TOC INCOMING LETTER OF TRANSMITTAL

Vendor/Company Name and Address:

Date:	Subcontract Release Number/Purchase Order:	Transmittal Number:	Project Number:	Project/Contract Title:
2/2/17	61485	003	GAL610132	PTR-MS Mobile Laboratory

Check the applicable designation:

Hard Copy Submittals:	Electronic Submittals:
[ ] Construction Subcontract	**[ ] Construction Subcontract**
Vendor is Off-Site: WRPS/Construction & Commissioning Document Control ATTN: CDC/Mail Stop S7-68/2704HV/B200K P.O. Box 850/Richland, WA 99352	^WRPS C&C Document Control
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[ ] All other Submittals	**[x] All other Submittals**
Vendor is Off-Site: c/o Mission Support Alliance, ATTN: Document Control Mail Stop H1-41/P.O. Box 950/Richland, WA 99352	^TOC Vendor
Vendor is On-Site: WRPS/Document Control/2750/D199/200E	** Electronic Transmittal: To establish a File Transfer Protocol (FTP) to send and receive vendor material electronically contact Information Resource Management (IRM) this can be used versus email.

Submittal Number	Submittal Description	Specification Number	Specification Paragraph Number	Copies E / H	TOC Document Number	Rev	Supplier Document Number	Supplier Rev
005	Weekly Report 1.2							00

E = Electronic H = Hardcopy ***No Electronic Media Will Come in Password Protected, See SOW/PO for Acceptable Formats**

Vendor/Company Representative: JJ Furlong *(Print First and Last Name)* _____ *(Signature)* 02/02/17 *(Date)*

DCC Receipt Acknowledgement: _____ *(Print First and Last Name)* _____ *(Signature)* _____ *(Date)*

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

WEEK 2 REPORT – LOCAL SOURCES AND ASSOCIATED GRAPHS

DECEMBER 22ND, 2016

Summary

Mobile lab operated between December 22nd 5:00 PM and December 23rd 5:00 AM. The mobile lab spent the majority of the day around the AP farm depending on the wind. Some time was spent near AY and some time was spent driving the greater west tank farm area. Emissions from HVAC systems were evident as well as generators. The PTR-TOF was offline for an hour with an unknown communication error. Field analyst submitted the behavior to the instrument manufacturer.

