

MINUTE BOOK

This Calendar Resolution 27  
was approved by the State Lands  
Commission by a vote of 3  
to 0 at its 2/24/77  
meeting.

INFORMATIVE CALENDAR ITEM

2/77  
WMT

29.

REVIEW OF PILOT SCALE DEMONSTRATION OF MICELLAR POLYMER  
WATERFLOODING TECHNIQUES FOR ENHANCED OIL RECOVERY,  
WILMINGTON OIL FIELD, LOS ANGELES COUNTY

The State Lands Commission, at its meeting of July 22, 1976, approved a request by the City of Long Beach to enter into a cost-sharing contract with the Federal Energy Research and Development Administration (ERDA), to conduct a pilot scale demonstration of micellar-polymer waterflooding techniques in the prior development portion of the Wilmington Oil Field.

Under the terms of the contract with ERDA, the City and the Federal Government have agreed to share the total estimated cost of \$7 million on a 50/50 basis. Total project expenditures were \$41,965 through December 31, 1976. The total federal obligation is limited to \$3 1/2 million, and they do not share in any of the oil revenue produced from the pilot demonstration.

During the first six months, project work has been directed toward planning and research. A contractor has been selected to design the facilities for handling and injecting the micellar slug and polymer. The plan is being designed and will be built in such a manner that it can be used initially for a small-scale test and then, with minor changes, for the entire pilot demonstration.

Some laboratory tests have been made with micellar slugs using sulfonated refined and semi-refined hydrocarbons. Research is now being directed toward developing a less expensive slug from sulfonated Wilmington Field crude oil.

An important phase of current research is in finding a polymer best suited for use in the Terminal Zone, as the polymers tested to date tend to be absorbed or entrapped by the reservoir rock test samples.

Another research project is a computer model study of the proposed line-drive pattern of injection and production wells to determine the most desirable pattern. An effort is being made to take full advantage of existing wells and thereby avoid drilling additional wells.

The project is currently about four months behind schedule, because problems encountered thus far have required more extensive laboratory studies and reservoir analyses. Such studies are essential in order to assure optimum conditions for the success of this project and avoid unnecessary expenditures on well work and field facilities.

A 52, 57, 58

S 27, 31

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The division will continue to analyze the progress of this pilot scale demonstration for enhanced oil recovery and present semi-annual progress summaries to the Commission for its information.