

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SKELLY)
OIL COMPANY FOR A WATERFLOOD PROJECT IN)
ROOSEVELT COUNTY, NEW MEXICO)

CASE NO. 5023

A P P L I C A T I O N

Comes now Skelly Oil Company and alleges and states:

1. That it is a Delaware corporation authorized to do business in the state of New Mexico, and that it is operating wells on its Hobbs "T" lease located in portions of Sections 33, 34, and 35, Township 7 South, Range 33 East, Roosevelt County, New Mexico.
2. That the wells on this lease are producing oil from the Chaveroo San Andres Pool and produce substantial quantities of salt water in association with that production and it is necessary that subsurface injection be utilized due to the elimination of surface disposal pits.
3. That Skelly Oil Company drilled its Hobbs "T" Well No. 11, located in Unit "P" of Section 33, Township 7 South, Range 33 East, Roosevelt County, New Mexico and that attempts were made to dually complete the well for oil production from the Upper San Andres and for water disposal in the Lower San Andres. Approval for such dual completion was secured from the New Mexico Oil Conservation Commission (Order No. R-3023). However, attempts to secure an effective oil completion in the Upper San Andres were unsuccessful. The Hobbs "T" No. 11 was singly completed for water disposal with a 2-7/8" O.D. string of internally plastic coated tubing set in a packer at 4,644'.
4. That Applicant seeks permission to institute a pilot waterflood project in the Chaveroo San Andres Pool by the injection of water into the San Andres formation through its Hobbs "T" Well No. 11, located in Section 33, Township 7 South, Range 33 East, Roosevelt County, New Mexico. The wells in the project area are in an advanced state of depletion.
5. That the proposed pilot waterflood project would result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
6. That based on performance and information gained from injection into the aforementioned Hobbs "T" Well No. 11, Applicant may request administrative approval to expand the project and to convert additional wells to water injection.
7. That attached hereto and made a part hereof is Exhibit "A", a map showing the location of the proposed injection well and the location of all other wells within a radius of two miles from the proposed injection well and the formation from which wells are producing or have produced.
8. That attached hereto and made a part hereof is Exhibit "B", a log of the proposed injection well.
9. That attached hereto and made a part hereof is Exhibit "C", a current analysis of the water which will be injected.
10. That attached hereto and made a part hereof is Exhibit "D", a diagrammatic sketch of the proposed injection well showing all casing strings, including diameters and setting depths; quantities used and tops of cement; perforated interval; tubing string, including diameter and setting depth; and the type and location of packers.
11. That the interval into which injection will be made is the Chaveroo San Andres Pool, approximately 4,523' below surface thru perforations over the intervals 4,207'-4,418' and 4,676'-4,849', and that the water will be produced water from Skelly Oil Company's Hobbs "T" lease and from other wells in the immediate area, and that initial injection volumes will be between 200-300 barrels of water per day, with an anticipated maximum pressure of 1,500 psi. The casing - tubing annulus will be loaded with an inhibited fluid and equipped

with a pressure gauge to facilitate detection of leakage in the casing, tubing, or packer.

12. Attached hereto and made a part hereof are waivers of objection from all operators offsetting the proposed injection well.

WHEREFORE, PREMISES CONSIDERED, Applicant requests that the Commission set this matter down for hearing, that notice hereof be given as required by law, and that at the conclusion of said hearing based on the evidence adduced, the Commission enter its order granting Skelly Oil Company permission to conduct a waterflood project in the Chaveroo San Andres Pool through injection in its Hobbs "T" Well No. 11, located in Unit "P" of Section 33, Township 7 South, Range 33 East, Roosevelt County, New Mexico, and to further provide for administrative expansion of the project area and the conversion of additional wells by administrative means without the necessity of separate hearings, and for such other orders, rules, and regulations as may be necessary in the premises.

