

CASE 4013: Application of REDFERN
DEVELOPMENT CORP. & WIL-MAC OIL
CORP. FOR SALT WATER DISPOSAL.

Case Number

4013

Application

Transcripts.

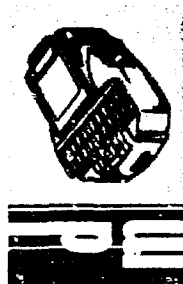
Small Exhibits

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 8, 1969
EXAMINER HEARING

IN THE MATTER OF:)

Application of Redfern)
Development Corporation)
and Wil-Mc Oil Corporation)
for salt water disposal,)
Lea County, New Mexico.)

Case No. 4013

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: Case 4013, continued from December 27, 1968, Examiner Hearing, Application of Redfern Development Corporation and Wil-Mc Oil Corporation for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, for the applicant, and I have one witness.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Numbers 1, 2, 3, 4, 5, inclusive, were marked for identification.)

WILLIAM J. LEMAY

called as a witness on behalf of the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please?

A William J. LeMay.

Q Are you the same William J. LeMay who testified earlier?

A Yes, I am.

MR. KELLAHIN: Are the witness's qualifications as a geologist acceptable?

MR. NUTTER: Yes.

Q Mr. LeMay, in connection with your work as a consulting geologist, have you done any work with Redfern Development

Corporation and Wil-Mc Oil Corporation in connection with Case 4013?

A Yes, I have.

Q What is proposed in this application?

A The applicant proposes to dispose of the produced salt water from the San Andres Formation into the San Andres Formation in the interval from approximately 4,042 feet to 4,179 feet. This is in lieu of what was previously advertised, 4,200 feet to 4,300 feet. They propose to dispose of this salt water in the Wil-Mc State K Well No. 1, located in Unit O of Section 11, Township 10 South, Range 32 East, in the East Mescalero-San Andres Pool of Lea County, New Mexico.

Q Referring to what has been marked as Exhibit Number 1, would you identify that exhibit, please?

A Exhibit Number 1 is a land location map of the Mescalero Pool, showing the ownership of land surrounding the Mescalero Field, and the Mescalero Field, and also color coated according to productive formations. The Pennsylvanian, San Andres, and Devonian are the main producers in the Mescalero Field, with the San Andres Formation being the predominant formation producing in the vicinity of the proposed injection well.

Land ownership is noted within a radius of two miles,

and also the wells are designated whether they are dry holes, oil or gas producers.

Q Referring to what has been marked as Exhibit Number 2, would you identify that exhibit?

A Exhibit Number 2 is a structure map of the Mescalero-San Andres Field, with the datum being the top of the Slaughter pay zone of the San Andres encountered approximately 700 feet below the top of the San Andres Formation. As indicated by the typed log on the right, production is from the gross Slaughter interval comprising approximately 150 feet.

The steep dip is to be noted flanking the field on the east, and also isopach figures indicating net pay, which are dashed in on the map.

What should be noted is the fact that the proposed disposal well in Section 11 is a down dip well on the Mescalero Structure.

Q Referring to Exhibit 3, would you identify that exhibit?

A Exhibit 3 is the application to dispose of the salt water. On this application, the casing program is noted and the amount of the cement; also the perforated interval from 4,042 to 4,179, and the previous perforations on this present dry hole. Previously it was a Pennsylvanian producer, and plugged back to

the San Andres Formation, which was non commercial. Wil-Mc tried to complete from this formation, I think in about 1965, and they pumped nine barrels of oil and twenty-six barrels of water from the existing perforations.

It indicates the anticipated daily volume of fluid salt water injected into this well, which will be between 100 and 500 barrels of water per day. They do plan to pressure up on the system in order to inject this amount of fluid in the formation with approximately 2,000 pounds PSI.

Q And it will be a closed type of system?

A That is correct.

Q Referring to Exhibit 4, will you please explain that exhibit?

A Exhibit 4 is a diagrammatic sketch of the Wil-Mc Oil Corporation's State K well, and it shows the casing program and the proposed completion of the system. There is a thirteen and three-eighths-inch surface casing set at 359 feet, and circulated to the surface, the cement is circulated to the surface with 365 sacks. The intermediate casing being eight and five-eighths-inch set at 3,480, and circulated to the surface with 2,800 sacks, and the production string being five and a half-inch casing set at 10,270, with the top of the cement calculated at 7,400 feet, with 500 sacks in the production string.

The proposed system will include a packer set above the perforations, and this packer will be set on two and three-eighths-inch plastic coated tubing. The annulus will be filled with inert fluid, and will be monitored at the surface with a pressure gauge.

Q Now, referring to what has been marked as Exhibit Number 5, would you identify that exhibit?

A Exhibit Number 5 is an analysis of the San Andres water as taken from the tank battery on the lease. It indicates the character of the water, being typically San Andres water.

Q Is it your understanding that the San Andres water is the water that will be injected?

A That is correct.

Q And this is the same zone that is being injected into, is it not?

A That is correct.

Q So would you anticipate any problems in connection with the injection of the San Andres water into the San Andres Formation?

A No, I would not.

Q In your opinion, taking into consideration the volume of water being injected and the location of the injection well, will the use of this well for water disposal cause any adverse

effect on producing wells in the area?

