

CASE 3438: Application of RICE ENGR.
& OPERATING, INC. for salt water
disposal, Lea County, New Mexico

Case Number

3438

Application
Transcripts.

Small Exhibits

ETC.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2098
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

August 11, 1966

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

Re: Case No. 3438
Order No. R-3102
Applicant:
Rice Engineering & Operating

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

OTHER Mr. Frank Irby

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. 3438
Order No. R-3102

APPLICATION OF RICE ENGINEERING
& OPERATING, INC., 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 August 3, 1966,
at Santa Fe, New Mexico, before Examiner Daniel S. Nuttar.

NOW, on this 11th day of August, 1966, 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, Rice Engineering & Operating, Inc.,
proposes to drill its Eunice-Monument-Eumont SWD Well No. L-21
at a location 1520 feet from the South line and 440 feet from
the West line of Section 21, Township 21 South, Range 36 East,
NMPM, Eunice-Monument Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres formation
below the oil-water contact through the open hole interval from
approximately 4500 feet to approximately 5100 feet.

(4) That the applicant proposes to drill and set 9 5/8-inch
casing to approximately 300 feet, and cement to surface; drill to
approximately 4500 feet and set 7-inch casing with a minimum of
750 sacks of cement.

-2-

CASE No. 3438
Order No. R-3102

(5) That the injection should be accomplished through 5 1/2-inch internally plastic-coated tubing set at approximately 4500 feet; that the casing-tubing annulus should be filled with oil.

(6) 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, Rice Engineering & Operating, Inc., is hereby authorized to drill its Eunice-Monument-Eumont SWD Well No. L-21 at a location 1520 feet from the South line and 440 feet from the West line of Section 21, Township 21 South, Range 36 East, NMPM, Eunice-Monument Pool, Lea County, New Mexico, and to dispose of produced salt water into the San Andres formation, injection to be accomplished through 5 1/2-inch tubing set at approximately 4500 feet, with injection into the open hole interval from approximately 4500 feet to approximately 5100 feet;

PROVIDED HOWEVER, that the applicant shall drill and set 9 5/8-inch casing to approximately 300 feet, and cement to surface; drill to approximately 4500 feet and set 7-inch casing with a minimum of 750 sacks of cement;

PROVIDED FURTHER, that the tubing shall be internally plastic-coated; that the casing-tubing annulus shall be filled with oil.

(2) 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) 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 this day and year hereinafter designated.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 8/3/66

CASE 3438

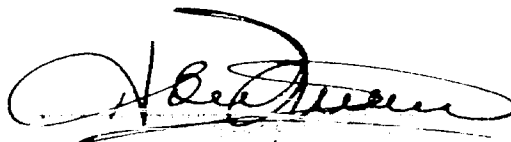
Hearing Date 9am 8/3/66

DSN @ SF

My recommendations for an order in the above numbered cases are as follows:

Enter order authorizing Rice Eng'g & Equip Inc to dispose of produced saltwater in their Emice-Monument SWD well No L-21 to be located 1520' FSL & 440' FWL of 21-215-36 E Emice-Monument Pool Lea Co N Mexico.

Well is to be equipped w/ 300' 9 5/8" surface casing, cement circulated, and 4500' 7" Osg cemented w/ a minimum of 750 sacks cement. ~~500'~~ ~~is tubing to be~~ Injection will be through ~~4500'~~ of 5 1/2" ~~plastic coated~~ tubing to be set @ 4500' with the casing-tubing annulus to be loaded w/ oil. Injection to be into San Andres formation in the open-hole interval from 4500' to 5100'.



DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 3, 1966

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

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner:

- CASE 3437: Application of Anadarko Production Company for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Pearsall Queen Sand Unit waterflood project by the injection of water into the Queen formation through one well to be drilled at an unorthodox location 25 feet North of the South line and 25 feet West of the East line of the SE/4 NW/4 of Section 4, Township 18 South, Range 32 East, Lea County, New Mexico.
- CASE 3438: 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 4500 feet to approximately 5100 feet in its EME SWD Well No. L-21 located 1520 feet from the South line and 440 feet from the West line of Section 21, Township 21 South, Range 36 East, Eunice-Monument Pool, Lea County, New Mexico.
- CASE 3439: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Scanlon and Shepard and all other interested parties to show cause why the following Scanlon and Shepard wells in Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program: Santa Fe Pacific Railroad Lease: Wells Nos. 1, 3, 4, 5, 7, and 8, all in Unit P, No. 10 in Unit H, and No. 2 in Unit L, all in Section 21; Well No. 6 in Unit L and Nos. 9 and 12 in Unit M of Section 22 and Nos. 11 and 13 in Unit D of Section 27. Ray Well No. 1 in Unit C, State Wells Nos. 1 and 2 in Unit A, and State K-1883 No. 1 in Unit B, all in Section 28.
- CASE 3440: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Osborn & Weir, and all interested parties, to show cause why the following Osborn & Weir wells in Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program: Scanlon Well No. 17 in Unit P of Section 21 and Nos. 14 and 18 in Unit M of Section 22; Scanlon Ray Wells No. 5 in Unit A and No. 6 in Unit C of Section 28.
- CASE 3441: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit LaMar Trucking, Inc., and all interested parties, to show cause why their State Well No. 1 located 495 feet from the North and West lines of Section 28, Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

