

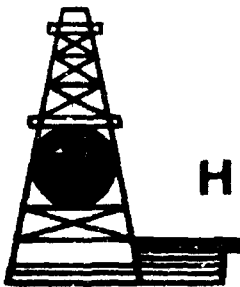
CASE 1041: HUNTER OIL CORPORATION FOR  
SALT WATER DISPOSAL WELL, EDOY COUNTY,  
NEW MEXICO

5861

Application  
Transcripts.

Small Exhibits

ETC.



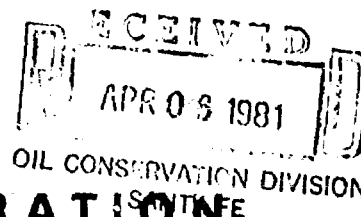
# HANSON OIL CORPORATION

P. O. BOX 1815

ROSWELL, NEW MEXICO 88201

PHONE AC 806-822-7330

March 30, 1981



*File  
R 5387  
Call 5861*

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: SULPHATE SISTER SWD #1  
Sec. 13, T. 25S, R. 26E  
Eddy County, New Mexico

Attention: Mr. Joe Ramey  
Secretary-Director

Dear Mr. Ramey:

In compliance with your request of September 29, 1980, we are submitting a Tracer Survey of the above captioned well conducted March 18, 1981.

If any further information is needed, please advise.

Very truly yours,

HANSON OIL CORPORATION

LeNora F. Correia  
Production Analyst

/lc  
Enc.

xc: Mr. W. A. Gressett  
New Mexico Oil Conservation Division  
Drawer DD  
Artesia, New Mexico 88210

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

September 29, 1980

Hanson Oil Corporation  
P. O. Box 1515  
Roswell, New Mexico 88201

Attention: A. J. Deane

Re: Sulphate Sister SWD No. 1  
Section 13, T25S, R26E  
Eddy County, New Mexico

Gentlemen:

After talking with district representatives who witnessed the step rate test on the above captioned well, you are hereby approved to increase your surface injection pressure to 1500 psi. Due to the relatively shallow depth at which this well is completed, we ask that you please submit a tracer survey taken every six months to establish that there is no leakage of fluids into adjoining formations.

Yours very truly,

JOE D. RAMEY  
Director

JDR/fd

C  
O  
P  
Y

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 16, 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of Hanson Oil Corporation  
for a salt water disposal well,  
Eddy County, New Mexico.

CASE  
5861

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil  
Conservation Commission:

Lynn Teschendorf, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant:

Jason W. Kellahin, Esq.  
KELLAHIN & FOX  
Attorneys at Law  
500 Don Gaspar  
Santa Fe, New Mexico

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General Court Reporting Service  
825 Calle Meja, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

I N D E X

Page

3 DALTON KINCHELOE

4 Direct Examination by Mr. Kellahin

3

5 Cross Examination by Mr. Stamets

13

EXHIBIT INDEX

Offered

Admitted

10 Applicant's Exhibit One, Application

6

12

11 Applicant's Exhibit Two, Plat

7

12

12 Applicant's Exhibit Three, Water Analysis

8

12

13 Applicant's Exhibit Four, Log

9

12

14 Applicant's Exhibit Five, Structure Map

9

12

15 Applicant's Exhibit Six, Sketch

10

12

16 Applicant's Exhibit Seven, Surface Install.

13

13

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Phone (505) 982-9212

1 MR. STAMETS: We will call at this time Case 5861.

2 MS. TESCHENDORF: Case 5861, application of Hanson  
3 Oil Corporation for a salt water disposal well, Eddy County,  
4 New Mexico.

5 MR. KELLAHIN: If the Examiner please, Jason Kellahin,  
6 Kellahin and Fox, Santa Fe, appearing for the applicant and  
7 we have one witness to be sworn.

8 MR. STAMETS: If you will stand and be sworn at  
9 this time, please?

10 (THEREUPON, the witness was duly sworn.)

11 DALTON KINCHELOE  
12  
13 called as a witness, having been first duly sworn, was  
14 examined and testified as follows:

15  
16 DIRECT EXAMINATION

17 BY MR. KELLAHIN:

18 Q Would you state your name, please?

19 A Dalton Kincheloe.

20 Q What business are you engaged in, Mr. Kincheloe?

21 A I'm an independent from Roswell.

22 Q And in connection with your work as an independent  
23 are you an engineer?

24 A I'm a geologist.

25 Q A geologist?

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1 A Yes, sir.

2 Q Have you been employed by Hanson Oil Corporation  
3 in Case Number 5861?

4 A I have.

5 Q Have you testified before the Oil Conservation  
6 Commission in previous cases and made your qualifications a  
7 matter of record?

8 A Yes, sir.

9 MR. KELLAHIN: Are the witness' qualifications  
10 acceptable?

11 MR. STAMETS: Yes, they would appear to be in this  
12 case.

13 Q (Mr. Kellahin continuing.) Mr. Kincheloe, are you  
14 familiar with the application of Hanson Oil Corporation in  
15 Case 5861?

16 A Yes, sir.

17 Q What is proposed by the applicant in this case?

18 A It is proposed to use a well located nineteen eighty  
19 from the north and west of Section 13, Township 25 South,  
20 Range 26 East, Eddy County, as a disposal well for salt water  
21 produced in the updip Delaware producing well.

22 Q Are you going to inject water in the same formation  
23 in which it has been produced?

24 A Yes.

25 Q What is the history of the well which you propose to

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1 use for water injection?

2 A That well was spudded in November of '73 and  
 3 abandoned after the lease was lost in November of 1975. The  
 4 well was originally drilled as a lease holder and a Delaware  
 5 test to possibly going to the Morrow formation, therefore,  
 6 they drilled a large hole at the surface and a twelve and a  
 7 quarter inch hole at the top of the Delaware. However, at the  
 8 top of the Delaware they shut it down and left it sitting there  
 9 for seven or eight months and the well filled up with fluid  
 10 and this fluid, there was a little oil on it so they ran a  
 11 pipe and attempted to complete it. The completion was a  
 12 failure and all they produced was salt water, subsequently  
 13 they just moved off and left it.

14 So they lost their lease through nonproduction but  
 15 they never did remove their equipment, they just left it  
 16 there.

17 Q Did Hanson Oil Corporation then acquire a business  
 18 lease for surface rights to utilize this well?

19 A Right, yes.

20 Q And did they acquire the tubing and casing that was  
 21 in the hole?

22 A Yes, they did.

23 Q From the original owner?

24 A From the original owner.

25 Q Now, referring to what has been marked as Exhibit

1 Number One, would you identify that exhibit, please?

2 A That is the application to dispose of salt water by  
3 injection into a formation, a New Mexico Oil Commission  
4 form.

5 Q Now, at what depths will you be injecting this  
6 water?

7 A The water will be injected from nineteen, sixty-two  
8 to nineteen, ninety-three.

9 Q In open hole?

10 A In open hole.

11 Q Now, according to your application you will  
12 inject under gravity if possible. What pressure would you  
13 anticipate?

14 A Well, it would appear that we are going to have to  
15 use about five hundred pounds of pressure to inject into  
16 the well.

