

CASE 4058: Application of HIRAM
W. KEITH AND DALTON HAINES FOR
SALT WATER DISPOSAL, LEA COUNTY.

- dse Number

4058

Application
Transcripts.

Small Exhibits

ETC.

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

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



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 26, 1969
EXAMINER HEARING

IN THE MATTER OF:)

Application of Hiram W.)
Keith and Dalton Haines)
for salt water disposal,)
Lea County, New Mexico.)

Case No. 4058

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case No. 4058.

MR. HATCH: Case 4058, application of Hiram W. Keith and Dalton Haines, for salt water disposal, Lea County, New Mexico.

MR. UTZ: Any appearances? You may proceed.

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

HIRAM W. KEITH

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

DIRECT EXAMINATION

MR. KEITH: My name is Hiram Keith. I am from Kermit, Texas, and I have testified before this Commission some ten years ago, but to requalify myself, I am a graduate petroleum engineer from Oklahoma University, and have worked in the oil industry for the last twenty years throughout the mid continent area.

This application is being made to obtain permission under Rule 701 to use our State No. 2 Well, subsurface disposal of produced water from our State, State A, and State B leases. We propose to inject produced water of some 18,500 barrels a month into the producing formation, Seven Rivers, from 3,874 feet to 3,950 feet. We believe that the well as

equipped on our proposed schematic diagram is more than adequate to protect any contamination of the upper fresh water zones, or any producing zones in the area.

Now, the Seven Rivers is a reef zone, it is what we propose to inject into, and it is a very large area of development, with good porosity and permeability.

The proposed injection well, State No. 2, is located structurally low on this small structural high of the West Wilson Pool. We think in view of this large extent of the Seven Rivers, the structural location of the proposed well, and we plan to inject into the lower zone of the reef, we believe that this will not be detrimental to the producing formation of the Seven Rivers, which is a producing zone in the West Wilson Field.

The subject leases are marginal, with a total production of some 24 barrels of oil per day and 620 barrels of water, and we think this application for injection of this well is essential for the continuing operation of this lease.

This was not submitted in the original, but I have an analysis of the water being injected. If the Commission would like that, I will submit it to you.

The schematic diagram will be Exhibit 1, and the pool map is Exhibit 2. We did not prepare a log of this well,

inasmuch as we just recently purchased the lease for the purpose primarily of having a disposal well in this field, and we purchased it from a bankruptcy court in Federal Court in Houston, and a lot of the records were not available so we didn't have a log on this well.

I stated that we plan on injecting some 620 barrels of water a day. The only other operator in the field, Mr. Fred Whittaker, has his well currently shut in. He doesn't have a disposal well, and we are trying to get together with him so he will have something available to use for disposal, also. So that would probably increase it another 500 barrels per day. Other than ourselves and Mr. Whittaker, we are the only operators in the field.

MR. UTZ: That will be a total of how much?

MR. KEITH: 1,120 a day. That concludes my report, sir.

MR. UTZ: Do you have that analysis there?

MR. KEITH: I believe I have it with me. Yes, here it is.

MR. UTZ: Mark that as Exhibit 3.

MR. KEITH: As you can see, the water isn't real salty. It is not bad water.

MR. UTZ: If it wasn't for all the rest of that stuff

in there, it wouldn't be bad, would it?

MR. KEITH: No, sir. Those carbonates will be rough on injection. I will have to chemically treat those.

MR. UTZ: Did you state whether or not your tubing will be lined?

MR. KEITH: No, sir, but I will, if the Commission requires it.

MR. UTZ: You anticipate that injection will take place for some time, don't you?

MR. KEITH: We anticipate the life of ten years, and recover some 32,000 barrels of oil.

MR. UTZ: How about loading the annulus with inert fluid?

MR. KEITH: Yes, sir, we can do that. If we put pressure gauges on the casing and the tubing, will that be necessary, too?

MR. UTZ: We don't require a pressure gauge on the annulus. Sometimes they leave them open. They say they can tell just as easily if they leave them open whether or not they are leaking. We give you your choice.

Eight and five eighths to the surface?