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

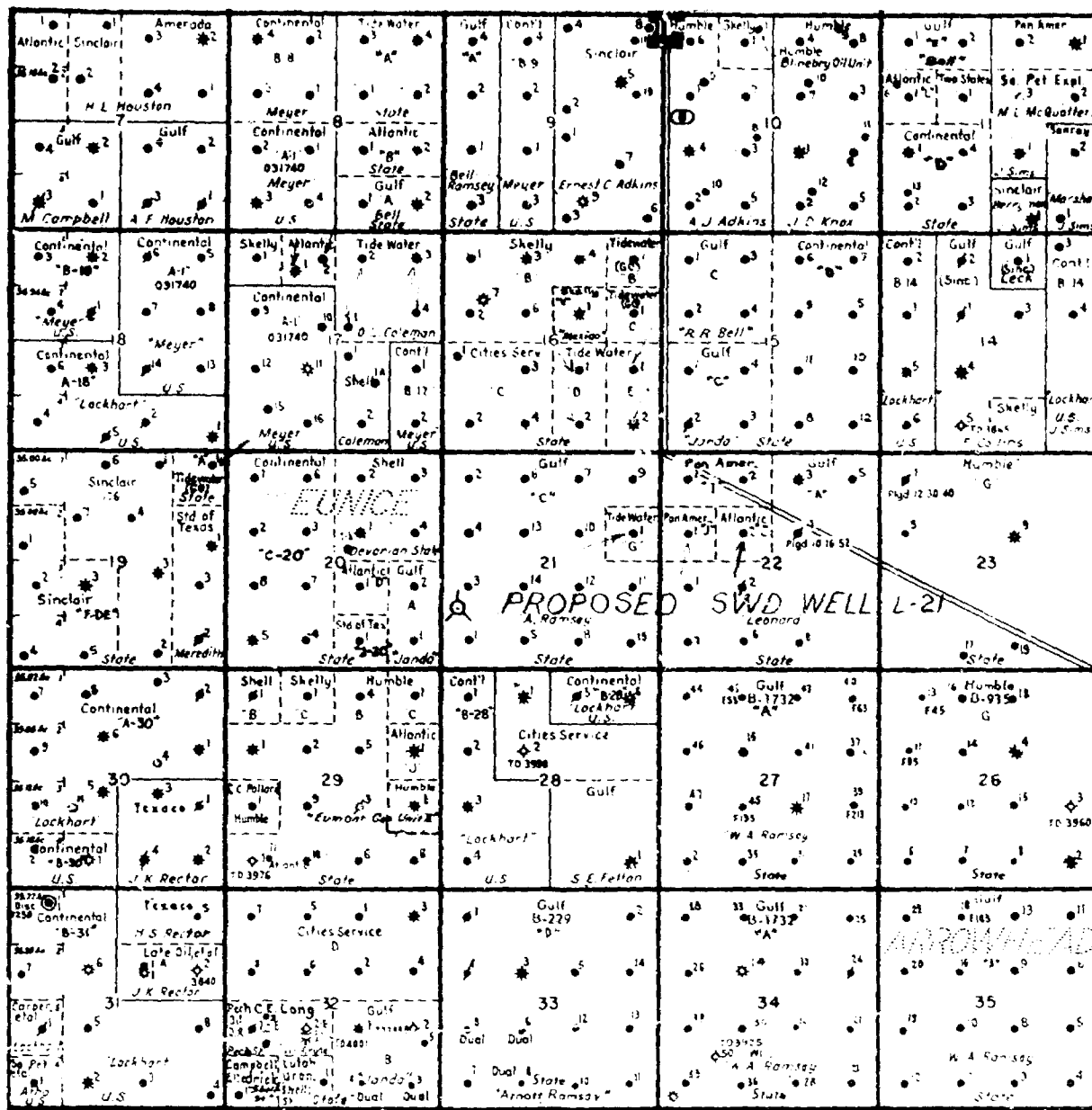
OPERATOR Rice Engineering & Operating, Inc.		ADDRESS Box 1142, Hobbs, New Mexico	
LEASE NAME Eunice-Monument-Eumont SWD	WELL NO. L-21	FIELD Eunice	COUNTY Lea
LOCATION UNIT LETTER <u>L</u> ; WELL IS LOCATED <u>440</u> FEET FROM THE <u>west</u> LINE AND <u>1,520</u> FEET FROM THE <u>south</u> LINE, SECTION <u>21</u> TOWNSHIP <u>21-S</u> RANGE <u>36-E</u> NMPM.			
CASING AND TUBING DATA			
NAME OF STRING SURFACE CASING (Proposed)	SIZE 9-5/8"	SETTING DEPTH 300'	SACKS CEMENT 250
TOP OF CEMENT circulate		TOP DETERMINED BY observation	
INTERMEDIATE None			
LONG STRING (Proposed)	7"	4,500'	750
TUBING (Proposed)		5-1/2"	4,500'
NAME, MODEL AND DEPTH OF TUBING PACKER None-load annular space with oil			
NAME OF PROPOSED INJECTION FORMATION San Andres		TOP OF FORMATION 3,957'	BOTTOM OF FORMATION 5,118'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES Open hole	PROPOSED INTERVAL(S) OF INJECTION 4,500' to 5,100' TD
IS THIS A NEW WELL DRILLED FOR DISPOSAL? Yes	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? -
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 300' (estimated)		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 4,000'	
DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None			
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) 12,000	MINIMUM 4,800	MAXIMUM 12,000	OPEN OR CLOSED TYPE SYSTEM Closed
IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity		APPROX. PRESSURE (PSI) 0	
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 Yes		WATER TO BE DISPOSED OF Yes	
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mexico Baptist Childrens' Home (lessee), Box 485, Albuquerque, New Mexico		ARE WATER ANALYSES ATTACHED? Yes	
NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Continental Oil Company, Box 460, Hobbs, New Mexico Gulf Oil Corporation, Box 670, Hobbs, New Mexico Atlantic Richfield Company, Box 1978, Roswell, New Mexico Standard Oil Company of Texas, Box 579, Hobbs, New Mexico Humble Oil & Refining Company, Box 2100, Hobbs, New Mexico Shell Oil Company, Box 1509, Midland, Texas Cities Service Oil Company, Box 69, Hobbs, New Mexico			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes	SURFACE OWNER State - yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Attached	PLAT OF AREA Attached	ELECTRICAL LOG No	DIAGRAMMATIC SKETCH OF WELL Yes