A No. I say this because of the south offset in Section 14, being a San Andres well, the production of this well, even though it is higher than the proposed injection well, the south offset being Unit B, Section 14, on the October production was pumping 143 barrels of oil, plus 1,287 barrels of water, being quite marginal.

MR. KELLAHIN: If the Examiner please, I believe a log of this well was submitted with the application.

MR. NUTTER: Yes, we do have that.

Q Mr. LeMay, have you examined Exhibits 1 through 5, and in your opinion do they correctly reflect the proposals that have been made by Redfern and Wil-Mc?

A Yes.

MR. KELLAHIN: At this time I offer into evidence Exhibits 1 through 5, inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 5 will be admitted in evidence.

(Whereupon, Applicant's Exhibits
Numbers 1, 2, 3, 4, and 5 were
admitted in evidence.)

MR. KELLAHIN: That is all I have on direct examination.

MR. NUTTER: Any questions of Mr. LeMay?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. LeMay, where will the water come from that will be disposed of?

A It will come from the San Andres production in the area. Both Wil-Mc and Redfern are operators of this salt water disposal system, and I don't know if any Bough C water will be put in that system or not. It is my understanding it will not.

Q But Redfern and Wil-Mc are two separate companies, and they are jointly installing this disposal well?

A Right.

Q To handle their own production of water, or will the well be available to other producers?

A This I don't know. I know they are having their water first, and depending upon the capacity of the injection well and the pressure system, they might expand it.

Q Well, Exhibit 3 indicates that they anticipate from 100 to 500 barrels of water a day?

A That is correct.

Q And you stated that the Mobil BB No. 1, which is immediately south, is making 1,500 barrels a month?

A Of water.

Q Is this a high water production for the pool, or is

it a typical well?

A It is fairly high for the well. It is a down dip well.

Q And you did want to make a point, also, that the Mobil well making 1,300 barrels a day is still structurally higher than the proposed disposal well?

A That is correct.

MR. NUTTER: Any further questions? Mr. LeMay, you may be excused. Do you have anything further?

MR. KELLAHIN: That is all.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4013? We will take the case under advisement, and recess until one fifteen o'clock this afternoon.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
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<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
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STATE OF NEW MEXICO)
) ss.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is a correct and true copy of the transcript of the hearing of the New Mexico Oil Conservation Commission held by me on 1-8, 1969, at 4013.
Samuel Mortelette
 New Mexico Oil Conservation Commission

dearnley-meier reporting corporation

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 22, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Redfern Development)
Corp. and Wil-McOil Corp. for salt)
water disposal, Lea County, N. M.)

Case No. 4013

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date JANUARY 22, 1969 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
Nina S. Deldarrie C. M. L. WHIGHAM	RW Byram & Co. TEXACO	Santa Fe MIDLAND
W. J. Mueller A. R. Kendrick Jason Kellaher	Phillips Petroleum Co. OCC Kellaher & Fox	Delaware, Tex. Ayer Santa Fe
Loy Crow John D Russell	General American Oil John D Russell att'y.	Artesia N.M. Roswell, N.M.
Barker Kelly Gregory Ambler	OCC	S. F. Ayer

MR. UTZ: The hearing will come to order, please.
The first case on the docket will be 4013.

MR. HATCH: Case 4013, continued and re-advertised.
Application of Redfern Development Corporation and Wil-Mc Oil
Corporation for salt water disposal, Lea County, New Mexico.

If the Examiner please, this case was first set on
the docket for December 27, 1968, but there was an error in
the footage, so it was re-advertised, and it was heard on
January 8, 1969, and it has been re-advertised for the purposes
of giving the people an opportunity to appear in the case.

MR. UTZ: Any appearances in this case?

MR. KELLAHIN: If the Examiner please, I believe the
record is complete on this application. I move that you enter
an order approving it.

MR. UTZ: We will take your recommendation under
advisement, Mr. Kellahin.

STATE OF NEW MEXICO)
) ss.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the hearing of case No. 4013
 heard by me on Jan. 27, 1969.
Theresa L. Smith Secretary
 New Mexico Oil Conservation Commission

dearnley-meier 1890-1893

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 27, 1968
EXAMINER HEARING

IN THE MATTER OF:

Application of Redfern
Development Corporation
and Wil-Mc Oil Corpor-
ation for salt water
disposal, Lea County,
New Mexico.

Case No. 4013

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4013.

MR. HATCH: Case 4013, application of Redfern Development Corporation and Wil-Mc Oil Corporation for salt water disposal, Lea County, New Mexico.

If the Examiner please, we have had a request to continue this and hear it on January 8; it will have to be re-advertised, though, to correct the disposal interval, and will be re-advertised for the 22nd.

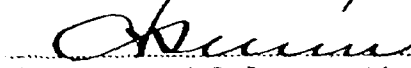
MR. NUTTER: Case 4013 will be continued to January 8th. It will also be heard on January 22nd, after re-advertisement.

STATE OF NEW MEXICO)
) ss.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.


 COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the hearing held on Case No. 4013, held by me on 12/27, 1968.

