

September 6, 1962

Re: Application of Phillips Petroleum Company  
for Approval of the New Mexico Oil Conser-  
vation Commission to Establish the West  
Cap Queen Sand Unit, Approval of the Unit  
Operating Agreement, and For Authority to  
Waterflood the Queen Sand Underlying Said  
Unit located in Township 14S, Range 31E,  
Chaves County, New Mexico

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

Dear Sir:

The attached copy of Phillips' application to the New Mexico Oil Conservation Commission for approval of the West Cap Queen Sand Unit and authority to waterflood the Queen Sand underlying the Unit is being furnished in compliance with Memorandum No. 5-58. It is anticipated that the injection water supply source will be the 300 foot Ogallala Sand located in the Lea County underground water basin. Phillips has obtained a water lease and appropriation for 340 acre feet of water per year from the SW/4 Section 18, Township 14S, Range 32E, Lea County for use in waterflooding this Unit. There is a possibility that the Unit working interest owners may elect to purchase water rather than develop this water supply, but if water is purchased it will be water produced from the Ogallala Sand in the same general vicinity as the above quoted water source.

We will furnish your office with a copy of the water analysis as soon as the water supply has been developed.

Yours truly,

*J. W. Perkins*  
J. W. Perkins  
W. Division Superintendent  
Production Department

DLC/jw  
Attach

Exhibit 3

*Exhibit 3 643*

PHILLIPS EXHIBIT 19

West Cap Queen Sand Unit  
Chaves County, New Mexico

INJECTION WELL SUMMARY

<u>Present Operator, Lease and Well No.</u>	<u>Unit Well No.</u>	<u>Casing Size</u>	<u>Casing Seat</u>	<u>Completion Interval</u>	<u>P - Perforated OH - Open Hole</u>
Ada Fed. Medlin "B" #1	9W1	5½"	2908'	2908-25'	OH
Gulf Hopp Fed. "A" #1	3W1	4½"	2706'	2686-93'	P
Gulf Zimmerman #1	10W1	7"	2789'	2789-840'	OH
Gulf Zimmerman #3	10W3	4½"	2877'	2877-96'	OH
Gulf Zimmerman #5	10W5	4½"	2767'	2765-90'	OH & P
Gulf Zimmerman #7	10W7	4½"	2880'	2821-23'	P
Hodge Malco Fed. #2	5W2	4½"	2725'	2706-14'	P
Hodge Malco Fed. #5	5W5	5½"	2700'	2665-70'	P
Penrose Ct. Trust #1	1W1	5½"	2705'	2705-2721'	OH
Penrose Saner Fed. #2	11W2	7"	2922'	2901-04'	P
Phillips Cleat #1	4W1	5½"	2758'	2758-70'	OH
Phillips Cleat #4	4W4	5½"	2715'	2715-35'	OH
Phillips Cleat #5	4W5	5½"	2708'	2708-29'	OH
Sinclair Arc Fed. #1	2W1	5½"	2746'	2728-37'	P
Tidewater State Z #2	7W2	5½"	2787'	2787-801'	OH
Tidewater State Z #3	7W3	5½"	2770'	2737-49'	P

NOTE: An additional water input well has been scheduled to be drilled in the SE/4, SE/4 of the NE/4, Section 21, Township 14 South, Range 31 East, Chaves County, New Mexico. It is planned that this well will have 4½" casing set through and perforated opposite the Queen formation. All of the injection wells will be equipped with 2" tubing and packers for injection service and the annulus between the tubing string and casing string will be filled with fluid above the packer.

*Case 2643*