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

W.G. Abbott Division Manager June 15, 1966
(Signature) W.G. Abbott (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.

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S



LEA COUNTY, NEW MEXICO

EXHIBIT "A"

DWN	AMM	6-66	LOCATION PLAT EME SWD WELL L-21	SCALE 1" = 4000'
			Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.

2438

PROLUCTIVE FORMATIONS OF WELLS WITHIN A
TWO-MILE RADIUS OF PROPOSED E-M-E SWD WELL L-21

<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Atlantic	Coleman	1	Yates, San Andres
"	Coleman	2	Grayburg, San Andres
"	State "D"	1	Grayburg
"	State "J"	1	Yates, Queen
"	State "L"	2	Grayburg, San Andres
Cities Service	Felton	1	Seven Rivers, Queen
"	State "C"	1	Seven Rivers, Queen,
"	State "C"	2	Grayburg
"	State "C"	3	Seven Rivers, Queen,
"	State "C"	4	Grayburg
"	State "D"	1	Seven Rivers, Queen,
"	State "D"	2	Grayburg
"	State "D"	3	Seven Rivers, Queen
"	State "D"	4	Seven Rivers, Queen
"	State "D"	5	Seven Rivers, Queen
"	State "D"	6	Seven Rivers, Queen
"	State "D"	7	Seven Rivers, Queen
"	State "D"	8	Seven Rivers, Queen
Continental	Lockhart "A-18"	1	Yates, Penrose, Grayburg
"	" "	2	Penrose
"	" "	3	Yates, Grayburg
"	" "	5	Queen, Penrose
"	Lockhart "A-30"	1	Yates, Queen
"	" "	2	Queen
"	" "	3	Queen
"	" "	4	Queen
"	" "	5	Yates, Seven Rivers,
"	" "	6	Queen
"	" "	7	Seven Rivers, Queen
"	" "	8	Seven Rivers
"	" "	11	Seven Rivers
"	Lockhart "B-28"	1	Penrose
"	" "	2	Penrose
"	" "	3	Yates, Seven Rivers,
"	" "	4	Queen, Penrose
"	" "	5	Penrose
"	" "	6	Penrose
"	" "	6	Yates, Seven Rivers,
"	" "	6	Queen, Penrose