17 Q Would that comply with the two tenths per pound  
18 per foot?

19 A It probably would. What is two-tenths of two  
20 thousand, it would be four hundred pounds, wouldn't it?

21 Q At least for the present you could live with  
22 four hundred pounds of pressure then?

23 A Yes, sir, it is indicated that we could.

24 Q Four hundred pounds?

25 A Well, I would rather have five if possible.

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1 MR. STAMETS: I would point out for the witness  
2 that Commission orders such as this normally provide for  
3 administrative procedure whereby a higher pressure can be  
4 authorized if evidence is furnished that such higher pressure  
5 will not result in fracturing the confining strata.

6 Q (Mr. Kellahin continuing.) Under those terms could  
7 you comply with the Commission order?

8 A Yes, sir.

9 Q If they approve this application?

10 A Yes, sir.

11 Q Now, referring to what has been marked as Exhibit  
12 Number Two, would you identify that exhibit, please?

13 A This is a land plat showing the existing wells  
14 within two miles of the disposal well. It shows the sulfate  
15 wells which is the Hanson No. 1 Gulf, Hanson Fasken and Hanson  
16 HM. The Gulf is in Section 12; the Fasken is in 11 and the  
17 HM is in 14.

18 There are several dry holes in the area and one gas  
19 well which is a Morrow producer in Section 2. That's a  
20 Mesa Petroleum Well. I haven't seen a completion on that  
21 but I understand it has been completed.

22 Q Now, Mr. Kincheloe, could you obtain for the  
23 Commission the casing and cementing data on these wells and  
24 the plugging information on any plugged wells within a two-mile  
25 radius?

1 A Yes, sir, I think it is on record with the State,  
2 the Commission, as to how they were plugged.

3 Q Would that be available to you so you could assemble  
4 it and furnish it to the Examiner?

5 A Yes, sir.

6 Q Would you do that?

7 A Yes.

8 Q Now, referring to what has been marked as Exhibit  
9 Three, would you identify that exhibit?

10 A This is an exhibit of the water analysis on the  
11 three producing wells, the wells in Sections 11, 12 and 14 and  
12 this was dated 12-27-76. It is about the fourth water analysis  
13 that we have had and they all run very much the same character  
14 on the wells.

15 Q Does this represent the water from the only producing  
16 wells in this pool?

17 A Yes, sir.

18 Q And all of that water will be disposed of in the  
19 well?

20 A All of this water is water we plan on injecting  
21 in the disposal well.

22 Q What volumes of water will you inject?

23 A We are producing about three hundred barrels a day  
24 at the present time which we are having to haul -- well, I  
25 don't know just how far it is -- but it is about sixty cents a

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1 barrel to haul the stuff off and we intend to inject that into  
2 this and also we have proposed an approved location for a  
3 No. 2 Gulf Federal, a Hanson Federal and an HM Federal. We  
4 plan to start drilling on March 6th and May 1st.

5 Q You anticipate then you will have some additional  
6 water from those wells?

7 A That's right, we sure will.

8 Q Now, referring to what has been marked as Exhibit  
9 Number Four, would you identify that exhibit?

10 A This is an electric log on the well as it was made  
11 prior to the running of the casing by the operator. It shows  
12 the base of the salt at sixteen ninety-two. It's a density  
13 neutron log and gamma ray. It shows the top of the Delaware  
14 mountain group with the Lamar line eighteen, ninety-five,  
15 the top of the Delaware sand at nineteen, fifty-five and the  
16 casing. It also has the lithology plotted on the bottom part  
17 of the log there in the anhydrite day and the total depth at  
18 nineteen, ninety-three. Their log depth was not that deep  
19 but the depth of the well is.

20 Q Now, referring to what has been marked as Exhibit  
21 Number Five, would you identify that exhibit?

22 A This is a structure map prepared by me on the top  
23 of the Delaware sand. It shows the producing wells and the  
24 structure dipping to the southeast about fifty to seventy-five  
25 feet per mile and the datums on the wells and the TD's on the

1 wells in the area.

2 Q Now, does that indicate that your proposed disposal  
3 well will be structurally lower than your producing wells?

4 A Yes, sir, it will be structurally lower and it should  
5 take the water and it shouldn't cause any trouble.

6 Q Will it cause any damage to the producing wells?

7 A No, sir, if anything it will help the producing wells.

8 Q Now, referring to Exhibit Number Six, will you  
9 identify that exhibit?

10 A This is a sketch of the wellbore itself with the  
11 surface casing, the four and a half inch casing, the tubing,  
12 and the proposed packer at nineteen hundred feet.

13 The hole at the present time has seventeen -- it was  
14 drilled with a seventeen and a half inch hole to four hundred  
15 and forty-seven feet, circulated with cement with four hundred  
16 and thirty-five sacks of cement which twenty-five sacks  
17 circulated and they drilled a twelve and a quarter hole from  
18 there down to nineteen, ninety-three and hung their casing in  
19 the bottom on gravel at nineteen, sixty-two. They cemented that  
20 string of pipe, four and a half inch pipe, with a hundred  
21 and fifty sacks of cement which brings the cement up approxi-  
22 mately one hundred feet, two hundred feet.

23 Q That would be a calculated top?

24 A That's a calculated top.

25 Q Based on the size of this hole?

1 A. Yes, sir.

2 Q Now, how will you complete the well?

3 A We propose to run a Baker packer on tubing with  
4 plastic lined tubing down hole and just open hole into the  
5 formation there.

6 Q And will you fill the casing tubing annulus with --

7 A KCL water.

8 Q KCL water and will you put a pressure gauge at the  
9 surface?

10 A Yes, sir, we will have a gauge on the surface.

11 Q Now, would that type of completion inform you of  
12 any casing or tubing leaks?

13 A It should, sir.

14 Q This casing is in a rather large hole, would that  
15 cause you any problem?

16 A Not particularly as long as the casing stands up it  
17 will be all right.

18 Q But you would detect any leaks if it didn't?

19 A I think we should with our pressure valve at the  
20 surface.

21 Q Would the completion of this well fully protect  
22 any producing or water formations?

23 A Pardon me.

24 Q Would the completion of this well as it has been  
25 made fully protect any producing formations or water sources?

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1 A. Yes, there is no surface water in the area. The well  
2 was drilled by cable tool.

3 Q. And no water was encountered?

4 A. No water was encountered until they got to about  
5 nineteen, forty-five and picked up about, oh, a bailer of  
6 salt water an hour there.

7 Q. Will the approval of this application enable Hanson  
8 to prolong the producing life of the producing wells there?

9 A. Very definitely because without it we are going to  
10 plug them.

11 Q. And that would prevent waste then?

12 A. Right.

13 Q. And will the correlative rights of anyone be impaired?

14 A. No, sir, they will not.

15 Q. Were Exhibits One through Six prepared by you or  
16 under your supervision?

17 A. Yes, sir.

18 MR. KELLAHIN: I offer at this time Exhibits One  
19 through Six.

20 MR. STAMETS: These exhibits will be admitted.

21 (THEREUPON, Applicant's Exhibits One through  
22 Six were admitted into evidence.)

23 THE WITNESS: I have one other exhibit which you  
24 might want and that is the surface installation. I don't know  
25 whether they need that or not.



1 MR. KELLAHIN: Well, we'll put it in in case they

2 do.