Respectfully submitted,

SKELLY OIL COMPANY

(SIGNED) CHESTER E. BLODGET
By _____
Chester E. Blodget
Its Attorney

Of Counsel:
L. C. White, Attorney
White, Koch, Kelly & McCarthy
P. O. Box 787
Santa Fe, New Mexico 87501



△ MARCH, 1973
INJECTION
WELLS

SMELLY LEASES

SKELLY OIL COMPANY
WEST CENTRAL DISTRICT
CHAVEROO POOL
ROOSEVELT & CHAVES COUNTIES, NEW MEXICO

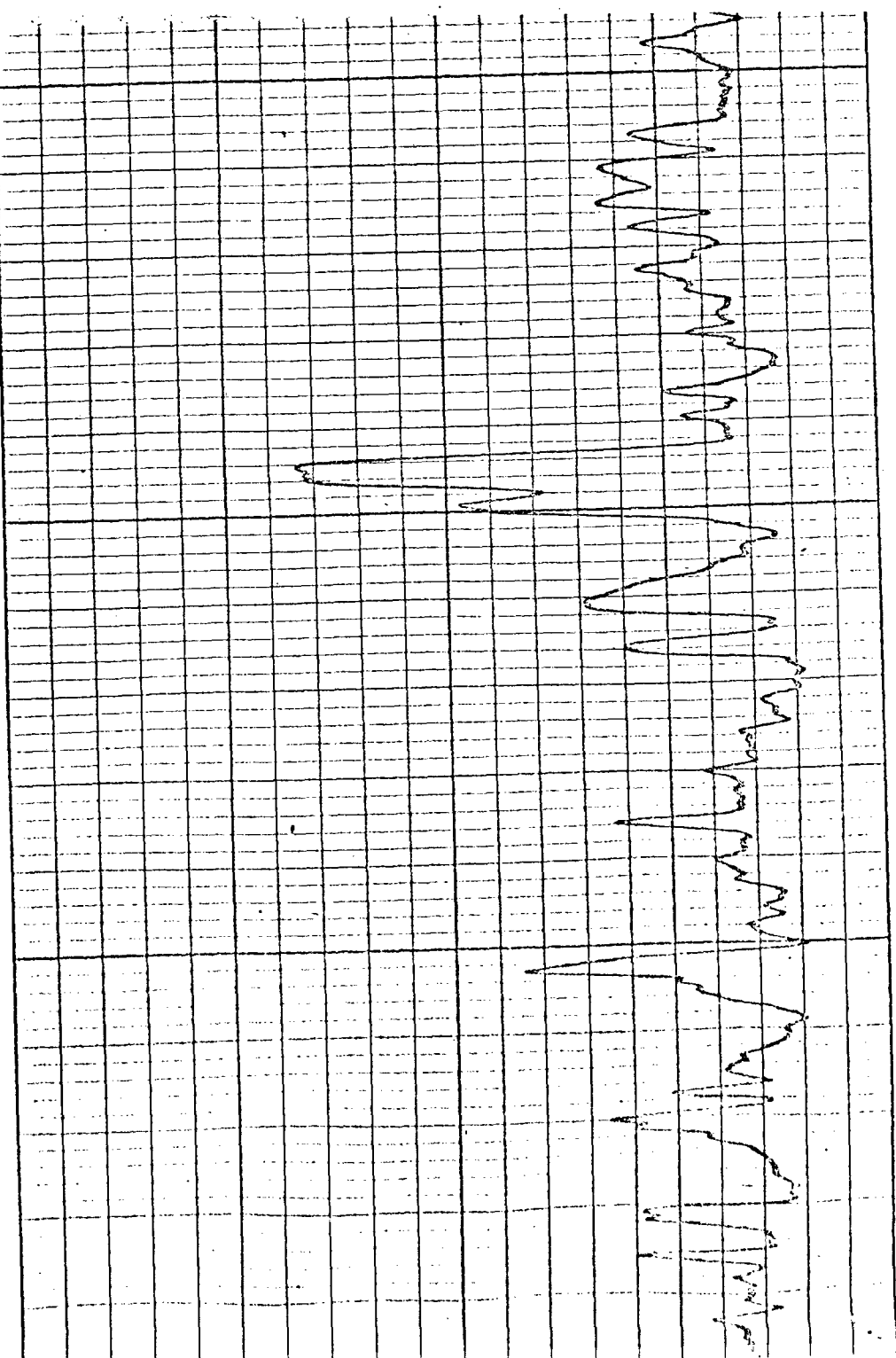
1888-1889

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VIA
MONTANA

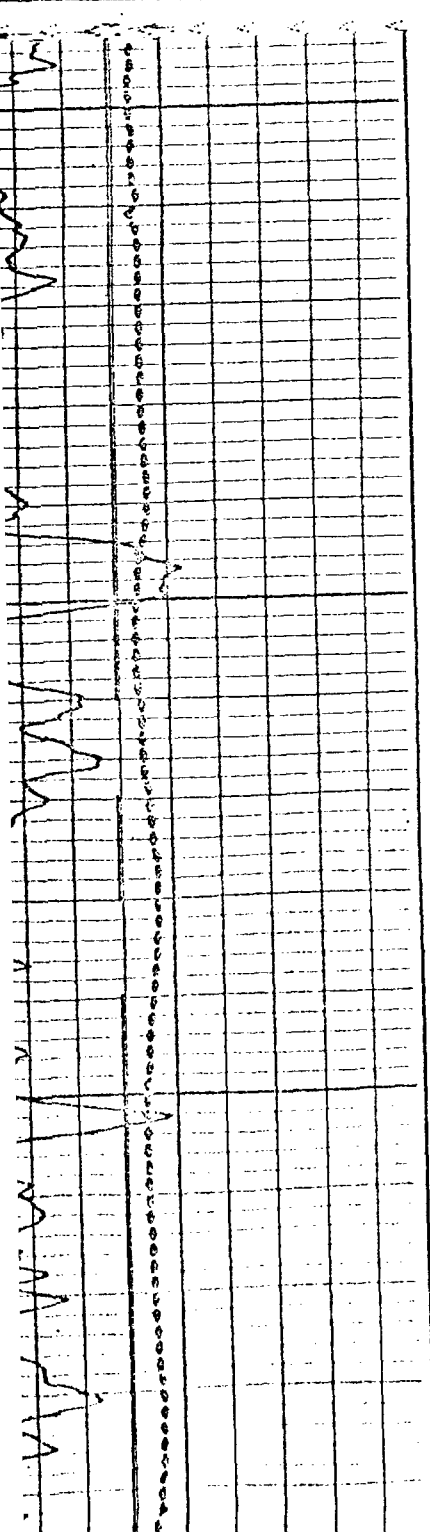
COMPANY SKELLY OIL COMPANY
 WELL HOBS T # 11
 FIELD CHAVEROO
