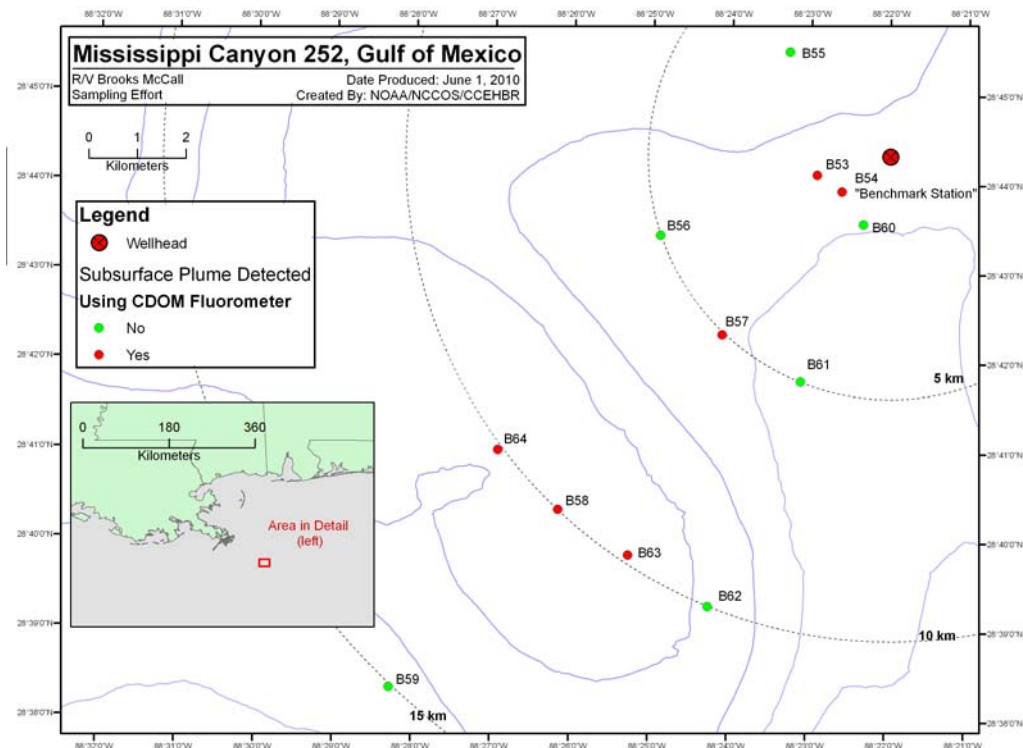


Research Vessel Brooks McCall

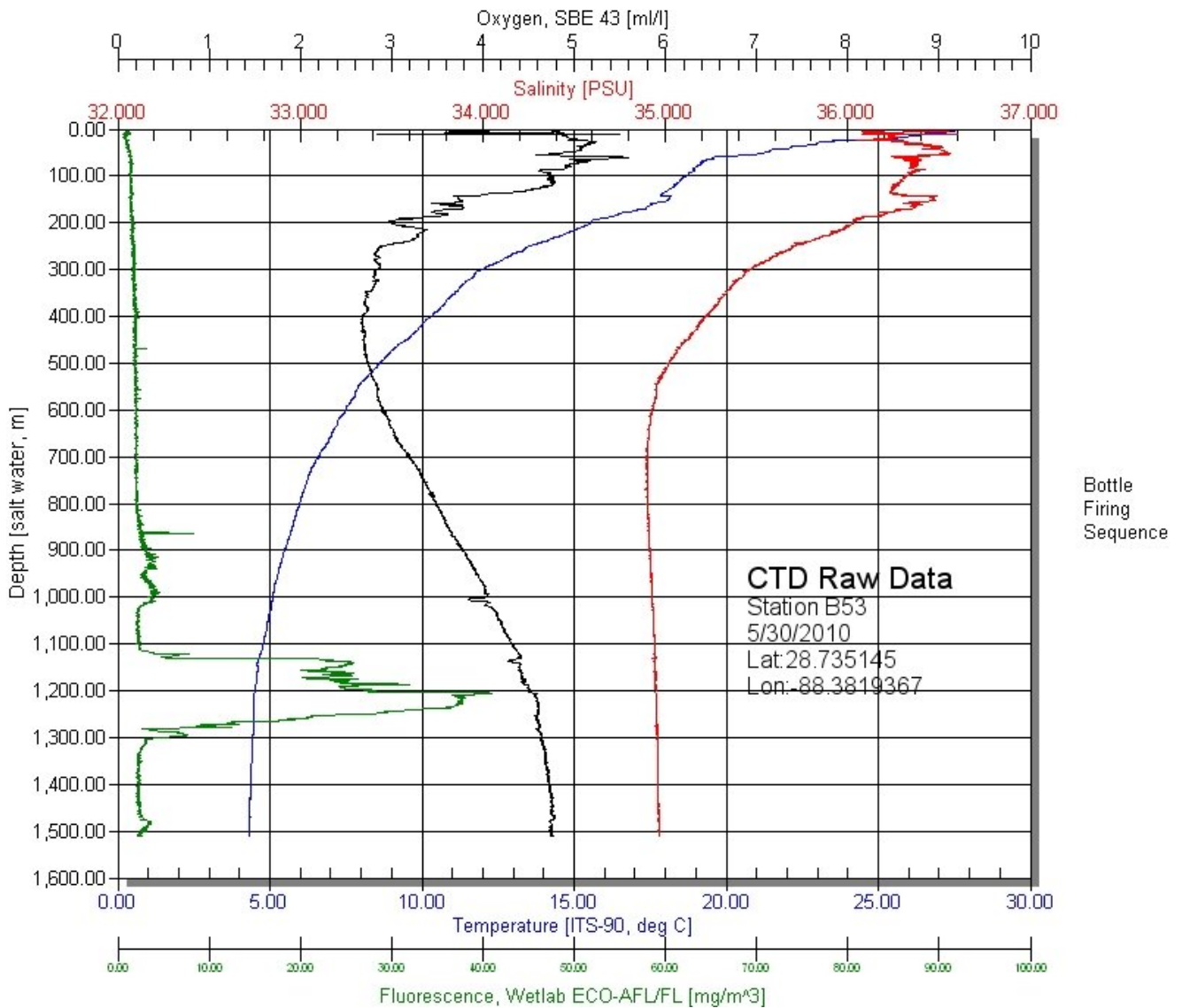
Monitoring Water Quality and Chemistry in the vicinity of the MC252 Oil Spill Location

Cruise #5 May 30-June 1 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 4	Number of Samples With :		
	Significant Hydrocarbon Content	Dissolved Oxygen below Specified Limit	Toxicity Indicated
Total CTD Runs			
12	0	0	



Conductivity, Temperature Depth (CTD) Sensor Information Station B53				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	42 parts per <u>billion</u>	1200 meters 3937 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1474 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

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.

