

Case No.

1605

Application, Transcript,  
Small Exhibits, Etc.

BEFORE THE  
GIL CONSERVATION COMMISSION  
FEBRUARY 25, 1959

IN THE MATTER OF:

APPLICATION OF RICE ENGINEERING AND OPERATING, INC.,  
CASE 1605

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE NEW MEXICO  
Phone CHapel 3-6691

BEFORE THE  
OIL CONSERVATION COMMISSION  
FEBRUARY 25, 1959

-----  
IN THE MATTER OF:

Application of Rice Engineering and Operat- )  
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water disposal well on an unorthodox loca- )  
tion. Applicant, in the above-styled cause, )  
seeks an order authorizing the disposal of )  
produced salt water through its E-M-E SWD )  
Well No. H-20 to be located 2475 feet from )  
the North line and 165 feet from the East )  
line of Section 20, Township 20 South, Range )  
37 East, Lea County, New Mexico. Applicant )  
proposes to inject the produced salt water )  
into the San Andres Formation in the inter- )  
val from 4450 feet to 5000 feet. )  
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Case 1605

BEFORE:

E. J. FISCHER, Examiner.

TRANSCRIPT OF HEARING

MR. FISCHER: Next case on the Docket is Case 1605.

MR. PAYNE: Case 1605: Application of Rice Engineer-  
ing and Operating, Inc., for an order authorizing a salt water  
disposal well on an unorthodox location.

MR. KELLAHIN: Jason Kellahin of Kellahin and Fox,  
Santa Fe, New Mexico, representing the Applicant. We have one  
witness, Mr. Abbott.

(Witness sworn.)

W. G. A B B O T T, a witness called by and on behalf of the

Applicant, being first duly sworn, testified as follows:

DIRECT EXAMINATION

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
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ALBUQUERQUE, NEW MEXICO  
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BY MR. KELLAHIN:

Q State your name, please?

A W. G. Abbott.

Q By whom are you employed, in what position?

A Division Manager, Rice Engineering, Inc., of Hobbs,  
New Mexico.

Q Are you familiar with the application and the subject  
matter therein, Case 1605?

A Yes, sir, I am.

Q Mr. Abbott, have you previously testified before this  
Commission as an engineer and had your qualifications accepted?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualification  
accepted?

MR. FISCHER: Yes, sir, they are.

A We are, in this application, we are asking for two  
things: One salt water disposal well and also an unorthodox  
location for this disposal well. We want to locate the well 2475  
feet from the North line and 165 feet from the East line of  
Section 20, Township 20 South, Range 37 East. This is shown in  
Exhibit A.

Exhibit A shows the wells in this immediate area, and also  
there is a key there that shows the producing zone of the oil  
wells in the area. We want to dispose of this salt water in  
the lower part of the San Andres formation.

Also, on this Exhibit A is a trace of a cross-section AA Prime which will be brought up later.

Q (By Mr. Kellahin) In connection with Exhibit A, Mr. Abbott, is there any production from the San Andres in the vicinity of the proposed disposal well?

A No, there isn't.

Q What is that production in there?

A That is Grayburg, and then there are a couple of dual completions in the Queen formation with the Grayburg gas wells.

Q I notice on Exhibit A you have a radius described around the proposed well. What is the size of that?

A That is a half mile radius around the proposed well.

Q Referring to what has been marked as Exhibit B, state what that shows?

A Exhibit B is a diagrammatic sketch of the proposed completion. We propose to set eight and five eighths O.D. 46 pound J-55 casing at 300 feet and cement it to the surface. Then we will set seven inch O.D. J-55 20 pound casing at 4450, then we will complete open hole in the San Andres formation between 4450 and 5000 feet.

Q In the operation of the disposal well, how do you propose to make your installation?

A Well, we will have this 7-inch casing set. Inside of that, we will run 5½-inch casing at, tubing in the well and

hang that 5½ inch from the surface with no packer, and that 5½ inch will be set to the bottom of the seven inch; then we will displace in the annular space sweet crude, either a naphtha or kerosene, of the calculated gravity; so we can displace the salt water in the annular space down to the bottom of this 5½-inch casing and at the same time apply approximately 50 pounds to this annular space at static conditions. Therefore, the -- incidentally, this tubing, 5½-inch casing as tubing, will be plastic line, will be inside of it; and the outside will be protected by this oil balance method of using the sweet oil.

Under static conditions, as I was going to say, we will have approximately 50 pounds on a casing, then as we inject water at any certain rate, we will have a reflection on that of a pressure at the surface; therefore, if we get any leak in the tubing, it will be reflected immediately at the surface through this pressure guage. It is a method we have used successfully in the Hobbs Pool.

Q Is it your opinion that is a sufficient protection against corrosion?

A Yes, sir, it is.

Q Has it been your experience in the Lea County area that it protects against corrosion or leakage?

A Yes. I don't know how serious corrosion will be, but with that protection we feel that the well will be adequately protected. And, also, we realize that the salt water disposal

well is very important in that when you lay the lines to that well, if you happen to lose the well because of a mechanical difficulty, it realizes quite an expenditure to replace it.

Q What volume of water do you propose to inject in this well?

A Approximately 15 thousand barrels a day by gravity.

Q The injection will be by gravity feed?

A Yes, sir.

Q Are you familiar with the San Andres formation in this area?

A Yes.

Q In your opinion, will this take the volumes of water contemplated?

A We think it will, yes, sir. We have tested a well two miles north of this well, and it was the Amerada-Atkins Number Two. We tested that at 544 barrels an hour by gravity, and that was down 5-inch casing and through perforations. So with an open hole completion like this, we hope to get that much water in the well.

Q What is the source of this water?

A This water is gathered from the operators that are members of the Eunice-Monument-Eumont Salt Water Disposal System.

Q What pools would the major portion of water come from?

A From the Monument Pool.

Q Now, referring to what has been marked as Exhibit C.



state what that shows?

A Exhibit C is a cross-section which is outlined by the tracing on Exhibit A, the AA Prime, showing four producing wells surrounding this proposed salt water disposal well. This points out the location in the section that we will be disposing of the water. You can see that on this cross-section that the deepest oil well in this area producing will be at approximately a minus 325 feet, while the top of this proposed salt water disposal zone will be approximately 1040 feet minus 1040 feet.

Q In the San Andres formation is any water encountered?

A Yes, sir.

Q In large volumes?

A Yes, sir, it has a good aquifer. It seems to cover quite an area.

Q The injection of water will create no problems that do not presently exist in regard to that?

A No, sir.

Q In your opinion there is sufficient separation to protect any producing horizons in the area?

A Yes, sir, there is.

Q Referring to what has been marked as Exhibit D, state what that is?

