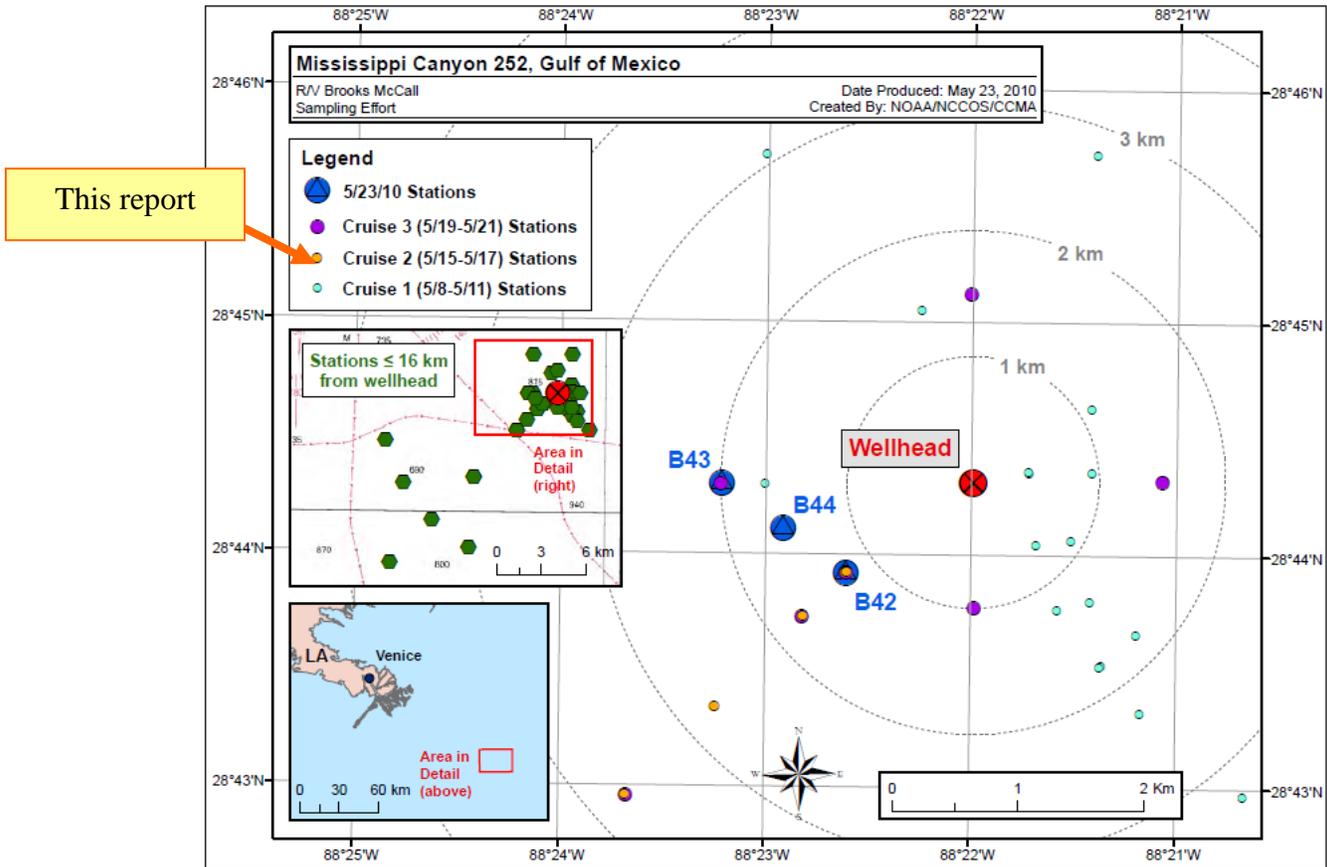


Research Vessel Brooks McCall

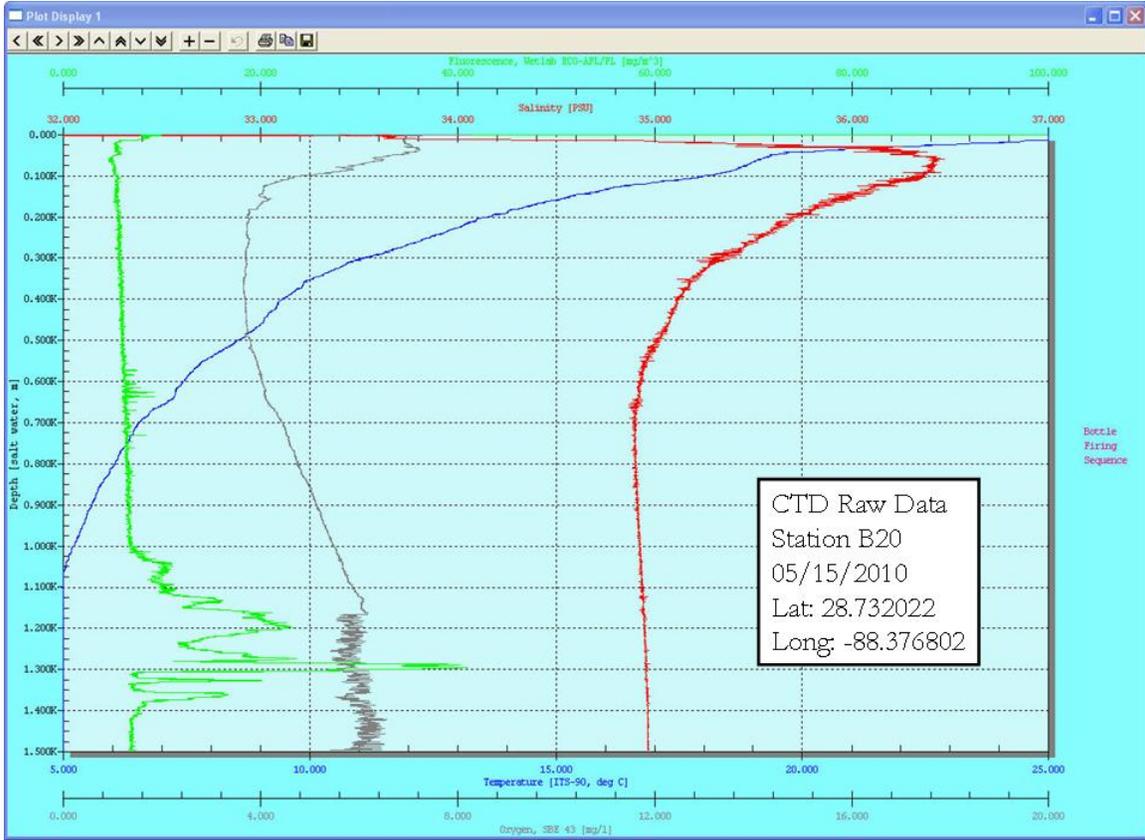
Monitoring Water Quality and Chemistry in the vicinity of the MC252 Oil Spill Location