MR. KEITH: Yes.

MR. UTZ: Set at 252?

MR. KEITH: Yes, sir.

MR. UTZ: That is below any fresh water in the area?

MR. KEITH: Yes, sir. The best I can tell, there is one fresh water well approximately a mile and a half, and I believe it is completed about 120 feet. And that is in the Ogallala area, water area. But from what I can find from the water bore, it is not productive in this particular area, and there isn't really much in the way of fresh water there.

If you will notice in Exhibit 2, this field is just approximately two miles west of the Wilson pool. I believe you have had hearings on that particular field previous to this. On that map I have circled the proposed injection well.

MR. UTZ: So you will be injecting --

MR. KEITH: The No. 2 well.

MR. UTZ: Any other questions of the witness? You may be excused. Any statements?

Would you like to have Exhibits 1, 2, and 3 entered into the record of this case?

MR. KEITH: Yes, sir.

MR. UTZ: They will be so entered. If there is nothing further, the case will be taken under advisement.

I N D E X

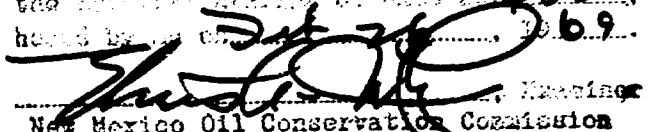
<u>WITNESS</u>	<u>PAGE</u>
HIRAM W. KEITH	
Direct Examination	2

<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Numbers 1, 2, and 3	2	6

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 New Mexico Hearing of Case No. 4058 heard by me on Sept 7th 1969.

 New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

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

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

March 4, 1969

Mr. Hiram W. Keith
Petroleum Engineer
Post Office Box 844
Kermit, Texas 79745

Re: Case No. 4058 & 4059
Order No. R-3692 - R-3693
Applicant:
Hiram W. Keith

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.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x R-3693

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. 4058
Order No. R-3692

APPLICATION OF HIRAM W. KEITH
AND DALTON HAINES 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 February 26, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 4th day of March, 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, Hiram W. Keith and Dalton Haines, are the owners and operators of the State Well No. 2, located in Unit K of Section 16, Township 21 South, Range 34 East, NMPM, West Wilson Pool, Lea County, New Mexico.

(3) That the applicants propose to utilize said well to dispose of produced salt water into the Seven Rivers formation, with injection into the open-hole interval from approximately 3874 feet to 3950 feet.

(4) That the injection should be accomplished through 2 1/2-inch plastic-lined tubing installed in a packer set at approximately 3850 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

-2-

CASE No. 4058

Order No. R-3692

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, Hiram W. Keith and Dalton Haines, are hereby authorized to utilize their State Well No. 2, located in Unit K of Section 16, Township 21 South, Range 34 East, NMPM, West Wilson Pool, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation, injection to be accomplished through 2 1/2-inch tubing installed in a packer set at approximately 3850 feet, with injection into the open-hole interval from approximately 3874 feet to 3950 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, Chairman


ALEX J. ARMILLO, Member


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

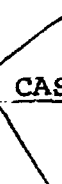

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 26, 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 4052: Application of Mobil Oil Corporation for a pool creation and discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Lightcap-Pennsylvanian Pool in Chaves County, New Mexico, comprising the NE/4 NE/4 of Section 7, Township 8 South, Range 30 East, and for the assignment of approximately 35,650 barrels of oil discovery allowable to the discovery well, its C. L. O'Brien Well No. 1 located in Unit A of said Section 7.
- CASE 4036: (Continued from the February 5, 1969, Examiner Hearing) Application of Mobil Oil Corporation for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its C. L. O'Brien Well No. 1 located in Unit A of Section 7, Township 8 South, Range 30 East, Chaves County, New Mexico, to produce oil from an undesignated Pennsylvanian oil pool and the Lightcap (Devonian) Pool through parallel strings of tubing.
- CASE 4053: Application of El Paso Products Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Gallegos-Gallup Pool, San Juan County, New Mexico, including provisions for the classification of oil and gas wells, 80-acre spacing for oil wells, and 320-acre spacing for gas wells.
- CASE 4054: Application of Amerada Petroleum Corporation for an unorthodox oil well location and amendment to Order No. R-2197, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1250 feet from the West line and 2220 feet from the South line of Section 28, Township 24 South, Range 37 East, in its Langlie Mattix Woolworth Unit Waterflood Project, Langlie-Mattix Pool, Lea County, New Mexico. Applicant also seeks the amendment of Order No. R-2197, which order authorized said waterflood project, to establish an administrative procedure whereby said project could be expanded to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

