## MINUTE ITEM

This Calendar Item No. 43
was approved as Minute Item
No. 43 by the State Lands
Commission by a vote of
to at its 5/39/20
meeting.

INFORMATIVE CALENDAR ITEM

43.

5/80 Thompson

REVIEW OF PILOT SCALE DEMONSTRATION OF CAUSTIC WATERFLOODING TECHNIQUES FOR ENHANCED OIL RECOVERY, LONG BEACH UNIT, WILMINGTON OIL FIELD, LOS ANGELES COUNTY

This review covers the 4th Quarter of 1979, and the 1st Quarter of 1980, in this cost-sharing project with the United States Department of Energy in the Ranger Zone of Fault Block VII of the Long Beach Unit. The contract between the City of Long Beach and the Federal Government provided for a 60/40 respective sharing of the originally estimated \$11.6 million contract demonstration costs and a similar sharing of revenue from any incremental oil attributable to the project toward reimbursement of the Federal contribution of costs. To date almost 12% of the Federal contribution to the project has been reimbursed. The future amounts of this reimbursement will depend on the success of the tertiary project.

The project is intended to recover additional oil via a conditioning pre-flush of softened salt brine having a concentration of 1% by weight (begun in April 1979 and completed in late March 1980), followed by an alkaline slug of sodium hydroxide (caustic) and sodium silicate to give about 0.4% by weight total sodium orthosilicate in the softened brine (begun in late March 1980 and to continue until a pre-determined amount has been injected), followed by water.

A 52, 57, 58

S 27, 31

CALENDAR PAGE 210
MINUTE PAGE 1077

## CALENDAR ITEM NO. 43 (CONTD)

The \$11.6 million of costs to be shared is close to being expended. In April 1980, the City of Long Beach and the Department of Energy were engaged in modifications to the contract, aimed at continuing Federal participation. Recent Federal regulations allow "tertiary incentive" which is a formula-based method of recovering certain front-end investment costs that are common to such tertiary projects, through valuation of a portion of controlled oil at uncontrolled prices. Offsetting the additional Long Beach Unit costs for the project are the uncontrolled prices received for "front end" tertiary funcentive crude oil (until September 1981), and a lower federal excess profit tax on the incremental oil produced by this Tertiary Enhanced Recovery Project. Under the December 21, 1979 Executive Order all of the oil from the Ranger Fault Block VII property is classified as heavy oil and receives uncontrolled oil prices.

The staff will continue to report semignnually on this project.

CALENDAR PAGE 211 MINUTE PAGE 1078