SCIENCE APPLICATIONS INTERNATIONAL CORPORATION Organic Data Review Checklist - Standard Validation

Project:	Harley-Davidson	_ Page 1 of 11							
SDG No:	180-43359-10	Analysis:	See attached						
Laboratory:	TestAmerica Pittsburgh	Method: Matrix:	See attached Water						
data have been su	ickage has been reviewed and the a mmarized. The general criteria use ination of the following:	analytical quality co	ntrol/quality assurance performance alytical integrityof the data were						
	Case Narrative Analytical Holding Times Sample Preservation								
	Project Blanks								
Project Specific QA	VQC or contract requirements may	take priority over va	alidation criteria in this procedure.						
Overall Remarks: No Majur 135 ucos									
-									
	"U", not detected at the associated "UJ", not detected and associated "J", associated value estimated "R", associated value unusable or a "=", compound properly identified a	value estimated analyte identity unfo nd value positive	unded						
Reviewed by:	motive the 6	Milla JI.	Date: <u>5/8//</u>						
QA Reviewed by:	CAPpine		Date: <u>5-14-15</u>						

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		Page 2 of 11
I. Case Narrative)	
14 - 16 - Nove - 1 - 1 - 1 - 1 - 1		no Morrativo (note discrepancies)
Verity direct statem	ents made within the Laboratory Ca	se Narrative (note discrepancies).
Remarks:	Mo reju I SS 4	20
Nemans.	110 100 2 -	
II. Re-analysis a	nd Secondary Dilutions	
Verify that re-analy	rsis and secondary dilutions were pe	erformed and reported as necessary. Determine
appropriate results	to report.	
Remarks:		
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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:

DOTIGUOIIS.								
	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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i. ii nolaing tin	nes are exceeded,	all results 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 up	unueable /		roculte	d re	tecte	non-det	qualify i	reviewer may	han 2X	/ more	exceeded by	are	dina times	. If h	2.
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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:

Deviations.		Metals				Mercury	(4)	
Sample #	Date	Date	Days	рН	Date	Date	Days	рН
	Collected	Analyzed	>HT	Check	Collected	Analyzed	>HT	Check
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- 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 155405	
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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 Extracted	Date	Notes:
		Collected	Extracted	Analyzed	
		- 			
		_			
		_			
					

- 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

Remarks:	1/40	75545		 .	<u> </u>	
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VI. Blanks			Pa	age 6 of 11
to analyze VO	Cs and SVOCs Yes	No	el for each 12 hour period on each 0 List documented contamination bel	
Laboratory N	Method Blanks:			
Date:	Lab ID#	Fraction	Compound	Conc. (ppb)
Associated l	Project Blanks (e.g.,	equipment rins	sates, trip blanks, etc.)	
Date	Lab ID#	Fraction	Compound	Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #	Fraction		Conc. (ppb)
Date	Lab ID #		Compound	Conc. (ppb)
	Lab ID #		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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- 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:		Ner izsuas.			
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Hold Time Summary

Sample Number	Method	Date Collected	Analysis Date	Date Extracted	Days to Analysis
180-43359-10	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-11	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-11	MCAWW 300.0	4/22/2015	4/24/2015		
180-43359-12	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-12	MCAWW 300.0	4/22/2015	4/27/2015		
180-43359-13	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-2	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-3	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-4	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-4	MCAWW 300.0	4/22/2015	4/25/2015		
180-43359-5	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-6	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-7	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-8	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-9	MCAWW 300.0	4/22/2015	4/23/2015		
180-43359-10	SM SM 2320B	4/22/2015	5/1/2015		
180-43359-11	SM SM 2320B	4/22/2015	5/1/2015		
80-43359-12	SM SM 2320B	4/22/2015	5/1/2015		
80-43359-13	SM SM 2320B	4/22/2015	5/1/2015		
180-43359-2	SM SM 2320B	4/22/2015	5/1/2015	i	
180-43359-3	SM SM 2320B	4/22/2015	5/1/2015		
180-43359-4	SM SM 2320B	4/22/2015	5/1/2015		
180-43359-5	SM SM 2320B	4/22/2015	5/1/2015		
.80-43359-6	SM SM 2320B	4/22/2015	5/1/2015		
.80-43359-7	SM SM 2320B	4/22/2015	5/1/2015		
80-43359-8	SM SM 2320B	4/22/2015	5/1/2015		
.80-43359-9	SM SM 2320B	4/22/2015	5/1/2015	İ	
80-43359-10	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-11	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-12	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-13	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-2	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
.80-43359-3	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-4	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-5	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-6	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-7	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-8	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-9	SW846 6020A	4/22/2015	4/30/2015	4/24/2015	
80-43359-1	SW846 8260C	4/22/2015	5/3/2015	, , , , , ,	:
80-43359-10	SW846 8260C	4/22/2015	5/4/2015		

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Sample Number	Method	Date Collected	Analysis Date	Date Extracted	Days to Analysis
180-43359-11	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-12	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-13	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-2	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-3	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-4	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-5	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-6	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-7	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-8	SW846 8260C	4/22/2015	5/3/2015		11
180-43359-9	SW846 8260C	4/22/2015	5/4/2015		12
180-43359-9	SW846 8260C	4/22/2015	5/5/2015		13

Trip Blank Detections

Sample ID Sample Analyte Result Method Units Qual

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