A Exhibit D shows the leases in this, wells in this half mile radius of the disposal well with the completion interval and the completion zone and any remarks about the well. This exhibit

shows the producing zones in the wells in that area.

Q Referring to what has been marked as Exhibit E, state what that is?

A Exhibit E is a list of the operators that are members of the Eunice-Monument-Eumont Salt Water Disposal System.

Q Will all of these operators be contributing to this particular disposal well?

A No, not specially. Many will not, but they belong to this unitized salt water disposal system. Of course, quite a few of the operators' water will go directly in this well.

Q And it is available, will be available, for the use of the entire system if need be?

A Yes, sir.

Q Referring to what has been marked as Exhibit F, I note that disposal well is located on a lease belonging to the Texas Company. Do you have any permission from them to use it for that purpose?

A Yes, sir. This next exhibit is a photostatic copy of a letter from the Texas Company written by O. F. Sebesta, Assistant Division Manager of the Texas Company, and he advised in this letter that the Texas Company approves of this proposed salt water disposal well.

Q Mr. Abbott, this application also includes an application for an unorthodox location for the disposal well. For what reason is it necessary to have an unorthodox location?

A The reason is because of the topography in that area.

In our salt water disposal systems, we try to design them for gravity drainage over an area, and by locating the well in the 165 feet from the lease line instead of the 330 location, we can drain about six feet in elevation, I mean it is six feet lower in elevation at that place on the lease and will cut down the size of our lines that will be necessary to bring the water to that well.

Q Will a location such as that in your opinion have any adverse affect on adjoining leases?

A No, sir, I can't see where it would.

Q Were Exhibits A through E prepared by you or under your direction and supervision?

A Yes, sir.

Q And Exhibit F is a copy of a letter which is in your files?

A Yes, sir, it is.

Q Will you be willing to produce the original if requested by the Commission?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer into evidence Exhibits A through F inclusive.

MR. FISCHER: Without objection they will be received.

MR. KELLAHIN: That is all the questions I have.

MR. FISCHER: Any questions of the witness?

MR. NUTTER: Yes.

MR. FISCHER: Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Abbott, are there any wells within a two-mile radius of this proposed disposal well which are producing from the San Andres?

A I don't believe there are. I can't say for certain, but in that area of the Monument Pool, most of the completions are in the Grayburg. Now, there is not too much difference in the Grayburg and San Andres in that particular area. Most of the Grayburg wells in that area seem to have a good water drive similar to the San Andres production.

Q Do you know where the nearest well is that is producing from the San Andres?

A No, I can't say that I do. It may be that some of the wells within two miles of this proposed well have been San Andres producers but have been plugged back to the Grayburg. There is a possibility of that, too.

Q What will hold the sweet oil in that annular space surrounding the 5½-inch pipe?

A The hydrostatic head of the salt water, of the San Andres water, will be about from 500 to 800 feet from the surface, and when we put this oil blanket that will decrease that water level, it will stay there in that position.

Q In other words, you will have enough water in the

San Andres formation to stand in the oil high enough to exert a hydrostatic head against that sweet oil?

A Yes, sir.

Q Is the San Andres water in this area a static water?

A Well, I can't answer that. I imagine it is fairly static.

MR. NUTTER: That is all. Thank you.

EXAMINATION BY MR. FISCHER:

Q Has the Texas Company agreed to your proposed casing program on this well?

A As yet we have not gotten a letter from them where they have said they do. We have sent them a letter recently with the proposed casing program. We hope to hear from them shortly.

Q Do you have any idea or could you make an estimate of the amount of water in barrels per day you would eventually be putting into this well?

A It would be close to 15,000 barrels a day.

Q What will you start out in the well?

A Well, when we start building our system, as we get to a lease that is making water, we will connect that lease and it may take a couple of months to reach that 15,000 barrels a day or approach it.

MR. FISCHER: That is all I have. Any other questions of the witness?

MR. PAYNE: Yes.

EXAMINATION BY MR. PAYNE:

Q Mr. Abbott, have you gotten the approval of the lessor on the lease where the disposal well is to be drilled, or do you feel that is necessary?

A Well, we have. The surface owner is the State of New Mexico, and it is leased to a man for grazing purposes and we have gotten a relinquishment of grazing leases for two and a half acres surrounding this well; then we have applied to the Land Office to get a business lease for that two and a half acres.

Q You don't contemplate any right of way problems?

A No, sir, not on that particular lease.

Q Mr. Abbott, would you be willing to submit to us a compilation very similar to your Exhibit D giving us the same type of information for all wells completed within a two-mile radius of the proposed disposal well?

A Yes, sir, we can do that.

MR. PAYNE: Very good. Thank you.

MR. FISCHER: Any other questions? No further questions, the case will be taken under advisement. The witness may be excused.

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STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO)

I, JOHN CALVIN BEVELL, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me; that the same is a true and correct record, to the best of my knowledge, skill and ability.

WITNESS my hand and seal this 2nd day of March, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

John Calvin Bevell  
NOTARY PUBLIC

My Commission Expires:

January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1605, heard by me on Feb 25, 1959.

E. J. Fischer, Examiner  
New Mexico Oil Conservation Commission

EXHIBIT "D" ✓

Wells With ½ Mile of SWD H-20

E-M-E SWD System

Operator	Lease	Well No.	Completion Interval Elevation	Completion Zone	Remarks
Shell	"G"	1	-75 to -259	Grayburg	Temp. Abd. BP @ -24'
Sinclair	Roach	1	-160 to -249 +161 to +119	Grayburg Queen	Dual Completion
"	"	2	-202 to -320	Grayburg	
"	"	3	-158 to -273	Grayburg	
"	"	4	-119 to -358	Grayburg	P & A
Skelly	"F"	1	-185 to -350	Grayburg	
Texas	"H"	3	-172 to -252	Grayburg	
"	"	6	-183 to -294	Grayburg	
"	"	8	-174 to -330	Grayburg	
"	"	15	-142 to -323	Grayburg	
Vem	"A"	1	-108 to -277 +108 to +13	Grayburg Queen	Dual Completion
"	"	2	+16 to -311	Grayburg	P & A
"	"	2X	-161 to -250	Grayburg	Replacement Well for #2
"	"	3	-64 to -320	Grayburg	



67 F

# THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS



DOMESTIC PRODUCING DEPARTMENT  
WEST TEXAS DIVISION

January 19, 1959

P. O. BOX 1720  
FORT WORTH 1, TEXAS

SALT WATER DISPOSAL  
E-M-E SWD System  
Lea County, New Mexico

Rice Engineering & Operating, Inc.  
P.O. Box 1142  
Hobbs, New Mexico

Attn: Mr. W. G. Abbott  
Division Manager

Dear Sir:

Please refer to your letter of December 20, 1958, in which you requested The Texas Company's consideration for the drilling of a salt water disposal well located 165 feet from the south line and 165 feet from the east line of the NE/4 of Section 20, T-20-S, R-37-E.