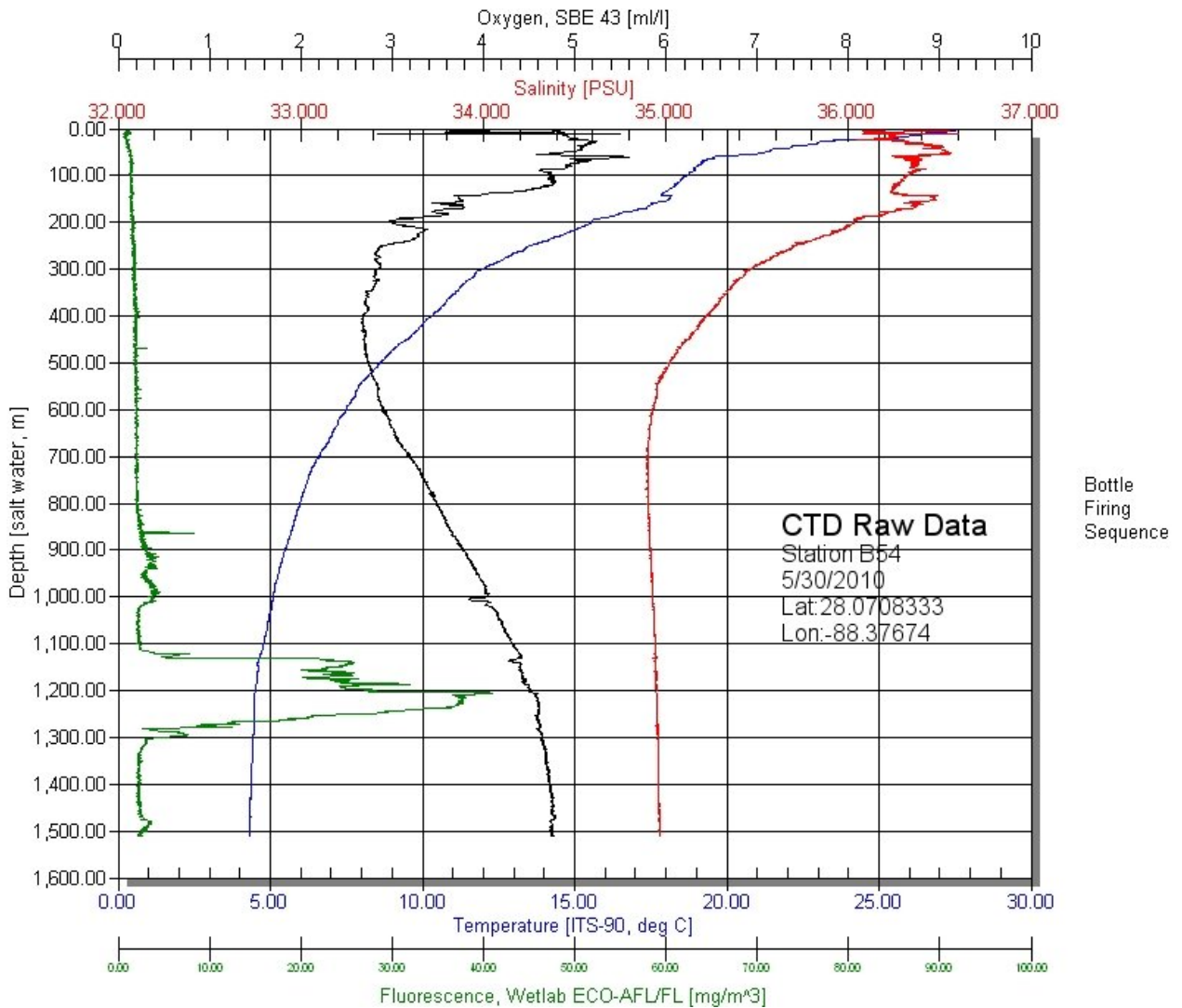
Note #3.