Cruise #2 May 15th – 18th 2010



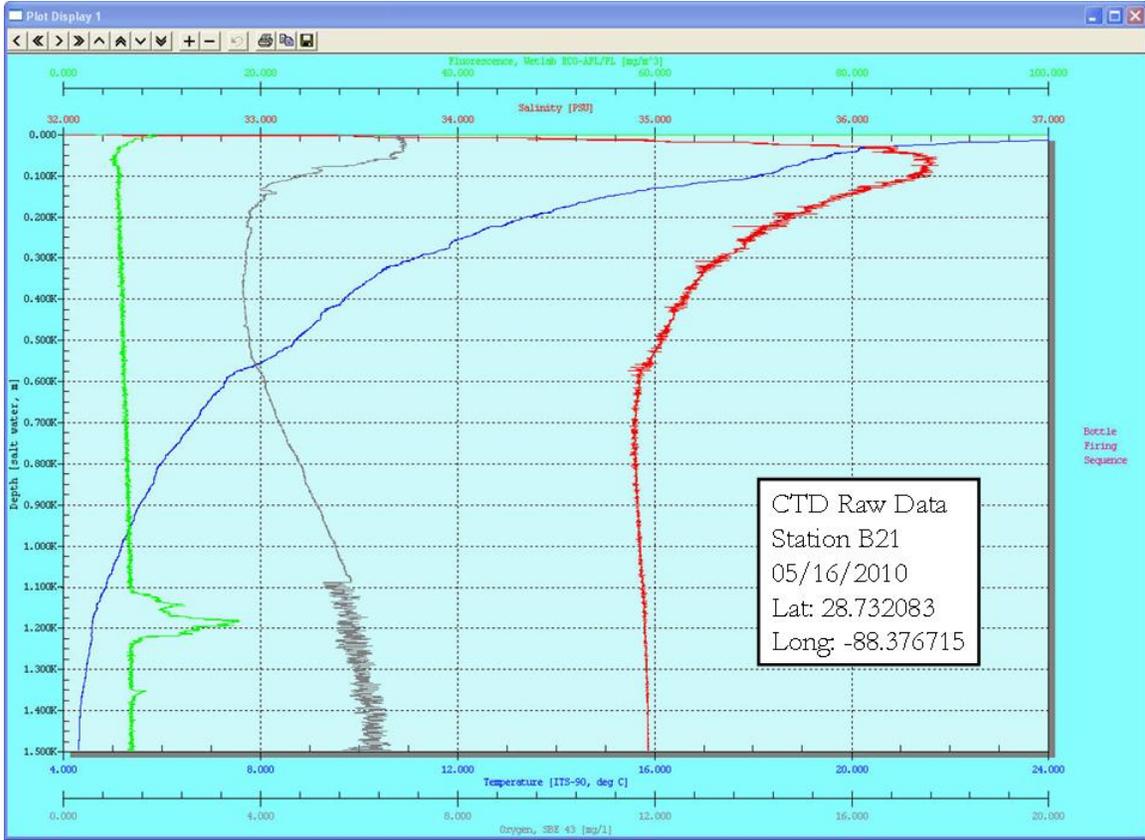
These data are being collected to analyze the water column near the MC252 oil spill for Hydrocarbon and Dissolved Oxygen content, and Toxicity.

