

Pt. Salinas, then returned to bay due to heavy seas precluding any work. Docked at 1000 hrs. Dr. Giese aboard at 1300 to 1330 again. 1700 hrs. Dr. Giese returned to boat with pickup truck driven by Marcos. Equipment to be returned to Magueyes was loaded at this time. 2200 hrs. Left Dr. Giese off at airport. Arrived Parguera 2330 hrs. and departed for Mayaguez.

Sat. 16 Mar. 68: No one aboard.

Sun. 17 Mar. 68: 2130 Capt. came aboard.

Mon. 18 Mar. 68: No work done in relation to oil slick. Crew and 2 men stood by with boat loaded.

Tues. 19 Mar. 68: No work done this date. Standing by.

Wed. 20 Mar. 68: 1405 H. Liz Hyman, Geologist, Obras Públicas, and 5 laborers boarded. At 1420 cast off and proceeded to an oil slick area appx. 2.5 mi., north of the Condado Hotel Area. Spread 126 bags perlite directly on slick. Slick was about 2 mi long and 300' to 500' wide, running on tide line E and W. Returned to dock 1645 hrs. All Obras Públicas people ashore.

Thur. 21 Mar. 68: MRV Carite and Crew departed San Juan 0845 hrs. and arrived Mayaguez 1915 hrs., same date.

Remarks

1. Vessel and crew were on standby basis 24 hours daily aboard the vessel except for Sat 16 Mar. and Sun. 17 Mar. 68.
2. Considerable damage was done to rubbing strips on both sides vessel due to inadequate dock.
3. Upper hull paint needs completely repainted due oil.
4. Both safety rails loose due to dock.
5. Three life preservers are missing.
6. \$300.00 worth of rope was damaged by petroleum.
7. One small anchor missing.
8. One carpenter hammer lost overboard.

Subject: Report of Observations During Cruise 4-68.

To: Dr. M. Cerame Vivas.

General:

The first and only really good test of the perlite dust on an oil slick was on Wed. 20 Mar. 68. Accompanied by Liz Hyman, geologist, Obras Publicas, cast off at 1420 hrs. and found an oil slick about 2.5 miles off the Condado Hotel section—directly north. This petroleum slick was approximately 2 miles long and 300' to 500' wide. Its formation was in an East and West direction parallel with the beach and meandered with the tide line. The petroleum was generally, fairly well concentrated, very thick and very heavy viscosity. There was no emulsification although there were small blobs floating independently of the main areas. The petroleum was held in formation on the tide line in the same way floating debris is held. Wind was from ENE at 15 to 18 mph. Sea swell was 4' to 6' and very few white caps. One hundred and twenty-six bags of perlite were dumped directly on the oil as boat proceeded at a speed of 2 to 6 mph. This application was then spread by wave action. The layer of dust in contact with the sea surface was held by the water and oil while the upper layer slid off, continuing to grow larger and larger in area as the layer became thinner due to this sliding action caused by the waves. This precluded the necessity of running the boat over the dust to mix it as was the case in the calm water inside the bay.

The light colored perlite dust turned a dark brown as it began to pick up the petroleum. After the complete load of 126 sacks had been spread a few passes over the area were made to observe the effects. The perlite apparently cleaned up the area thoroughly where applied. Remaining was an opalescent oil film which it seems that the perlite failed to hold. This was a very thin film of oil. Unfortunately only 126 sacks were aboard. This oil slick area could have been effectively covered with 300 to 350 sacks.