GREAT WESTERN
Midland drilling co. Texas

October 25, 1962

R. C. TUCKER, PRES.

PHONE MU 2-5241
ADDRESS REPLY TO:
BOX 1659
MIDLAND, TEXAS

New Mexico Oil Conservation Commission,
Box 871,
Santa Fe, New Mexico

Gentlemen:

We are enclosing our application to dispose of salt water by injection into a porous formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico, as outlined in yellow on the attached plat. This well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

There is no production in the area from any of the proposed injection intervals to the best of our knowledge. The nearest San Andres production is about 5 miles southeast in the Saunders Pool. The nearest production from either the Glorieta, Clearfork or Tubb zones is over 20 miles away.

The waters to be disposed of are mineralized to a degree to render them unfit for human or animal use. It is also our opinion that the conate water contained in the proposed injection intervals is also mineralized to a degree to render it unfit for animal or human consumption.

Surface casing was set at 321' and cemented with 300 sacks of cement. The cement circulated to the surface. 8-5/8" casing was set at 4304' and cemented with 700 sacks of cement. The former operator did not run a survey to determine where the top of the cement came to. We calculate that the top should be not less than 1000' from the surface. However, all zones above the proposed disposal intervals, will be protected by virtue of the fact that our injection will be down tubing and under a packer. This tubing will be either cement lined or plasticoated.

If the injection is approved as requested, we believe that initially the water can be disposed of by gravity. It may be necessary in the future to apply pressure to the system. We do not believe that the pressure will exceed 1000#. If the permission herein requested is granted, we propose to re-enter the well, clean out to the permitted total depth and condition the well for injection. Injection will be into the open hole interval as outlined on the application.

AMERICAN ASSOCIATION OF OILWELL DRILLING CONTRACTORS MEMBER

Copies of this application have been sent by registered mail to the following:

1. Offset Operators.
2. State Engineer's Office.
3. United States Geological Survey.
4. Surface Owner.

We believe that under the provisions of Rule 701, that this application is eligible for Administrative Approval. If the application cannot be approved administratively, please set the application for an Examiner hearing at your convenience.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton

John T. Hampton
Chief Production Engineer

JTH:tr

Revised 9 16 58

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

APPLICATION
TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION
NOT PRODUCTIVE OF OIL OR GAS

Operator Great Western Drilling Company Address Box 1659, Midland, Texas

Lease Federal "MM" Well No. 1 SWD County Lea

Unit D Section 8 Township 9-S Range 37-E

This is an application to dispose of salt water produced from the following pool(s):

Allison - Penn

Name of Injection Formation(s): San Andres, Glorieta, Clearfork, Tubb

Top of injection zone: 4384' Bottom of injection zone: 7800'

Give operator, lease, well no., and location of any other well in this area using this same zone for disposal purposes: Unknown

CASING PROGRAM

	Diameter	Setting Depth	Sacks Cement	Top of Cement
Surface	13-3/8	321'	300	Circulated
Intermediate				
Long String	8-5/8"	4304'	700	Calculated top 1000' plus/minus

Will injection be through tubing, casing, or annulus? Tubing (Corrosion protected)

Size tubing: 2-1/2" Setting depth: 4260', plus or minus Packer set at: 4260' plus/minus

Name and Model No. of packer: Guiberson Type AF Hold down tension packer or equivalent

Will injection be through perforations or open hole? Open Hole

Proposed interval(s) of injection: 4384' - 7800'

Well was originally drilled for what purpose? Bough "C" Test

Has well ever been perforated in any zone other than the proposed injection zone? No

List all such perforated intervals and sacks of cement used to seal off or squeeze each:

30 sack plug at 9730, 30 sack plug at 7800'.

Give depth of bottom of next higher zone which produces oil or gas: None

Give depth of top of next lower zone which produces oil or gas: Bough "C" in area 9670', plus or minus, none in this well.