Summary Table Cruise 2	Number of Samples With :-		
Total CTD Runs	Significant Hydrocarbon Content	Dissolved Oxygen below Specified Limit	Toxicity Indicated
9	0	0	No Available Data



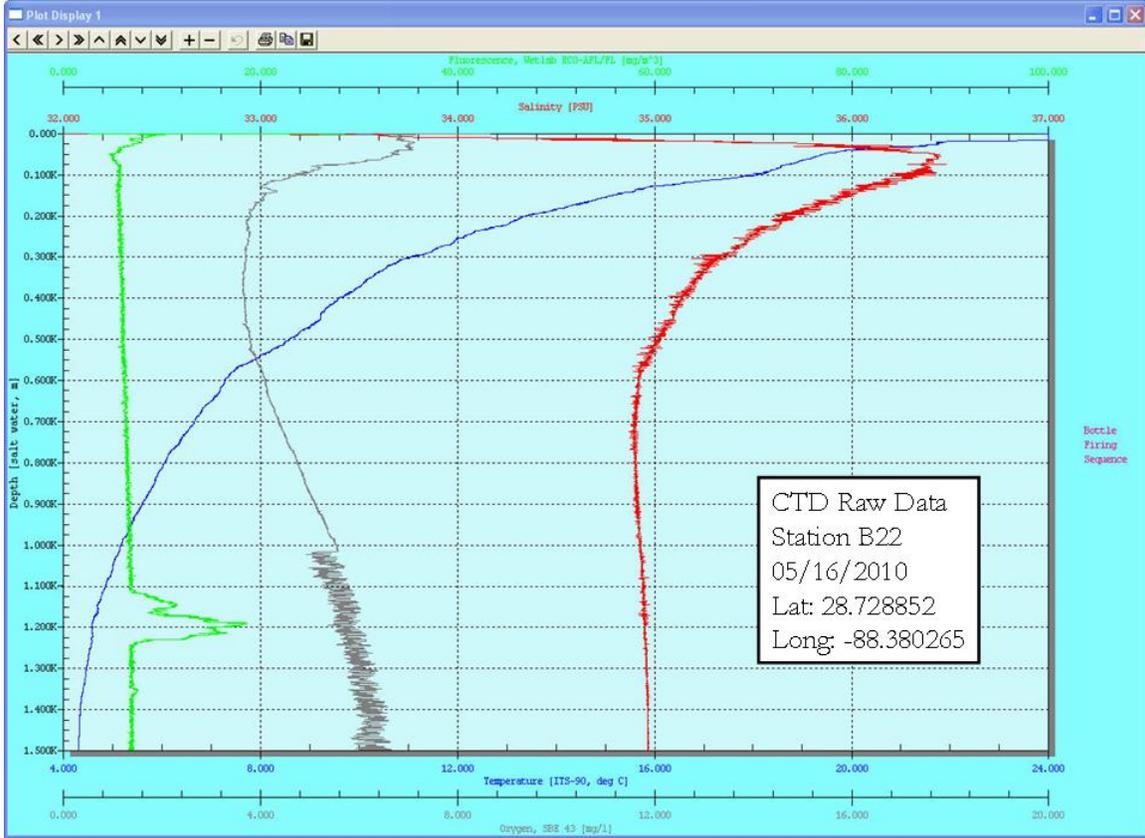
Conductivity, Temperature Depth (CTD) Sensor Information Station B20				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	41 parts per <u>billion</u>	1290 meters 4231 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l	375 meters 1230 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



