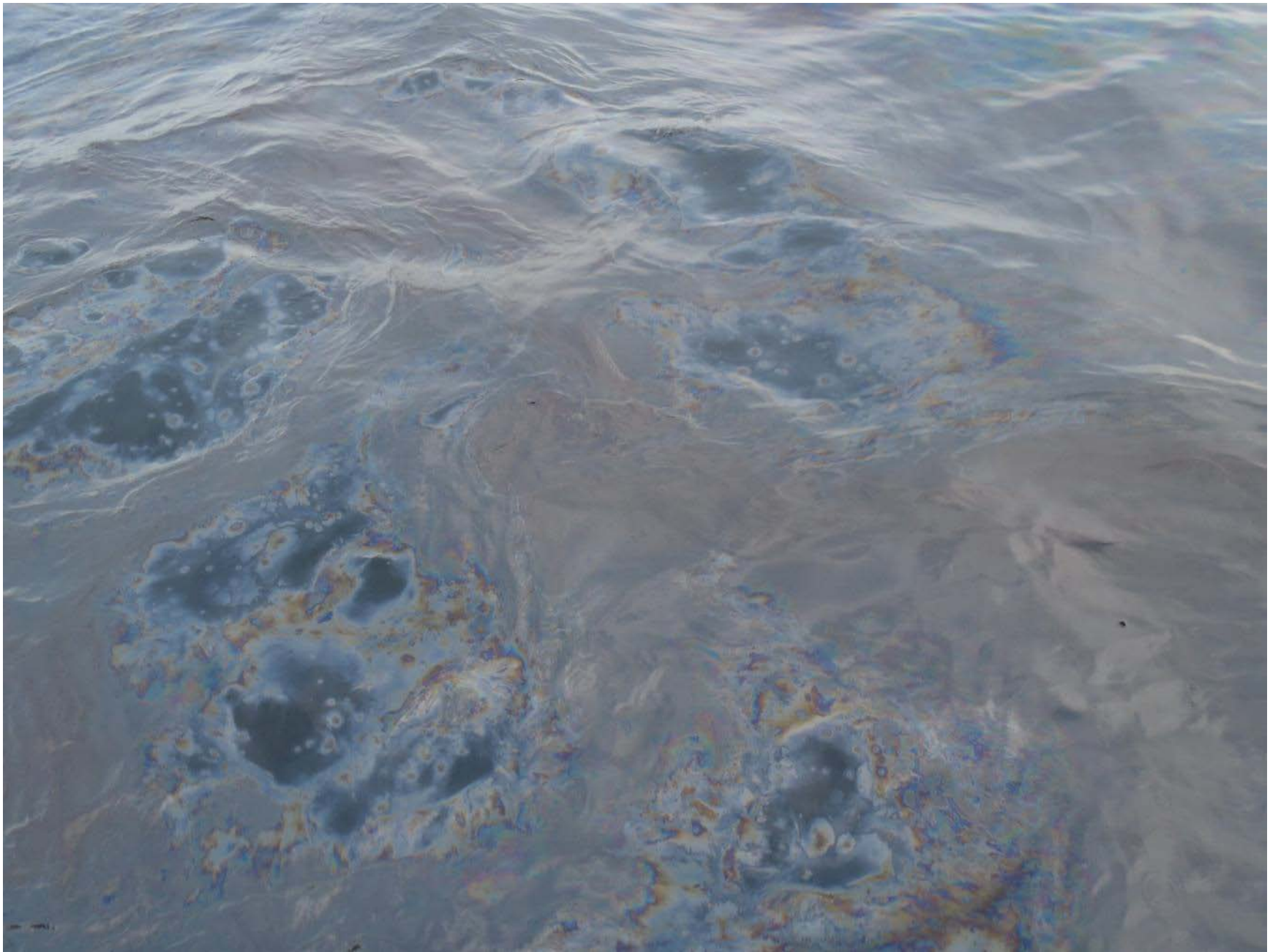
U.S. Environmental Protection Agency

June 25, 2010

6008329

Surface Oil

Surface Oil



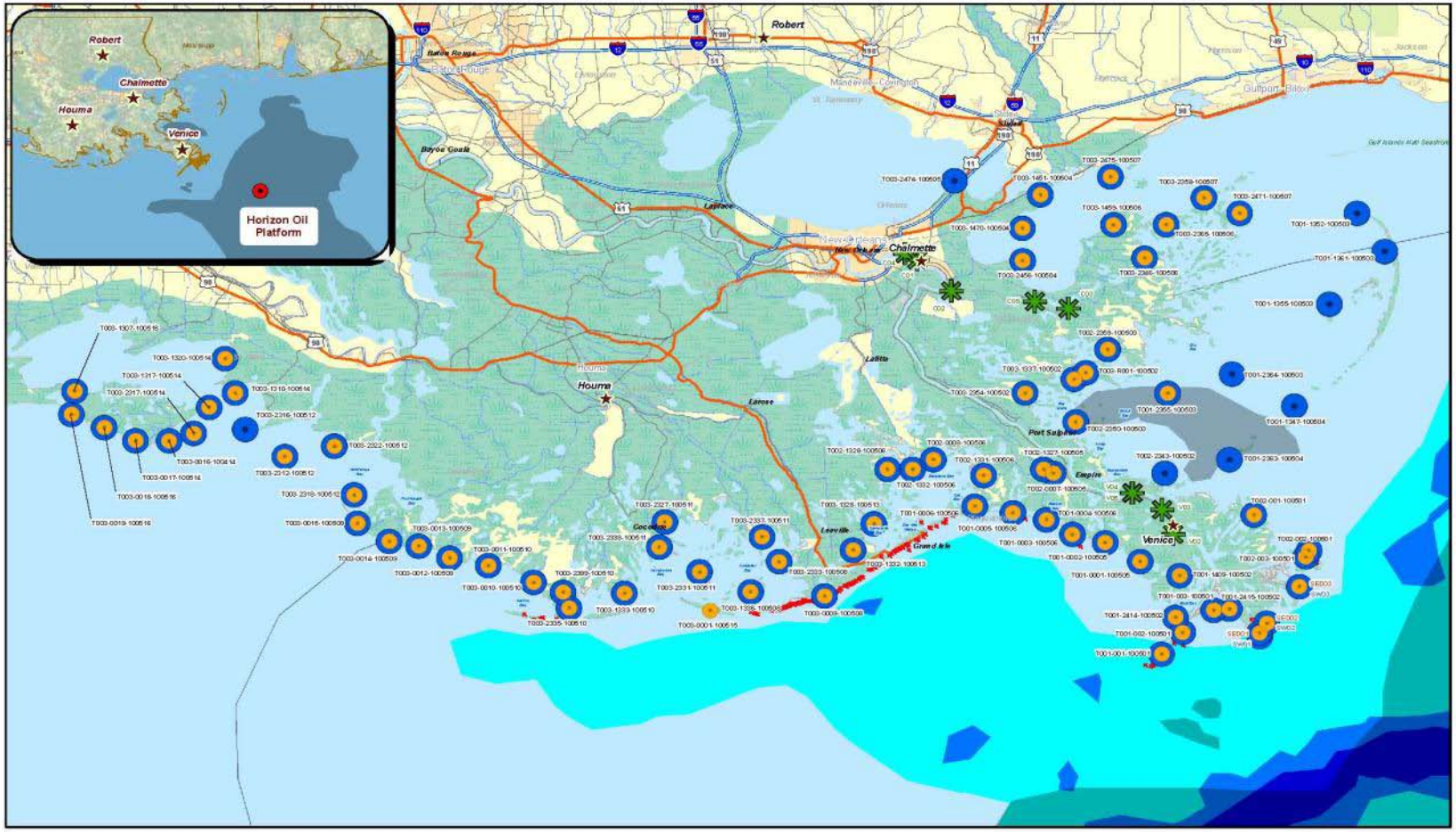
Surface Oil

Surface Oil

Sampling Activities

- Deep Sea Dispersant Application
- Water and Sediment Sampling
- Miscellaneous Samples
- Air Monitoring

Sampling Map



Legend

- Asset Location
- Air
- Sediment
- Surface Water
- Beached_20100522_0600CDT_20100519_1300CDT
- Trajectory_20100522_0600CDT_20100519_1300CDT
- FORECASTHEAVY
- FORECASTMEDIUM
- FORECASTLIGHT
- FORECASTUNCERTAINTY
- Uncert_20100522_0600CDT_20100519_1300CDT
- Oil Extent 20100518_1900

0 5 10 20
Miles

US EPA REGION 6
START-3
(For Official Use Only)

Sampling Locations Map

Date Created:	UIC:	SCALE:
5/19/2010	R520	

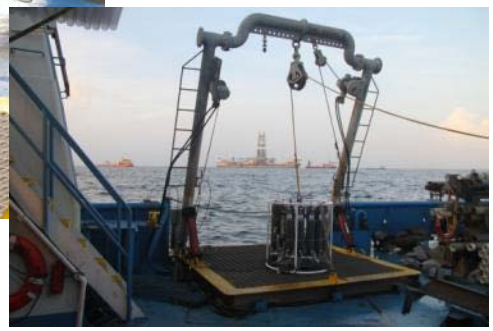
Deep Sea Dispersant Application

- Under an EPA directive, BP vessels have been monitoring the effects and effectiveness of dispersant application
  - R/V Brooks McCall
  - R/V Ocean Veritas

