# SCIENCE APPLICATIONS INTERNATIONAL CORPORATION Organic Data Review Checklist - Standard Validation

Project:	Harley-Davidson		Page 1 of 11
SDG No:	180-40617-1	Analysis:	See attached
Laboratory:	TestAmerica Pittsburgh	Method: Matrix:	See attached Water
data have been s	package has been reviewed and the ummarized. The general criteria us mination of the following:	analytical quality co sed to assess the an	ontrol/quality assurance performance allytical integrityof the data were
	Case Narrative Analytical Holding Times Sample Preservation		
	Project Blanks		
Project Specific C	AA/QC or contract requirements ma	y take priority over v	alidation criteria in this procedure.
Overall Remark	s: No issues		
		<del></del>	
Definition of Qualit	fiers:  "U", not detected at the associate "UJ", not detected and associated "J", associated value estimated "R", associated value unusable of "=", compound properly identified	l value estimated	ounded
Reviewed by:	Alan G. Millan V.	WD/M/C	Date: <u>9/26/1</u> 5
QA Reviewed by	: CAR	/	Date: <u>3/26//</u> S Date: <u>6-23-</u> 15



	Page 2 of 11
I. Case Narrative	
Verify direct statements made within the Laboratory Case	Narrative (note discrepancies).
Remarks: No make 1554.	
II. Re-analysis and Secondary Dilutions	
Verify that re-enalysis and secondary dilutions were perfeappropriate results to report.	rmed and reported as necessary. Determine
Remarks:	
Remarks.	

# **III. Holding Times**

VOC - Waters - unpreserved: aromatic within 7 days, non-aromatic within 14 days of sample collection

VOC - Waters - preserved: aromatic and non-aromatic within 14 days of sample collection

VOC - Soils - preserve or analyze within 48 hours of sample collection; analyze within 14 days of preservation

SVOC, Pest., PCB - Waters - extract within 7 days of sample collection, analyze within 40 days of extraction SVOC, Pest., PCB - Soils - extract within 14 days of sample collection, analyze within 40 days of extraction

### **Deviations:**

	VOC			SVOC			Pest/PCB	
Sample #	Date	Date	Date	Date	Date	Date	Date	Date
	Collected	Analyzed	Collected	Extracted	Analyzed	Collected	Extracted	Analyzed
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1. 1	If holding ti	mes are	exceeded,	all resul	ts are	qualified	as	estimated	(J/UJ)
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2. If holding times are exceeded by more than 2X, reviewer may qualify non-detected results as unusable (R)

Remarks:	No issuas	

### **III. Holding Times**

Metals - Waters - preserved to pH<2, 180 days from sample collection

Metals - Soils - 180 days from sample collection

Mercury - Waters - preserved to pH<2, 28 days from sample collection

Mercury - Soils - 28 days from sample collection

#### Deviations:

		Metals			_	Mercury		
Sample #	Date	Date	Days	рН	Date	Date	Days	рН
	Collected		>HT	Check	Collected	Analyzed	>HT	Check
				<u> </u>				
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		-						
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#### **Actions:**

- 1. If preserved samples exceed holding time, qualifty all associated results as estimated (J/UJ).
- 2. If unpreserved samples exceed holding time, qualify all associated results as unusable (R).
- 3. If holding times are exceeded by more than 2X, reviewer may qualify non-detected results as unusable (R)
- 4. If water samples are not acidified, use professional judgement. Minimally, qualify data as estimated (J) and non-detects unusable (R).
- 5. If soil samples exceed holding time, use professional judgement to qualify data.

Remarks:	No issuus

## **III. Holding Times**

Sample should be preserved and analyzed according to the appropriate analytical method in general the following preservations and holding times for waters can be applied:

Sulfate, 4 degress C, 28 days

Sulfide, 4 degrees C, pH ≥9 with zinc acetate/sodium hydroxide, 7 days

Bromide/Chloride/Fluoride, no preservative required, 28 days

Nitrate/Nitrite or Ammonia, 4 degrees C, pH ≤ 2 with sulfuric acid, 28 days

Nitrate or Nitrite, 4 degrees C, 48 hours

Alkalinity, 4 degrees C, 14 days

TDS/TSS, 4degrees C, 7 days

Phosphate (total), 4 degrees C, pH < 2 with sulfuric acid, 28 days

Hexavalent Chromium, Cool 4 degress C, water- 24 hours, soil - 30 days

#### **Deviations:**

Sample #	Analyte	Date	Date	Date	Notes:
		Collected	Extracted	Analyzed	

#### **Actions:**

- 1. If holding times are exceeded, all results are qualified as estimated (J/UJ)
- 2. If holding times are exceeded by more than 2X, reviewer may qualify non-detected results as unusable (R)
- 3. If samples were not properly preserved, use professional judgement to qualify the data

