



# Houston Forensic Science Center

Comparative and Analytical Division - Toxicology

## Headspace GC Maintenance Log

Instrument: Headspace 2

Date	N <sub>2</sub> Tank Pressure	H <sub>2</sub> Tank Pressure	Air Tank Pressure	He Tank Pressure	Air Control	SS	Comments	Signature
					Pass/Fail	Pass/Fail		
9/24/18	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	updated master method with RTs of verification calibrators for both columns. See audit trail.	<del>    </del>
9/27/18	70 4w	70 22w	70 15w	70 260	Pass	Pass	Changed Helium & Hydrogen tanks.	ARL
<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>		
<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>		
<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>	<del>    </del>		

Form Complete Date/Signature: Bruce Mauldin 10/1/2018

BAM  
10/1/2018

Method Audit Trail

Operator : SYSTEM  
Date : 5/9/2016 3:46:13 PM  
Change Info: This method was created at 5/9/2016 3:46:13 PM and based on  
method C:\CHEM32\1\METHODS\ag\_baa CLR4.M

Operator : SYSTEM  
Date : 5/9/2016 3:46:20 PM  
Change Info: Method saved. User comment: "Renamed "

Operator : SYSTEM  
Date : 5/9/2016 3:47:16 PM  
Change Info: Method saved. User comment: "Renamed "ag\_baa CLR4.M" to  
"Volatiles.M". No changes were made to acquisition or data  
analysis parameters. CLR"

Operator : SYSTEM  
Date : 5/10/2016 8:31:27 AM  
Change Info: Method saved. User comment: "Updated noise ranges for FID2,  
recalculating with Performance + Noise report. CLR"

Operator : Admin  
Date : 5/17/2016 5:02:52 PM  
Change Info: Method saved. User comment: "Updated data file path to D: drive.  
CLR"

Operator : Admin  
Date : 5/17/2016 5:03:44 PM  
Change Info: Method saved. User comment: "VOLATILES.M method approved for  
analysis of casework on May 17, 2016. CLR"

Operator : Admin  
Date : 5/19/2016 11:40:03 AM  
Change Info: Method saved. User comment: "FID signal names changed from FID1A  
to FID1 and from FID2B to FID2 to better reflect column  
configuration (BAC1 and BAC2). Timestamp was added to report file  
names. Acetaldehyde was removed from calibration table because  
this analyte has not been subject to the full qualitative  
validation procedure, as described in Toxicology Analytical Manual  
v.2.4. CLR"

Operator : Melissa Lloyd  
Date : 5/19/2016 12:36:36 PM  
Change Info: Method saved. User comment: "Updated method to abort when dynamic  
leak test fails, when a vial is missing, or when the vial is of  
the wrong size. CLR"

Operator : Admin  
Date : 5/20/2016 9:06:53 AM  
Change Info: Method saved. User comment: "Changed pressurization gas to  
Nitrogen to reflect what the instrument was using.-AAJ"

Operator : Admin  
Date : 5/20/2016 10:27:26 AM  
Change Info: Method saved. User comment: "Changed Vial Standby Flow from 2.000



method: C:\Chem32\1\Methods\VOLATILES.M  
Modified on: 9/24/2018 at 3:37:16 PM  
to 20.000 on headspace part of instrument in Configuration.-AAJ"

Operator : Admin  
Date : 5/20/2016 12:57:26 PM  
Change Info: Method saved. User comment: "FID signal names changed back to FID1A and FID2B to reflect the imbedded detector name.-AAJ"

Operator : Ashley Ann Johnson, M.S.  
Date : 5/24/2016 12:01:20 PM  
Change Info: Method saved. User comment: "Headspace keyboard lock had been turned OFF during service visit on 5/20/16; keyboard lock turned ON. FID1A signal-specific integration event table restored. These parameters are now consistent with validated method. CLR"