 Examiner
 New Mexico Oil Conservation Commission

DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2068
SANTA FE

January 24, 1969

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

Re: Case No. 4013
Order No. R-3663
Applicant:
Redfern Development Corp.
& Wil-Mc Oil Corporation

Dear Sir:

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

Very truly yours,

A handwritten signature in cursive script, reading "A. L. Porter, Jr.", is written over the typed name.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC

Other State Engineer Office

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. 4013
Order No. R-3663

APPLICATION OF REDFERN DEVELOPMENT
CORPORATION AND WIL-MC OIL CORPORATION
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 January 22, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 24th day of January, 1969, 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 applicants, Redfern Development Corporation and Wil-Mc Oil Corporation, are the owners and operators of the Wil-Mc State "K" Well No. 1, located in Unit O of Section 11, Township 10 South, Range 32 East, NMPM, Mescalero-San Andres Pool, Lea County, New Mexico.

(3) That the applicants propose to utilize said well to dispose of produced salt water into the San Andres formation, with injection into the perforated interval from approximately 4042 feet to 4179 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set just above said perforations; that the casing-tubing annulus should be

-2-

CASE No. 4013
Order No. R-3663

filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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 applicants, Redfern Development Corporation and Wil-Mc Oil Corporation, are hereby authorized to utilize the Wil-Mc State "K" Well No. 1, located in Unit O of Section 11, Township 10 South, Range 32 East, NMPM, Mescalero-San Andres Pool, Lea County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer just above the disposal interval, with injection into the perforated interval from approximately 4042 feet to 4179 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 at the surface in order to determine leakage in the casing, tubing, or packer.

(2) That the applicants shall submit monthly reports of the 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 the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

David F. Cargo
DAVID F. CARGO, Chairman

Alex J. Armijo
ALEX J. ARMILLO, Member

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

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 22, 1969

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

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

CASE 4013: (Continued and Readvertised)

Application of Redfern Development Corporation and Wil-Mc Oil Corporation for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the San Andres formation in the interval from approximately 4042 feet to 4179 feet in the Wil-Mc State K Well No. 1 located in Unit O of Section 11, Township 10 South, Range 32 East, Mescalero-San Andres Pool, Lea County, New Mexico.

CASE 4029: Application of General American Oil Company for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its pilot waterflood project in the Grayburg zone of the San Andres formation in the Grayburg-Jackson Pool, Eddy County, New Mexico, authorized by Order No. R-2324, by the conversion to water injection of 13 additional injection wells located in Township 17 South, Ranges 29 and 30 East, Eddy County, New Mexico.

CASE 4030: Application of Argus Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the perforated and open-hole interval from approximately 3554 feet to 3775 feet in its J. T. Lynn A-28 Well No. 3, located 2310 feet from the South line and 1650 feet from the East line of Section 28, Township 23 South, Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 4031: Application of Texaco 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 Yates-Seven Rivers formations in the open-hole interval from approximately 2964 feet to 3119 feet in its C. W. Shepherd Federal "B" Well No. 5 located in Unit I of Section 1, Township 26 South, Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

- CASE 4032: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the establishment of non-standard gas proration units and unorthodox gas well locations, where necessary, in the Aztec and Blanco-Pictured Cliffs Gas Pools in Sections 6, 7, 18, 19, 30, and 31, Townships 29 and 30 North, Ranges 8 and 9 West, San Juan County, New Mexico. Said non-standard units and locations being necessitated by variations in said legal subdivisions of the U. S. Public Land Surveys.
- CASE 4033: Application of Phillips Petroleum Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations in the perforated interval from 3606 feet to 3740 feet in its Cruces Federal Well No. 5 located in Unit P of Section 26, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 4034: Application of Phillips Petroleum Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations in the open-hole interval from 3360 feet to 3520 feet in its C. D. Woolworth Well No. 9 located in Unit B of Section 27, Township 24 South, Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 4035: Application of Phillips Petroleum Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations through its Philmex Well No. 5 located in Unit N of Section 27, Township 17 South, Range 33 East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

Bracket No. 41-68

DOCKET: EXAMINER HEARING - FRIDAY - DECEMBER 27, 1968

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 4005: Application of Petrochem Corporation of Texas for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation in the perforated interval from 9783 to 9946 feet in its State WTB Well No. 1 located in Unit D of Section 31, Township 12 South, Range 34 East, East Hightower-Upper Pennsylvanian Pool, Lea County, New Mexico.
- CASE 4006: Application of Petrochem Corporation of Texas for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the San Andres formation through its Paton Federal Well No. 2 located in Unit N of Section 6, Township 18 South, Range 27 East, Red Lake Pool, Eddy County, New Mexico.
- CASE 4007: Application of Paul DeLava for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Bagley State Well No. 1 located in the NW/4 NW/4 of Section 34, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to produce oil from the Bagley-Pennsylvanian Pool and to dispose of produced salt water down the annulus between the production casing and the intermediate casing into the San Andres, G. shale, and possibly other formations in the interval from approximately 7700 feet to 7858 feet.
- CASE 4008: Application of Paul DeLava for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Shell State Well No. 1 located in the NW/4 NW/4 of Section 19, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to produce oil from the Inos-Pennsylvanian Pool and to dispose of produced salt water down the annulus between the production casing and the intermediate casing into the San Andres, G. shale, and possibly other formations in the interval from approximately 7740 feet to 7800 feet.