This is to advise that The Texas Company approves of the proposal with the understanding that the injection interval will be confined to the formation occurring from approximately 4450 to 4750 feet; and conditioned upon The Texas Company's prior approval of the drilling and completion program of the subject well.

Yours very truly,

THE TEXAS COMPANY

*[Signature]*

O. F. Sebesta  
Assistant Division Manager

VFD-DL

JBR-file

RECEIVED

JAN 21 1959  
REC'D  
FEB 11 1959

EUNICE - MONUMENT - EUMONT

MAILING LIST

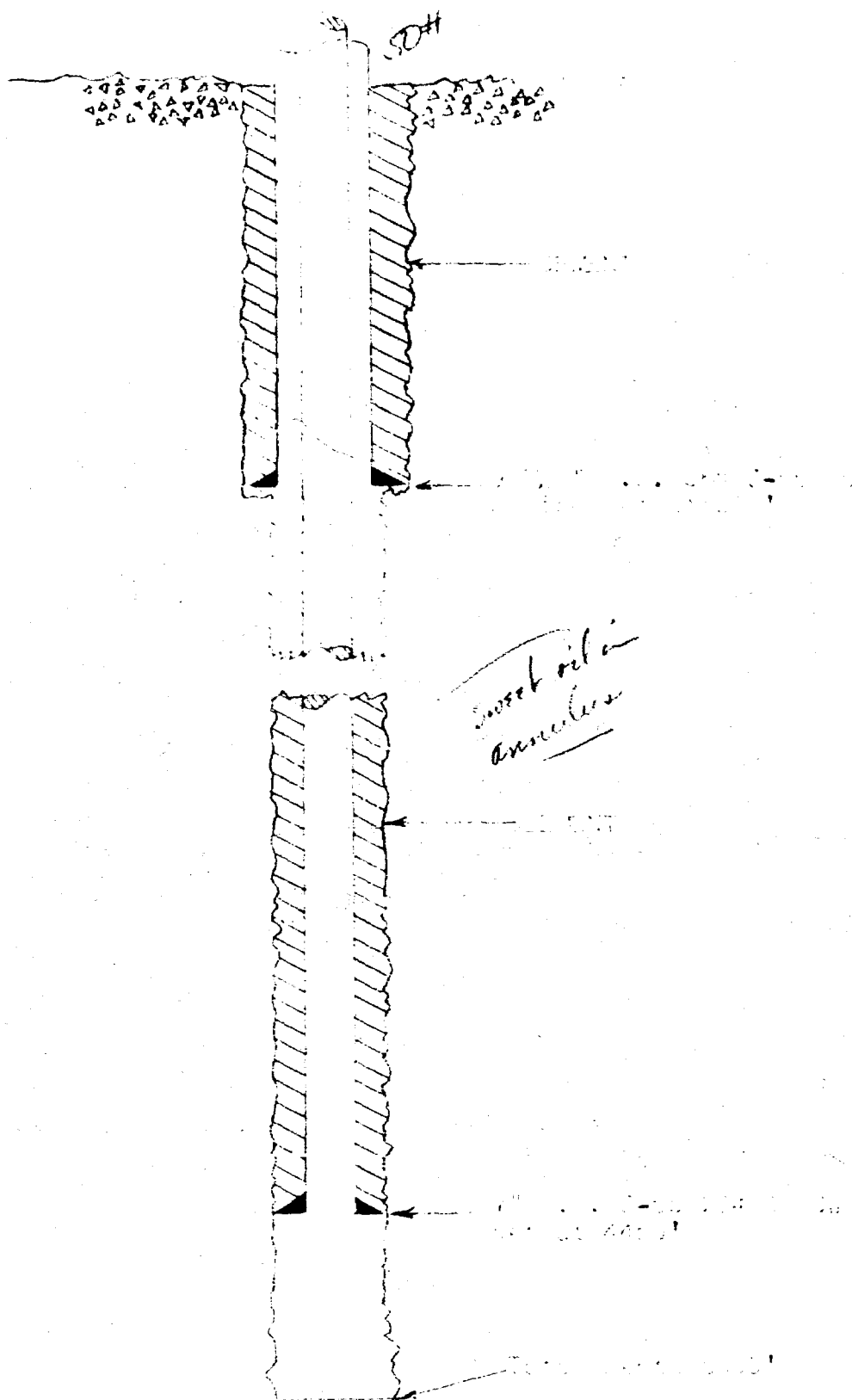
Amerada Petroleum Corporation, Drawer D., Monument, N. M.  
Anderson-Prichard Oil Corporation, Box 196, Midland, Tex.  
Atlantic Refining Company, The, Box 1038, Denver City, Tex.  
Aztec Oil & Gas Company, Box 847, Hobbs, N. M.  
Cities Service Oil Company, Box 97, Hobbs, N. M.  
Continental Oil Company, Box 427, Hobbs, N. M.  
General Crude Oil Company, 314 Commerce Bldg., Abilene, Tex.  
Getty Oil Company, Box 547, Hobbs, N. M.  
Gulf Oil Corporation, Box 2167, Hobbs, N. M. (C. M. Bumpass)  
Gulf Oil Corporation, Box 669, Roswell, N. M. (M. I. Taylor)  
Gulf Oil Corp., P. O. Drawer 1290, Fort Worth 1, Tex. (E. Hosford)  
Hudson & Hudson, Inc., 1810 Electric Bldg., Fort Worth, Tex.  
Humble Oil & Refining Company, Box 2347, Hobbs, N. M.  
Stuart Hunt, Trustee, 1507 Mercantile Nat'l. Bank Bldg., Dallas, Tex.  
Magnolia Petroleum Company, Box 2406, Hobbs, N. M. (Jerry Young)  
Ohio Oil Company, The, Box 2107, Hobbs, N. M.  
Pan American Petroleum Corporation, Box 268, Lubbock, Tex.  
Pan American Petroleum Corporation, Box 68, Hobbs, N. M. (J. W. Brown)  
Neville G. Penrose, Inc., 1815 Fair Bldg., Fort Worth, Texas  
Phillips Petroleum Company, Box 2105, Hobbs, New Mexico  
Shell Oil Company, Box 845, Roswell, New Mexico  
Sinclair Oil & Gas Company, 520 E. Broadway, Hobbs, N. M.  
Sinclair Oil & Gas Company, Box 521, Tulsa, Okla. (F. H. Rhees)  
Sinclair Oil & Gas Company, Box 1470, Midland, Tex. (R. E. Powers)  
Sinclair Oil & Gas Company, Box 1470, Midland, Tex. (H. F. Defenbaugh)  
Skelly Oil Company, Box 38, Hobbs, N. M.  
Skelly Oil Company, Box 1650, Tulsa, Okla. (Ira Myers)  
Standard Oil Company of Texas, Box 698, Monahans, Texas  
Standard Oil Company of Texas, Box 1249, Houston, Tex. (H.W. Matthews)  
Sun Oil Company, Box 1861, Midland, Texas  
Sunray Mid-Continent Oil Co., 11th Floor Wilco Bldg., Midland, Tex.  
Sunray Mid-Continent Oil Co. Box 128, Hobbs, N. M. (R. E. Statton)  
The Superior Oil Company, Box 510, Midland, Tex.  
The Texas Company, Box 352, Midland, Tex.  
Tidewater Oil Company, Box 547, Hobbs, N. M.  
Southern Petroleum Exploration, Inc., Box 176, Eunice, N. M.  
Southern Pet. Exploration, Inc., Box 1017, Roswell, N. M. (J.B. Headley)  
Two States Oil Company, 528 Wilson Building, Dallas, Texas