Operator : Corissa L. Rodgers, M.S.  
Date : 6/9/2016 8:23:31 AM  
Change Info: Method saved. User comment: "Area reject reduced to 3.4 area counts on FID1A and 3.6 area counts on FID2B (area counts equal to 10% of the LOQ from the validation) to monitor potential isopropanol interference. -CLR"

Operator : SYSTEM  
Date : 6/30/2016 4:30:14 PM  
Change Info: Method saved. User comment: "Updated description of method to include copying from HS3 to HS2. CLR"

Operator : SYSTEM  
Date : 6/30/2016 5:03:01 PM  
Change Info: Data analysis parameters were copied from the sequence method 'C:\Chem32\1\Data\20160630\_TEST\20160630\_TEST 2016-06-30 16-33-15\VOLATILES.M'.

Operator : SYSTEM  
Date : 6/30/2016 5:03:12 PM  
Change Info: Data analysis parameters were copied from the sequence method 'C:\Chem32\1\Data\20160630\_TEST\20160630\_TEST 2016-06-30 16-33-15\VOLATILES.M'.

Operator : SYSTEM  
Date : 7/6/2016 2:56:09 PM  
Change Info: Method saved. User comment: "Removed signal-specific area reject criteria. This threshold will be calculated from data generated during validation, and the parameter will be revised when validation is complete. CLR"

Operator : SYSTEM  
Date : 7/20/2016 10:05:34 AM  
Change Info: Method saved. User comment: "Updated HFSC Volatile Report Template-AAJ"

Operator : SYSTEM  
Date : 8/11/2016 9:07:56 AM  
Change Info: Method saved. User comment: "Updated ISTD# values in calibration table, area reject criteria for both FIDs, and added casework approval information to method description. CLR"

Operator : SYSTEM  
Date : 9/30/2016 2:42:04 PM  
Change Info: Method saved. User comment: "Added liner information.-AAJ"



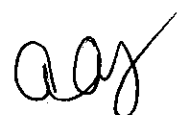
method: C:\Chem32\1\Methods\VOLATILES.M  
Modified on: 9/24/2018 at 3:37:16 PM  
Operator : Corissa L. Rodgers, M.S.  
Date : 12/13/2016 1:26:49 PM  
Change Info: Method saved. User comment: "Updated relative reference window for retention time from 5% to 1%. Report template was also revised. CLR"

Operator : Corissa L. Rodgers, M.S.  
Date : 12/14/2016 12:38:28 PM  
Change Info: Method saved. User comment: "Updated default RT windows for retention time from 1% to 2%. CLR"

Operator : Corissa L. Rodgers, M.S.  
Date : 12/15/2016 4:15:53 PM  
Change Info: Method saved. User comment: "Updated calibration table with average retention times (RTs) after column 1 was changed. These RTs were verified in batch 20161214\_CLR."

Operator : Corissa L. Rodgers, M.S.  
Date : 7/10/2018 4:34:26 PM  
Change Info: Method saved. User comment: "Updated retention times for FID2 with average RTs of calibrators in verification run ALC\_20180710\_CLR2."

Operator : Ashley Ann Johnson, M.S.  
Date : 9/24/2018 3:37:16 PM  
Change Info: Method saved. User comment: "Updated retention times for FID1 with average RTs of calibrators in verification run ALC\_20180816\_AAJ2 and FID2 with average RTs of calibrators in verification run ALC\_20180831\_AAJ."



-----  
SEQUENCE PARAMETERS  
-----

Sequence : C:\CHEM32\1\SEQUENCE\2018\09\_SEPTMBER\ALC\_20180927\_TEST.S  
Operator : Andrea Gooden, M.S.  
Data File Naming : Auto  
Data Directory : C:\Chem32\1\Data\  
Data Subdirectory : ALC\_20180927\_TEST  
Barcode Reader : not used  
Shutdown Cmd/Macro : macro "shutdowncm.mac",go  
Sequence Comment : I.S. Lot: 180821-IS Pipette: Hamilton 1742  
Part of Methods to run: According to Runtime Checklist  
Update Master Method (Data Analysis parameters): No

