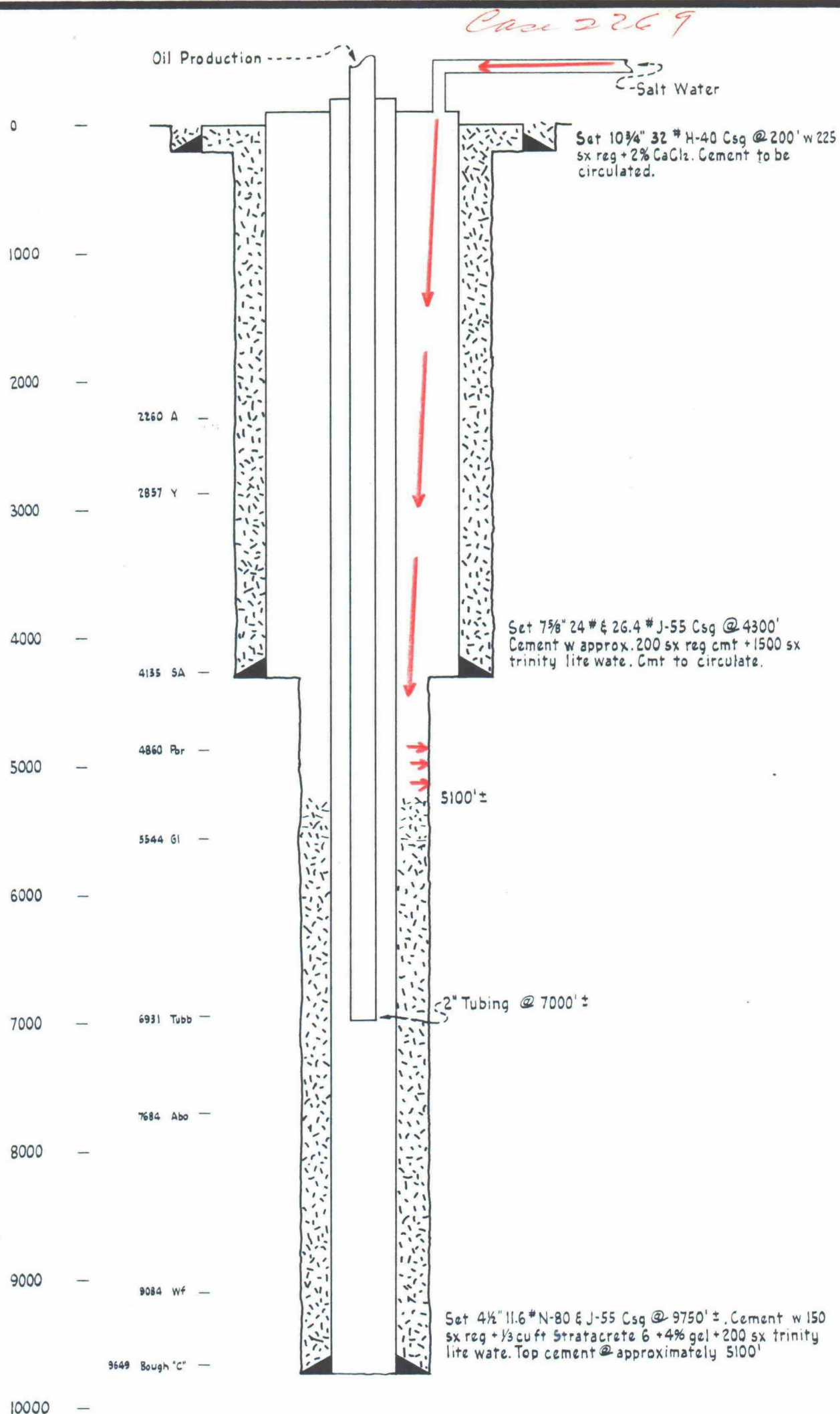


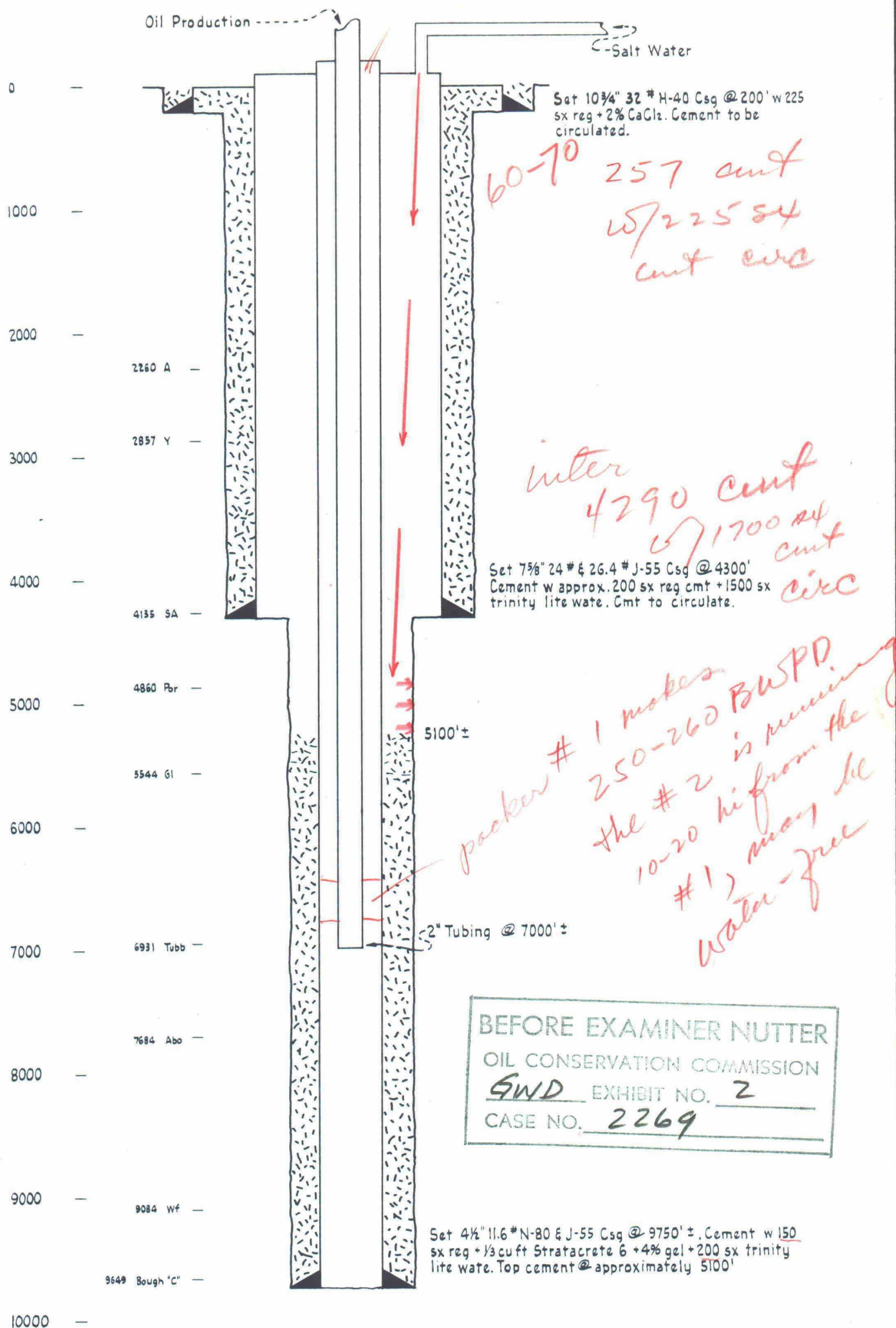
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SCHEMATIC DIAGRAM
PROPOSED CASING & CEMENTING PROGRAM
GREAT WESTERN DRILLING CO.
FEDERAL "MM" NO. 2
SEC. 8 T-9-S R-37-E
LEA COUNTY, NEW MEXICO

Exhibit B

[illegible]



SCHEMATIC DIAGRAM
PROPOSED CASING & CEMENTING PROGRAM
GREAT WESTERN DRILLING CO.
FEDERAL "MM" NO. 2
SEC. 8 T-9-S R-37-E
LEA COUNTY, NEW MEXICO

Treat-Rite Water Laboratories, Inc.