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 10 milliliters per Liter

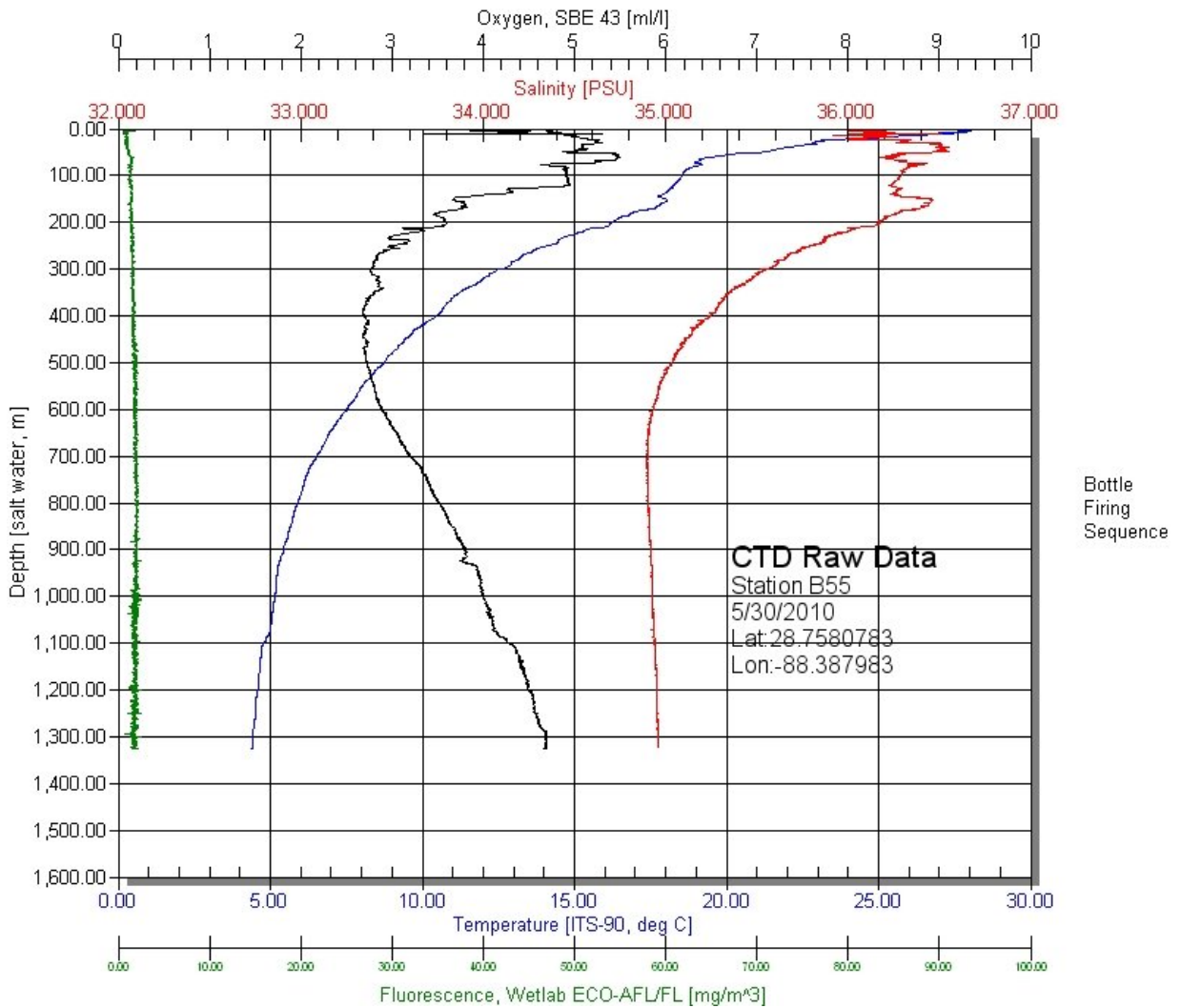
Blue curve is Temperature on a scale of 0 to 30 degrees Centigrade (32 to 86 degrees Fahrenheit)

Red Curve is Salinity on a scale of 32 to 37 parts per thousand



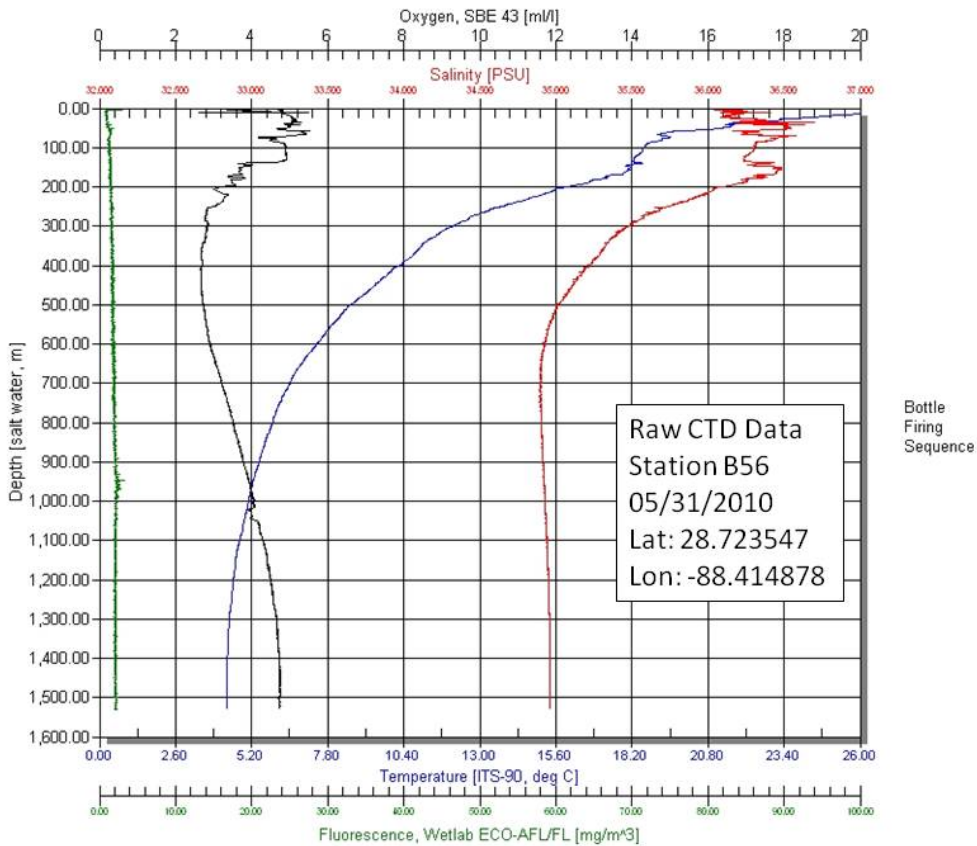
Conductivity, Temperature Depth (CTD) Sensor Information Station B54				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	42 parts per billion	1200 meters 3937 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 10 milliliters per Liter Blue curve is Temperature on a scale of 0 to 30 degrees Centigrade (32 to 86 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