SEQUENCE TABLE:  
=====

Line : 1F  
Location : 1  
Sample Information :  
Sample Name : Air Control  
Method Name : VOLATILES  
Sample Type : Sample  
-----

=====

Line : 2F  
Location : 2  
Sample Information :  
Sample Name : Air Control  
Method Name : VOLATILES  
Sample Type : Sample  
-----

=====

Line : 3F  
Location : 3  
Sample Information : Lot: FN03251502  
Sample Name : SS  
Method Name : VOLATILES  
Sample Type : Sample  
-----

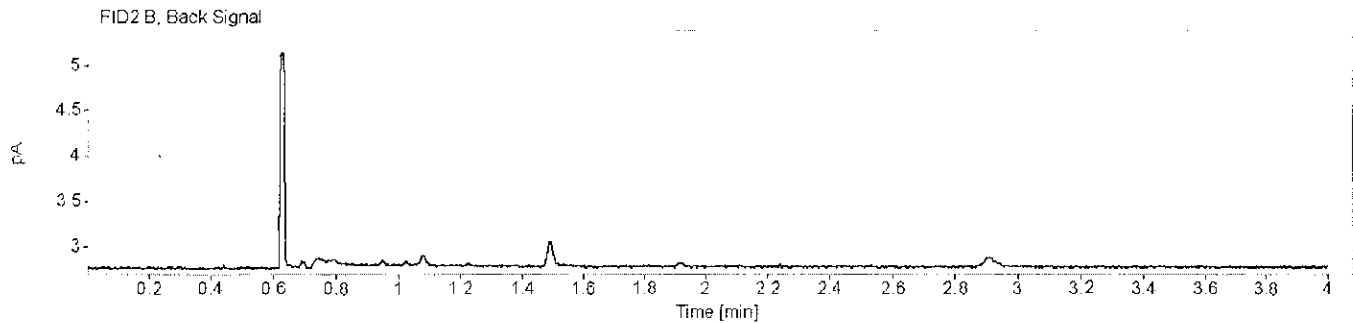
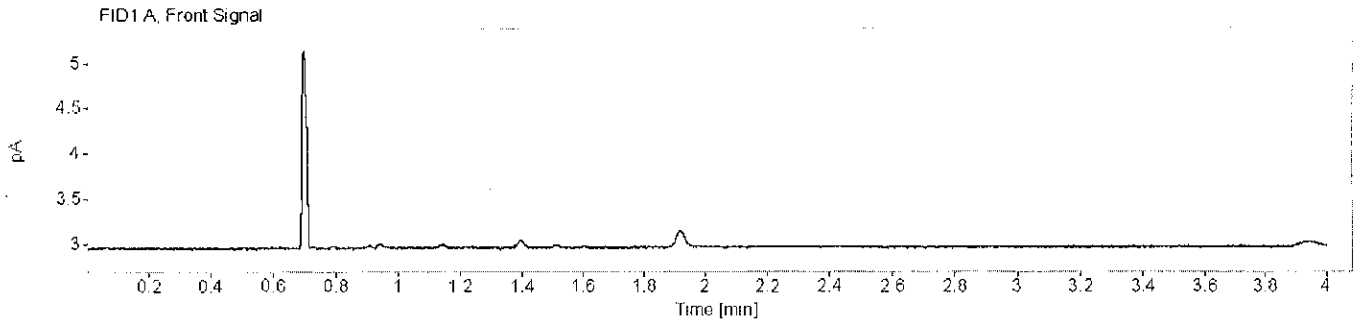
=====



**Houston Forensic Science Center, Inc.**  
**Forensic Analysis Division**  
**Toxicology - Volatile Analysis Chromatograms**



Sample name: Air Control Description: Vial Number: 1  
Instrument: Headspace 2 Acq. method: VOLATILES.M Injection date: 9/27/2018 8:32:41 AM  
Data file: C:\Chem32\11\Data\ALC\_20180927\_TEST\ALC\_20180927\_TEST 2018-09-27 08-23-39\001F0101.D