CASE 4009: Application of Humble Oil & Refining Company for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4273 feet to 4329 feet in its New Mexico "BX" State Well No. 3 located in Unit G of Section 16, Township 8 South, Range 33 East, Chaveroo-San Andres Pool, Chaves County, New Mexico.

CASE 4010: Application of John H. Trigg for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations through his Empire "J" Federal Well No. 1 located in Unit P of Section 1, Township 18 South, Range 26 East, Red Lake Grayburg-San Andres Pool, Eddy County, New Mexico.

CASE 4011: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formation in the open-hole interval from approximately 3520 feet to 3639 feet in his Charles Whitten Well No. 5 located in Unit B of Section 4, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 4012: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3602 to authorize the disposal of produced salt water into the Yates-Seven Rivers formations in the open-hole interval from approximately 3363 feet to 3650 feet in his Everett Well No. 4, located in Unit M, Section 35, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico. The subject disposal well would be in lieu of the Everett Well No. 2, previously authorized for disposal by Order No. R-3602.

CASE 4013: Application of Redfern Development Corporation and Wil-Mo Oil Corporation for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the San Andres formation in the interval from approximately 4200 feet to 4300 feet in the Wil-Mo State Well No. 1-K, located in Unit G of Section 11, Township 10 South, Range 32 East, Mescalero-San Andres Pool, Lea County, New Mexico.

CASE 4014: Application of Ralph Lowe for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Devonian formation in the perforated interval from approximately 12,350 feet to 12,455 feet in his "C" Devonian Unit Well No. 1 located in Unit O of Section 16, Township 10 South, Range 36 East, South Crossroads-Devonian Pool, Lea County, New Mexico.

CASE 3991: (Continued and Readvertised)

Application of Roger C. Hanks, Ltd., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the lower Devonian formation in the open-hole interval from approximately 10,804 feet to 10,885 feet in its Monterey State Well No. 1 located in Unit A of Section 11, Township 10 South, Range 32 East, Mescalero Field, Lea County, New Mexico.

CASE 4015: Application of Wilson Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico, through the following six wells:

TOWNSHIP 21 SOUTH, RANGE 34 EAST

Wilson State Well No. 9 located in Unit F of Section 13;

Shell State Well No. 13 located in Unit H of Section 13;

Wilson State Well No. 8 located in Unit O of Section 13;

Wilson State Well No. 20 located in Unit B of Section 23;

Wilson State Well No. 21 located in Unit J of Section 23;

TOWNSHIP 21 SOUTH, RANGE 35 EAST

Wilson State Well No. 1-A located in Unit G of Section 7;

Applicant further seeks an administrative procedure whereby other wells in said pool may be approved for disposal purposes without the requirement of notice and hearing.

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

OPERATOR REDFERN DEVELOPMENT CORPORATION *		ADDRESS P. O. BOX 1747, MIDLAND, TEXAS 79701			
LEASE NAME NEW MEXICO STATE "T"	WELL NO. 1	FIELD MESCALERO SAN ANTONIO	COUNTY LEA		
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE south LINE AND 1980 FEET FROM THE east LINE, SECTION 11 TOWNSHIP 108South RANGE 32 East NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	359	365	circ.	-
INTERMEDIATE	8 5/8	3480	2800	circ.	Calc-est.
LONG STRING	5 1/2	10,270	500	7400	Calc.
TUBING	2 3/8	3950	NAME, MODEL AND DEPTH OF TUBING PACKER 2" x 5 1/2" retrievable pkr.		
NAME OF PROPOSED INJECTION FORMATION SAN ANTONIO		TOP OF FORMATION 3400' est.		BOTTOM OF FORMATION 4400 est.	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforation		PROPOSED INTERVAL(S) OF INJECTION 4042 to 4179	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? To test the Devonian		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 355 plus 8750-8430, Perf. 4397-58 sq. 2 3/4 / 275 sq., 4137-38 sq. 2 100 sq., 4039-40 sq. w/40sq.					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 1500		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 8900-8950		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 8900-8950	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 500	MINIMUM 100	MAXIMUM 500	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 2000
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	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) McGuffin - Tatum, New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL SEE ATTACHED					
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>BEFORE EXAMINATION</p> <p>OIL CONSERVATION COMMISSION</p> <p>EXHIBIT NO. 2</p> <p>CASE NO. 37 1715</p> </div>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes		SURFACE OWNER 12-19-68		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL 12-19-68	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

