

CASE 6060: J. CECIL RHODES FOR SALT  
WATER DISPOSAL, LEA COUNTY, NEW MEXICO

Case Number

6060

Application

Transcripts.

Small Exhibits

ETC.

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
12 October, 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of J. Cecil Rhodes for  
salt water disposal, Lea County, New  
Mexico.

CASE  
6060

BEFORE: Richard L. Stamets.

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:	W. Thomas Kellahin, Esq. KELLAHIN & FOX 500 Don Gaspar Santa Fe, New Mexico 87501

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

I N D E X2 VICTOR F. VASICIK

3	Direct Examination by Mr. Kellahin	3
4	Cross Examination by Mr. Stamets	10

E X H I B I T S

9	Applicant Exhibit 1, Application	10
10	Applicant Exhibit 2, Form C-108	10
11	Applicant Exhibit 3, Diagram	10
12	Applicant Exhibit 4, Land Plat	10
13	Applicant Exhibit 5, Plat	10
14	Applicant Exhibit 6, Water Analysis	10
15	Applicant Exhibit 7, Form C-104	10
16	Applicant Exhibit 8, Letter and Tabulation	10
17	Applicant Exhibit 9, Test	10

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1 MR. STAMETS: Call next Case 6060.

2 Application of Cecil Rhodes for salt water dis-  
3 posal, Lea County, New Mexico.

4 Call for appearances in this case.

5 MR. KELLAHIN: Tom Kellahin, of Kellahin and Fox,  
6 appearing on behalf of the applicant, and I have one witness.

7 MR. STAMETS: Any other appearances in this case?

8 MR. VASICIK: Yes. I'm Victor F. Vasicik.

9 (Witness sworn.)

10  
11 VICTOR F. VASICIK

12 being called as a witness and being duly sworn upon his oath,  
13 testified as follows, to-wit:

14  
15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17  
18 Q Mr. Vasicik, would you please state your name,  
19 by whom you're employed, and in what capacity?

20 A My name is Victor F. Vasicik and I represent J.  
21 Cecil Rhodes as an agent.

22 Q Have you previously testified before the Commis-  
23 sion?

24 A Yes.

25 Q In what capacity, sir?

1 A As an expert witness.

2 Q In what field of expertise?

3 A Petroleum engineering.

4 Q Have you made a study of and are you familiar with  
5 the facts surrounding Mr. Rhodes' application for this salt  
6 water disposal?

7 A I am.

8 MR. KELLAHIN: If the Examiner please, are the  
9 witness' qualifications acceptable?

10 MR. STAMETS: They are.

11 Q Would you please refer to what I have marked as  
12 Applicant Exhibit Number 1, which is in fact the application  
13 for salt water disposal, and state briefly for the Examiner  
14 what you're seeking to accomplish?

15 A We wish to dispose of salt water into the Blinebry  
16 Formation at a depth of 5252 to 5546, which would be into  
17 the Blinebry Formation, and those are perforations that I just  
18 quoted, and this salt water is produced from the J. Cecil  
19 Rhodes Stewart No. 1.

20 We will produce -- as shown, we will inject this  
21 water, as shown on a schematic diagram -- want to get that  
22 in right now?

23 Q Yes, sir, let's go through what we've marked as  
24 Exhibit Number 2, which is your Form C-108. Summarize  
25 briefly what you intend to do there.

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1 A. We intend to run a packer at the end of tubing down  
2 to a depth of 3500 feet and pump water from under our packer,  
3 which is set on the end of that tubing, into the Blinebry  
4 Formation, which is 5252 to 5546.

5 Q. All right, sir. Please refer to what we've marked  
6 as Exhibit Number 3 and identify it.

7 A. This is a schematic diagram showing the downhole  
8 set-up of this well, Corrigan No. 1, which was originally  
9 owned and operated by the estate of Gordon Callum and later  
10 J. Cecil Rhodes purchased the well.

11 It has 8-5/8ths casing down to a depth of 982  
12 cemented to the surface. It has 4-1/2 casing set at 5555,  
13 which is cemented with 550 sacks. Top of the cement on this  
14 4-1/2 casing is at 2200 feet from the surface, which was by  
15 temperature survey.

16 At present it does not have this tubing in the  
17 well. We propose to put that tubing in the well at the time  
18 of -- when we get approval to do this.

