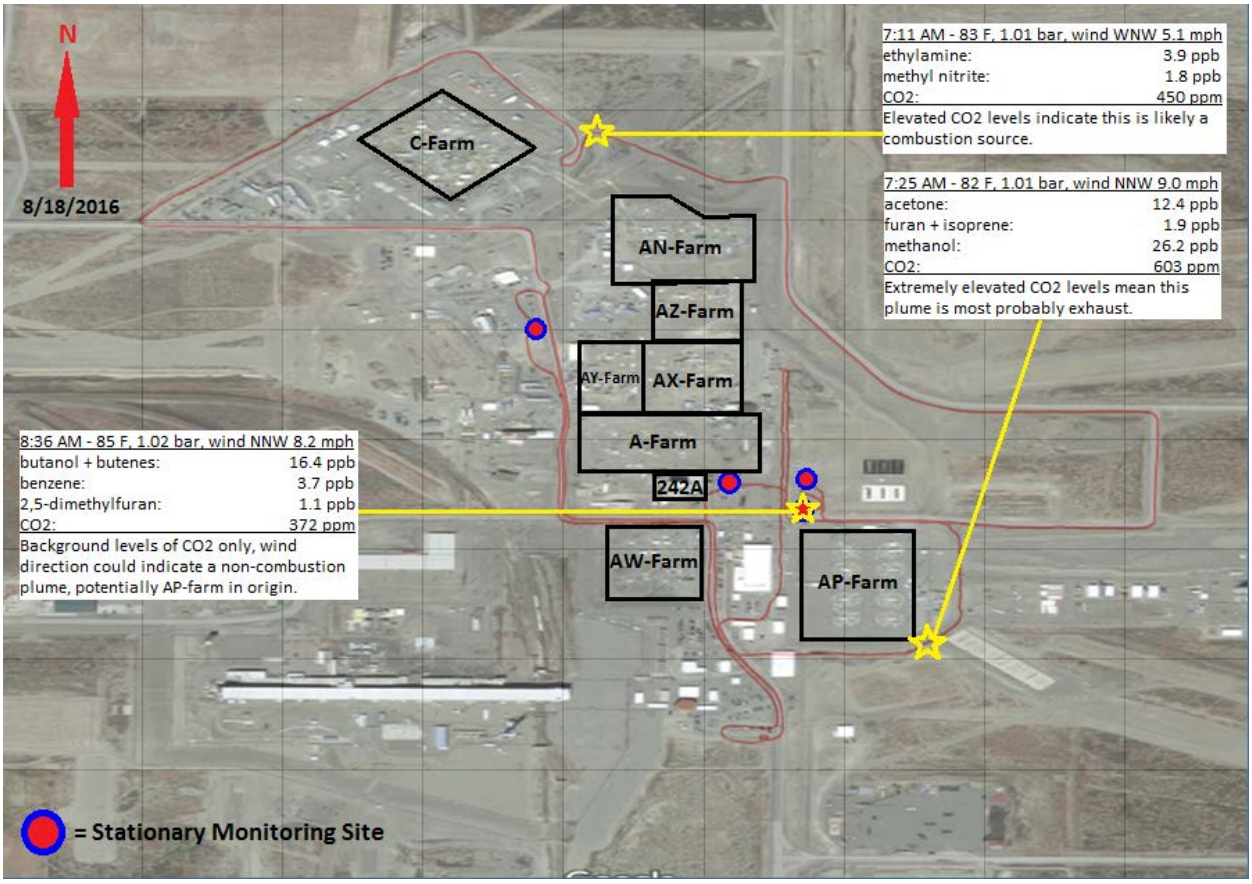
Mobile Lab Results from 8-18-16

The mobile laboratory was used to determine vapors at the Hanford tank farm while travelling through the Hanford tank farms and in specific stationary sites. Passing plumes were detected in travelling mode, while none were detected in the specific stationary locations. The results from 8-18-2016 indicate compounds that are typical of partial combustion products, rather than tank sources. In any case, all detected compounds are below the ***Occupational Exposure Limits (OEL)*** for each compound as shown in the table below. Vapor plumes detected were very short durations (less than 2 mins typically) and therefore will not challenge the constant levels of exposure needed to challenge the OEL. The levels detected are consequently well below any immediate effects but may be above odor thresholds. The chemical listing and their associate OELs can be found here:

..\..\..\References\Industrial Hygiene Chemical Vapor Technical Basis RPP-22491_-_Rev_1.pdf



Chemical	OEL	Maximum Concentration Detected
Benzene	0.5 ppm	0.0037 ppm
Acetone	250 ppm	0.004 ppm
Methanol	200 ppm	0.0262 ppm
Methyl Nitrite	0.1 ppm	0.0018 ppm
1-butanol/butene	20 ppm	0.0164 ppm

Ethylamine	5 ppm	0.0039ppb
2,5-Dimethyl Furan	0.001 ppm	0.0011 ppm[1]
Furan+ Isoprene	Furan: 0.001ppm	0.0019 ppm[2]
CO2	5000 ppm	499 ppm

[1] The passing plume had only a few minutes of concentration and therefore does not challenge the OEL.
[2] The passing plume had only a few minutes of concentration and therefore does not challenge the OEL.