3 Q (Mr. Kellahin continuing.) I hand you what has  
4 been marked as Exhibit Number Seven, will you identify that,  
5 please.

6 A Number Seven is just the surface installation at  
7 the surface which encompasses a three inch flow line from the  
8 producing wells starting in Section 14 down to the tank  
9 which we propose to put a three hundred barrel tank sixty  
10 feet from the wellbore and a triplex pump four feet from the  
11 tank and a two inch pressure line to the disposal well.

12 MR. KELLAHIN: At this time I will offer Exhibit  
13 Number Seven.

14 MR. STAMETS: Exhibit Number Seven will be admitted.  
15 (THEREUPON, Applicant's Exhibit Number Seven  
16 was admitted into evidence.)

17  
18 CROSS EXAMINATION

19 BY MR. STAMETS:

20 Q Mr. Kincheloe, and Mr. Kellahin as well, I would  
21 point out that there seems to be a difference between the  
22 advertised open hole depth and the depth as shown on this  
23 Form C-108, Exhibit Number One in this case.

24 A I could explain that. What happened is that -- well,  
25 the well was drilled by Charlie Powell for the Grace's and

1 cleaned out by Mr. Brininstool, another contractor down there  
2 and this thing rocked along over a period of two years.

3 At the time the electric log was run they said, well,  
4 they had a bottom of nineteen, seventy-eight. Before we came  
5 to the Commission to attempt to complete this well as a salt  
6 water disposal well, we checked with the USGS and they suggested  
7 that we try to pump water in it so we tried and we were unable  
8 to put water away. I had a pump jack tubing in the hole and  
9 rods and a leak in the head so with a thousand pounds we were  
10 unable to put any water in the hole so we pulled the tubing  
11 and the packer and checked bottom on it and found the bottom  
12 to be nineteen ninety-three so that's what the difference  
13 is in depth so I amended this.

14 Q It really doesn't change the situation any at all,  
15 you are still going in the very upper part of the Delaware?

16 A We are going into the upper part of the Delaware in  
17 the Ramsey zone.

18 Q And this application was based on the information  
19 you had and you now have additional information?

20 A Yes, sir.

21 Q Who set this four and a half inch casing string in  
22 there and cemented it?

23 A The Grace's did, the operator of the well at the  
24 time they owned it.

25 Q Is there anything in the records which have been

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1 forwarded to Hanson Oil Corporation which would verify that  
2 this hundred and fifty sacks of cement was really run in the hole  
3 and anything that would indicate what the top of the cement is  
4 in that?

5 A No, sir, there is not. I do have a copy of all of  
6 the Federal forms filed in here somewhere which is their  
7 record but as far as the cement coming up two hundred and ten  
8 feet or a hundred and five feet, I don't know.

9 Q Of course, on a producing well it does not normally  
10 make that much difference but on an injection well it certainly  
11 could make a difference, especially one that you intend to use  
12 some pressure on.

13 If it were required could Hanson Oil Corporation  
14 run a cement bond log on this well to determine the quality of  
15 the cement and the top of the cement.

16 A Yes, sir, we had planned on running that cement bond  
17 log at the time we had the thing open but Van who also has an  
18 interest in the production to the north there, said that if you  
19 got out of the four and a half inch pipe with his tool and he  
20 lost it we might be in real trouble so we backed off from  
21 running it at that time.

22 I have here the forms filed at the USGS in Artesia  
23 in which they say they run four and a half inch, nine and a  
24 half pound J-55 casing set at nineteen, sixty-two, cemented  
25 with a hundred and fifty sacks of cement. So it's just a

1 guess as to where the top of the cement is really.

2 Q And the top that you have shown on your exhibit is  
3 a calculated top. Is that calculated on a hundred percent  
4 fill up?

5 A Yes, sir, on one point four feet per sack.

6 Q And with a cable tool hole is it possible that hole  
7 would be larger?

8 A The hole is indicated to be in good shape.

9 Q Did you run a caliper on the hole?

10 A Yes, sir, I believe we did run a caliper on it.

11 Q How about the potential for cement going back in the  
12 formation and getting a little bit less fill than we had or  
13 it would calculate?

14 A Well, it is certainly possible. The only thing I  
15 can say to that is that we drilled a well to the north of it  
16 there in Section 12, Becker and I did, and that's mighty hard  
17 rock. It was almost a silicious limestone in the Delaware  
18 lime section there. It was a real shock to me. I expected  
19 a black, kind of a soft stuff and when we got into it it was  
20 extremely hard.

21 Q The casing, though, does extend in this hole into  
22 the Delaware sand and some of the cement is across the Delaware  
23 sand?

24 A Yes, sir, you've got about seven feet of Delaware  
25 sand and then the lime section and the anhydrite. That basal

1 anhydrite there is somewhat limey, it is just typical Castile,  
2 is what it amounts to. I don't believe that there would be  
3 much chance of it washing out.

4 A caliper is available should you want it, well,  
5 there is a copy of it on that and I have a copy of it here too.

6 Q If we require a cement bond log we won't need a  
7 caliper.

8 A Okay.

9 Q The Commission requirement as far as determining  
10 cementing, casing, plugging, would only be for wells within a  
11 half a mile normally and looking at your map here which is  
12 Exhibit Number Two, I would think the only wells we would be  
13 interested in would be those two producing wells immediately  
14 to the north and west.

15 A Yes, sir.

16 Q And that would be satisfactory as far as the Examiner  
17 was concerned.

18 A Those are the wells that you want the record on the  
19 cementing?

20 Q Right, I think that would take care of it. I  
21 presume that those are completed in the same interval that  
22 you are going to be injecting into here?

23 A Yes, sir.

24 Q The packer does not show on Exhibit Number One but  
25 it does show on Exhibit Number Six and that is to be located

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1 at about nineteen hundred feet, is that corret?

2 A. Yes.

3 MR. STAMETS: Are there any other questions of the  
4 witness? He may be excused.

5 (THEREUPON, the witness was excused.)


6 MR. STAMETS: Is there anything further in this case?  
7 We will take the case under advisement.

8 (THEREUPON, the hearing was in recess.)  
9  
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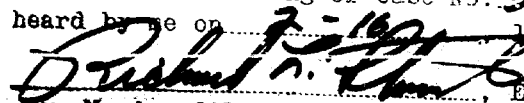
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Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,  
do hereby certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation Commission  
was reported by me, and the same is a true and correct record  
of the said proceedings to the best of my knowledge, skill and  
ability.

  
Sidney F. Morrish, C.S.R.

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Phone (505) 962-9212

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 5861  
heard by me on 7-16-77  
, Examiner  
New Mexico Oil Conservation Commission



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501



DIRECTOR  
JOE D. RAMEY

LAND COMMISSIONER  
PHIL R. LUCERO  
March 16, 1977

STATE GEOLOGIST  
EMERY C. ARNOLD

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5861  
ORDER NO. R-5387

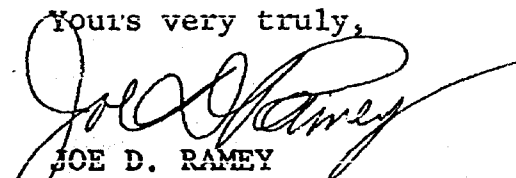
Applicant:

Hanson Oil Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Yours very truly,

  
JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC X  
Artesia OCC X  
Aztec OCC \_\_\_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_



BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5861  
Order No. R-5387

APPLICATION OF HANSON OIL  
CORPORATION FOR A SALT WATER  
DISPOSAL WELL, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 16, 1977, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 15th day of March, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Hanson Oil Corporation, is the owner and operator of the Sulphate Sister Well No. 1, located in Unit E of Section 13, Township 25 South, Range 26 East, N2PM, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Delaware formation, with injection into the open hole interval from approximately 1962 feet to 1993 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer set at approximately 1900 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

-2-

Case No. 5861  
Order No. R-5387

(5) That the injection well or system should be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 457 psi.