- CASE 4055: Application of Albert Gackle 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 open-hole interval from approximately 3290 feet to 3620 feet in his George Etz Well No. 3 located in Unit N of Section 27, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.
- CASE 4056: Application of Albert Gackle 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 Queen formation in the perforated interval from approximately 3642 feet to 3699 feet in his Sinclair "A" State Well No. 5 located in Unit I of Section 23, Township 23 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4057: Application of Charles B. Read for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Quail-Queen Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
-  CASE 4058: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3874 feet to 3951 feet in their State Well No. 2 located in Unit K of Section 16, Township 21 South, Range 34 East, West Wilson Pool, Lea County, New Mexico.
- CASE 4059: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Delaware formation in the open-hole interval from approximately 4030 feet to 4158 feet in their Eddy "AGA" State Well No. 2 located 660 feet from the North line and 1650 feet from the West line of Section 36, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 4060: Application of Sidney Lanier 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 3402 feet to 3650 feet in his I. B. Ogg "A" Well No. 5 located in Unit J of Section 35, Township 24 South,

(Case 4060 continued)

Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 4061: Application of Millard Deck 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 Seven Rivers and Queen formations in the open-hole interval from approximately 3752 feet to 3872 feet in its Atha Well No. 1 located in Unit M of Section 31, Township 21 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

CASE 4062: Application of Kersey & Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 1835 feet to 1870 feet in the Bass Well No. 3 located in Unit F of Section 12, Township 19 South, Range 28 East, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 4063: Application of Kerr-McGee Corporation for the creation of a new gas pool and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the Morrow formation by its Nix Well No. 1 located in Unit L of Section 11, Township 19 South, Range 26 East, Eddy County, New Mexico, and for the promulgation of special pool rules therefor, including a provision for 640-acre spacing.

CASE 4064: Application of Atlantic Richfield Company for salt water disposal, Roosevelt 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 4207 feet to 4286 feet in its Tucker Well No. 4 located in Unit O of Section 23, Township 7 South, Range 32 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 4065: Application of Humble Oil & Refining Company for an unorthodox oil well location and reclassification of a water well to an oil well, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have its New Mexico State "S" Water Source Well No. 4 (CP-427), located at an unorthodox oil well location 650 feet from the West line and 175 feet from the

South line of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico, reclassified as an oil well for the production of oil an undesignated San Andres Oil Pool and authority to produce same as an oil well.

- CASE 4066: Application of Humble Oil & Refining Company for the consolidation of two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard 320-acre gas proration units into one standard 640-acre unit comprising all of Section 26, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its New Mexico State "G" Wells Nos. 2 and 4 located in Units P and G, respectively, of said Section 26. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.
- CASE 4067: Application of Benson-Montin-Greer Drilling Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the La Plata-Gallup Pool, San Juan County, New Mexico, including a provision for 160-acre spacing and proration units. Applicant further requests that said special rules provide that the unit allowable for a 160-acre unit in said pool be allocated on the basis of four times the normal unit allowable for Northwest New Mexico, and that no credit be given for depth factors. Applicant further requests that said special rules be limited in their application to the exterior boundaries of the La Plata-Mancos Unit Area.
- CASE 4068: Application of Martin Yates III for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in its Yates & Hanson McCord Well No. 1 located in Unit E of Section 22, Township 23 South, Range 26 East, Dark Canyon Field, Eddy County, New Mexico. Applicant further seeks a procedure whereby its Cordie King Well No. 2 located in Unit K of said Section 22 may be approved for the disposal of salt water without the requirement of notice and hearing.

