Ryan Chouest Data Summary
Cruise 6/26/2010

Review Date 6/27/2010

Summary:

This sampling report presents data collected from the Ryan Chouest for the period of 6/26/2010.

Science results and preliminary interpretation:

The fluorometry sensor readings show low values along the transect in the SE direction away from Panama City and then increase slightly towards the west (Figures 2 – 4). The trend is generally consistent with the occurrence and the spreading of gradient of the oil slicks. The Chelsea and Trios fluorometers exhibit both similar inferred hydrocarbon concentrations and spatial changes in the data (Figures 2 – 3). The Contros sensor shows the least variability due to its low sensitivity, but the overall pattern is similar to the Chelsea and Trios fluorometers. (Figure 4).

Sea surface oil slick observations include sections of disseminated, small pieces of orange mousse and red-orange emulsions (Figures 2 – 4). Brown oil and rainbow sheen were also observed at two locations deep within the potential oiling footprint of 6/25. We were unable to photograph these observations.

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Planned versus actual route taken for Cruise 5:

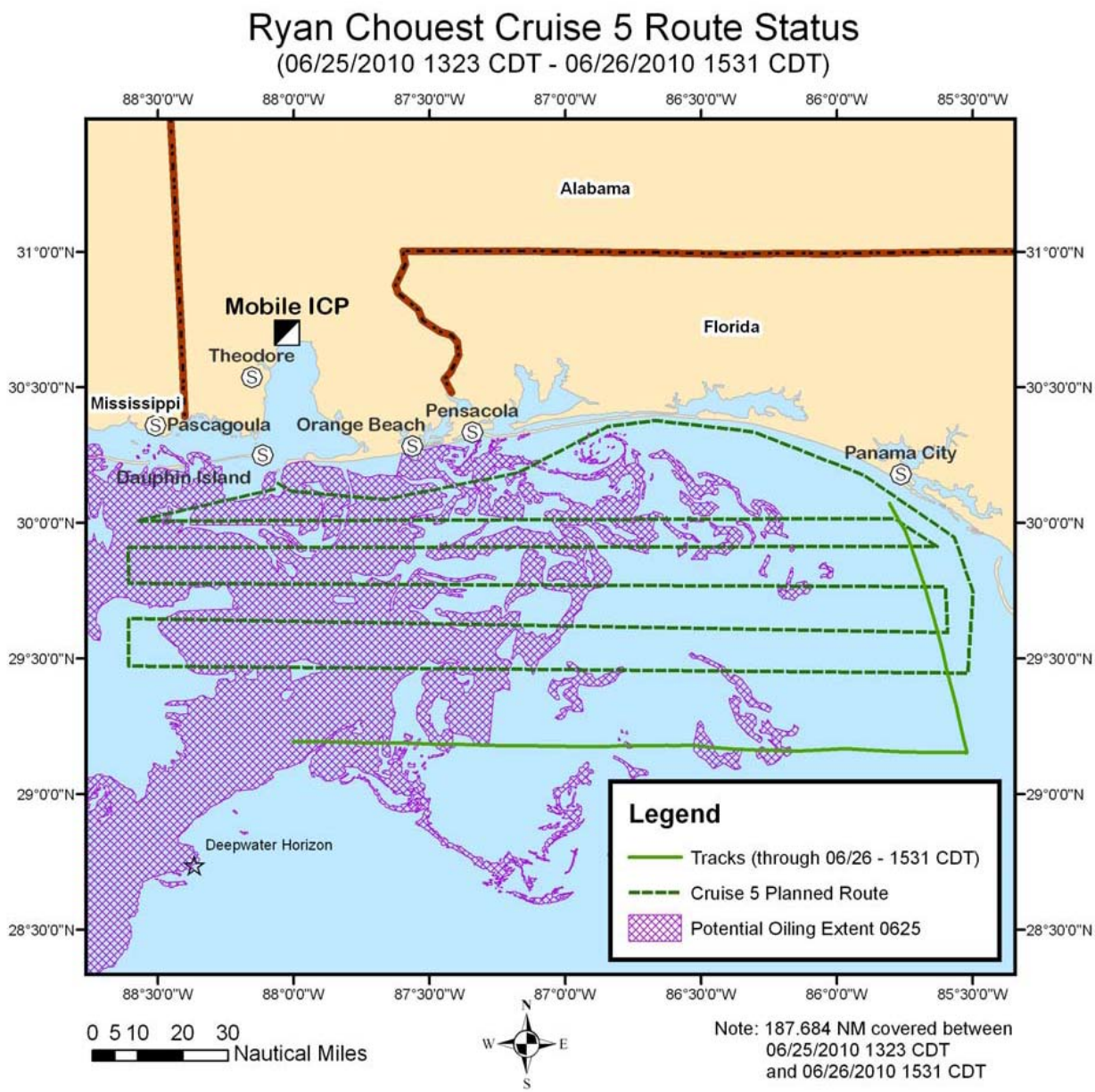

Figure 1: Planned versus actual route course plotted between 06/25/2010 –06/26/2010. Purple shaded area represents outline extent of the slick from 06/24 ERMA composite.

Vessel Science Operations:

They logged fluorometry measurements and observed sea-surface conditions. They continue to perform liquid-liquid extractions on seawater samples and analyze with the GCMS.

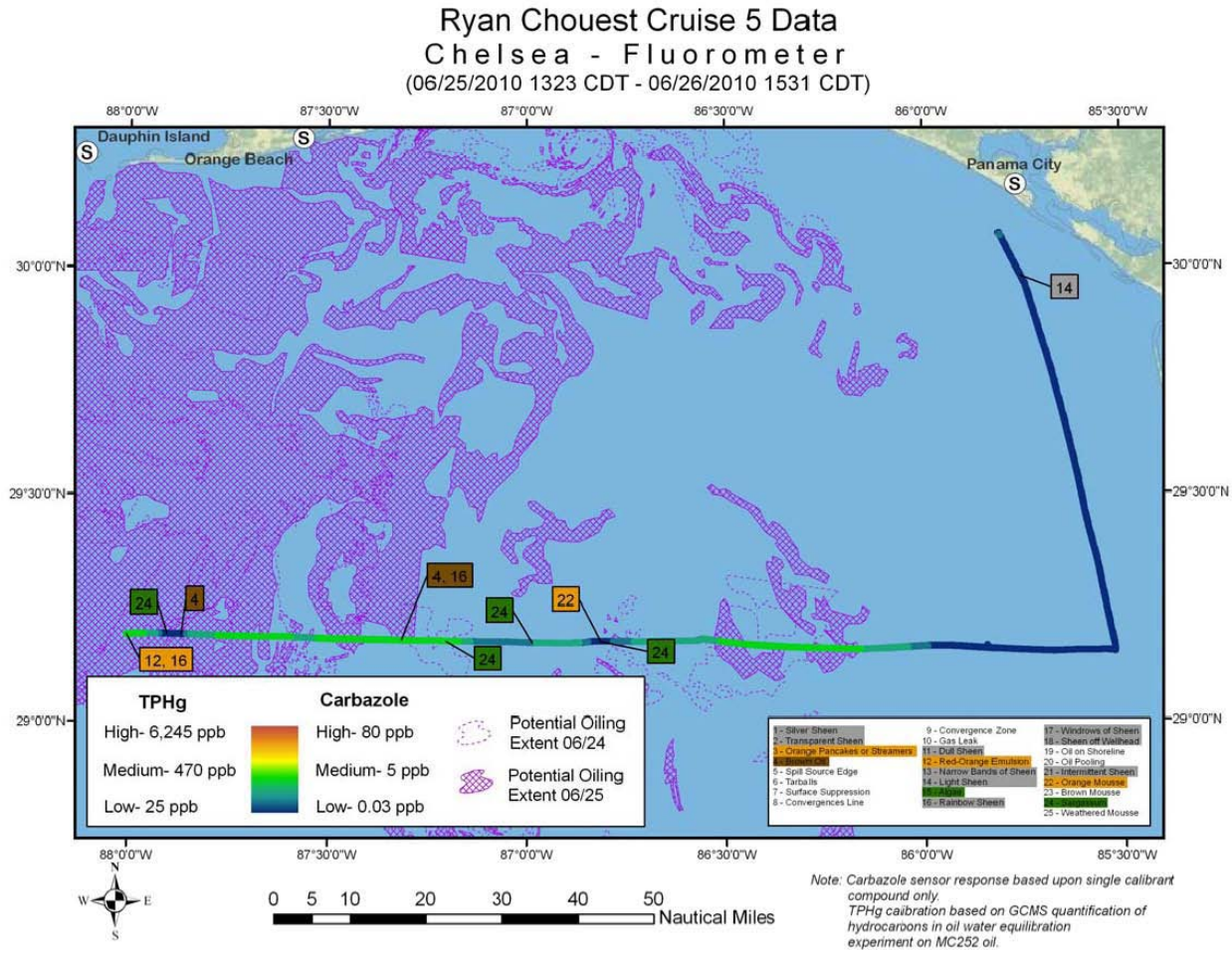

Figure 2. Chelsea fluorometer results plotted with location on cruise 5 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