19 Q. I assume you'll be injecting this produced salt  
20 water under pressure?

21 A. Yes.

22 Q. And what will that pressure be at the surface?

23 A. We anticipate that the pressure will probably be  
24 somewhere in the neighborhood of 400 pounds per square inch,  
25 but it could be less than that. We ran a test on the well

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1 and we had -- we were pumping in at 2-1/2 barrels a minute  
2 at 500 psi. We just tried it down the casing to see if it  
3 would take it all right and that -- that was our pressure.

4 Q Will that pressure exceed the recommended guide-  
5 lines of the Oil Commission that injection pressure shall not  
6 exceed 0.2 psi per foot of depth?

7 A It will not exceed that pressure.

8 Q Referring back to your schematic drawing, what if  
9 any installations would you make upon the surface to monitor  
10 the water flow in this well?

11 A This well will be pumped from a tank from which  
12 we will know how much water is going in this tank each 24  
13 hours, and it will also have a --it will be hooked up with  
14 electricity, a pump will, which will pump this water out of  
15 a tank and down in the well.

16 Q How will you monitor to prevent or detect leakage  
17 in the well?

18 A We'll have a packer set at 3500 feet and there  
19 will be a gauge on the casing, a casing head, that will tell  
20 us whether or not we have any leakage from behind that packer  
21 or not.

22 Q Please refer to what we have marked as Exhibit  
23 Number 4 and identify it.

24 A This is a land plat showing the location of the  
25 well, of the proposed salt water disposal well.



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1 Q And would you refer to what we have marked as  
2 Exhibit Number 5 and identify it?

3 A This Exhibit Number 5 is a plat showing the pro-  
4 ducers that surround the proposed injection well. It also  
5 shows all the dry holes, and the Blinebry producers, as well  
6 as the Queen producers, that surround this proposed injector.

7 It's also a contour map, for what it is worth,  
8 but it's probably all right. It's a pretty old contour map  
9 but it's still okay.

10 Q Please refer to Exhibit Number 6 and identify it.

11 A This is a water analysis of the water that we pro-  
12 pose to inject into the well.

13 Q This is produced salt water from the Blinebry  
14 Formation?

15 A Yes.

16 Q And you'll be re-injecting it into the Blinebry  
17 Formation?

18 A That is correct.

19 Q In your opinion will the method of completion of  
20 the salt water disposal well -- is it consistent with sound  
21 engineering practices so that the injected water will remain  
22 confined in the proposed formation?

23 A Yes.

24 Q Please refer to Exhibit Number 7 and identify it.

25 A The C-104 form, which shows the change of operator

1 from Gordon M. Callum Estate to J. Cecil Rhodes.

2 Q Can you summarize briefly for the benefit of the  
3 Examiner the history on this Corrigan Well No. 1?

4 A It was completed as a producer in -- and I don't  
5 remember exactly how much oil it made, but it did make maybe  
6 3000 or 4000 barrels of oil before it went to water, made  
7 100 percent salt water, and it produces too low on the struc-  
8 ture to continue producing from the Blinebry, and there were  
9 no other zones up the hole, so it was temporarily abandoned  
10 by Gordon Callum several years ago.

11 Q Refer to what's been marked as Exhibit Number 7,  
12 I believe.

13 A Would that be this letter?

14 Q Yes, sir.

15 A This was a letter that was written to the Commis-  
16 sion advising them that we have enclosed a tabulated summary  
17 depicting all wells in the area that penetrated the proposed  
18 water injection zone.

19 Q Would you refer now to that tabulation and summar-  
20 ize its contents for the Examiner?

21 A There are several wells, approximately 8 wells,  
22 that surround the proposed injection, most of which are to  
23 the north/northeast and southeast, which have all penetrated  
24 the zone that we propose to inject the salt water. They have  
25 all been -- the cement covers -- the cement behind the string

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1 in all these wells comes up to sufficient depth to protect  
2 all the sands below the salt water -- below the salt, salt  
3 zone, one of which is even strictly a cemented oil string.  
4 The cement in all these wells comes up to approximately 2000  
5 feet from the surface.

6 Q What, if any, fresh water sources are in the area?

7 A I'm not aware of any fresh water at the surface in  
8 that area.

9 Q Please refer to what we've marked as Exhibit Num-  
10 ber 9 and identify it.

11 A This is a test that we ran on this well to see if  
12 it would take water at all before we went to this -- for  
13 this hearing, decided to have a hearing on it, and we ran it  
14 on July the 26th, 1977, and we found that we could pump water  
15 into this well with a surface pressure of 500 psi at 2-1/2  
16 barrels per minute.