Examiner Hearing
February 26, 1969

- CASE 4045: (Continued from the February 5, 1969 Examiner Hearing)
Application of H & S Oil Company for an amendment to Order No. R-3357, as amended by Order No. R-3357-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3357, as amended by Order No. R-3357-A, which order authorized the H & S West Artesia Unit Unit Waterflood Project. Applicant proposes to substitute the Roach Drilling Company-Leonard Well No. 18 located in Unit D of Section 17 as a water injection well in said project in lieu of the Cities Service-Mell Well No. 17 located in Unit M of Section 8, both in Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.
- CASE 4069: Application of Union Oil Company of California for the creation of a new pool, assignment of discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Midway State Well No. 1 located in Unit F of Section 12, Township 17 South, Range 36 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 57,380 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 80-acre proration units.
- CASE 4070: Application of C. E. LaRue and B. N. Muncy, Jr., for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the salt and Yates formations in the open-hole interval from approximately 1254 feet to 3000 feet in the La Rue-Muncy John "B" Well No. 2 located in Unit A of Section 35, Township 17, South, Range 32, East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

Case 4058

Heard 2-28-69

Rec. 2-28-69.

Grant Hiram McKeith and Dalton
Haines permission to convert their
State ~~well~~ #2, West Wilson post to
an S W D well. Injection shall be
 thru 2 1/2" plaster coated tubing
 under of packer set at approx.
 3850' + into Seneca River from their
 open hole from 3874-3980. Annulus
 shall be filled w/ inert fluid.

Thos. A. McKeith

Could not contact Hiram McKeith
 for rental information 2-28-69
 10:30A

Before the Oil Conservation Commission
of the
State of New Mexico

In the matter of the application of Hiram
W. Keith and Dalton Haines for salt water
disposal under rule 701.

4058
Case 4048

APPLICATION

comes Hiram W. Keith and Dalton Haines a co-ownership, and states:

1. Applicants are the operators of 3 wells producing in the west Wilson, Seven Rivers Field, Lea County, New Mexico. The wells are all situated upon oil and gas leases issued by the state of New Mexico and covers the following lands.

TOWNSHIP 21 SOUTH, RANGE 34 EAST, N.M.P.M.

State "A" Lease, NM-1387-State of New Mexico, S $\frac{1}{2}$ SE $\frac{1}{4}$ Section 16.

State "B" Lease, NM-1187-State of New Mexico, N $\frac{1}{2}$, N $\frac{1}{2}$, NW $\frac{1}{4}$ and SE $\frac{1}{4}$, NW $\frac{1}{4}$, Section 21.

State Lease, E $\frac{1}{2}$, SW $\frac{1}{4}$, Section 16.

Production from the State A and State B leases is commingled.

2. The operator is currently disposing of approximately 18,500 barrels of water per month in conjunction with the production of approximately 23 barrels of oil per day from said 3 wells, in two unlined pits located on the State and State A Leases.
3. There is attached hereto, showing the said 3 producing wells, together with the location of only one other oil operator, F. W. Whitaker, within a two mile radius of the proposed salt water disposal well, State No. 2.
4. All wells on the West Wilson Field are producing from the Seven Rivers formation at a depth of approximately 3850 feet and are in an advanced stage of depletion.
5. There is also attached hereto a diagrammatic sketch of the proposed injection well, showing all casing strings, and the proposed tubing and location of packer.

Wherefore, applicant prays:

- (a) That permission be granted to the applicants, under rule 701, for the salt water disposal of produced water from the state, state A, and State B leases, into their State No. 2 well, located 1650 feet from the South line and 2310 feet from the West line of Section 16, Township-21 South, Range 34 East, Lea County, New Mexico.

