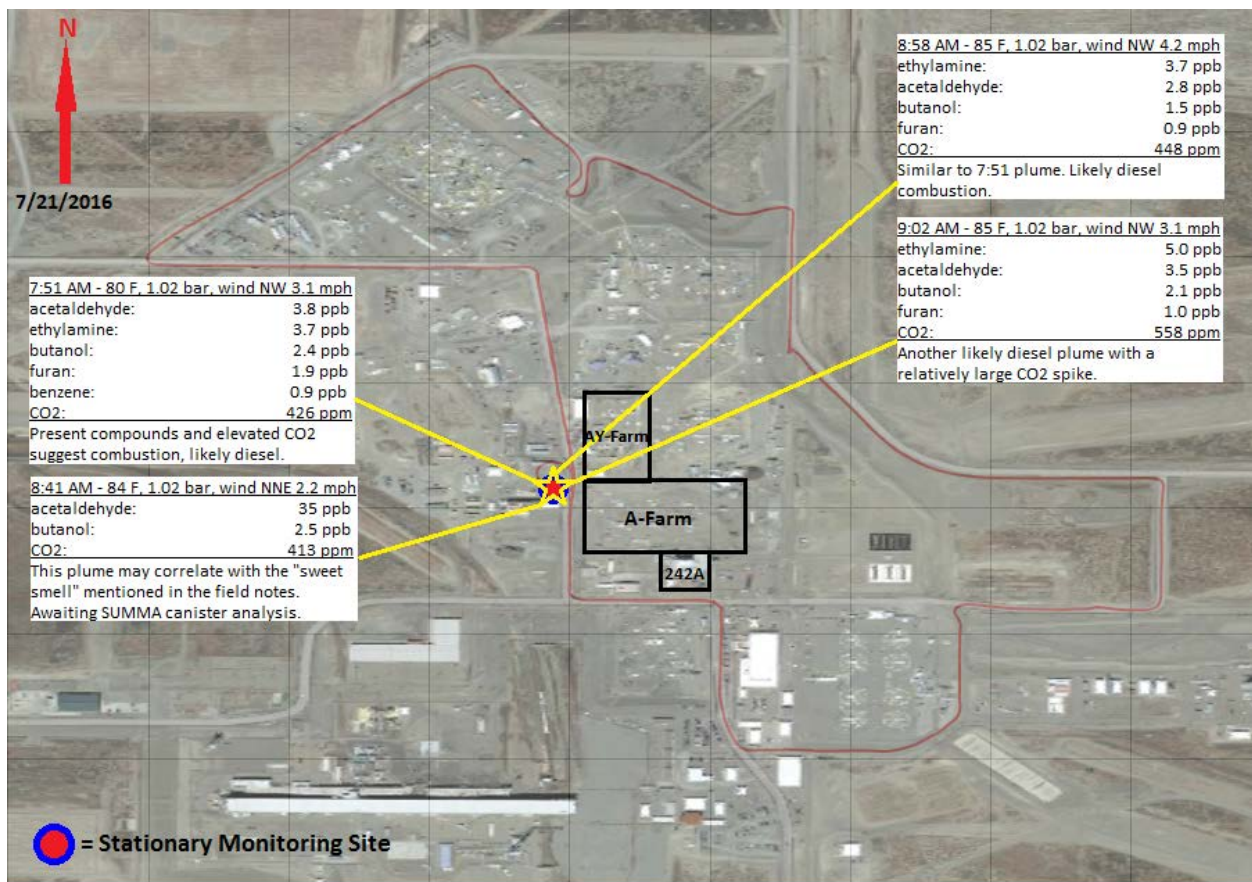


Mobile Lab Results from 7-21-16

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. The specific stationary sites was just west of **A Tank Farm**. The results from 7-21-2016 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 (<2 mins)
Furan + Isoprene (masses equivalent)	Furan: 0.001 ppm	0.0019 ppm ¹

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

Acetaldehyde	25 ppm (Ceiling Limit) ²	0.0038 ppm
Butanol	20 ppm	0.0025 ppm
Benzene	0.5 ppm	0.0009 ppm
Ethylamine	5 ppm	0.005 ppb
CO2	5000 ppm	558 ppm

² The ceiling limit is the concentration that should not be exceeded during any part of the working exposure.