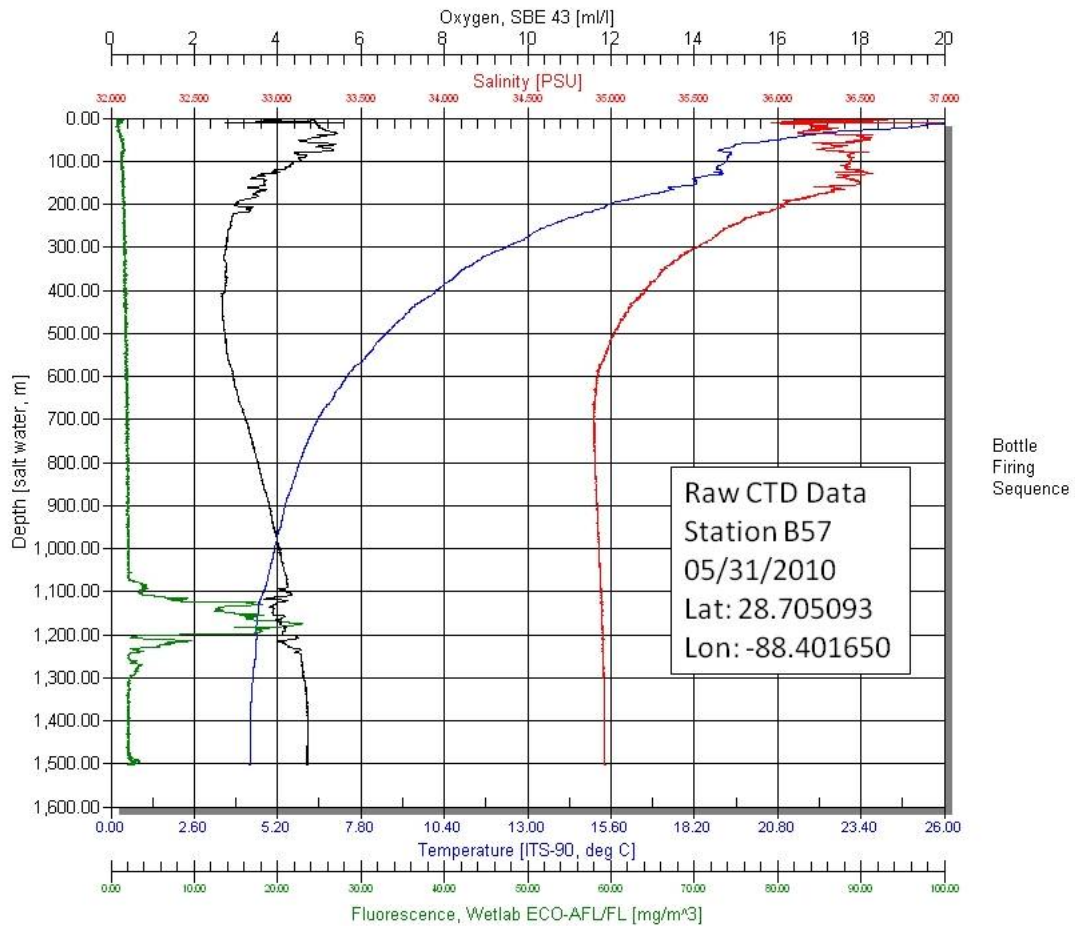
Conductivity, Temperature Depth (CTD) Sensor Information Station B55				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1320 meters 4330 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 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 10 milliliters per Liter Blue curve is Temperature on a scale of 0 to 30 degrees Centigrade (32 to 86 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 parts per thousand



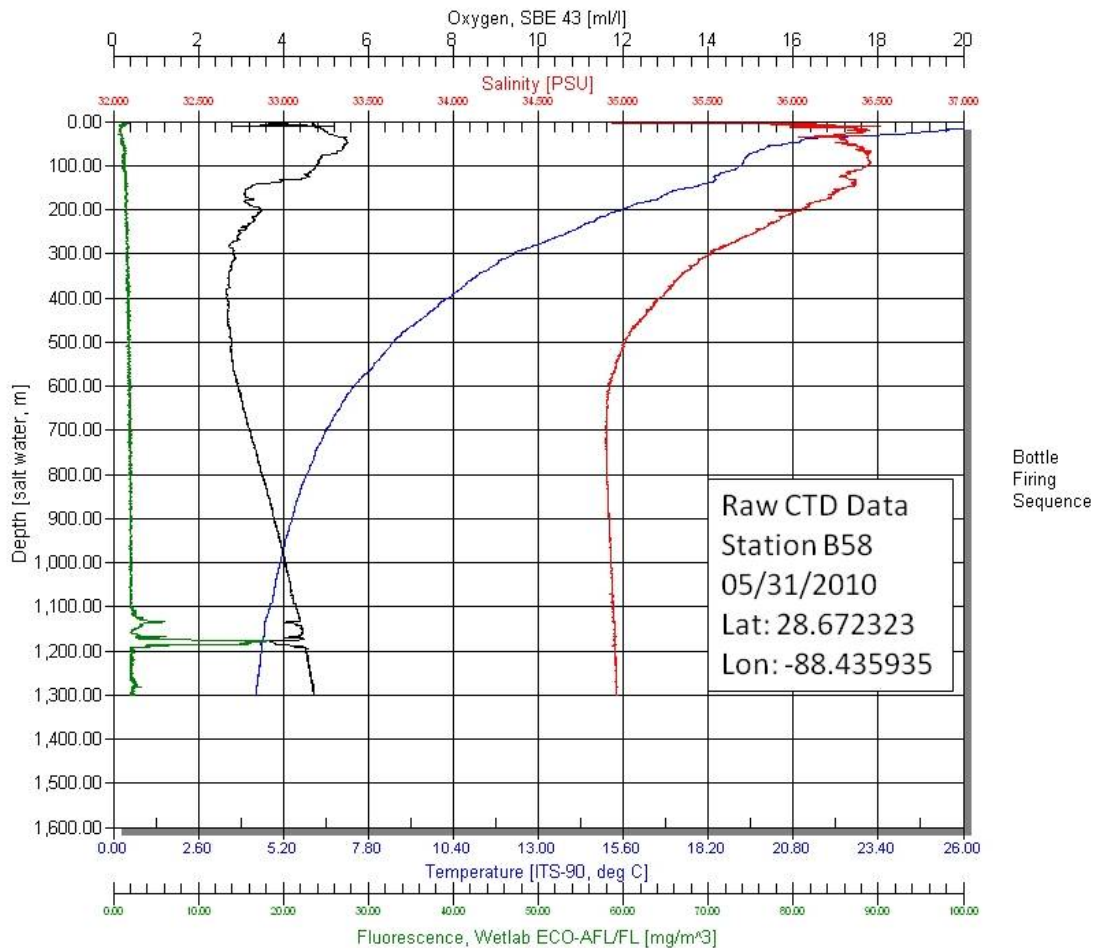
Conductivity, Temperature Depth (CTD) Sensor Information Station B56				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1550 meters 5084 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