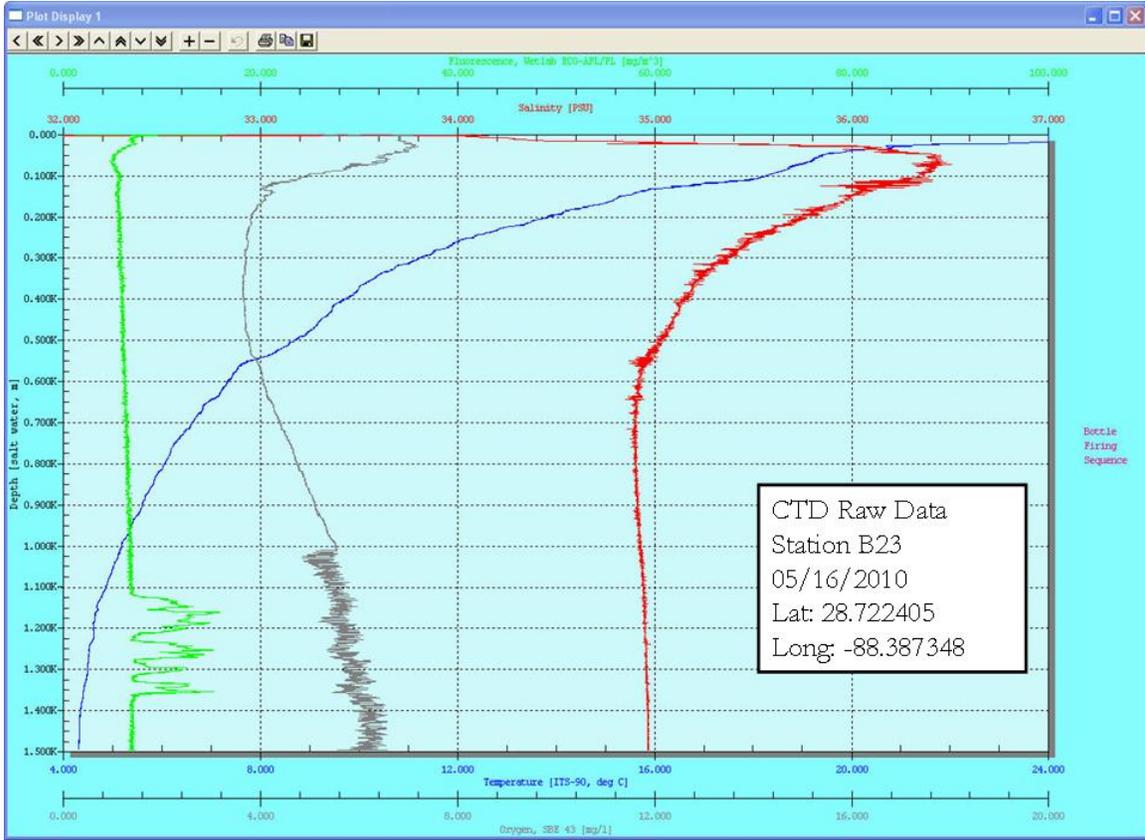
Conductivity, Temperature Depth (CTD) Sensor Information Station B21				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	18 parts per <u>Billion</u>	1280 meters 4200 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l	375 meters 1230 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