(6) That the operator should notify the supervisor of the Artesia district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Hanson Oil Corporation, is hereby authorized to utilize its Sulphate Sister Well No. 1, located in Unit E of Section 13, Township 25 South, Range 26 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1900 feet, with injection into the open hole interval from approximately 1962 feet to 1993 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 457 psi.

(3) That approximately one year following initiation of the injection authorized by this order, the operator shall conduct a tracer survey on said well to confirm the integrity of the cement bond in the lower portion of the hole.

-3-

Case No. 5861

Order No. R-5387

(4) That the operator shall notify the supervisor of the Artesia district office of the Commission of the date and time of the installation of disposal equipment and the taking of the tracer survey required by Order (3) above so that the same may be witnessed.

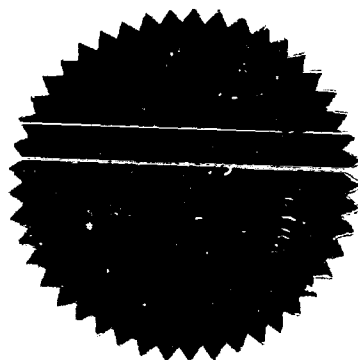
(5) That the operator shall immediately notify the supervisor of the Commission's Artesia district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(6) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



PHIL R. LUCERO, Chairman

*Emery C. Arnold*  
EMERY C. ARNOLD, Member

*Joe D. Ramsey*  
JOE D. RAMSEY, Member & Secretary

S E A L

dr/

NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Hanson Oil Corporation</b>		ADDRESS <b>P.O. Box 1515, Roswell, New Mexico 88201</b>			
LEASE NAME <b>Sulphate Sister</b>	WELL NO. <b>1</b>	FIELD <b>Southwest Sulphate Delaware</b>	COUNTY <b>Eddy</b>		
LOCATION UNIT LETTER <b>E</b> WELL IS LOCATED <b>1980</b> FEET FROM THE <b>North</b> LINE AND <b>1980</b> FEET FROM THE <b>West</b> LINE, SECTION <b>13</b> TOWNSHIP <b>25-S</b> RANGE <b>26-E</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING					
Hole size <b>17 1/2"</b>	<b>13 3/8"</b>	<b>447'</b>	<b>435</b>	<b>Circ.</b>	
INTERMEDIATE					
None					
LONG STRING					
J-55	<b>4 1/2" - 9#</b>		<b>150 "C"</b>		
TUBING			NAME, MODEL AND DEPTH OF TUBING PACKER		
	<b>2 3/8"</b>	<b>1900'</b>			
NAME OF PROPOSED INJECTION FORMATION <b>Delaware Sand</b>		TOP OF FORMATION <b>1955'</b>		BOTTOM OF FORMATION	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?		PERFORATIONS OR OPEN HOLE?		PROPOSED INTERVAL(S) OF INJECTION	
<b>Tubing</b>		<b>Open Hole</b>		<b>1962 - 1993</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL?		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?	
<b>No</b>		<b>Wildcat - Delaware Sand Test</b>		<b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
<b>None</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA	
<b>None</b>		<b>None</b>		<b>None</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
	<b>250</b>	<b>750</b>	<b>Closed</b>	<b>Gravity if Possible</b>	<b>500#</b>
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -			WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
			<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					
<b>Federal</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
<b>HNG (Dalco) 1/2 (Sec. 14)</b> <b>David Fasten (Dalco)</b>					
<b>Mesa 1/2 (Sec. 14)</b>					
<b>Gulf (Sec. 14)</b>					
<b>Robert Enfield 1/4 (SE/4 13)</b>					
<b>El Paso 3/4 (SE/4 13)</b>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
		<b>Federal</b>		<b>No</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		PLAT OF AREA		ELECTRICAL LOG	
		<b>Yes</b>		<b>Yes</b>	
				THE NEW MEXICO STATE ENGINEER	
				<b>Yes</b>	
				DIAGRAMMATIC SKETCH OF WELL	
				<b>Yes</b>	

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

(Signature)

(Title)

(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

SOUTH SULPHATE DELAWARE FIELD

LAND PLAT

HANSON OIL CORPORATION

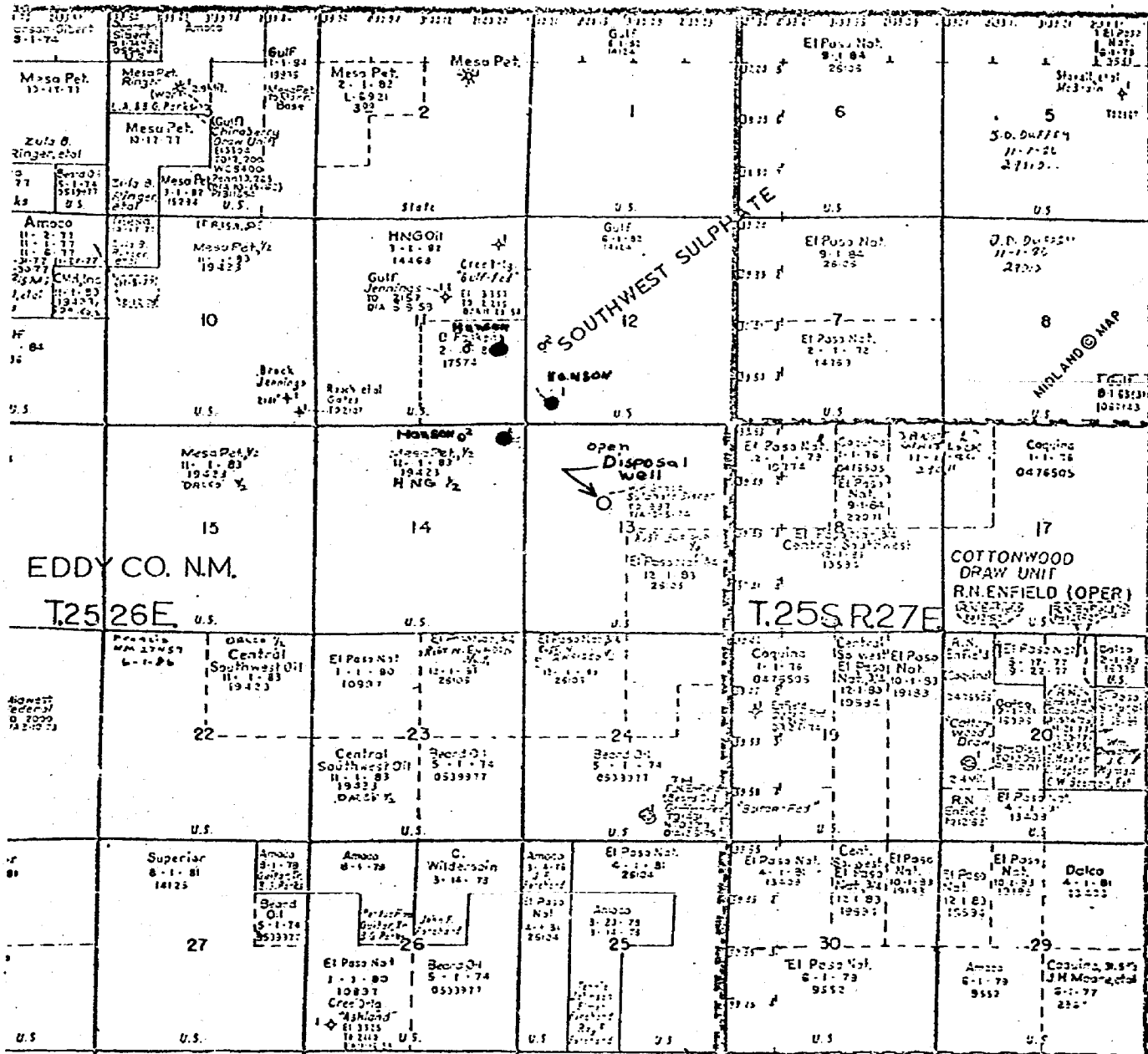
BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION

EXHIBIT NO. 2

CASE NO. 5861

Submitted by Kinchloe

Hearing Date Feb. 16, 1977









COMPENSATED  
Density

FILE NO.		COMPANY <u>Corliss Glass</u>	
WELL <u>SULPHATE SISTER #1</u>		FIELD <u>WILD CAT</u>	
COUNTY <u>Edg</u>		STATE <u>NEWARK</u>	
LOCATION: <u>1980 FN &amp; 660 FWL</u>		Other Services	
SEC <u>* 13</u>	TWP <u>25-S</u>	RGE <u>26-E</u>	
Permanent Datum <u>6.1</u>	Elev. <u>0</u>	KB Elevations: <u>32.36</u>	
Log Measured from <u>6.1</u>	Ft. Above Permanent Datum	GL <u>32.36</u>	
Drilling Measured from <u>6.1</u>			
Date <u>9.4.74</u>	Run No. <u>041</u>		
Depth—Driller <u>1981</u>	Depth—Logger <u>1927</u>		
Bottom Logged Interval <u>1965</u>	Top Logged Interval <u>1200</u>		
Casing—Driller <u>1318 @ 450</u>	Casing—Logger <u>@</u>		
Bit Size <u>1 1/4</u>	Type Fluid in Hole <u>WATER &amp; OIL</u>		
Density and Viscosity	pH and Fluid Loss		
Source of Sample	Sm @ Meas. Temp.		
Rm @ Meas. Temp.	Rm @ Meas. Temp.		
Rmc @ Meas. Temp.	Source of Rm and Rmc		
Rm @ BHT	Time Since Circ.		
Max Rec. Temp. Deg. F.	Equip. No. and Location		
Recorded By <u>MSA/TEE</u>	Witnessed By <u>John Stoy</u>		

FIELD

POINT

BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 4  
CASE NO. 5-861  
Submitted by Kuchel  
Hearing Date Feb 16, 1977

Base SdH 1692

1546

BX

1700

1800

Lamar

Lamar 1295 + 1341

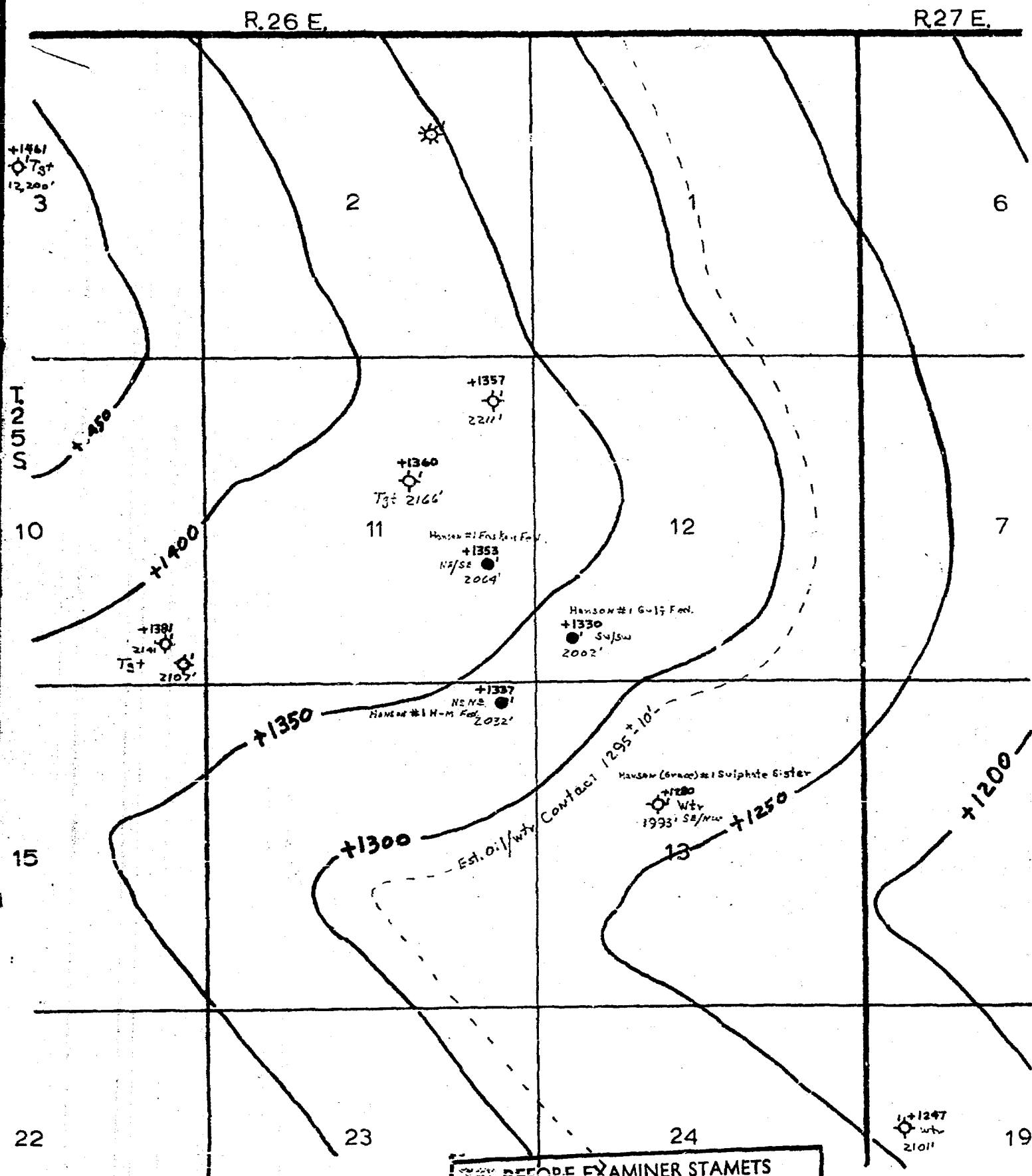
4" casing @ 1962 w/ 1500 lb class C cement

1955 + 1201

DeLaware Sd.