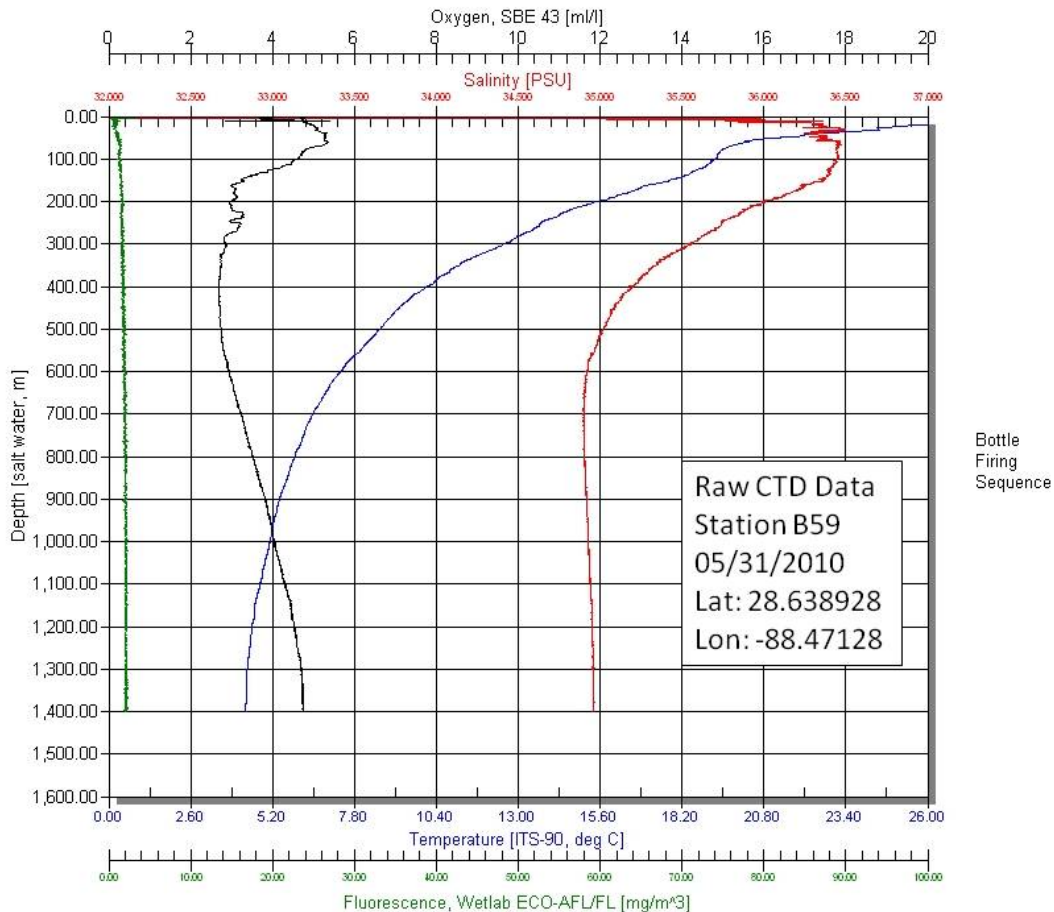
Conductivity, Temperature Depth (CTD) Sensor Information Station B57				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	24 parts per <u>billion</u>	1180 meters 3871 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.4 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



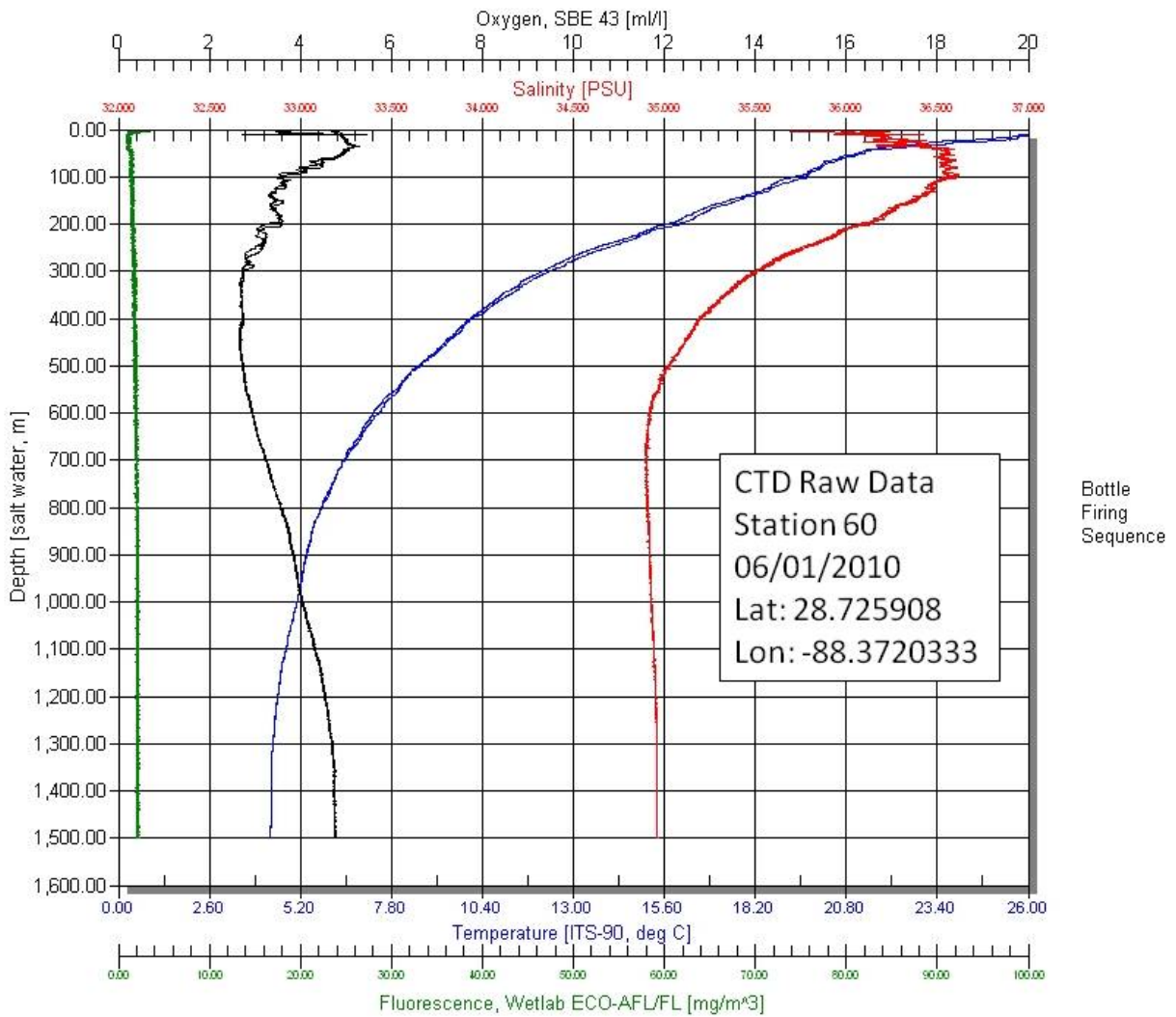
Conductivity, Temperature Depth (CTD) Sensor Information Station B58				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	18 parts per <u>billion</u>	1180 meters 3871 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.4 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