<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Continental	Meyer "A-1"	4	Grayburg
Contd.	"	5	Grayburg
"	"	7	Yates, Grayburg
"	"	8	Grayburg
"	"	9	Grayburg
"	"	10	Grayburg
"	"	11	Queen, Grayburg
"	"	12	Grayburg
"	"	13	Grayburg
"	"	14	Grayburg
"	"	15	Grayburg
"	"	16	Grayburg
"	Meyer "B-9"	3	Grayburg
"	Meyer "B-17"	1	Grayburg
"	"	2	Grayburg
"	State "C-20"	1	Grayburg
"	"	2	Penrose
"	"	3	Penrose
"	"	4	Penrose
"	"	5	Yates, Seven Rivers,
"	"		Grayburg
"	"	6	Penrose
"	"	7	Grayburg
"	"	8	Grayburg
"	State "D"	8	Grayburg
"	"	11	Grayburg
"	"	12	Queen, Grayburg
Gulf	Bell "A"	1	Grayburg
"	"	2	Queen, Grayburg
"	Bell "C"	1	Grayburg
"	"	2	Grayburg
"	"	4	Queen, Grayburg
"	Bell-Ramsey "A"	3	Grayburg
"	Felton	1	Queen, Grayburg
"	Janda "A"	1	Grayburg
"	"	2	Grayburg
"	Janda "B"	1	Seven Rivers, Queen,
"	"		Grayburg
"	"	5	Grayburg
"	Janda "C"	1	Grayburg
"	"	2	Grayburg
"	"	3	Grayburg
"	"	4	Grayburg
"	Leonard "A"	1	Grayburg
"	"	2	Grayburg
"	"	3	Seven Rivers, Queen,
"	"		Grayburg
"	"	4	Grayburg
"	"	5	Grayburg

<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Gulf Contd.	Leonard "A"	6	Grayburg
"	"	7	Yates, Grayburg
"	"	8	Grayburg
"	W. A. Ramsey "A"	2	Queen, Penrose
"	"	15	Queen, Penrose
"	"	17	Yates, Seven Rivers,
"	"		Queen, Penrose
"	"	26	Queen, Penrose
"	"	31	Queen, Penrose
"	"	33	Queen, Penrose
"	"	35	Queen, Penrose
"	"	37	Queen, Penrose
"	"	39	Queen, Penrose
"	"	40	Queen, Penrose
"	"	41	Queen, Penrose
"	"	42	Queen, Penrose
"	"	43	Queen, Penrose
"	"	44	Queen, Penrose
"	"	45	Queen, Penrose
"	"	46	Queen, Penrose
"	"	47	Queen, Penrose
"	"	48	Queen, Penrose
"	A. Ramsey "C"	1	Grayburg
"	"	2	Grayburg
"	"	3	Grayburg
"	"	4	Grayburg
"	"	5	Grayburg
"	"	6	Grayburg
"	"	7	Grayburg
"	"	8	Grayburg
"	"	9	Grayburg
"	"	10	Grayburg
"	"	11	Grayburg
"	"	12	Grayburg
"	"	13	Yates, Seven Rivers,
"	"		Grayburg
"	"	14	Grayburg
"	"	15	Grayburg
"	A. Ramsey "D"	1	Penrose
"	"	2	Queen, Penrose
"	"	3	Yates, Seven Rivers, Queen,
"	"		Penrose, Grayburg
"	"	4	Queen, Penrose
"	"	5	Queen, Penrose
"	"	6	Seven Rivers, Queen,
"	"		Penrose
"	"	9	Seven Rivers, Queen,
"	"		Penrose
"	"	12	Queen, Penrose
"	"	14	Queen, Grayburg

<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Humble	Eumont Gas	1	Seven Rivers, Queen,
"	Unit II	1	Penrose
"	State "B"	2	Seven Rivers, Queen,
"	"	3	Penrose
"	"	4	Penrose, Grayburg
"	"	5	Penrose, Grayburg
"	"	6	Grayburg
"	"	8	Penrose
"	"	9	Penrose
"	"	10	Penrose
"	State "C"	11	Penrose
"	"	1	Grayburg
Pan American	State "I"	1	Grayburg
"	"	2	Grayburg
"	State "J"	1	Grayburg, San Andres
Pollard, C.C.	State	1	Queen
Shell	Coleman	1	Seven Rivers
"	"	1-A	Seven Rivers
"	"	2	Seven Rivers
"	Dev. State	1	Seven Rivers
"	"	1-A	Seven Rivers
"	"	2	Seven Rivers
"	"	3	Seven Rivers
"	"	4	Seven Rivers
"	State "B"	1	Seven Rivers
Sinclair	Adkins	3	Grayburg
"	"	6	Grayburg
"	"	9	Queen
"	State "176"	1	Queen
"	"	2	Queen
"	"	3	Queen
"	"	4	Queen
"	"	6	Queen
"	"	7	Queen
"	State "F-DE"	1	Queen
"	"	2	Queen
"	"	3	Seven Rivers, Queen
"	"	4	Queen
"	"	5	Queen