Information from BP Vessels

- Cruise Sampling Tracking Spreadsheet
- CTD Graphs
- LISST Report
- Bulleted Status Report by BP contractor
- Map with Sampling Stations
- GIS Shape Files

Fluorometer & CTD Unit

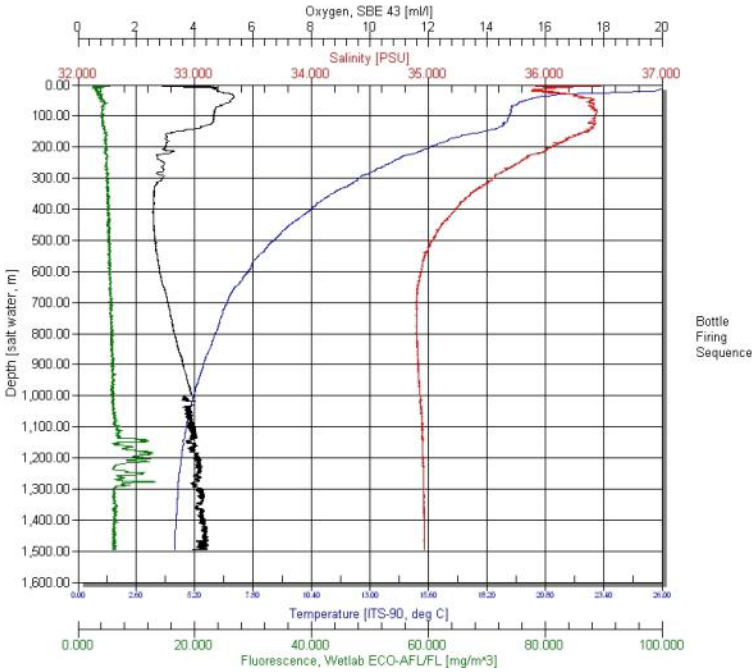


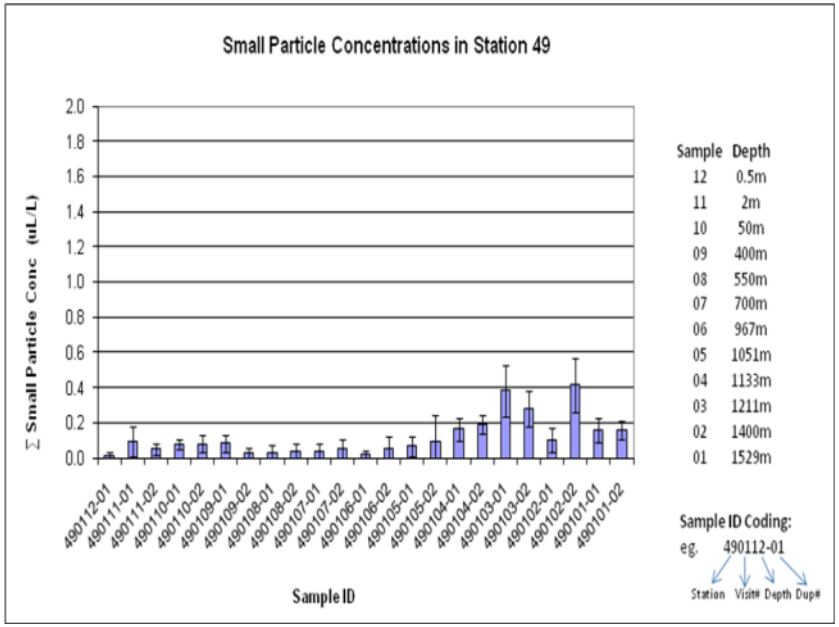
LISST

Indicators of Effects & Effectiveness

- Fluorometer & CTD Unit
  - Fluorescence
  - Oxygen
  - Salinity
  - Temperature

- LISST
  - Measures droplet size
  - Indicates whether oil is chemically dispersed





Water and Sediment Sampling

- Pre-Impact samples
  - Collected along the Gulf Coast prior to oil reaching the shoreline
- Ongoing samples
  - Collected to evaluate environmental threat

Water and Sediment Analysis

- Volatile organic chemicals
- Semi-Volatile organic chemicals
- Oil constituents
- Dispersant indicators
- Metals
- Toxicity

Miscellaneous Samples

- Source Oil
- Weathered Oil
- Oily Debris
- Mousse
- Tar Balls
- Corexit 9500
- Corexit 9527

Air Monitoring

- Continuous monitoring
  - Hydrogen sulfide
  - PM 10 & 2.5
  - Total VOCs
- Specialized air monitoring equipment
  - TAGA & Aspect

- Chemical-specific monitoring
  - Volatile organic chemicals (TO-15)
  - Semi-Volatile organic chemicals (TO-13)