Total Depth 1993

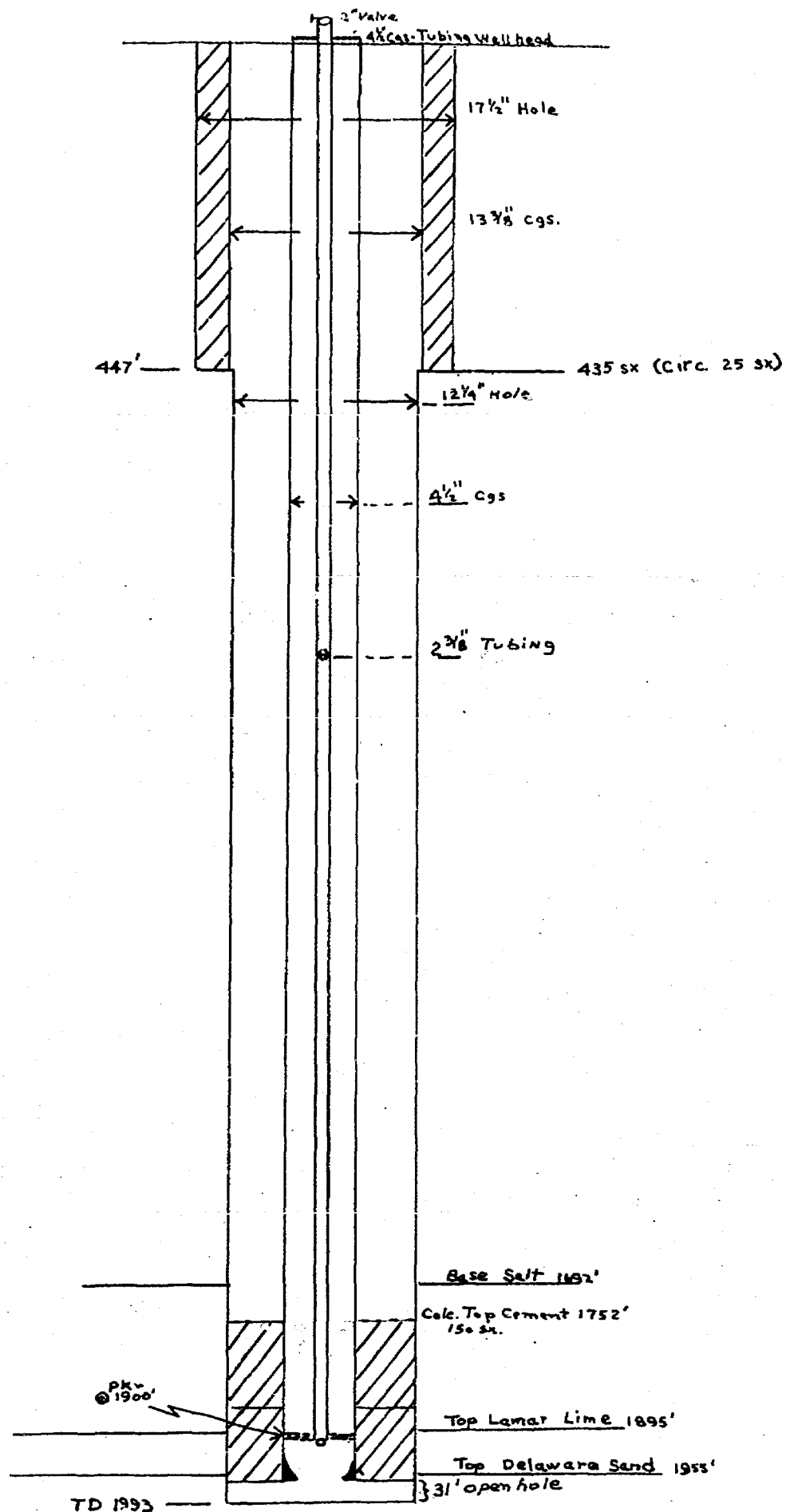
☼ Dry Hole  
 ● Producer Delaware  
 ☼ Gas Well-Morrow



BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
Nason EXHIBIT NO. 5  
CASE NO. 5861  
Submitted by Kuchlos  
Hearing Date Feb. 16, 1977



Scale  
 Vert. 1" = 200'  
 Horiz. 1" = 10'

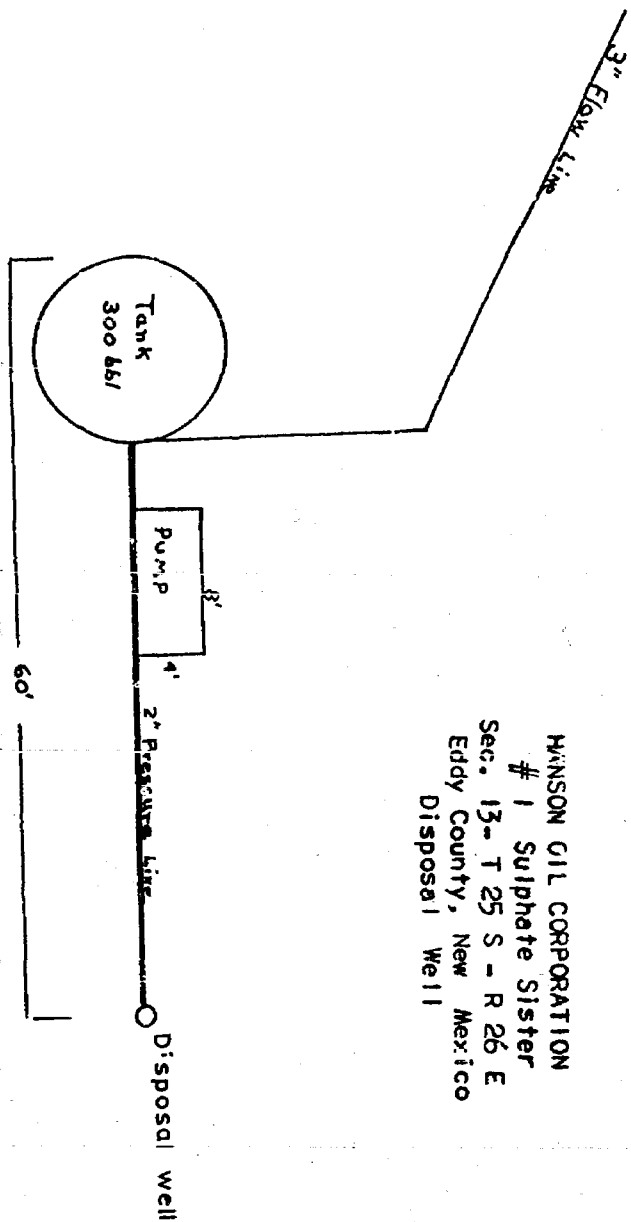


PROPOSED SALT WATER DISPOSAL WELL  
 Hanson Oil Corp. (Grace) # 1 Sulphate Sister  
 1980' F N & W L Sec. 13, T. 25 S., R. 26 E., Eddy Co., N M  
 El. 3236' gl. Total Depth 1993'