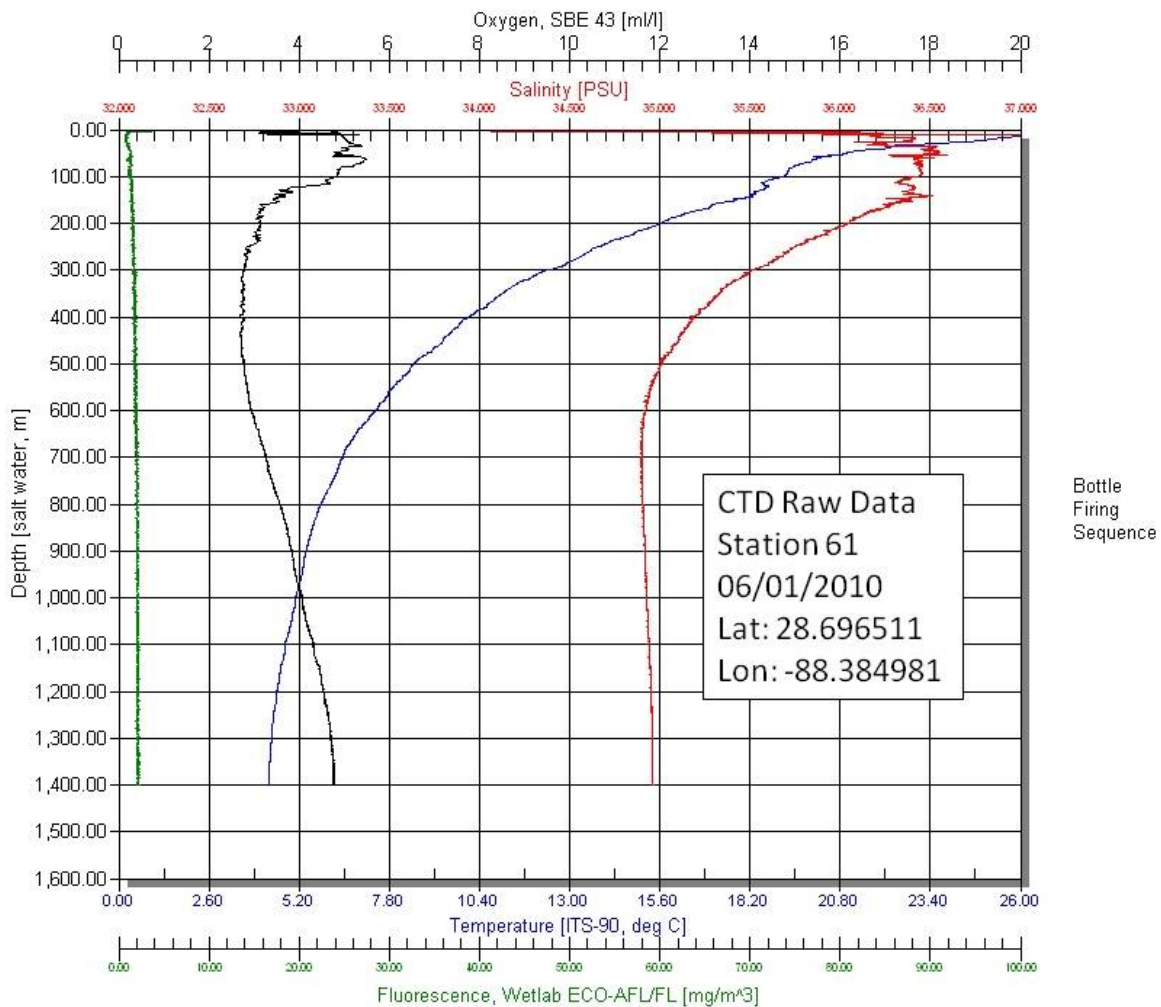
Conductivity, Temperature Depth (CTD) Sensor Information Station B59				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1400 meters 4593 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



