

Transport of Oil from the Deepwater Horizon Spill

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The Deepwater Horizon (DwH) oil spill released an official government estimated 5.0 million barrels (about 200 million gallons) of crude oil into the Gulf of Mexico between April 20, 2010 and July 15, 2010 when the well was sealed. This spill was unique in that it occurred 1500m in the deep ocean. It is believed that most of the oil that did not evaporate either formed the surface slicks, or became suspended in the deep ocean as part of a subsurface plume. The oil becomes deposited on the ocean floor either by marine snow blizzards, in which marine snow forms in the surface slick and sinks to the ocean floor or by “fall-out” from the subsurface layer. Earlier studies have looked at the sediment deposition from the subsurface plume but so far no study has compared the sediment data from the surface and subsurface layers. This study compares sediment samples from the NOAA and private studies to have a clearer understanding of the deposition of oil from surface and subsurface layers. We can then compare the deposition and maps of the surface slick and subsurface plume to theoretical models purposed for the various depositions