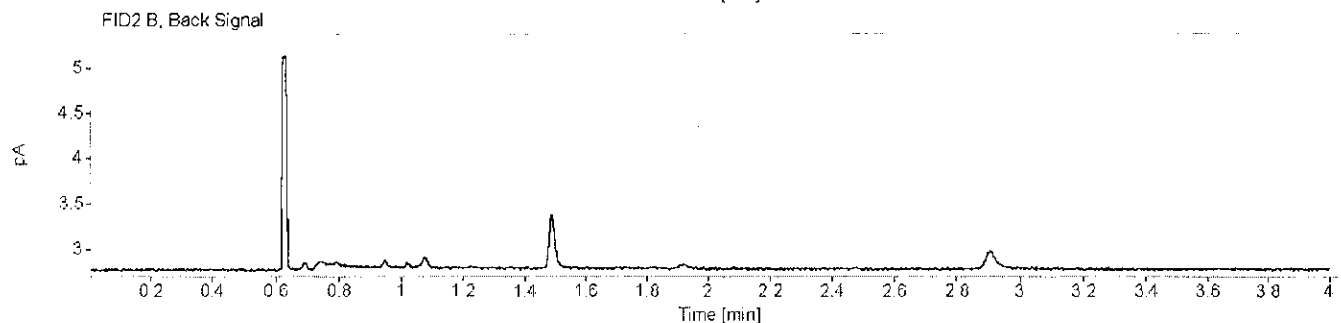
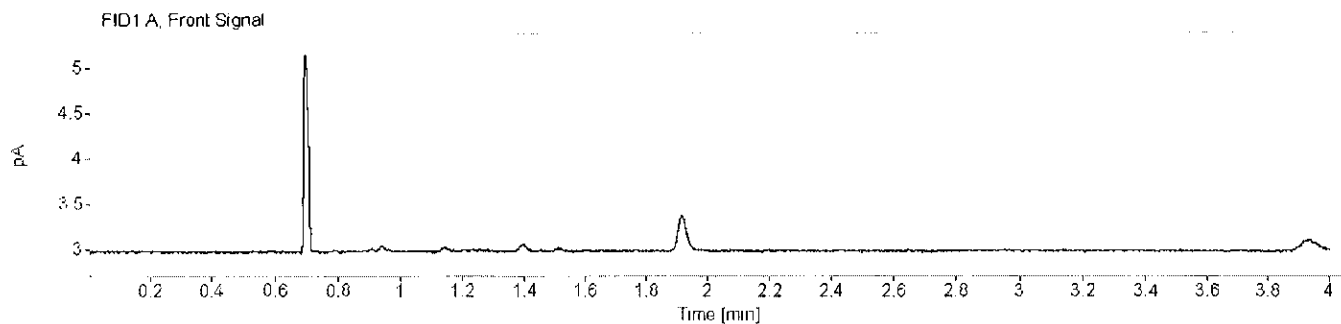


*AL*

**Houston Forensic Science Center, Inc.**  
**Forensic Analysis Division**  
**Toxicology - Volatile Analysis Chromatograms**



Sample name: Air Control Description: Vial Number: 2  
Instrument: Headspace 2 Acq. method: VOLATILES.M Injection date: 9/27/2018 8:37:11 AM  
Data file: C:\Chem32\1\Data\ALC\_20180927\_TEST\ALC\_20180927\_TEST 2018-09-27 08-23-39\002F0201.D