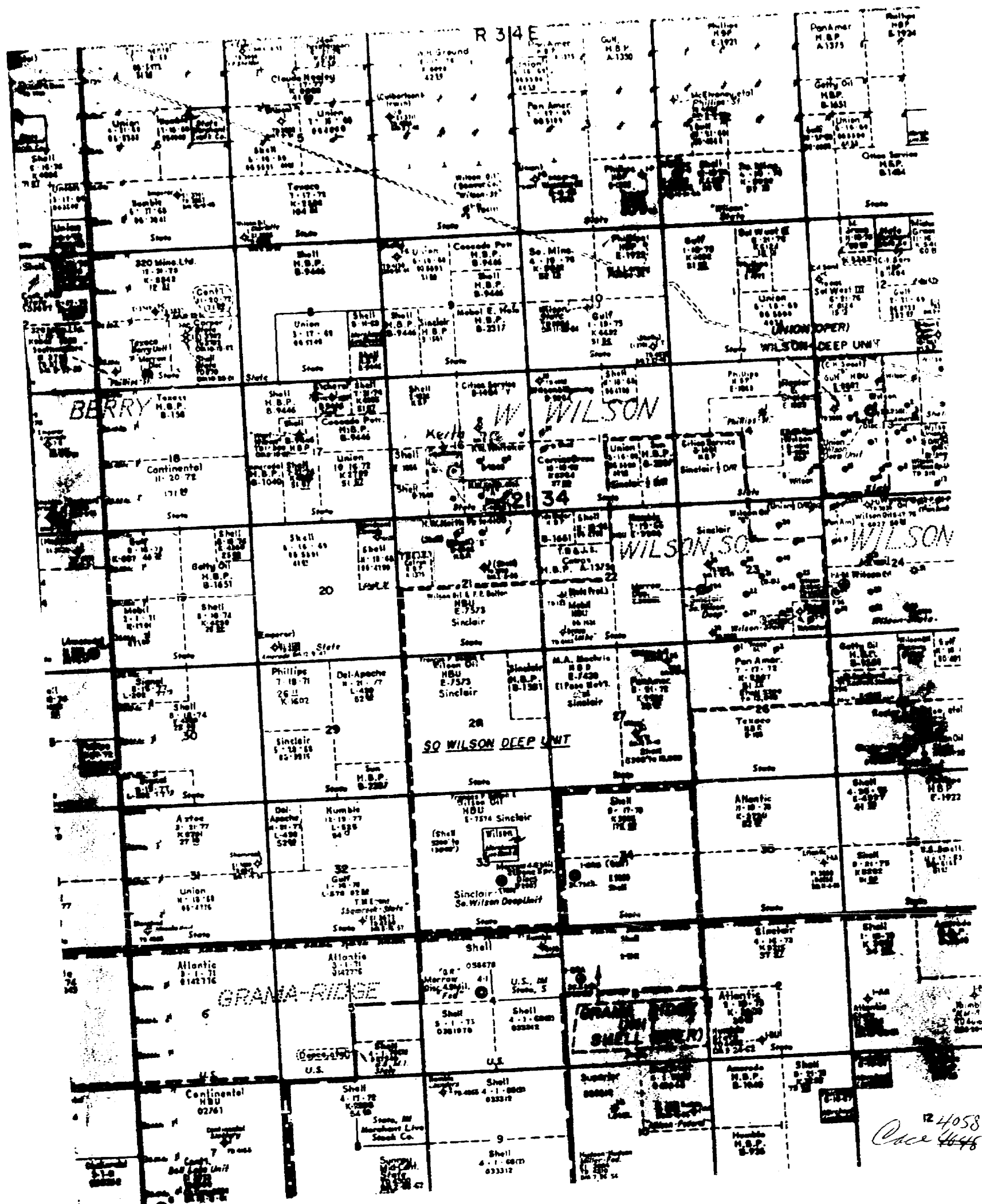
It is proposed to inject the said produced salt water into the subject well in the Seven Rivers Formation, open hole from 3074 feet to 3951 feet.