<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Skelly	Coleman	1	Penrose, Grayburg
"	Mexico "V"	1	Yates, Penrose, Grayburg
"	State "B"	1	Penrose, Grayburg
"	"	2	Queen, Penrose, Grayburg
"	"	3	Penrose, Grayburg
"	"	4	Queen, Penrose, Grayburg
"	"	6	Penrose, Grayburg
"	"	7	Yates
"	State "C"	1	Queen, Penrose, Grayburg
Stand. of Texas Meredith		1	Seven Rivers, Queen
"	"	2	Seven Rivers, Queen
"	"	3	Seven Rivers, Queen
"	State "2-20"	1	Seven Rivers, Queen
Texaco	Rector	1	Penrose, Grayburg
"	"	2	Penrose, Grayburg
"	"	3	Penrose, Grayburg
"	"	4	Penrose, Grayburg
"	"	5	Seven Rivers
Tidewater	Coleman	1	San Andres
"	"	2	San Andres
"	"	3	San Andres
"	"	4	San Andres
"	(GO) State "A"	1	San Andres
"	(GO) State "B"	1	San Andres
"	(GO) State "C"	1	San Andres
"	State "D"	1	San Andres
"	"	2	San Andres
"	State "E"	1	San Andres
"	"	2	San Andres
"	State "G"	1	San Andres