 COUNTY ROOSEVELT STATE NEW MEXICO
 LOCATION 660' FROM S/L
 660' FROM E/L
 Sec. 33 Twp. 7S Rge. 33E
 Other Services:
 FDC, SNP, LL,
 MLL

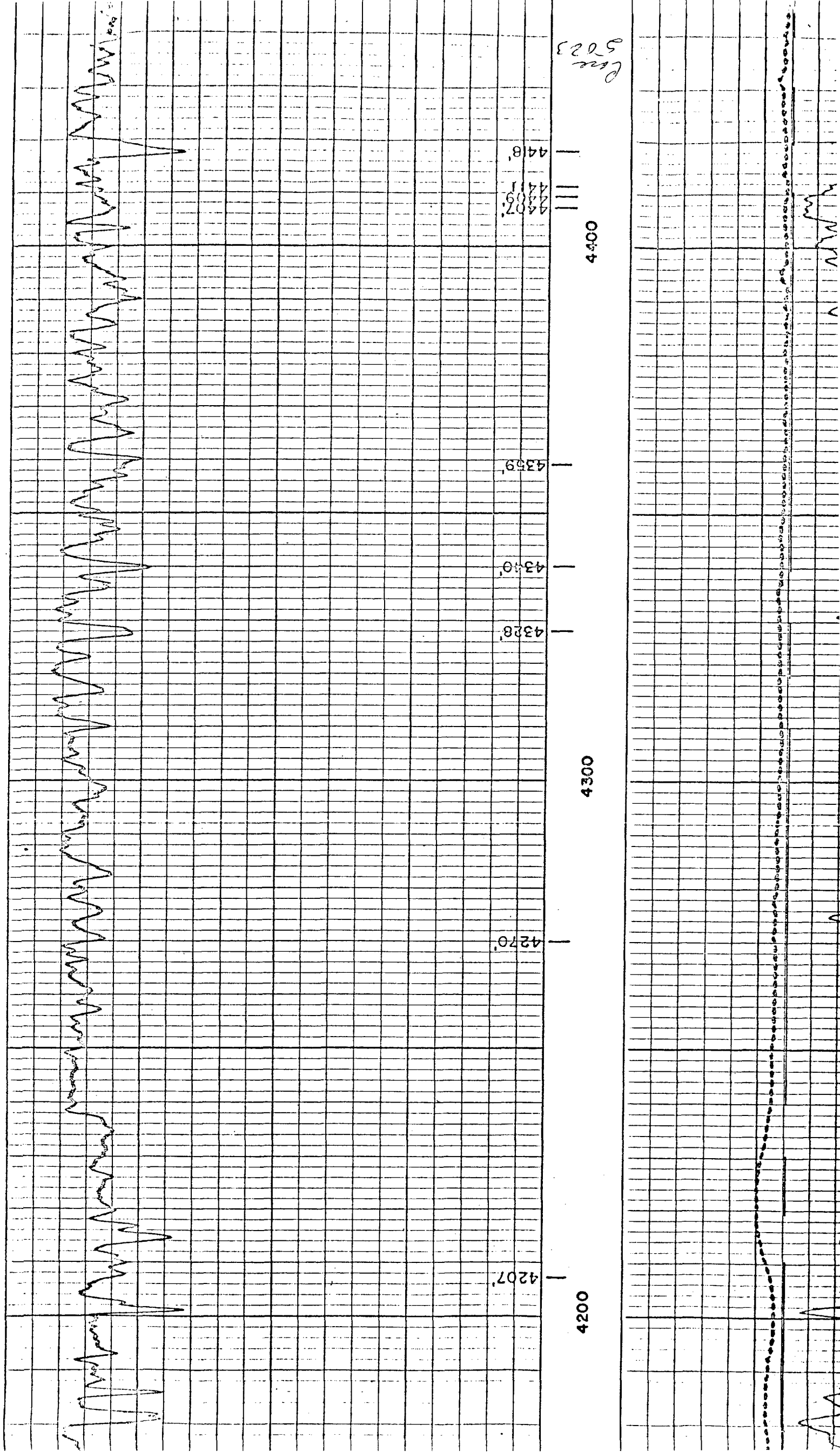
Elevation Datum: GL, Elev. 4417
 Measured From KB, 10 Ft. Above Perm. Datum
 Measured From KB
 Elev.: K.B. 4427
 D.F. 4426
 G.L. 4417