EXHIBIT "D"

Wells With 1/2 Mile of SWD H-20

E-M-E SWD System

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DWN

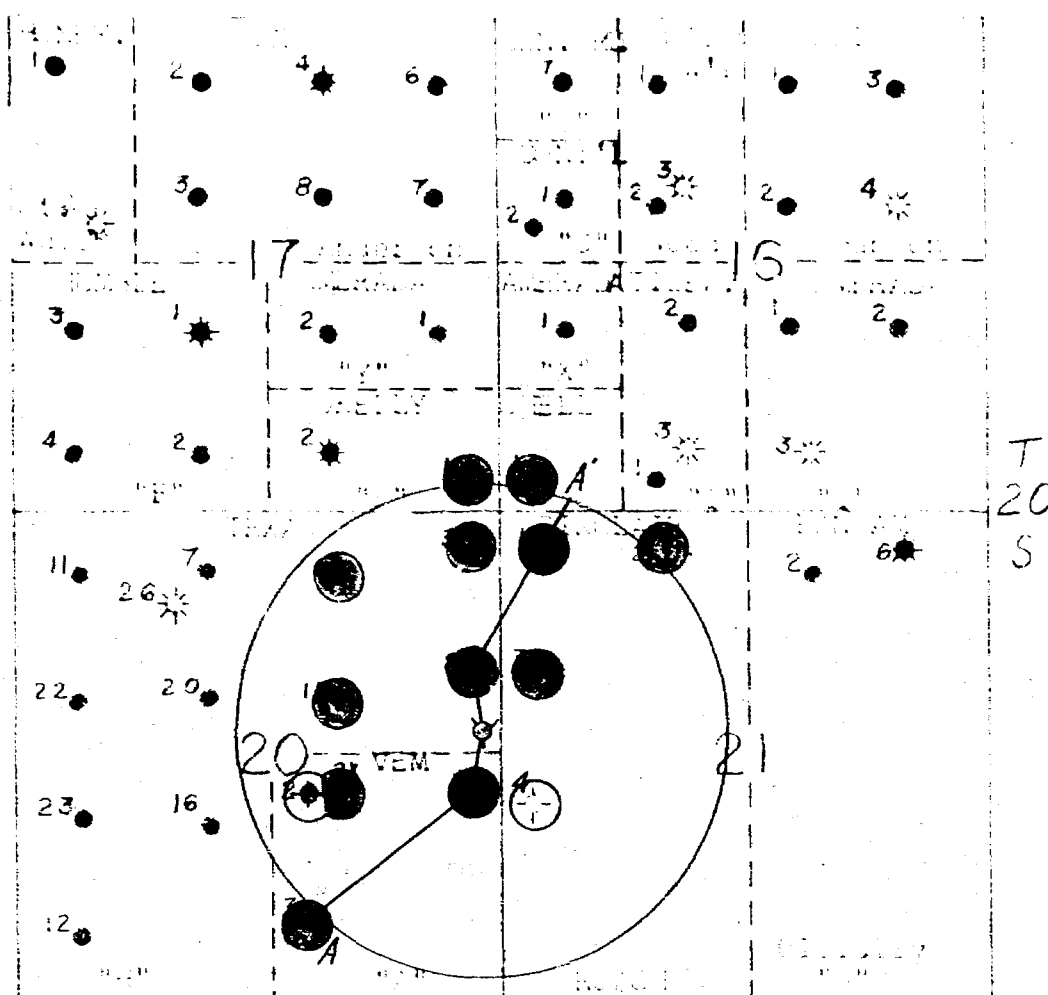
2-1/2" O.D. well, 11-1/2" I.D.  
Annulus 9" diameter

SCALE  
1" = 10'