17 We pumped at 3 barrels per minute at 500 psi and  
18 2-1/2 barrels a minute at 600 psi. 100 barrels into the  
19 formation with an instant shut-in of 500, and the well went  
20 on a vacuum at ten minutes. We think that is very -- this  
21 is sufficient to handle all the water from the J. Cecil  
22 Rhodes well.

23 Q What is that volume?

24 A The volume from the Cecil Rhodes well, approxi-  
25 mately, right now is about 38 barrels a day. On the applica-

1 tion I think I allowed -- I might have made it a little bit  
2 higher just to -- just in case we made more, a little bit  
3 more. I think I'd better see here what I did put on that  
4 application. I said a maximum of 40, 40 barrels per day.

5 Q In your opinion will approval of this application  
6 be in the best interests of conservation, the prevention of  
7 waste, and the protection of correlative rights?

8 A Yes.

9 Q And were Exhibits 1 through 9 prepared under your  
10 direction or prepared directly by you?

11 A Yes.

12 MR. KELLAHIN: If the Examiner please, we move  
13 the introduction of Exhibits 1 through 9.

14 MR. STAMETS: The exhibits will be admitted.

15 MR. KELLAHIN: That concludes our direct examina-  
16 tion.

17  
18 CROSS EXAMINATION

19 BY MR. STAMETS:

20  
21 Q Mr. Vasicik, is the tubing in this well going to  
22 be coated with --

23 A Yes. Yes, we're going to coat it internally, and  
24 we're going to put some corrosive-resistant material in the  
25 water behind them on top of the packer.

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1 A. Okay.

2 MR. STAMETS: Are there any questions of the wit-  
3 ness?

4 MR. RAMEY: Mr. Vasicik, in the event we write an  
5 order on this, what -- what pressure would you like to have  
6 it? What would be the maximum pressure you'd like to have  
7 it as?

8 A. I would like to have 1000 pounds, if I could, but  
9 I don't think we'll ever need it, but I would like to have  
10 1000 pounds, but I still would be well within what the frac  
11 gradient is in that area, which is -- is very high, from what  
12 I understand from some of the treatment reports I got there.  
13 The fracture gradient is somewhere in the neighborhood of --  
14 well, it calculated out about 1800 pounds, I think, before  
15 you start packing.

16 MR. KELLAHIN: If the Examiner please, we could  
17 furnish -- we could submit to you in letter form the fracture  
18 gradient calculations for this particular area.

19 MR. STAMETS: If you've got those, I think the  
20 Commission would appreciate having them. We're trying to  
21 develop as much information along these lines as we can, so  
22 it certainly would be appreciated.

23 MR. KELLAHIN: We'd be happy to submit that to  
24 you.

25 A. It will be, as I understand, in other words, we

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1 get these from the treatment companies. We can -- we can --  
2 I've already discussed this with Dowell and that's what they,  
3 somewhere in the neighborhood that's what they came up with.  
4 They do a lot of -- they did a lot of fracing in the Blinebry.  
5 As a matter of fact, J. Cecil Rhodes, they fraced his, and  
6 we can come up with that from those pressures.

7 MR. STAMETS: One of the factors that the Commis-  
8 sion has used is the instantaneous shut-in pressure after  
9 frac.

10 A. Yes, sir.

11 MR. STAMETS: Any other questions of the witness?  
12 You may be excused.

13 Anything further in this case?

14 We'll take the case under advisement.

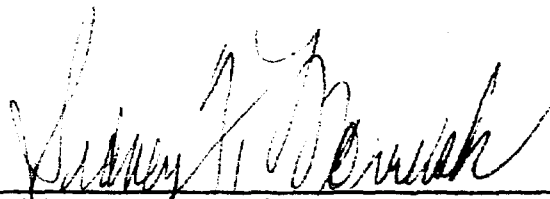
15 (Hearing concluded.)  
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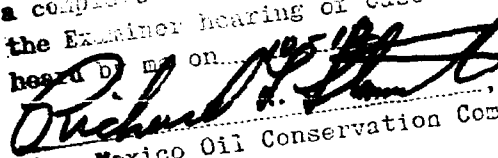
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REPORTER'S CERTIFICATE

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.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6060,  
heard by me on 10-22-55.  
  
Examiner  
New Mexico Oil Conservation Commission

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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. 6060  
Order No. R-5569

APPLICATION OF J. CECIL RHODES  
FOR SALT WATER DISPOSAL,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 12, 1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 1st day of November, 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, J. Cecil Rhodes, is the owner and operator of the Corrigan Well No. 1, located in Unit M of Section 11, Township 25 South, Range 37 East, NMPM, Justis-Blinbry Pool, Lea County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Blinbry formation, with injection into the perforated interval from approximately 5252 feet to 5448 feet.
- (4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer set at approximately 5150 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.
- (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 1050 psi.