11-23-65		ONE		4900		4900		4891		0		10 3/4 @ 370		370		9 7/8		SALT GEL & STARCH		10.4 40		- 9.2ml		PIT		.060 @ 69 °F		.042 @ 75 °F		- °F		M -		.038 @ 112 °F		3 HOURS	
Driller	ONE	4900	4900	4891	0	10 3/4 @ 370	370	9 7/8	SALT GEL & STARCH	10.4 40	- 9.2ml	PIT	.060 @ 69 °F	.042 @ 75 °F	- °F	M -	.038 @ 112 °F	3 HOURS																			



4100





Handwritten notes on lined paper, possibly a ledger or notebook, with entries written in cursive script. The entries are organized into columns, likely representing dates and corresponding events or measurements. The handwriting is somewhat faded and the paper shows signs of age.

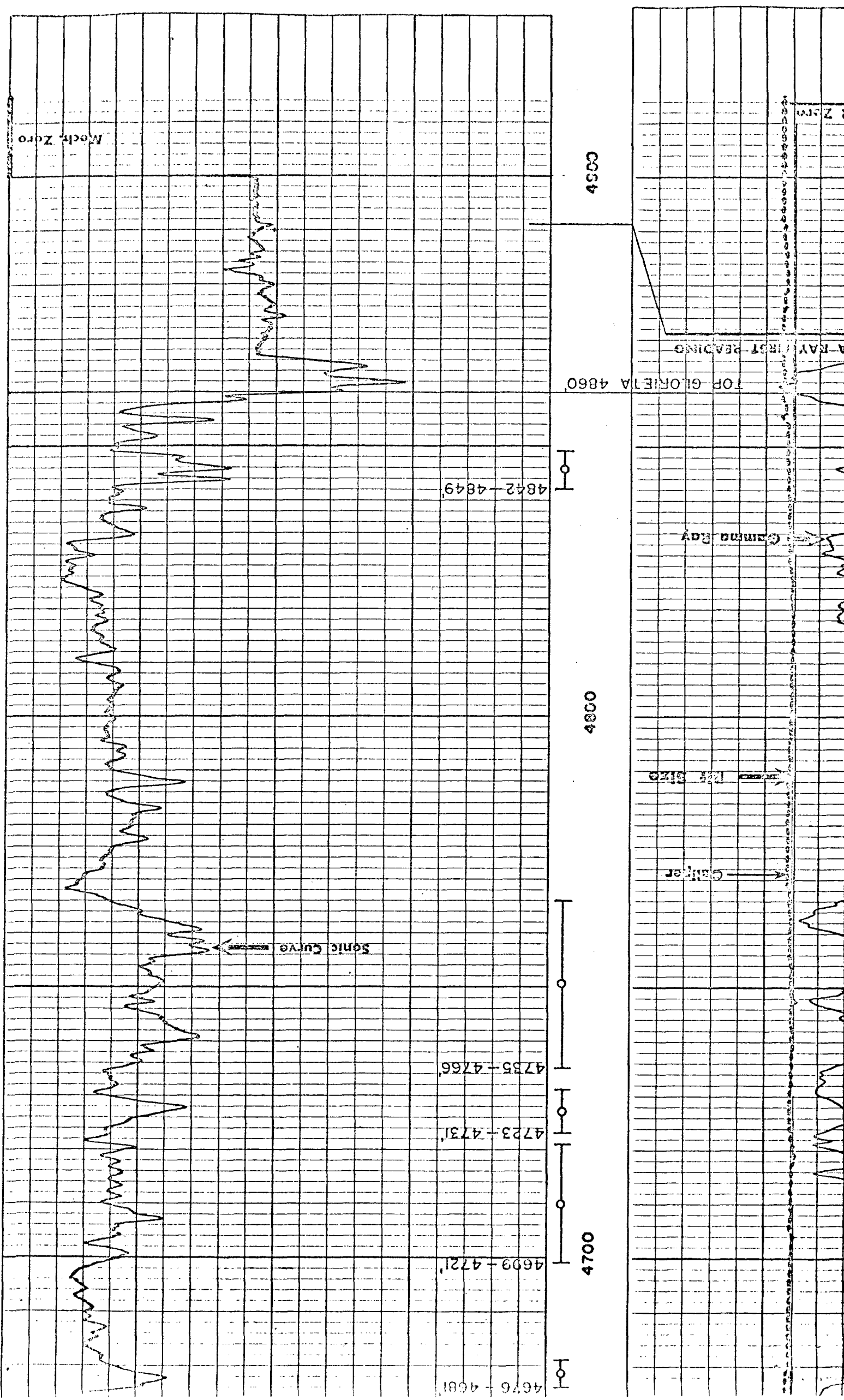
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HALLIBURTON DIVISION LABORATORY
HALLIBURTON COMPANY
LOVINGTON, NEW MEXICOCase 4923
5023

LABORATORY WATER ANALYSIS

No. W73-023

To Skelly Oil Company

Date 1-12-73

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. 1-12-73

Well No. SWD #1

Depth

Formation San Andres

County Roosevelt

Field

Chaveroo

Source Disposal Tank

Resistivity	0.047 @ 70° F.	
Specific Gravity	1.182	
pH	5.4	
Calcium (Ca)	22,560	*MPL
Magnesium (Mg)	7,240	
Chlorides (Cl)	160,000	
Sulfates (SO ₄)	68	
Bicarbonates (HCO ₃)	170	
Soluble Iron (Fe)	Nil	
Sodium, Na	64,350	
Total Dissolved Solids, TDS	254,390	

Remarks:

*Milligrams per liter

Respectfully submitted,

Analyst: Brewer
cc:

HALLIBURTON COMPANY

By W. L. Brewer
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.

Exhibit "C"

PROPOSED WATER INJECTION WELL
 SKELLY OIL COMPANY HOBBS "T" NO. 11
 660' FSL & FEL SEC. 33-T7S-R33E
 ROOSEVELT COUNTY, NEW MEXICO