Rice Engineering & Operating, Inc.  
Hobbs, New Mexico

DWG NO.  
1-21

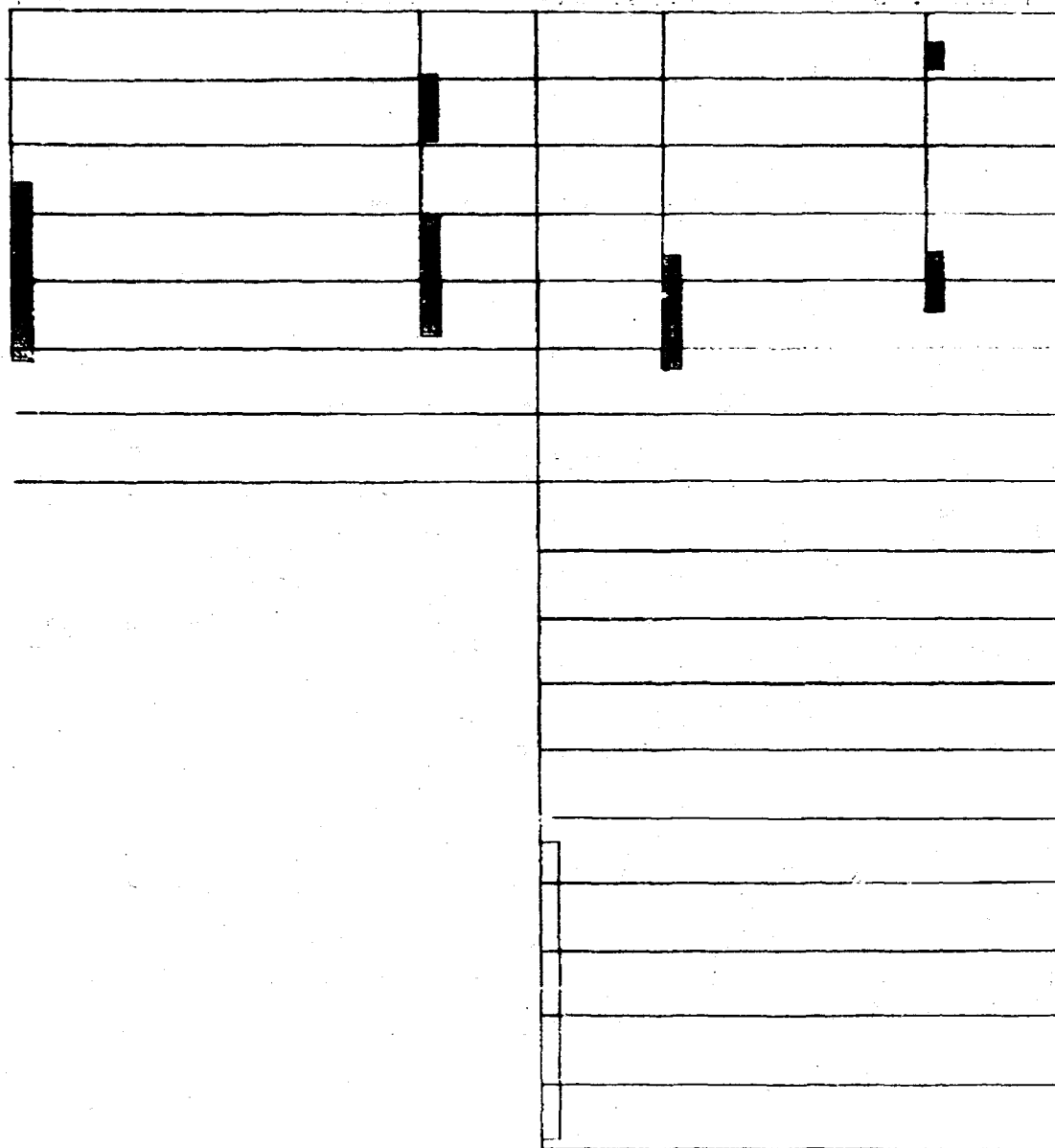
R 37 E



KEY TO PRODUCING ZONES

- Grayburg
- Grayburg-Queen (Dual)
- Abandoned Grayburg

DWN			SCALE
		Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.



SECTION THROUGH WALL

NOTES

1. ALL REBAR TO BE EPOXY COATED

DATE 1/6/05

DWG NO.		Rice Engineering & Operating, Inc. 11101 N.W. 10th Ave. Miami, FL 33157	SCALE 1" = 1'-0" DWG NO.
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EUNICE - MONUMENT - EUMONT

MAILING LIST

Amerada Petroleum Corporation, Drawer D., Monument, N. M.  
Anderson-Prichard Oil Corporation, Box 196, Midland, Tex.  
Atlantic Refining Company, The, Box 1038, Denver City, Tex.  
Aztec Oil & Gas Company, Box 847, Hobbs, N. M.  
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Southern Pet. Exploration, Inc., Box 1017, Roswell, N. M. (J.B. Headley)  
Two States Oil Company, 528 Wilson Building, Dallas, Texas

DOCKET: EXAMINER HEARING FEBRUARY 25, 1959

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before E. J. FISCHER, Examiner:

- CASE 1604: Application of Atlantic Refining Company to commingle the production from several separate oil pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Drinkard, Fusselman, Blinebry and any other pool or pools encountered in the Justis Field which produces oil of similar quality on its Carlson Federal Lease comprising the N/2 SW/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant proposes to separately meter the production from each zone prior to commingling.
- CASE 1605: Application of Rice Engineering and Operating, Inc. for an order authorizing a salt water disposal well on an unorthodox location. Applicant, in the above-styled cause, seeks an order authorizing the disposal of produced salt water through its E-M-E SWD Well No. H-20 to be located 2475 feet from the North line and 165 feet from the East line of Section 20, Township 20 South, Range 37 East, Lea County, New Mexico. Applicant proposes to inject the produced salt water into the San Andres formation in the interval from 4450 feet to 5000 feet.
- CASE 1606: Application of El Paso Natural Gas Company for an oil-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Huerfano Unit Well No. 104 located in the SE/4 SE/4 of Section 17, Township 26 North, Range 10 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from an undesignated Gallup oil pool and the production of gas from an undesignated Dakota gas pool through parallel strings of 2" tubing.
- CASE 1607: Application of Standard Oil Company of Texas for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its Bogle Flats Unit Agreement embracing 5,280 acres, more or less, of federal and state lands in Township 22 South, Range 23 East, Eddy County, New Mexico.
- CASE 1608: Application of Nearburg & Ingram for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its Square Lake Deep Unit Agreement embracing 4,317 acres, more or less, of federal lands in Townships 16 and 17 South, Range 30 East, Eddy County, New Mexico.



-2-

Docket No. 7-59

CASE 1609: Application of Continental Oil Company for an oil-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Warren Unit Well No. 10 located 660 feet from the North line and 2310 feet from the East line of Section 28, Township 20 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Warren-Blinbry Gas Pool and the production of gas from the Warren-Tubb Gas Pool through parallel strings of 2" tubing.

ir/

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date

Feb. 26, 1959

CASE NO.

1605

HEARING DATE

Feb. 25, 1959

My recommendations for an order in the above numbered case(s) are as follows:

Recommend Approval —  
that Rice Eng. & Operating, Inc.  
be given authority to drill a SWD  
well No. H-20 at an unorthodox  
location 2475' FNL & 165' FEL in  
Sect. 20, T20S, R37E, Lea Co. for  
the purpose of salt water disposal  
in the interval from approximately  
4450' to 5000' all in the San Andres  
formation.

E. J. Fischer  
Staff Member

Case 1605 17  
RICE Engineering & Operating, Inc.

Post Office Box 1142

Telephone EXpress 3-9174

HOBBS, NEW MEXICO

January 22, 1959

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Re: Rule 701 - Permit for Injection  
of Water (Salt Water Disposal)  
Rule 104 - Unorthodox Location

Gentlemen:

Rice Engineering & Operating, Inc. of Hobbs, New Mexico, hereby applies for a hearing to be held before the New Mexico Oil Conservation Commission for the purpose of securing a permit under Rule 701 and an exception to Rule 104 to drill and complete a salt water disposal well on The Texas Company's State University "H" Lease in Section 20, Township 20 South, Range 37 East, Monument Pool, Lea County, New Mexico. The proposed disposal well will be known as Rice Engineering & Operating, Inc. E-M-E SWD Well H-20.

Rice Engineering & Operating, Inc. further deposes and states the following:

- A. That said well is to be located 2475 feet from the North line and 165 feet from the East line of Section 20, Township 20 South, Range 37 East N.M.P.M. (See Exhibit "A")
- B. That said well will be drilled through the porous zone of the San Andres Formation.
- C. That said well will have 9 5/8" OD H-40 SS casing set at approximately 300 feet and cement circulated. Seven inch OD J-55 SS casing will be set and cemented at approximately 4450 feet, with total depth of 5000 feet. (See Exhibit "B")

Deputy, Handed  
2-11-59 BP

N.M.O.C.C.