Case No. 6060  
Order No. R-5569

(6) That the operator should notify the supervisor of the Hobbs 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, J. Cecil Rhodes, is hereby authorized to utilize its Corrigan Well No. 1, located in Unit M of Section 11, Township 25 South, Range 37 East, NMPM, Justis-Blinebry Pool, Lea County, New Mexico, to dispose of produced salt water into the Blinebry formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 5150 feet, with injection into the perforated interval from approximately 5252 feet to 5448 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 1050 psi.

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

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs 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.

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

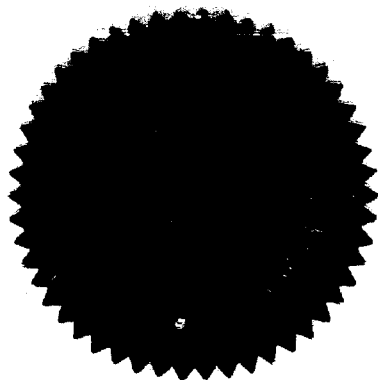
-3-

Case No. 6060  
Order No. R-5569

(6) 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. Ramey*  
JOE D. RAMEY, Member & Secretary

S E A L

jr/

Dockets Nos. 33-77 and 34-77 are tentatively set for hearing on October 26 and November 9, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 12, 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 November, 1977, from fifteen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
- (2) Consideration of the allowable production of gas for November, 1977, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 6053: (Continued & Readvertised)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Noel Reynolds and all other interested parties to appear and show cause why the Torreon Water Well No. 1, located in Unit J of Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 6025: (Continued & Readvertised)

Application of Roger C. Hanks for a special gas-oil ratio limitation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a special gas-oil ratio limitation of 10,000 cubic feet of gas per barrel of oil for the North Dagger Draw-Upper Pennsylvanian Pool, Eddy County, New Mexico, retroactive to August 22, 1977.

CASE 6052: (Continued from September 28, 1977, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Western Energy Corporation and all other interested parties to appear and show cause why the Ute Well No. 2 located in Unit O of Section 23, Township 31 North, Range 16 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 6055: (Continued from September 28, 1977, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Han-San, Inc., and all other interested parties to appear and show cause why the Grevey Well No. 4 located in Unit E of Section 26, Township 26 North, Range 1 East, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 6057: Application of Aminoil USA Inc., for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Willow Lake Well No. 3 to be located 1980 feet from the South line and 1940 feet from the West line of Section 15, Township 24 South, Range 28 East, Willow Lake Field, Eddy County, New Mexico, the S/2 of said Section 15 to be dedicated to the well.

CASE 6058: Application of Atlantic Richfield Company for the amendment of Order No. R-5430, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5430, which order approved an unorthodox Justis-Fusselman location for its Wimberly WN Well No. 11 in Section 24, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant now requests that the unorthodox location for said well be extended to include the Montoya formation.

CASE 6059: Application of Dome Petroleum Corporation for pool creation, an oil discovery allowable, and a special depth bracket allowable, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Leggs-Entrada Oil Pool in Section 11, Township 21 North, Range 10 West, San Juan County, New Mexico, the assignment of approximately 27,020 barrels of oil discovery allowable to its Santa Fe-Leggs Well No. 1 located in Unit O of said Section 11, and the establishment of a special depth bracket allowable of 750 barrels of oil per day for said pool.

CASE 6060: Application of J. Cecil Rhodes for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Blinbry formation into the perforated interval from 5252 feet to 5448 feet in his Corrigan Well No. 1 located in Unit M of Section 11, Township 25 South, Range 37 East, Justis-Blinbry Pool, Lea County, New Mexico.



# V-F Petroleum Inc.

oil & gas operations    501 vaughn building    midland, texas 79701

915 683-3344

SEP 29 1977

September 27, 1977

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

RE: J. Cecil Rhodes  
Corrigan #1  
Application for con-  
verting well to SWD

Gentlemen:

In accordance with Conservation Commission memo 3-77 please find attached a tabulated summary of wells within one-half mile radius of the proposed well shown in caption. There are wells that have penetrated the proposed injection interval.

There are no plugged and abandoned wells within one-half mile that penetrated the proposed injection interval.

Thank you.

Very truly yours,



V. F. Vasicek  
President

VFV:gr  
Encl.

