SCIENCE APPLICATIONS INTERNATIONAL CORPORATION Organic Data Review Checklist - Standard Validation

SDG No:	180-42178-1	Analysis:	See attached
		Method:	See attached
Laboratory:	TestAmerica Pittsburgh	Matrix:	Water
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data have been su	nckage has been reviewed and the ar mmarized. The general criteria used ination of the following:	nalytical quality co I to assess the ana	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 to	ake priority over va	alidation criteria in this procedure.
Overall Remarks Busul a Area on be remarks	a SDG Sample result based on professionis	1 jedgeret	souple # (Should assumed that the detector is a hab issues.
Definition of Qualification of Qualifica	"U", not detected at the associated to "UJ", not detected and associated value, associated value estimated "R", associated value unusable or an "=", compound properly identified an Alan G, Millm In Cut by Alan G, Millm In	alue estimated nalyte identity unfo	Date: <u>3/27//</u> S Date: <u>6-23-15</u>

13/27/15

Project:

Harley-Davidson

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I. Case Narrative			
		an Norretive (note disgrapancies)	
		se Narrative (note discrepancies).	
Remarks:	Was 15546	5	
	me orace		<u>.</u>
			
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I. Re-analysis and S	Secondary Dilutions		
Verify that re-analysis a	nd secondary dilutions were pe	rformed and reported as necessary	. Determine
appropriate results to re	port.		
		/	
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:

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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		-						

Actions:

1. If notating	times are	exceeaea,	all results	are qualified	as estimated ((J/UJ
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If holding times are exceeded by m	ore than 2X, review	er may qualify non-dete	ected results as	s unusable (Ri
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Remarks:	No issuas					
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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		
Sample #		Date	Date	Days	рН	Date	Date	Days	pН
	\	Collected	Analyzed	>HT_	Check	Collected		>HT_	Check
	,								
					/				
				X					
			/						
		/							

Actions:

1. lf	preserved sam	ples exceed h	iolding time, q	ualifty al	Il associated res	ults as est	timated (J/UJ).
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- 2. If unpreserved sample's 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:	
	

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 Analyzed	Notes:	
		Collected	LXIIacieu	Allalyzed		
		/				
		X				
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		4				-
		 				

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

Remarks:	/_	Λ			\	
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VI. Blanks			Page	e 6 of 11
to analyze VOCs	s and SVOCs Yes	No	el for each 12 hour period on each GC List documented contamination below	
Laboratory Mo	ethod Blanks:			
Date:	Lab ID#	Fraction	Compound	Conc. (ppb)
7				
Associated P	roiect Blanks (e.g	equipment rins	sates, trip blanks, etc.)	
Date	Lab ID#	Fraction	Compound	Conc. (ppb)
				7
Remarks:		566 9	Ha he A	

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.

Deviations:

	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).

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Remarks:		2-		

.Hold Time Summary

Sample Number	Method	Date Collected	Analysis Date	Date Extracted	Days to Analysis
180-42178-1	SW846 8260C	3/18/2015	3/24/2015		6
180-42178-2	SW846 8260C	3/18/2015	3/24/2015		6
180-42178-3	SW846 8260C	3/18/2015	3/24/2015		6
180-42178-4	SW846 8260C	3/18/2015	3/24/2015		6

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Trip Blank Detections

Sample ID	Sample	Analyte	Result	Method	Units	Qual
180-42178-2	HD-QC1-0/1-3	2-Butanone (MEK)	0.77	SW846 8260C	ug/L	J.
180-42178-2	HD-QC1-0/1-3	Toluene	0.37	SW846 8260C	ug/L	J
180-42178-3	HD-QC1-0/1-4	Toluene	0.41	SW846 8260C	ug/L	J

About how boon Found canadytas how boon found water for water for the Source It water for the Samples. They will be Ignored AGM
3/97/15

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