-2-

January 22, 1959

- D. That said well by agreement between Rice Engineering & Operating, Inc. and The Texas Company shall be utilized by the Eunice - Monument - Eumont Salt Water Disposal System as a disposal well.
- E. That the salt water to be injected is produced in the Monument Field.
- F. That the volume of salt water to be disposed shall be approximately 15,000 barrels per day.

Therefore, Rice Engineering & Operating, Inc. requests that the New Mexico Oil Conservation Commission set a date for this application to be heard, and after said hearing to grant this permit to dispose of salt water in the Rice Engineering & Operating, Inc. E-M-E SWD Well H-20.

Respectfully submitted,

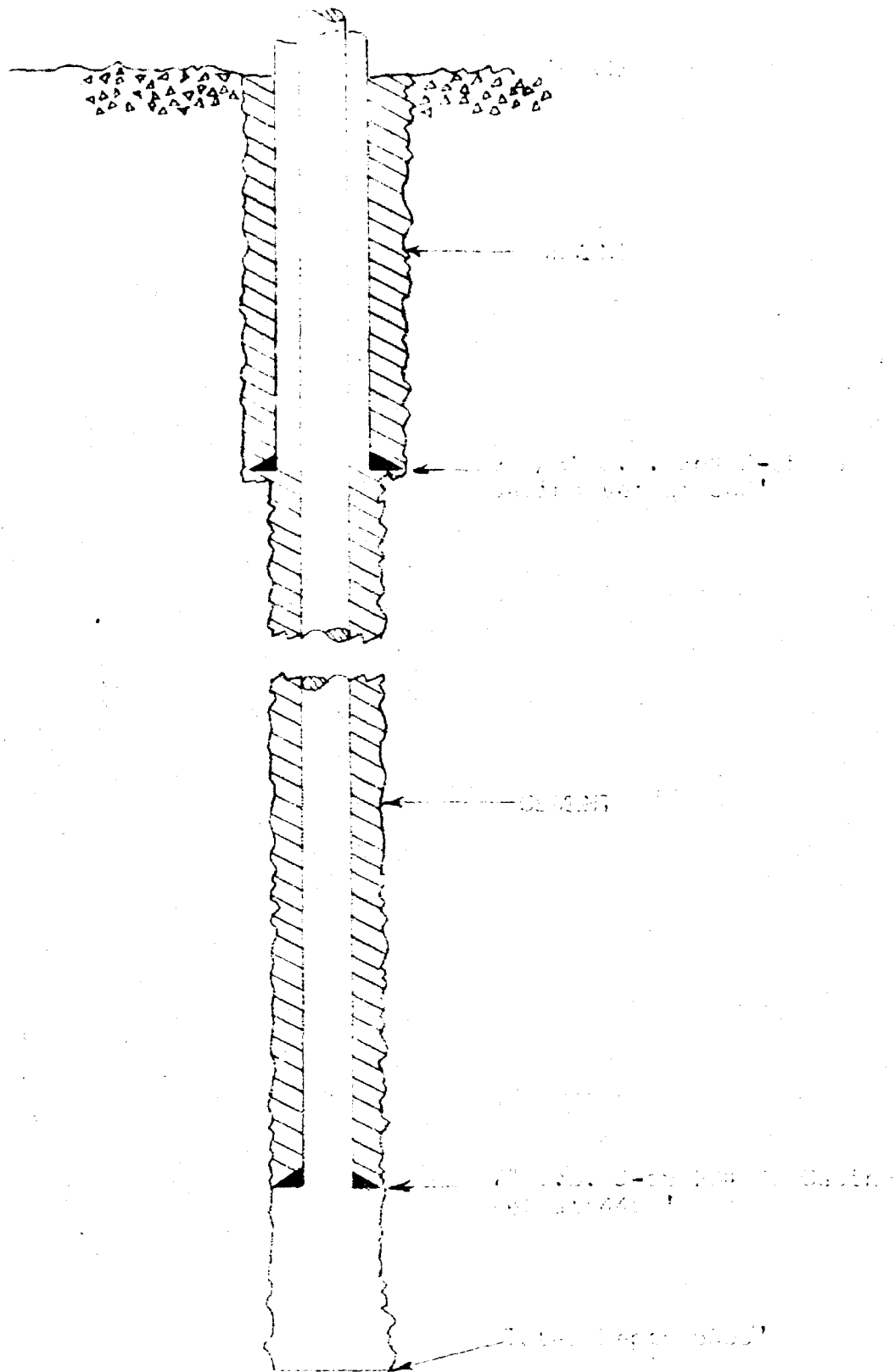
RICE ENGINEERING & OPERATING, INC.