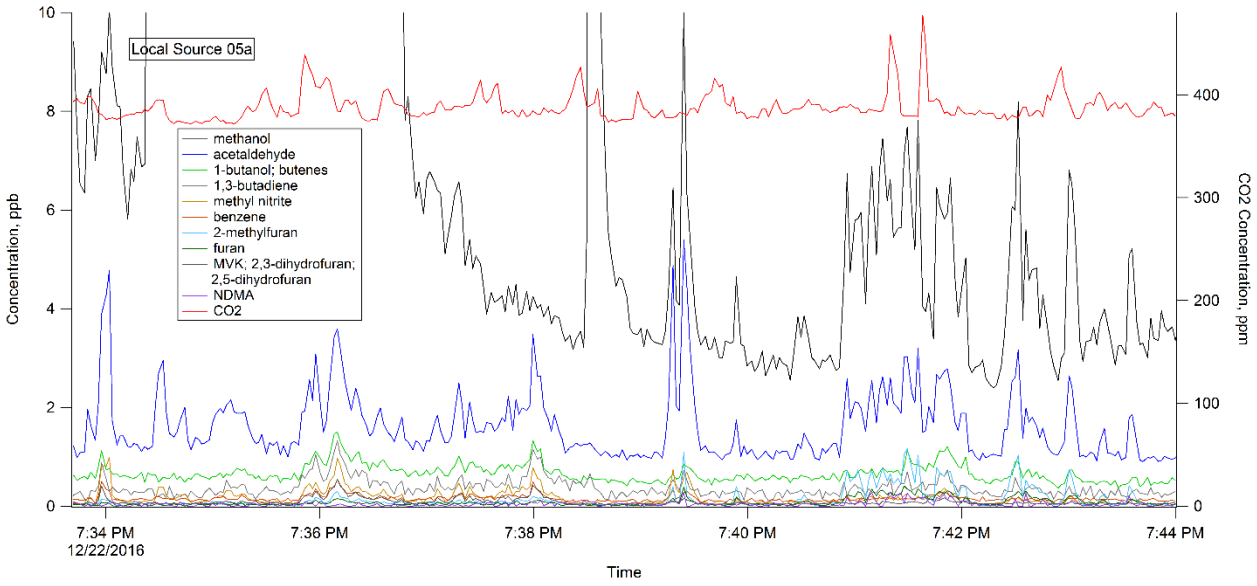
December 22nd Local Sources

LS05a, 12/22/16, 7:39:31 PM	1.01 bar, 29 F, wind SSW 2 mph	methanol: 98.1 ppb acetaldehyde: 5.4 ppb 1-butanol + butenes: 1.5 ppb 1,3-butadiene: 1.3 ppb methyl nitrite: 1 ppb benzene: 0.5 ppb 2-methylfuran: 1.2 ppb furan: 0.4 ppb MVK; 2,3-dihydrofuran; 2,5-dihydrofuran: 0.5 ppb NDMA: 0.3 ppb CO2: 497 ppm Mobile lab detected elevated levels of several compounds over about five minutes. Field notes indicate a proximity to a generator along the S fence line of AP farm.
LS05b, 12/22/16, 8:54:32 PM	1.01 bar, 28 F, wind SE 1.3 mph	methanol: 452 ppb CO2: 377 ppm Detected a source of methanol that exceeds OEL.

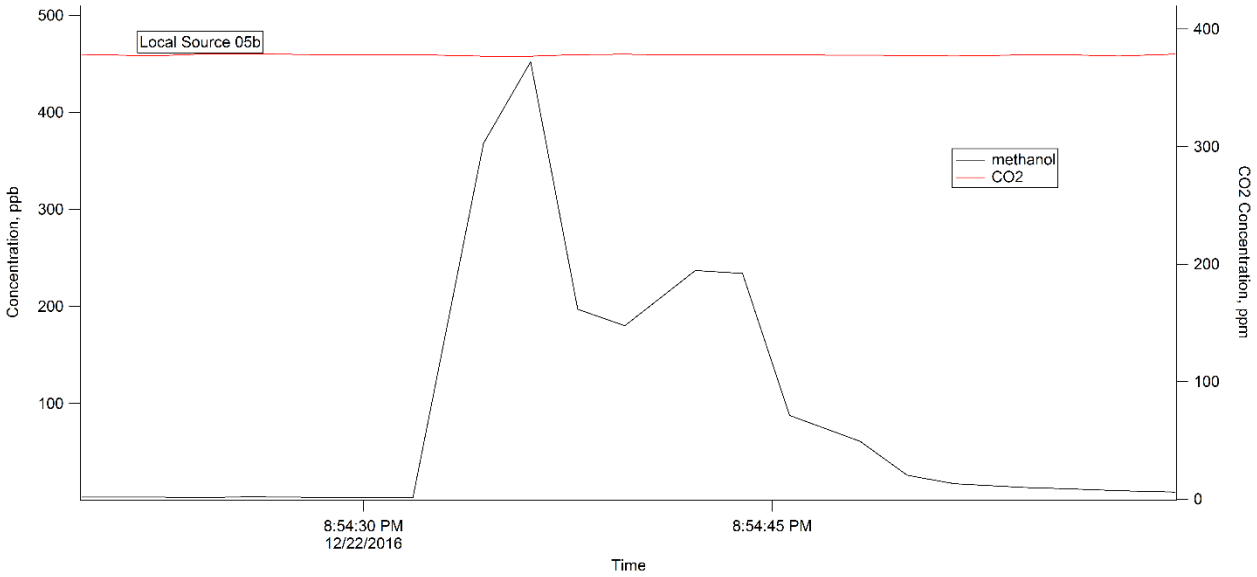
LS05c, 12/23/16, 3:23:05 AM	1.01 bar, 29 F, wind SE 3 mph	acetaldehyde: 8.36 ppb methanol: 5.38 ppb methyl nitrite: 2.0 ppb 1-butanol + butenes: 1.3 ppb 1,3-butadiene: 0.8 ppb benzene: 0.8 ppb CO2: 392 ppm Detected a series of short spikes of various compounds over the span of 90 seconds. A correlating rise in CO2 could indicate that this source is combustion exhaust.