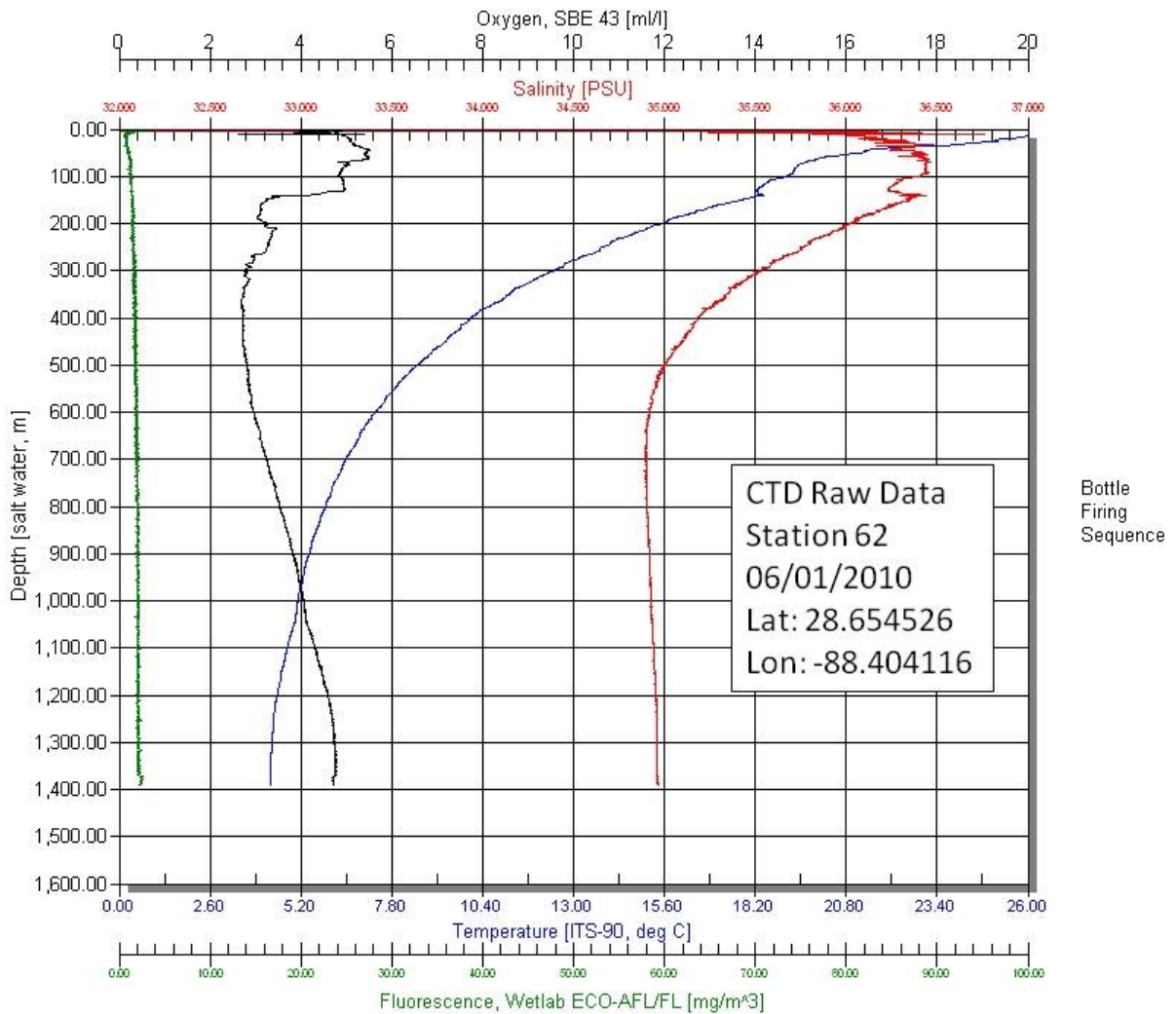
Conductivity, Temperature Depth (CTD) Sensor Information Station B60				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1500 meters 4920 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



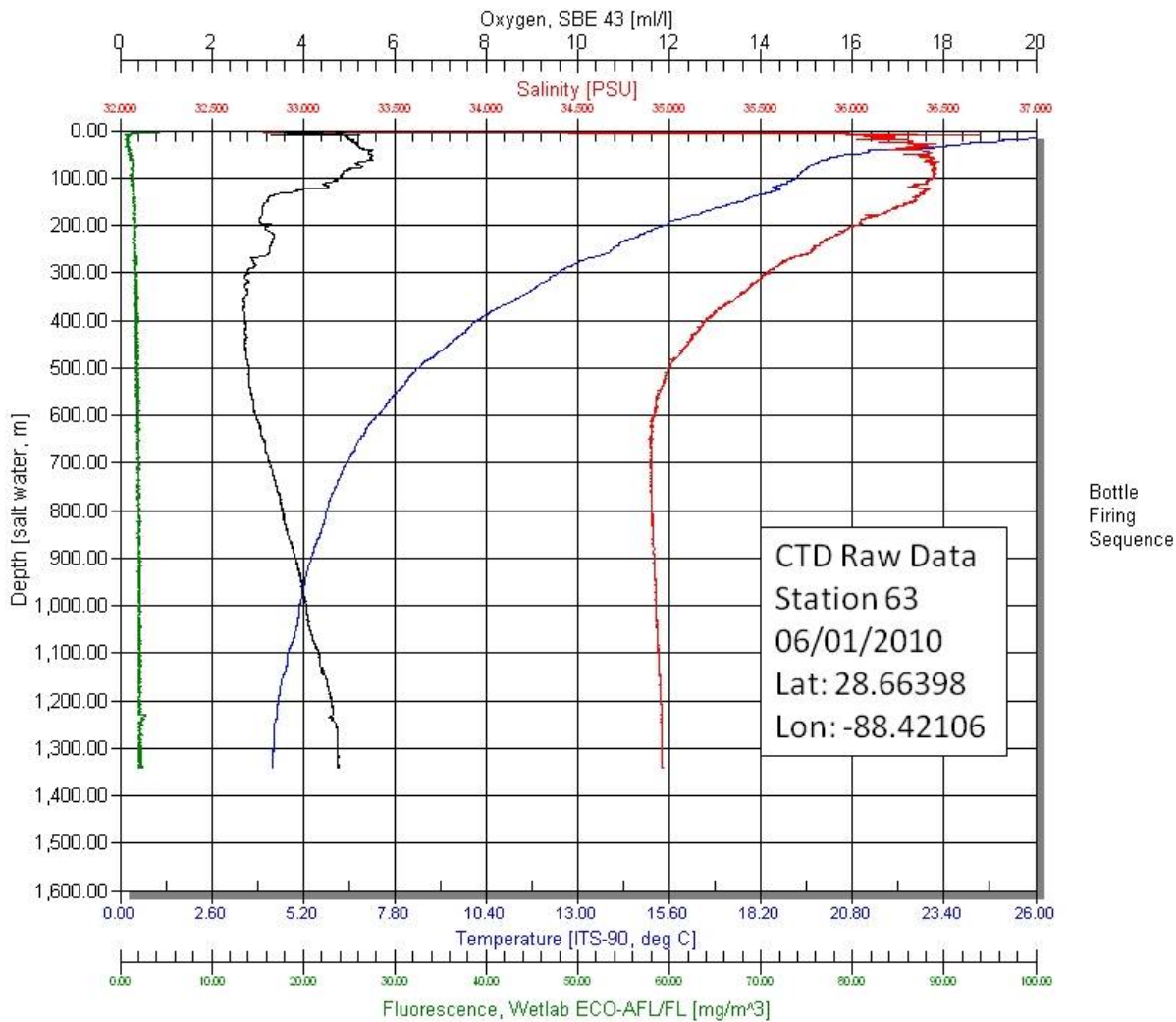
Conductivity, Temperature Depth (CTD) Sensor Information Station B61				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1400 meters 4593 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