Give depth of bottom of deepest fresh water zone in area: 200 plus or minus

Expected volume of salt water to be injected daily (barrels): 2,000

Will injection be by gravity or pump pressure? pump Estimated pressure: 1000 psi

Is system open or close type? Closed Is filtration or chemical treatment necessary? No

Is the water to be disposed of mineralized to such a degree as to be unfit for domestic, stock, irrigation, and/or other general use? Yes

Is any water occurring naturally within the proposed disposal formation mineralized to such a degree as to be unfit for domestic, stock, irrigation, and/or other general use? Yes

List all offset operators to the lease on which this well is located and their mailing address

Texaco, Inc.	Box 3109,	Midland, Texas
Arnold Brunner,	~~Surrey Building~~	Conroe, Texas
Eloy F. Sanchez	Box 1244	Santa Fe, New Mexico

Name and address of surface owner M. C. Gandy, Tatum, New Mexico Box 991

Have copies of this application been sent by registered mail or given to all offset operators, surface owners, and to the New Mexico State Engineer? Yes

Is a complete electrical log of this well attached? Yes

Operator: Great Western Drilling Company

By: John T. Hampton
John T. Hampton

Title: Chief Production Engineer

STATE OF _____)
) ss.
County of _____)

BEFORE ME, The undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein and that said report is true and correct.

SUBSCRIBED AND SWORN TO before me this the _____ day of _____, 19__.

_____
Notary Public in and for the County of _____

_____
My Commission Expires

NOTE: Should waivers from all offset operators, the surface owner, and the State Engineer not accompany an application, the New Mexico Oil Conservation Commission will hold the application for a period of fifteen (15) days from date of receipt by the Commission's Santa Fe office. If at the end of said fifteen-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

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COPY

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GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

Arnold H. Brunner,
Surrey Building,
Conroe, Texas

Dear Sir:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water into a formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field, in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. The subject well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found to be dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

To the best of our knowledge there is no production in the area from any of the proposed injection intervals. Nearest San Andres production is about 5 miles East. The nearest production from the Glorieta, Clearfork or Tubb zones is over 20 miles away.

In compliance with Rule 701 of the New Mexico Oil Conservation Commission, we are sending you, as an offset operator, a copy of our Application. Since we believe that this application is eligible for Administrative Approval, we respectfully request that you waive protest by approving one copy of this letter and returning it to the writer.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton

JTH:tr

John T. Hampton
Chief Production Engineer

APPROVED FOR: _____
BY: _____
DATE: _____

COPY

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GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

Texaco, Inc.
Box 3109,
Midland, Texas

Attn: Mr. Bob Black

Gentlemen:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water into a formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field, in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. The subject well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found to be dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

To the best of our knowledge there is no production in the area from any of the proposed injection intervals. Nearest San Andres production is about 5 miles East. The nearest production from the Glorieta, Clearfork or Tubb zones is over 20 miles away.

In compliance with Rule 701 of the New Mexico Oil Conservation Commission, we are sending you, as an offset operator, a copy of our Application. Since we believe that this application is eligible for Administrative Approval, we respectfully request that you waive protest by approving one copy of this letter and returning it to the writer.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton
Chief Production Engineer

JTH:tr

APPROVED FOR: _____
BY: _____
DATE: _____

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GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

United States Geological Survey,
Drawer 1857,
Roswell, New Mexico

Gentlemen:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water, into a porous formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. This well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

To the best of our knowledge, there is no production in the area from any of the proposed injection intervals. The nearest San Andres production is about 5 miles southeast. The nearest production from either the Clearfork, Glorieta or Tubb zones is over 20 miles away.

Waters to be disposed of are mineralized to a degree to be unfit for human or animal use. It is also our opinion that conate water contained in the proposed injection interval is also mineralized to a degree to render it unfit for human or animal use.

Surface casing was set in the subject well at 321' and cemented with 300 sacks of cement. The cement circulated to the surface. 8-5/8" casing was set at 4304' and cemented with 700 sacks of cement. The former operator did not run a survey to determine where the top of the cement came to. We calculate that the top should be not less than 1000' from the surface. However, all zones above the proposed disposal interval, will be protected by virtue of the fact that our injection will be down tubing and under a packer. This tubing will be either cement or plastic lined.

If the injection is approved as requested, we believe that initially the water can be disposed of by gravity. It may be necessary in the future to apply pressure to the system. We do not believe that this pressure will exceed 1000#.