BOX 1468

MONAHANS, TEXAS

RESULT OF WATER ANALYSES

TO: Mr. John Hampton LABORATORY NO. M46127
P. O. Box 1659, Midland, Texas SAMPLE RECEIVED 4-14-61
 RESULTS REPORTED 4-21-61

COMPANY Great Western Drilling Co. LEASE Federal NM
 FIELD OR POOL Wildcat

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:
 NO. 1 Produced water - taken from Federal NM #1 heater-treater. 4-14-61
 NO. 2 _____
 NO. 3 _____
 NO. 4 _____

REMARKS: _____

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60 degs. F	1.0792			
pH When Sampled				
pH When Received	7.3			
Total Alkalinity as CaCO ₃	252			
Supersaturation as CaCO ₃	36			
Undersaturation as CaCO ₃	—			
Total Hardness as CaCO ₃	19,274			
Calcium as CaCO ₃	14,066			
Magnesium as CaCO ₃	4,208			
Sodium and/or Potassium				
Sulfate as SO ₄	477			
Chloride as NaCl	113,834			
Silica as SiO ₂	12.8			
Iron as Fe	64.7			
Manganese as Mn				
Barium as Ba	none			
Turbidity Electric	21.1			
Color as Pt	2.3			
Dissolved Solids at 103 deg. C				
Total Solids at 103 deg. C				
Total Solids, Calculated				
Temperature Degs. F.				
Carbon Dioxide, Calculated	25.2			
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	none			
Residual Chlorine				
Resistivity OHMS/CC at 60 Degs. F.	12.4			
Total Suspended Oil	173			

All Results Reported As Parts Per Million

Additional Determinations And Remarks

Letter of recommendation attached.

BY _____

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

7-3-58

SWD EXHIBIT NO. APPLICATION FOR DUAL COMPLETION

CASE NO. 2269

Field Name Undesignated	County Lea	Date April 13, 1961
Operator Great Western Drilling Company	Lease Federal "MM"	Well No. 2
Location of Well Unit E	Section 8	Township 9-S
		Range 37-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X

2. If answer is yes, identify one such instance: Order No. _____; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	San Andres	Bough "C"
b. Top and Bottom of Pay Section (Perforations)	4860 - 5060	9670 - 9680
c. Type of production (Oil or Gas)	Salt Water Disposal	Oil
d. Method of Production (Flowing or Artificial Lift)	Injection	Artificial Life

4. The following are attached. (Please mark YES or NO)

- X a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- X b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- X c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- _____ d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Santa Fe Pacific Rwy. Co.	900 Polk Street	Amarillo, Texas
Union Oil of California	Union Oil Bldg.,	Midland, Texas
John Kelly	Box 5671	Roswell, New Mexico
Texaco, Inc.	Box 3109	Midland, Texas
King, Warren & Dye	Box 1505	Midland, Texas
L. B. Hodges	Box 671	Roswell, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification April 14, 1961.

CERTIFICATE: I, the undersigned, state that I am the Chief Production Engineer of the Great Western Drilling Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

John S. Hampton
Signature

* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

DEED TO OIL WELL

OIL CONSERVATION COMMISSION

EXHIBIT NO. 5CASE NO. 2269STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Revised 9 16 58

APPLICATION
TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION
NOT PRODUCTIVE OF OIL OR GASOperator Great Western Drilling Company Address Box 1659, Midland, TexasLease Federal "MM" Well No. -2 County LeaUnit E Section 8 Township 9-S Range 37-E

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

UndesignatedName of Injection Formation(s): San AndresTop of injection zone: 4860 Bottom of injection zone: 5060

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	10-3/4"	200'- plus or minus	225	Circulate
Intermediate	7-5/8"	4300'- "	1700	Circulate
Long String	4-1/2"	9800'- "	350	5100

Will injection be through tubing, casing, or annulus? AnnulusSize tubing: 2-3/8" Setting depth: 7000'-plus or minus Packer set at: 7000'- plus or minusName and Model No. of packer: N.A.Will injection be through perforations or open hole? Open HoleProposed interval(s) of injection: 4860 - 5060Well was originally drilled for what purpose? Oil ProductionHas 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:

The producing zone will be perforated from approximately 9670 - 9680'.Give depth of bottom of next higher zone which produces oil or gas: NoneGive depth of top of next lower zone which produces oil or gas: 9670'Give depth of bottom of deepest fresh water zone in area: Approximately 200'Expected volume of salt water to be injected daily (barrels): 400 - 500 BWPDWill injection be by gravity or pump pressure? Unknown Estimated pressure: Maximum 1000 psiIs 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

