A Discussion of Crude Oil Production Potential in Alaska and California

Nearly half of the proved oil reserves in the United States are located in Alaska and California. In 1980, production from this 14 billion bbl reserve base averaged nearly 2.6 million BOPD or roughly 30% of total United States production. Although there is little doubt that Alaska’s and California’s future contributed to total United States production will increase, a great deal of uncertainty exists concerning the magnitude of this contribution.

A range of forecasted production values is presented for Alaska and California. The forecast reveals that there is a 67% spread between the high and low boundaries of California’s production potential during the mid 1990s; this range is even greater (167%) in the case of Alaska.

The forecast is accompanied by a comprehensive discussion of factors that will determine actual production. These factors are organized into three groups: exploration success, market conditions, and regulatory environment. The first, exploration success, is described in terms of geologic prospects, lease sale timing, technology performance in harsh frontier environments, and economic risk in comparison to other regions. The second group comprises factors affecting petroleum company perception of future West Coast market conditions. Forecasts of refined product demand, crude supply potential, and refinery configuration are presented to help define this perception. The third group, future state and federal regulatory environments, is discussed from the perspective of conflicts between state and federal outer continental shelf operational jurisdiction, potential government responses to serious accidents, and policies concerning taxes, royalties, and crude exports.

This information will help petroleum companies formulate crude exploration, development, production and processing plans based on personal perceptions of the future.
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