Hiram W. Keith & Dalton Haines

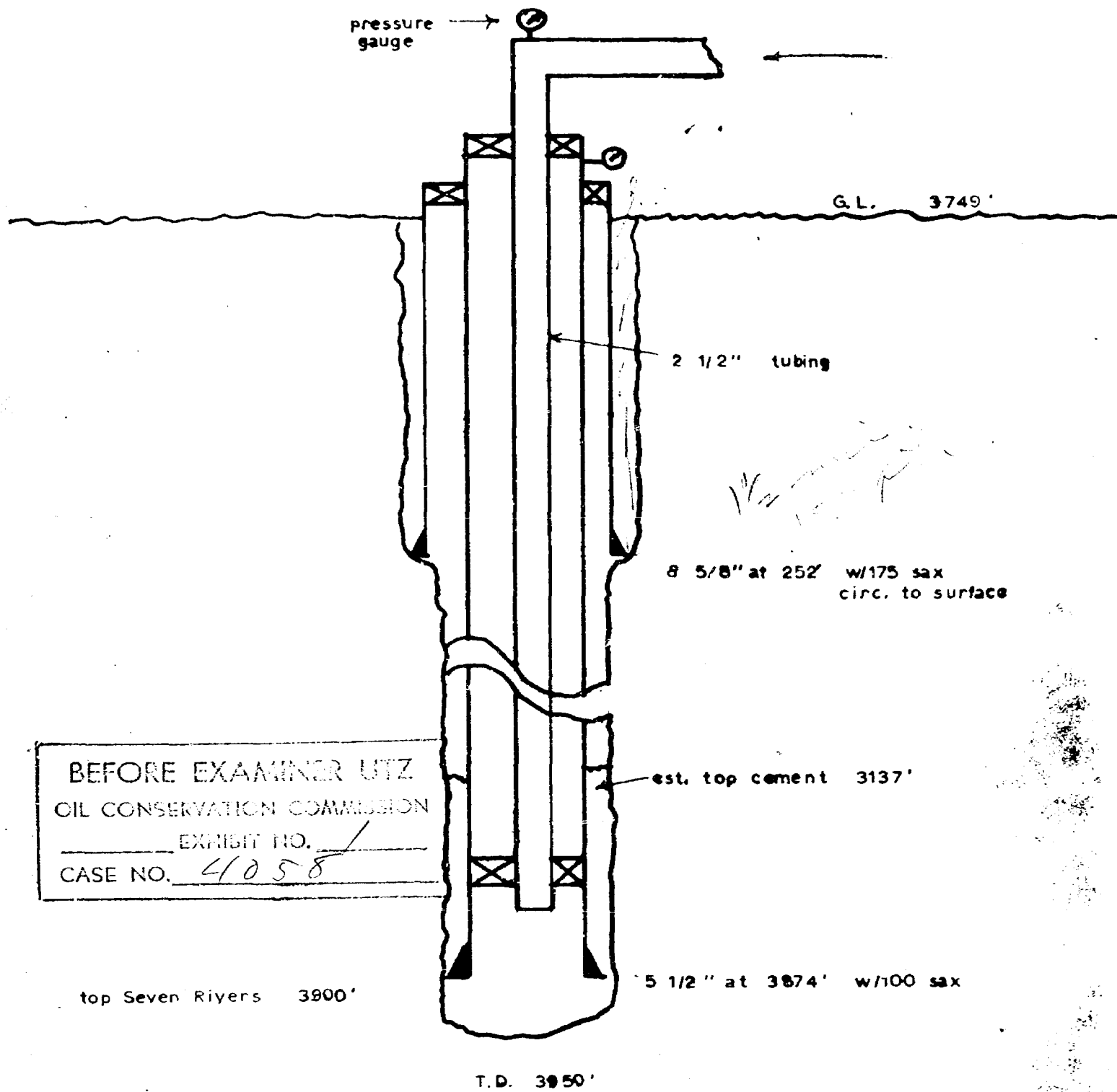
By *Hiram W. Keith*

Hiram W. Keith
P. O. Box 844
Kermit, Texas 79745

4058
Chas 4045



HIRAM W. KEITH & DALTON HAINES
STATE NO. 2 WELL
WEST WILSON FIELD



Case 4048

WEST WILSON FIELD

Names and addresses of all operators within
a two mile radius of the proposed salt water
disposal well, State Well No. 2.