THE FIRST NATIONAL BANK  
PHONE 66-4231  
MIDLAND, TEXAS

Dear Mr. [unclear]  
I am sorry to hear  
the letter of [unclear]  
from Mr. [unclear]  
sorry for the delay.



TABULATION OF WELLS WITHIN ONE-HALF MILE RADIUS  
THAT PENETRATED PROPOSED INJECTION ZONE

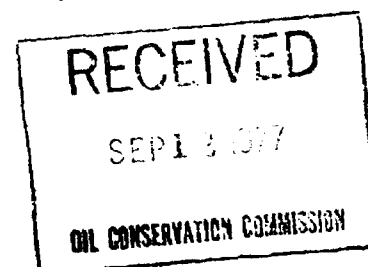
Operator	Well Name	Location	Total Depth Drilled	Size	Surface Casing			Production Casing			Perforated Interval	
					Depth Set	Sx Cmt	Top Cement	Size	Depth Set	Sx Cmt		Top Cmt
Atlantic Richfield Co.	Justis #2	"O" 11-25-37 660 FSL; 1980 FEL	6129	8-5/8"	958	620	Circ.	4-1/2"	6128	1280	2250	5318-5407
Union of Texas	Justis #1	"J" 11-25-37 2310 FSL; 2310 FEL	6150	9-5/8"	1010	490	Circ.	7"	6148	475	1920	5844-6115
Union of Texas	Olsen-Stuart	"K" 11-25-37 2310 FSL; 2310 FWL	6200	8-5/8"	1000	440	Circ.	5-1/2"	6200	535	1950	5837-6144
Union of Texas	Olsen-Stuart #2	"K" 11-25-37 2310 FWL; 2160 FSL	6200	9-5/8"	954	340	Circ.	7"	6200	500	1950	5619-6124
Union of Texas	Stuart #7	"F" 11-25-37	6150	9-5/8"	1062	536	Circ.	7"	6150	683	700	5307-6113
Union of Texas	Stuart #8	"E" 11-25-37 1650 FWL; 990 FSL	5240	9-5/8"	1036	546	Circ.	7"	6180	432	1500	5406-5495
Union of Texas	Stuart #1	"L" 11-25-37 990 FN; 2310 FSL	6200	9-5/8"	1067	668	Circ.	4-1/2"	6200	1085	Circ.	5380-5605
J. C. Rhodes	Stuart #1	"N" 11-25-37	6240	8-5/8"	984	604	Circ.	5-1/2"	6227	523	2095	5174-6109

6660  
Case 66603

# V-F Petroleum Inc.

oil & gas operations 901 vaughn building midland, texas 79701 915 683-3344

September 8, 1977



New Mexico Conservation Commission  
P. O. Box 1148  
Santa Fe, New Mexico 87501

Attn: Joe D. Ramey

Re: J. Cecil Rhodes  
#1 Corrigan  
Lea County, New Mexico

*Set for hearing  
on Oct 12*

Dear Mr. Ramey:

*Blineberry*

We respectfully request permission to inject produced salt water into the ~~Blineberry~~ formation at a depth of 5,252' to 5,448' in the subject well. This well was formerly owned and operated by the Gordon M. Cone Estate and was found too low to produce oil commercially out of this zone. Subsequently the well and lease has been purchased by J. Cecil Rhodes of Midland, Texas, the current operator of this lease.

We are attaching here the following:

1. Geological plat contoured on top of the Blineberry, depicting producing wells nearby.
2. Current land plat of the area showing wells within a two mile radius.
3. Log of the subject well.
4. Schematic diagram of down hole equipment, and pertinent information related thereto.
5. Form C-108 outlining the plan of disposal.
6. Copy of C-104 showing change of operator from Gordon M. Cone Estate to J. Cecil Rhodes.

Copies of Form C-108, schematic diagram, geological map, land plat, and a copy of this letter have been sent to the offset operators as listed on attached Form C-108 and to the surface landowner.

Also copies of all the material dealing with this application have been sent to the State Engineer, Mr. Steve Reynolds, BATAAN Memorials Bldg., Santa Fe, New Mexico 87501.

*Verick called 9/13/77 - C 14*



Page 2  
New Mexico Conservation Commission  
September 8, 1977

Hopefully you will find this application in order. Please advise if additional information or dates are needed.

