

VII. Initial & Continuing Calibration (VOC, SVOC)

GC/MS instrument performance checks (BFB / DFTPP) Acceptable Y or N
 All compounds must have and RRF > 0.01, %RSD < 30, and %D < 25

VOC - Date of initial calibration:

8/9/15 17:52, 8/26/15 15:04, 7/31/15 1400,

VOC - Date(s) of continuing calibration:

10/13/15 13:30, 10/15/15 1256, 10/13/15 1052

Was the 12 hour criteria met? Y or N

10/14/15 1226

SVOC- Date of initial calibration:

SVOC - Date(s) of continuing calibration:

Was the 12 hour criteria met? Y or N

Deviations:

Compound	Date	RRF	%RSD	%D	Samples Affected

* % Difference = ((RF_{CCV} - RF_{ICAL AVG})/RF_{ICAL AVG}) x 100. In instances where the bias of the CCV impacts validation qualifiers, review the RF values or amount reported to confirm that the % Difference or % Drift are reported with the correct negative or positive value.

Actions:

1. If any compound has an initial or continuing RRF of < 0.01, qualify positive results as estimated (J)
2. If any compound has an initial or continuing RRF of < 0.01, qualify non-detects as unusable (R)
3. If any compound has a %RSD >30 or a %D >25, qualify positive results as estimated (J)
4. If any compound has a %RSD >40 or a %D >40, qualify non-detects as estimated (UJ)
5. If BFB or DFTPP mass assignment / ION abundance criteria are all associated data as unusable (R).
6. If samples were analyzed outside the 12 hour BFB or DFTPP performance check time period, qualify the affected sample data as estimated (J/UJ).
7. If separate calibration for water and soil were not performed, use professional judgement to evaluate the data. Data may be rejected (R).
8. If calibrations were not completed within the 12 hour criterion, qualify all associated data as estimated (J/UJ).
 If the 12 hour criterion was grossly exceeded, reject all associated data (R).

Remarks:

See attached

Hold Time Summary

SDG 180-48399-1

Sample Number	Sample Name	Method	Date Collected	Analysis Date	Date Extracted	Days to Analysis
180-48399-1	HD-TATE (S-6)-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-10	HD-MW-102S-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-11	HD-MW-102D-0/1-0	SW846 8260C	10/2/2015	10/14/2015		12
180-48399-11	HD-MW-102D-0/1-0	SW846 8260C	10/2/2015	10/15/2015		13
180-48399-12	HD-QC4-0/1-3	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-13	HD-QC4-0/1-4	SW846 8260C	10/2/2015	10/14/2015		12
180-48399-14	HD-QC14-0/1-2	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-2	HD-SOFTAIL LIFT STATION-0/1	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-3	HD-MW-161-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-3	HD-MW-161-0/1-0	SW846 8260C	10/2/2015	10/15/2015		13
180-48399-4	HD-MW-163-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-5	HD-MW-166-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-6	HD-MW-167-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-7	HD-MW-168-0/1-0	SW846 8260C	10/2/2015	10/13/2015		11
180-48399-8	HD-MW-103S-0/1-0	SW846 8260C	10/2/2015	10/14/2015		12
180-48399-8	HD-MW-103S-0/1-0	SW846 8260C	10/2/2015	10/15/2015		13
180-48399-9	HD-MW-103D-0/1-0	SW846 8260C	10/2/2015	10/14/2015		12

Full Validation

Blank Detections

SDG 180-48399-1

Sample ID	Sample	Analyte	Result	Method	Units	Qual
180-48399-12	HD-QC4-0/1-3	2-Butanone (MEK)	1.9	SW846 8260C	ug/L	J ^c
180-48399-12	HD-QC4-0/1-3	Acetone	5.3	SW846 8260C	ug/L	^c
180-48399-13	HD-QC4-0/1-4	2-Butanone (MEK)	1.4	SW846 8260C	ug/L	J
180-48399-13	HD-QC4-0/1-4	Acetone	2.5	SW846 8260C	ug/L	J

Qualifier Check

SDG 180-48399-1

Sample ID	Sample	Analyte	Result	5x	10x	Method	Units	Qual
180-48399-10	HD-MW-102S-0/1-0	1,1-Dichloroethane	0.62	3.1	6.2	SW846 8260C	ug/L	J
180-48399-8	HD-MW-103S-0/1-0	1,1-Dichloroethane	0.16	0.8	1.6	SW846 8260C	ug/L	J
180-48399-11	HD-MW-102D-0/1-0	1,4-Dioxane				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	1,4-Dioxane				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	1,4-Dioxane				SW846 8260C	ug/L	^c
180-48399-12	HD-QC4-0/1-3	1,4-Dioxane				SW846 8260C	ug/L	^c
180-48399-13	HD-QC4-0/1-4	2-Butanone (MEK)	1.4	7	14	SW846 8260C	ug/L	J
180-48399-12	HD-QC4-0/1-3	2-Butanone (MEK)	1.9	9.5	19	SW846 8260C	ug/L	J ^c
180-48399-10	HD-MW-102S-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-4	HD-MW-163-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-5	HD-MW-166-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-6	HD-MW-167-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-7	HD-MW-168-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-14	HD-QC14-0/1-2	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-12	HD-QC4-0/1-3	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-2	HD-SOFTAIL LIFT STATION-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-1	HD-TATE (S-6)-0/1-0	2-Hexanone				SW846 8260C	ug/L	^c
180-48399-11	HD-MW-102D-0/1-0	Acetone				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	Acetone				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Acetone				SW846 8260C	ug/L	^c
180-48399-12	HD-QC4-0/1-3	Acetone	5.3	26.5	53	SW846 8260C	ug/L	^c
180-48399-13	HD-QC4-0/1-4	Acetone	2.5	12.5	25	SW846 8260C	ug/L	J
180-48399-12	HD-QC4-0/1-3	Acrylonitrile				SW846 8260C	ug/L	^c
180-48399-10	HD-MW-102S-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-4	HD-MW-163-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-5	HD-MW-166-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-6	HD-MW-167-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-7	HD-MW-168-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-14	HD-QC14-0/1-2	Bromoform				SW846 8260C	ug/L	^c
180-48399-2	HD-SOFTAIL LIFT STATION-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-1	HD-TATE (S-6)-0/1-0	Bromoform				SW846 8260C	ug/L	^c
180-48399-11	HD-MW-102D-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-11	HD-MW-102D-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-10	HD-MW-102S-0/1-0	Bromomethane				SW846 8260C	ug/L	^c

Sample ID	Sample	Analyte	Result	5x	10x	Method	Units	Qual
180-48399-9	HD-MW-103D-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-4	HD-MW-163-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-5	HD-MW-166-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-6	HD-MW-167-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-7	HD-MW-168-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-14	HD-QC14-0/1-2	Bromomethane				SW846 8260C	ug/L	^c
180-48399-13	HD-QC4-0/1-4	Bromomethane				SW846 8260C	ug/L	^c
180-48399-2	HD-SOFTAIL LIFT STATION-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-1	HD-TATE (S-6)-0/1-0	Bromomethane				SW846 8260C	ug/L	^c
180-48399-11	HD-MW-102D-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-10	HD-MW-102S-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-4	HD-MW-163-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-5	HD-MW-166-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-6	HD-MW-167-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-7	HD-MW-168-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-14	HD-QC14-0/1-2	Chloroethane				SW846 8260C	ug/L	^c
180-48399-12	HD-QC4-0/1-3	Chloroethane				SW846 8260C	ug/L	^c
180-48399-2	HD-SOFTAIL LIFT STATION-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-1	HD-TATE (S-6)-0/1-0	Chloroethane				SW846 8260C	ug/L	^c
180-48399-11	HD-MW-102D-0/1-0	Chloroform	0.45	2.25	4.5	SW846 8260C	ug/L	J
180-48399-9	HD-MW-103D-0/1-0	Chloroform	0.44	2.2	4.4	SW846 8260C	ug/L	J
180-48399-8	HD-MW-103S-0/1-0	Chloroform	0.48	2.4	4.8	SW846 8260C	ug/L	J
180-48399-3	HD-MW-161-0/1-0	Chloroform	0.26	1.3	2.6	SW846 8260C	ug/L	J
180-48399-4	HD-MW-163-0/1-0	Chloroform	0.2	1	2	SW846 8260C	ug/L	J
180-48399-5	HD-MW-166-0/1-0	Chloroform	0.86	4.3	8.6	SW846 8260C	ug/L	J
180-48399-6	HD-MW-167-0/1-0	Chloroform	0.31	1.55	3.1	SW846 8260C	ug/L	J
180-48399-1	HD-TATE (S-6)-0/1-0	Chloroform	0.23	1.15	2.3	SW846 8260C	ug/L	J
180-48399-11	HD-MW-102D-0/1-0	cis-1,2-Dichloroethene	7.4	37	74	SW846 8260C	ug/L	J
180-48399-8	HD-MW-103S-0/1-0	cis-1,2-Dichloroethene	4.7	23.5	47	SW846 8260C	ug/L	J
180-48399-3	HD-MW-161-0/1-0	Tetrachloroethene	350	1750	3500	SW846 8260C	ug/L	E
180-48399-11	HD-MW-102D-0/1-0	Tetrachloroethene	7.4	37	74	SW846 8260C	ug/L	J

Sample ID	Sample	Analyte	Result	5x	10x	Method	Units	Qual
180-48399-11	HD-MW-102D-0/1-0	Trichloroethene	150	750	1500	SW846 8260C	ug/L	E
180-48399-8	HD-MW-103S-0/1-0	Trichloroethene	100	500	1000	SW846 8260C	ug/L	E
180-48399-3	HD-MW-161-0/1-0	Trichloroethene	9.2	46	92	SW846 8260C	ug/L	J
180-48399-11	HD-MW-102D-0/1-0	Vinyl chloride				SW846 8260C	ug/L	^c
180-48399-8	HD-MW-103S-0/1-0	Vinyl chloride				SW846 8260C	ug/L	^c
180-48399-3	HD-MW-161-0/1-0	Vinyl chloride				SW846 8260C	ug/L	^c

Initial & Continuing Calibration

Compound	Date	RRF	%RSD	%D	Samples Affected
Isobutyl alcohol	8/26/2015	0.0022			
1,4-Dioxane	8/26/2015	0.0022			
Isobutyl alcohol	7/31/2015	0.0072			
1,4-Dioxane	7/31/2015	0.0027			1 → 14 = A - code 3
1,4-Dioxane	10/13/2015	0.0032		44.6	
1,4-Dioxane	10/15/2015	0.003		33.6	
Isobutyl alcohol	10/13/2015	0.0091			
1,4-Dioxane	10/13/2015	0.0026			
Isobutyl alcohol	10/14/2015	0.0077			
1,4-Dioxane	10/14/2015	0.0028			
Acetone	10/13/2015			36	# 12 = J - code 4
Acrylonitrile	10/13/2015			27.7	
Methyl acetate	10/13/2015			31.1	
Vinyl acetate	10/13/2015			34.9	
Tetrahydrofuran	10/13/2015			27.7	
Isobutyl alcohol	10/13/2015			71.2	
2-Hexanone	10/13/2015			43.3	
Hexachlorobutadiene	10/15/2015			30.3	
2-Hexanone	10/13/2015			31.1	
n-Heptane	10/14/2015			41.3	

Laboratory Control Sample			
Compound	Date	%R	Samples Affected
1,2-Dichloroethane	10/14/2015	79	8,9,11,13-UJ
Chloroethane	10/13/2015	77	1,2,3,4,5,6,7,10,12,14-UJ
Chloroethane	10/13/2015	73	1,2,3,4,5,6,7,10,12,14-UJ
Chloroethane	10/15/2015	73	3,8,11-UJ
Bromomethane	10/13/2015	64	1,2,3,4,5,6,7,10,12,14-UJ
Bromomethane	10/14/2015	55	8,9,11,13-UJ
1,4-Dioxane	10/15/2015	144	None
Acetone	10/13/2015	141	12-J
1,4-Dioxane	10/13/2015	139	None
Acrylonitrile	10/13/2015	137	None
2-Butanone (MEK)	10/13/2015	129	12-J
Chloromethane	10/13/2015	124	None
2-Hexanone	10/13/2015	124	None

Code 11