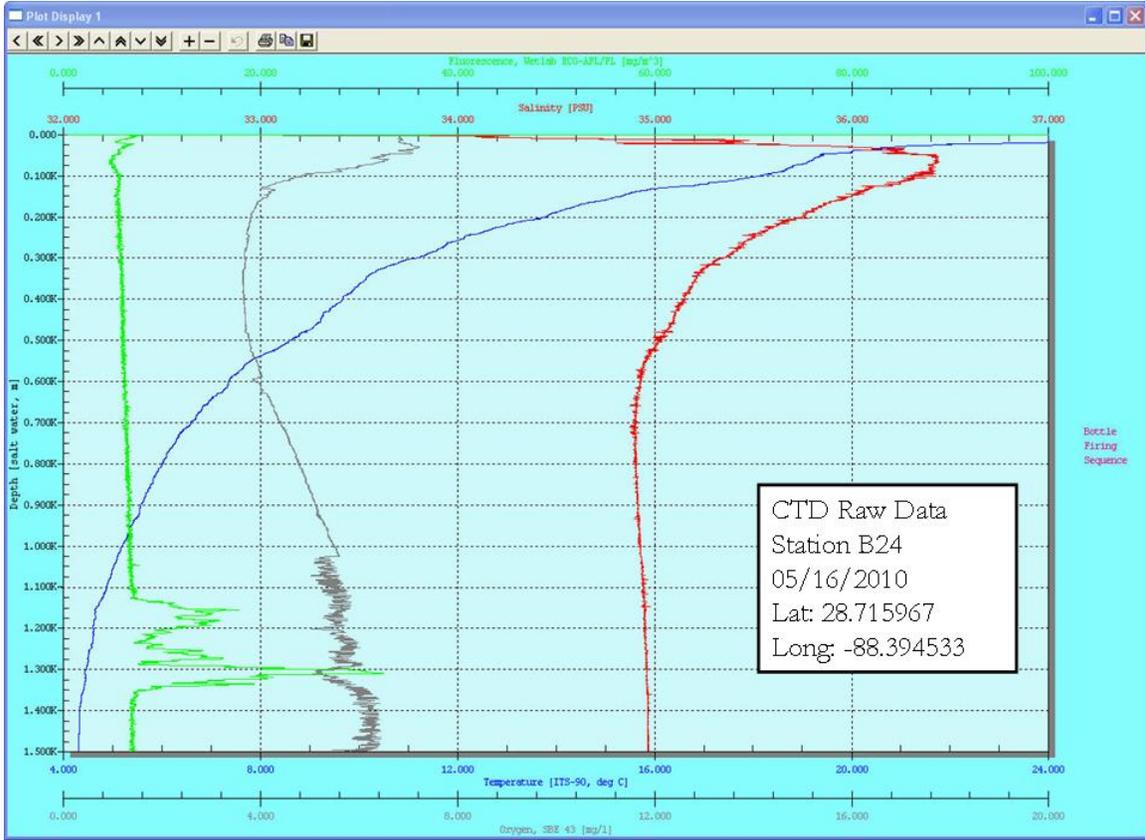
Conductivity, Temperature Depth (CTD) Sensor Information <u>Station B22</u>				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	19 parts per <u>billion</u>	1190 meters 3904 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.6 ml/l	400 meters 1312 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