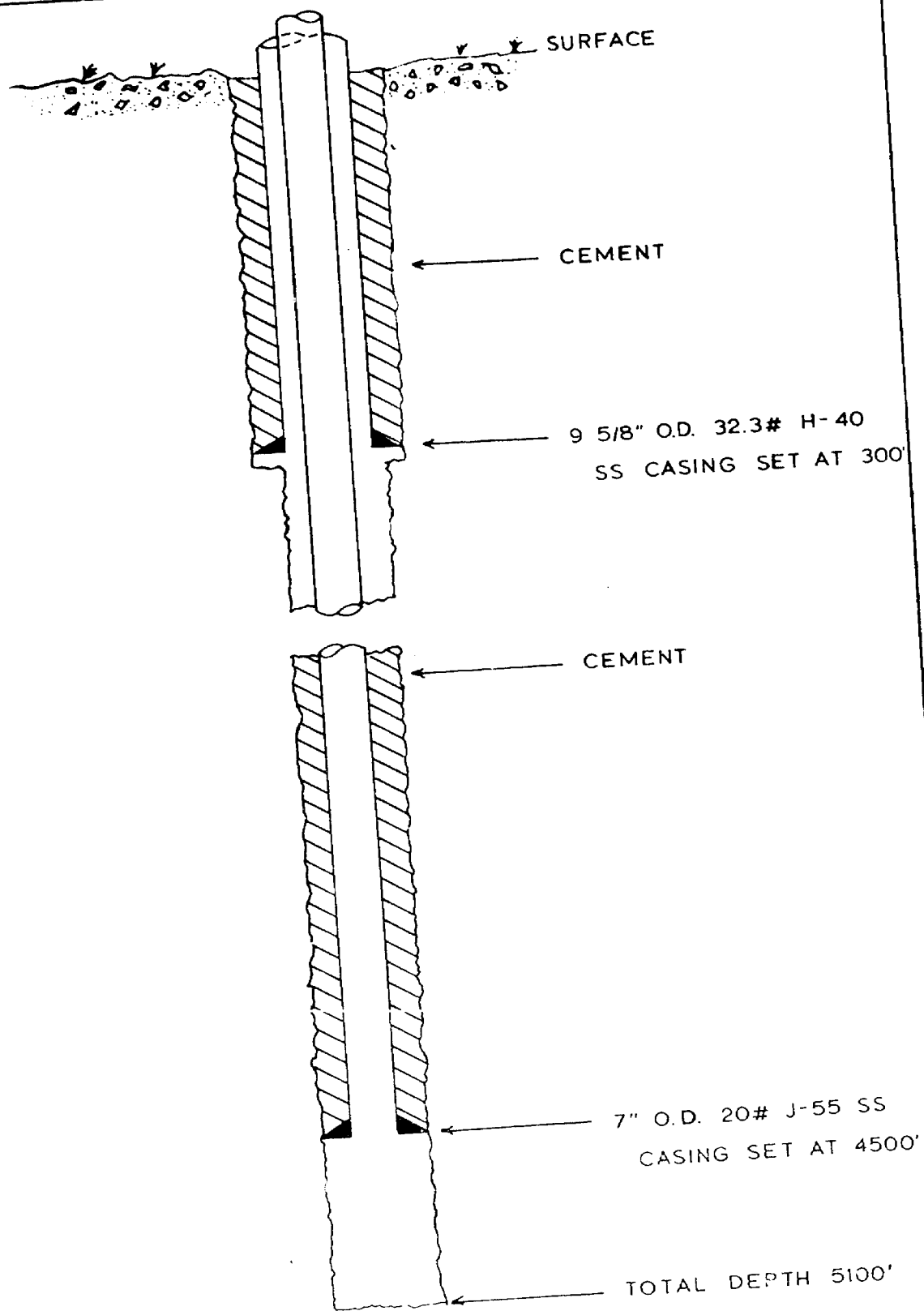


EXHIBIT "B"

DWN	AMM	6-66	PROPOSED COMPLETION EME SWD WELL L-21	SCALE NONE
				DWG NO.
			Rice Engineering & Operating, Inc. Hobbs, New Mexico	

6-3438

FORMATION WATER ANALYSIS

MILLIGRAMS PER LITER

GRAYBURG

Sodium, Na	5.060
Calcium, Ca	665
Magnesium, Mg	295
Sulphate, SO ₄	120
Chloride, Cl	9.620
Bicarbonate, HCO ₃	1.910
Hydrogen Sulphide, H ₂ S	<u>180</u>
TOTAL SOLIDS	17.850
pH	7.6
Specific Gravity	1.009

OIL CONSERVATION COMMISSION
I DISTRICT

RECEIVED

'66 JUN 24 AM 7 48

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE June 20, 1966

Re: Proposed NSP _____
Proposed Triple _____
Proposed NSL _____
Proposed NFO _____
Proposed DC _____

SWD X

Gentlemen:

I have examined the application dated 6/16/66
for the Rice Engineering & Operating, Inc. Eunice-Monument-Eumont SWD #L-21
Operator Lease and Well No. S-T-R 21-21-36

and my recommendations are as follows:

If Hearing Not Necessary, O.K.---E.F.E.
O.K. J.W.R.

Yours very truly,

[Signature]



STATE OF NEW MEXICO
STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

July 28, 1966

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Rice Engineering and Operating, Inc., which seeks authority to drill a well in Unit L of Sec. 21, T. 21 S., R. 36 E., and to dispose of produced salt water through this well into the San Andres between the depths 4500' and 5100'.

After reviewing the application and the water analyses, it appears that the proposal would not cause any threat of contamination to the fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of the application.

FEI/ma
cc-Rice Engineering & Operating, Inc.
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Div.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6601

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 3, 1966

EXAMINER HEARING

IN THE MATTER OF: Application of Rice
Engineering and Operating, Incorporated
for salt water disposal, Lea County,
New Mexico.

Case No. 3438

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING





MR. NUTTER: We will call next, Case 3438.

MR. HATCH: Application of Rice Engineering and Operating, Incorporated for salt water disposal, Lea County, New Mexico.

MR. FOX: Robert Fox, Kellahin and Fox, P.O. Box 1769, Santa Fe, appearing for the applicant, and Mr. Abbott is the witness.

(Witness sworn.)

W. G. A B B O T T, called as a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. FOX:

Q State your full name, please?

A My name is W. G. Abbott.

Q By whom are you employed and in what position?

A I'm Division Manager of Rice Engineering and Operating, Inc., in Hobbs, New Mexico.

Q Have you testified previously before the Oil Conservation Commission, and have you stated your qualifications?

A Yes, sir.

MR. FOX: Are the qualifications acceptable, Mr. Examiner?

MR. NUTTER: They are.

Q (By Mr. Fox) Are you familiar with the application



before the Commission at this time, Mr. Abbott?

A Yes, sir.

Q Will you state what is proposed by the applicant in this matter?

A We would like to drill a salt water disposal well to the San Andres formation for Eunice-Monument Eumont SWD system. This well would be Number L 21. We plan to drill it 1520 feet from the south line and 440 feet from the west line of Section 21, Township 21 South, Range 36 East, Lea County, New Mexico.

This well will be used as a salt water disposal well for a portion of the Eunice-Monument, Eumont SWD system. I want to submit first -- I have about four exhibits -- this first exhibit.

MR. FOX: Why don't we take them all and have them marked?

(Whereupon, Exhibit 1 marked for identification.)

A This Exhibit 1 is a plat of the area showing the location of this proposed well. On this plat we have traces of two cross sections, AA Prime and BB Prime. This Exhibit 2 will be our cross section AA Prime.

(Whereupon, Exhibit 2 marked for identification.)

A Exhibit 3 is the cross section BB Prime.



(Whereupon, Exhibit 3 marked for identification.)