Very truly yours,



V. F. Vasicek  
Petroleum Engineer and  
Agent for J. Cecil Rhodes

VFV/gn  
Enclosures

## NEW MEXICO OIL CONSERVATION COMMISSION

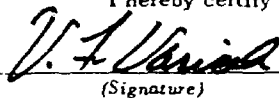
## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>J. Cecil Rhodes</b>		ADDRESS <b>901 Vaughn Building, Midland, TX</b>	
LEASE NAME <b>Corrigan #1</b>	WELL NO. <b>1</b>	FIELD <b>Justice Blineberry</b>	COUNTY <b>Lea</b>
LOCATION UNIT LETTER <b>M</b> ; WELL IS LOCATED <b>990</b> FEET FROM THE <b>West</b> LINE AND <b>990</b> FEET FROM THE <b>South</b> LINE, SECTION <b>11</b> TOWNSHIP <b>25</b> RANGE <b>37</b> NMPM.			

## CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING					
<b>24# J-55 Surface</b>	<b>8-5/8</b>	<b>982</b>	<b>450</b>	<b>Surface</b>	<b>Circulated</b>
INTERMEDIATE					
LONG STRING					
<b>10.5# J-55</b>	<b>4-1/2</b>	<b>5553</b>	<b>550</b>	<b>2200</b>	<b>Temp. Survey (API)</b>
TUBING					
<b>23/8 EUE</b>			<b>Baker Model AD Tension PKR @ 3500'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>Blineberry</b>			TOP OF FORMATION <b>5252</b>		BOTTOM OF FORMATION <b>5546</b>
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>tubing</b>			PERFORATIONS OR OPEN HOLES <b>perforations</b>		
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>NO</b>			PROPOSED INTERVAL(S) OF INJECTION <b>5252-5448</b>		
IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Looking for Blineberry production</b>			HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>NO</b>		
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>250' (EST)</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>Paddock 5010</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>Drinkard 5896</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) <b>30</b>	MINIMUM <b>20</b>	MAXIMUM <b>40</b>	OPEN OR CLOSED TYPE SYSTEM <b>open</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>pressure</b>	APPROX. PRESSURE (PSI) <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 - <b>YES</b>			WATER TO BE DISPOSED OF <b>Blineberry</b>		
			NATURAL WATER IN DISPOSAL ZONE <b>Blineberry</b>		
			ARE WATER ANALYSES ATTACHED? <b>YES</b>		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>J. M. Owen Jal, New Mexico</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
<b>Ph. 684-8211, Mobil Oil Corporation, P. O. Box 633, Midland, Texas 79701</b>					
<b>Ph. 682-7301, Gulf Oil Corporation, P. O. Box 1150, Midland, Texas 79701</b>					
<b>Ph. 584-0100, ARCO (Atlantic-Richfield), P. O. Box 1610, Midland, Texas 79701</b>					
<b>Ph. 684-0600, Union of Texas, 1300 Wilco Bldg., Midland, Texas 79701</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>YES</b>		<b>YES</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA		ELECTRICAL LOG	
<b>YES</b>		<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)**Petroleum Engineer**  
(Title)**9-8-77**  
(Date)

\*E: 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.



