47. REPORT ON OIL SLICK OCCURRENCE, AUGUST 6, 1966, LONG BEACH-HUNTINGTON BEACH AREA - W.O. 4284.

Following presentation of Informative Calendar Item 49 attached, various questions were raised by Commissioner Anderson and answered by the Executive Officer on what was being done to avoid similar occurrences in the future. For a complete verbatim report on these questions and answers, see the reporter's transcript, copy of which is on file in the Los Angeles Office of the State Lands Division.

Commissioner Anderson stated that he would like to get something done on the approximately twenty harbor spills that occur each month. The Executive Officer was directed to ask the U.S. Coast Guard and the California Department of Fish and Game for a report on what they are doing in this regard.

Attachment Calendar Item 49 (2 pages) 49.

REPORT ON OIL SLICK OCCURRENCE, AUGUST 6, 1966, LONG BEACH-HUNTINGTON BEACH AREA - W.O. 4284.

Historically, the largest oil slick observed off the southern California coast was first reported to the U. S. Coast Guard at 7:15 a.m. on August 6, 1966, by a pleasure craft that radioed its position as 8 miles from the east end of the Long Beach breakwater on a course of 175° magnetic (Exhibit 1(A)). At 3:35 p.m. a Coast Guard 40-boat and helicopter were dispatched to investigate. The slick at that time was reported to be one-half mile wide at a position one and one-half miles east of Alamitos Bay entrance and one mile offshore, extending to one and one-quarter miles wide off the Long Beach breakwater entrance (Exhibit 1(B)).

The slick had reached Humble's and Standard's offshore drilling islands (Monterey and Esther) by 6:30 p.m., and at that time, due apparently to shifting winds and breaking effects of the islands and breakwater, proceeded to spread throughout a large area. It reached its greatest extent on August 8, when it extended from Pier "J" in Long Beach to just north of Huntington Beach at Bolsa Chica Beach. At that time it lay both inside and outside of the breakwater, and was estimated to cover approximately 20 square miles. The slick was not continuous, however, and was broken by spaces of clear water (Exhibit 2). By August 10, 1966, the slick had essentially disappated itself on the beaches, and on August 16, 1966, a canvass by State Lands Division of all beach cities indicated that the beaches were clean, although some residual color bleeding from the breakwaters was expected to continue for some period.

It has not been possible to make an accurate quantitative estimate of the oil in the slick. In the subject instance, quantities have been variously estimated as being from a few barrels to as much as "750,000 gallons". The Department of Fish and Game has estimated "thousands of barrels", citing experience gained from observing an average of 20 harbor spills per month.

Various origins of the material were suggested in the early stages of the investigation. These included tanker bilges, breaks in pipelines servicing offshore platforms, casing failures on offshore wells, operator failure on offshore platforms, submarine seeps, etc. Preliminary conflicting laboratory analyses by various organizations served only to comfuse the issue.

The companies with tideland oil production from the area reported that an inspection of their lines indicated no breaks. An inspection of shipping-pressure charts and production reports by State Lands personnel has indicated no sudden pressure losses or production losses, as would occur if a line ruptured. Furthermore, if tideland production had been the source of the slick, the slick should have been first noted shoreward of the development islands and platforms, instead of seaward as was the case.

A review of major waste-water outfalls was made in conjunction with the State Regional Water Quality Control Boards. Although surveillance of these outfalls is only on a periodic basis, their nature and location is such that they could not be considered sources of the material.

SUPPLEMENTAL CALENDAR ITEM 49. (CONTD.)

A navy oiler, recently arrived from New Orleans, had been sighted in the vicinity at the time of the original oil slick sighting. Subsequent discussions with the Captain of the vessel and other crew officers indicated that they had been in the area, had been transferring fuel from their cargo tanks to their fuel tanks, had spilled no oil, and had seen no oil on the water. The vessel rebunkered after arriving at Terminal Island, making it impossible to obtain a sample of the fuel from the ship which had been loaded at New Orleans. Through the efforts of the Western Oil and Gas Association, a sample of the fuel was obtained from the original vendor in Louisiana.

Because of the conflicting analyses from various sources, the Division concluded that it was imperative to have independent analytical determinations. A survey of leboratories in California led to the conclusion that the only laboratories equipped to perform the complete analytical work were the research subsidiaries of the various producing oil companies. Therefore, three coded unidentified samples were delivered to a local independent commercial laboratory for preliminary analyses, and to an out-of-state laboratory for more detailed procedures. Those samples were:

- 1. The fuel oil delivered to the Navy Oiler at Algiers, Louisiana, on June 16, 1966;
- 2. The oil slick occurring on August 6, 1966, and delivered to State Lands on August 23, 1966, by the Department of Fish and Game;
- 3. Crude oil produced by one of the State's offshore lessees.

Through mass spectrometer, gas chromatography, and spectrographic analyses, these independent laboratories have concluded that the oil slick that occurred on August 6, 1966, was:

- 1. Not a crude oil;
- 2. Not similar to the Navy Special Fuel Oil used to fuel the Navy oiler;
- 3. Not from the State lessee from whose platform the crude oil sample was taken;
- 4. Probably a blend of highly aromatic and/or thermally cracked bunker fuel with two different cut-back stocks.
- 5. Very unlikely to have been refined from a California crude oil.

Inasmuch as the slick material was not similar to the fuel oil delivered to the Navy oiler at Algiers, Louisiana, the source most obviously must have been from another (and as yet unidentified) vessel.