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

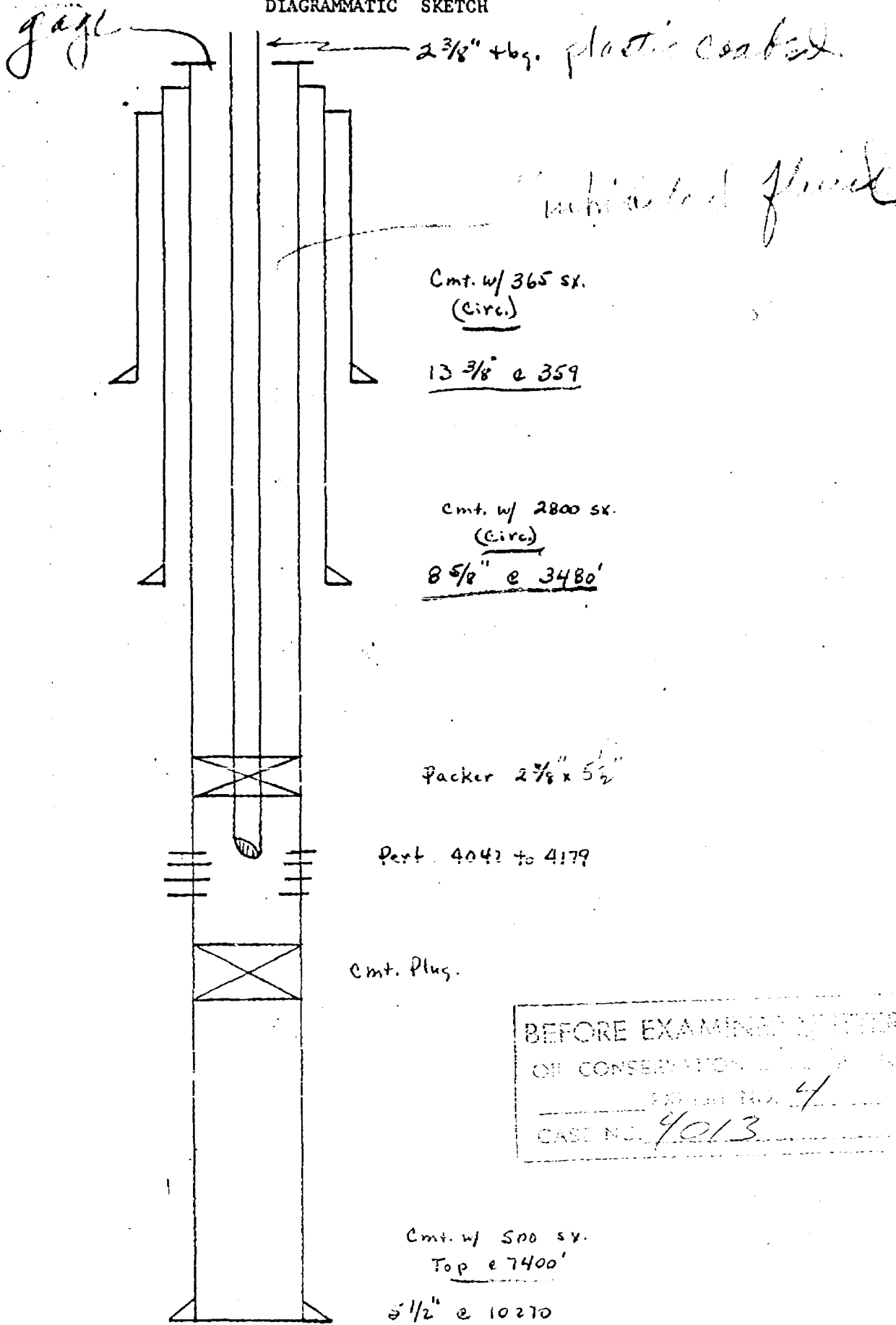
 (Signature)	Production Manager (Title)	December 19, 1968 (Date)
--	--------------------------------------	------------------------------------

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.

* Wil-Mc Oil Corporation is the owner of this well, but Redfern Development will act as Operator.

REDFERN DEVELOPMENT CORPORATION-OPERATOR
 WIL-MC OIL CORPORATION'S NEW MEXICO STATE "K"
 660 feet from south line, & 1980 feet from the
 east line, Section 11, Township 10South, Range
 23 East.

DIAGRAMMATIC SKETCH



HALLIBURTON DIVISION LABORATORY
HALLIBURTON COMPANY
MIDLAND DIVISION

LABORATORY WATER ANALYSIS No. W1-526-68

To Redfern Development Co.

Date 12-24-68

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____ Date Rec. 12-23-68

Well No. Redfern Sunray St. Depth _____ Formation _____

County _____ Field _____ Source Tank Battery

Treater _____

Resistivity _____ .056 @ 66 F. _____

Specific Gravity _____ 1.175 _____

pH _____ 7.3 _____

Calcium (Ca) _____ 2,600 _____ *MPL

Magnesium (Mg) _____ 750 _____

Chlorides (Cl) _____ 161,000 _____

Sulfates (SO₄) _____ 1740 _____

Bicarbonates (HCO₃) _____ 260 _____

Soluble Iron (Fe) _____ Nil _____

Remarks:

BEFORE EXAMINER MUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 4013

*Milligrams per liter

Respectfully submitted,

Analyst: Whitfield
cc:

HALLIBURTON COMPANY

By Frank P. Whitfield
DIVISION CHEMIST

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

DEC 28 AM 6 17

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Andres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

READING & BATES
BY: Bill M. Bates
Manager, Production & Engineering
Date: 12-23-68

REDFERN DEVELOPMENT CORPORATION
WILCO BUILDING
MIDLAND, TEXAS 79701

POST OFFICE BOX 1747
ZIP CODE 79701
TELEPHONE MUTUAL 2-5186
AREA CODE 818

December 19, 1968

IN REPLY REFER TO
FILE: 60/017L
Lea

Continental Oil Company
P. O. Box 431
Midland, Texas

Re: Salt Water Disposal Waiver
Mescalero San Andres Field
Lea County, New Mexico

RECEIVED	
SECTION	
DEC 20 1968	
Please Note	
H.M.N.	
J.E.F.	
W.R.H.	
B.R.M.	
D.D.C.	
T.C.O.D.	
File	Noted

Gentlemen:

Redfern Development Corporation has made application to the New Mexico Oil Conservation Commission to dispose of produced salt water into the Wil-Mc Oil Corp.'s New Mexico State "K" No. 1. The hearing has been set for December 27, 1968, at the Commission office in Santa Fe, New Mexico.