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
<u>Hanson</u>	EXHIBIT NO. <u>6</u>
CASE NO. <u>5-861</u>	
Submitted by <u>Kuchler</u>	
Hearing Date <u>July 16, 1977</u>	

WINSON OIL CORPORATION  
 # 1 Sulphate Sister  
 Sec. 13- T 25 S - R 26 E  
 Eddy County, New Mexico  
 Disposal Well

North



Scale 1" = 15 feet  
 Sketch of Surface Equipment

BEFORE EXAMINER, STAMETS  
 OIL CONSERVATION COMMISSION  
~~THE~~ EXHIBIT NO. 7  
 CASE NO. 5861  
 Submitted by K. H. H. H.  
 Hearing Date Feb 16, 1975

JASON W. KELLAHIN  
ROBERT E. FOX  
W. THOMAS KELLAHIN

KELLAHIN AND FOX JAN 24 1977  
ATTORNEYS AT LAW  
800 DON GASPAR AVENUE  
POST OFFICE BOX 1789  
SANTA FE, NEW MEXICO 87501

TELEPHONE 992-4315  
AREA CODE 505

January 21, 1976

Case 5861

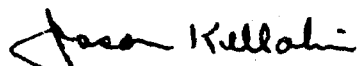
Mr. Joe D. Ramey  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Enclosed is the application of Hanson Oil Corporation for approval of a salt water disposal well, Eddy County, New Mexico. This application was phoned to the Commission by Mr. Dalton Kincheloe on January 20.

It is our understanding that the application will be set for hearing on February 16.

Yours very truly,

  
Jason W. Kellahin

CC: Mr. Dalton Kincheloe

JWK:kfm

Enclosure

JAN 24 1977  
OIL CONSERVATION COMMISSION

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF HANSON OIL CORPORATION FOR  
APPROVAL OF SALT WATER DISPOSAL,  
EDDY COUNTY, NEW MEXICO

*Case 5861*

A P P L I C A T I O N

Comes now Hanson Oil Corporation and applies to the Oil Conservation Commission of New Mexico for approval of salt water disposal, Eddy County, New Mexico, and in support thereof would show the Commission:

1. Applicant proposes to dispose of water in the Sulphate Sister Well No. 1, formerly operated by Michael P. Grace. The well is located in Unit E, Section 13, Township 25 South, Range 26 East, N.M.P.M.
2. The well will be conventionally completed for salt water disposal, and disposal will be in the Delaware Formation, in an open-hole interval, 1926 to 1978 feet.
3. The proposed disposal is in the interest of conservation and the prevention of waste, and the correlative rights of all parties will be fully protected.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving use of the above well for salt water disposal.

Respectfully submitted,  
HANSON OIL CORPORATION

By *John Killah*  
Killahin & Fox  
P. O. Box 1769  
Santa Fe, New Mexico  
ATTORNEYS FOR APPLICANT

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

JUN 24 1977  
OIL CONSERVATION COMM.  
SANTA FE

IN THE MATTER OF THE APPLICATION  
OF HANSON OIL CORPORATION FOR  
APPROVAL OF SALT WATER DISPOSAL,  
EDDY COUNTY, NEW MEXICO

A P P L I C A T I O N

Case 5861

Comes now Hanson Oil Corporation and applies to the Oil Conservation Commission of New Mexico for approval of salt water disposal, Eddy County, New Mexico, and in support thereof would show the Commission:

1. Applicant proposes to dispose of water in the Sulphate Sister Well No. 1, formerly operated by Michael P. Grace. The well is located in Unit E, Section 13, Township 25 South, Range 26 East, N.M.P.M.
2. The well will be conventionally completed for salt water disposal, and disposal will be in the Delaware Formation, in an open-hole interval, 1926 to 1978 feet.
3. The proposed disposal is in the interest of conservation and the prevention of waste, and the correlative rights of all parties will be fully protected.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving use of the above well for salt water disposal.

Respectfully submitted,  
HANSON OIL CORPORATION

BY James W. Kellah  
Kellahin & Fox  
P. O. Box 1769  
Santa Fe, New Mexico  
ATTORNEYS FOR APPLICANT

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF HANSON OIL CORPORATION FOR  
APPROVAL OF SALT WATER DISPOSAL,  
EDDY COUNTY, NEW MEXICO

A P P L I C A T I O N

Case 5861

Comes now Hanson Oil Corporation and applies to the Oil Conservation Commission of New Mexico for approval of salt water disposal, Eddy County, New Mexico, and in support thereof would show the Commission:

1. Applicant proposes to dispose of water in the Sulphate Sister Well No. 1, formerly operated by Michael P. Grace. The well is located in Unit E, Section 13, Township 25 South, Range 26 East, N.M.P.M.
2. The well will be conventionally completed for salt water disposal, and disposal will be in the Delaware Formation, in an open-hole interval, 1926 to 1978 feet.
3. The proposed disposal is in the interest of conservation and the prevention of waste, and the correlative rights of all parties will be fully protected.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving use of the above well for salt water disposal.

Respectfully submitted,  
HANSON OIL CORPORATION

BY Jason Kellahin  
Kellahin & Fox  
P. O. Box 1769  
Santa Fe, New Mexico  
ATTORNEYS FOR APPLICANT

Dockets Nos. 8-77 and 9-77 are tentatively set for hearing on March 9 and March 23, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - FRIDAY - FEBRUARY 11, 1977

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following case will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 5872: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the suspension of Rules 15(A) and 15(B) of the General Rules for Prorated Gas Pools as promulgated by Order No. R-1670, as amended, to permit overproduced wells to continue to produce gas during the present severe weather conditions without danger of being shut in for overproduction.

Docket No. 6-77

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 16, 1977

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE:
- (1) Consideration of the allowable production of gas for March, 1977, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for March, 1977, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
  - (3) Consideration of purchaser's nominations for the one-year period beginning April 1, 1977, for both of the above areas.

CASE 5656: Application of Amoco Production Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Elliott Gas Com "F" 1-R Well No. 1A to be drilled 1244 feet from the South line and 820 feet from the East line of Section 33, Township 30 North, Range 9 West, Blanco Mesaverde Pool, San Juan County, New Mexico.

CASE 5857: Application of Union Oil Company of California for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter its Pipeline Deep Unit Federal Well No. 3, the surface location of which is 1980 feet from the North and East lines of Section 7, Township 19 South, Range 34 East, Lea County, New Mexico, and to directionally drill said well in a southerly or easterly direction and complete it in the Morrow formation at a point no closer than 330 feet to the outer boundary of the proration unit, the E/2 of said Section 7.

CASE 5658: Application of Union Oil Company of California for 320-acre spacing, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the adoption of 320-acre spacing and proration units for the North Quail Ridge-Morrow Gas Pool, Lea County, New Mexico. In the absence of objection, the Commission will adopt such 320-acre spacing.

CASE 5859: (This case will be continued and readvertised.)

Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Basin-Dakota and Blanco-Mesaverde production in the wellbore of its Breech D Well No. 307 located in Unit M of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 5860: Application of Rice Engineering & Operating, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation through the open hole interval from 4176 feet to 5500 feet of its Hobbs SWD Well No. P-16, located in Unit P of Section 16, Township 19 South, Range 38 East, Hobbs Field, Lea County, New Mexico.

