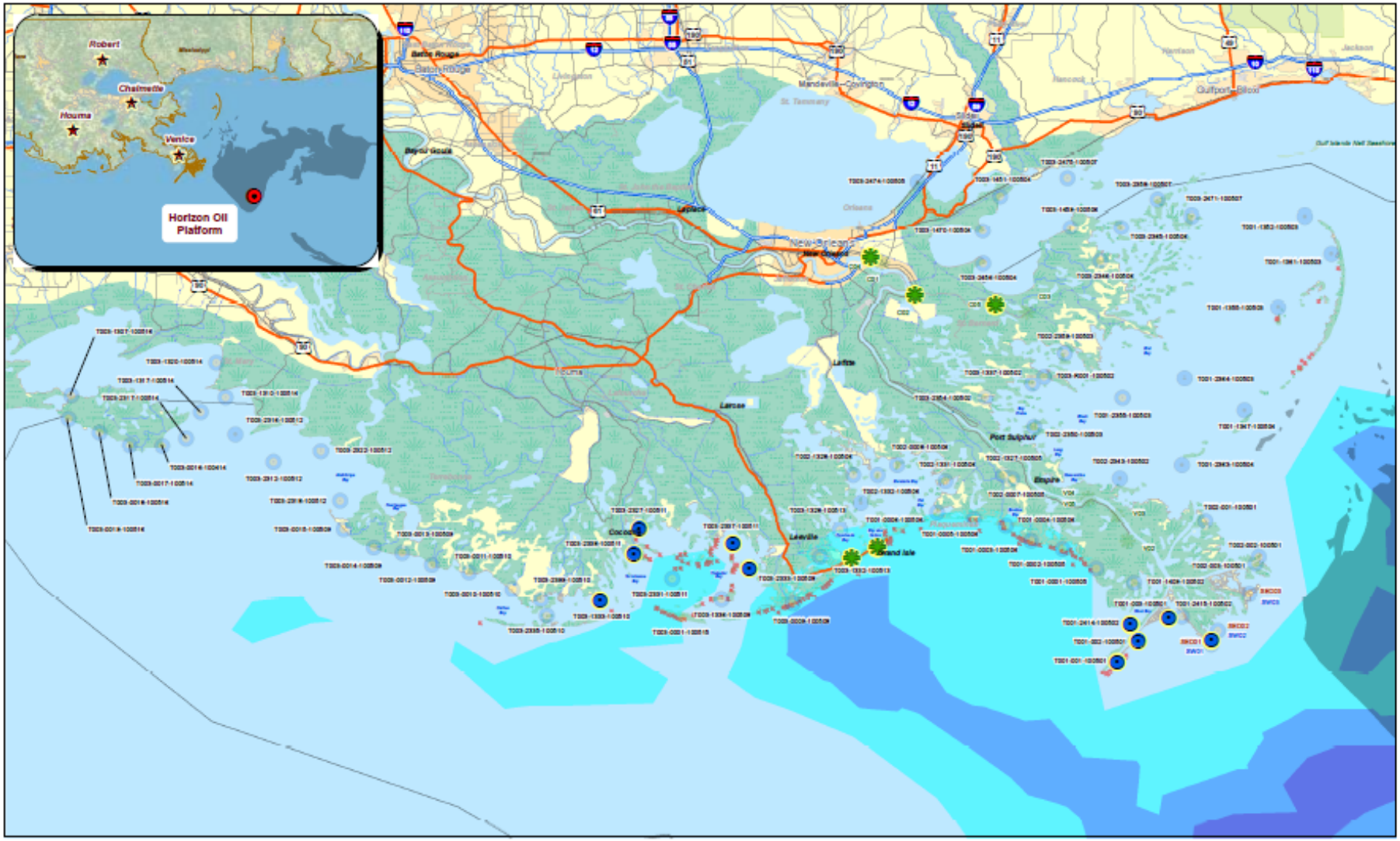
Summary of EPA's Sampling and Monitoring Activities Deepwater Horizon Incident

May 22, 2010

Data Reporting Period:
May 20, 2010 0000 – May 21, 2010 0000

6010847



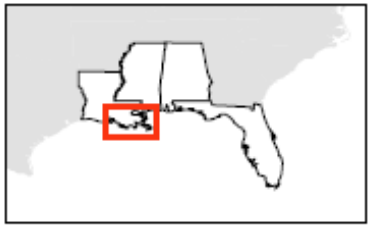
Legend

Air

Sediment

Surface Water

Latest sampling locations are highlighted



0 5 10 20

Miles

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

Latest Sampling Locations Map

Date Created:	UIC:	SCALE:
5/22/2010	R520	

Dispersant Application

	TOTALS for Reporting Period (gal.)	TOTALS to date (gal.)
Surface	28,892	633,908
Subsurface	14,400	87,572

Samples

	SUMMA Canisters	PQ200 (PM 2.5)	Water	Sediment	TOTALS for Reporting Period	TOTALS to date
Collected	8	6	13	0	27	581
Shipped	8	6	13	0	27	546

* Sample shipment delayed due to weekend (FedEx does not ship on Sunday); Samples collected on Saturday and Sunday will be shipped on Monday and reflected on that Sample Summary.

Water Sampling

View of EPA collecting water/mousse samples

Water Sampling

View of EPA collecting a mousse sample

Air Monitoring Data

	CO (ppm)	H2S (ppm)	OXYs (%)	PM10 (ug/m3)	VOCs (ppm)
C02	-	-	20.7375	30.5484	0.2917
C04	-	-	20.7125	19.3883	0.3500
C05	-	-	20.9000	14.9485	1.3038
V02	0.0808	0.1077	20.8154	16.5292	0.2346
V03	0.3808	0.1038	20.6423	26.6083	0.1923
V05	0.3038	0.1000	20.7923	31.5208	0.1000

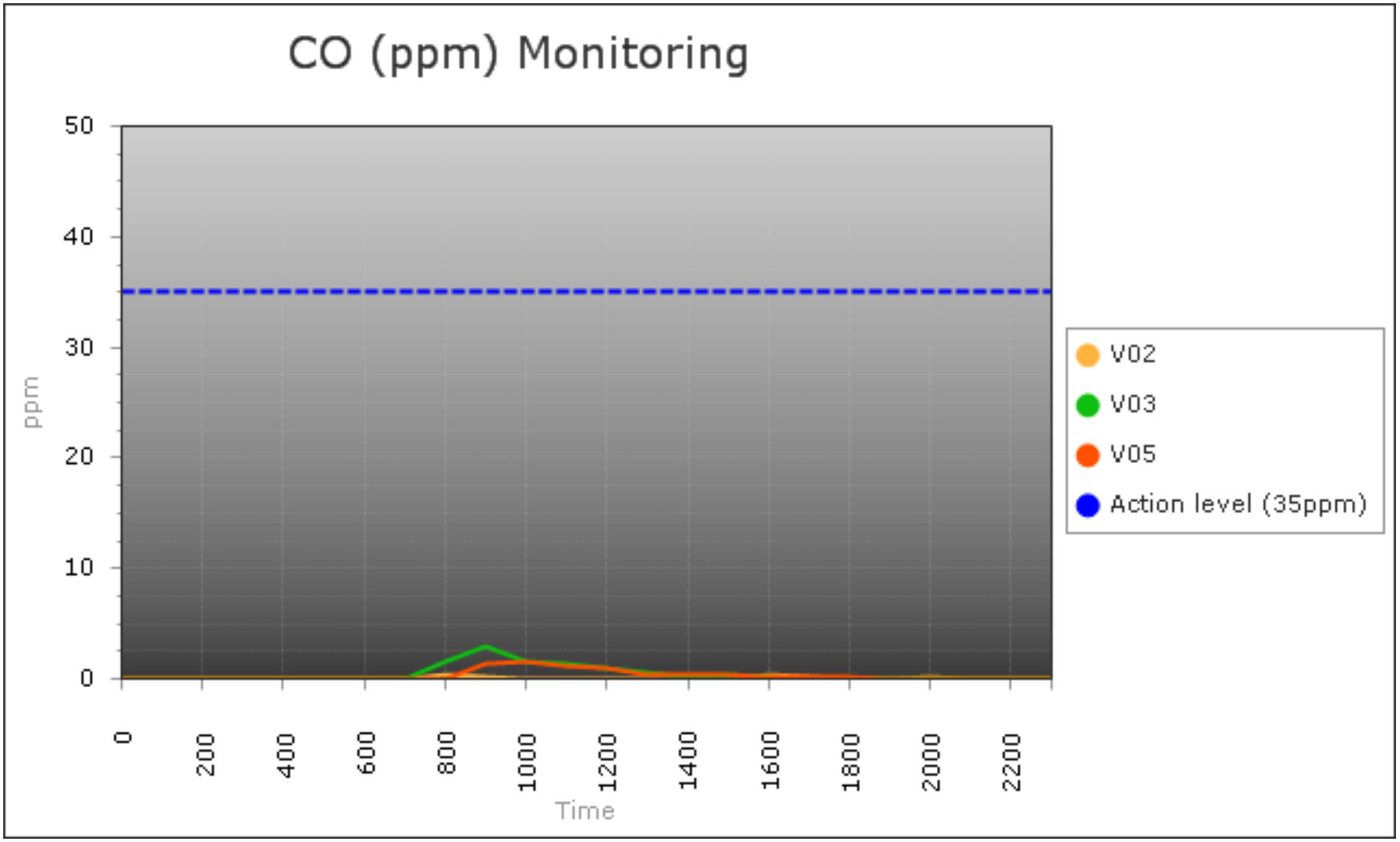
* Data shown above is a 24-hour average
"-" indicates no data collected

Action Levels:
VOCs = 10 ppm; OXY (Oxygen) = acceptable range 19.5-23.5%,
PM10 (particulates) = 150 ug/m3; H2S = 0.5 ppm; CO = 35 ppm
Note: Action Levels based on OSHA PEL (VOCs and OXY), ATSDR Risk-Based Exposure Levels (PM10), and NIOSH RELs (H2S and CO)

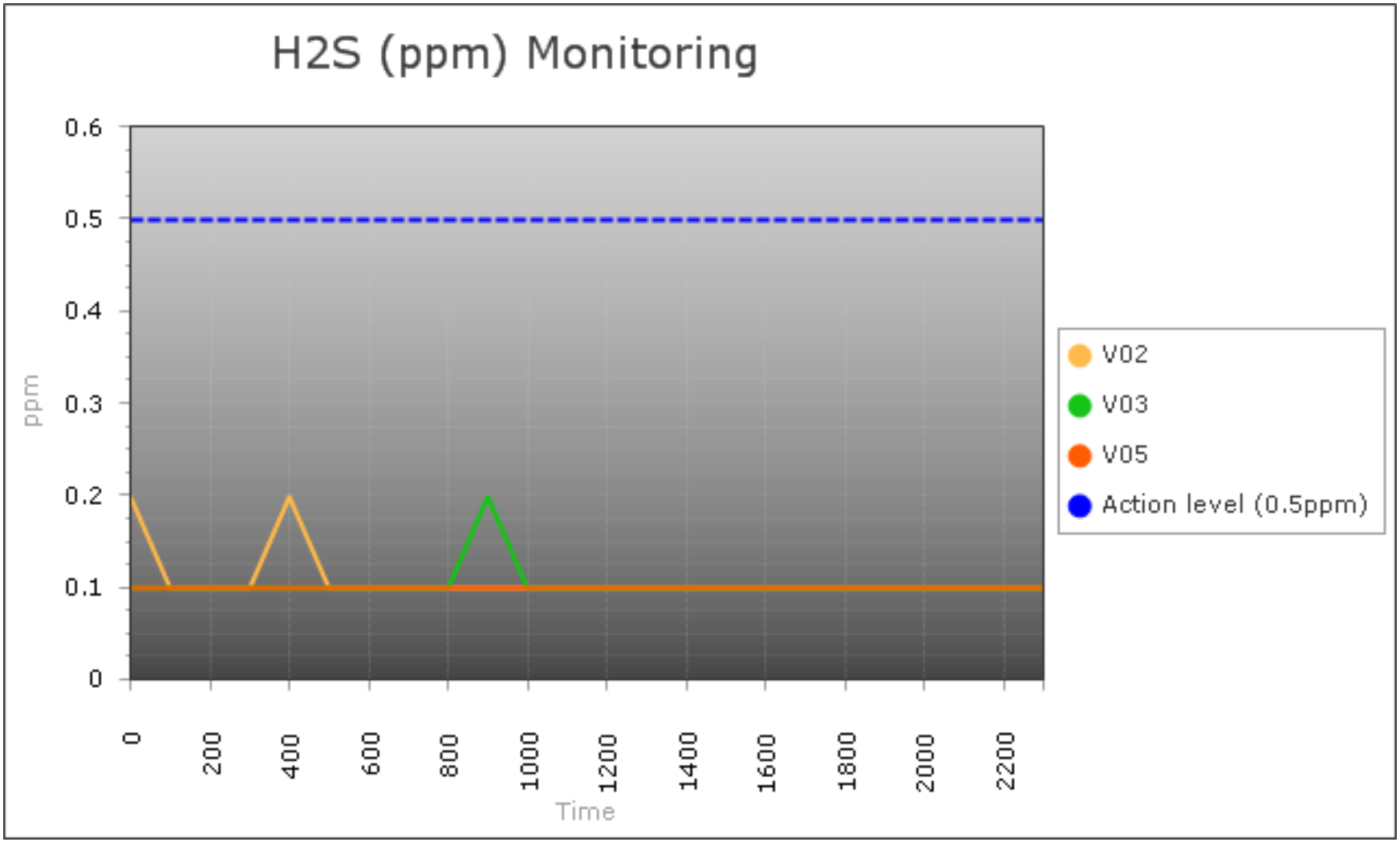
Air Monitoring/Sampling

Air monitoring/sampling equipment at Location CO4 in Chalmette, LA

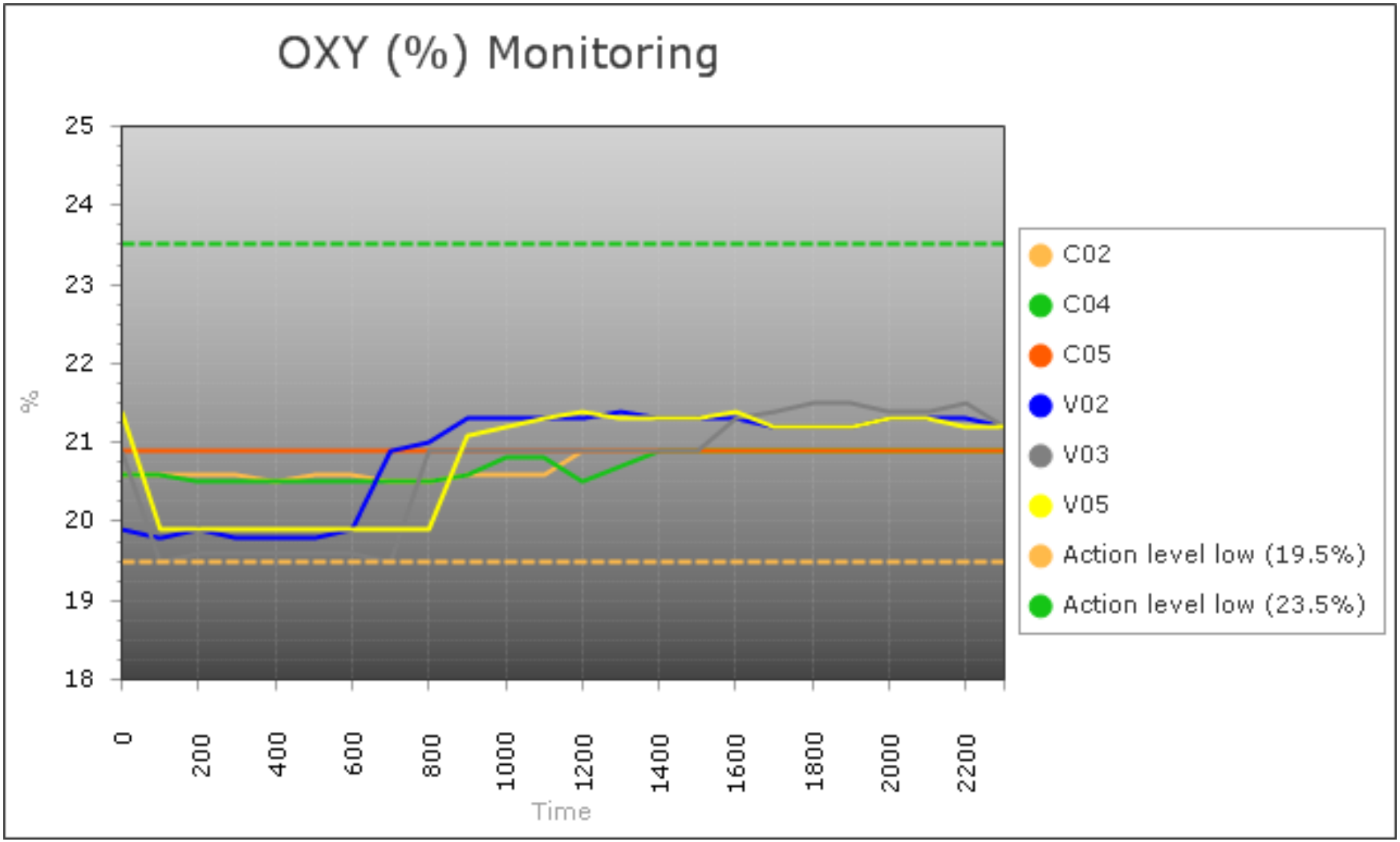
CO Monitoring



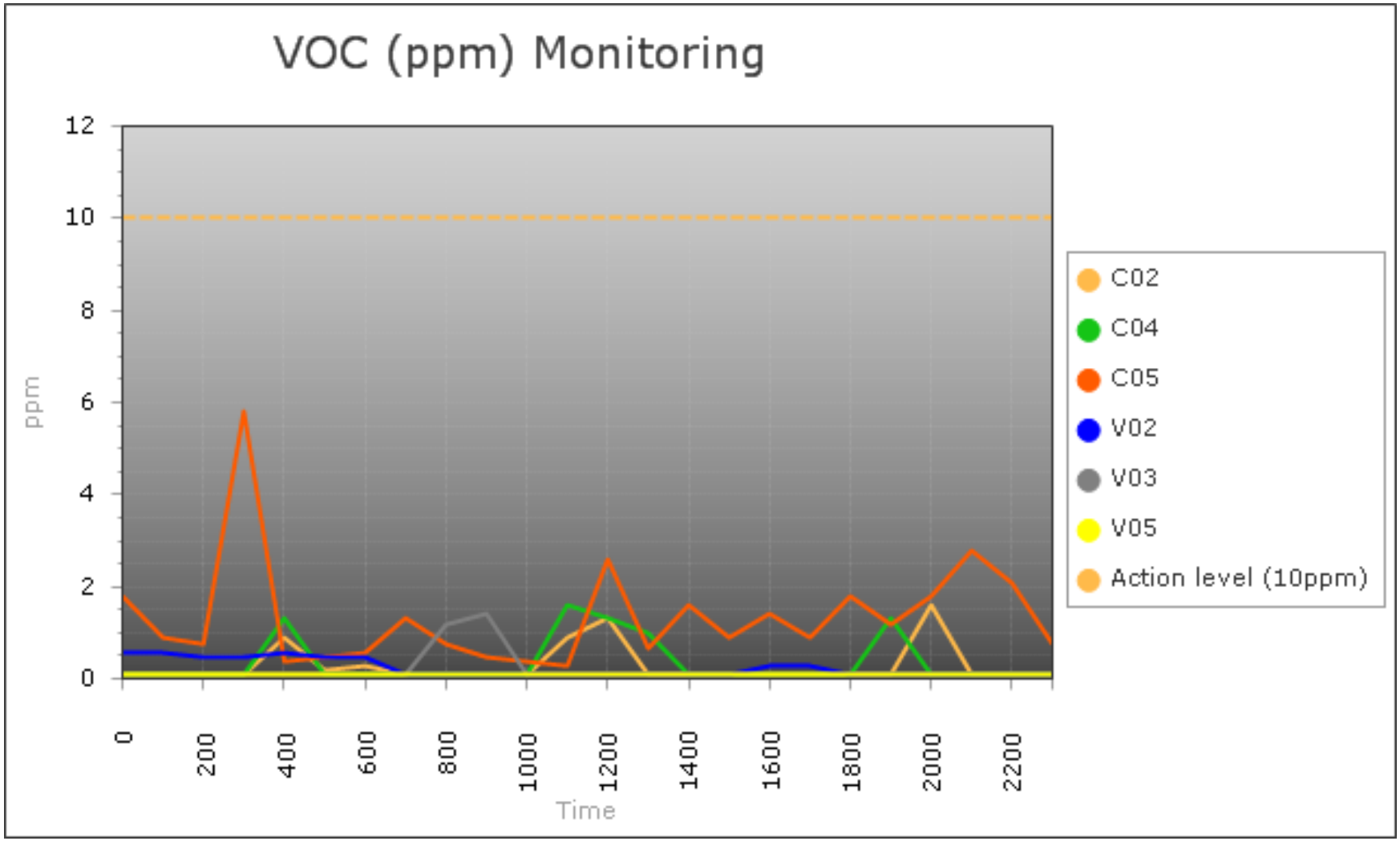
