SKELLY OIL COMPANY

P. O. Box 1650
TULSA 2, OKLAHOMA

PRODUCTION DEPARTMENT
C. L. BLACKSHER, VICE PRESIDENT
W. P. WHITMORE, MGR. PRODUCTION
W. D. CARSON, MGR. TECHNICAL SERVICES
ROBERT G. HILTZ, MGR. JOINT OPERATIONS
GEORGE W. SELINGER, MGR. CONSERVATION

May 18, 1964

Re: Order No. SWD-44
State "O" Well No. 13
Sec. 31-16S-37E
Lea County, New Mexico

State Engineer's Office
P. O. Box 1079
Santa Fe, New Mexico

Gentlemen:

On May 15, 1964, we sent you a copy of our application and letter requesting an amendment to the captioned Order so as to allow Skelly Oil Company to dispose of salt water into the Hueco zone of the Wolfcamp formation at 10,210-10,260' instead of the previously authorized Seven Rivers formation.

At the time we filed the original application, you requested an analysis of the water from the proposed injection zone. Assuming that you would desire similar information on this new injection zone, we are enclosing a copy of the water analysis from the Shell Oil Company State CA Well No. 1, which is approximately 13,000' northwest of our proposed disposal well. The water on this analysis is from the Wolfcamp zone, the same zone we anticipate using for disposal.

Should you have further questions, please call.

Yours very truly,

(Signed) GEORGE W. SELINGER

RJJ:br
Attach.

cc-Mr. A. L. Porter, Jr. w/ attach.
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

MA - 764

Lovington WA File

SHELL OIL COMPANY

PRODUCTION LABORATORY WATER ANALYSIS REPORT

ODESSA, TEXAS

From PRODUCTION LABORATORY
ODESSA, Texas

To Hobbs Division

Hobbs, New Mexico

Laboratory Number 1380
Field Number
Sample Received 4/27/56
Sample Analyzed 5/7/56
Results Reported 5/11/56

SAMPLE DESCRIPTION

Company Shell Oil Company Lease State CA Well No. 1
Field or District Lovington WC County Lea State New Mexico
Name of Formation Wolfcamp Top Bottom
Depth of Casing 11,342 Perforated From √ To Total Depth 12,751
Date of Completion December 13, 19 52 Initial Production 504 BOPD
Taken By H. G. Starling From well Date 4/4/56 Time Temp.
Under Conditions Of well pumping

CHEMICAL AND PHYSICAL PROPERTIES

Specific Gravity at 20/20 °C. 1.1137 pH 6.25 Resistivity .048 at 80°F

CONSTITUENT	Milligrams per liter Mg/l	Reaction Coefficient	Reaction Value
Total Iron – Fe^3 and Fe^2	present	0.03582	
Aluminum – Al^3		0.11070	
Calcium – Ca^2	9347	0.04990	466.435
Magnesium – Mg^2	2515	0.08224	206.834
Sodium (Including Potassium) – Calc.	50928	0.04348	2214.361
Positive Sub-Total			2887.610
Bicarbonate – HCO_3^-	61	0.01639	1.000
Carbonate – $CO_6^=$		0.03333	
Sulfate – $SO_4^=$	853	0.02083	17.768
Chloride – Cl^-	101732	0.02820	2868.842
Sulfide – $S^=$		0.06237	
Negative Sub-Total			2887.610
Grand Total	165436		

Silica – SiO_2

Remarks √ - perforated from 10,148 - 10,156 & 10,171 - 10,178.
Well pumping average 33Bo & 33BW/D

cc.
Prod. Dept., Midland Area
Division Office
T.S.D. - Houston
Exploration Dept., Midland Area
Prod. Laboratory, Midland Area

Analyst W. D. L.

Checked

SKELLY OIL COMPANY

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GEORGE W. SELINGER, MGR. CONSERVATION

May 22, 1964

Re: Your Reference #87501
Our File - Order SWD-44
State "O" Well No. 13
Sec. 31-16S-37E
Lea County, New Mexico

State Engineer's Office
P. O. Box 1079
Santa Fe, New Mexico

Attention: Mr. Frank E. Irby

Gentlemen:

We have your letter of May 20, 1964, inquiring as to a discrepancy of 100 sacks of cement used on the long string (5½" Casing) between our application and the diagrammatic sketch. You are correct, one of them is an error. The correct amount of cement is 1982 sacks, and therefore the amount of cement around the casing shoe on the diagrammatic sketch should be changed to read 682 sacks instead of 582 sacks.

This is probably of no consequence because the cement around the casing shoe was circulated to a two-stage tool at 8988' and then cement was introduced through the two-stage tool with the top of the cement being 3782' as indicated on a cement log.

If we can be of further assistance, please advise.

Yours very truly,

(Signed) GEORGE W. SELINGER

by R Jacobs

RJJ:br

cc-Mr. A. L. Porter, Jr.
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

bcc-Mr. H. E. Aab

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

June 2, 1964

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

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Skelly Oil Company which seeks authorization to convert State "O" well in unit F, Section 31, T 16-S, R 37 E, Lovington (Abo) pool to salt water disposal.

Since disposal will be down 2 7/8" O.D. internally coated tubing under a tension packer set well below the cement surrounding the 5½" casing, it appears there will be no threat of contamination to the fresh waters which exist in the area. Therefore, this office offers no objection to the granting of the application.

Very truly yours,

S. E. Reynolds
State Engineer

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

FEI:cl

cc: George W. Selinger