Since we believe that this application is eligible for Administrative Approval, we respectfully request that you notify us of your feelings as soon as convenient for you.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton

John T. Hampton
Chief Production Engineer

JTH:tr

COPY COPY

GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

State Engineer's Office,
State Capitol Building,
Santa Fe, New Mexico

Attn: Mr. Frank E. Irby

Gentlemen:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water into a formation not productive of oil or gas.

The proposed salt water disposal well is located in the Allison-Pennsylvanian Field in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. The well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

Waters to be disposed of are mineralized to a degree to be unfit for human use or animal use. It is also our opinion that conate water found in the proposed injection intervals are also mineralized to a degree to render them unfit for either human or animal use.

We call your attention to the fact that surface casing was set and cemented through any possible fresh water zones and that 700 sacks of cement was used to cement the casing set at 4304 feet. The former operator did not run a survey to determine where the cement top came to. We calculate that the top should be not less than 1000' from the surface. However, all zones above the proposed disposal interval should be protected by virtue of the fact that our injection will be down tubing and under a packer. This tubing will be either cement or plastic lined.

If the injection is approved as requested, we believe that initially the water can be disposed of by gravity. It may be necessary in the future, to apply pressure to the system. We do not believe that the pressure will exceed 1000#.

Since we believe that this application is eligible for Administrative Approval, we respectfully request that you notify us of your feelings as soon as convenient for you. Thanking you for your cooperation in the past, we remain,

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton

John T. Hampton
Chief Production Engineer

JTH:tr

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GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

Mr. M. C. Gandy,
Box 991,
Tatum, New Mexico

Dear Sir:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water into a formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field, in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. This well was originally drilled as a Bough "C" test by Pierce and Davis. It was the #1 Gandy Federal. After the well was found to be dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

In compliance with Rule 701 of the New Mexico Oil Conservation Commission, we are sending you, the surface owner, a copy of our Application. Since we believe that this application is eligible for Administrative Approval, we respectfully request that you waive protest by approving one copy of this letter and returning it to the writer.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

John T. Hampton
Chief Production Engineer

JTH:tr

APPROVED BY: _____

DATE: _____

COPY COPY

GREAT WESTERN DRILLING CO.
MIDLAND, TEXAS

October 25, 1962

Eloy F. Sanchez,
Box 1244,
Santa Fe, New Mexico

Dear Sir:

Great Western Drilling Company is making application to the New Mexico Oil Conservation Commission for permission to dispose of produced salt water into a formation not productive of oil or gas. The proposed salt water disposal well is located in the Allison-Pennsylvanian Field, in the NW/4 of the NW/4 of Sec. 8, T-9-S, R-37-E, Lea County, New Mexico. The subject well was originally drilled as a Bough "C" test by Pierce and Davis. After the well was found to be dry in the Bough "C" zone, Great Western Drilling Company obtained the well for salt water disposal purposes.

To the best of our knowledge there is no production in the area from any of the proposed injection intervals. Nearest San Andres production is about 5 miles East. The nearest production from the Glorieta, Clearfork or Tubb zones is over 20 miles away.

In compliance with Rule 701 of the New Mexico Oil Conservation Commission, we are sending you, as an offset operator, a copy of our Application. Since we believe that this application is eligible for Administrative Approval, we respectfully request that you waive protest by approving one copy of this letter and returning it to the writer.

Yours very truly,

JTH:tr

GREAT WESTERN DRILLING COMPANY

John T. Hampton
Chief Production Engineer

APPROVED FOR: _____
BY: _____
DATE: _____

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

October 30, 1962

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

Dear Mr. Porter:

Reference is made to the application of Great Western Drilling Company dated October 25th which seeks to inject salt water into the San Andres, Glorieta, Clearfork and Tubb formations at intervals between 4384 feet and 7800 feet. The disposal well is located in the Allison-Pennsylvania Field in the NW¼ NW¼ of Section 8, Township 9 South, Range 37 East in Lea County.

In view of the statements that injection will be down tubing and under a packer and the tubing will be either cement or plastic lined and the packer will be well below the top of the cement surrounding the casing, this office offers no objection to the granting of the application.

Yours truly,

S. E. Reynolds
State Engineer

By: Frank E. Irby
Frank E. Irby
Chief
Water Rights Division

FEI/ma
cc-Great Western Drilling Co.
F. H. Hennighausen

LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE