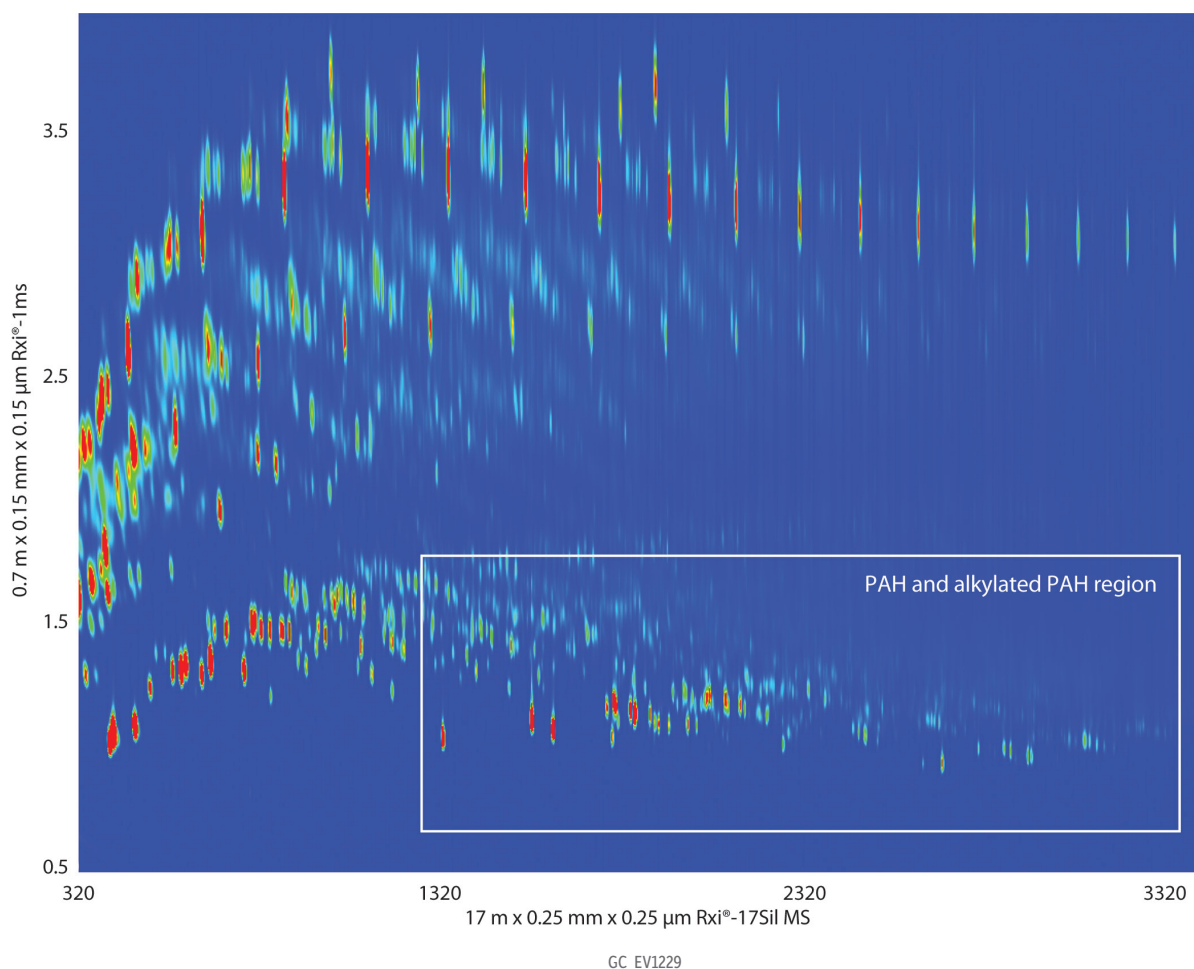


GCxGC Contour Plot of Riser Pipe Oil in 2010 Gulf Oil Spill (Rxi®-17Sil MS and Rxi®-1ms)



Column
 Rxi®-17Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 14123)
 Rxi®-1ms 1.2 m, 0.15 mm ID, 0.15 µm (cat.# 43800)

Sample
 Diluent: Methylene chloride

Injection
 Inj. Vol.: 1 µL splitless (hold 1 min)
 Liner: Premium 4mm Single Taper w/Wool (cat.# 23303.1)
 Inj. Temp.: 250 °C
 Purge Flow: 40 mL/min

Oven
 Oven Temp.: Rxi®-17Sil MS: 40 °C (hold 1 min) to 320 °C at 3.5 °C/min (hold 4 min)
 Rxi®-1ms: 45 °C (hold 1 min) to 325 °C at 3.5 °C/min (hold 4 min)

Carrier Gas: He, corrected constant flow (2.2 mL/min)

Modulation
 Modulator Temp. Offset: 20 °C
 Second Dimension
 Separation Time: 4 sec
 Hot Pulse Time: 1.4 sec
 Cool Time between Stages: 0.6 sec

Detector
 TOFMS
 Transfer Line Temp.: 300 °C
 Analyzer Type: TOF
 Source Temp.: 250 °C
 Electron Energy: 70 eV
 Mass Defect: 50 mu/100 u
 Solvent Delay Time: 5 min
 Tune Type: PFTBA
 Ionization Mode: EI
 Acquisition Range: 45-550 amu
 Spectral Acquisition Rate: 200 spectra/sec

Instrument
 LECO Pegasus 4D GCxGC-TOFMS
 Rxi®-1ms (cat.# 43800) is a 10 m column. A 1.2 m section was used as the second dimension column.

Notes
 Dr. Ed Overton, Professor Emeritus at Louisiana State University, for providing the riser pipe oil sample.

Acknowledgement