December 22nd Graphs

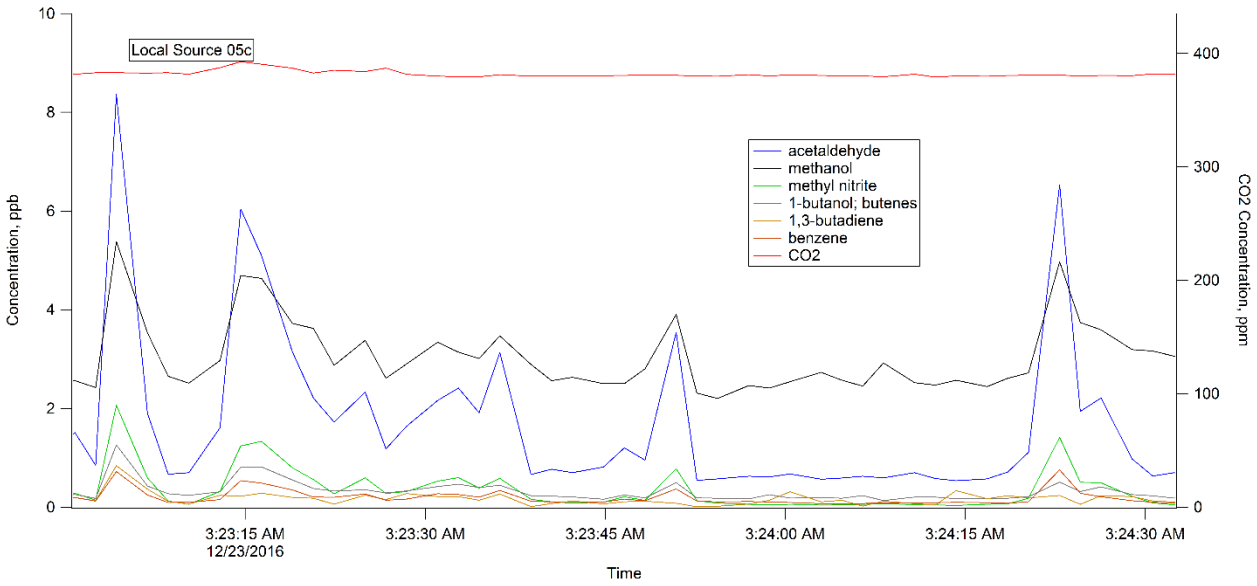
LS05a



LS05b



LS05c



December 22nd Maps

200E

DECEMBER 26, 2016

Summary

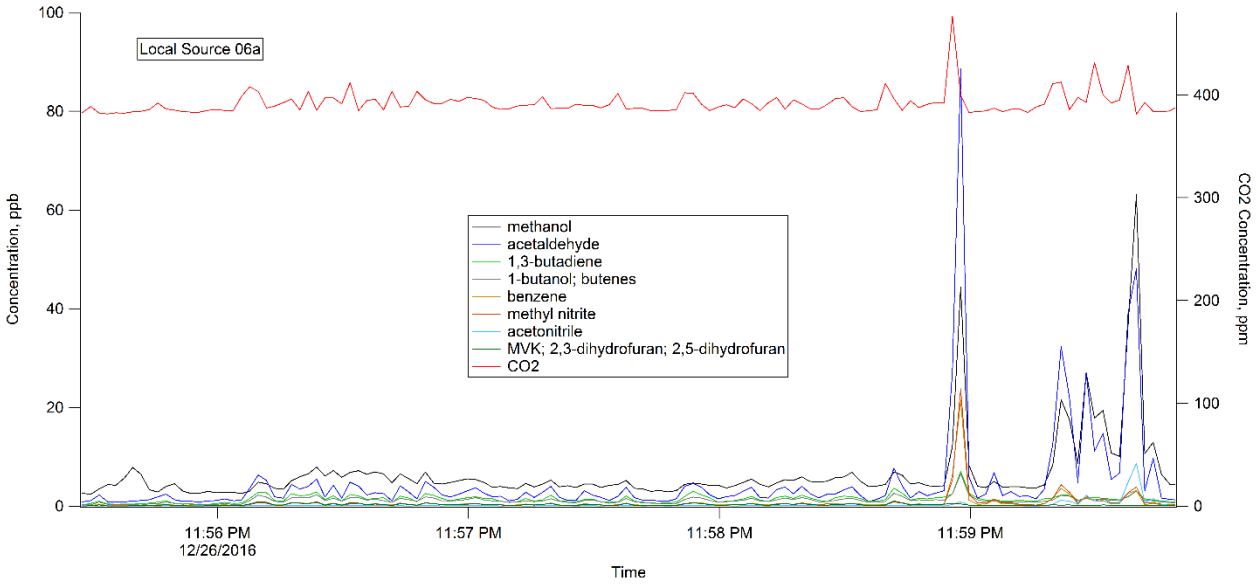
Mobile lab operated between December 26th 5:00 PM and December 27th 5:00 AM. The mobile lab spent the majority of the day around the AP and AY stacks, relocating to keep downwind. The PTR-TOF was offline for an hour with an unknown communication error similar to the previous day. Awaiting comment from instrument manufacturer concerning the cause.