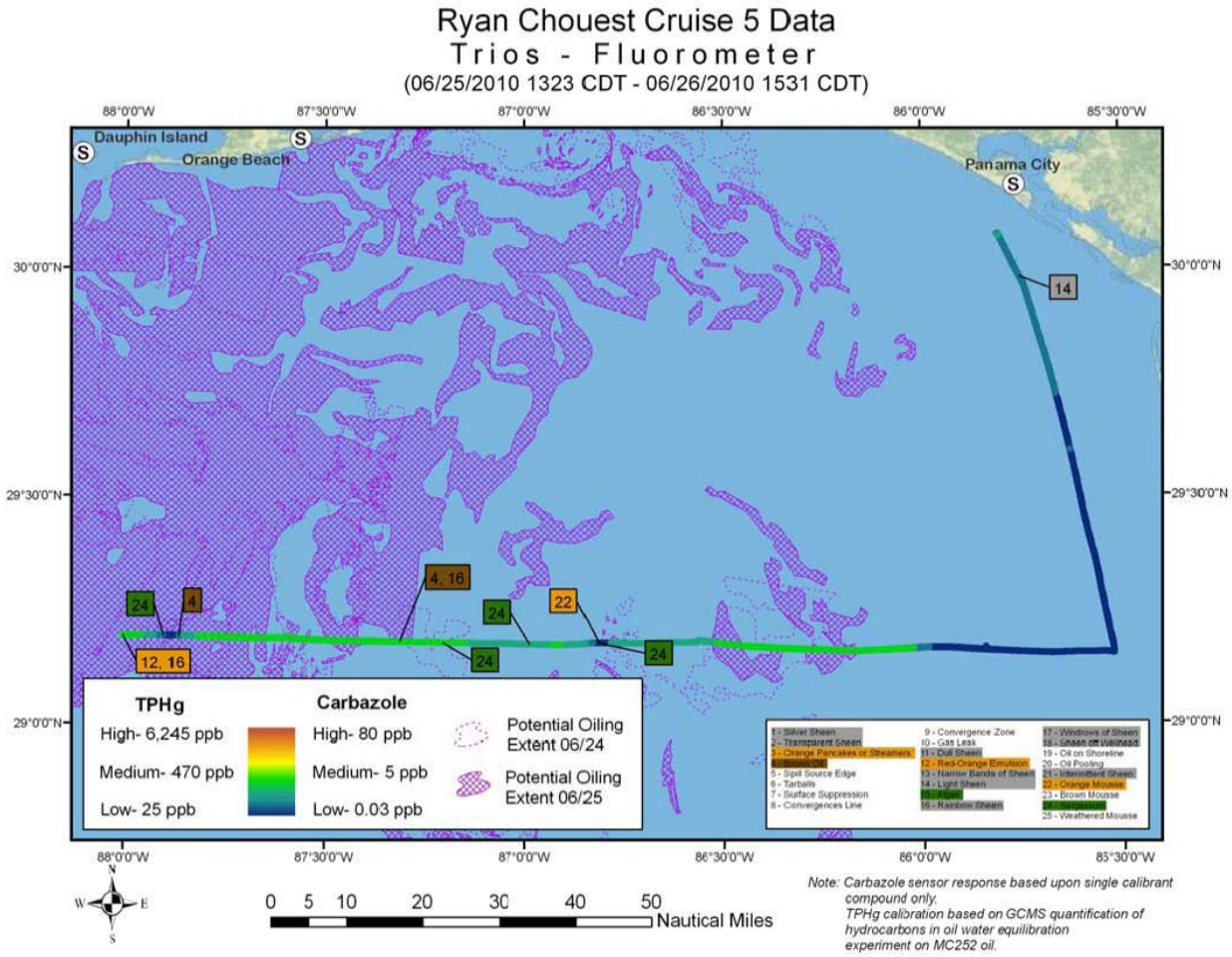

Figure 3. Trios fluorometer results plotted with location on cruise 5 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