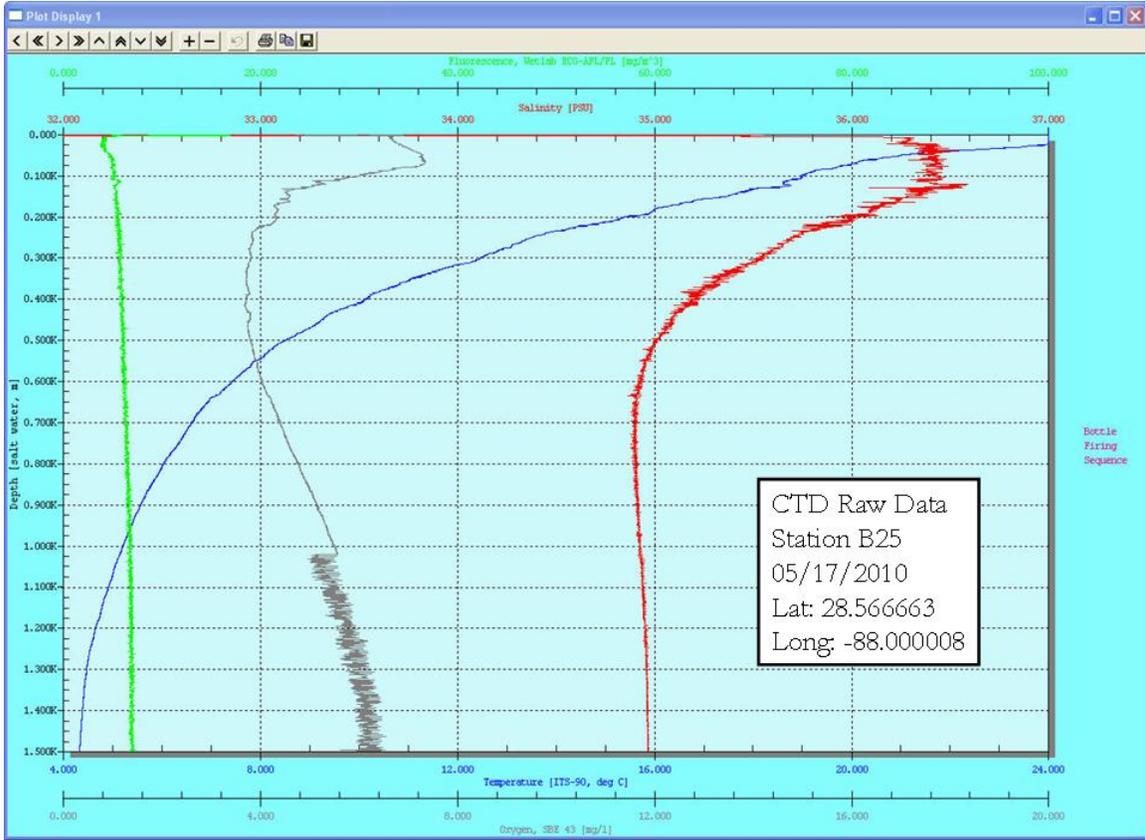
Conductivity, Temperature Depth (CTD) Sensor Information Station B23				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	16 parts per <u>billion</u>	1170 meters 3839 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.6 ml/l	370 meters 1214 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



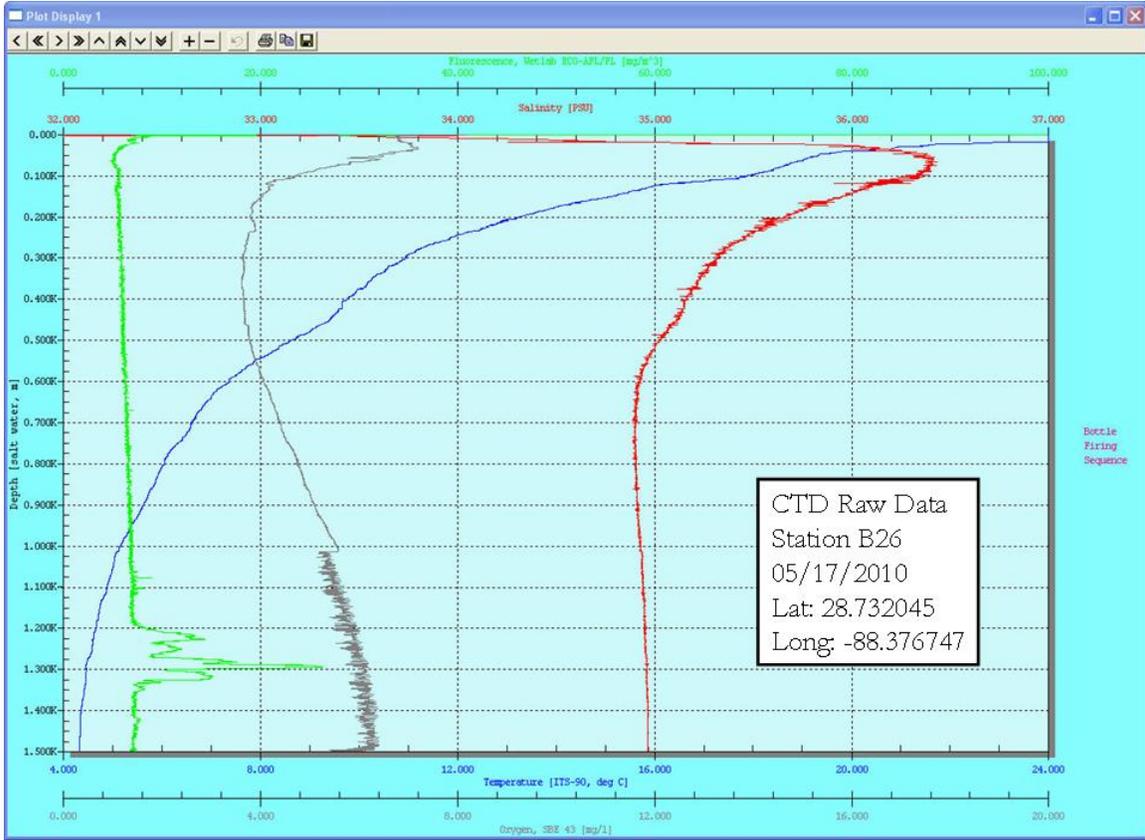
Conductivity, Temperature Depth (CTD) Sensor Information Station B24				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	33 parts per <u>billion</u>	1300 meters 4265 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l	370 meters 1214 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