December 26th, 2016 Local Sources

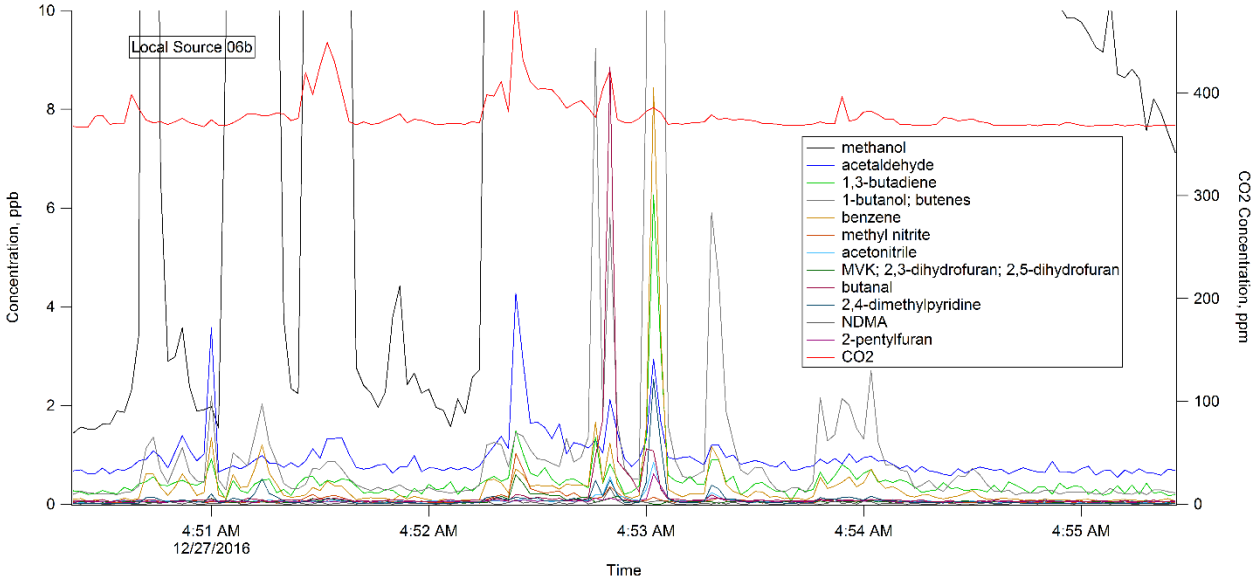
LS06a, 12/26/16, 11:56:09 PM	1.02 bar, 30 F, wind ESE 10 mph	methanol: 63.1 ppb acetaldehyde: 88.5 ppb 1,3-butadiene: 7.0 ppb 1-butanol + butenes: 6.6 ppb benzene: 21.4 ppb methyl nitrite: 23.8 ppb acetonitrile: 0.8 ppb MVK + 2,3-dihydrofuran + 2,5-dihydrofuran: 1.0 ppb CO2: 476 ppm Detected an elevated background of several compounds followed by several short spikes, accompanied by rises in CO2. The signal for MVK + 2,3-dihydrofuran + 2,5-dihydrofuran exceeded OEL.
LS06b, 12/27/16, 4:51:00 AM	1.01 bar, 40 F, wind NNE 12 mph	methanol: 975.7 ppb acetaldehyde: 4.3 ppb 1,3-butadiene: 6.3 ppb 1-butanol; butenes: 48.5 ppb benzene: 8.4 ppb methyl nitrite: 1.0 ppb acetonitrile: 0.8 ppb MVK; 2,3-dihydrofuran; 2,5-dihydrofuran: 0.6 ppb butanal: 8.8 ppb 2,4-dimethylpyridine: 0.5 ppb NDMA: 0.3 ppb 2-pentylfuran: 0.6 ppb CO2: 491 ppm T This source was observed while refueling at a gas station in Pasco. The signals for methanol and NDMA exceed OEL.

December 26th Graphs

LS06a



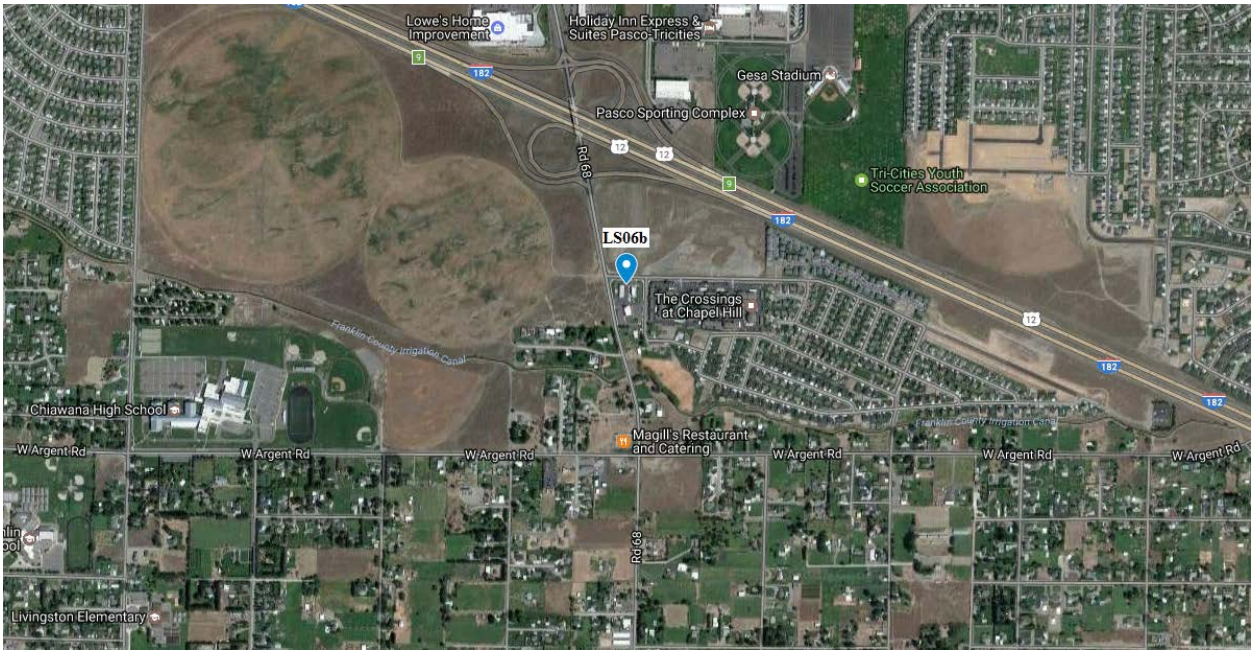
LS06b



December 26th Maps

200E

Town



DECEMBER 27TH, 2016

Summary

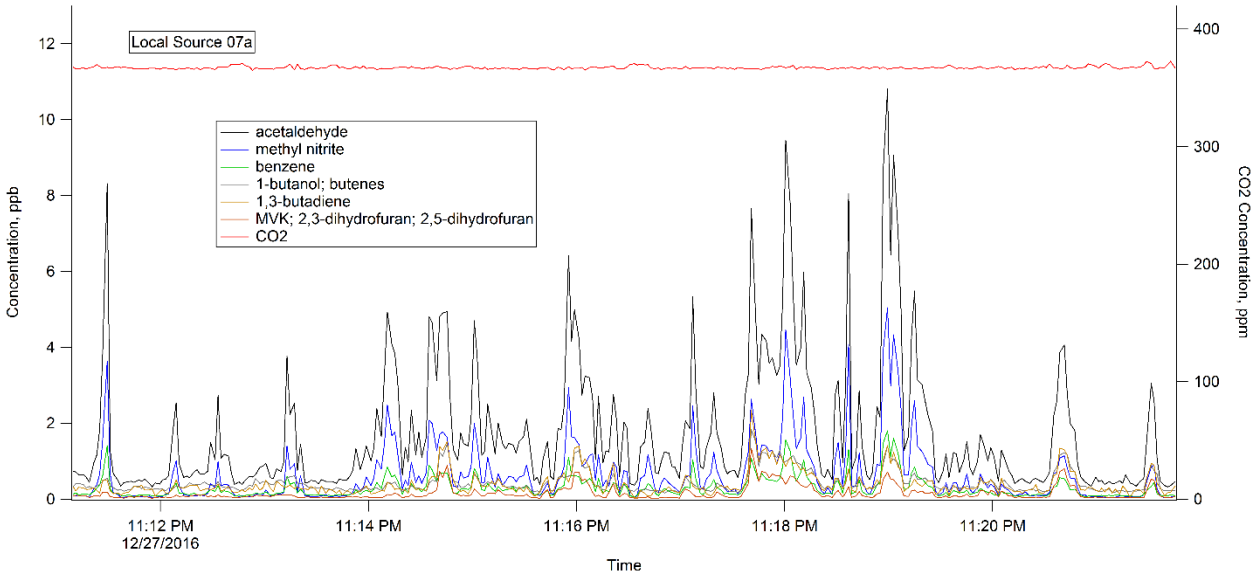
Mobile lab operated between December 27th 5:00 PM and December 28th 5:00 AM. AY-102 waste retrieval began around 7:30 PM. The mobile lab spent the majority of the time sampling downwind of AP stacks and less time around AY.

December 27th Local Sources

LS07a, 12/27/16, 11:11:38 PM	1.02 bar, 36 F, wind SSE 5 mph	acetaldehyde: 10.8 ppb methyl nitrite: 5.0 ppb benzene: 1.8 ppb 1-butanol; butenes: 1.8 ppb 1,3-butadiene: 2.3 ppb MVK; 