CASE 5861: Application of Hanson Oil Corporation for a salt water disposal well, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the open hole interval from 1926 to 1978 feet in its Sulphate Sister Well No. 1, located in Unit E of Section 13, Township 25 South, Range 26 East, Eddy County, New Mexico.

CASE 5862: Application of Palmer Oil and Gas Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 1 Well No. 1 located 1525 feet from the South line and 820 feet from the East line of Section 1, Township 31 North, Range 13 West, Franco Mesaverde and Basin-Dakota Pools, San Juan County, New Mexico.

CASE 5863: Application of Amerada Hess Corporation for an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jicarilla Apache "B" Well No. 16, completed as an oil well in the Dakota formation at a point 1850 feet from the South line and 1500 feet from the West line of Section 29, Township 25 North, Range 5 West, Rio Arriba County, New Mexico, said well having been projected as a Basin-Dakota gas well at a standard gas well location for said pool.

CASE 5864: Application of Agua, Inc. for the amendment of Order No. R-5137, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the further amendment of Order No. R-5137, which authorized the disposal of produced salt water into the San Andres formation through the open-hole interval from approximately 4000 feet to 5000 feet in applicant's Blinbry-Drinkard SWD System Well No. A-22, located in Unit A of Section 22, Township 22 South, Range 37 East, Blinbry-Drinkard-Langlie Mattix Area, Lea County, New Mexico. Said order, as amended, limited surface injection pressures to 800 psi, and applicant seeks its amendment to permit surface injection pressures up to 1500 psi.

CASE 5865: Application of Inexco Oil Co. for 320-acre spacing, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the adoption of 320-acre spacing and proration units for the West Tonto-Pennsylvanian Gas Pool, Lea County, New Mexico. In the absence of objection, the Commission will adopt such 320-acre spacing.

CASE 5866: Application of Union Texas Petroleum for an exception to casing and cementing requirements of Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the casing and cementing requirements of Order No. R-111-A to eliminate the salt protection string in a well it proposes to drill in Unit D of Section 33, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 5867: Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 19, Township 21 South, Range 27 East, Burton Flat Field, Eddy County, New Mexico, to be dedicated to its Forrest Well No. 1 to be located in Unit N of said Section 19. Also to be considered will be the cost of completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in completion of said well.

CASE 5820: (Continued from the February 2, 1977, Examiner Hearing.)

Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the W/2 of Section 4, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5868: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Travis Deep Unit Well No. 1 to be drilled 1980 feet from the South line and 1684 feet from the West line of Section 18, Township 18 South, Range 29 East, Eddy County, New Mexico, the S/2 of said Section 18 to be dedicated to the well.

CASE 5846: (Continued and Readvertised)

Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Empire South Deep Unit Well No. 13 to be drilled 660 feet from the South line and 1432 feet from the West line of Section 30, Township 17 South, Range 29 East, South Empire Field, Eddy County, New Mexico, the S/2 of said Section 30 to be dedicated to the well.



CASE 5869: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Big Boggy Well No. 1 to be drilled 990 feet from the South line and 2080 feet from the East line of Section 36, Township 17 South, Range 26 East, Atoka Pennsylvanian Gas Pool, Eddy County, New Mexico, the S/2 of said Section 36 to be dedicated to the well.

CASE 5870: Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its South Maljamar Deep Unit Well No. 2 to be drilled 990 feet from the South line and 1980 feet from the West line of Section 30, Township 17 South, Range 32 East, Lea County, New Mexico, the S/2 of said Section 30 to be dedicated to the well.

CASE 5871: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Friendly Frenchman Well No. 1 to be drilled 1005 feet from the South line and 660 feet from the East line of Section 32, Township 16 South, Range 26 East, Eddy County, New Mexico, the S/2 of said Section 32 to be dedicated to the well.

CASE 5810: (Continued from the February 2, 1977, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Stonewall "EP" Com Well No. 1, located in Unit F of Section 30, Township 20 South, Range 28 East, Eddy County, New Mexico, to produce gas from the North Burton Flat-Wolfcamp Gas Pool and an undesignated Morrow gas pool.

CASE 5847: (Continued from the February 2, 1977, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Gossett "EU" Well No. 1, located in Unit K of Section 26, Township 17 South, Range 25 East, Eddy County, New Mexico, in such a manner as to produce gas from the Lower Wolfcamp or Upper Pennsylvanian and the Lower Pennsylvanian formations through the casing-tubing annulus and tubing, respectively.

CASE 5848: (Continued from the February 2, 1977, Examiner Hearing)

Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Pipkin HE Well No. 1 to be drilled 660 feet from the South and West lines of Section 4, Township 18 South, Range 25 East, Eddy County, New Mexico, the S/2 of said Section 4 to be dedicated to the well.

~~Hanson~~

Hanson Oil Corporation  
Box 1515 Rowell

salt water disposal

Delaware formation

open hole 1926-1978

Michael P. Grace

Sulphate Sister Well No 1

located Unit E 13-25S-26E

Feb 16, 1977

called in by Dalton Kinschlae 1/20/77  
Kinschlae will file application.

dr/

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

Order No. R- 5387

APPLICATION OF HANSON OIL  
CORPORATION FOR A SALT WATER  
DISPOSAL WELL, EDDY COUNTY,  
NEW MEXICO.

**BY THE COMMISSION:**

This cause came on for hearing at 9 a.m. on February 16, 1977 at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this            day of February, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Hanson Oil Corporation,  
is the owner and operator of the Sulphate Sister Well No. 1,  
located in Unit E of Section 13, Township 25 South,  
Range 26 East, NMPM, [scribble],  
Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Delaware formation, with injection into the open hole interval from approximately ~~1926~~<sup>1962</sup> feet to ~~1978~~<sup>1993</sup> feet.

(4) That the injection should be accomplished through 2 3/8  
\_\_\_\_\_ -inch plastic lined tubing installed in a packer  
set at approximately 1900 feet; that the casing-tubing annulus  
should be filled with an inert fluid; and that a pressure gauge  
or approved leak detection device should be attached to the

CASE NO. \_\_\_\_\_

annulus in order to determine leakage in the casing, tubing, or packer.

(6) That the injection well or system should be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than <sup>45"</sup>~~700~~ psi.

(5) That the operator should notify the supervisor of the Artesia district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(6) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Hanson Oil Corporation, is hereby authorized to utilize its Sulphate Sister Well No. 1, located in Unit E of Section 13, Township 25 South, Range 26 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 1900 feet, with injection into the open hole interval from approximately <sup>1962</sup>~~1926~~ feet to <sup>1993</sup>~~1970~~ feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than <sup>457</sup>~~700~~ psi.

(3) (4) That the operator shall notify the supervisor of the Artesia district office of the Commission of the date and time of the installation of disposal equipment ~~and~~ <sup>the taking of the tracer survey required by Order (3) above</sup> so that the same may be ~~inspected~~ <sup>witnessed</sup>.

(5) That the operator shall immediately notify the supervisor of the Commission's Artesia district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(6) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

(3) That ~~and~~ approximately one year following initiation of the injection authorized by this order, the operator shall conduct a tracer survey on said well, to ~~confirm~~ <sup>confirm</sup> the integrity of the ~~the~~ cement bond ~~and~~ in the lower portion of the hole.