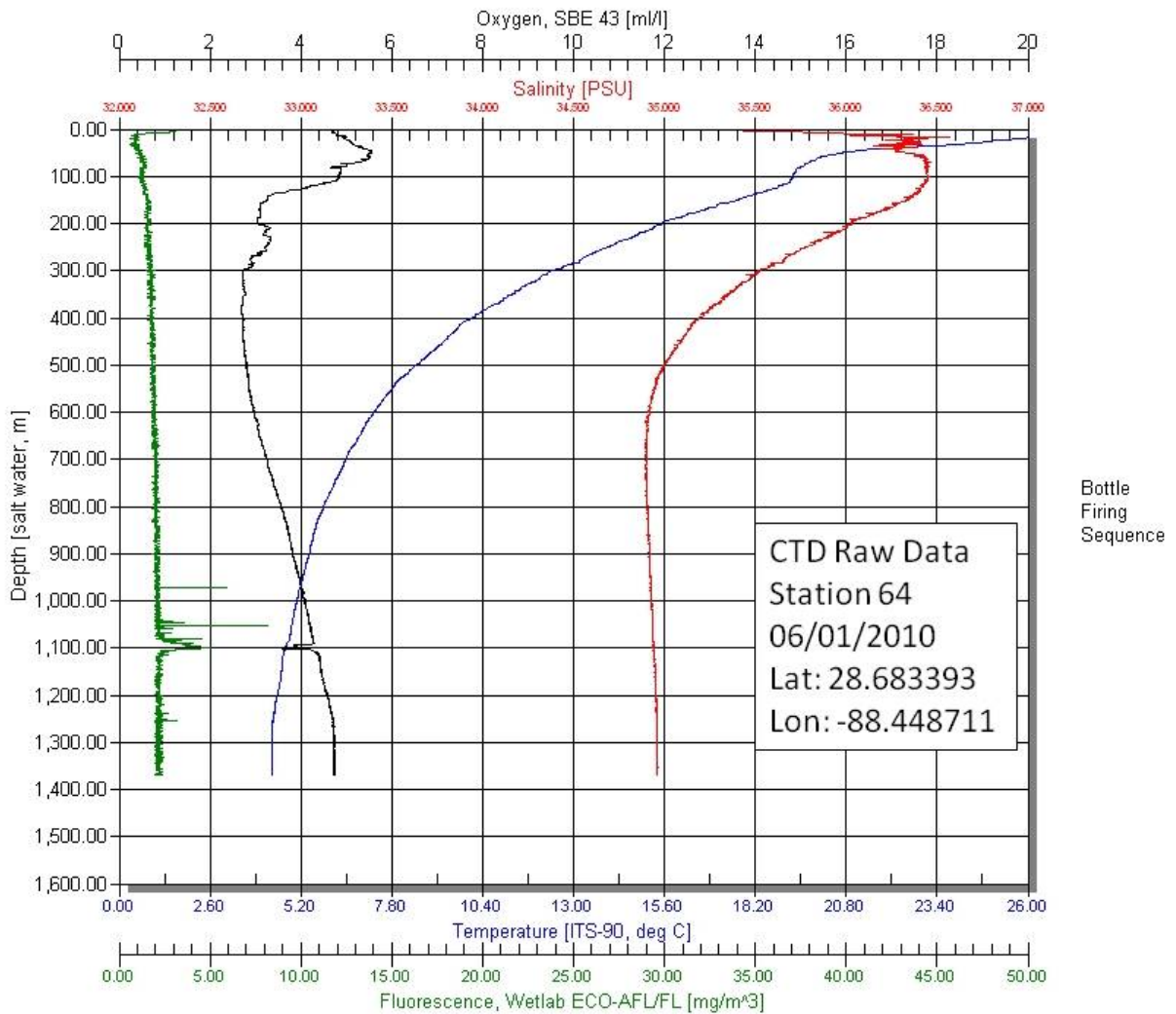
Conductivity, Temperature Depth (CTD) Sensor Information Station B62				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1400 meters 4593 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



Conductivity, Temperature Depth (CTD) Sensor Information Station B63				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	2 parts per <u>billion</u>	1350 meters 4430 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.6 ml/l	450 meters 1476 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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand



Conductivity, Temperature Depth (CTD) Sensor Information Station B64				
Measurement	Reference Point	Value from Station	Depth below sea level	Status
Hydrocarbon Concentration in Water Maximum Fluorometry Reading (Note #1)	29 parts per million	8 parts per billion	1050 meters 3445 feet	No Significant Hydrocarbon Exposure
Minimum Dissolved Oxygen ml/l (Note #2)	2 ml/l	2.8ml/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 0 to 26 degrees Centigrade (32 to 78.8 degrees Fahrenheit) Red Curve is Salinity on a scale of 32 to 37 parts per thousand