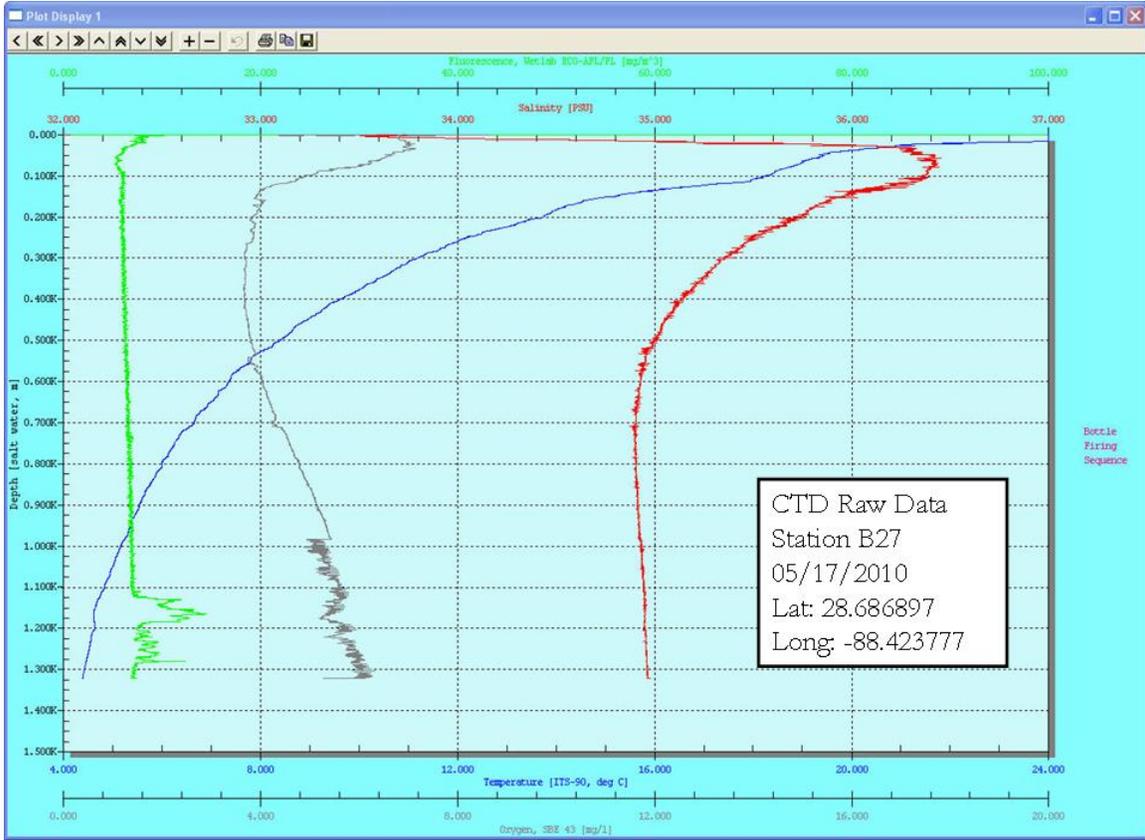
Conductivity, Temperature Depth (CTD) Sensor Information Station B25				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	<u>No Anomaly</u> 8 parts per billion <u>background</u>	N/A	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l		Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