A As you can see on these cross sections, AA Prime and BB Prime, our proposed disposal zone from 4500 to 5100 feet is well below the oil producing zone of the wells in that area.

Exhibit 4 shows a diagram of the proposed well.

(Whereupon, Exhibit 4 marked for identification.)

A We propose to set 300 feet of nine and five/eighths inch surface pipe with 250 sacks of cement and circulate the cement and we will set approximate 4500 feet of seven inch 20 pound J 55 casing, and set it at 4500 feet, with 750 sacks. We will determine the top of the cement by temperature survey on that.

Then our injection tubing will be plastic lined five and a half inch casing that we'll use as tubing, and that will be set at 4500 feet or down to the bottom of the seven inch. Then we plan to load the annular space between the five and a half inch tubing and a seven inch casing with oil, and we'll keep this oil blanket on the entire exterior of the tubing string and the interior of the casing string.

This oil will be held in place by a hydrostatic pressure of the San Andres formation. This well we plan to inject about 12,000 barrels a day by gravity into the well. At the present time, we will probably have about 4800 to 5,000



barrels a day.

The surface of the land is owned by State of New Mexico and the New Mexico Baptist Children's Home has the surface lease on it. We have secured a business lease for two and a half acres around the well from the State of New Mexico.

I also want to point out that all the offset operators have been notified of this application. I believe that's all.

Q (By Mr. Fox) Did you prepare these Exhibits 1 through 4, Mr. Abbott?

A They were prepared under my direction, yes, sir.

MR. FOX: I would like to move their admission, Mr. Examiner.

MR. NUTTER: Rice Engineering's Exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Exhibits 1, 2, 3 and 4 offered and admitted in evidence.)

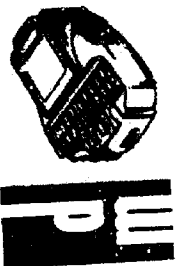
MR. FOX: That's all we have.

MR. NUTTER: Are there any further questions of Mr. Abbott?

CROSS EXAMINATION

BY MR. NUTTER:

Q I note from Exhibits 2 and 3 that the injection zone



for the wells shown on the two cross sections is well below the production zone for the producing wells shown on those cross sections.

A Yes, sir.

Q Are these four wells on each of these two exhibits typical of all of the wells in the immediate area?

A Yes, sir, they are typical. One reason we had to have this Hearing rather than administrative approval, some of the operators called some of the producing zones San Andres. Well, I doubt if any of the San Andres is productive and if it is, it's already watered out and the well has been plugged back. But, the producing zone is right at the top of the San Andres, if it does get in the San Andres.

Q What would the top of the San Andres be on either of these cross sections, approximately what sub-sea depth there?

A Well, we estimated on our well at 3957 and I think the elevation there is about 3500.

Q So, about 400 feet then, approximately?

A Yes.

Q And your injection will be at more than minus 900?

A Yes, sir.

Q So you will have a minimum of 500 feet --

A Yes.

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PAGE

7

Q -- for any production in the area?

A Yes.

MR. NUTTER: Are there any other questions of Mr. Abbott?

A One thing I forgot, we do have a copy of a letter to Mr. Porter from Steve Reynolds, the State Engineer, approving this proposed injection.

Q (By Mr. Nutter) Is that the letter of July 28, 1966?

A Yes.

Q We have that in our file. One other question, I note from your form C 108 that you propose to use 750 sacks of cement with the top at 2,000 feet; does this still hold true?

A Yes.

Q What will that do, bring it up to the base of the salt?

A Yes.

MR. HATCH: Should I read this letter into the record?

MR. NUTTER: Yes.

MR. HATCH: I have a letter from the State of New Mexico State Engineer's Office dated July 28, addressed to Mr. A. L. Porter; "Reference is made to the application of Rice Engineering and Operating Corporation, which seeks the authority to drill a well in Unit L of Section 21, Township

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PAGE

8

21 South, Range 36 East, and it is proposed to produce salt water into the San Andres between 4500 feet and 5100 feet. After reviewing the application and the water analysis, it appears that the proposal would not cause any contamination to any of the fresh water in the area. Therefore, this office offers no objection to the application. S. E. Reynolds, State Engineer, by Frank E. Irby".

MR. NUTTER: Any further questions of the witness?

He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Fox?

MR. FOX: Nothing further.

MR. NUTTER: Does anyone have anything further to officer in Case 3438? We will take the case under advisement.

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PAGE

9

I N D E X

WITNESS

PAGE

W. G. ABBOTT

Direct Examination by Mr. Fox

2

Cross Examination by Mr. Nutter

5

E X H I B I T S

NUMBER

MARKED FOR
IDENTIFICATION

OFFERED

ADMITTED

No. 1

3

No. 2

3

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No. 3

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No. 4

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PAGE

10

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 9th day of August, 1966.