2,3-dihydrofuran; 2,5-dihydrofuran: 1.3 ppb CO2: 370 ppm Detected a series of spikes along several compounds over the course of around 15 minutes. The signal for MVK + 2,3-dihydrofuran + 2,5-dihydrofuran exceeded OEL.

December 27th Graphs

LS07a



December 27th Maps

200E

DECEMBER 28TH, 2016

Summary

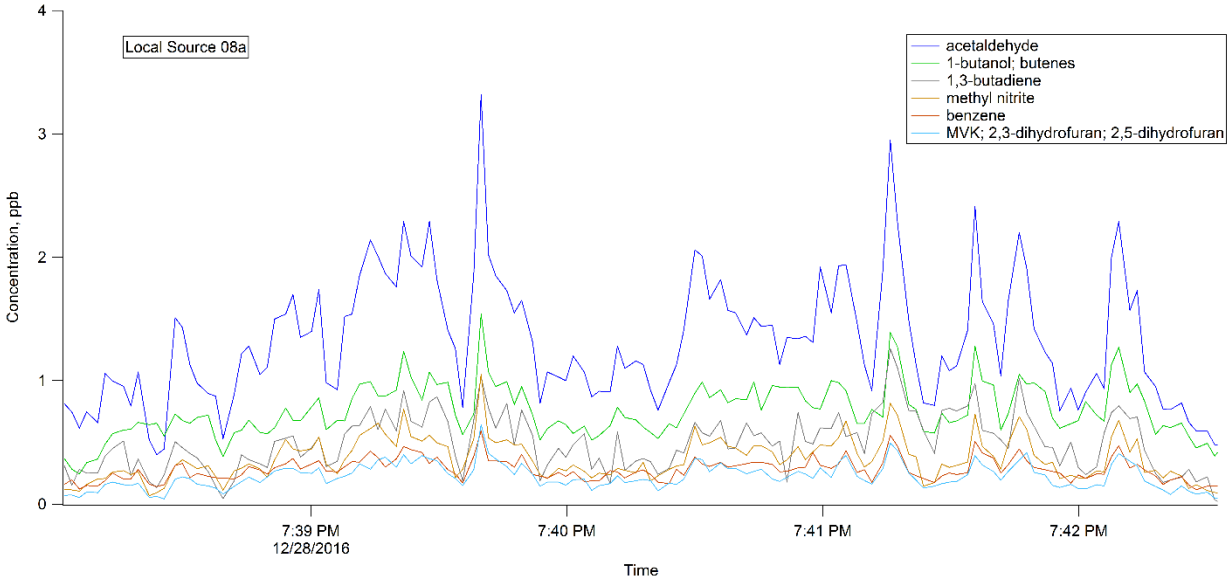
Mobile lab operated between December 28th 5:00 PM and December 29th 5:00 AM. AY-102 waste retrieval began around 7:00 PM. The mobile lab spent the majority of the time sampling downwind of AP or AY stacks depending on the wind. No CO2 data was collected for this day (CAPA #1665)