Santa Fe Pacific Rwy. Co.	900 Polk Street	Amarillo, Texas
Union Oil of California	Union Oil Bldg.,	Midland, Texas
John Kelly	Box 5671	Roswell, New Mexico
Texaco, Inc.	Box 3109	Midland, Texas
King, Warren & Dye	Box 1505	Midland, Texas
L. B. Hodges	Box 671	Roswell, New Mexico

Name and address of surface owner Fred Baldrige - Portales, New Mexico

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? No

Operator: Great Western Drilling Company

By: John T. Hampton
John T. Hampton

Title: Chief Production Engineer

STATE OF Texas)
County of Midland)

ss.

BEFORE ME, The undersigned authority, on this day personally appeared John T. Hampton 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 14th day of April, 19 61.

Thalia Roby THALIA ROBY
Notary Public in and for the County of Midland

June 1, 1961
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.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF GREAT WESTERN DRILLING)
COMPANY TO DULY COMPLETE ITS FEDERAL)
MM NO. 2 WELL LOCATED IN THE SE¹/₄NW¹/₄)
SECTION 8, TOWNSHIP 9 SOUTH, RANGE)
37 EAST, N.M.P.M., LEA COUNTY, NEW)
MEXICO (undesignated field) FOR THE)
PRODUCTION OF OIL FROM THE BOUGH C)
FORMATION AND FOR THE INJECTION OF)
SALT WATER PRODUCED FROM SUCH WELL)
INTO THE NON-PRODUCING FORMATIONS OF)
SUCH WELL BETWEEN THE DEPTHS OF 4860)
FEET AND 5060 FEET.)

CASE NO. 2269

AFFIDAVIT

STATE OF NEW MEXICO)
County of Chaves) ss.

S. B. Christy, IV, a member of the law firm of Hervey, Dow & Hinkle, Box 10, Roswell, New Mexico, which firm is the attorney of record for Great Western Drilling Company in Case No. 2269 before the New Mexico Oil Conservation Commission, does hereby swear that he did on the 18th day of April, 1961, mail a true and correct copy of the Application in the above and foregoing case, postage prepaid, to each of the following addressees at the address stated, to-wit:

<u>NAME</u>	<u>ADDRESS</u>
Santa Fe Pacific Rwy. Co.	900 Polk Street, Amarillo, Texas
Union Oil of California	Union Oil Building, Midland, Texas
John Kelly	Box 5671, Roswell, New Mexico
Texaco Inc.	Box 3109, Midland, Texas
King, Warren & Dye	Box 1505, Midland, Texas
L. B. Hodges	Box 671, Roswell, New Mexico
Fred Baldrige	Portales, New Mexico
U. S. Geological Survey	Box 1857, Roswell, New Mexico
State Engineer	Capitol Building, Santa Fe, New Mexico

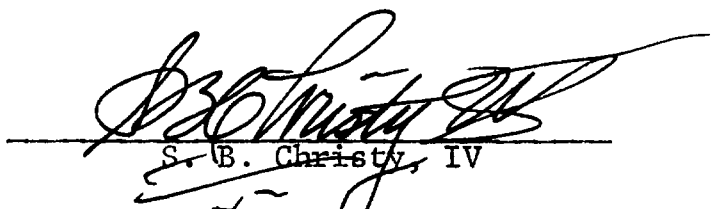
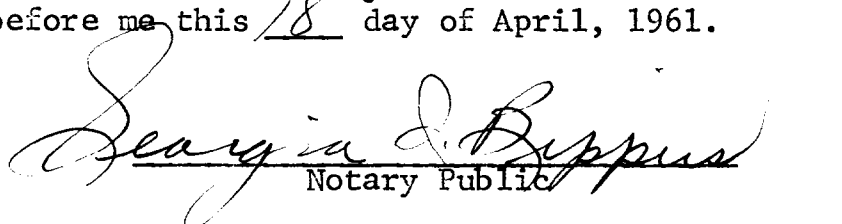
and that he did take such action for and in behalf of Great Western Drilling Company.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
<u>G.W.D.</u>	EXHIBIT NO. <u>6</u>
CASE NO. <u>2269</u>	

Subscribed and sworn to before me this 18th day of April, 1961.

My Commission Expires:

May 10 1962


S. B. Christy, IV

Notary Public