The Deepwater Horizon oil spill found much of industry and academia unprepared to stop the flow of oil, study its spread throughout the Gulf, or understand the fate of the oil and its effects on the environment. This talk presents some notable exceptions, where tools and techniques developed for the exploration and detailed study of hydrothermal vents were used to study the spill. Using an isobaric, gas-tight sampler developed for vent studies, researchers obtained samples of the leaking oil and gas directly from the source before it was altered by interaction with ambient seawater. In another related study, researchers used a cabled sampling and instrument package (CTD) and an autonomous underwater vehicle (AUV) equipped with in-situ mass spectrometers to map the extent and estimate the mass flux of a deep hydrocarbon plume emanating from the damaged well. Despite the need to mobilize these studies quickly, they produced high-quality results that appeared promptly in the peer-reviewed literature.

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