Ada Dearnley
NOTARY PUBLIC

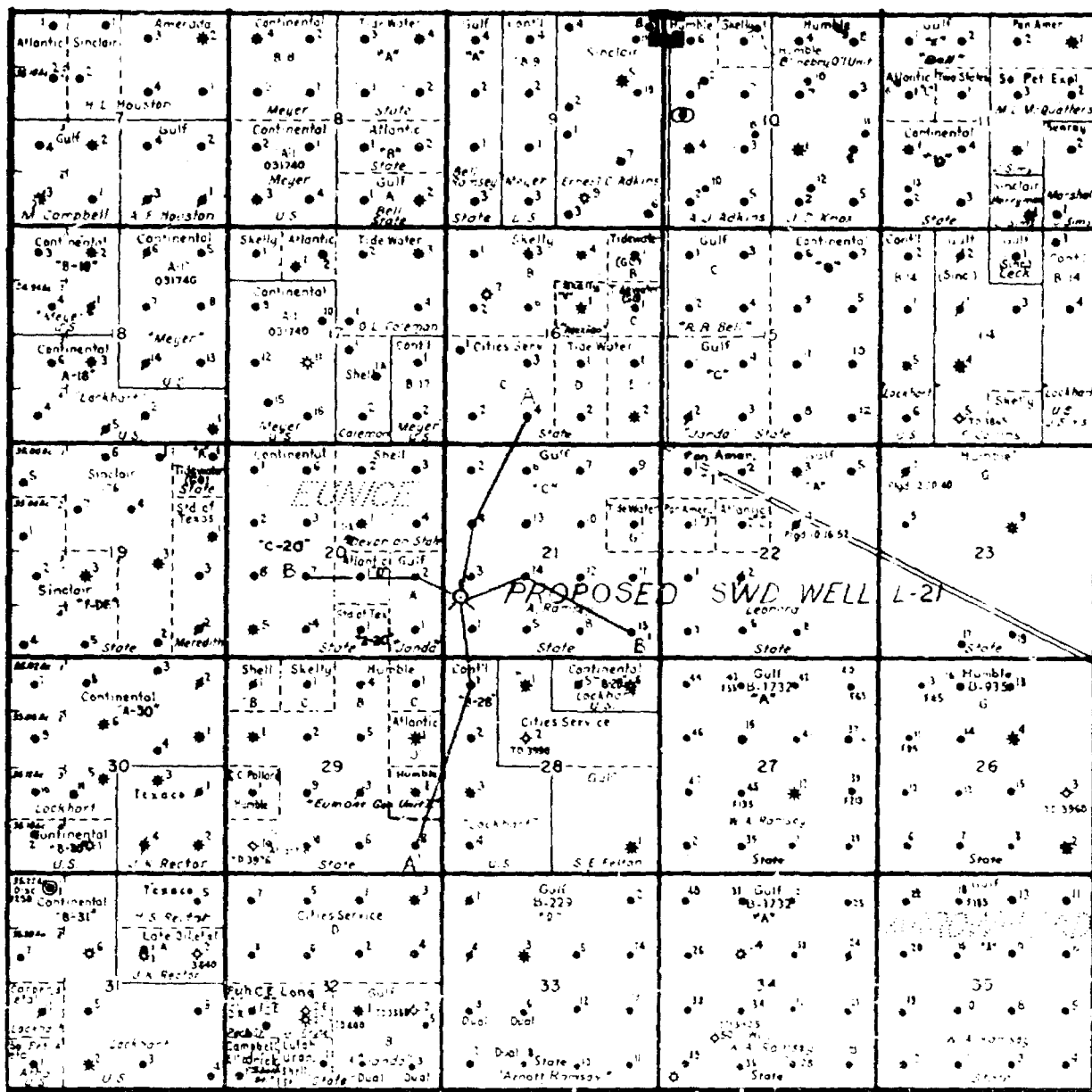
My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Bernalillo Hearing of Case No. 3438
heard at, on 8/3, 1966.

Samuel Examiner
New Mexico Oil Conservation Commission

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S

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 3438

LEA COUNTY, NEW MEXICO

EXHIBIT "A"

DWN	AMM	6-66	LOCATION PLAT EME SWD WELL L-21	SCALE 1" = 4000'
			Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Appel EXHIBIT NO. 2
CASE NO. 3238

DWN			SCALE
			DWG NO.

Case	Time	Time	Time	Time
1	10:00	10:00	10:00	10:00
2	10:00	10:00	10:00	10:00
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DWN				SCALE,
			Rice Engineering & Operating, Inc.	DWG NO.
			Hobbs, New Mexico	