Disposal will consist of approximately 100 to 500 barrels per day of produced salt water into the New Mexico State "K" No. 1 which Redfern Development Corporation operates. It is requested that you approve our application for this salt water disposal. Attached for your file is a copy of the application which has been presented to the Commission.

For your convenience, two copies of a letter of waiver are attached. If you approve of the use of this well for salt water disposal, please sign the original and mail to the New Mexico Oil Conservation Commission.

Yours very truly,

Fred A. Skidmore, Jr.

Fred A. Skidmore, Jr.
Production Manager

FAS:lm
Enc

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Anres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

CONTINENTAL OIL COMPANY

BY: *[Signature]*

Date: 12-23-68

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Andres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

SHELL OIL COMPANY

BY: K. W. Leggett

Date: DEC 19 1968

MAILED
JAN 6 AM 8 24

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Anres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

R. C. HANKS

BY: R. C. Hanks

Date: 1 3 69

RECEIVED
'68 DEC 23 AM 9 54

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation for Disposal of Salt
Water into the Wil-Mc Oil Corp.
New Mexico State "K",
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being the surface owner of the Wil-Mc Oil Corp. lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corporation lease in the Mescalero San Andres Field, 660 from the south line and 1980 from the east line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

John McGuffin, Surface Owner

Date: _____

63 DEC 23 4 48 PM '68

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Andres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

MOBIL OIL CORPORATION

BY: _____

Date: _____

DEC 23 PM 8 52

December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Andres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

CITIES SERVICE OIL COMPANY

BY: _____

Date: _____

18 DEC 23 AM 8 53
December 19, 1968

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

Re: Waiver for Redfern Development
Corporation Application for Disposal
of Salt Water into The Wil-Mc Oil
Corp. New Mexico State "K"
Mescalero San Andres Field
Lea County, New Mexico

Dear Sir:

The undersigned, being an authorized representative operator, offsetting Wil-Mc Oil Corp.'s Lease, has been duly informed by Redfern Development Corporation of its intention to make application to dispose of produced salt water into the New Mexico State "K" No. 1 located on the Wil-Mc Oil Corp. lease in the Mescalero San Anres Field. The subject well is located 660 from the South line and 1980 from the East line of Section 11, Township 10-South, Range 32-East, Lea County, New Mexico.

This is to advise that we approve of their application and waive notice of hearing.

WIL-MC OIL CORPORATION

BY: _____

Date: _____

REDFERN DEVELOPMENT CORPORATION

WILCO BUILDING
MIDLAND, TEXAS 79701

POST OFFICE BOX 1747
ZIP CODE 79701
TELEPHONE MUTUAL 2-5184
AREA CODE 915

January 18, 1969

IN REPLY REFER TO
FILE: 60/017L
Lea Co.

69 JAN 21 AM 9 31

Case 4013

*DMS
Jason will
inform Redfern*

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

Re: Permit to Dispose of Produced Water
Application to Dispose of Salt Water by
Injection into a Porous Formation Productive
of Oil or Gas.
The Wil-Mc Oil Corp. - New Mexico State "K"
Well No. 1 - 660 from S line and 1980 from E
line of Section 11, Township 10-S, Range 32-E,
Mescalero San Andres Field
Lea County, New Mexico

Gentlemen:

On December 19, 1968, we requested permission to dispose
of lease produced water into the Mescalero San Andres Field, San
Andres Formation interval 4042-4179, as defined by the Wil-Mc
Oil Corp. N. M. State "K" No. 1.

Please advise us the status of our application. If there
is any additional information required, please advise.

Yours very truly,

Fred A. Skidmore, Jr.
Fred A. Skidmore, Jr.
Production Manager

FAS:lm

DEC 11 AM 8 40
1968

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF REDFERN DEVELOPMENT
CORPORATION AND WIL-MAC OIL
CORPORATION FOR SALT WATER DISPOSAL,
MESCALERO POOL, LEA COUNTY, NEW
MEXICO

Page 4013

A P P L I C A T I O N

Come now REDFERN DEVELOPMENT CORPORATION and WIL-MAC OIL CORPORATION, and apply to the Oil Conservation Commission of New Mexico for approval of underground disposal of produced water in a producing formation, in the Mescalero-San Andres Pool, Lea County, New Mexico, and in support thereof would show the Commission:

1. Applicants propose to complete the Wil-Mac State Well No. 1-K, located 660 feet from the South line, and 1980 feet from the East line of Section 11, Township 10 South, Range 32 East, N.M.P.M., Lea County, New Mexico, for disposal of produced water in the interval from 4200 to 4300 feet, in the San Andres formation.