emarks:	No issues	

VI. Blanks			Pag	ge 6 of 11
to analyze VOC	s and SVOCs Yes	No	el for each 12 hour period on each G List documented contamination belo	
Laboratory M	lethod Blanks:			
Date:	Lab ID#	Fraction	Compound	Conc. (ppb)
-				
Associated P	Project Blanks (e.g.,	equipment rins	sates, trip blanks, etc.)	
				Conc (nnh)
Date	Lab ID#	Fraction	Compound	Conc. (ppb)
				Conc. (ppb)
			Compound	Conc. (ppb)
Date		Fraction	Compound	
Date		Fraction	Compound	

# VI. Blanks (continued)

Calculate action levels based on 10X the highest blank concentration of "common laboratory solvents", VOCs (methylene chloride, acetone, toluene, 2-butanone, cyclohexane) or SVOCs (phthalates), and 5X the highest blank concentration for all other VOC, SVOC, Pesticides, and PCB compounds. Sample weights, volumes, and dilution factors must be taken into account when applying the 5X and 10X criteria. This allows the total amount of contaminant present to be considered.

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	Maximum Conc.	Action Level (ppb)	Samples Affected
Compound	Detected, (ppb)	/	·
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#### **Actions:**

- 1. If compound results exceed the action levels, the data are not qualified
- 2. If compound results are below the required reporting level, report results as non-detect (U) at the reporting level
- 3. If the compound is detected above the reporting level, but below the action level, qualify as not-detected (U)
- 4. If gross contamination exists in blanks (i.e.,, saturated peaks by GC/ MS), all affected compounds in the associated samles should be qualifed as unusable (R) due to interference.
- 5. If blanks were not analyzed per matrix per concentration level for each 12 hour period on each GC/MS system used to analyze VOCs and SVOCs use professional judgement to qualify data. Data may be rejected (R).

Remarks:	 NO 1554WS				

# Hold Time Summary

Sample Number	Method	Date Collected	Analysis Date	Date Extracted	Days to Analysis
180-40617-1	MCAWW 300.0	1/20/2015	1/21/2015		1
180-40617-2	MCAWW 300.0	1/20/2015	1/21/2015		1
180-40617-3	MCAWW 300.0	1/20/2015	1/21/2015		1
180-40617-4	MCAWW 300.0	1/20/2015	1/21/2015		1
180-40617-5	MCAWW 300.0	1/20/2015	1/21/2015		1
180-40617-1	SM SM 2320B	1/20/2015	1/27/2015		7
180-40617-2	SM SM 2320B	1/20/2015	1/27/2015		7
180-40617-3	SM SM 2320B	1/20/2015	1/27/2015		7
180-40617-4	SM SM 2320B	1/20/2015	1/27/2015		7
180-40617-5	SM SM 2320B	1/20/2015	1/27/2015		7
180-40617-1	SW846 6020A	1/20/2015	1/29/2015	1/26/2015	9
180-40617-1	SW846 6020A	1/20/2015	1/30/2015	1/26/2015	10
180-40617-2	SW846 6020A	1/20/2015	1/29/2015	1/26/2015	9
180-40617-2	SW846 6020A	1/20/2015	1/30/2015	1/26/2015	10
180-40617-3	SW846 6020A	1/20/2015	1/29/2015	1/26/2015	9
180-40617-3	SW846 6020A	1/20/2015	1/30/2015	1/26/2015	10
180-40617-4	SW846 6020A	1/20/2015	1/29/2015	1/26/2015	9
180-40617-4	SW846 6020A	1/20/2015	1/30/2015	1/26/2015	10
180-40617-5	SW846 6020A	1/20/2015	1/29/2015	1/26/2015	9
180-40617-5	SW846 6020A	1/20/2015	1/30/2015	1/26/2015	10
180-40617-1	SW846 8260C	1/20/2015	1/28/2015		8
180-40617-2	SW846 8260C	1/20/2015	1/28/2015		8
180-40617-2	SW846 8260C	1/20/2015	1/30/2015		10
180-40617-3	SW846 8260C	1/20/2015	1/28/2015		8
180-40617-4	SW846 8260C	1/20/2015	1/28/2015		8
180-40617-4	SW846 8260C	1/20/2015	1/30/2015		10
180-40617-5	SW846 8260C	1/20/2015	1/28/2015		8
180-40617-6	SW846 8260C	1/20/2015	1/28/2015		8

Thursday, February 26, 2015 Page 1 of 1

# Trip Blank Detections

Sample ID Sample Analyte Result Method Units Qual

Thursday, February 26, 2015 Page 1 of 1