Case 5023

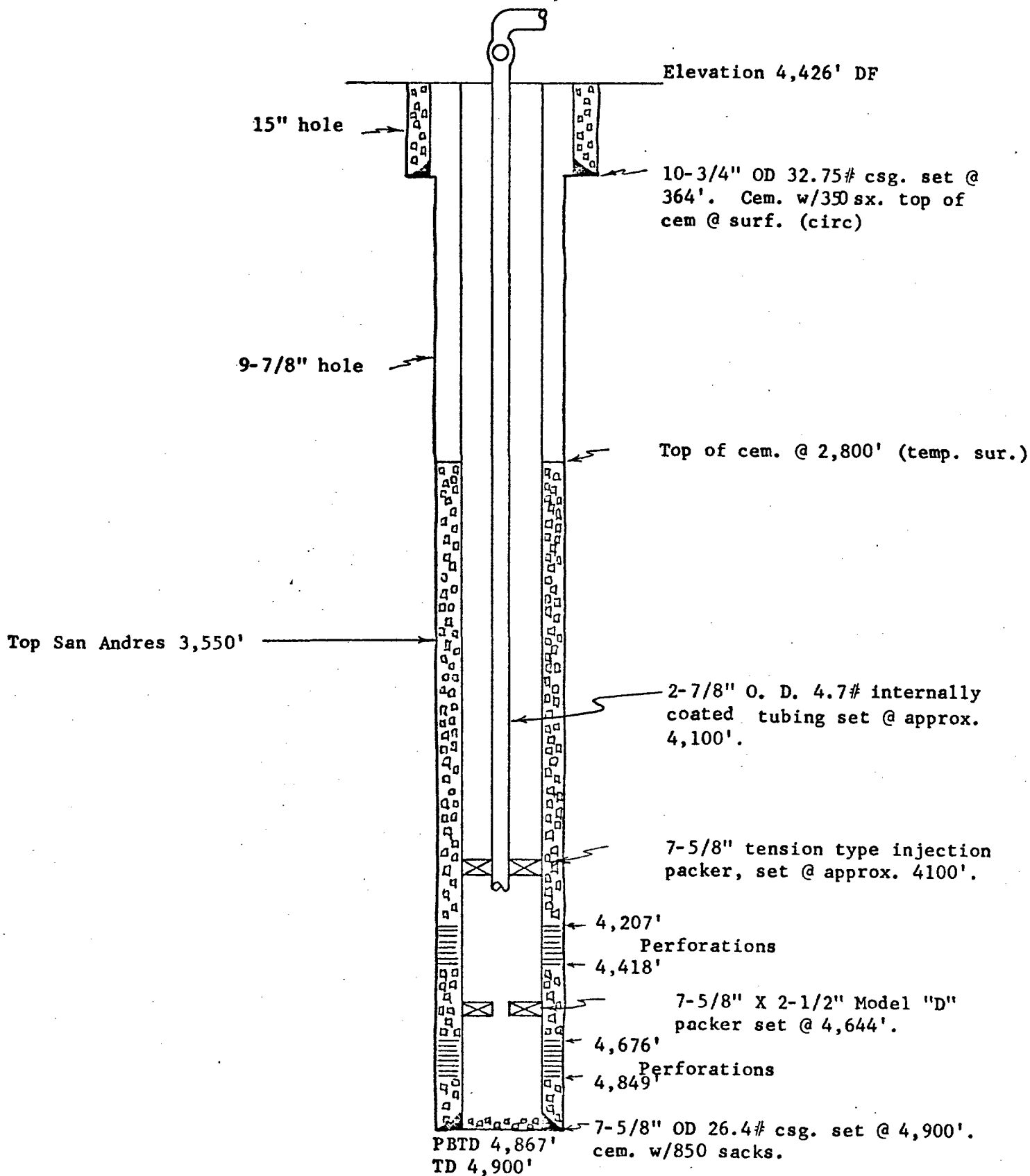


Exhibit "D"

We have no objection to the conversion of Skelly Oil Company's Chaveroo SWD System Well No. 1 to a pilot injection well in the Chaveroo San Andres Pool. The location of this well is 660' FSL and 660' FEL of Section 33-7S-33E, Roosevelt County, New Mexico.

Atlantic Richfield Company

By: V M Hollrah

Date: 3-21-73

Sun Oil Company

By: _____

Date: _____

Champlin Petroleum Company

By: _____

Date: _____

We have no objection to the conversion of Skelly Oil Company's Chaveroo
SWD System Well No. 1 to a pilot injection well in the Chaveroo San Andres
Pool. The location of this well is 660' FSL and 660' FEL of Section 33-7S-33E,
Roosevelt County, New Mexico.

Atlantic Richfield Company

By: _____

Date: _____

Sun Oil Company

By: H.R. Huey

Date: 3-20-73

Champlin Petroleum Company

By: _____

Date: _____

We have no objection to the conversion of Skelly Oil Company's Chaveroo SWD System Well No. 1 to a pilot injection well in the Chaveroo San Andres Pool. The location of this well is 660' FSL and 660' FEL of Section 33-7S-33E, Roosevelt County, New Mexico.

Atlantic Richfield Company

By: _____

Date: _____

Sun Oil Company

By: _____

Date: _____

Western States Producing Company

By: Don L. Bennett

Date: 5-1-73