By: B. I. Routh  
B. I. ROUTH  
General Manager

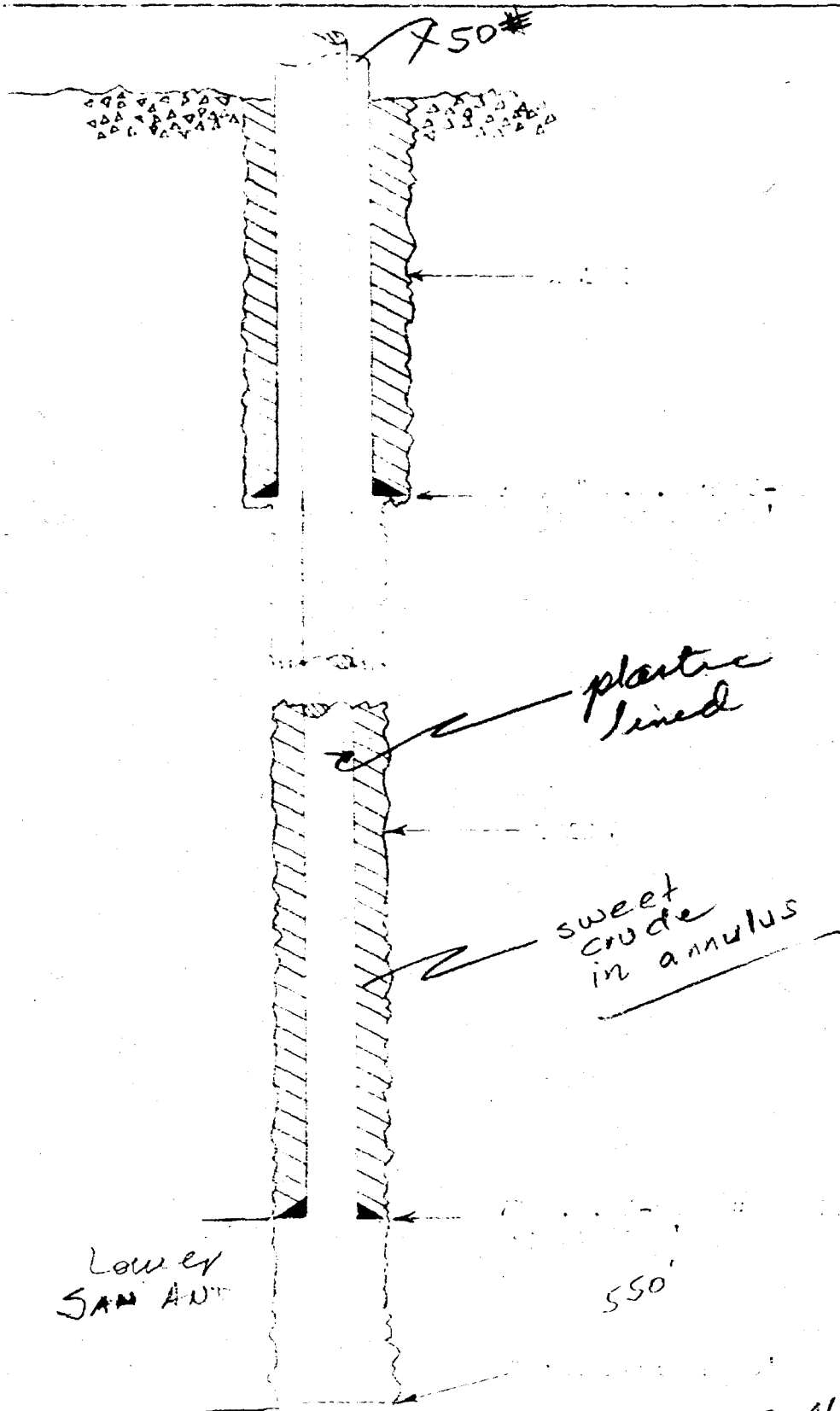
WGA/js

Attachments:

Exhibit "A"  
Exhibit "B"



DWG	1-1-1	1-1-1 Well Head, N. H. 20	SCALE
		New Mexico	1/4" = 1'-0"
		Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO. 1-1-1



Case 1605

DWN		SCALE
	Kee Engineering & Operating, Inc. Houston, New Mexico	DWG NO.

**RICE Engineering & Operating, Inc.**

Post Office Box 1142

Telephone EXpress 3-9174

HOBBS, NEW MEXICO

March 4, 1959

Mr. E. J. Fischer  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Re: Case 1605

Dear Sir:

We are writing this letter to clarify some points that were brought out at the hearing held February 25, 1959.

San Andres Zone - To our knowledge there are no wells at present producing from the San Andres formation within a radius of two miles from the proposed Rice Engineering & Operating, Inc. SWD H-20 Well. It is pointed out that the pay section in the Eunice-Monument-Eumont Pools appears to be a function of sea-level with the original water-oil contact being at about 340 to 350 feet subsea regardless of the producing formation in which the well is completed. With the disposal zone to be below 1000 feet subsea, it is improbable that there can be any interference between the disposal zone and the oil producing formations.

Cementing Program - It was stated in our application that the 9 5/8" surface casing would be cemented and the cement circulated. The 7" pipe will be cemented with 600 sacks of 50-50 per-cent pozmix containing 0% gel, with 150 sacks of neat cement around the shoe. In an 8 3/4" hole this would fill approximately 7300 feet with 100% fill.

We feel that this disposal well using the oil blanket in the annular space will adequately protect all fresh water and oil productive zones from any possible contamination from salt water.

Yours very truly,

RICE ENGINEERING & OPERATING, INC.

  
B. I. ROUTH - General Manager

WGA/js

RICE Engineering & Operating, Inc.

Post Office Box 1142

Telephone EXpress 3-9174

HOBBS, NEW MEXICO

March 4, 1959

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New Mexico Oil Conservation Commission  
P. O. Box 871  
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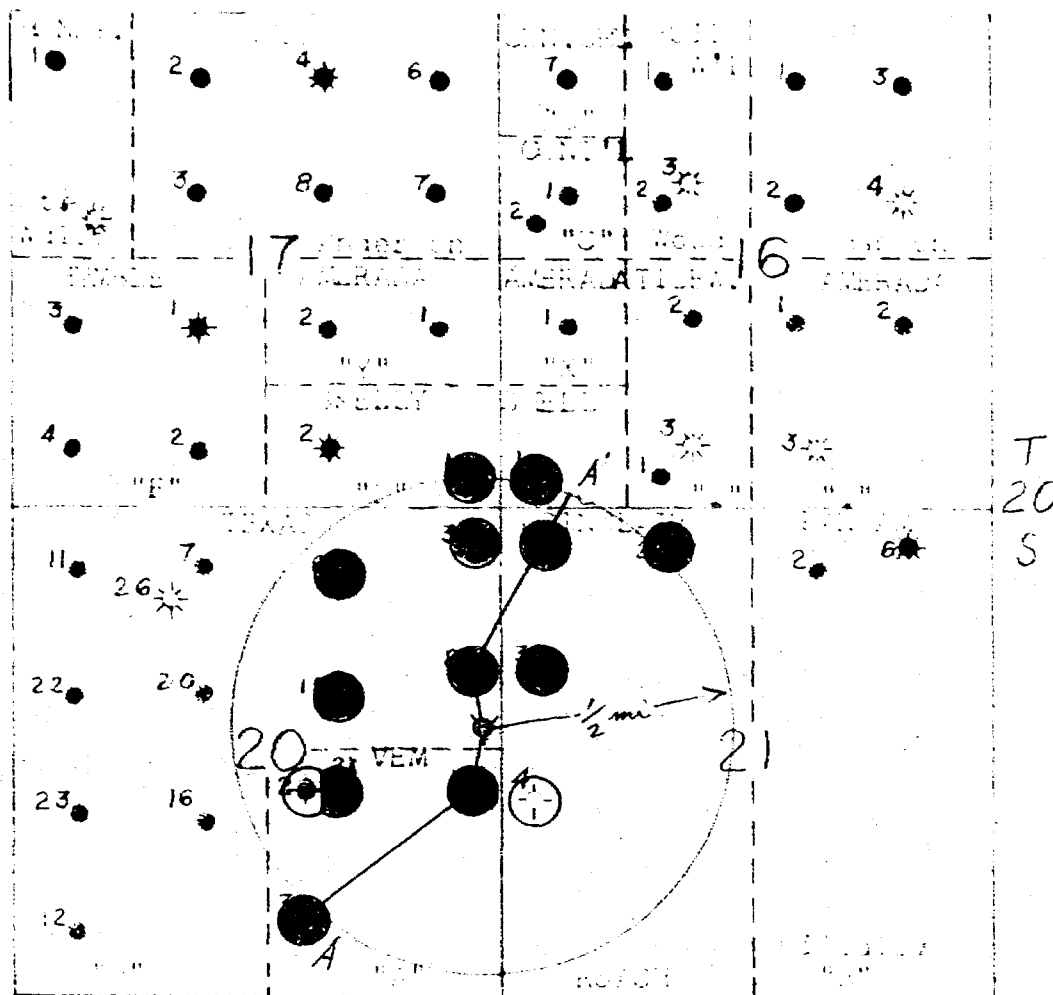
RICE ENGINEERING & OPERATING, INC.