2. The San Andres is a producing formation in the vicinity of the subject well, and therefore the disposal system requires a hearing before the Commission or the Commission's duly appointed examiner.

3. Applicants propose to dispose of produced water through tubing, under a packer, with continuous use of coupons for the purpose of determining if corrosion is occurring or apt to occur, or, in the alternative, to complete said well as directed by the Commission.

4. The water to be disposed of at the present time is produced from the San Andres pool, and approximately 100 barrels

DOCKET MAILED

12-17-68

per day will be disposed of initially. It is further proposed to utilize said well for water disposal from other wells in the vicinity in the future.

WHEREFORE, applicants pray that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and after notice and hearing as required by law the Commission enter its order approving the disposal system as prayed for.

Respectfully submitted,

REDFERN DEVELOPMENT CORPORATION
WIL-MAC OIL CORPORATION

BY: Jason W. Kellahin
KELLAHIN & FOX
Post Office Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANTS

REDFERN DEVELOPMENT CORPORATION

WILCO BUILDING
MIDLAND, TEXAS 79701

POST OFFICE BOX 1747
ZIP CODE 79701
TELEPHONE MUTUAL 2-5184
AREA CODE 915

December 19, 1968

DEC 23 1968

IN REPLY REFER TO
FILE: 60/017L
Lea Co.

CR 4013

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

Re: Permit to Dispose of Produced Water
Application to Dispose of Salt Water by
Injection into a Porous Formation Productive
of Oil or Gas.
The Wil-Mc Oil Corp. - New Mexico State "K"
Well No. 1 - 660 from S line and 1980 from E
Line, Section 11, Township 10-S, Range 32-E,
Mescalero San Andres Field
Lea County, New Mexico

Gentlemen:

We request permission to dispose of lease produced water into the Mescalero San Andres Field, San Andres Formation interval 4042-4179, as defined by the Wil-Mc Oil Corp. N. M. State "K" No. 1. This well is currently uneconomical and temporarily shut-in. It is our intention to re-enter the well and inject produced water through tubing below a packer into the interval from 4042-4179. We have included the following:

1. From G-108 "Application to Dispose of Salt Water By Injection into a Porous Formation".
2. Log on the N. M. State "K" with injection interval marked.
3. Plat of Area.
4. Copy of Waiver to offset operators
5. Copy of Waiver to surface owner.
6. Diagrammatic sketch of well.

DOCKET MAILED


Date 1-9-69

New Mexico Oil Conservation Commission

December 19, 1968

If any additional information is required, please advise us.

Yours very truly,

A handwritten signature in cursive script, appearing to read "Fred A. Skidmore, Jr.", enclosed within a circular ink stamp.

Fred A. Skidmore, Jr.
Production Manager

FAS:lm
Enc

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR REDFERN DEVELOPMENT CORPORATION *		ADDRESS P. O. BOX 1747, MIDLAND, TEXAS 79701			
LEASE NAME NEW MEXICO STATE "K"	WELL NO. 1	FIELD MESCALERO SAN ANDRES	COUNTY LEA		
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE south LINE AND 1980 FEET FROM THE east LINE, SECTION 11 TOWNSHIP 10South RANGE 32 East NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	359	365	circ.	-
INTERMEDIATE	8 5/8	3480	2800	circ.	Calc-est.
LONG STRING	5 1/2	10,270	500	7400	Calc.
TUBING	2 3/8	3950	NAME, MODEL AND DEPTH OF TUBING PACKER 2" x 5 1/2" retriuable pkr.		
NAME OF PROPOSED INJECTION FORMATION SAN ANDRES		TOP OF FORMATION 3400' est.		BOTTOM OF FORMATION 4400 est.	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforation		PROPOSED INTERVAL(S) OF INJECTION 4042 to 4179	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? To test the Devonian		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 355 plus 8750-8430, Perf. 4397-98 sq. 2 w/ 275 sx., 4137-38 sq. 2 100 sx., 4039-40 sq. w/40sw.					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 1500		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 8900-8950		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 8900-8950	
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) 500	MINIMUM 100	MAXIMUM 500	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 2000
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		
			NATURAL WATER IN DISPOSAL ZONE Yes		
			ARE WATER ANALYSES ATTACHED? No		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) McGuffin - Tatum, New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL SEE ATTACHED					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes					
SURFACE OWNER 12-19-68		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL 12-19-68		THE NEW MEXICO STATE ENGINEER 12-19-68	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		ELECTRICAL LOG Yes		DIAGRAMMATIC SKETCH OF WELL Yes	

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


(Signature)

Production Manager

(Title)

December 19, 1968

(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.

* Wil-Mc Oil Corporation is the owner of this well, but Redfern Development will act as Operator

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

4013

OPERATOR REDFERN DEVELOPMENT CORPORATION *		ADDRESS P. O. Box 1747, MIDLAND, TEXAS 79701	
LEASE NAME NEW MEXICO STATE "K"	WELL NO. 1	FIELD MESCALERO SAN ANDRES	COUNTY LEA
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE, SECTION 11 TOWNSHIP 10 South RANGE 32 East N.M.P.M.			