December 28th Local Sources

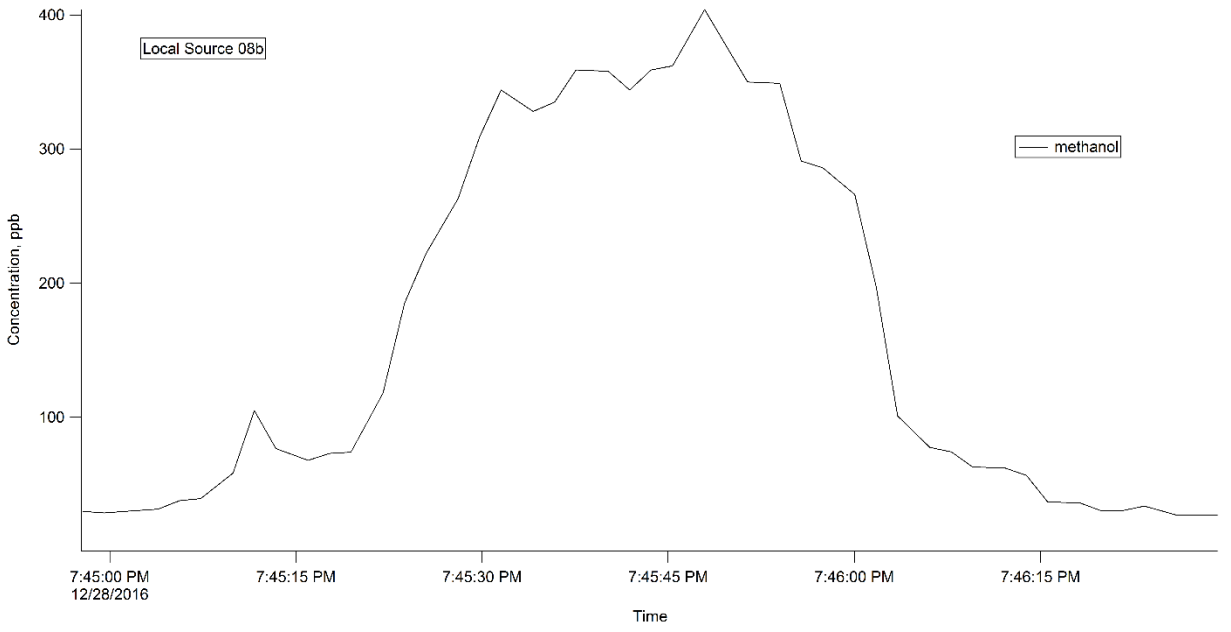
LS08a, 12/28/16, 7:39:39 PM	1.03 bar, 33 F, wind SSE 1 mph	acetaldehyde: 3.3 ppb 1-butanol; butenes: 1.5 ppb 1,3-butadiene: 1.3 ppb methyl nitrite: 1.0 ppb benzene: 0.6 ppb MVK; 2,3-dihydrofuran; 2,5-dihydrofuran: 0.6 ppb CO2 data unavailable for 12/28/16. Detected a rise in several compounds over the course of around 4 minutes. The signal for MVK + 2,3-dihydrofuran + 2,5-dihydrofuran exceeded OEL.
LS08b, 12/28/16, 7:45:12 PM	1.03 bar, 32 F, wind SSE 1 mph	methanol: 404 ppb CO2 data unavailable for 12/28/16. Detected a spike in methanol that spanned around one minute. The signal for methanol exceeded OEL.

December 28th Graphs

LS08a



LS08b



December 28th Maps

200E