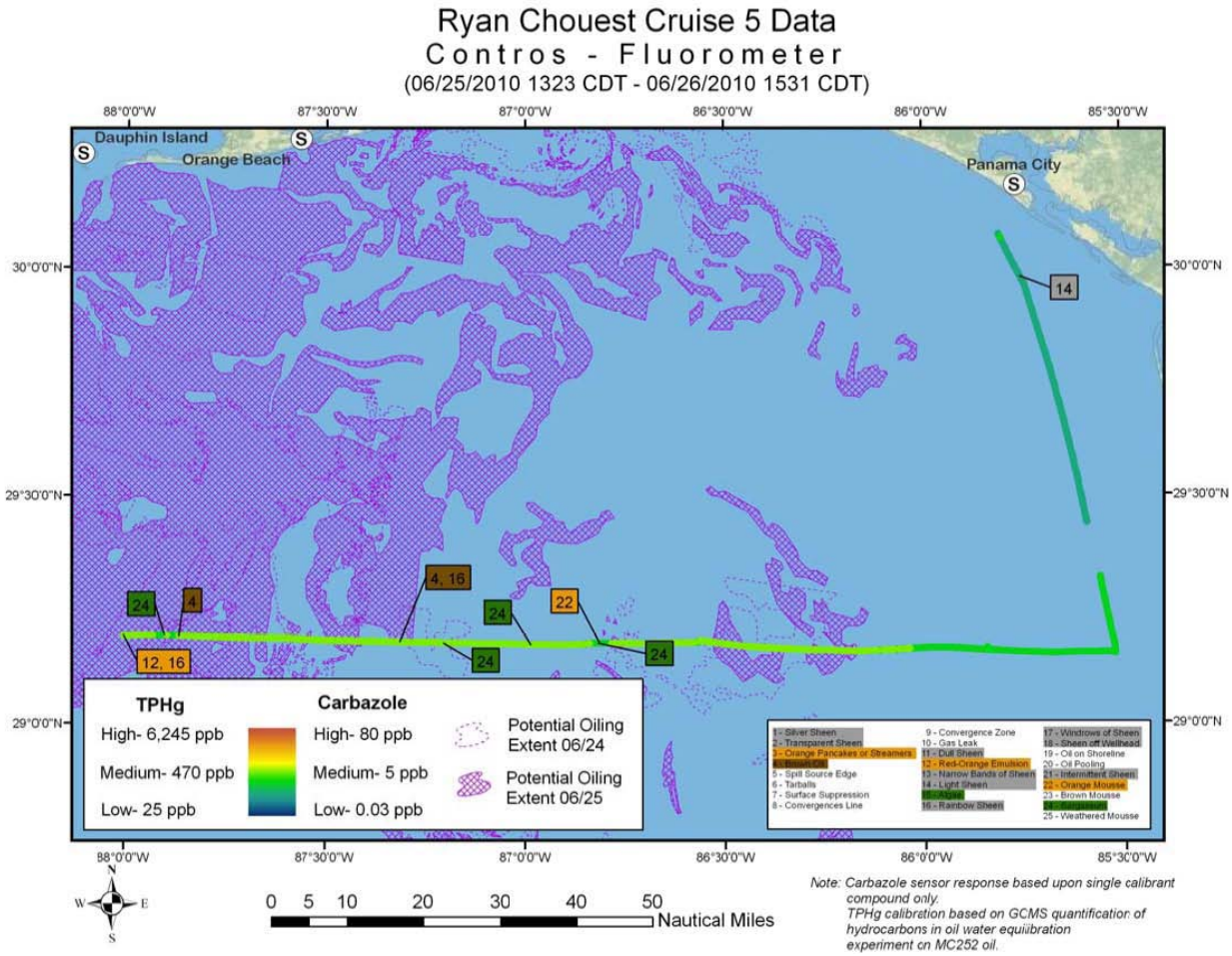

Figure 4. Contros fluorometer results plotted with location on cruise 5 track. Breaks in data occur when either data quality is poor or the systems were turned off due to pump problems.

Problems/Operational Issues:

There are no problems at this time.