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	359	365	circ.	-
INTERMEDIATE	8 5/8	3480	2800	circ.	Calc-est.
LONG STRING	5 1/2	10,270	500	7400	Calc.
TUBING	2 3/8	3950	NAME, MODEL AND DEPTH OF TUBING PACKER 2" x 5 1/2" retrievable pkr.		

NAME OF PROPOSED INJECTION FORMATION SAN ANDRES		TOP OF FORMATION 3400' est.	BOTTOM OF FORMATION 4400 est.
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? Perforation	PROPOSED INTERVAL(S) OF INJECTION 4042 to 4179
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? To test the Devonian		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH
355 plus 8750-8430, Perf. 4397-98 sq. 2 w/ 275 ex., 4137-38 sq. 2 100 ex, 4039-40 sq. w/40ex.

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 1500	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 8900-8950	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 8900-8950
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 500	MINIMUM 100	MAXIMUM 500
OPEN OR CLOSED TYPE SYSTEM Closed		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure
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		ARE WATER ANALYSES ATTACHED? No

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)
McGuffin - Tatum, New Mexico

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL
SEE ATTACHED

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes	SURFACE OWNER 12-19-68	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL 12-19-68	THE NEW MEXICO STATE ENGINEER 12-19-68
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

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

Paul G. Fairmont (Signature) **Production Manager** (Title) **December 19, 1968** (Date)

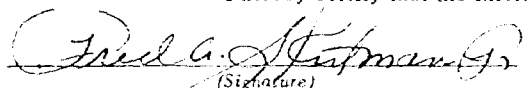
NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's 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.

* Wil-Mc Oil Corporation is the owner of this well, but Redfern Development will act as Operator

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION42
4013

OPERATOR REDFERN DEVELOPMENT CORPORATION *		ADDRESS P. O. BOX 1747, MIDLAND, TEXAS 79701			
LEASE NAME NEW MEXICO STATE "K"	WELL NO. 1	FIELD MESCALERO SAN ANDRES	COUNTY LEA		
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE south LINE AND 1980 FEET FROM THE east LINE, SECTION 11 TOWNSHIP 10South RANGE 32 East NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13 3/8	359	365	circ.	-
INTERMEDIATE	8 5/8	3480	2800	circ.	Calc-est.
LONG STRING	5 1/2	10,270	500	7400	Calc.
TUBING	2 3/8	3950	NAME, MODEL AND DEPTH OF TUBING PACKER 2" x 5 1/2" reticuable pkr.		
NAME OF PROPOSED INJECTION FORMATION SAN ANDRES		TOP OF FORMATION 3400' est.		BOTTOM OF FORMATION 4400 est.	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforation		PROPOSED INTERVAL(S) OF INJECTION 4042 to 4179	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? To test the Devonian		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 355 plus 8750-8430, Perf. 4397-98 sq. 2 w/ 275 sq. 4137-38 sq. 2 100 sq. 4039-40 sq. w/40sq.					
DEPTH OF DEEPEST FRESH WATER ZONE IN THIS AREA 1500		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 8900-8950		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 8900-8950	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 500	MINIMUM 100	MAXIMUM 500	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 2000
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	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) McGuffin - Tatum, New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL SEE ATTACHED					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes					
SURFACE OWNER 12-19-68		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL 12-19-68		THE NEW MEXICO STATE ENGINEER 12-19-68	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		ELECTRICAL LOG Yes		DIAGRAMMATIC SKETCH OF WELL Yes	

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


(Signature)**Production Manager**
(Title)**December 19, 1968**
(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.

* Wil-Mc Oil Corporation is the owner of this well, but Redfern Development will act as Operator

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. 4013

Order No. R-~~3067~~

APPLICATION OF REDFERN DEVELOPMENT
CORPORATION AND WIL-MC OIL CORPORATION
FOR SALT WATER DISPOSAL, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSIONBY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January ²², 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Rutherford.

NOW, on this _____ day of January, 1969, 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 applicants, Redfern Development Corporation
and Wil-Mc Oil Corporation,
are ^{the} ~~ys~~ the owners and operators of the Wil-Mc State "K" Well No. 1,
located in Unit 0 of Section 11, Township 10 South, Range
32 East, NMPM, Mescalero-San Andres Pool, Lea
County, New Mexico.

(3) That the applicants propose to utilize said well to
dispose of produced salt water into the San Andres
formation, with injection into the perforated interval
from approximately 4042 feet to 4179 feet.

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

just above the said perforations;
approximately feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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:

Redfern Development Corporation
(1) That the applicants, and Wil-Mc Oil Corporation,
are
~~1/2~~ hereby authorized to utilize ~~1/2~~ the Wil-Mc State "K" Well No. 1,
located in Unit 0 of Section 11, Township 10 South, Range
32 East, NMPM, Mescalero-San Andres Pool, Lea
County, New Mexico, to dispose of produced salt water into the
San Andres formation, injection to be accomplished through
2 3/8 -inch tubing installed in a packer *just above the disposal*
interval, ~~set at approximately~~ feet, with injection into the *perforated* interval
from approximately 4042 feet to 4179 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 left open~~ at the surface in order to determine
leakage in the casing, tubing, or packer.

(2) That the applicants shall submit monthly reports of ~~1/2~~ the
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 the day and year hereinabove
designated.