H_2S Monitoring



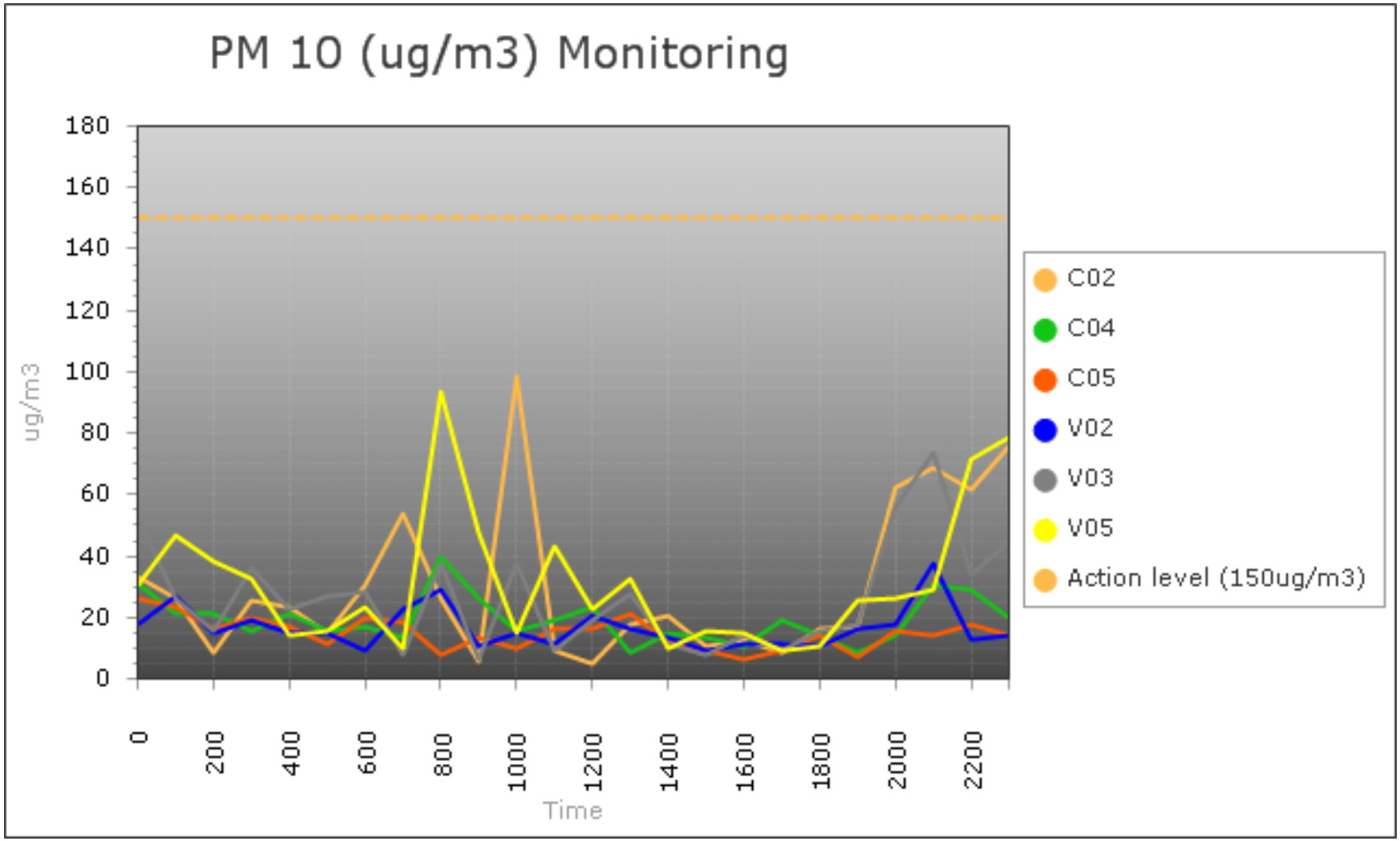
Oxygen Monitoring



VOC Monitoring



PM 10 Monitoring



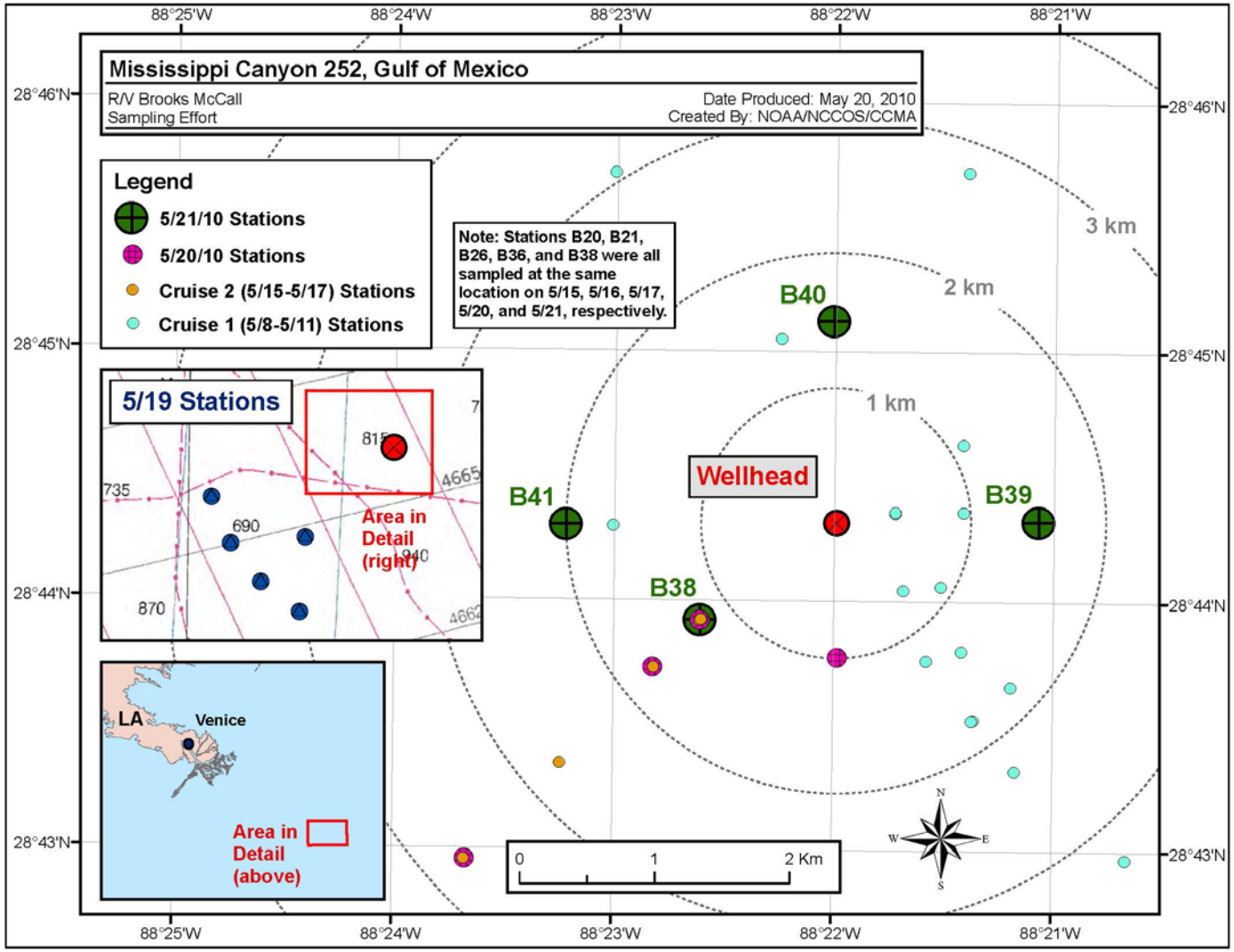
Action Level Exceedences

- There are no reported air monitoring exceedences for this reporting period.

Brooks McCall/Dispersant Summary

- Contrary to the previous days report “that the SW oriented deep plume was diminishing in size”, it now appears likely that it is still present and has only