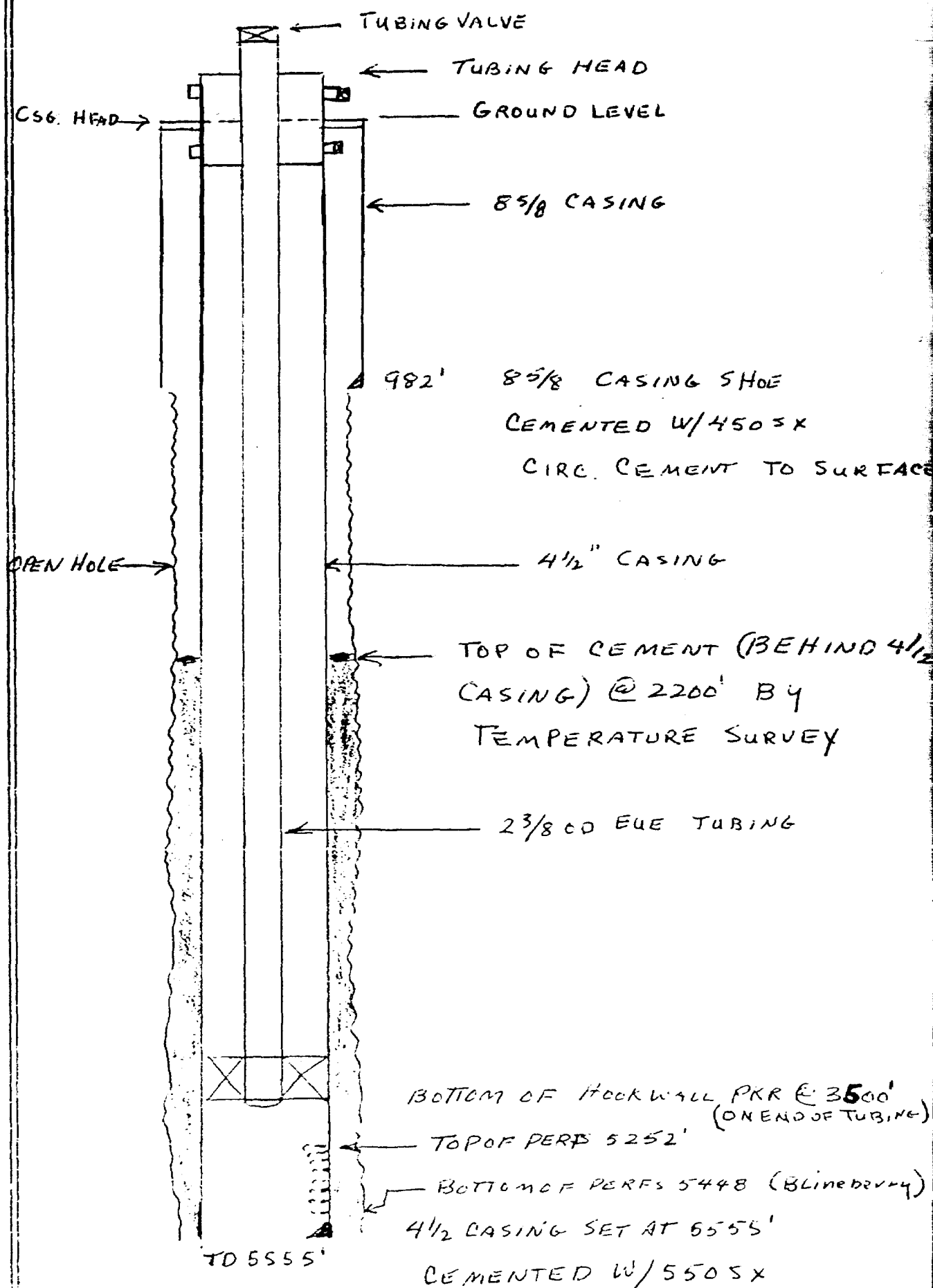
SCHEMATIC DIAGRAM

J. CECIL RHODES

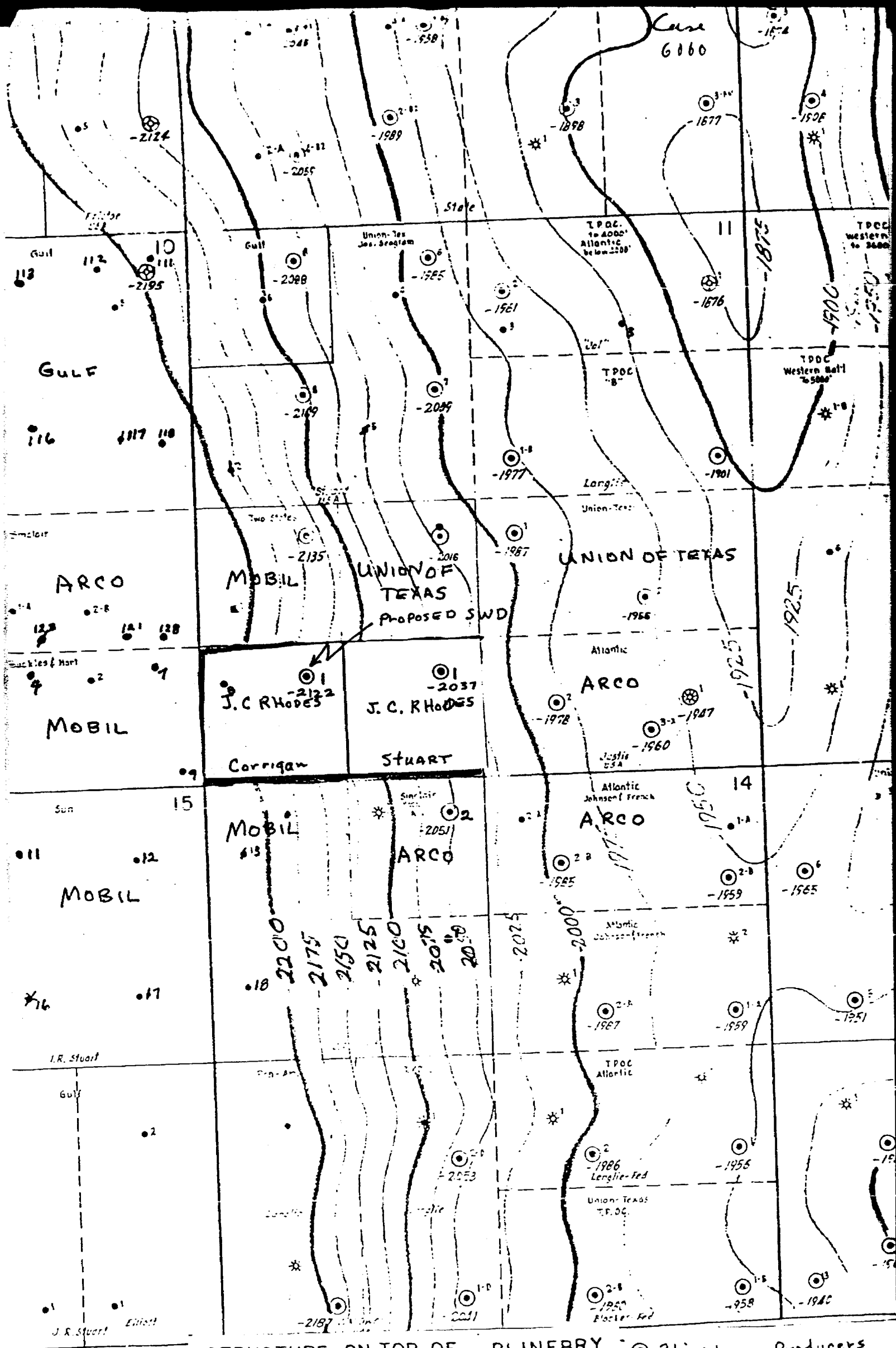
CORRIGAN WELL #1

Sec. 11 T25S R37E  
Lea Co., NM

(diagram is not drawn to scale)







Case 6060

DISTRIBUTION		
ANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104  
Supersedes Old C-104 and C-110  
Effective 1-1-65

I. Operator  
J. Cecil Rhodes

Address  
901 Vaughn Building, Midland, Texas 79701

Reason(s) for filing (Check proper box) Other (Please explain)

New Well ☐ Change in Transporter of:  
Recompletion ☐ Oil ☐ Dry Gas ☐  
Change in Ownership ☒ Casinghead Gas ☐ Condensate ☐

If change of ownership give name and address of previous owner Gordon M. Cone Estate, Lovington, New Mexico 88260

## II. DESCRIPTION OF WELL AND LEASE

Lease Name Corrigan	Well No. 1	Pool Name, including Formation Justice - Blinberry	Kind of Lease State, Federal or Fee Fee	Lease No.
Location Unit Letter M : 990 Feet From The West Line and 990 Feet From The South Line of Section 11 Township 25 Range 37, NMPM, Lea County				

## III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When

If this production is commingled with that from any other lease or pool, give commingling order number:

## IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Restv.	Diff. Restv.
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
Perforations	Depth Casing Shoe							
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					

## V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

## GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

## VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

*J. A. Vanech*  
(Signature)  
Petroleum Engineer and Agent  
(Title)  
September 8, 1977  
(Date)

## OIL CONSERVATION COMMISSION

APPROVED \_\_\_\_\_, 19\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiple

DRAFT

dr/

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. 6060

Order No. R- 5569

APPLICATION OF J. CECIL RHODES FOR  
SALT WATER DISPOSAL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 12, 1977,  
at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this        day of October, 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, J. Cecil Rhodes,  
is the owner and operator of the Corrigan Well No. 1,  
located in Unit M of Section 11, Township 25 South,  
Range 37 East, NMDM, Justis-Blinebry Pool,  
Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the Blinebry  
formation, with injection into the perforated interval  
from approximately 5252 feet to 5448 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer  
set at approximately 5150 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.

(4) 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>1050</sup> ~~1000~~ psi.

(5) That the operator should notify the supervisor of the Hobbs 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.

(7) 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, J. Cecil Rhodes, is hereby authorized to utilize its Corrigan Well No. 1, located in Unit M of Section 11, Township 25 South, Range 37 East, NMPM, Justis-Blinebry Pool, Lea County, New Mexico, to dispose of produced salt water into the Blinebry formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 5150 feet, with injection into the perforated interval from approximately 5252 feet to 5448 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.

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

(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>1050</sup>~~700~~ psi.

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

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs 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.

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

(6) 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.