*Handwritten signature/initials*

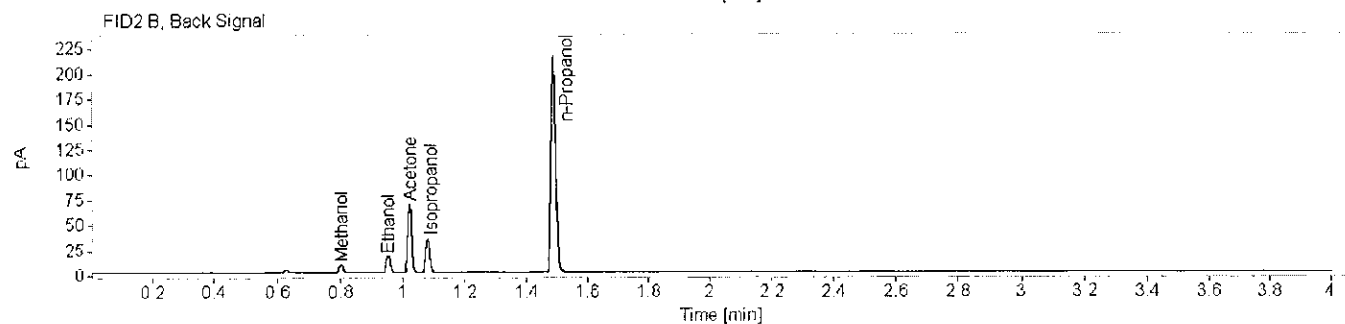
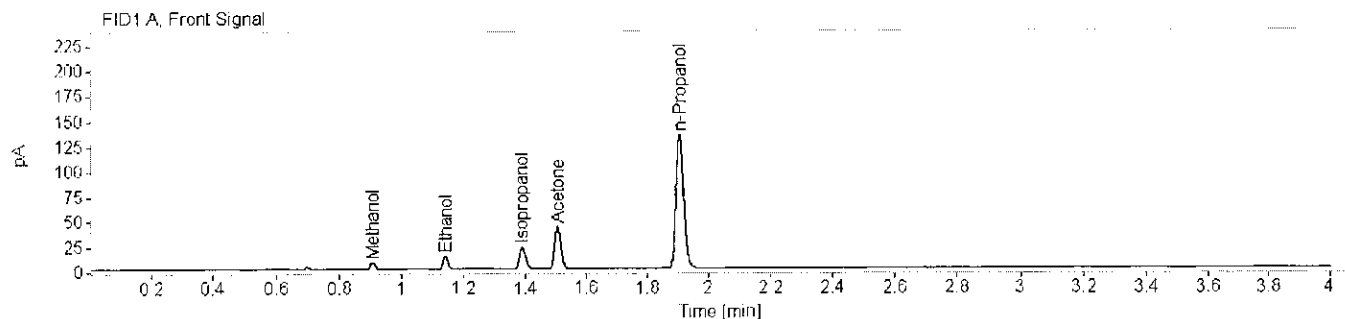
# Houston Forensic Science Center, Inc.

## Forensic Analysis Division

### Toxicology - Volatile Analysis Chromatograms



**Sample name:** SS      **Description:** Lot: FN03251502      **Vial Number:** 3  
**Instrument:** Headspace 2      **Acq. method:** VOLATILES.M      **Injection date:** 9/27/2018 8:43:03 AM  
**Data file:** C:\Chem32\1\Data\ALC\_20180927\_TEST\ALC\_20180927\_TEST 2018-09-27 08-23-39\003F0301.D



Name FID1A

Compound	Peak Symmetry	Peak to Valley Ratio	RT [min]	Expected RT [min]	Area	Concentration [g/100 mL]
Methanol	1.02555		0.910	0.910	7.5773	0.0116
Ethanol	0.85003		1.143	1.144	15.3362	0.0118
Isopropanol	0.85109		1.391	1.392	30.0219	0.0104
Acetone	0.88008		1.509	1.509	59.2004	0.0108
n-Propanol	0.84797		1.907	1.911	235.4036	0.0100

Name FID2B

Compound	Peak Symmetry	Peak to Valley Ratio	RT [min]	Expected RT [min]	Area	Concentration [g/100 mL]
Methanol	1.48679		0.806	0.806	7.9637	0.0115
Ethanol	0.88006		0.956	0.955	16.0575	0.0117
Acetone	0.87760	1092.70080062551	1.024	1.023	61.7695	0.0109
Isopropanol	0.83274	538.489988050016	1.081	1.081	31.6626	0.0105
n-Propanol	0.86122		1.490	1.490	243.5617	0.0100