  
B. I. ROUTH - General Manager

WGA/js



R 37 E



KEY TO PRODUCING ZONES

- Grayburg
- Grayburg-Queen (Dual)
- Abandoned Grayburg

DWN	DATE	SCALE
Rice Engineering & Operating, Inc.		DWG NO.
H. B. New Mexico		

2 mile radius

EXHIBIT "D"

Wells With 1/2 Mile of SWD H-20

E-M-E SWD System

Operator	Lease	Well No.	Completion Interval Elevation	Completion Zone	Remarks
Shell	"G"	1	-75 to -259	Grayburg	Temp. Abd. BP @ -24'
Sinclair	Roach	1	-160 to -249 +161 to +119	Grayburg Queen	Dual Completion
"	"	2	-202 to -320	Grayburg	
"	"	3	-158 to -273	Grayburg	
"	"	4	-119 to -358	Grayburg	P & A
Skelly	"F"	1	-185 to -350	Grayburg	
Texas	"H"	3	-172 to -252	Grayburg	
"	"	6	-183 to -294	Grayburg	
"	"	8	-174 to -330	Grayburg	
"	"	15	-142 to -323	Grayburg	
Vem	"A"	1	-108 to -277 +108 to +13	Grayburg Queen	Dual Completion
"	"	2	+16 to -311	Grayburg	P & A
"	"	2X	-161 to -250	Grayburg	Replacement Well for #2
"	"	3	-64 to -320	Grayburg	

CLASS OF SERVICE  
This is a fast message  
unless its deferred char-  
acter is indicated by the  
proper symbol.

# WESTERN UNION

## TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS  
DL=Day Letter  
NL=Night Letter  
LT=International  
Letter Telegram

1201

The filing time shown in the date line on domestic telegrams is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

LA038 SSJ138

L HBA009 PD=HOBBS NMEX 11 816AMM= M 0105

E J FISHER=

NEW MEXICO OIL CONSERVATION COMM BOX 871 SANTA FE NMEX=

DEAR SIR: THE TOP OF THE SAN ANDRES DISPOSAL ZONE REFERRED  
TO IN CASE 1605 IS 590 FEET BELOW THE ORIGINAL OIL WATER  
CONTACT IN THE EUNICE MONUMENT EUMONT POOLS THERE ARE NO  
SAN ANDRES WELLS PRODUCING IN THE ABOVE POOL WITHIN THE  
PROPOSED DISPOSAL INTERVAL, YOURS TRUELY=

RICE ENGINEERING AND OPERATING INC B I ROUTH=

THE CO.=1605 590 DATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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. 1605  
Order No. R-1348

APPLICATION OF RICE ENGINEERING AND  
OPERATING, INC., FOR AN ORDER AUTHORIZING  
A SALT WATER DISPOSAL WELL ON AN UNORTHODOX  
LOCATION IN SECTION 20, TOWNSHIP 20 SOUTH,  
RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 25, 1959, at Santa Fe, New Mexico, before E. J. Fischer, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 11<sup>th</sup> day of March, 1959, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, E. J. Fischer, 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, Rice Engineering and Operating, Inc., seeks an order authorizing the disposal of produced salt water into the San Andres formation through its E-M-E SWD Well No. H-20 to be located 2475 feet from the North line and 165 feet from the East line of Section 20, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, with the proposed injection interval from 4,450 feet to 5,000 feet.

(3) That disposal should be through tubing and the casing-tubing annulus should be filled with a non-corrosive fluid as a protective measure.

(4) That the applicant's proposed salt water injection program will not jeopardize the production of oil, gas, or fresh water in the area and is consonant with sound conservation practices.

-2-  
Case No. 1605  
Order No. E-1348

**IT IS THEREFORE ORDERED:**

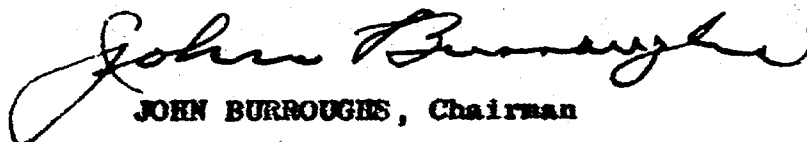
(1) That the applicant, Rice Engineering & Operating, Inc., be and the same is hereby authorized to dispose of produced salt water into the San Andres formation through its E-M-E SWB Well No. E-20 to be located 2475 feet from the North line and 165 feet from the East line of Section 20, Township 20 South, Range 37 East, NMPN, Lea County, New Mexico, with the injection interval from 4450 feet to 5000 feet.

**PROVIDED HOWEVER,** That disposal shall be through tubing and the casing-tubing annulus shall be filled with a non-corrosive fluid.

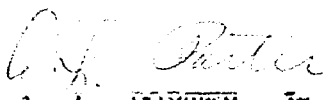
(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1119 of the Commission's Rules and Regulations.

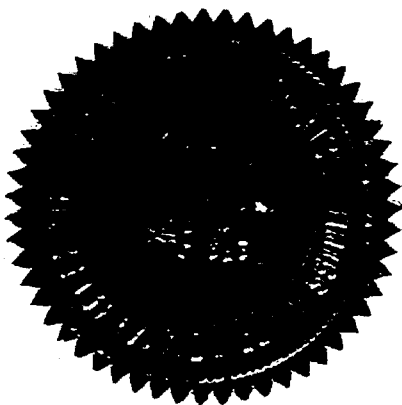
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
JOHN BURROUGHS, Chairman

  
MURRAY E. MORGAN, Member

  
A. L. PORTER, Jr., Member & Secretary



ir/

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

March 12, 1959

Mr. Jason Kellahin  
Kellahin & Fox  
P.O. Box 1713  
Santa Fe, New Mexico

Dear Mr. Kellahin:

On behalf of your clients, we enclose two copies of Order R-1348 and Order R-1350 issued March 11, 1959, by the Oil Conservation Commission in Cases 1605 and 1609, respectively, which were both heard on February 25th at Santa Fe before an examiner.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

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Encis.

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