shifted to a more westerly orientation. Significant fluorescence was detected at Station B41 at a depth of 1100–1300 meters 1.5 kilometers from the wellhead.
- Dissolved oxygen values ranged between 2.7 and 7.1 mg/l. The use of the colorimetric method for dissolved oxygen analysis (LaMotte field kit) was resumed. DO values from all 3 onboard sources compared well with the historical DO profiles from the Gulf.
- Toxicity results were provided for 5/20/2010. Organisms were exposed to two samples, one at 300m with no fluorescence signal (B36D), and one in the middle of a deep dispersed oil plume (B 36J). No significant toxicity was found in the dispersed oil plume relative to lab controls.

Brooks McCall Sampling Effort



ASPECT Data

- ASPECT did not conduct flight operations on 5/21 because scheduled maintenance was conducted on the aircraft.

- ASPECT plans to begin flight operations on the morning of 5/22. The objectives for each flight are to collect data over oil burning operations and to photo document oiled areas.

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TAGA

- On 5/21, TAGA performed mobile monitoring for oil dispersant indicator compounds, OD-00 and OD-27, in Southern MS and AL from Stennis, MS to Dauphin Island, AL. All observed OD-00 and OD-27 indicator compounds were associated with a point source.

- TAGA plans to perform mobile monitoring for oil dispersant indicator compounds, OD-00 and OD-27, on 5/22 in Southern Louisiana.

ACTION PLAN
for
5/22/2010

- The Brooks McCall will return to port on 5/22
- Water Sampling planned for the Venice and Chalmette Water Operations
- TAGA will conduct mobile monitoring in southern LA
- ASPECT will begin flight operations on the morning of 5/22. The objectives for each flight are to collect data over oil burning operations and to photo document oiled areas.
- Air Samples will be collected from 6 locations