F. W. Whitaker
Eunice, New Mexico

4058
Once 4048

P. O. BOX 1400 PHONE 943-3234
MONAHANS, TEXAS 79756

JO W. ILLINOIS PHONE 683-4521
MIDLAND, TEXAS 79701

LABORATORY NO. 268149
TO: Mr. Hiram Keith SAMPLE RECEIVED 2-29-68
608 East Austin, Kermit, Texas RESULTS REPORTED 3-1-68
COMPANY Hiram Keith LEASE State "A" & "B"
FIELD OR POOL West Wilson
SECTION BLOCK SURVEY COUNTY Lea STATE N. M.

NO. 1 Produced (Seven Rivers) water - taken from State "A" & "B". 2-27-68

NO. 2 _____

NO. 3 _____

NO. 4 _____

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0147			
pH When Sampled				
pH When Received	6.9			
Bicarbonate as HCO_3	1,190			
Supersaturation as CaCO_3	35			
Undersaturation as CaCO_3	—			
Total Hardness as CaCO_3	3,650			
Calcium as Ca	986			
Magnesium as Mg	288			
Sodium and/or Potassium	3,146			
Sulfate as SO_4	2,602			
Chloride as Cl	4,829			
Iron as Fe	0.60			
Barium as Ba	0			
Turbidity, Electric	21.7			
Color as Pt	82			
Dissolved Solids at 103° C.				
Total Solids at 103° C.				
Total Solids, Calculated	13,042	X		
Temperature °F.				
Carbon Dioxide, Calculated	244			
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	1,300			
Resistivity, ohms/m at 60° F.	0.645			
Suspended Oil				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

BX

Waylan C. Martin, M. A.

POST OFFICE BOX 844

HIRAM W. KEITH
REGISTERED PROFESSIONAL PETROLEUM ENGINEER
PRODUCER AND PROPERTY MANAGEMENT
608 EAST AUSTIN STREET
KERMIT, TEXAS 79745

AREA CODE (915) 586-2931

JAN 30 1969

January 27, 1969

4058

[Handwritten signature]

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

ATTENTION: Mr. A. L. Porter, Jr.

Gentlemen:

We have enclosed two applications for hearings for salt water disposal under rule 701, namely our State Well no. 2, West Wilson Field and Eddy State AGA well no. 2, North Mason Field.

If these applications meet with your commission's approval, we herein request a hearing at the next commission meeting.

We would like to point out that both of these applications are for the conversion of subject wells to salt water disposal wells, with disposal into the producing formations. It is our opinion that these conversions will serve to provide subsurface salt water disposal and stimulate thru flooding action, the offset producing wells, without any detrimental effects.

Yours very truly,

Hiram W. Keith
Hiram W. Keith

HWK/ggm

DOCKETED

Date 2-13-69

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. 4058Order No. R- 3692

APPLICATION OF HIRAM W. KEITH
AND DALTON HAINES 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 February 26, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz

NOW, on this 27th day of March, 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, Hiram W. Keith and Dalton Haines,
are
~~as~~ the owners and operators of the State Well No. 2
located in Unit K of Section 16, Township 21 South, Range
34 East, NMPM, West Wilson Pool, Lea
County, New Mexico.

(3) That the applicants propose to utilize said well to
dispose of produced salt water into the Seven Rivers
formation, with injection into the open-hole interval
from approximately 3874 feet to 3950
~~3951~~ feet.

(4) That the injection should be accomplished through
2 1/2-inch plastic-lined tubing installed in a packer set at

approximately 3850 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:

(1) That the applicants, Hiram W. Keith and Dalton Haines, are ~~xx~~ hereby authorized to utilize ~~xxx~~ their State Well No. 2 located in Unit K of Section 16, Township 21 South, Range 34 East, NMPM, West Wilson Pool, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation, injection to be accomplished through 2 1/2-inch tubing installed in a packer set at approximately 3850 feet, with injection into the open-hole interval from approximately 3874 feet to ³⁸⁵⁰~~3951~~ 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 ~~xxxx~~ the disposal operations in accordance with Rules 104 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 hereinafter designated.