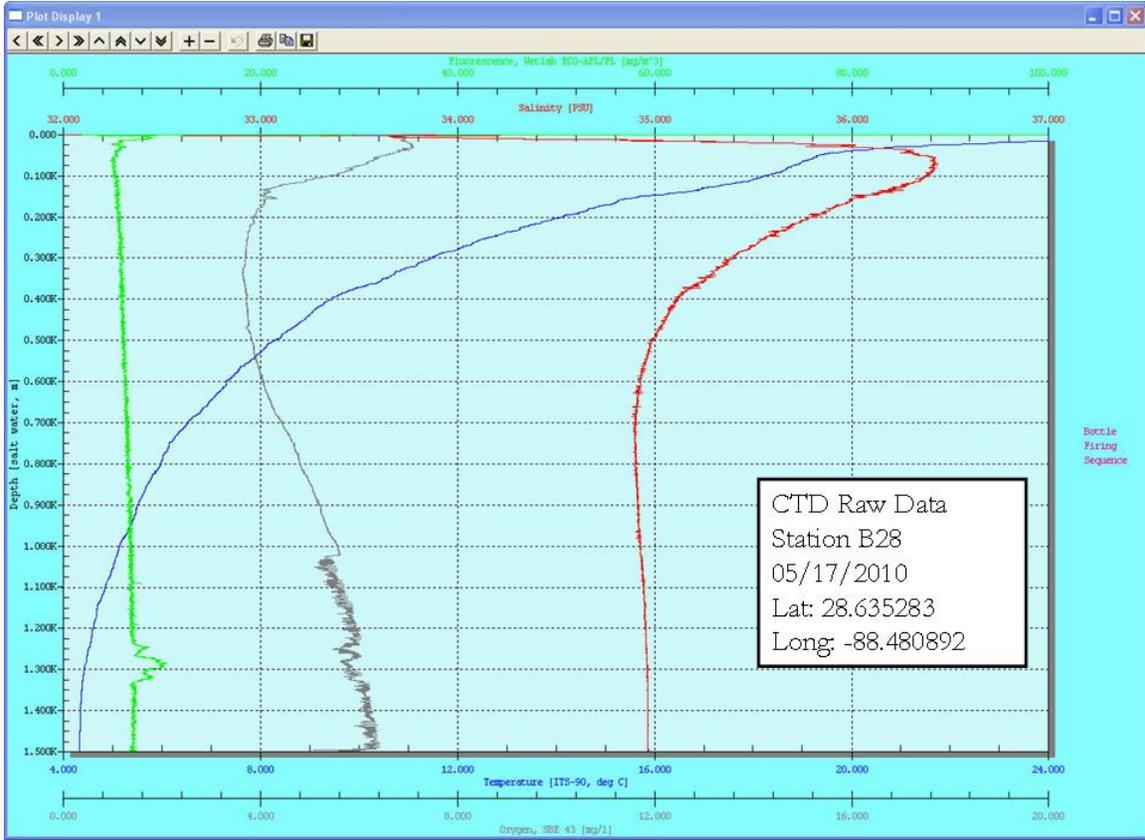
Conductivity, Temperature Depth (CTD) Sensor Information Station B26				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	27 parts per <u>billion</u>	1280 meters 4199 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.6 ml/l	320 meters 1050 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



Conductivity, Temperature Depth (CTD) Sensor Information <u>Station B27</u>				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	14 parts per <u>billion</u>	1270 meters 4167 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l	350 meters 1148 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



Conductivity, Temperature Depth (CTD) Sensor Information Station B28				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	11 parts per <u>billion</u>	1290 meters 4232 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	3.7 ml/l	350 meters 1148 feet	Acceptable
Toxicity Results	No Available Data			
Data Source	Brooks McCall Cruise Science team - NOAA, EPA, & BP representatives on board			

Sources and References
Note #1 As a reference point, The EPA NPDES (National Pollutant Discharge Effluent Standard) permits for Offshore Gulf of Mexico installations contain a NOT TO EXCEED limit of 42 mg/L (42 parts per million) on a daily basis AND a NOT TO EXCEED limit of 29 mg/L per day (29 parts per million) on a monthly basis.
Note #2. 2 milliliters per Liter (2 parts per million) is the lower limit for Dissolved Oxygen specified by the applicable documents controlling the use of dispersant in subsea injection for the MC 252 oil spill.
Note #3. Green Curve is Fluorescence on a scale of 0 to 100 milligrams per cubic meter (0 to 100 parts per billion) Grey Curve is Dissolved Oxygen on a scale of 0 to 20 milliliters per Liter Blue curve is Temperature on a scale of 4 to 24 degrees Centigrade (39 to 75 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand