ANALYTICAL REPORT

Job Number: 180-129532-2

Job Description: Vo Toys - Harrison, NJ

For:
Anchor QEA LLC
1201 3rd Ave
Suite 2600
Seattle, WA 98101

Attention: Cindy Fields

Approved for release.
Carrie L Gamber
Senior Project Manager
12/16/2021 3:25 PM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
Carrie.Gamber@Eurofinset.com
12/16/2021

Table of Contents

Definitions/Glossary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

Qualifiers

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Anchor QEA LLC

Project: Vo Toys - Harrison, NJ

Report Number: 180-129532-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 11/04/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.8 C.

PH
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

Client Sample ID: T1-WC-A-FL-C-2111011530 — Lab Sample ID: 180-129532-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TCLP pH Post-Leach	5.7	!	0.1	0.1	SU	1		1311	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

General Chemistry - TCLP

Client Sample ID: T1-WC-A-FL-C-2111011530
Date Collected: 11/01/21 15:30
Date Received: 11/04/21 10:45

Lab Sample ID: 180-129532-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TCLP pH Post-Leach	5.7	!	0.1	0.1	SU			12/13/21 16:22	1

Default Detection Limits

Client: Anchor QEA LLC
Job ID: 180-129532-2
Project/Site: Vo Toys - Harrison, NJ

General Chemistry - TCLP

Analyte	RL	MDL	Units
TCLP pH Post-Leach	0.1	0.1	SU

QC Association Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

General Chemistry

Analysis Batch: 382023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129532-2	T1-WC-A-FL-C-2111011530	TCLP	Solid	1311	

Lab Chronicle

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

Client Sample ID: T1-WC-A-FL-C-2111011530

Lab Sample ID: 180-129532-2

Date Collected: 11/01/21 15:30
Date Received: 11/04/21 10:45

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Analysis	1311		1			382023	12/13/21 16:22	GRN	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

GRN = Gavin Nicholls

Accreditation/Certification Summary

Client: Anchor QEA LLC
Job ID: 180-129532-2
Project/Site: Vo Toys - Harrison, NJ

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1311		Solid	TCLP pH Post-Leach

Method Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

Method	Method Description	Protocol	Laboratory
1311	TCLP pH Post Leach	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-129532-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-129532-2	T1-WC-A-FL-C-2111011530	Solid	11/01/21 15:30	11/04/21 10:45

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job Number: 180-129532-2

SDG No.:

Project: Vo Toys - Harrison, NJ

Client Sample ID	Lab Sample ID
T1-WC-A-FL-C-2111011530	180-129532-2

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - TCLP

Client Sample ID: T1-WC-A-FL-C-2111011530
Lab Sample ID: 180-129532-2
Lab Name: Eurofins TestAmerica, Pittsburgh
Job No.: 180-129532-2
SDG ID.:
Matrix: Solid
Date Sampled: 11/01/2021 15:30
Reporting Basis: WET
Date Received: 11/04/2021 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	TCLP pH Post-Leach	5.7	0.1	0.1	SU		!	1	1311

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - TCLP

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-129532-2

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 1311 RL Date: 07/09/2019 10:56

Analyte	Wavelength/ Mass	RL (SU)	
TCLP pH Post-Leach		0.1	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - TCLP

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-129532-2

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: 1311 XRL Date: 07/09/2019 10:57

Analyte	Wavelength/ Mass	XRL (SU)	
TCLP pH Post-Leach		0.1	

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-129532-2

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 1311

Start Date: 12/13/2021 16:22 End Date: 12/13/2021 16:22

Lab Sample Id	D/F	Type	Time	Analytes																							
				TCLPpH																							
180-129532-2	1	P	16:22	X																							

Prep Types:
P = TCLP

FORM XIII-IN

General Chemistry Raw Data Report

Job ID: 180-129532-2

Batch: 382023 **Analyst Initials: GRN**

Method: 1311 **Instrument: No Equipment**

Lab Sample ID: 180-129532-A-2 **Analysis Date: Dec 13, 2021 16:22**

Analyte	Detector	Dilution	Raw Result	Unit
TCLP pH Post-Leach	None	1	5.70	SU

Shipping and Receiving Documents

ANCHOR QEA

COC ID: 20211101-1534

TURNAROUND TIME: ASAP - 10 Day as discussed with Carrie CRUSH:

PROJECT/CLIENT INFO				LABORATORY				OTHER INFO	
Project Name	GE Vo-Toys			Lab Name	Eurofins TestAmerica			Email Invoice To	
Project Number	160469-02.16 T2			Lab Contact	Carrie Gamber			Invoice Reports	
Department				Email	[redacted]			Email Report To	
Address	68 Excelsior Ave			Address	301 Alpha Drive			Email Reports	
	Suite 101							Shipping Company	
City	Saratoga Springs	State	NY	City	Pittsburg	State	PA	Tracking Number	
Postal Code	12866	Country	USA	Postal Code	15238	Country	USA	Cooler Count	
Phone Number	518-860-2963			Phone Number	412-963-2428			Cooler Description	
Point of Contact	Luke Jefts			Quote Number				Sampler 2	
Email Address	ljefts@anchorqea.com			PO Number				Sampler 3	

SAMPLE DETAILS / ANALYSES REQUESTED

Filtered - F: Field, L: Lab, FL: Field & Lab, N: None

Sample ID	Start Depth	End Depth	Depth Unit	Field Matrix	Date	Time (24hr)	MS/MSD	# Of Cont.	TCLP_VOCs	~~PCBs~~ Form U Parameters
[redacted]			in	SW	2021/11/01	15:15	N	2	2	
T1-VOC-A-FL-C-2111011530			in	SW	2021/11/01	15:30	N	4		4

180-129532 Chain of Custody

ADDITIONAL COMMENTS/SPECIAL INSTRUCTIONS	RELINQUISHED BY/AFFILIATION	DATE/TIME	ACCEPTED BY/AFFILIATION	DATE/TIME
Per discussion w/ Cindy Fields + Carrie Gamber we would like this analyzed for the form U parameters and a grab sample for VOCs.	A Bleichner / AQ	11/3/2021 1300	FedEx	
			D Watson	11-4-21 10:45

NO OF BOTTLES RETURNED/DESCRIPTION

Sampler's Name	Alexander Bleichner	Mobile #	5188488195
Sampler's Signature	Alexander Bleichner	Date/Time	11/3/2021 1300

Page 1 of 1

ORIGIN ID:GFLA (518) 886-0643
SARATOGA SPRINGS
ANCHOR QEA
68 EXCELSIOR AVENUE
SUITE 101
SARATOGA SPRINGS, NY 12866
UNITED STATES US

SHIP DATE: 03NOV21
ACTWGT: 33.00 LB
CAD: 109495568/INET4400
DIMS: 23x14x15 IN

BILL SENDER

TO **CARRIE GAMBER**
EUROFINS TESTAMERICA
301 ALPHA DRIVE

PITTSBURGH PA 15238
(412) 963-2428 REF: 160469-02.16 T2
INV:
PO: T NOWAK DEPT: ENVIRONMENTAL SAMPLES

56DJ29A7E/FE4A

FedEx Express

J212221101001uw

THU - 04 NOV 11:30A
PRIORITY OVERNIGHT

TRK# 0201 **7751 0644 5884**

XN AGCA

15238
PIT
PA US

Uncorrected temp 3.8 °C
Thermometer ID 8
CF 0 Initials MO
PT-WI-SR-001 effective 11/8/18

Chain under hood
Anchor
QEA

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

180-129532 Waybill

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gamber, Carrier L	Carrier Tracking No(s):	COC No: 180-448634.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Carrie.Gamber@Eurofinset.com	State of Origin: New Jersey	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-129532-1
Address: 777 New Durham Road, ,	Due Date Requested: 11/17/2021			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Vo Toys - Harrison, NJ	Project #: 18024678			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9014_ReactiveCN/7.3.3	9034_Reactive/7.3.4	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
T1-WC-A-FL-C-2111011530 (180-129532-2)	11/1/21	15:30 Eastern		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible]	11-8-21 [illegible]	[illegible]	[illegible] /ViaFedEx	11/09/21 10:45	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: ID#9-0.7=0.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Anchor QEA LLC

Job Number: 180-129532-2

Login Number: 129532
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 180-132081-1

Job Description: Vo Toys - Harrison, NJ

For:
Anchor QEA LLC
1201 3rd Ave
Suite 2600
Seattle, WA 98101

Attention: Cindy Fields

Approved for release.
Carrie L Gamber
Senior Project Manager
2/9/2022 2:28 PM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
Carrie.Gamber@Eurofinset.com
02/09/2022
Revision: 1

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Definitions/Glossary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
FH	MS and/or MSD recovery above control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Analyte was found in the blank.
F2	MS/MSD RPD exceeds control limits
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
FL	MS and/or MSD recovery below control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Anchor QEA LLC

Project: Vo Toys - Harrison, NJ

Report Number: 180-132081-1 REVISED

NOTE: This report was revised to remove the extra TCLP pH LB sample that was inadvertently linked to this job and also to report the updated painter filter result per the client's request.

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 1/7/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

The samples received did not match the information listed on the Chain-of-Custody (COC): T1-WC-B-FL-D-2201051234-0-12 (180-132081-3) and T1-WC-B-FL-D-2201051520-0-12 (180-132081-4). There are two samples listed on the COC and per the client the PCB and VOA containers were logged in as a grab sample.

VOLATILES
The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-384838 and analytical batch 180-384914 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 180-384914 recovered outside control limits for the following analytes: 1,1-Dichloroethene.

SEMIVOLATILES
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PESTICIDES
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PCB
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HERBICIDES
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS
Cadmium was detected in method blank LB 180-384835/1-D at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

As shown on the raw data pages, the MS exceeded the upper calibration limit for the instrument which calculates to 143% and warrants the F1 flag as well as the F2 flag for having the %RSD be greater than the control limit of 20 between the MS & MSD. This may be due to a spiking error more than matrix interference or non-homogeneity. Samples affected are: T1-WC-B-FL-D-2201051234-0-12 (180-132081-1), (180-132081-B-1-I MS) and (180-132081-B-1-J MSD)

Mercury failed the recovery criteria low for the MS of sample T1-WC-B-FL-D-2201051234-0-12MS (180-132081-1) in batch 180-385098.

GENERAL CHEMISTRY
TCLP pH Post-Leach was detected in method blank LB 180-384835/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-384936 and analytical batch 180-384998 for Oil and Grease were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Detection Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.81	J F2 FH	2.0	0.063	mg/L	1		EPA 6010D	TCLP
Zinc	0.11	J	0.20	0.026	mg/L	1		EPA 6010D	TCLP
Mercury	0.0035	FL	0.00020	0.00013	mg/L	1		EPA 7470A	TCLP
Ignitability	>140				Degrees F	1		EPA 1020B	Total/NA
pH	6.6	HF	0.1	0.1	SU	1		EPA 9045D	Total/NA
Free Liquid	CNF				NONE	1		EPA 9095B	Total/NA
Total Volatile Solids	1.7		0.50	0.50	%	1		SM 2540G	Total/NA
Total Solids	90		0.50	0.50	%	1		SM 2540G	Total/NA
TCLP pH Post-Leach	4.9	!	0.1	0.1	SU	1		1311	TCLP
Oil & Grease (HEM)	6.8		5.1	4.4	mg/L	1		EPA 1664B	ASTM Leach
Chemical Oxygen Demand	29		10	9.1	mg/L	1		EPA 410.4	ASTM Leach

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.71	J	2.0	0.063	mg/L	1		EPA 6010D	TCLP
Cadmium	0.0044	J B	0.50	0.0030	mg/L	1		EPA 6010D	TCLP
Lead	0.051	J	0.50	0.044	mg/L	1		EPA 6010D	TCLP
Zinc	0.70		0.20	0.026	mg/L	1		EPA 6010D	TCLP
Ignitability	>140				Degrees F	1		EPA 1020B	Total/NA
pH	8.7	HF	0.1	0.1	SU	1		EPA 9045D	Total/NA
Free Liquid	CNF				NONE	1		EPA 9095B	Total/NA
Total Volatile Solids	2.6		0.50	0.50	%	1		SM 2540G	Total/NA
Total Solids	89		0.50	0.50	%	1		SM 2540G	Total/NA
TCLP pH Post-Leach	5.0	!	0.1	0.1	SU	1		1311	TCLP
Chemical Oxygen Demand	19		10	9.1	mg/L	1		EPA 410.4	ASTM Leach
Total Solids	24		10	10	mg/L	1		SM 2540B	ASTM Leach

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	32		18	5.4	ug/Kg	1	☼	EPA 8082A	Total/NA

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND	FH	0.20	0.029	mg/L			01/12/22 18:24	1
2-Butanone (MEK)	ND		0.20	0.058	mg/L			01/12/22 18:24	1
Benzene	ND	FH	0.20	0.039	mg/L			01/12/22 18:24	1
Carbon tetrachloride	ND		0.20	0.066	mg/L			01/12/22 18:24	1
Chlorobenzene	ND		0.20	0.031	mg/L			01/12/22 18:24	1
Chloroform	ND	FH	0.20	0.042	mg/L			01/12/22 18:24	1
Tetrachloroethene	ND		0.20	0.040	mg/L			01/12/22 18:24	1
Trichloroethene	ND	FH	0.20	0.030	mg/L			01/12/22 18:24	1
Vinyl chloride	ND		0.20	0.073	mg/L			01/12/22 18:24	1
1,1-Dichloroethene	ND	*1	0.20	0.057	mg/L			01/12/22 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*52 - 151*		*01/12/22 18:24*	*1*
4-Bromofluorobenzene (Surr)	*75*		*49 - 118*		*01/12/22 18:24*	*1*
Dibromofluoromethane (Surr)	*80*		*60 - 132*		*01/12/22 18:24*	*1*
Toluene-d8 (Surr)	*79*		*53 - 124*		*01/12/22 18:24*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.029	mg/L			01/12/22 15:28	1
2-Butanone (MEK)	ND		0.20	0.058	mg/L			01/12/22 15:28	1
Benzene	ND		0.20	0.039	mg/L			01/12/22 15:28	1
Carbon tetrachloride	ND		0.20	0.066	mg/L			01/12/22 15:28	1
Chlorobenzene	ND		0.20	0.031	mg/L			01/12/22 15:28	1
Chloroform	ND		0.20	0.042	mg/L			01/12/22 15:28	1
Tetrachloroethene	ND		0.20	0.040	mg/L			01/12/22 15:28	1
Trichloroethene	ND		0.20	0.030	mg/L			01/12/22 15:28	1
Vinyl chloride	ND		0.20	0.073	mg/L			01/12/22 15:28	1
1,1-Dichloroethene	ND	*1	0.20	0.057	mg/L			01/12/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*140*		*52 - 151*		*01/12/22 15:28*	*1*
4-Bromofluorobenzene (Surr)	*114*		*49 - 118*		*01/12/22 15:28*	*1*
Dibromofluoromethane (Surr)	*122*		*60 - 132*		*01/12/22 15:28*	*1*
Toluene-d8 (Surr)	*120*		*53 - 124*		*01/12/22 15:28*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		01/13/22 09:30	01/17/22 18:02	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:02	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		01/13/22 09:30	01/17/22 18:02	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:02	1
Cresols, Total	ND		0.10	0.012	mg/L		01/13/22 09:30	01/17/22 18:02	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		01/13/22 09:30	01/17/22 18:02	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		01/13/22 09:30	01/17/22 18:02	1
Hexachloroethane	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 18:02	1
m & p-Cresol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:02	1
Nitrobenzene	ND		0.050	0.012	mg/L		01/13/22 09:30	01/17/22 18:02	1
o-Cresol	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 18:02	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		01/13/22 09:30	01/17/22 18:02	1
Pyridine	ND		0.10	0.0082	mg/L		01/13/22 09:30	01/17/22 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*38*		*32 - 115*	*01/13/22 09:30*	*01/17/22 18:02*	*1*
2-Fluorobiphenyl	*66*		*55 - 105*	*01/13/22 09:30*	*01/17/22 18:02*	*1*
2-Fluorophenol (Surr)	*68*		*55 - 105*	*01/13/22 09:30*	*01/17/22 18:02*	*1*
Nitrobenzene-d5 (Surr)	*70*		*55 - 109*	*01/13/22 09:30*	*01/17/22 18:02*	*1*
Phenol-d5 (Surr)	*53*		*48 - 105*	*01/13/22 09:30*	*01/17/22 18:02*	*1*
Terphenyl-d14 (Surr)	*83*		*37 - 107*	*01/13/22 09:30*	*01/17/22 18:02*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		01/13/22 09:30	01/17/22 18:25	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:25	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		01/13/22 09:30	01/17/22 18:25	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:25	1
Cresols, Total	ND		0.10	0.012	mg/L		01/13/22 09:30	01/17/22 18:25	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		01/13/22 09:30	01/17/22 18:25	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		01/13/22 09:30	01/17/22 18:25	1
Hexachloroethane	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 18:25	1
m & p-Cresol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 18:25	1
Nitrobenzene	ND		0.050	0.012	mg/L		01/13/22 09:30	01/17/22 18:25	1
o-Cresol	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 18:25	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		01/13/22 09:30	01/17/22 18:25	1
Pyridine	ND		0.10	0.0082	mg/L		01/13/22 09:30	01/17/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*47*		*32 - 115*	*01/13/22 09:30*	*01/17/22 18:25*	*1*
2-Fluorobiphenyl	*76*		*55 - 105*	*01/13/22 09:30*	*01/17/22 18:25*	*1*
2-Fluorophenol (Surr)	*80*		*55 - 105*	*01/13/22 09:30*	*01/17/22 18:25*	*1*
Nitrobenzene-d5 (Surr)	*79*		*55 - 109*	*01/13/22 09:30*	*01/17/22 18:25*	*1*
Phenol-d5 (Surr)	*63*		*48 - 105*	*01/13/22 09:30*	*01/17/22 18:25*	*1*
Terphenyl-d14 (Surr)	*95*		*37 - 107*	*01/13/22 09:30*	*01/17/22 18:25*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.0029	mg/L		01/13/22 08:45	01/17/22 11:25	1
Endrin	ND		0.00050	0.000091	mg/L		01/13/22 08:45	01/17/22 11:25	1
gamma-BHC (Lindane)	ND		0.00050	0.00012	mg/L		01/13/22 08:45	01/17/22 11:25	1
Heptachlor	ND		0.00050	0.00018	mg/L		01/13/22 08:45	01/17/22 11:25	1
Heptachlor epoxide	ND		0.00050	0.00014	mg/L		01/13/22 08:45	01/17/22 11:25	1
Methoxychlor	ND		0.00050	0.00031	mg/L		01/13/22 08:45	01/17/22 11:25	1
Toxaphene	ND		0.040	0.020	mg/L		01/13/22 08:45	01/17/22 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*94*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:25*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:25*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:25*	*1*
Tetrachloro-m-xylene (Surr)	*95*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:25*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.0029	mg/L		01/13/22 08:45	01/17/22 11:40	1
Endrin	ND		0.00050	0.000091	mg/L		01/13/22 08:45	01/17/22 11:40	1
gamma-BHC (Lindane)	ND		0.00050	0.00012	mg/L		01/13/22 08:45	01/17/22 11:40	1
Heptachlor	ND		0.00050	0.00018	mg/L		01/13/22 08:45	01/17/22 11:40	1
Heptachlor epoxide	ND		0.00050	0.00014	mg/L		01/13/22 08:45	01/17/22 11:40	1
Methoxychlor	ND		0.00050	0.00031	mg/L		01/13/22 08:45	01/17/22 11:40	1
Toxaphene	ND		0.040	0.020	mg/L		01/13/22 08:45	01/17/22 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:40*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:40*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:40*	*1*
Tetrachloro-m-xylene (Surr)	*95*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:40*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-3
Matrix: Solid
Percent Solids: 90.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		18	5.9	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1221	ND		18	6.4	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1232	ND		18	4.4	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1242	ND		18	2.7	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1248	ND		18	4.3	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1254	**32**		18	5.4	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1
PCB-1260	ND		18	5.2	ug/Kg	☼	01/10/22 11:30	01/12/22 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*99*		*55 - 135*	*01/10/22 11:30*	*01/12/22 20:23*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*55 - 135*	*01/10/22 11:30*	*01/12/22 20:23*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*	*01/10/22 11:30*	*01/12/22 20:23*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*63 - 138*	*01/10/22 11:30*	*01/12/22 20:23*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-4
Matrix: Solid
Percent Solids: 88.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		19	6.1	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1221	ND		19	6.6	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1232	ND		19	4.6	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1242	ND		19	2.7	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1248	ND		19	4.5	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1254	ND		19	5.6	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1
PCB-1260	ND		19	5.3	ug/Kg	☼	01/10/22 11:30	01/12/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*99*		*55 - 135*	*01/10/22 11:30*	*01/12/22 19:26*	*1*
Tetrachloro-m-xylene (Surr)	*90*		*55 - 135*	*01/10/22 11:30*	*01/12/22 19:26*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*63 - 138*	*01/10/22 11:30*	*01/12/22 19:26*	*1*
DCB Decachlorobiphenyl (Surr)	*102*		*63 - 138*	*01/10/22 11:30*	*01/12/22 19:26*	*1*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8151A - Herbicides (GC) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.020	mg/L		01/13/22 12:30	01/19/22 07:00	20
Silvex (2,4,5-TP)	ND		0.010	0.0064	mg/L		01/13/22 12:30	01/19/22 07:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*64*		*48 - 127*	*01/13/22 12:30*	*01/19/22 07:00*	*20*
2,4-Dichlorophenylacetic acid (Surr)	*65*		*48 - 127*	*01/13/22 12:30*	*01/19/22 07:00*	*20*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8151A - Herbicides (GC) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.020	mg/L		01/13/22 12:30	01/19/22 07:20	20
Silvex (2,4,5-TP)	ND		0.010	0.0064	mg/L		01/13/22 12:30	01/19/22 07:20	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*69*		*48 - 127*	*01/13/22 12:30*	*01/19/22 07:20*	*20*
2,4-Dichlorophenylacetic acid (Surr)	*72*		*48 - 127*	*01/13/22 12:30*	*01/19/22 07:20*	*20*

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 6010D - Metals (ICP) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	F2 FH	0.50	0.083	mg/L		01/12/22 12:15	01/13/22 08:58	1
Barium	**0.81**	**J F2 FH**	2.0	0.063	mg/L		01/12/22 12:15	01/13/22 08:58	1
Cadmium	ND	F2 FH B	0.50	0.0030	mg/L		01/12/22 12:15	01/13/22 08:58	1
Chromium	ND	F2 FH	0.50	0.016	mg/L		01/12/22 12:15	01/13/22 08:58	1
Copper	ND		0.25	0.022	mg/L		01/12/22 12:15	01/13/22 08:58	1
Lead	ND	F2 FH	0.50	0.044	mg/L		01/12/22 12:15	01/13/22 08:58	1
Nickel	ND		0.40	0.019	mg/L		01/12/22 12:15	01/13/22 08:58	1
Selenium	ND	F2 FH	0.50	0.037	mg/L		01/12/22 12:15	01/13/22 08:58	1
Silver	ND	F2 FH	0.50	0.0091	mg/L		01/12/22 12:15	01/13/22 08:58	1
Zinc	**0.11**	**J**	0.20	0.026	mg/L		01/12/22 12:15	01/13/22 08:58	1
Molybdenum	ND		0.40	0.025	mg/L		01/12/22 12:15	01/13/22 08:58	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 6010D - Metals (ICP) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50	0.083	mg/L		01/12/22 12:15	01/13/22 09:39	1
Barium	**0.71**	**J**	2.0	0.063	mg/L		01/12/22 12:15	01/13/22 09:39	1
Cadmium	**0.0044**	**J B**	0.50	0.0030	mg/L		01/12/22 12:15	01/13/22 09:39	1
Chromium	ND		0.50	0.016	mg/L		01/12/22 12:15	01/13/22 09:39	1
Copper	ND		0.25	0.022	mg/L		01/12/22 12:15	01/13/22 09:39	1
Lead	**0.051**	**J**	0.50	0.044	mg/L		01/12/22 12:15	01/13/22 09:39	1
Nickel	ND		0.40	0.019	mg/L		01/12/22 12:15	01/13/22 09:39	1
Selenium	ND		0.50	0.037	mg/L		01/12/22 12:15	01/13/22 09:39	1
Silver	ND		0.50	0.0091	mg/L		01/12/22 12:15	01/13/22 09:39	1
Zinc	**0.70**		0.20	0.026	mg/L		01/12/22 12:15	01/13/22 09:39	1
Molybdenum	ND		0.40	0.025	mg/L		01/12/22 12:15	01/13/22 09:39	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 7470A - Mercury (CVAA) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0035	FL	0.00020	0.00013	mg/L		01/12/22 12:04	01/13/22 11:02	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 7470A - Mercury (CVAA) - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/12/22 12:04	01/13/22 11:08	1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.5**		0.1	0.1	%			01/10/22 17:09	1
Percent Solids	**90.5**		0.1	0.1	%			01/10/22 17:09	1
Cyanide, Reactive	ND		25	25	mg/Kg		01/19/22 10:00	01/19/22 14:45	1
Sulfide, Reactive	ND		20	20	mg/Kg		01/19/22 10:00	01/19/22 14:45	1
Ignitability	**>140**				Degrees F			01/08/22 13:39	1
pH	**6.6**	**HF**	0.1	0.1	SU			01/07/22 13:46	1
Free Liquid	**CNF**				NONE			01/12/22 09:02	1
Total Volatile Solids	**1.7**		0.50	0.50	%			01/10/22 10:37	1
Total Solids	**90**		0.50	0.50	%			01/10/22 10:37	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid
Percent Solids: 90.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND	FL	180	81	mg/Kg	☼	01/12/22 11:00	01/13/22 01:25	1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.7**		0.1	0.1	%			01/10/22 17:09	1
Percent Solids	**88.3**		0.1	0.1	%			01/10/22 17:09	1
Cyanide, Reactive	ND		25	25	mg/Kg		01/19/22 10:00	01/19/22 14:45	1
Sulfide, Reactive	ND		20	20	mg/Kg		01/19/22 10:00	01/19/22 14:45	1
Ignitability	**>140**				Degrees F			01/08/22 13:45	1
pH	**8.7**	**HF**	0.1	0.1	SU			01/07/22 13:47	1
Free Liquid	**CNF**				NONE			01/12/22 09:11	1
Total Volatile Solids	**2.6**		0.50	0.50	%			01/10/22 10:37	1
Total Solids	**89**		0.50	0.50	%			01/10/22 10:37	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid
Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND		190	83	mg/Kg	☼	01/12/22 11:00	01/13/22 01:25	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-3
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.2**		0.1	0.1	%			01/10/22 11:03	1
Percent Solids	**90.8**		0.1	0.1	%			01/10/22 11:03	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-4
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.1**		0.1	0.1	%			01/10/22 11:03	1
Percent Solids	**88.9**		0.1	0.1	%			01/10/22 11:03	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TCLP pH Post-Leach	4.9	!	0.1	0.1	SU			01/14/22 13:48	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry - TCLP

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TCLP pH Post-Leach	5.0	!	0.1	0.1	SU			01/14/22 13:48	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry - ASTM Leach

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	**6.8**		5.1	4.4	mg/L		01/14/22 13:00	01/14/22 19:30	1
Ammonia, distilled	ND		0.10	0.088	mg/L			01/15/22 11:17	1
Chemical Oxygen Demand	**29**		10	9.1	mg/L		01/13/22 12:38	01/13/22 16:35	1
Total Solids	ND		10	10	mg/L			01/13/22 14:47	1

Client Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry - ASTM Leach

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-2
Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND		5.1	4.4	mg/L		01/14/22 13:00	01/14/22 19:30	1
Ammonia, distilled	ND		0.10	0.088	mg/L			01/15/22 11:18	1
Chemical Oxygen Demand	**19**		10	9.1	mg/L		01/13/22 12:38	01/13/22 16:36	1
Total Solids	**24**		10	10	mg/L			01/13/22 14:47	1

Default Detection Limits

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS - TCLP

Leach: EPA 1311

Analyte	RL	MDL	Units
1,1-Dichloroethene	0.20	0.057	mg/L
1,2-Dichloroethane	0.20	0.029	mg/L
2-Butanone (MEK)	0.20	0.058	mg/L
Benzene	0.20	0.039	mg/L
Carbon tetrachloride	0.20	0.066	mg/L
Chlorobenzene	0.20	0.031	mg/L
Chloroform	0.20	0.042	mg/L
Tetrachloroethene	0.20	0.040	mg/L
Trichloroethene	0.20	0.030	mg/L
Vinyl chloride	0.20	0.073	mg/L

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Prep: 3510C

Leach: EPA 1311

Analyte	RL	MDL	Units
1,4-Dichlorobenzene	0.050	0.0045	mg/L
2,4,5-Trichlorophenol	0.050	0.0079	mg/L
2,4,6-Trichlorophenol	0.050	0.0095	mg/L
2,4-Dinitrotoluene	0.050	0.0079	mg/L
Cresols, Total	0.10	0.012	mg/L
Hexachlorobenzene	0.050	0.0055	mg/L
Hexachlorobutadiene	0.050	0.0084	mg/L
Hexachloroethane	0.050	0.0040	mg/L
m & p-Cresol	0.050	0.0079	mg/L
Nitrobenzene	0.050	0.012	mg/L
o-Cresol	0.050	0.0040	mg/L
Pentachlorophenol	0.25	0.0075	mg/L
Pyridine	0.10	0.0082	mg/L

Method: EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Prep: 3510C

Leach: EPA 1311

Analyte	RL	MDL	Units
Chlordane (technical)	0.0050	0.0029	mg/L
Endrin	0.00050	0.000091	mg/L
gamma-BHC (Lindane)	0.00050	0.00012	mg/L
Heptachlor	0.00050	0.00018	mg/L
Heptachlor epoxide	0.00050	0.00014	mg/L
Methoxychlor	0.00050	0.00031	mg/L
Toxaphene	0.040	0.020	mg/L

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Prep: 3541

Analyte	RL	MDL	Units
PCB-1016	17	5.4	ug/Kg
PCB-1221	17	5.9	ug/Kg
PCB-1232	17	4.1	ug/Kg
PCB-1242	17	2.4	ug/Kg
PCB-1248	17	4.0	ug/Kg
PCB-1254	17	5.0	ug/Kg
PCB-1260	17	4.7	ug/Kg

Default Detection Limits

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8151A - Herbicides (GC) - TCLP

Prep: 8151A
Leach: EPA 1311

Analyte	RL	MDL	Units
2,4-D	0.040	0.020	mg/L
Silvex (2,4,5-TP)	0.010	0.0064	mg/L

Method: EPA 6010D - Metals (ICP) - TCLP

Prep: 3010A
Leach: EPA 1311

Analyte	RL	MDL	Units
Arsenic	0.050	0.0083	mg/L
Barium	0.20	0.0063	mg/L
Cadmium	0.050	0.00030	mg/L
Chromium	0.050	0.0016	mg/L
Copper	0.025	0.0022	mg/L
Lead	0.050	0.0044	mg/L
Molybdenum	0.040	0.0025	mg/L
Nickel	0.040	0.0019	mg/L
Selenium	0.050	0.0037	mg/L
Silver	0.050	0.00091	mg/L
Zinc	0.020	0.0026	mg/L

Method: EPA 7470A - Mercury (CVAA) - TCLP

Prep: 7470A
Leach: EPA 1311

Analyte	RL	MDL	Units
Mercury	0.00020	0.00013	mg/L

General Chemistry

Analyte	RL	MDL	Units
Percent Moisture	0.1	0.1	%
Percent Solids	0.1	0.1	%
pH	0.1	0.1	SU
Total Solids	0.50	0.50	%
Total Volatile Solids	0.50	0.50	%

General Chemistry

Prep: 7.3.3

Analyte	RL	MDL	Units
Cyanide, Reactive	25	25	mg/Kg

General Chemistry

Prep: 7.3.4

Analyte	RL	MDL	Units
Sulfide, Reactive	20	20	mg/Kg

General Chemistry

Prep: 9071B

Analyte	RL	MDL	Units
Oil & Grease (HEM)	170	74	mg/Kg

General Chemistry - TCLP

Default Detection Limits

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry - TCLP

Analyte	RL	MDL	Units
TCLP pH Post-Leach	0.1	0.1	SU

General Chemistry - ASTM Leach

Leach: D3987-85

Analyte	RL	MDL	Units
Ammonia, distilled	0.10	0.088	mg/L
Total Solids	10	10	mg/L

General Chemistry - ASTM Leach

Prep: 1664B
Leach: D3987-85

Analyte	RL	MDL	Units
Oil & Grease (HEM)	5.0	4.3	mg/L

General Chemistry - ASTM Leach

Prep: 410.4
Leach: D3987-85

Analyte	RL	MDL	Units
Chemical Oxygen Demand	10	9.1	mg/L

Surrogate Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(52-151)	(49-118)	(60-132)	(53-124)
LCS 180-384914/3	Lab Control Sample	97	83	93	83
LCSD 180-384914/5	Lab Control Sample Dup	92	85	89	82

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(52-151)	(49-118)	(60-132)	(53-124)
180-132081-3	T1-WC-B-FL-D-2201051234-0-1	90	75	80	79
180-132081-3 MS	T1-WC-B-FL-D-2201051234-0-12	118	98	116	95
180-132081-3 MSD	T1-WC-B-FL-D-2201051234-0-12	112	99	116	101
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	140	114	122	120
LB 180-384838/1-A	Method Blank	117	103	110	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-115)	(55-105)	(55-105)	(55-109)	(48-105)	(37-107)
LCS 180-385073/2-A	Lab Control Sample	71	76	79	79	76	88
MB 180-385073/1-A	Method Blank	61	66	74	64	68	79

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-115)	(55-105)	(55-105)	(55-109)	(48-105)	(37-107)
180-132081-1	T1-WC-B-FL-D-2201051234-0-1	38	66	68	70	53	83
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	47	76	80	79	63	95
LB 180-384701/1-D	Method Blank	70	74	79	73	75	84
LB 180-384835/1-F	Method Blank	63	71	75	71	70	85

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: EPA 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(48-137)	(48-137)	(56-137)	(56-137)
LCS 180-385068/2-A	Lab Control Sample	99	97	85	96
LCSD 180-385068/3-A	Lab Control Sample Dup	91	94	82	91
MB 180-385068/1-A	Method Blank	103	97	80	92

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: EPA 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(48-137)	(48-137)	(56-137)	(56-137)
180-132081-1	T1-WC-B-FL-D-2201051234-0-1	94	98	80	95
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	100	98	84	95
LB 180-384835/1-E	Method Blank	97	98	80	93

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TCX1	TCX2	DCB1	DCB2
Lab Sample ID	Client Sample ID	(55-135)	(55-135)	(63-138)	(63-138)
180-132081-3	T1-WC-B-FL-D-2201051234-0-1	99	85	97	101
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	99	90	104	102
180-132081-4 MS	T1-WC-B-FL-D-2201051520-0-12	71	66	81	78

Surrogate Summary

Client: Anchor QEA LLC
Job ID: 180-132081-1
Project/Site: Vo Toys - Harrison, NJ

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TCX1 (55-135)	TCX2 (55-135)	DCB1 (63-138)	DCB2 (63-138)
180-132081-4 MSD	T1-WC-B-FL-D-2201051520-0-1	88	81	97	92
LCS 180-384682/2-C	Lab Control Sample	108	111	127	124
MB 180-384682/1-C	Method Blank	82	81	96	90

Surrogate Legend

TCX = Tetrachloro-m-xylene (Surr)
DCB = DCB Decachlorobiphenyl (Surr)

Method: EPA 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (48-127)	DCPAA2 (48-127)
LCS 180-385097/2-A	Lab Control Sample	77	83
LCSD 180-385097/3-A	Lab Control Sample Dup	77	84
MB 180-385097/1-A	Method Blank	81	90

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

Method: EPA 8151A - Herbicides (GC)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPAA1 (48-127)	DCPAA2 (48-127)
180-132081-1	T1-WC-B-FL-D-2201051234-0-1	64	65
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	69	72
LB 180-384835/1-G	Method Blank	63	66

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCS 180-384914/3
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	0.0100	0.0123		mg/L		123	57 - 149
2-Butanone (MEK)	0.0100	0.00811	J	mg/L		81	35 - 158
Benzene	0.0100	0.0115		mg/L		115	68 - 122
Carbon tetrachloride	0.0100	0.0103		mg/L		103	60 - 135
Chlorobenzene	0.0100	0.00892	J	mg/L		89	72 - 123
Chloroform	0.0100	0.0114		mg/L		114	62 - 121
Tetrachloroethene	0.0100	0.0102		mg/L		102	60 - 129
Trichloroethene	0.0100	0.0112		mg/L		112	67 - 121
Vinyl chloride	0.0100	0.00871	J	mg/L		87	47 - 147
1,1-Dichloroethene	0.0100	0.0107		mg/L		107	49 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*52 - 151*
4-Bromofluorobenzene (Surr)	*83*		*49 - 118*
Dibromofluoromethane (Surr)	*93*		*60 - 132*
Toluene-d8 (Surr)	*83*		*53 - 124*

Lab Sample ID: LCSD 180-384914/5
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	0.0100	0.0119		mg/L		119	57 - 149	3	27
2-Butanone (MEK)	0.0100	0.00755	J	mg/L		76	35 - 158	7	35
Benzene	0.0100	0.0115		mg/L		115	68 - 122	0	21
Carbon tetrachloride	0.0100	0.0106		mg/L		106	60 - 135	3	25
Chlorobenzene	0.0100	0.00918	J	mg/L		92	72 - 123	3	19
Chloroform	0.0100	0.0118		mg/L		118	62 - 121	3	22
Tetrachloroethene	0.0100	0.00990	J	mg/L		99	60 - 129	3	22
Trichloroethene	0.0100	0.0110		mg/L		110	67 - 121	1	23
Vinyl chloride	0.0100	0.00936	J	mg/L		94	47 - 147	7	25
1,1-Dichloroethene	0.0100	0.00809	J *1	mg/L		81	49 - 132	28	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*52 - 151*
4-Bromofluorobenzene (Surr)	*85*		*49 - 118*
Dibromofluoromethane (Surr)	*89*		*60 - 132*
Toluene-d8 (Surr)	*82*		*53 - 124*

Lab Sample ID: LB 180-384838/1-A
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.10	0.015	mg/L			01/12/22 14:38	1
2-Butanone (MEK)	ND		0.10	0.029	mg/L			01/12/22 14:38	1
Benzene	ND		0.10	0.020	mg/L			01/12/22 14:38	1
Carbon tetrachloride	ND		0.10	0.033	mg/L			01/12/22 14:38	1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-384838/1-A
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.10	0.016	mg/L			01/12/22 14:38	1
Chloroform	ND		0.10	0.021	mg/L			01/12/22 14:38	1
Tetrachloroethene	ND		0.10	0.020	mg/L			01/12/22 14:38	1
Trichloroethene	ND		0.10	0.015	mg/L			01/12/22 14:38	1
Vinyl chloride	ND		0.10	0.037	mg/L			01/12/22 14:38	1
1,1-Dichloroethene	ND		0.10	0.029	mg/L			01/12/22 14:38	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*52 - 151*		*01/12/22 14:38*	*1*
4-Bromofluorobenzene (Surr)	*103*		*49 - 118*		*01/12/22 14:38*	*1*
Dibromofluoromethane (Surr)	*110*		*60 - 132*		*01/12/22 14:38*	*1*
Toluene-d8 (Surr)	*97*		*53 - 124*		*01/12/22 14:38*	*1*

Lab Sample ID: 180-132081-3 MS
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND	FH	0.200	0.283		mg/L		142	57 - 149
2-Butanone (MEK)	ND		0.200	0.177	J	mg/L		89	35 - 158
Benzene	ND	FH	0.200	0.264	FH	mg/L		132	68 - 122
Carbon tetrachloride	ND		0.200	0.224		mg/L		112	60 - 135
Chlorobenzene	ND		0.200	0.198	J	mg/L		99	72 - 123
Chloroform	ND	FH	0.200	0.269	FH	mg/L		134	62 - 121
Tetrachloroethene	ND		0.200	0.195	J	mg/L		97	60 - 129
Trichloroethene	ND	FH	0.200	0.238		mg/L		119	67 - 121
Vinyl chloride	ND		0.200	0.192	J	mg/L		96	47 - 147
1,1-Dichloroethene	ND	*1	0.200	0.215		mg/L		107	49 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*52 - 151*
4-Bromofluorobenzene (Surr)	*98*		*49 - 118*
Dibromofluoromethane (Surr)	*116*		*60 - 132*
Toluene-d8 (Surr)	*95*		*53 - 124*

Lab Sample ID: 180-132081-3 MSD
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	ND	FH	0.200	0.302	FH	mg/L		151	57 - 149	6	27
2-Butanone (MEK)	ND		0.200	0.170	J	mg/L		85	35 - 158	4	35
Benzene	ND	FH	0.200	0.275	FH	mg/L		138	68 - 122	4	21
Carbon tetrachloride	ND		0.200	0.216		mg/L		108	60 - 135	4	25
Chlorobenzene	ND		0.200	0.214		mg/L		107	72 - 123	7	19
Chloroform	ND	FH	0.200	0.277	FH	mg/L		138	62 - 121	3	22
Tetrachloroethene	ND		0.200	0.209		mg/L		104	60 - 129	7	22
Trichloroethene	ND	FH	0.200	0.255	FH	mg/L		128	67 - 121	7	23

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-132081-3 MSD
Matrix: Solid
Analysis Batch: 384914

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	ND		0.200	0.182	J	mg/L		91	47 - 147	5	25
1,1-Dichloroethene	ND	*1	0.200	0.221		mg/L		110	49 - 132	3	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*52 - 151*
4-Bromofluorobenzene (Surr)	*99*		*49 - 118*
Dibromofluoromethane (Surr)	*116*		*60 - 132*
Toluene-d8 (Surr)	*101*		*53 - 124*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-385073/1-A
Matrix: Solid
Analysis Batch: 385325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 385073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		01/13/22 09:30	01/17/22 09:17	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 09:17	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		01/13/22 09:30	01/17/22 09:17	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 09:17	1
Cresols, Total	ND		0.10	0.012	mg/L		01/13/22 09:30	01/17/22 09:17	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		01/13/22 09:30	01/17/22 09:17	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		01/13/22 09:30	01/17/22 09:17	1
Hexachloroethane	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 09:17	1
m & p-Cresol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 09:17	1
Nitrobenzene	ND		0.050	0.012	mg/L		01/13/22 09:30	01/17/22 09:17	1
o-Cresol	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 09:17	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		01/13/22 09:30	01/17/22 09:17	1
Pyridine	ND		0.10	0.0082	mg/L		01/13/22 09:30	01/17/22 09:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*61*		*32 - 115*	*01/13/22 09:30*	*01/17/22 09:17*	*1*
2-Fluorobiphenyl	*66*		*55 - 105*	*01/13/22 09:30*	*01/17/22 09:17*	*1*
2-Fluorophenol (Surr)	*74*		*55 - 105*	*01/13/22 09:30*	*01/17/22 09:17*	*1*
Nitrobenzene-d5 (Surr)	*64*		*55 - 109*	*01/13/22 09:30*	*01/17/22 09:17*	*1*
Phenol-d5 (Surr)	*68*		*48 - 105*	*01/13/22 09:30*	*01/17/22 09:17*	*1*
Terphenyl-d14 (Surr)	*79*		*37 - 107*	*01/13/22 09:30*	*01/17/22 09:17*	*1*

Lab Sample ID: LCS 180-385073/2-A
Matrix: Solid
Analysis Batch: 385325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 385073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.250	0.168		mg/L		67	61 - 100
2,4,5-Trichlorophenol	0.250	0.169		mg/L		68	53 - 104
2,4,6-Trichlorophenol	0.250	0.178		mg/L		71	53 - 103
2,4-Dinitrotoluene	0.250	0.131		mg/L		52	43 - 100
Cresols, Total	0.750	0.494		mg/L		66	58 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-385073/2-A
Matrix: Solid
Analysis Batch: 385325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 385073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	0.250	0.148		mg/L		59	34 - 100
Hexachlorobutadiene	0.250	0.181		mg/L		72	52 - 110
Hexachloroethane	0.250	0.163		mg/L		65	56 - 100
m & p-Cresol	0.500	0.337		mg/L		67	59 - 100
Nitrobenzene	0.250	0.183		mg/L		73	60 - 100
o-Cresol	0.250	0.156		mg/L		63	56 - 100
Pentachlorophenol	0.250	0.133	J	mg/L		53	14 - 112
Pyridine	0.250	0.215		mg/L		86	54 - 107

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*71*		*32 - 115*
2-Fluorobiphenyl	*76*		*55 - 105*
2-Fluorophenol (Surr)	*79*		*55 - 105*
Nitrobenzene-d5 (Surr)	*79*		*55 - 109*
Phenol-d5 (Surr)	*76*		*48 - 105*
Terphenyl-d14 (Surr)	*88*		*37 - 107*

Lab Sample ID: LB 180-384701/1-D
Matrix: Solid
Analysis Batch: 385325

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 385073

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		01/13/22 09:30	01/17/22 12:17	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:17	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		01/13/22 09:30	01/17/22 12:17	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:17	1
Cresols, Total	ND		0.10	0.012	mg/L		01/13/22 09:30	01/17/22 12:17	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		01/13/22 09:30	01/17/22 12:17	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		01/13/22 09:30	01/17/22 12:17	1
Hexachloroethane	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 12:17	1
m & p-Cresol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:17	1
Nitrobenzene	ND		0.050	0.012	mg/L		01/13/22 09:30	01/17/22 12:17	1
o-Cresol	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 12:17	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		01/13/22 09:30	01/17/22 12:17	1
Pyridine	ND		0.10	0.0082	mg/L		01/13/22 09:30	01/17/22 12:17	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*32 - 115*	*01/13/22 09:30*	*01/17/22 12:17*	*1*
2-Fluorobiphenyl	*74*		*55 - 105*	*01/13/22 09:30*	*01/17/22 12:17*	*1*
2-Fluorophenol (Surr)	*79*		*55 - 105*	*01/13/22 09:30*	*01/17/22 12:17*	*1*
Nitrobenzene-d5 (Surr)	*73*		*55 - 109*	*01/13/22 09:30*	*01/17/22 12:17*	*1*
Phenol-d5 (Surr)	*75*		*48 - 105*	*01/13/22 09:30*	*01/17/22 12:17*	*1*
Terphenyl-d14 (Surr)	*84*		*37 - 107*	*01/13/22 09:30*	*01/17/22 12:17*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 180-384835/1-F
Matrix: Solid
Analysis Batch: 385325

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 385073

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		01/13/22 09:30	01/17/22 12:40	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:40	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		01/13/22 09:30	01/17/22 12:40	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:40	1
Cresols, Total	ND		0.10	0.012	mg/L		01/13/22 09:30	01/17/22 12:40	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		01/13/22 09:30	01/17/22 12:40	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		01/13/22 09:30	01/17/22 12:40	1
Hexachloroethane	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 12:40	1
m & p-Cresol	ND		0.050	0.0079	mg/L		01/13/22 09:30	01/17/22 12:40	1
Nitrobenzene	ND		0.050	0.012	mg/L		01/13/22 09:30	01/17/22 12:40	1
o-Cresol	ND		0.050	0.0040	mg/L		01/13/22 09:30	01/17/22 12:40	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		01/13/22 09:30	01/17/22 12:40	1
Pyridine	ND		0.10	0.0082	mg/L		01/13/22 09:30	01/17/22 12:40	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*32 - 115*	*01/13/22 09:30*	*01/17/22 12:40*	*1*
2-Fluorobiphenyl	*71*		*55 - 105*	*01/13/22 09:30*	*01/17/22 12:40*	*1*
2-Fluorophenol (Surr)	*75*		*55 - 105*	*01/13/22 09:30*	*01/17/22 12:40*	*1*
Nitrobenzene-d5 (Surr)	*71*		*55 - 109*	*01/13/22 09:30*	*01/17/22 12:40*	*1*
Phenol-d5 (Surr)	*70*		*48 - 105*	*01/13/22 09:30*	*01/17/22 12:40*	*1*
Terphenyl-d14 (Surr)	*85*		*37 - 107*	*01/13/22 09:30*	*01/17/22 12:40*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-385068/1-A
Matrix: Solid
Analysis Batch: 385331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 385068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.0029	mg/L		01/13/22 08:45	01/17/22 10:22	1
Endrin	ND		0.00050	0.000091	mg/L		01/13/22 08:45	01/17/22 10:22	1
gamma-BHC (Lindane)	ND		0.00050	0.00012	mg/L		01/13/22 08:45	01/17/22 10:22	1
Heptachlor	ND		0.00050	0.00018	mg/L		01/13/22 08:45	01/17/22 10:22	1
Heptachlor epoxide	ND		0.00050	0.00014	mg/L		01/13/22 08:45	01/17/22 10:22	1
Methoxychlor	ND		0.00050	0.00031	mg/L		01/13/22 08:45	01/17/22 10:22	1
Toxaphene	ND		0.040	0.020	mg/L		01/13/22 08:45	01/17/22 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*48 - 137*	*01/13/22 08:45*	*01/17/22 10:22*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*48 - 137*	*01/13/22 08:45*	*01/17/22 10:22*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*56 - 137*	*01/13/22 08:45*	*01/17/22 10:22*	*1*
Tetrachloro-m-xylene (Surr)	*92*		*56 - 137*	*01/13/22 08:45*	*01/17/22 10:22*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-385068/2-A
Matrix: Solid
Analysis Batch: 385331

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 385068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endrin	0.0100	0.0112		mg/L		112	72 - 115
gamma-BHC (Lindane)	0.0100	0.0104		mg/L		104	67 - 120
Heptachlor	0.0100	0.0103		mg/L		103	71 - 125
Heptachlor epoxide	0.0100	0.0111		mg/L		111	67 - 123
Methoxychlor	0.0100	0.00997		mg/L		100	59 - 109

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*99*		*48 - 137*
DCB Decachlorobiphenyl (Surr)	*97*		*48 - 137*
Tetrachloro-m-xylene (Surr)	*85*		*56 - 137*
Tetrachloro-m-xylene (Surr)	*96*		*56 - 137*

Lab Sample ID: LCSD 180-385068/3-A
Matrix: Solid
Analysis Batch: 385331

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 385068

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Endrin	0.0100	0.0110		mg/L		110	72 - 115	3	15
gamma-BHC (Lindane)	0.0100	0.0101		mg/L		101	67 - 120	3	18
Heptachlor	0.0100	0.0101		mg/L		101	71 - 125	2	16
Heptachlor epoxide	0.0100	0.0107		mg/L		107	67 - 123	4	15
Methoxychlor	0.0100	0.00977		mg/L		98	59 - 109	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*48 - 137*
DCB Decachlorobiphenyl (Surr)	*94*		*48 - 137*
Tetrachloro-m-xylene (Surr)	*82*		*56 - 137*
Tetrachloro-m-xylene (Surr)	*91*		*56 - 137*

Lab Sample ID: LB 180-384835/1-E
Matrix: Solid
Analysis Batch: 385331

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 385068

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050	0.0029	mg/L		01/13/22 08:45	01/17/22 11:09	1
Endrin	ND		0.00050	0.000091	mg/L		01/13/22 08:45	01/17/22 11:09	1
gamma-BHC (Lindane)	ND		0.00050	0.00012	mg/L		01/13/22 08:45	01/17/22 11:09	1
Heptachlor	ND		0.00050	0.00018	mg/L		01/13/22 08:45	01/17/22 11:09	1
Heptachlor epoxide	ND		0.00050	0.00014	mg/L		01/13/22 08:45	01/17/22 11:09	1
Methoxychlor	ND		0.00050	0.00031	mg/L		01/13/22 08:45	01/17/22 11:09	1
Toxaphene	ND		0.040	0.020	mg/L		01/13/22 08:45	01/17/22 11:09	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:09*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*48 - 137*	*01/13/22 08:45*	*01/17/22 11:09*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:09*	*1*
Tetrachloro-m-xylene (Surr)	*93*		*56 - 137*	*01/13/22 08:45*	*01/17/22 11:09*	*1*

QC Sample Results

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-384682/1-C
Matrix: Solid
Analysis Batch: 384861

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17	5.4	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1221	ND		17	5.9	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1232	ND		17	4.1	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1242	ND		17	2.4	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1248	ND		17	4.0	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1254	ND		17	5.0	ug/Kg		01/10/22 11:30	01/12/22 18:30	1
PCB-1260	ND		17	4.7	ug/Kg		01/10/22 11:30	01/12/22 18:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*82*		*55 - 135*	*01/10/22 11:30*	*01/12/22 18:30*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*55 - 135*	*01/10/22 11:30*	*01/12/22 18:30*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*63 - 138*	*01/10/22 11:30*	*01/12/22 18:30*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*63 - 138*	*01/10/22 11:30*	*01/12/22 18:30*	*1*

Lab Sample ID: LCS 180-384682/2-C
Matrix: Solid
Analysis Batch: 384861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1330	1260		ug/Kg		95	43 - 136
PCB-1260	1330	1520		ug/Kg		114	55 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*108*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*111*		*55 - 135*
DCB Decachlorobiphenyl (Surr)	*127*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*124*		*63 - 138*

Lab Sample ID: 180-132081-4 MS
Matrix: Solid
Analysis Batch: 384861

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Prep Type: Total/NA
Prep Batch: 384682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		1490	945		ug/Kg	☼	63	43 - 136
PCB-1260	ND		1490	1090		ug/Kg	☼	73	55 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*71*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*66*		*55 - 135*
DCB Decachlorobiphenyl (Surr)	*81*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*78*		*63 - 138*

Lab Sample ID: 180-132081-4 MSD
Matrix: Solid
Analysis Batch: 384861

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12
Prep Type: Total/NA
Prep Batch: 384682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1490	1180		ug/Kg	☼	79	43 - 136	22	40

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-132081-4 MSD — **Client Sample ID: T1-WC-B-FL-D-2201051520-0-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384861 — **Prep Batch: 384682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1260	ND		1490	1320		ug/Kg	☼	88	55 - 128	19	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*88*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*81*		*55 - 135*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*92*		*63 - 138*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-385097/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385491 — **Prep Batch: 385097**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.020	mg/L		01/13/22 12:30	01/19/22 05:42	20
Silvex (2,4,5-TP)	ND		0.010	0.0064	mg/L		01/13/22 12:30	01/19/22 05:42	20

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*81*		*48 - 127*	*01/13/22 12:30*	*01/19/22 05:42*	*20*
2,4-Dichlorophenylacetic acid (Surr)	*90*		*48 - 127*	*01/13/22 12:30*	*01/19/22 05:42*	*20*

Lab Sample ID: LCS 180-385097/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385491 — **Prep Batch: 385097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	0.200	0.116		mg/L		58	23 - 139
Silvex (2,4,5-TP)	0.0500	0.0379		mg/L		76	33 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*77*		*48 - 127*
2,4-Dichlorophenylacetic acid (Surr)	*83*		*48 - 127*

Lab Sample ID: LCSD 180-385097/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385491 — **Prep Batch: 385097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-D	0.200	0.126		mg/L		63	23 - 139	8	35
Silvex (2,4,5-TP)	0.0500	0.0402		mg/L		80	33 - 140	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid (Surr)	*77*		*48 - 127*
2,4-Dichlorophenylacetic acid (Surr)	*84*		*48 - 127*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: LB 180-384835/1-G
Matrix: Solid
Analysis Batch: 385491

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 385097

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040	0.020	mg/L		01/13/22 12:30	01/19/22 06:41	20
Silvex (2,4,5-TP)	ND		0.010	0.0064	mg/L		01/13/22 12:30	01/19/22 06:41	20

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid (Surr)	*63*		*48 - 127*	*01/13/22 12:30*	*01/19/22 06:41*	*20*
2,4-Dichlorophenylacetic acid (Surr)	*66*		*48 - 127*	*01/13/22 12:30*	*01/19/22 06:41*	*20*

Method: EPA 6010D - Metals (ICP)

Lab Sample ID: MB 180-384966/1-A
Matrix: Solid
Analysis Batch: 385128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050	0.0083	mg/L		01/12/22 12:15	01/13/22 08:45	1
Barium	ND		0.20	0.0063	mg/L		01/12/22 12:15	01/13/22 08:45	1
Cadmium	ND		0.050	0.00030	mg/L		01/12/22 12:15	01/13/22 08:45	1
Chromium	ND		0.050	0.0016	mg/L		01/12/22 12:15	01/13/22 08:45	1
Copper	ND		0.025	0.0022	mg/L		01/12/22 12:15	01/13/22 08:45	1
Lead	ND		0.050	0.0044	mg/L		01/12/22 12:15	01/13/22 08:45	1
Nickel	ND		0.040	0.0019	mg/L		01/12/22 12:15	01/13/22 08:45	1
Selenium	ND		0.050	0.0037	mg/L		01/12/22 12:15	01/13/22 08:45	1
Silver	ND		0.050	0.00091	mg/L		01/12/22 12:15	01/13/22 08:45	1
Zinc	ND		0.020	0.0026	mg/L		01/12/22 12:15	01/13/22 08:45	1
Molybdenum	ND		0.040	0.0025	mg/L		01/12/22 12:15	01/13/22 08:45	1

Lab Sample ID: LCS 180-384966/2-A
Matrix: Solid
Analysis Batch: 385128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.07		mg/L		107	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Cadmium	0.500	0.519		mg/L		104	80 - 120
Chromium	0.500	0.470		mg/L		94	80 - 120
Copper	0.500	0.513		mg/L		103	80 - 120
Lead	0.500	0.492		mg/L		98	80 - 120
Nickel	0.500	0.500		mg/L		100	80 - 120
Selenium	1.00	1.06		mg/L		106	80 - 120
Silver	0.250	0.251		mg/L		100	80 - 120
Zinc	0.250	0.246		mg/L		98	80 - 120
Molybdenum	0.500	0.495		mg/L		99	80 - 120

Lab Sample ID: LB 180-384835/1-D
Matrix: Solid
Analysis Batch: 385128

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 384966

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50	0.083	mg/L		01/12/22 12:15	01/13/22 08:54	1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: LB 180-384835/1-D — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385128 — **Prep Batch: 384966**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		2.0	0.063	mg/L		01/12/22 12:15	01/13/22 08:54	1
Cadmium	0.00340	J B	0.50	0.0030	mg/L		01/12/22 12:15	01/13/22 08:54	1
Chromium	ND		0.50	0.016	mg/L		01/12/22 12:15	01/13/22 08:54	1
Copper	ND		0.25	0.022	mg/L		01/12/22 12:15	01/13/22 08:54	1
Lead	ND		0.50	0.044	mg/L		01/12/22 12:15	01/13/22 08:54	1
Nickel	ND		0.40	0.019	mg/L		01/12/22 12:15	01/13/22 08:54	1
Selenium	ND		0.50	0.037	mg/L		01/12/22 12:15	01/13/22 08:54	1
Silver	ND		0.50	0.0091	mg/L		01/12/22 12:15	01/13/22 08:54	1
Zinc	ND		0.20	0.026	mg/L		01/12/22 12:15	01/13/22 08:54	1
Molybdenum	ND		0.40	0.025	mg/L		01/12/22 12:15	01/13/22 08:54	1

Lab Sample ID: 180-132081-1 MS — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385128 — **Prep Batch: 384966**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND	F2 FH	5.00	5.19		mg/L		104	75 - 125
Barium	0.81	J F2 FH	50.0	49.3		mg/L		97	75 - 125
Cadmium	ND	F2 FH B	1.00	0.998		mg/L		100	75 - 125
Chromium	ND	F2 FH	5.00	4.66		mg/L		93	75 - 125
Lead	ND	F2 FH	5.00	4.66		mg/L		93	75 - 125
Selenium	ND	F2 FH	1.00	1.01		mg/L		101	75 - 125
Silver	ND	F2 FH	1.00	0.972		mg/L		97	75 - 125

Lab Sample ID: 180-132081-1 MS — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385128 — **Prep Batch: 384966**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	ND		1.00	0.965		mg/L		97	75 - 125
Nickel	ND		1.00	0.890		mg/L		89	75 - 125
Zinc	0.11	J	0.500	0.607		mg/L		99	75 - 125
Molybdenum	ND		1.00	0.870		mg/L		87	75 - 125

Lab Sample ID: 180-132081-1 MSD — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385128 — **Prep Batch: 384966**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND	F2 FH	5.00	7.10	FH F2	mg/L		142	75 - 125	31	20
Barium	0.81	J F2 FH	50.0	67.2	FH F2	mg/L		133	75 - 125	31	20
Cadmium	ND	F2 FH B	1.00	1.37	FH F2	mg/L		137	75 - 125	31	20
Chromium	ND	F2 FH	5.00	6.41	FH F2	mg/L		128	75 - 125	32	20
Lead	ND	F2 FH	5.00	6.38	FH F2	mg/L		128	75 - 125	31	20
Selenium	ND	F2 FH	1.00	1.42	FH F2	mg/L		142	75 - 125	33	20
Silver	ND	F2 FH	1.00	1.34	FH F2	mg/L		134	75 - 125	32	20

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: 180-132081-1 MSD — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385128 — **Prep Batch: 384966**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	ND		1.00	0.973		mg/L		97	75 - 125	1	20
Nickel	ND		1.00	0.933		mg/L		93	75 - 125	5	20
Zinc	0.11	J	0.500	0.628		mg/L		103	75 - 125	3	20
Molybdenum	ND		1.00	0.917		mg/L		92	75 - 125	5	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-384964/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385098 — **Prep Batch: 384964**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/12/22 12:04	01/13/22 10:59	1

Lab Sample ID: LCS 180-384964/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385098 — **Prep Batch: 384964**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00241		mg/L		96	80 - 120

Lab Sample ID: LB 180-384835/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385098 — **Prep Batch: 384964**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/12/22 12:04	01/13/22 11:01	1

Lab Sample ID: 180-132081-1 MS — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385098 — **Prep Batch: 384964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0035	FL	0.00500	ND	FL	mg/L		0	75 - 125

Lab Sample ID: 180-132081-1 MSD — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385098 — **Prep Batch: 384964**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0035	FL	0.00500	0.00795		mg/L		89	75 - 125	NC	20

Method: 1311 - TCLP pH Post Leach

Lab Sample ID: 180-132081-1 DU — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 385207

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TCLP pH Post-Leach	4.9	!	4.9		SU		0	2

Method: 9014 - Cyanide, Reactive

Lab Sample ID: MB 460-824077/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 824085 — **Prep Batch: 824077**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		25	25	mg/Kg		01/19/22 10:00	01/19/22 14:45	1

Lab Sample ID: LCS 460-824077/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 824085 — **Prep Batch: 824077**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	40.0	ND		mg/Kg		12	10 - 100

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 460-824075/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 824080 — **Prep Batch: 824075**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		20	20	mg/Kg		01/19/22 10:00	01/19/22 14:45	1

Lab Sample ID: LCSSRM 460-824075/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 824080 — **Prep Batch: 824075**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Reactive	70.9	64.8		mg/Kg		91.4	46.7 - 142.5

Method: EPA 1664B - HEM and SGT-HEM

Lab Sample ID: MB 180-385196/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385240 — **Prep Batch: 385196**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND		5.0	4.3	mg/L		01/14/22 13:00	01/14/22 19:30	1

Lab Sample ID: LCS 180-385196/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385240 — **Prep Batch: 385196**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	39.8	34.0		mg/L		85	78 - 114

Lab Sample ID: LCSD 180-385196/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 385240 — **Prep Batch: 385196**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease (HEM)	39.8	35.6		mg/L		89	78 - 114	5	18

Method: EPA 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LB 180-384972/1-D
Matrix: Solid
Analysis Batch: 385240

Client Sample ID: Method Blank
Prep Type: ASTM Leach
Prep Batch: 385196

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND		5.2	4.5	mg/L		01/14/22 13:00	01/14/22 19:30	1

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-385280/17
Matrix: Solid
Analysis Batch: 385280

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10	0.088	mg/L			01/15/22 10:52	1

Lab Sample ID: LCS 180-385280/18
Matrix: Solid
Analysis Batch: 385280

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia, distilled	0.500	0.515		mg/L		103	90 - 110

Lab Sample ID: LB 180-384972/1-A
Matrix: Solid
Analysis Batch: 385280

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10	0.088	mg/L			01/15/22 11:05	1

Method: EPA 410.4 - COD

Lab Sample ID: MB 180-385084/12-A
Matrix: Solid
Analysis Batch: 385108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 385084

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	9.1	mg/L		01/13/22 12:38	01/13/22 16:08	1

Lab Sample ID: MB 180-385084/36-A
Matrix: Solid
Analysis Batch: 385108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 385084

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	9.1	mg/L		01/13/22 12:38	01/13/22 16:23	1

Lab Sample ID: LCS 180-385084/35-A
Matrix: Solid
Analysis Batch: 385108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 385084

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	75.0	80.5		mg/L		107	90 - 110

Method: EPA 410.4 - COD (Continued)

Lab Sample ID: LB 180-384972/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 385108 — **Prep Batch: 385084**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	9.1	mg/L		01/13/22 12:38	01/13/22 16:32	1

Method: EPA 9045D - pH

Lab Sample ID: LCS 180-384571/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: 180-132081-1 DU — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384571

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.6	HF	6.6		SU		0.2	2

Method: EPA 9071B - HEM and SGT-HEM

Lab Sample ID: MB 180-384936/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384998 — **Prep Batch: 384936**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	ND		170	74	mg/Kg		01/12/22 11:00	01/13/22 01:25	1

Lab Sample ID: LCS 180-384936/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384998 — **Prep Batch: 384936**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	1330	1280		mg/Kg		96	78 - 114

Lab Sample ID: 180-132081-1 MS — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384998 — **Prep Batch: 384936**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	ND	FL	1470	1070	FL	mg/Kg	☼	73	78 - 114

Lab Sample ID: 180-132081-1 MSD — **Client Sample ID: T1-WC-B-FL-D-2201051234-0-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 384998 — **Prep Batch: 384936**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease (HEM)	ND	FL	1470	1100	FL	mg/Kg	☼	75	78 - 114	3	18

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-132081-1 DU
Matrix: Solid
Analysis Batch: 384927

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Free Liquid	CNF			CNF		NONE				NC	20

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-385099/1
Matrix: Solid
Analysis Batch: 385099

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10	10	mg/L			01/13/22 14:47	1

Lab Sample ID: LCS 180-385099/2
Matrix: Solid
Analysis Batch: 385099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Solids			179	154		mg/L		86	85 - 115		

Lab Sample ID: LCSD 180-385099/3
Matrix: Solid
Analysis Batch: 385099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Solids			179	156		mg/L		87	85 - 115	1	20

Lab Sample ID: LB 180-384972/1-A
Matrix: Solid
Analysis Batch: 385099

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10	10	mg/L			01/13/22 14:47	1

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-132081-1 DU
Matrix: Solid
Analysis Batch: 384673

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Volatile Solids	1.7			1.79		%				4	10
Total Solids	90			90.5		%				0.4	10

QC Association Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

GC/MS VOA

Leach Batch: 384838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 1311	
LB 180-384838/1-A	Method Blank	TCLP	Solid	EPA 1311	
180-132081-3 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-3 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	

Analysis Batch: 384914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8260D	384838
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 8260D	384838
LB 180-384838/1-A	Method Blank	TCLP	Solid	EPA 8260D	384838
LCS 180-384914/3	Lab Control Sample	Total/NA	Solid	EPA 8260D	
LCSD 180-384914/5	Lab Control Sample Dup	Total/NA	Solid	EPA 8260D	
180-132081-3 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8260D	384838
180-132081-3 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8260D	384838

GC/MS Semi VOA

Leach Batch: 384701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-384701/1-D	Method Blank	TCLP	Solid	EPA 1311	

Leach Batch: 384835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 1311	
LB 180-384835/1-F	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 385073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3510C	384835
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	3510C	384835
LB 180-384701/1-D	Method Blank	TCLP	Solid	3510C	384701
LB 180-384835/1-F	Method Blank	TCLP	Solid	3510C	384835
MB 180-385073/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-385073/2-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 385325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8270E	385073
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 8270E	385073
LB 180-384701/1-D	Method Blank	TCLP	Solid	EPA 8270E	385073
LB 180-384835/1-F	Method Blank	TCLP	Solid	EPA 8270E	385073
MB 180-385073/1-A	Method Blank	Total/NA	Solid	EPA 8270E	385073
LCS 180-385073/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	385073

GC Semi VOA

Prep Batch: 384682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	3541	
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 384682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-384682/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-384682/2-C	Lab Control Sample	Total/NA	Solid	3541	
180-132081-4 MS	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3541	
180-132081-4 MSD	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3541	

Cleanup Batch: 384815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	3665A	384682
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3665A	384682
MB 180-384682/1-C	Method Blank	Total/NA	Solid	3665A	384682
LCS 180-384682/2-C	Lab Control Sample	Total/NA	Solid	3665A	384682
180-132081-4 MS	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3665A	384682
180-132081-4 MSD	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3665A	384682

Cleanup Batch: 384816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	3660B	384815
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3660B	384815
MB 180-384682/1-C	Method Blank	Total/NA	Solid	3660B	384815
LCS 180-384682/2-C	Lab Control Sample	Total/NA	Solid	3660B	384815
180-132081-4 MS	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3660B	384815
180-132081-4 MSD	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	3660B	384815

Leach Batch: 384835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 1311	
LB 180-384835/1-E	Method Blank	TCLP	Solid	EPA 1311	
LB 180-384835/1-G	Method Blank	TCLP	Solid	EPA 1311	

Analysis Batch: 384861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 8082A	384816
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 8082A	384816
MB 180-384682/1-C	Method Blank	Total/NA	Solid	EPA 8082A	384816
LCS 180-384682/2-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	384816
180-132081-4 MS	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 8082A	384816
180-132081-4 MSD	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 8082A	384816

Prep Batch: 385068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3510C	384835
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	3510C	384835
LB 180-384835/1-E	Method Blank	TCLP	Solid	3510C	384835
MB 180-385068/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-385068/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-385068/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Prep Batch: 385097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	8151A	384835

GC Semi VOA (Continued)

Prep Batch: 385097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	8151A	384835
LB 180-384835/1-G	Method Blank	TCLP	Solid	8151A	384835
MB 180-385097/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-385097/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-385097/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 385331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8081B	385068
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 8081B	385068
LB 180-384835/1-E	Method Blank	TCLP	Solid	EPA 8081B	385068
MB 180-385068/1-A	Method Blank	Total/NA	Solid	EPA 8081B	385068
LCS 180-385068/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	385068
LCSD 180-385068/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	385068

Analysis Batch: 385491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 8151A	385097
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 8151A	385097
LB 180-384835/1-G	Method Blank	TCLP	Solid	EPA 8151A	385097
MB 180-385097/1-A	Method Blank	Total/NA	Solid	EPA 8151A	385097
LCS 180-385097/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	385097
LCSD 180-385097/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	385097

Metals

Leach Batch: 384835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 1311	
LB 180-384835/1-B	Method Blank	TCLP	Solid	EPA 1311	
LB 180-384835/1-D	Method Blank	TCLP	Solid	EPA 1311	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 1311	

Prep Batch: 384964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	7470A	384835
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	7470A	384835
LB 180-384835/1-B	Method Blank	TCLP	Solid	7470A	384835
MB 180-384964/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 180-384964/2-A	Lab Control Sample	Total/NA	Solid	7470A	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	7470A	384835
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	7470A	384835

QC Association Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Metals

Prep Batch: 384966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3010A	384835
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	3010A	384835
LB 180-384835/1-D	Method Blank	TCLP	Solid	3010A	384835
MB 180-384966/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-384966/2-A	Lab Control Sample	Total/NA	Solid	3010A	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3010A	384835
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3010A	384835
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3010A	384835
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	3010A	384835

Analysis Batch: 385098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 7470A	384964
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 7470A	384964
LB 180-384835/1-B	Method Blank	TCLP	Solid	EPA 7470A	384964
MB 180-384964/1-A	Method Blank	Total/NA	Solid	EPA 7470A	384964
LCS 180-384964/2-A	Lab Control Sample	Total/NA	Solid	EPA 7470A	384964
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 7470A	384964
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 7470A	384964

Analysis Batch: 385128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 6010D	384966
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	EPA 6010D	384966
LB 180-384835/1-D	Method Blank	TCLP	Solid	EPA 6010D	384966
MB 180-384966/1-A	Method Blank	Total/NA	Solid	EPA 6010D	384966
LCS 180-384966/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	384966
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 6010D	384966
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 6010D	384966
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 6010D	384966
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	EPA 6010D	384966

General Chemistry

Analysis Batch: 384571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9045D	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 9045D	
LCS 180-384571/1	Lab Control Sample	Total/NA	Solid	EPA 9045D	
180-132081-1 DU	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9045D	

Analysis Batch: 384607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 1020B	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 1020B	

Analysis Batch: 384673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	SM 2540G	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	SM 2540G	
180-132081-1 DU	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	SM 2540G	

QC Association Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Analysis Batch: 384678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	2540G	
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	2540G	

Analysis Batch: 384717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	2540G	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	2540G	

Analysis Batch: 384927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9095B	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 9095B	
180-132081-1 DU	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9095B	

Prep Batch: 384936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	9071B	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	9071B	
MB 180-384936/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 180-384936/2-A	Lab Control Sample	Total/NA	Solid	9071B	
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	9071B	
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	9071B	

Leach Batch: 384972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	D3987-85	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	D3987-85	
LB 180-384972/1-A	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-384972/1-B	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-384972/1-D	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 384998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9071B	384936
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	EPA 9071B	384936
MB 180-384936/1-A	Method Blank	Total/NA	Solid	EPA 9071B	384936
LCS 180-384936/2-A	Lab Control Sample	Total/NA	Solid	EPA 9071B	384936
180-132081-1 MS	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9071B	384936
180-132081-1 MSD	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	EPA 9071B	384936

Prep Batch: 385084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	410.4	384972
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	410.4	384972
LB 180-384972/1-B	Method Blank	ASTM Leach	Solid	410.4	384972
MB 180-385084/12-A	Method Blank	Total/NA	Solid	410.4	
MB 180-385084/36-A	Method Blank	Total/NA	Solid	410.4	
LCS 180-385084/35-A	Lab Control Sample	Total/NA	Solid	410.4	

QC Association Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

General Chemistry

Analysis Batch: 385099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	SM 2540B	384972
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	SM 2540B	384972
LB 180-384972/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	384972
MB 180-385099/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-385099/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
LCSD 180-385099/3	Lab Control Sample Dup	Total/NA	Solid	SM 2540B	

Analysis Batch: 385108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	EPA 410.4	385084
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	EPA 410.4	385084
LB 180-384972/1-B	Method Blank	ASTM Leach	Solid	EPA 410.4	385084
MB 180-385084/12-A	Method Blank	Total/NA	Solid	EPA 410.4	385084
MB 180-385084/36-A	Method Blank	Total/NA	Solid	EPA 410.4	385084
LCS 180-385084/35-A	Lab Control Sample	Total/NA	Solid	EPA 410.4	385084

Prep Batch: 385196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	1664B	384972
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	1664B	384972
LB 180-384972/1-D	Method Blank	ASTM Leach	Solid	1664B	384972
MB 180-385196/1-A	Method Blank	Total/NA	Solid	1664B	
LCS 180-385196/2-A	Lab Control Sample	Total/NA	Solid	1664B	
LCSD 180-385196/3-A	Lab Control Sample Dup	Total/NA	Solid	1664B	

Analysis Batch: 385207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	1311	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	TCLP	Solid	1311	
180-132081-1 DU	T1-WC-B-FL-D-2201051234-0-12	TCLP	Solid	1311	

Analysis Batch: 385240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	EPA 1664B	385196
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	EPA 1664B	385196
LB 180-384972/1-D	Method Blank	ASTM Leach	Solid	EPA 1664B	385196
MB 180-385196/1-A	Method Blank	Total/NA	Solid	EPA 1664B	385196
LCS 180-385196/2-A	Lab Control Sample	Total/NA	Solid	EPA 1664B	385196
LCSD 180-385196/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 1664B	385196

Analysis Batch: 385280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	ASTM Leach	Solid	EPA 350.1	384972
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	ASTM Leach	Solid	EPA 350.1	384972
LB 180-384972/1-A	Method Blank	ASTM Leach	Solid	EPA 350.1	384972
MB 180-385280/17	Method Blank	Total/NA	Solid	EPA 350.1	
LCS 180-385280/18	Lab Control Sample	Total/NA	Solid	EPA 350.1	

Prep Batch: 824075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	7.3.4	

General Chemistry (Continued)

Prep Batch: 824075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	7.3.4	
MB 460-824075/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCSSRM 460-824075/3-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Prep Batch: 824077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	7.3.3	
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	7.3.3	
MB 460-824077/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 460-824077/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	

Analysis Batch: 824080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	9034	824075
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	9034	824075
MB 460-824075/1-A	Method Blank	Total/NA	Solid	9034	824075
LCSSRM 460-824075/3-A	Lab Control Sample	Total/NA	Solid	9034	824075

Analysis Batch: 824085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Total/NA	Solid	9014	824077
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Total/NA	Solid	9014	824077
MB 460-824077/1-A	Method Blank	Total/NA	Solid	9014	824077
LCS 460-824077/2-A	Lab Control Sample	Total/NA	Solid	9014	824077

Lab Chronicle

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30

Lab Sample ID: 180-132081-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	385073	01/13/22 09:30	CBY	TAL PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	385325	01/17/22 18:02	VVP	TAL PIT
	Instrument ID:	CH731								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	385068	01/13/22 08:45	CBY	TAL PIT
TCLP	Analysis	EPA 8081B		1			385331	01/17/22 11:25	DFE	TAL PIT
	Instrument ID:	CHGC15								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	385097	01/13/22 12:30	CBY	TAL PIT
TCLP	Analysis	EPA 8151A		20			385491	01/19/22 07:00	JMO	TAL PIT
	Instrument ID:	CGC1								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3010A			5 mL	50 mL	384966	01/12/22 12:15	KFS	TAL PIT
TCLP	Analysis	EPA 6010D		1			385128	01/13/22 08:58	RJG	TAL PIT
	Instrument ID:	C								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	7470A			25 mL	25 mL	384964	01/12/22 12:04	RJR	TAL PIT
TCLP	Analysis	EPA 7470A		1			385098	01/13/22 11:02	RJR	TAL PIT
	Instrument ID:	HGY								
TCLP	Analysis	1311		1			385207	01/14/22 13:48	MRS	TAL PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	2540G		1			384717	01/10/22 17:09	CMR	TAL PIT
	Instrument ID:	NOEQUIP								
Total/NA	Prep	7.3.3			10 g	50 mL	824077	01/19/22 10:00	HTV	TAL EDI
Total/NA	Analysis	9014		1	25 mL	25 mL	824085	01/19/22 14:45	HTV	TAL EDI
	Instrument ID:	NOEQUIP								
Total/NA	Prep	7.3.4			10 g	50 mL	824075	01/19/22 10:00	HTV	TAL EDI
Total/NA	Analysis	9034		1	25 mL	25 mL	824080	01/19/22 14:45	HTV	TAL EDI
	Instrument ID:	CBNAMS15								
Total/NA	Analysis	EPA 1020B		1			384607	01/08/22 13:39	BAC	TAL PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.28 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Prep	1664B			980 mL	1000 mL	385196	01/14/22 13:00	SMV	TAL PIT
ASTM Leach	Analysis	EPA 1664B		1			385240	01/14/22 19:30	SMV	TAL PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.28 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Analysis	EPA 350.1		1			385280	01/15/22 11:17	SNR	TAL PIT
	Instrument ID:	BLUE-ASTORIA								
ASTM Leach	Leach	D3987-85			100.28 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Prep	410.4			1 mL	1 mL	385084	01/13/22 12:38	ELS	TAL PIT
ASTM Leach	Analysis	EPA 410.4		1	1 mL	1 mL	385108	01/13/22 16:35	ELS	TAL PIT
	Instrument ID:	GENESYS10S								
Total/NA	Analysis	EPA 9045D		1	19.99 mL	20 mL	384571	01/07/22 13:46	SMW	TAL PIT
	Instrument ID:	NOEQUIP								

Lab Chronicle

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-1

Date Collected: 01/05/22 12:34 — **Matrix: Solid**
Date Received: 01/07/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9095B		1			384927	01/12/22 09:02	CMT	TAL PIT
ASTM Leach	Leach	D3987-85			100.28 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Analysis	SM 2540B		1	100 mL	100 mL	385099	01/13/22 14:47	CMT	TAL PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	SM 2540G		1			384673	01/10/22 10:37	JCR	TAL PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-1

Date Collected: 01/05/22 12:34 — **Matrix: Solid**
Date Received: 01/07/22 10:30 — **Percent Solids: 90.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			30.0 g	30.0 g	384936	01/12/22 11:00	CBY	TAL PIT
Total/NA	Analysis	EPA 9071B		1			384998	01/13/22 01:25	CTM	TAL PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-2

Date Collected: 01/05/22 15:20 — **Matrix: Solid**
Date Received: 01/07/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	385073	01/13/22 09:30	CBY	TAL PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	385325	01/17/22 18:25	VVP	TAL PIT
	Instrument ID:	CH731								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3510C			100 mL	40.0 mL	385068	01/13/22 08:45	CBY	TAL PIT
TCLP	Analysis	EPA 8081B		1			385331	01/17/22 11:40	DFE	TAL PIT
	Instrument ID:	CHGC15								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	8151A			100 mL	10.0 mL	385097	01/13/22 12:30	CBY	TAL PIT
TCLP	Analysis	EPA 8151A		20			385491	01/19/22 07:20	JMO	TAL PIT
	Instrument ID:	CGC1								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	3010A			5 mL	50 mL	384966	01/12/22 12:15	KFS	TAL PIT
TCLP	Analysis	EPA 6010D		1			385128	01/13/22 09:39	RJG	TAL PIT
	Instrument ID:	C								
TCLP	Leach	EPA 1311			100.03 g	2000 mL	384835	01/11/22 15:00	MRS	TAL PIT
TCLP	Prep	7470A			25 mL	25 mL	384964	01/12/22 12:04	RJR	TAL PIT
TCLP	Analysis	EPA 7470A		1			385098	01/13/22 11:08	RJR	TAL PIT
	Instrument ID:	HGY								
TCLP	Analysis	1311		1			385207	01/14/22 13:48	MRS	TAL PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	2540G		1			384717	01/10/22 17:09	CMR	TAL PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-2

Date Collected: 01/05/22 15:20 — **Matrix: Solid**
Date Received: 01/07/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7.3.3			10 g	50 mL	824077	01/19/22 10:00	HTV	TAL EDI
Total/NA	Analysis	9014		1	25 mL	25 mL	824085	01/19/22 14:45	HTV	TAL EDI
	Instrument ID: NOEQUIP									
Total/NA	Prep	7.3.4			10 g	50 mL	824075	01/19/22 10:00	HTV	TAL EDI
Total/NA	Analysis	9034		1	25 mL	25 mL	824080	01/19/22 14:45	HTV	TAL EDI
	Instrument ID: CBNAMS15									
Total/NA	Analysis	EPA 1020B		1			384607	01/08/22 13:45	BAC	TAL PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Prep	1664B			980 mL	1000 mL	385196	01/14/22 13:00	SMV	TAL PIT
ASTM Leach	Analysis	EPA 1664B		1			385240	01/14/22 19:30	SMV	TAL PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Analysis	EPA 350.1		1			385280	01/15/22 11:18	SNR	TAL PIT
	Instrument ID: BLUE-ASTORIA									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Prep	410.4			1 mL	1 mL	385084	01/13/22 12:38	ELS	TAL PIT
ASTM Leach	Analysis	EPA 410.4		1	1 mL	1 mL	385108	01/13/22 16:36	ELS	TAL PIT
	Instrument ID: GENESYS10S									
Total/NA	Analysis	EPA 9045D		1	19.91 mL	20 mL	384571	01/07/22 13:47	SMW	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 9095B		1			384927	01/12/22 09:11	CMT	TAL PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	384972	01/12/22 14:45	MRS	TAL PIT
ASTM Leach	Analysis	SM 2540B		1	100 mL	100 mL	385099	01/13/22 14:47	CMT	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			384673	01/10/22 10:37	JCR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-2

Date Collected: 01/05/22 15:20 — **Matrix: Solid**
Date Received: 01/07/22 10:30 — **Percent Solids: 88.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			30.0 g	30.0 g	384936	01/12/22 11:00	CBY	TAL PIT
Total/NA	Analysis	EPA 9071B		1			384998	01/13/22 01:25	CTM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-3

Date Collected: 01/05/22 12:34 — **Matrix: Solid**
Date Received: 01/07/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	EPA 1311			1.0 g	500 mL	384838	01/11/22 15:00	MRS	TAL PIT
TCLP	Analysis	EPA 8260D		1	0.25 mL	5 mL	384914	01/12/22 18:24	APD	TAL PIT
	Instrument ID: CHHP11									

Lab Chronicle

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-3

Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			384678	01/10/22 11:03	JCR	TAL PIT

Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 — Lab Sample ID: 180-132081-3

Date Collected: 01/05/22 12:34
Date Received: 01/07/22 10:30
Matrix: Solid
Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.19 g	20.0 mL	384682	01/10/22 11:30	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	384815	01/11/22 09:54	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	384816	01/11/22 09:55	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			384861	01/12/22 20:23	JMO	TAL PIT
	Instrument ID:	CHGC20								

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-4

Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	EPA 1311			25.03 g	500 mL	384838	01/11/22 15:00	MRS	TAL PIT
TCLP	Analysis	EPA 8260D		1	0.25 mL	5 mL	384914	01/12/22 15:28	APD	TAL PIT
	Instrument ID:	CHHP11								
Total/NA	Analysis	2540G		1			384678	01/10/22 11:03	JCR	TAL PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 — Lab Sample ID: 180-132081-4

Date Collected: 01/05/22 15:20
Date Received: 01/07/22 10:30
Matrix: Solid
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.04 g	20.0 mL	384682	01/10/22 11:30	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	384815	01/11/22 09:54	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	384816	01/11/22 09:55	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			384861	01/12/22 19:26	JMO	TAL PIT
	Instrument ID:	CHGC20								

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL EDI
- Batch Type: Prep
  - HTV = Huan Vu
- Batch Type: Analysis
  - HTV = Huan Vu

Lab: TAL PIT
- Batch Type: Cleanup
  - JMO = John Oravec
  - MRS = Michael Serpa
- Batch Type: Prep
  - CBY = Charles Yushinski
  - CSC = Chayce Cockroft
  - ELS = Edwin Shireman
  - KFS = Kelly Shannon
  - RJR = Ron Rosenbaum
  - SMV = Sarah Vander Wagen
- Batch Type: Analysis
  - APD = Aaron DeLeo
  - BAC = Blase Cindric
  - CMR = Carl Reagle
  - CMT = Cassandra Tlumac
  - CTM = Connor Mitsch
  - DFE = David Eppinger
  - ELS = Edwin Shireman
  - JCR = Jessica Rodgers
  - JMO = John Oravec
  - MRS = Michael Serpa
  - RJG = Rob Good
  - RJR = Ron Rosenbaum
  - SMV = Sarah Vander Wagen
  - SMW = Shelby Walters
  - SNR = Sabra Richart
  - VVP = Vincent Piccolino

Accreditation/Certification Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1311		Solid	TCLP pH Post-Leach

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-22
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-23
Georgia	State	12028 (NJ)	06-30-22
Massachusetts	State	M-NJ312	06-30-22
New Jersey	NELAP	12028	07-01-23
New York	NELAP	11452	04-01-23
Pennsylvania	NELAP	68-00522	02-03-22
Rhode Island	State	LAO00376	12-31-22
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Method	Method Description	Protocol	Laboratory
EPA 8260D	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 8151A	Herbicides (GC)	SW846	TAL PIT
EPA 6010D	Metals (ICP)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
1311	TCLP pH Post Leach	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
9014	Cyanide, Reactive	SW846	TAL EDI
9034	Sulfide, Reactive	SW846	TAL EDI
EPA 1020B	Ignitability, Small Scale Closed-Cup Method	SW846	TAL PIT
EPA 1664B	HEM and SGT-HEM	EPA	TAL PIT
EPA 350.1	Nitrogen, Ammonia	EPA	TAL PIT
EPA 410.4	COD	MCAWW	TAL PIT
EPA 9045D	pH	SW846	TAL PIT
EPA 9071B	HEM and SGT-HEM	SW846	TAL PIT
EPA 9095B	Paint Filter	SW846	TAL PIT
SM 2540B	Total Solids	SM	TAL PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	TAL PIT
1311	TCLP Extraction	SW846	TAL PIT
1664B	HEM and SGT-HEM (SPE)	1664B	TAL PIT
3010A	Preparation, Total Metals	SW846	TAL PIT
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
410.4	COD	MCAWW	TAL PIT
5030C	Purge and Trap	SW846	TAL PIT
7.3.3	Cyanide, Reactive	SW846	TAL EDI
7.3.4	Sulfide, Reactive	SW846	TAL EDI
7470A	Preparation, Mercury	SW846	TAL PIT
8151A	Extraction (Herbicides)	SW846	TAL PIT
9071B	Preparation, HEM and SGT-HEM	SW846	TAL PIT
D3987-85	ASTM Leaching Procedure	ASTM	TAL PIT
EPA 1311	TCLP Extraction	SW846	TAL PIT

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Anchor QEA LLC
Project/Site: Vo Toys - Harrison, NJ

Job ID: 180-132081-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-132081-1	T1-WC-B-FL-D-2201051234-0-12	Solid	01/05/22 12:34	01/07/22 10:30
180-132081-2	T1-WC-B-FL-D-2201051520-0-12	Solid	01/05/22 15:20	01/07/22 10:30
180-132081-3	T1-WC-B-FL-D-2201051234-0-12	Solid	01/05/22 12:34	01/07/22 10:30
180-132081-4	T1-WC-B-FL-D-2201051520-0-12	Solid	01/05/22 15:20	01/07/22 10:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/6 Client Sample ID:

Date Analyzed: 12/15/21 10:32 Lab File ID: 11121521A06.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Assign Peak	deleoa	12/15/21 11:35
Chloromethane	1.93	Assign Peak	deleoa	12/15/21 10:52
1,3-Butadiene	2.08	Assign Peak	deleoa	12/15/21 10:52
Bromomethane	2.46	Assign Peak	deleoa	12/15/21 10:52
Chloroethane	2.58	Assign Peak	deleoa	12/15/21 10:52
Dichlorofluoromethane	2.88	Assign Peak	deleoa	12/15/21 10:53
Trichlorofluoromethane	2.90	Assign Peak	deleoa	12/15/21 10:53
Ethyl ether	3.28	Assign Peak	deleoa	12/15/21 10:53
1,1-Dichloroethene	3.63	Assign Peak	deleoa	12/15/21 10:53
1,1,2-Trichloro-1,2,2-trifluoroethane	3.67	Assign Peak	deleoa	12/15/21 10:53
Iodomethane	3.84	Assign Peak	deleoa	12/15/21 11:35
Acetone	3.85	Assign Peak	deleoa	12/15/21 12:41
Carbon disulfide	3.95	Assign Peak	deleoa	12/15/21 11:35
Allyl chloride	4.24	Assign Peak	deleoa	12/15/21 11:35
Methyl acetate	4.26	Assign Peak	deleoa	12/15/21 11:35
Methylene Chloride	4.45	Assign Peak	deleoa	12/15/21 11:35
Acrylonitrile	4.84	Assign Peak	deleoa	12/15/21 11:36
trans-1,2-Dichloroethene	4.84	Assign Peak	deleoa	12/15/21 11:36
Methyl tert-butyl ether	4.85	Assign Peak	deleoa	12/15/21 11:36
tert-Butyl alcohol	4.88	Assign Peak	deleoa	12/15/21 12:04
TBA-d9 (IS)	5.06	Assign Peak	deleoa	12/15/21 12:05
1,1-Dichloroethane	5.46	Assign Peak	deleoa	12/15/21 11:36
2,2-Dichloropropane	6.20	Assign Peak	deleoa	12/15/21 11:49
2-Butanone (MEK)	6.25	Assign Peak	deleoa	12/15/21 12:16
Chlorobromomethane	6.47	Assign Peak	deleoa	12/15/21 11:37
Tetrahydrofuran	6.53	Assign Peak	deleoa	12/15/21 12:15
1,1,1-Trichloroethane	6.79	Assign Peak	deleoa	12/15/21 11:37
Cyclohexane	6.85	Assign Peak	deleoa	12/15/21 11:37
Carbon tetrachloride	6.95	Assign Peak	deleoa	12/15/21 11:37

EPA 8260D

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/6 Client Sample ID:

Date Analyzed: 12/15/21 10:32 Lab File ID: 11121521A06.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.17	Assign Peak	deleoa	12/15/21 10:52
Benzene	7.17	Assign Peak	deleoa	12/15/21 11:37
Isobutyl alcohol	7.39	Assign Peak	deleoa	12/15/21 11:38
Trichloroethene	7.91	Assign Peak	deleoa	12/15/21 11:38
1,2-Dichloropropane	8.18	Assign Peak	deleoa	12/15/21 11:38
1,4-Dioxane	8.42	Assign Peak	deleoa	12/15/21 11:38
Dichlorobromomethane	8.46	Assign Peak	deleoa	12/15/21 11:38
cis-1,3-Dichloropropene	8.90	Assign Peak	deleoa	12/15/21 11:38
4-Methyl-2-pentanone (MIBK)	9.08	Assign Peak	deleoa	12/15/21 11:38
Toluene-d8 (Surr)	9.16	Assign Peak	deleoa	12/15/21 10:52
Ethyl methacrylate	9.54	Assign Peak	deleoa	12/15/21 11:39
1,1,1,2-Tetrachloroethane	10.74	Assign Peak	deleoa	12/15/21 11:39
Ethylbenzene	10.74	Assign Peak	deleoa	12/15/21 11:39
m-Xylene & p-Xylene	10.87	Assign Peak	deleoa	12/15/21 11:39
Bromoform	11.47	Assign Peak	deleoa	12/15/21 11:39
1,1,2,2-Tetrachloroethane	11.94	Assign Peak	deleoa	12/15/21 11:39
1,2,3-Trichloropropane	12.00	Assign Peak	deleoa	12/15/21 11:40
1,2-Dibromo-3-Chloropropane	14.15	Assign Peak	deleoa	12/15/21 11:40
1,2,4-Trichlorobenzene	14.96	Assign Peak	deleoa	12/15/21 11:40

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/7 Client Sample ID:

Date Analyzed: 12/15/21 10:57 Lab File ID: 11121521A07.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.93	Assign Peak	deleoa	12/15/21 11:17
1,3-Butadiene	2.10	Assign Peak	deleoa	12/15/21 11:17
Trichlorofluoromethane	2.90	Assign Peak	deleoa	12/15/21 13:11
Ethyl ether	3.27	Assign Peak	deleoa	12/15/21 11:18
1,1-Dichloroethene	3.64	Assign Peak	deleoa	12/15/21 11:18
1,1,2-Trichloro-1,2,2-trifluoroethane	3.70	Assign Peak	deleoa	12/15/21 11:18
Acetone	3.77	Assign Peak	deleoa	12/15/21 12:42
Iodomethane	3.86	Assign Peak	deleoa	12/15/21 11:18
Carbon disulfide	3.94	Assign Peak	deleoa	12/15/21 11:24
Allyl chloride	4.23	Assign Peak	deleoa	12/15/21 11:21
Methyl acetate	4.24	Assign Peak	deleoa	12/15/21 11:54
tert-Butyl alcohol	4.77	Assign Peak	deleoa	12/15/21 11:54
Acrylonitrile	4.82	Assign Peak	deleoa	12/15/21 13:04
trans-1,2-Dichloroethene	4.85	Assign Peak	deleoa	12/15/21 11:22
1,1-Dichloroethane	5.46	Assign Peak	deleoa	12/15/21 13:12
cis-1,2-Dichloroethene	6.20	Assign Peak	deleoa	12/15/21 11:23
2,2-Dichloropropane	6.21	Assign Peak	deleoa	12/15/21 11:22
2-Butanone (MEK)	6.22	Assign Peak	deleoa	12/15/21 13:12
Chlorobromomethane	6.48	Assign Peak	deleoa	12/15/21 11:25
Chloroform	6.62	Assign Peak	deleoa	12/15/21 11:55
Cyclohexane	6.86	Assign Peak	deleoa	12/15/21 11:55
Carbon tetrachloride	6.95	Assign Peak	deleoa	12/15/21 11:55
1,1-Dichloropropene	6.96	Assign Peak	deleoa	12/15/21 11:55
1,2-Dichloroethane-d4 (Surr)	7.17	Assign Peak	deleoa	12/15/21 11:17
Benzene	7.18	Assign Peak	deleoa	12/15/21 11:55
n-Heptane	7.53	Assign Peak	deleoa	12/15/21 11:56
Trichloroethene	7.90	Assign Peak	deleoa	12/15/21 11:56
Methylcyclohexane	8.14	Assign Peak	deleoa	12/15/21 11:56
1,2-Dichloropropane	8.18	Assign Peak	deleoa	12/15/21 11:56

EPA 8260D

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/7 Client Sample ID:

Date Analyzed: 12/15/21 10:57 Lab File ID: 11121521A07.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibromomethane	8.27	Assign Peak	deleoa	12/15/21 11:57
1,4-Dioxane	8.35	Assign Peak	deleoa	12/15/21 11:23
Dichlorobromomethane	8.47	Assign Peak	deleoa	12/15/21 11:23
trans-1,3-Dichloropropene	9.48	Assign Peak	deleoa	12/15/21 11:23
Tetrachloroethene	9.74	Assign Peak	deleoa	12/15/21 11:57
1,2,4-Trichlorobenzene	14.97	Assign Peak	deleoa	12/15/21 11:24
1,2,3-Trichlorobenzene	15.47	Assign Peak	deleoa	12/15/21 11:24

Lab Sample ID: ICIS 180-382231/8 Client Sample ID:

Date Analyzed: 12/15/21 11:23 Lab File ID: 11121521A08.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.94	Assign Peak	deleoa	12/15/21 11:42
1,1,2-Trichloro-1,2,2-trifluoroethane	3.70	Assign Peak	deleoa	12/15/21 11:42
Acetone	3.77	Peak assignment corrected	deleoa	12/15/21 12:17
Iodomethane	3.86	Assign Peak	deleoa	12/15/21 11:43
Methyl acetate	4.24	Assign Peak	deleoa	12/15/21 11:43
Allyl chloride	4.25	Assign Peak	deleoa	12/15/21 11:44
Acrylonitrile	4.84	Assign Peak	deleoa	12/15/21 11:44
trans-1,2-Dichloroethene	4.86	Assign Peak	deleoa	12/15/21 11:44
1,1-Dichloroethane	5.45	Assign Peak	deleoa	12/15/21 11:44
2,2-Dichloropropane	6.20	Assign Peak	deleoa	12/15/21 11:44
2-Butanone (MEK)	6.22	Assign Peak	deleoa	12/15/21 12:17
Carbon tetrachloride	6.95	Assign Peak	deleoa	12/15/21 11:45
1,4-Dioxane	8.35	Assign Peak	deleoa	12/15/21 11:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/9 Client Sample ID:

Date Analyzed: 12/15/21 11:48 Lab File ID: 11121521A09.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.93	Assign Peak	deleoa	12/15/21 12:08
Trichlorofluoromethane	2.90	Assign Peak	deleoa	12/15/21 12:09
Acetone	3.73	Assign Peak	deleoa	12/15/21 12:42
Methyl acetate	4.24	Assign Peak	deleoa	12/15/21 12:09
Allyl chloride	4.26	Assign Peak	deleoa	12/15/21 12:10
Hexane	5.24	Assign Peak	deleoa	12/15/21 12:10
1,1-Dichloroethane	5.46	Assign Peak	deleoa	12/15/21 12:10
2-Butanone (MEK)	6.23	Peak assignment corrected	deleoa	12/15/21 12:17
Dibromomethane	8.27	Assign Peak	deleoa	12/15/21 12:11
1,4-Dioxane	8.32	Assign Peak	deleoa	12/15/21 12:11
Dichlorobromomethane	8.46	Assign Peak	deleoa	12/15/21 12:11
o-Xylene	11.26	Assign Peak	deleoa	12/15/21 12:12

Lab Sample ID: IC 180-382231/10 Client Sample ID:

Date Analyzed: 12/15/21 12:13 Lab File ID: 11121521A10.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.93	Assign Peak	deleoa	12/15/21 12:32
Vinyl chloride	2.05	Assign Peak	deleoa	12/15/21 12:32
Dichlorofluoromethane	2.88	Assign Peak	deleoa	12/15/21 12:33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.69	Assign Peak	deleoa	12/15/21 12:33
Acetone	3.75	Assign Peak	deleoa	12/15/21 12:42
Carbon disulfide	3.94	Assign Peak	deleoa	12/15/21 12:45
Allyl chloride	4.24	Assign Peak	deleoa	12/15/21 12:34
tert-Butyl alcohol	4.73	Assign Peak	deleoa	12/15/21 13:17
2-Butanone (MEK)	6.23	Assign Peak	deleoa	12/15/21 13:14
1,4-Dioxane	8.42	Assign Peak	deleoa	12/15/21 12:35
Tetrachloroethene	9.75	Assign Peak	deleoa	12/15/21 12:35

EPA 8260D

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/11 Client Sample ID:

Date Analyzed: 12/15/21 12:39 Lab File ID: 11121521A11.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.94	Assign Peak	deleoa	12/15/21 12:57
1,1-Dichloroethene	3.64	Assign Peak	deleoa	12/15/21 12:58
Acetone	3.75	Assign Peak	deleoa	12/15/21 12:58
Allyl chloride	4.26	Assign Peak	deleoa	12/15/21 12:58
Methylene Chloride	4.47	Assign Peak	deleoa	12/15/21 12:59
TBA-d9 (IS)	4.62	Assign Peak	deleoa	12/15/21 13:23
tert-Butyl alcohol	4.76	Assign Peak	deleoa	12/15/21 12:59
Acrylonitrile	4.82	Assign Peak	deleoa	12/15/21 12:59
trans-1,2-Dichloroethene	4.86	Assign Peak	deleoa	12/15/21 13:00
n-Heptane	7.53	Assign Peak	deleoa	12/15/21 13:01
1,4-Dioxane	8.34	Assign Peak	deleoa	12/15/21 13:01

Lab Sample ID: IC 180-382231/12 Client Sample ID:

Date Analyzed: 12/15/21 13:04 Lab File ID: 11121521A12.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.94	Assign Peak	deleoa	12/15/21 13:23
1,1,2-Trichloro-1,2,2-trifluoroethane	3.69	Assign Peak	deleoa	12/15/21 13:24
Acetone	3.74	Assign Peak	deleoa	12/15/21 13:24
Allyl chloride	4.25	Assign Peak	deleoa	12/15/21 13:24
TBA-d9 (IS)	4.62	Assign Peak	deleoa	12/15/21 13:25
tert-Butyl alcohol	4.73	Assign Peak	deleoa	12/15/21 13:25
2,2-Dichloropropane	6.21	Assign Peak	deleoa	12/15/21 13:26
Isobutyl alcohol	7.19	Assign Peak	deleoa	12/15/21 13:27

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 382231

Lab Sample ID: IC 180-382231/13 Client Sample ID:

Date Analyzed: 12/15/21 13:29 Lab File ID: 11121521A13.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.94	Assign Peak	deleoa	12/15/21 13:50
Dichlorofluoromethane	2.89	Assign Peak	deleoa	12/15/21 13:51
1,1-Dichloroethene	3.66	Assign Peak	deleoa	12/15/21 13:51
Acetone	3.75	Assign Peak	deleoa	12/15/21 13:52
Methyl acetate	4.25	Assign Peak	deleoa	12/15/21 13:52
tert-Butyl alcohol	4.77	Assign Peak	deleoa	12/15/21 13:53
1,4-Dioxane	8.37	Assign Peak	deleoa	12/15/21 13:55

EPA 8260D

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 384914

Lab Sample ID: CCVIS 180-384914/2 Client Sample ID:

Date Analyzed: 01/12/22 08:21 Lab File ID: 1101122202.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.92	Assign Peak	deleoa	01/12/22 08:40
Vinyl chloride	2.05	Assign Peak	deleoa	01/12/22 08:40
Dichlorofluoromethane	2.90	Assign Peak	deleoa	01/12/22 08:40
Trichlorofluoromethane	2.91	Assign Peak	deleoa	01/12/22 08:40
1,1-Dichloroethene	3.65	Assign Peak	deleoa	01/12/22 08:41
1,1,2-Trichloro-1,2,2-trifluoroethane	3.68	Assign Peak	deleoa	01/12/22 09:05
Acetone	3.77	Assign Peak	deleoa	01/12/22 08:41
Allyl chloride	4.23	Assign Peak	deleoa	01/12/22 08:41
1,1-Dichloroethane	5.46	Assign Peak	deleoa	01/12/22 08:42
2-Butanone (MEK)	6.24	Assign Peak	deleoa	01/12/22 08:42
1,4-Dioxane	8.32	Assign Peak	deleoa	01/12/22 08:42

Lab Sample ID: LCS 180-384914/3 Client Sample ID:

Date Analyzed: 01/12/22 08:46 Lab File ID: 1101122203.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.65	Peak assignment corrected	deleoa	01/12/22 09:06
2-Butanone (MEK)	6.22	Peak assignment corrected	deleoa	01/12/22 09:06

Lab Sample ID: LCSD 180-384914/5 Client Sample ID:

Date Analyzed: 01/12/22 09:36 Lab File ID: 1101122205.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.65	Assign Peak	deleoa	01/12/22 12:54
2-Butanone (MEK)	6.24	Assign Peak	deleoa	01/12/22 12:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHHP11 Analysis Batch Number: 384914

Lab Sample ID: LB 180-384838/1-A Client Sample ID:

Date Analyzed: 01/12/22 14:38 Lab File ID: 1101122217.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.62	Assign Peak	deleoa	01/12/22 15:23

Lab Sample ID: 180-132081-4 Client Sample ID:

Date Analyzed: 01/12/22 15:28 Lab File ID: 1101122219.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.60	Assign Peak	deleoa	01/12/22 15:48

Lab Sample ID: 180-132081-3 MS Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 MS

Date Analyzed: 01/12/22 16:44 Lab File ID: 1101122222.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.65	Peak assignment corrected	deleoa	01/12/22 17:14
2-Butanone (MEK)	6.22	Peak assignment corrected	deleoa	01/12/22 17:14

Lab Sample ID: 180-132081-3 MSD Client Sample ID: T1-WC-B-FL-D-2201051234-0-12 MSD

Date Analyzed: 01/12/22 17:09 Lab File ID: 1101122223.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.65	Assign Peak	deleoa	01/13/22 09:30

Lab Sample ID: 180-132081-3 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/12/22 18:24 Lab File ID: 1101122226.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.61	Assign Peak	deleoa	01/13/22 08:36

EPA 8260D

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 383112

Lab Sample ID: IC 180-383112/3 Client Sample ID:

Date Analyzed: 12/22/21 09:29 Lab File ID: V1222003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.39	Incomplete Integration	piccolinov	12/22/21 11:57
N-Nitrosodimethylamine	1.85	Incomplete Integration	piccolinov	12/22/21 11:57
Pyridine	1.89	Incomplete Integration	piccolinov	12/22/21 11:57
Methyl methanesulfonate	4.13	Incomplete Integration	piccolinov	12/22/21 11:57
Isophorone	6.50	Incomplete Integration	piccolinov	12/22/21 11:57
2-Nitrophenol	6.58	Incomplete Integration	piccolinov	12/22/21 11:57
Bis(2-chloroethoxy)methane	6.71	Incomplete Integration	piccolinov	12/22/21 11:57
Dimethyl phthalate	8.27	Incomplete Integration	piccolinov	12/22/21 11:57
3-Nitroaniline	8.46	Incomplete Integration	piccolinov	12/22/21 11:58
4,6-Dinitro-2-methylphenol	9.05	Incomplete Integration	piccolinov	12/22/21 11:58
Benzidine	11.06	Incomplete Integration	piccolinov	12/22/21 11:58
Bis(2-ethylhexyl) phthalate	12.76	Incomplete Integration	piccolinov	12/22/21 11:58
Di-n-octyl phthalate	13.72	Incomplete Integration	piccolinov	12/22/21 11:58
7,12-Dimethylbenz(a)anthracene	14.29	Incomplete Integration	piccolinov	12/22/21 11:58
Indeno[1,2,3-cd]pyrene	16.32	Incomplete Integration	piccolinov	12/22/21 11:59
Benzo[g,h,i]perylene	16.75	Incomplete Integration	piccolinov	12/22/21 11:59

EPA 8270E

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 383112

Lab Sample ID: IC 180-383112/4 Client Sample ID:

Date Analyzed: 12/22/21 09:51 Lab File ID: V1222004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.41	Incomplete Integration	piccolinov	12/22/21 11:55
Pyridine	1.90	Incomplete Integration	piccolinov	12/22/21 11:55
Bis(2-ethylhexyl) phthalate	12.76	Incomplete Integration	piccolinov	12/22/21 11:56
Benzo[a]pyrene	14.76	Incomplete Integration	piccolinov	12/22/21 11:56
Indeno[1,2,3-cd]pyrene	16.33	Incomplete Integration	piccolinov	12/22/21 11:56
Dibenz(a,h)anthracene	16.34	Incomplete Integration	piccolinov	12/22/21 11:56

Lab Sample ID: IC 180-383112/5 Client Sample ID:

Date Analyzed: 12/22/21 10:12 Lab File ID: V1222005.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.40	Peak assignment corrected	piccolinov	12/22/21 11:54
Benzoic acid	6.67	Incomplete Integration	piccolinov	12/22/21 11:54

Lab Sample ID: ICIS 180-383112/6 Client Sample ID:

Date Analyzed: 12/22/21 10:34 Lab File ID: V1222006.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	6.68	Incomplete Integration	piccolinov	12/22/21 11:53

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 383112

Lab Sample ID: IC 180-383112/7 Client Sample ID:

Date Analyzed: 12/22/21 10:55 Lab File ID: V1222007.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	6.69	Incomplete Integration	piccolino v	12/22/21 12:00

Lab Sample ID: IC 180-383112/9 Client Sample ID:

Date Analyzed: 12/22/21 11:39 Lab File ID: V1222009.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	6.72	Peak assignment corrected	piccolino v	12/22/21 12:01

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CH731 Analysis Batch Number: 385325

Lab Sample ID: LB 180-384835/1-F Client Sample ID:

Date Analyzed: 01/17/22 12:40 Lab File ID: V0117013.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Tribromophenol (Surr)	9.32	Peak assignment corrected	piccolino v	01/17/22 13:15

EPA 8270E

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384283

Lab Sample ID: IC 180-384283/2 Client Sample ID:

Date Analyzed: 01/05/22 10:18 Lab File ID: Q0105220000002.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.08	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 2	7.35	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 3	7.81	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 4	7.89	Baseline Smoothing	eppinged	01/05/22 11:29
Dibutylchlorendate ISTD	8.30	Baseline Smoothing	eppinged	01/05/22 11:29

Lab Sample ID: IC 180-384283/2 Client Sample ID:

Date Analyzed: 01/05/22 10:18 Lab File ID: Q0105220000002.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.47	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 2	7.52	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 3	8.27	Baseline Smoothing	eppinged	01/05/22 11:29
Dibutylchlorendate ISTD	8.53	Baseline Smoothing	eppinged	01/05/22 11:29
Toxaphene Peak 4	8.77	Baseline Smoothing	eppinged	01/05/22 11:29

Lab Sample ID: IC 180-384283/3 Client Sample ID:

Date Analyzed: 01/05/22 10:34 Lab File ID: Q0105220000003.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.48	Baseline Smoothing	eppinged	01/05/22 10:50
Toxaphene Peak 2	7.52	Baseline Smoothing	eppinged	01/05/22 10:50
Toxaphene Peak 3	8.27	Baseline Smoothing	eppinged	01/05/22 10:50
Dibutylchlorendate ISTD	8.52	Baseline Smoothing	eppinged	01/05/22 10:50
Toxaphene Peak 4	8.77	Baseline Smoothing	eppinged	01/05/22 10:50

EPA 8081B

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384283

Lab Sample ID: IC 180-384283/4 Client Sample ID:

Date Analyzed: 01/05/22 10:50 Lab File ID: Q0105220000004.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibutylchlorendate ISTD	8.30	Peak assignment corrected	eppinged	01/05/22 11:07

Lab Sample ID: IC 180-384283/4 Client Sample ID:

Date Analyzed: 01/05/22 10:50 Lab File ID: Q0105220000004.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 2	7.53	Baseline Smoothing	eppinged	01/05/22 11:08
Toxaphene Peak 3	8.28	Baseline Smoothing	eppinged	01/05/22 11:08
Dibutylchlorendate ISTD	8.54	Baseline Smoothing	eppinged	01/05/22 11:08
Toxaphene Peak 4	8.78	Baseline Smoothing	eppinged	01/05/22 11:08

Lab Sample ID: IC 180-384283/5 Client Sample ID:

Date Analyzed: 01/05/22 11:05 Lab File ID: Q0105220000005.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.08	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 2	7.35	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 3	7.81	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 4	7.89	Baseline Smoothing	eppinged	01/05/22 11:27
Dibutylchlorendate ISTD	8.31	Baseline Smoothing	eppinged	01/05/22 11:27

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384283

Lab Sample ID: IC 180-384283/5 Client Sample ID:

Date Analyzed: 01/05/22 11:05 Lab File ID: Q0105220000005.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.48	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 2	7.53	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 3	8.28	Baseline Smoothing	eppinged	01/05/22 11:27
Dibutylchlorendate ISTD	8.53	Baseline Smoothing	eppinged	01/05/22 11:27
Toxaphene Peak 4	8.78	Baseline Smoothing	eppinged	01/05/22 11:27

Lab Sample ID: IC 180-384283/6 Client Sample ID:

Date Analyzed: 01/05/22 11:21 Lab File ID: Q0105220000006.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.48	Baseline Smoothing	eppinged	01/05/22 11:35
Toxaphene Peak 2	7.53	Baseline Smoothing	eppinged	01/05/22 11:35
Toxaphene Peak 3	8.27	Baseline Smoothing	eppinged	01/05/22 11:35
Dibutylchlorendate ISTD	8.53	Baseline Smoothing	eppinged	01/05/22 11:35
Toxaphene Peak 4	8.77	Baseline Smoothing	eppinged	01/05/22 11:35

Lab Sample ID: IC 180-384283/7 Client Sample ID:

Date Analyzed: 01/05/22 11:37 Lab File ID: Q0105220000007.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlordane (technical) Peak 3	7.17	Split Peak	eppinged	01/05/22 12:06

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384283

Lab Sample ID: IC 180-384283/8 Client Sample ID:

Date Analyzed: 01/05/22 11:52 Lab File ID: Q0105220000008.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlordane (technical) Peak 3	7.17	Split Peak	eppinged	01/05/22 12:12

Lab Sample ID: IC 180-384283/9 Client Sample ID:

Date Analyzed: 01/05/22 12:08 Lab File ID: Q0105220000009.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlordane (technical) Peak 3	7.17	Split Peak	eppinged	01/05/22 12:23

Lab Sample ID: IC 180-384283/11 Client Sample ID:

Date Analyzed: 01/05/22 12:39 Lab File ID: Q0105220000011.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlordane (technical)		Unspecified		
Chlordane (technical) Peak 1	5.95	Peak assignment corrected	eppinged	01/05/22 12:57
Chlordane (technical) Peak 3	6.84	Peak assignment corrected	eppinged	01/05/22 12:57
Chlordane (technical) Peak 4	6.91	Peak assignment corrected	eppinged	01/05/22 12:57

Lab Sample ID: IC 180-384283/11 Client Sample ID:

Date Analyzed: 01/05/22 12:39 Lab File ID: Q0105220000011.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlordane (technical) Peak 3	7.17	Split Peak	eppinged	01/05/22 12:57

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384383

Lab Sample ID: IC 180-384383/8 Client Sample ID:

Date Analyzed: 01/06/22 10:44 Lab File ID: Q0106220000008.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
alpha-BHC	5.21	Peak assignment corrected	eppinged	01/06/22 10:59
gamma-BHC (Lindane)	5.48	Peak assignment corrected	eppinged	01/06/22 10:59
beta-BHC	5.65	Peak assignment corrected	eppinged	01/06/22 10:59
delta-BHC	5.85	Peak assignment corrected	eppinged	01/06/22 10:59
Heptachlor	5.94	Peak assignment corrected	eppinged	01/06/22 10:59
Aldrin	6.23	Peak assignment corrected	eppinged	01/06/22 11:00
Heptachlor epoxide	6.59	Peak assignment corrected	eppinged	01/06/22 11:00
trans-Chlordane	6.81	Peak assignment corrected	eppinged	01/06/22 11:00
cis-Chlordane	6.88	Peak assignment corrected	eppinged	01/06/22 11:00
Endosulfan I	6.93	Peak assignment corrected	eppinged	01/06/22 11:00
Dieldrin	7.17	Peak assignment corrected	eppinged	01/06/22 11:01
Endosulfan II	7.58	Peak assignment corrected	eppinged	01/06/22 11:01
Endrin aldehyde	7.70	Peak assignment corrected	eppinged	01/06/22 11:02
Endosulfan sulfate	7.91	Peak assignment corrected	eppinged	01/06/22 11:02
Methoxychlor	8.24	Peak assignment corrected	eppinged	01/06/22 11:01

EPA 8081B

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 384383

Lab Sample ID: IC 180-384383/8 Client Sample ID:

Date Analyzed: 01/06/22 10:44 Lab File ID: Q0106220000008.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
alpha-BHC	5.61	Peak assignment corrected	eppinged	01/06/22 10:59
gamma-BHC (Lindane)	5.91	Peak assignment corrected	eppinged	01/06/22 10:59
beta-BHC	6.15	Peak assignment corrected	eppinged	01/06/22 10:59
Heptachlor	6.24	Peak assignment corrected	eppinged	01/06/22 10:59
delta-BHC	6.38	Peak assignment corrected	eppinged	01/06/22 10:59
Aldrin	6.51	Peak assignment corrected	eppinged	01/06/22 11:00
Heptachlor epoxide	6.96	Peak assignment corrected	eppinged	01/06/22 11:00
trans-Chlordane	7.19	Peak assignment corrected	eppinged	01/06/22 11:00
cis-Chlordane	7.24	Peak assignment corrected	eppinged	01/06/22 11:00
Endosulfan I	7.31	Peak assignment corrected	eppinged	01/06/22 11:00
Dieldrin	7.56	Peak assignment corrected	eppinged	01/06/22 11:01
Endosulfan II	8.09	Peak assignment corrected	eppinged	01/06/22 11:01
Endrin aldehyde	8.26	Peak assignment corrected	eppinged	01/06/22 11:02
Endosulfan sulfate	8.50	Peak assignment corrected	eppinged	01/06/22 11:02
Methoxychlor	8.74	Peak assignment corrected	eppinged	01/06/22 11:01

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC15 Analysis Batch Number: 385331

Lab Sample ID: CCV 180-385331/2 Client Sample ID:

Date Analyzed: 01/17/22 09:19 Lab File ID: Q0117220000002.D GC Column: MR-1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.08	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 2	7.35	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 3	7.81	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 4	7.89	Baseline Smoothing	eppinged	01/17/22 09:34

Lab Sample ID: CCV 180-385331/2 Client Sample ID:

Date Analyzed: 01/17/22 09:19 Lab File ID: Q0117220000002.D GC Column: MR-2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene		Unspecified		
Toxaphene Peak 1	7.46	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 2	7.51	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 3	8.25	Baseline Smoothing	eppinged	01/17/22 09:34
Toxaphene Peak 4	8.75	Baseline Smoothing	eppinged	01/17/22 09:34

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 357315

Lab Sample ID: IC 180-357315/5 Client Sample ID:

Date Analyzed: 05/18/21 09:27 Lab File ID: 05180005.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260		Unspecified		
PCB-1016 Peak 2	3.98	Instrument noise	oravecj	05/19/21 09:42
PCB-1260 Peak 1	7.05	Instrument noise	oravecj	05/19/21 09:39
PCB-1260 Peak 3	8.13	Instrument noise	oravecj	05/19/21 09:39
PCB-1260 Peak 5	9.82	Instrument noise	oravecj	05/19/21 09:40

Lab Sample ID: IC 180-357315/5 Client Sample ID:

Date Analyzed: 05/18/21 09:27 Lab File ID: 05180005.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260		Unspecified		
PCB-1016 Peak 3	5.71	Instrument noise	oravecj	05/19/21 09:38
PCB-1016 Peak 4	6.47	Instrument noise	oravecj	05/19/21 09:38
PCB-1260 Peak 1	9.28	Instrument noise	oravecj	05/19/21 09:41
PCB-1260 Peak 2	9.89	Instrument noise	oravecj	05/19/21 09:41
PCB-1260 Peak 5	11.40	Instrument noise	oravecj	05/19/21 09:41

Lab Sample ID: IC 180-357315/6 Client Sample ID:

Date Analyzed: 05/18/21 09:45 Lab File ID: 05180006.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 2	3.98	Instrument noise	oravecj	05/19/21 09:42

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 357315

Lab Sample ID: IC 180-357315/11 Client Sample ID:

Date Analyzed: 05/18/21 11:20 Lab File ID: 05180011.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260		Unspecified		
PCB-1260 Peak 1	7.05	Instrument noise	oravecj	05/19/21 09:44
PCB-1260 Peak 2	7.57	Instrument noise	oravecj	05/19/21 09:44
PCB-1260 Peak 3	8.13	Instrument noise	oravecj	05/19/21 09:44
PCB-1260 Peak 4	9.36	Instrument noise	oravecj	05/19/21 09:44

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: MB 180-384682/1-C Client Sample ID:

Date Analyzed: 01/12/22 18:30 Lab File ID: 01120045.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242		Unspecified		
PCB-1260		Unspecified		
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:30

Lab Sample ID: MB 180-384682/1-C Client Sample ID:

Date Analyzed: 01/12/22 18:30 Lab File ID: 01120045.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242		Unspecified		
PCB-1260		Unspecified		
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:30
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:30

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 Client Sample ID: T1-WC-B-FL-D-2201051520-0-12

Date Analyzed: 01/12/22 19:26 Lab File ID: 01120048.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016		Unspecified		
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1260		Unspecified		
PCB-1016 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 Client Sample ID: T1-WC-B-FL-D-2201051520-0-12

Date Analyzed: 01/12/22 19:26 Lab File ID: 01120048.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 Client Sample ID: T1-WC-B-FL-D-2201051520-0-12

Date Analyzed: 01/12/22 19:26 Lab File ID: 01120048.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016		Unspecified		
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1260		Unspecified		
PCB-1016 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 Client Sample ID: T1-WC-B-FL-D-2201051520-0-12

Date Analyzed: 01/12/22 19:26 Lab File ID: 01120048.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 MS Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 MS

Date Analyzed: 01/12/22 19:45 Lab File ID: 01120049.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1254		Unspecified		
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 MS Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 MS

Date Analyzed: 01/12/22 19:45 Lab File ID: 01120049.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1254		Unspecified		
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-205 (IS)	12.14	Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 MSD Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 MSD

Date Analyzed: 01/12/22 20:04 Lab File ID: 01120050.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1254		Unspecified		
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-4 MSD Client Sample ID: T1-WC-B-FL-D-2201051520-0-12 MSD

Date Analyzed: 01/12/22 20:04 Lab File ID: 01120050.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1254		Unspecified		
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1254 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-3 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/12/22 20:23 Lab File ID: 01120051.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016		Unspecified		
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1260		Unspecified		
PCB-1016 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-3 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/12/22 20:23 Lab File ID: 01120051.D GC Column: RTX-CLP1 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-3 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/12/22 20:23 Lab File ID: 01120051.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016		Unspecified		
PCB-1221		Unspecified		
PCB-1232		Unspecified		
PCB-1242		Unspecified		
PCB-1248		Unspecified		
PCB-1260		Unspecified		
PCB-1016 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1016 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1221 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1232 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1242 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1248 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1248 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:32
PCB-1260 Peak 1		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CHGC20 Analysis Batch Number: 384861

Lab Sample ID: 180-132081-3 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/12/22 20:23 Lab File ID: 01120051.D GC Column: RTX-CLP2 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 2		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 3		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 4		Invalid Compound ID	oravecj	01/13/22 07:31
PCB-1260 Peak 5		Invalid Compound ID	oravecj	01/13/22 07:31

EPA 8082A

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CGC1 Analysis Batch Number: 359437

Lab Sample ID: IC 180-359437/1 Client Sample ID:

Date Analyzed: 06/04/21 07:41 Lab File ID: 0604210000005.D GC Column: RTX-50 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-D	9.43	Split Peak	oravecj	06/04/21 10:03

Lab Sample ID: IC 180-359437/1 Client Sample ID:

Date Analyzed: 06/04/21 07:41 Lab File ID: 0604210000005.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dichlorophenylacetic acid (Surr)	8.08	Split Peak	oravecj	06/04/21 10:02
2,4-DB	11.23	Split Peak	oravecj	06/04/21 10:03

Lab Sample ID: IC 180-359437/3 Client Sample ID:

Date Analyzed: 06/04/21 08:20 Lab File ID: 0604210000007.D GC Column: RTX-50 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dichlorophenylacetic acid (Surr)	8.02	Split Peak	oravecj	06/04/21 10:03

Lab Sample ID: IC 180-359437/6 Client Sample ID:

Date Analyzed: 06/04/21 09:19 Lab File ID: 0604210000010.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)	10.35	Split Peak	oravecj	06/04/21 10:06

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CGC1 Analysis Batch Number: 359437

Lab Sample ID: IC 180-359437/7 Client Sample ID:

Date Analyzed: 06/04/21 09:39 Lab File ID: 0604210000011.D GC Column: RTX-50 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)	10.11	Split Peak	oravecj	06/04/21 10:05

EPA 8151A

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Instrument ID: CGC1 Analysis Batch Number: 385491

Lab Sample ID: MB 180-385097/1-A Client Sample ID:

Date Analyzed: 01/19/22 05:42 Lab File ID: 0119220000003.D GC Column: RTX-50 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)		Invalid Compound ID	oravecj	01/19/22 07:36

Lab Sample ID: MB 180-385097/1-A Client Sample ID:

Date Analyzed: 01/19/22 05:42 Lab File ID: 0119220000003.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)		Invalid Compound ID	oravecj	01/19/22 07:36

Lab Sample ID: 180-132081-1 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/19/22 07:00 Lab File ID: 0119220000007.D GC Column: RTX-50 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)		Invalid Compound ID	oravecj	01/19/22 07:36

Lab Sample ID: 180-132081-1 Client Sample ID: T1-WC-B-FL-D-2201051234-0-12

Date Analyzed: 01/19/22 07:00 Lab File ID: 0119220000007.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Silvex (2,4,5-TP)		Invalid Compound ID	oravecj	01/19/22 07:36

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
20 PPM NH3 P_00258	02/12/22	01/15/22	DI Water, Lot N/A	50 mL	WNH31000P_00031	1 mL	Ammonia, distilled	20 mg/L
.WNH31000P_00031	03/19/23		Lab Chem, Lot L078-13		(Purchased Reagent)		Ammonia, distilled	1000 mg/L
20 PPM NH3 S_00256	02/12/22	01/15/22	DI Water, Lot N/A	50 mL	WNH31000S_00021	1 mL	Ammonia, distilled	20 mg/L
.WNH31000S_00021	03/03/22		Lab Chem Inc., Lot K058-18		(Purchased Reagent)		Ammonia, distilled	1000 mg/L
8260Internal_00001	02/11/22	01/11/22	Methanol, Lot 4292562	10 mL	VOA8260INTRES_00193	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00193	05/31/26		Restek, Lot A0172729		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
GCAR1248CALL4_00025	08/18/21	02/18/21	Hexane, Lot 3878999	100 mL	GCPCBI1248STD_00011	0.05 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.GCPCBI1248STD_00011	01/30/25		RESTEK, Lot A0142661		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
GCAR1248CALL4_00026	02/18/22	08/19/21	Hexane, Lot 3878999	100 mL	GCPCBI1248STD_00011	0.05 mL	PCB-1248	0.5 ug/mL
.GCPCBI1248STD_00011	01/30/25		RESTEK, Lot A0142661		(Purchased Reagent)		PCB-1248	1000 ug/mL
GCAR1660CALL1_00030	08/18/21	02/18/21	HEXANE, Lot 3878999	100 mL	GC1660WORKS_00023	0.01 mL	PCB-1016 Peak 1	0.01 ug/mL
							PCB-1016 Peak 2	0.01 ug/mL
							PCB-1016 Peak 3	0.01 ug/mL
							PCB-1016 Peak 4	0.01 ug/mL
							PCB-1016 Peak 5	0.01 ug/mL
							PCB-1260 Peak 1	0.01 ug/mL
							PCB-1260 Peak 2	0.01 ug/mL
							PCB-1260 Peak 3	0.01 ug/mL
							PCB-1260 Peak 4	0.01 ug/mL
							PCB-1260 Peak 5	0.01 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0005 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25		RESTEK, Lot A0150739		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24		RESTEK, Lot A0141110		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL2_00022	08/18/21	02/18/21	HEXANE, Lot 3878999	100 mL	GC1660WORKS_00023	0.1 mL	PCB-1016 Peak 1	0.1 ug/mL
							PCB-1016 Peak 2	0.1 ug/mL
							PCB-1016 Peak 3	0.1 ug/mL
							PCB-1016 Peak 4	0.1 ug/mL
							PCB-1016 Peak 5	0.1 ug/mL
							PCB-1260 Peak 1	0.1 ug/mL
							PCB-1260 Peak 2	0.1 ug/mL
							PCB-1260 Peak 3	0.1 ug/mL
							PCB-1260 Peak 4	0.1 ug/mL
							PCB-1260 Peak 5	0.1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.005 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25		RESTEK, Lot A0150739		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL3_00021	08/18/21	02/18/21	HEXANE, Lot 3878999	100 mL	GC1660WORKS_00023	0.25 mL	PCB-1016 Peak 1	0.25 ug/mL
							PCB-1016 Peak 2	0.25 ug/mL
							PCB-1016 Peak 3	0.25 ug/mL
							PCB-1016 Peak 4	0.25 ug/mL
							PCB-1016 Peak 5	0.25 ug/mL
							PCB-1260 Peak 1	0.25 ug/mL
							PCB-1260 Peak 2	0.25 ug/mL
							PCB-1260 Peak 3	0.25 ug/mL
							PCB-1260 Peak 4	0.25 ug/mL
							PCB-1260 Peak 5	0.25 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0125 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0125 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL4_00023	08/18/21	02/18/21	HEXANE, Lot 3878999	200 mL	GC1660WORKS_00023	1 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL5_00022	08/18/21	02/18/21	HEXANE, Lot 3878999	200 mL	GC1660WORKS_00023	2 mL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
							PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL5_00023	02/18/22	08/19/21	HEXANE, Lot 3878999	200 mL	GC1660WORKS_00023	2 mL	PCB-1016	1 ug/mL
							PCB-1260	1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016	100 ug/mL
							PCB-1260	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016	1000 ug/mL
							PCB-1260	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL6_00020	08/18/21	02/18/21	HEXANE, Lot 3878999	100 mL	GC1660WORKS_00023	2 mL	PCB-1016 Peak 1	2 ug/mL
							PCB-1016 Peak 2	2 ug/mL
							PCB-1016 Peak 3	2 ug/mL
							PCB-1016 Peak 4	2 ug/mL
							PCB-1016 Peak 5	2 ug/mL
							PCB-1260 Peak 1	2 ug/mL
							PCB-1260 Peak 2	2 ug/mL
							PCB-1260 Peak 3	2 ug/mL
							PCB-1260 Peak 4	2 ug/mL
							PCB-1260 Peak 5	2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.1 ug/mL
							Tetrachloro-m-xylene (Surr)	0.1 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR1660CALL7_00021	08/18/21	02/18/21	HEXANE, Lot 3878999	100 mL	GC1660WORKS_00023	4 mL	PCB-1016 Peak 1	4 ug/mL
							PCB-1016 Peak 2	4 ug/mL
							PCB-1016 Peak 3	4 ug/mL
							PCB-1016 Peak 4	4 ug/mL
							PCB-1016 Peak 5	4 ug/mL
							PCB-1260 Peak 1	4 ug/mL
							PCB-1260 Peak 2	4 ug/mL
							PCB-1260 Peak 3	4 ug/mL
							PCB-1260 Peak 4	4 ug/mL
							PCB-1260 Peak 5	4 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
.GC1660WORKS_00023	02/18/22	02/18/21	Hexane, Lot 3878999	40 mL	GCPCBI1660STD_00019	4 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00010	1 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPCBI1660STD_00019	10/31/25	RESTEK, Lot A0150739			(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00010	11/30/24		RESTEK, Lot A0141110		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
GCAR2154CALL4_00024	08/18/21	02/18/21	Hexane, Lot 3878999	100 mL	GCPCB2154 mix_00007	0.05 mL	PCB-1221 Peak 1	0.5 ug/mL
							PCB-1221 Peak 2	0.5 ug/mL
							PCB-1221 Peak 3	0.5 ug/mL
							PCB-1254 Peak 1	0.5 ug/mL
							PCB-1254 Peak 2	0.5 ug/mL
							PCB-1254 Peak 3	0.5 ug/mL
							PCB-1254 Peak 4	0.5 ug/mL
							PCB-1254 Peak 5	0.5 ug/mL
.GCPCB2154 mix_00007	01/31/24		RESTEK, Lot A0131802		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
							PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
GCAR3262CALL4_00017	08/18/21	02/18/21	Hexane, Lot 3878999	100 mL	GCPCB3262 mix_00005	0.05 mL	PCB-1232 Peak 1	0.5 ug/mL
							PCB-1232 Peak 2	0.5 ug/mL
							PCB-1232 Peak 3	0.5 ug/mL
							PCB-1232 Peak 4	0.5 ug/mL
							PCB-1232 Peak 5	0.5 ug/mL
							PCB-1262 Peak 1	0.5 ug/mL
							PCB-1262 Peak 2	0.5 ug/mL
							PCB-1262 Peak 3	0.5 ug/mL
							PCB-1262 Peak 4	0.5 ug/mL
							PCB-1262 Peak 5	0.5 ug/mL
.GCPCB3262 mix_00005	01/31/24		RESTEK, Lot A0132023		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
							PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
GCAR4268CALL4_00017	08/18/21	02/18/21	Hexane, Lot 3878999	100 mL	GCPCB4268 mix_00005	0.05 mL	PCB-1242 Peak 1	0.5 ug/mL
							PCB-1242 Peak 2	0.5 ug/mL
							PCB-1242 Peak 3	0.5 ug/mL
							PCB-1242 Peak 4	0.5 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1242 Peak 5	0.5 ug/mL
							PCB-1268 Peak 1	0.5 ug/mL
							PCB-1268 Peak 2	0.5 ug/mL
							PCB-1268 Peak 3	0.5 ug/mL
							PCB-1268 Peak 4	0.5 ug/mL
.GCPCB4268 mix_00005	03/31/24		RESTEK, Lot A0133093		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
							PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
GCAR4268CALL4_00018	02/18/22	08/19/21	Hexane, Lot 3878999	100 mL	GCPCB4268 mix_00005	0.05 mL	PCB-1242	0.5 ug/mL
.GCPCB4268 mix_00005	03/31/24		RESTEK, Lot A0133093		(Purchased Reagent)		PCB-1242	1000 ug/mL
GCCHLORLEVEL1_00018	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	0.004 mL	Chlordane (technical) Peak 1	0.005 ug/mL
							Chlordane (technical) Peak 2	0.005 ug/mL
							Chlordane (technical) Peak 3	0.005 ug/mL
							Chlordane (technical) Peak 4	0.005 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical) Peak 1	50 ug/mL
							Chlordane (technical) Peak 2	50 ug/mL
							Chlordane (technical) Peak 3	50 ug/mL
							Chlordane (technical) Peak 4	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical) Peak 1	5000 ug/mL
							Chlordane (technical) Peak 2	5000 ug/mL
							Chlordane (technical) Peak 3	5000 ug/mL
							Chlordane (technical) Peak 4	5000 ug/mL
GCCHLORLEVEL2_00015	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	0.02 mL	Chlordane (technical) Peak 1	0.025 ug/mL
							Chlordane (technical) Peak 2	0.025 ug/mL
							Chlordane (technical) Peak 3	0.025 ug/mL
							Chlordane (technical) Peak 4	0.025 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical) Peak 1	50 ug/mL
							Chlordane (technical) Peak 2	50 ug/mL
							Chlordane (technical) Peak 3	50 ug/mL
							Chlordane (technical) Peak 4	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical) Peak 1	5000 ug/mL
							Chlordane (technical) Peak 2	5000 ug/mL
							Chlordane (technical) Peak 3	5000 ug/mL
							Chlordane (technical) Peak 4	5000 ug/mL
GCCHLORLEVEL3_00030	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	0.2 mL	Chlordane (technical) Peak 1	0.25 ug/mL
							Chlordane (technical) Peak 2	0.25 ug/mL
							Chlordane (technical) Peak 3	0.25 ug/mL
							Chlordane (technical) Peak 4	0.25 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical) Peak 1	50 ug/mL
							Chlordane (technical) Peak 2	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlordane (technical) Peak 3	50 ug/mL
							Chlordane (technical) Peak 4	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical) Peak 1	5000 ug/mL
							Chlordane (technical) Peak 2	5000 ug/mL
							Chlordane (technical) Peak 3	5000 ug/mL
							Chlordane (technical) Peak 4	5000 ug/mL
GCCHLORLEVEL3_00030	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	0.2 mL	Chlordane (technical)	0.25 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical)	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical)	5000 ug/mL
GCCHLORLEVEL4_00017	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	1 mL	Chlordane (technical) Peak 1	1.25 ug/mL
							Chlordane (technical) Peak 2	1.25 ug/mL
							Chlordane (technical) Peak 3	1.25 ug/mL
							Chlordane (technical) Peak 4	1.25 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical) Peak 1	50 ug/mL
							Chlordane (technical) Peak 2	50 ug/mL
							Chlordane (technical) Peak 3	50 ug/mL
							Chlordane (technical) Peak 4	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical) Peak 1	5000 ug/mL
							Chlordane (technical) Peak 2	5000 ug/mL
							Chlordane (technical) Peak 3	5000 ug/mL
							Chlordane (technical) Peak 4	5000 ug/mL
GCCHLORLEVEL5_00017	05/31/22	01/05/22	Hexane, Lot 4595066	40 mL	GCCHLORINTSTD_00008	2 mL	Chlordane (technical) Peak 1	2.5 ug/mL
							Chlordane (technical) Peak 2	2.5 ug/mL
							Chlordane (technical) Peak 3	2.5 ug/mL
							Chlordane (technical) Peak 4	2.5 ug/mL
.GCCHLORINTSTD_00008	05/31/22	06/03/21	Hexane, Lot 4180122	40 mL	TECHCHLORDANE_00004	400 uL	Chlordane (technical) Peak 1	50 ug/mL
							Chlordane (technical) Peak 2	50 ug/mL
							Chlordane (technical) Peak 3	50 ug/mL
							Chlordane (technical) Peak 4	50 ug/mL
..TECHCHLORDANE_00004	05/31/22		RESTEK, Lot A0137638		(Purchased Reagent)		Chlordane (technical) Peak 1	5000 ug/mL
							Chlordane (technical) Peak 2	5000 ug/mL
							Chlordane (technical) Peak 3	5000 ug/mL
							Chlordane (technical) Peak 4	5000 ug/mL
GCHERBCALSL1_00031	10/31/21	05/13/21	Hexane, Lot 4180122	40 mL	GCHERBICALSTK_00023	0.125 mL	2,4-Dichlorophenylacetic acid (Surr)	0.02 ug/mL
							2,4,5-T	0.005 ug/mL
							2,4-D	0.02 ug/mL
							2,4-DB	0.02 ug/mL
							Dalapon	0.02 ug/mL
							Dicamba	0.01 ug/mL
							Dichlorprop	0.02 ug/mL
							Dinoseb	0.02 ug/mL
							MCPA	2 ug/mL
							MCPP	2 ug/mL
							Pentachlorophenol	0.005 ug/mL
							Silvex (2,4,5-TP)	0.005 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22	RESTEK, Lot A0150937			(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21	restek, Lot A0142217			(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL2_00027	10/31/21	05/13/21	Hexane, Lot 4180122	40 mL	GCHERBICALSTK_00023	0.25 mL	2,4-Dichlorophenylacetic acid (Surr)	0.04 ug/mL
							2,4,5-T	0.01 ug/mL
							2,4-D	0.04 ug/mL
							2,4-DB	0.04 ug/mL
							Dalapon	0.04 ug/mL
							Dicamba	0.02 ug/mL
							Dichlorprop	0.04 ug/mL
							Dinoseb	0.04 ug/mL
							MCPA	4 ug/mL
							MCPP	4 ug/mL
							Pentachlorophenol	0.01 ug/mL
							Silvex (2,4,5-TP)	0.01 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22		RESTEK, Lot A0150937		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21		restek, Lot A0142217		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL3_00032	10/31/21	05/13/21	Hexane, Lot 4180122	100 mL	GCHERBICALSTK_00023	1.25 mL	2,4-Dichlorophenylacetic acid (Surr)	0.08 ug/mL
							2,4,5-T	0.02 ug/mL
							2,4-D	0.08 ug/mL
							2,4-DB	0.08 ug/mL
							Dalapon	0.08 ug/mL
							Dicamba	0.04 ug/mL
							Dichlorprop	0.08 ug/mL
							Dinoseb	0.08 ug/mL
							MCPA	8 ug/mL
							MCPP	8 ug/mL
							Pentachlorophenol	0.02 ug/mL
							Silvex (2,4,5-TP)	0.02 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22		RESTEK, Lot A0150937		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21		restek, Lot A0142217		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL3_00035	01/31/22	01/03/22	Hexane, Lot 4180122	100 mL	GCHERBICALSTK_00023	1.25 mL	2,4-Dichlorophenylacetic acid (Surr)	0.08 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
..GCDCAASSTD_00009	04/30/22		RESTEK, Lot A0150937		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
GCHERBCALSL3_00035	01/31/22	01/03/22	Hexane, Lot 4180122	100 mL	GCHERBICALSTK_00023	1.25 mL	2,4-D	0.08 ug/mL
							Silvex (2,4,5-TP)	0.02 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCHERBICALMIX_00019	0.32 mL	2,4-D	6.4 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCHERBICALMIX_00019	10/31/21		restek, Lot A0142217		(Purchased Reagent)		2,4-D	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL4_00032	10/31/21	05/13/21	Hexane, Lot 4180122	40 mL	GCHERBICALSTK_00023	1 mL	2,4-Dichlorophenylacetic acid (Surr)	0.16 ug/mL
							2,4,5-T	0.04 ug/mL
							2,4-D	0.16 ug/mL
							2,4-DB	0.16 ug/mL
							Dalapon	0.16 ug/mL
							Dicamba	0.08 ug/mL
							Dichlorprop	0.16 ug/mL
							Dinoseb	0.16 ug/mL
							MCPA	16 ug/mL
							MCPP	16 ug/mL
							Pentachlorophenol	0.04 ug/mL
							Silvex (2,4,5-TP)	0.04 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22		RESTEK, Lot A0150937		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..GCHERBICALMIX_00019	10/31/21		restek, Lot A0142217		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL5_00027	10/31/21	05/13/21	Hexane, Lot 4180122	40 mL	GCHERBICALSTK_00023	2 mL	2,4-Dichlorophenylacetic acid (Surr)	0.32 ug/mL
							2,4,5-T	0.08 ug/mL
							2,4-D	0.32 ug/mL
							2,4-DB	0.32 ug/mL
							Dalapon	0.32 ug/mL
							Dicamba	0.16 ug/mL
							Dichlorprop	0.32 ug/mL
							Dinoseb	0.32 ug/mL
							MCPA	32 ug/mL
							MCPP	32 ug/mL
							Pentachlorophenol	0.08 ug/mL
							Silvex (2,4,5-TP)	0.08 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22		RESTEK, Lot A0150937		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21		restek, Lot A0142217		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL6_00015	10/31/21	05/13/21	Hexane, Lot 4180122	20 mL	GCHERBICALSTK_00023	2 mL	2,4-Dichlorophenylacetic acid (Surr)	0.64 ug/mL
							2,4,5-T	0.16 ug/mL
							2,4-D	0.64 ug/mL
							2,4-DB	0.64 ug/mL
							Dalapon	0.64 ug/mL
							Dicamba	0.32 ug/mL
							Dichlorprop	0.64 ug/mL
							Dinoseb	0.64 ug/mL
							MCPA	64 ug/mL
							MCPP	64 ug/mL
							Pentachlorophenol	0.16 ug/mL
							Silvex (2,4,5-TP)	0.16 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22	RESTEK, Lot A0150937			(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21	restek, Lot A0142217			(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCHERBCALSL7_00014	10/31/21	05/13/21	Hexane, Lot 4180122	40 mL	GCHERBICALSTK_00023	0.0625 mL	2,4-Dichlorophenylacetic acid (Surr)	0.01 ug/mL
							2,4,5-T	0.0025 ug/mL
							2,4-D	0.01 ug/mL
							2,4-DB	0.01 ug/mL
							Dalapon	0.01 ug/mL
							Dicamba	0.005 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorprop	0.01 ug/mL
							Dinoseb	0.01 ug/mL
							MCPA	1 ug/mL
							MCPP	1 ug/mL
							Pentachlorophenol	0.0025 ug/mL
							Silvex (2,4,5-TP)	0.0025 ug/mL
.GCHERBICALSTK_00023	10/31/21	05/13/21	Hexane, Lot 4180122	10 mL	GCDCAASSTD_00009	0.064 mL	2,4-Dichlorophenylacetic acid (Surr)	1.28 ug/mL
					GCHERBICALMIX_00019	0.32 mL	2,4,5-T	1.6 ug/mL
							2,4-D	6.4 ug/mL
							2,4-DB	6.4 ug/mL
							Dalapon	6.4 ug/mL
							Dicamba	3.2 ug/mL
							Dichlorprop	6.4 ug/mL
							Dinoseb	6.4 ug/mL
							MCPA	640 ug/mL
							MCPP	640 ug/mL
							Pentachlorophenol	1.6 ug/mL
							Silvex (2,4,5-TP)	1.6 ug/mL
..GCDCAASSTD_00009	04/30/22	RESTEK, Lot A0150937			(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL
..GCHERBICALMIX_00019	10/31/21	restek, Lot A0142217			(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
GCMATRIXWORKS_00044	06/22/22	12/22/21	ACETONE, Lot 3747124	200 mL	AR1016(10000)_00005	0.8 mL	PCB-1016	40 ug/mL
					AR1260(10000)_00003	0.8 mL	PCB-1260	40 ug/mL
.AR1016(10000)_00005	07/31/26	restek, Lot A0174171			(Purchased Reagent)		PCB-1016	10000 ug/mL
.AR1260(10000)_00003	08/31/26	Restek, Lot A0175178			(Purchased Reagent)		PCB-1260	10000 ug/mL
GCPest L1_00038	03/03/22	09/10/21	Hexane, Lot 4368221	40 mL	GCCLPSURRSTK_00013	0.008 mL	DCB Decachlorobiphenyl (Surr)	0.001 ug/mL
							Tetrachloro-m-xylene (Surr)	0.001 ug/mL
					GCPestCAL_00016	0.004 mL	4,4'-DDD	0.001 ug/mL
							4,4'-DDE	0.001 ug/mL
							4,4'-DDT	0.001 ug/mL
							Aldrin	0.001 ug/mL
							alpha-BHC	0.001 ug/mL
							beta-BHC	0.001 ug/mL
							cis-Chlordane	0.001 ug/mL
							delta-BHC	0.001 ug/mL
							Dieldrin	0.001 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan I	0.001 ug/mL
							Endosulfan II	0.001 ug/mL
							Endosulfan sulfate	0.001 ug/mL
							Endrin	0.001 ug/mL
							Endrin aldehyde	0.001 ug/mL
							Endrin ketone	0.001 ug/mL
							gamma-BHC (Lindane)	0.001 ug/mL
							Heptachlor	0.001 ug/mL
							Heptachlor epoxide	0.001 ug/mL
							Methoxychlor	0.001 ug/mL
							trans-Chlordane	0.001 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL
..GCPESTAB3STD_00004	09/30/22	RESTEK, Lot A0137734			(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
GCPESTISSPK2_00027	07/31/22	01/03/22	Hexane, Lot 4595066	100 mL	DBC Internal_00004	0.5 mL	Dibutylchlorendate ISTD	1 ug/mL
					GCpest/pcbINT_00006	0.1 mL	1-Bromo-2-nitrobenzene	1 ug/mL
.DBC Internal_00004	11/30/22	RESTEK, Lot A0152900			(Purchased Reagent)		Dibutylchlorendate ISTD	200 ug/mL
.GCpest/pcbINT_00006	04/30/23	restek, Lot A0157061			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
GCPestL2_00027	03/03/22	09/10/21	Hexane, Lot 4368221	40 mL	GCCLPSURRSTK_00013	0.04 mL	DCB Decachlorobiphenyl (Surr)	0.005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.005 ug/mL
					GCPestCAL_00016	0.02 mL	4,4'-DDD	0.005 ug/mL
							4,4'-DDE	0.005 ug/mL
							4,4'-DDT	0.005 ug/mL
							Aldrin	0.005 ug/mL
							alpha-BHC	0.005 ug/mL
							beta-BHC	0.005 ug/mL
							cis-Chlordane	0.005 ug/mL
							delta-BHC	0.005 ug/mL
							Dieldrin	0.005 ug/mL
							Endosulfan I	0.005 ug/mL
							Endosulfan II	0.005 ug/mL
							Endosulfan sulfate	0.005 ug/mL
							Endrin	0.005 ug/mL
							Endrin aldehyde	0.005 ug/mL
							Endrin ketone	0.005 ug/mL
							gamma-BHC (Lindane)	0.005 ug/mL
							Heptachlor	0.005 ug/mL
							Heptachlor epoxide	0.005 ug/mL
							Methoxychlor	0.005 ug/mL
							trans-Chlordane	0.005 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL
..GCPESTAB3STD_00004	09/30/22		RESTEK, Lot A0137734		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
GCPestL3_00042	03/03/22	09/10/21	Hexane, Lot 4368221	100 mL	GCCLPSURRSTK_00013	0.5 mL	DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
					GCPestCAL_00016	0.25 mL	4,4'-DDD	0.025 ug/mL
							4,4'-DDE	0.025 ug/mL
							4,4'-DDT	0.025 ug/mL
							Aldrin	0.025 ug/mL
							alpha-BHC	0.025 ug/mL
							beta-BHC	0.025 ug/mL
							cis-Chlordane	0.025 ug/mL
							delta-BHC	0.025 ug/mL
							Dieldrin	0.025 ug/mL
							Endosulfan I	0.025 ug/mL
							Endosulfan II	0.025 ug/mL
							Endosulfan sulfate	0.025 ug/mL
							Endrin	0.025 ug/mL
							Endrin aldehyde	0.025 ug/mL
							Endrin ketone	0.025 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							gamma-BHC (Lindane)	0.025 ug/mL
							Heptachlor	0.025 ug/mL
							Heptachlor epoxide	0.025 ug/mL
							Methoxychlor	0.025 ug/mL
							trans-Chlordane	0.025 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL
..GCPESTAB3STD_00004	09/30/22	RESTEK, Lot A0137734			(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-Chlordane	2000 ug/mL
GCPestL4_00028	03/03/22	09/10/21	Hexane, Lot 4368221	40 mL	GCCLPSURRSTK_00013	0.4 mL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
					GCPestCAL_00016	0.2 mL	4,4'-DDD	0.05 ug/mL
							4,4'-DDE	0.05 ug/mL
							4,4'-DDT	0.05 ug/mL
							Aldrin	0.05 ug/mL
							alpha-BHC	0.05 ug/mL
							beta-BHC	0.05 ug/mL
							cis-Chlordane	0.05 ug/mL
							delta-BHC	0.05 ug/mL
							Dieldrin	0.05 ug/mL
							Endosulfan I	0.05 ug/mL
							Endosulfan II	0.05 ug/mL
							Endosulfan sulfate	0.05 ug/mL
							Endrin	0.05 ug/mL
							Endrin aldehyde	0.05 ug/mL
							Endrin ketone	0.05 ug/mL
							gamma-BHC (Lindane)	0.05 ug/mL
							Heptachlor	0.05 ug/mL
							Heptachlor epoxide	0.05 ug/mL
							Methoxychlor	0.05 ug/mL
							trans-Chlordane	0.05 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..GCPESTAB3STD_00004	09/30/22	RESTEK, Lot A0137734			(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
GCPestL5_00026	03/03/22	09/10/21	Hexane, Lot 4368221	40 mL	GCCLPSURRSTK_00013	0.8 mL	DCB Decachlorobiphenyl (Surr)	0.1 ug/mL
							Tetrachloro-m-xylene (Surr)	0.1 ug/mL
					GCPestCAL_00016	0.4 mL	4,4'-DDD	0.1 ug/mL
							4,4'-DDE	0.1 ug/mL
							4,4'-DDT	0.1 ug/mL
							Aldrin	0.1 ug/mL
							alpha-BHC	0.1 ug/mL
							beta-BHC	0.1 ug/mL
							cis-Chlordane	0.1 ug/mL
							delta-BHC	0.1 ug/mL
							Dieldrin	0.1 ug/mL
							Endosulfan I	0.1 ug/mL
							Endosulfan II	0.1 ug/mL
							Endosulfan sulfate	0.1 ug/mL
							Endrin	0.1 ug/mL
							Endrin aldehyde	0.1 ug/mL
							Endrin ketone	0.1 ug/mL
							gamma-BHC (Lindane)	0.1 ug/mL
							Heptachlor	0.1 ug/mL
							Heptachlor epoxide	0.1 ug/mL
							Methoxychlor	0.1 ug/mL
							trans-Chlordane	0.1 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL
..GCPESTAB3STD_00004	09/30/22		RESTEK, Lot A0137734		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
GCPestL6_00026	03/03/22	09/10/21	Hexane, Lot 4368221	40 mL	GCCLPSURRSTK_00013	1.6 mL	DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
					GCPestCAL_00016	0.8 mL	4,4'-DDD	0.2 ug/mL
							4,4'-DDE	0.2 ug/mL
							4,4'-DDT	0.2 ug/mL
							Aldrin	0.2 ug/mL
							alpha-BHC	0.2 ug/mL
							beta-BHC	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-Chlordane	0.2 ug/mL
							delta-BHC	0.2 ug/mL
							Dieldrin	0.2 ug/mL
							Endosulfan I	0.2 ug/mL
							Endosulfan II	0.2 ug/mL
							Endosulfan sulfate	0.2 ug/mL
							Endrin	0.2 ug/mL
							Endrin aldehyde	0.2 ug/mL
							Endrin ketone	0.2 ug/mL
							gamma-BHC (Lindane)	0.2 ug/mL
							Heptachlor	0.2 ug/mL
							Heptachlor epoxide	0.2 ug/mL
							Methoxychlor	0.2 ug/mL
							trans-Chlordane	0.2 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24		RESTEK, Lot A0141110		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPestCAL_00016	03/03/22	03/03/21	Hexane, Lot 4040129	20 mL	GCPESTAB3STD_00004	0.1 mL	4,4'-DDD	10 ug/mL
							4,4'-DDE	10 ug/mL
							4,4'-DDT	10 ug/mL
							Aldrin	10 ug/mL
							alpha-BHC	10 ug/mL
							beta-BHC	10 ug/mL
							cis-Chlordane	10 ug/mL
							delta-BHC	10 ug/mL
							Dieldrin	10 ug/mL
							Endosulfan I	10 ug/mL
							Endosulfan II	10 ug/mL
							Endosulfan sulfate	10 ug/mL
							Endrin	10 ug/mL
							Endrin aldehyde	10 ug/mL
							Endrin ketone	10 ug/mL
							gamma-BHC (Lindane)	10 ug/mL
							Heptachlor	10 ug/mL
							Heptachlor epoxide	10 ug/mL
							Methoxychlor	10 ug/mL
							trans-Chlordane	10 ug/mL
..GCPESTAB3STD_00004	09/30/22		RESTEK, Lot A0137734		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
GCPESTPEMSTD_00051	06/30/22	01/05/22	Hexane, Lot 4595066	100 mL	GCCLPSURRSTK_00013	0.5 mL	DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
					GCPEST(PEM2)_00002	0.5 mL	4,4'-DDT	0.05 ug/mL
							Endrin	0.025 ug/mL
.GCCLPSURRSTK_00013	08/06/22	08/06/21	Hexane, Lot 4368221	20 mL	GCPEST(SURR)S_00010	0.5 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene (Surr)	5 ug/mL
..GCPEST(SURR)S_00010	11/30/24	RESTEK, Lot A0141110			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
.GCPEST(PEM2)_00002	06/30/22	RESTEK, Lot A0150215			(Purchased Reagent)		4,4'-DDT	10 ug/mL
							Endrin	5 ug/mL
GCTBASOLUTION_00069	10/22/22	10/22/21	DI Water, Lot n/a	4 L	GCNa2SO3_00015	1000 g	Sodium Sulfite	1982.5 ug/mL
					GCTBA98.0_00008	135.6 g	Tetrabutylammonium Hydrogen Sulfate	33222 ug/mL
.GCNa2SO3_00015	08/01/25	Fisher, Lot 203490			(Purchased Reagent)		Sodium Sulfite	0.00793 mol/g
.GCTBA98.0_00008	02/04/25	Arcos Organics, Lot A0397220			(Purchased Reagent)		Tetrabutylammonium Hydrogen Sulfate	98 %
GCTOXLEVEL1_00018	06/02/22	01/05/22	Hexane, Lot 4595066	40 mL	GCTOXINTERSTD_00009	0.016 mL	Toxaphene Peak 1	0.02 ug/mL
							Toxaphene Peak 2	0.02 ug/mL
							Toxaphene Peak 3	0.02 ug/mL
							Toxaphene Peak 4	0.02 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene Peak 1	50 ug/mL
							Toxaphene Peak 2	50 ug/mL
							Toxaphene Peak 3	50 ug/mL
							Toxaphene Peak 4	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24	RESTEK, Lot A0155399			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
GCTOXLEVEL2_00015	06/02/22	01/05/22	Hexane, Lot 4595066	40 mL	GCTOXINTERSTD_00009	0.16 mL	Toxaphene Peak 1	0.2 ug/mL
							Toxaphene Peak 2	0.2 ug/mL
							Toxaphene Peak 3	0.2 ug/mL
							Toxaphene Peak 4	0.2 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene Peak 1	50 ug/mL
							Toxaphene Peak 2	50 ug/mL
							Toxaphene Peak 3	50 ug/mL
							Toxaphene Peak 4	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24	RESTEK, Lot A0155399			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
GCTOXLEVEL3_00032	06/02/22	01/05/22	Hexane, Lot 4595066	40 mL	GCTOXINTERSTD_00009	0.8 mL	Toxaphene Peak 1	1 ug/mL
							Toxaphene Peak 2	1 ug/mL
							Toxaphene Peak 3	1 ug/mL
							Toxaphene Peak 4	1 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene Peak 1	50 ug/mL
							Toxaphene Peak 2	50 ug/mL
							Toxaphene Peak 3	50 ug/mL
							Toxaphene Peak 4	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24		RESTEK, Lot A0155399		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
GCTOXLEVEL3_00032	06/02/22	01/05/22	Hexane, Lot 4595066	40 mL	GCTOXINTERSTD_00009	0.8 mL	Toxaphene	1 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24		RESTEK, Lot A0155399		(Purchased Reagent)		Toxaphene	5000 ug/mL
GCTOXLEVEL4_00016	06/02/22	01/05/22	Hexane, Lot 4595066	20 mL	GCTOXINTERSTD_00009	1 mL	Toxaphene Peak 1	2.5 ug/mL
							Toxaphene Peak 2	2.5 ug/mL
							Toxaphene Peak 3	2.5 ug/mL
							Toxaphene Peak 4	2.5 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene Peak 1	50 ug/mL
							Toxaphene Peak 2	50 ug/mL
							Toxaphene Peak 3	50 ug/mL
							Toxaphene Peak 4	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24		RESTEK, Lot A0155399		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
GCTOXLEVEL5_00020	06/02/22	01/05/22	Hexane, Lot 4595066	20 mL	GCTOXINTERSTD_00009	2 mL	Toxaphene Peak 1	5 ug/mL
							Toxaphene Peak 2	5 ug/mL
							Toxaphene Peak 3	5 ug/mL
							Toxaphene Peak 4	5 ug/mL
.GCTOXINTERSTD_00009	06/02/22	06/02/21	Hexane, Lot 4180122	25 mL	GCTOXSTDSTD_00003	0.25 mL	Toxaphene Peak 1	50 ug/mL
							Toxaphene Peak 2	50 ug/mL
							Toxaphene Peak 3	50 ug/mL
							Toxaphene Peak 4	50 ug/mL
..GCTOXSTDSTD_00003	02/29/24		RESTEK, Lot A0155399		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
Herb(RTS)spk_00013	09/30/22		restek, Lot A0164201		(Purchased Reagent)		2,4,5-T	5 ug/mL
							2,4-D	20 ug/mL
							2,4-DB	20 ug/mL
							Dalapon	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dicamba	10 ug/mL
							Dichlorprop	20 ug/mL
							Dinoseb	20 ug/mL
							MCPA	2000 ug/mL
							MCPP	2000 ug/mL
							Pentachlorophenol	5 ug/mL
							Silvex (2,4,5-TP)	5 ug/mL
LPTCLPSpike_00020	09/03/22	CPI, Lot 10125125-1			(Purchased Reagent)		Arsenic	500 ppm
							Barium	5000 ppm
							Cadmium	100 ppm
							Chromium	500 ppm
							Lead	500 ppm
							Selenium	100 ppm
							Silver	100 ppm
M6500CCV_00109	04/10/22	01/10/22	5%HNO3 - 5%HCL, Lot 21K1262004 - 281827	1000 mL	MTAPITTCALTRA_00013	10 mL	Arsenic	0.5 ppm
							Cadmium	0.5 ppm
							Lead	0.5 ppm
							Selenium	0.5 ppm
							Silver	1 ppm
					MTAPITTCALTRC_00013	10 mL	Barium	2 ppm
							Chromium	2 ppm
							Copper	2 ppm
							Nickel	2 ppm
							Zinc	2 ppm
					MTAPITTCALTRD_00014	10 mL	Molybdenum	2 ppm
.MTAPITTCALTRA_00013	05/20/22	Inorganic Ventures, Lot S2-MEB704932			(Purchased Reagent)		Arsenic	50 ppm
							Cadmium	50 ppm
							Lead	50 ppm
							Selenium	50 ppm
							Silver	100 ppm
.MTAPITTCALTRC_00013	05/20/22	Inorganic Ventures, Lot S2-MEB704934			(Purchased Reagent)		Barium	200 ppm
							Chromium	200 ppm
							Copper	200 ppm
							Nickel	200 ppm
							Zinc	200 ppm
.MTAPITTCALTRD_00014	05/20/22	Inorganic Ventures, Lot S2-MEB704935			(Purchased Reagent)		Molybdenum	200 ppm
M6500ICSAB_00017	03/22/22	12/22/21	5%HNO3 - 5%HCL, Lot 215109 - 281827	1000 mL	M6500ICSA_00013	100 mL	Al	500 ppm
							Ca	500 ppm
							Fe	200 ppm
							Mg	500 ppm
					MLI1000_00003	1 mL	Li	1 ppm
					TA-ICP-ICSAB1_00002	10 mL	Molybdenum	1 ppm
							Sb	1 ppm
							Si	10 ppm
							Sn	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ti	1 ppm
					TA-ICP-ICSAB2_00002	10 mL	Arsenic	1 ppm
							B	10 ppm
							Barium	1 ppm
							Be	0.5 ppm
							Cadmium	1 ppm
							Chromium	1 ppm
							Co	1 ppm
							Copper	1 ppm
							K	10 ppm
							Lead	1 ppm
							Mn	1 ppm
							Na	10 ppm
							Nickel	1 ppm
							Selenium	1 ppm
							Silver	1 ppm
							Sr	1 ppm
							Tl	1 ppm
							V	1 ppm
							Zinc	1 ppm
.M6500ICSA_00013	03/13/23	CPI International, Lot 1121422-1			(Purchased Reagent)		Al	5000 ppm
							Ca	5000 ppm
							Fe	2000 ppm
							Mg	5000 ppm
.MLI1000_00003	09/30/22	CPI International, Lot 1094768-25			(Purchased Reagent)		Li	1000 ppm
.TA-ICP-ICSAB1_00002	01/22/23	CPI International, Lot 1115088-1			(Purchased Reagent)		Molybdenum	100 ppm
							Sb	100 ppm
							Si	1000 ppm
							Sn	100 ppm
							Ti	100 ppm
.TA-ICP-ICSAB2_00002	01/22/23	CPI International, Lot 1133580-1			(Purchased Reagent)		Arsenic	100 ppm
							B	1000 ppm
							Barium	100 ppm
							Be	50 ppm
							Cadmium	100 ppm
							Chromium	100 ppm
							Co	100 ppm
							Copper	100 ppm
							K	1000 ppm
							Lead	100 ppm
							Mn	100 ppm
							Na	1000 ppm
							Nickel	100 ppm
							Selenium	100 ppm
							Silver	100 ppm
							Sr	100 ppm
							Tl	100 ppm
							V	100 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	100 ppm
M6500ICV_00033	03/21/22	12/21/21	5%HNO3 - 5%HCL, Lot 215109 - 281827	1000 mL	MTAPITTICPICV_00018	20 mL	Arsenic	0.25 ppm
							Barium	1 ppm
							Cadmium	0.25 ppm
							Chromium	1 ppm
							Copper	1 ppm
							Lead	0.25 ppm
							Molybdenum	1 ppm
							Nickel	1 ppm
							Selenium	0.25 ppm
							Silver	0.5 ppm
							Zinc	1 ppm
.MTAPITTICPICV_00018	08/30/22		SPEX, Lot 17-037AB		(Purchased Reagent)		Arsenic	12.5 ppm
							Barium	50 ppm
							Cadmium	12.5 ppm
							Chromium	50 ppm
							Copper	50 ppm
							Lead	12.5 ppm
							Molybdenum	50 ppm
							Nickel	50 ppm
							Selenium	12.5 ppm
							Silver	25 ppm
							Zinc	50 ppm
MHgworkingCal_02771	01/13/22	01/12/22	2% Nitric Acid, Lot cont #:4579168	100 mL	MHgIntcal_01830	1 mL	Mercury	100 ppb
.MHgIntcal_01830	01/13/22	01/12/22	2% Nitric Acid, Lot cont #: 4579168	100 mL	MCGHG1-1_00016	1 mL	Mercury	10 ppm
..MCGHG1-1_00016	11/24/22		CPI, Lot 1084154-49		(Purchased Reagent)		Mercury	1000 ppm
MHgworkingCal_02772	01/14/22	01/13/22	2% Nitric Acid, Lot cont #:4579168	100 mL	MHgIntcal_01831	1 mL	Mercury	100 ppb
.MHgIntcal_01831	01/14/22	01/13/22	2% Nitric Acid, Lot cont #: 4579168	100 mL	MCGHG1-1_00016	1 mL	Mercury	10 ppm
..MCGHG1-1_00016	11/24/22		CPI, Lot 1084154-49		(Purchased Reagent)		Mercury	1000 ppm
MHgWorkingicv_02708	01/14/22	01/13/22	2% Nitric Acid, Lot cont#: 4579168	100 mL	MHgIntICV_01778	1 mL	Mercury	100 ppb
.MHgIntICV_01778	01/14/22	01/13/22	2% Nitric Acid, Lot cont #: 4579168	100 mL	MHGICV-1_00012	1 mL	Mercury	10 ppm
..MHGICV-1_00012	01/31/23		Env. Express, Lot 2107432-100EE		(Purchased Reagent)		Mercury	1000 ppm
MICSAICP_00110	03/21/22	12/21/21	5%HNO3 - 5%HCL, Lot 215109 - 281827	1000 mL	M6500ICSA_00013	100 mL	Al	500 ppm
							Ca	500 ppm
							Fe	200 ppm
							Mg	500 ppm
.M6500ICSA_00013	03/13/23		CPI International, Lot 1121422-1		(Purchased Reagent)		Al	5000 ppm
							Ca	5000 ppm
							Fe	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Mg	5000 ppm
MICVLCCVL_00052	04/12/22	01/12/22	5%HNO3 - 5%HCL, Lot 21K1262004 - 281827	1000 mL	EUROPITT-CRA1_00002	10 mL	Arsenic	0.01 ppm
							Barium	0.2 ppm
							Cadmium	0.005 ppm
							Chromium	0.005 ppm
							Copper	0.025 ppm
							Lead	0.01 ppm
							Nickel	0.04 ppm
							Selenium	0.01 ppm
							Silver	0.005 ppm
							Zinc	0.02 ppm
					EUROPITT-CRA2_00002	10 mL	Molybdenum	0.04 ppm
.EUROPITT-CRA1_00002	04/20/23	CPI International, Lot 10114318-4			(Purchased Reagent)		Arsenic	1 ppm
							Barium	20 ppm
							Cadmium	0.5 ppm
							Chromium	0.5 ppm
							Copper	2.5 ppm
							Lead	1 ppm
							Nickel	4 ppm
							Selenium	1 ppm
							Silver	0.5 ppm
							Zinc	2 ppm
.EUROPITT-CRA2_00002	04/20/23	CPI International, Lot 10114318-3			(Purchased Reagent)		Molybdenum	4 ppm
MTCLPHgSpike_00035	02/17/22	08/17/21	DI Water, Lot 4368406	100 mL	MCGHG1-1_00016	0.1 mL	Mercury	1000 ppb
.MCGHG1-1_00016	11/24/22	CPI, Lot 1084154-49			(Purchased Reagent)		Mercury	1000 ppm
op-p/pcb sur_00029	02/11/22	08/05/21	ACETONE, Lot 3747124	2000 mL	GCDCBStock_00010	1.6 mL	DCB Decachlorobiphenyl (Surr)	0.8 ug/mL
					GCTCMXSTD_00012	0.8 mL	Tetrachloro-m-xylene (Surr)	0.8 ug/mL
.GCDCBStock_00010	05/31/25	AGILENT, Lot 0006599545			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	1000 ug/mL
.GCTCMXSTD_00012	07/31/25	Agilent, Lot 0006612638			(Purchased Reagent)		Tetrachloro-m-xylene (Surr)	2000 ug/mL
OP8270TCLPSPi_00048	06/30/22	12/31/21	Methanol, Lot 0000273166	100 mL	svTCLPacids_00013	5 mL	2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Methylphenol	200 ug/mL
							Cresols, Total	300 ug/mL
							m & p-Cresol	200 ug/mL
							o-Cresol	100 ug/mL
							Pentachlorophenol	100 ug/mL
							Total Cresols	300 ug/mL
					svTCLPbns_00011	5 mL	1,4-Dichlorobenzene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pyridine	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.svTCLPacids_00013	11/30/23		Restek, Lot A0165463		(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ug/mL
							2,4,6-Trichlorophenol	2000 ug/mL
							3 & 4 Methylphenol	4000 ug/mL
							3-Methylphenol	4000 ug/mL
							Cresols, Total	6000 ug/mL
							m & p-Cresol	4000 ug/mL
							o-Cresol	2000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Total Cresols	6000 ug/mL
.svTCLPbns_00011	12/31/23		Restek, Lot A0158475		(Purchased Reagent)		1,4-Dichlorobenzene	2000 ug/mL
							2,4-Dinitrotoluene	2000 ug/mL
							Hexachlorobenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexachloroethane	2000 ug/mL
							Nitrobenzene	2000 ug/mL
							Pyridine	2000 ug/mL
OPHERBRTSSURR_00013	10/30/22		RESTEK, Lot a0165153		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL
OPPESTMATRIX_00050	04/05/22	10/05/21	ACETONE, Lot 3747111	100 mL	GCPESTAB3STD_00004	0.05 mL	4,4'-DDD	1 ug/mL
							4,4'-DDE	1 ug/mL
							4,4'-DDT	1 ug/mL
							Aldrin	1 ug/mL
							alpha-BHC	1 ug/mL
							beta-BHC	1 ug/mL
							cis-Chlordane	1 ug/mL
							delta-BHC	1 ug/mL
							Dieldrin	1 ug/mL
							Endosulfan I	1 ug/mL
							Endosulfan II	1 ug/mL
							Endosulfan sulfate	1 ug/mL
							Endrin	1 ug/mL
							Endrin aldehyde	1 ug/mL
							Endrin ketone	1 ug/mL
							gamma-BHC (Lindane)	1 ug/mL
							Heptachlor	1 ug/mL
							Heptachlor epoxide	1 ug/mL
							Methoxychlor	1 ug/mL
							trans-Chlordane	1 ug/mL
.GCPESTAB3STD_00004	09/30/22		RESTEK, Lot A0137734		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							beta-BHC	2000 ug/mL
							cis-Chlordane	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
							trans-Chlordane	2000 ug/mL
OPQL8270SURi_00121	06/23/22	12/23/21	Methanol, Lot 0000273166	500 mL	SVLVSURSPK_00018	20 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
.SVLVSURSPK_00018	05/31/26	Restek, Lot A0172807			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
PCBINT_00017	05/20/21	11/19/20	Hexane, Lot 3878999	100 mL	GCBZ#205STD1_00006	10 mL	PCB-205 (IS)	10 ug/mL
					GCpest/pcbINT_00006	1 mL	1-Bromo-2-nitrobenzene	10 ug/mL
.GCBZ#205STD1_00006	09/06/26	AccuStandard, Lot 216091034			(Purchased Reagent)		PCB-205 (IS)	100 ug/mL
.GCpest/pcbINT_00006	04/30/23	restek, Lot A0157061			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
PCBINT_00020	04/22/22	10/22/21	Hexane, Lot 3878999	100 mL	GCBZ#205STD1_00006	10 mL	PCB-205 (IS)	10 ug/mL
					GCpest/pcbINT_00006	1 mL	1-Bromo-2-nitrobenzene	10 ug/mL
.GCBZ#205STD1_00006	09/06/26	AccuStandard, Lot 216091034			(Purchased Reagent)		PCB-205 (IS)	100 ug/mL
.GCpest/pcbINT_00006	04/30/23	restek, Lot A0157061			(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
SVDFTPP50i_00041							Aramite, Total	
							Cresols, Total	
							Diallate	
							Tentatively Identified Compound	
					SVTUNINGMIXs_00008	250 uL	4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	25 ug/mL
							Benzidine_T	25 ug/mL
							DFTPP	25 ug/mL
							Pentachlorophenol_T	25 ug/mL
.SVTUNINGMIXs_00008	03/31/22	Restek, Lot A0147424			(Purchased Reagent)		4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	1000 ug/mL
							Benzidine_T	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							DFTPP	1000 ug/mL
							Pentachlorophenol_T	1000 ug/mL
SVDFTPP50i_00043							Aramite, Total	
							Cresols, Total	
							Diallate	
							Tentatively Identified Compound	
					SVTUNINGMIXs_00009	250 uL	4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	25 ug/mL
							Benzidine_T	25 ug/mL
							DFTPP	25 ug/mL
							Pentachlorophenol_T	25 ug/mL
.SVTUNINGMIXs_00009	11/30/24		Restek, Lot A0178508		(Purchased Reagent)		4,4'-DDD	0 ug/mL
							4,4'-DDE	0 ug/mL
							4,4'-DDT	1000 ug/mL
							Benzidine_T	1000 ug/mL
							DFTPP	1000 ug/mL
							Pentachlorophenol_T	1000 ug/mL
SVTAPITINTRNi_00029	12/16/22	12/16/21	MeCl2, Lot 4498350	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
.SVLVIntstd_00012	03/31/25		Restek, Lot A0159166		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SVTAPSTD0.38i_00015	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	4.75 uL	Benzo[e]pyrene	0.19 ug/mL
							Benzoic acid	0.19 ug/mL
							Indene	0.19 ug/mL
							2,3,5,6-Tetrachlorophenol	0.19 ug/mL
							2-Naphthylamine	0.19 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.19 ug/mL
							1,1'-Biphenyl	0.19 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.19 ug/mL
							1,2,4-Trichlorobenzene	0.19 ug/mL
							1,2-Dichlorobenzene	0.19 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	0.19 ug/mL
							1,3-Dichlorobenzene	0.19 ug/mL
							1,3-Dinitrobenzene	0.19 ug/mL
							1,4-Dichlorobenzene	0.19 ug/mL
							1,4-Dioxane	0.19 ug/mL
							1-Methylnaphthalene	0.19 ug/mL
							2,2'-oxybis[1-chloropropane]	0.19 ug/mL
							2,3,4,6-Tetrachlorophenol	0.19 ug/mL
							2,4,5-Trichlorophenol	0.19 ug/mL
							2,4,6-Trichlorophenol	0.19 ug/mL
							2,4-Dichlorophenol	0.19 ug/mL
							2,4-Dimethylphenol	0.19 ug/mL
							2,4-Dinitrophenol	0.38 ug/mL
							2,4-Dinitrotoluene	0.19 ug/mL
							2,6-Dichlorophenol	0.19 ug/mL
							2,6-Dinitrotoluene	0.19 ug/mL
							2-Chloronaphthalene	0.19 ug/mL
							2-Chlorophenol	0.19 ug/mL
							2-Methylnaphthalene	0.19 ug/mL
							2-Nitroaniline	0.19 ug/mL
							2-Nitrophenol	0.19 ug/mL
							3-Nitroaniline	0.19 ug/mL
							4,6-Dinitro-2-methylphenol	0.38 ug/mL
							4-Bromophenyl phenyl ether	0.19 ug/mL
							4-Chloro-3-methylphenol	0.19 ug/mL
							4-Chloroaniline	0.19 ug/mL
							4-Chlorophenyl phenyl ether	0.19 ug/mL
							4-Nitroaniline	0.19 ug/mL
							4-Nitrophenol	0.38 ug/mL
							Acenaphthene	0.19 ug/mL
							Acenaphthylene	0.19 ug/mL
							Acetophenone	0.19 ug/mL
							Aniline	0.19 ug/mL
							Anthracene	0.19 ug/mL
							Azobenzene	0.19 ug/mL
							Benzo[a]anthracene	0.19 ug/mL
							Benzo[a]pyrene	0.19 ug/mL
							Benzo[b]fluoranthene	0.19 ug/mL
							Benzo[g,h,i]perylene	0.19 ug/mL
							Benzo[k]fluoranthene	0.19 ug/mL
							Benzyl alcohol	0.19 ug/mL
							Bis(2-chloroethoxy)methane	0.19 ug/mL
							Bis(2-chloroethyl)ether	0.19 ug/mL
							Bis(2-ethylhexyl) phthalate	0.19 ug/mL
							Butyl benzyl phthalate	0.19 ug/mL
							Carbazole	0.19 ug/mL
							Chrysene	0.19 ug/mL
							Di-n-butyl phthalate	0.19 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	0.19 ug/mL
							Dibenz(a,h)anthracene	0.19 ug/mL
							Dibenzofuran	0.19 ug/mL
							Diethyl phthalate	0.19 ug/mL
							Dimethyl phthalate	0.19 ug/mL
							Fluoranthene	0.19 ug/mL
							Fluorene	0.19 ug/mL
							Hexachlorobenzene	0.19 ug/mL
							Hexachlorobutadiene	0.19 ug/mL
							Hexachlorocyclopentadiene	0.19 ug/mL
							Hexachloroethane	0.19 ug/mL
							Hexadecane	0.19 ug/mL
							Indeno[1,2,3-cd]pyrene	0.19 ug/mL
							Isophorone	0.19 ug/mL
							m & p-Cresol	0.19 ug/mL
							n-Decane	0.19 ug/mL
							N-Nitrosodi-n-propylamine	0.19 ug/mL
							N-Nitrosodimethylamine	0.19 ug/mL
							N-Nitrosodiphenylamine	0.19 ug/mL
							n-Octadecane	0.19 ug/mL
							Naphthalene	0.19 ug/mL
							Nitrobenzene	0.19 ug/mL
							o-Cresol	0.19 ug/mL
							Pentachlorophenol	0.38 ug/mL
							Phenanthrene	0.19 ug/mL
							Phenol	0.19 ug/mL
							Pyrene	0.19 ug/mL
							Pyridine	0.38 ug/mL
							Atrazine	0.19 ug/mL
							Benzaldehyde	0.19 ug/mL
							Caprolactam	0.19 ug/mL
							3,3'-Dichlorobenzidine	0.19 ug/mL
							Benzidine	0.19 ug/mL
							2,4,6-Tribromophenol (Surr)	0.19 ug/mL
							2-Fluorobiphenyl	0.19 ug/mL
							2-Fluorophenol (Surr)	0.19 ug/mL
							Nitrobenzene-d5 (Surr)	0.19 ug/mL
							Phenol-d5 (Surr)	0.19 ug/mL
							Terphenyl-d14 (Surr)	0.19 ug/mL
							Methyl methanesulfonate	0.19 ug/mL
							N-Nitrosopyrrolidine	0.19 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22	Restek, Lot a0149278			(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22	Restek, Lot A0164214			(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23	Absolute, Lot 030218			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22	Restek, Lot A0164387			(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00447	12/25/21	12/18/21	MeCl2, Lot 4498350	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	125 uL	Benzo[e]pyrene	5 ug/mL
							Benzoic acid	5 ug/mL
							Indene	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2-Naphthylamine	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Nitroaniline	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Azobenzene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							m & p-Cresol	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							n-Octadecane	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							o-Cresol	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	10 ug/mL
							Atrazine	5 ug/mL
							Benzaldehyde	5 ug/mL
							Caprolactam	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Benzidine	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22	Restek, Lot a0149278			(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22	Restek, Lot A0164214			(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23	Absolute, Lot 030218			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00451	01/19/22	01/12/22	MeCl2, Lot 4498350	1 mL	SVTAPITINTRNi_00029	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
.SVTAPITINTRNi_00029	12/16/22	12/16/21	MeCl2, Lot 4498350	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25		Restek, Lot A0159166		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SVTAPSTD10i_00451	01/19/22	01/12/22	MeCl2, Lot 4498350	1 mL	SVTAPITSTCKi_00031	125 uL	1,4-Dichlorobenzene	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							Cresols, Total	10 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							m & p-Cresol	5 ug/mL
							Nitrobenzene	5 ug/mL
							o-Cresol	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Pyridine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SVTAPITSTCKi_00031	07/04/22	01/04/22	MeCl2, Lot 4498350	20 mL	SVLIST1/STD1_00008	800 uL	1,4-Dichlorobenzene	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							Cresols, Total	80 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							m & p-Cresol	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Pyridine	80 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLIST1/STD1_00008	07/31/22		Restek, Lot A0168059		(Purchased Reagent)		1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							Cresols, Total	2000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Pyridine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPSTD2.0i_00026	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	25 uL	Benzo[e]pyrene	1 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							2,3,5,6-Tetrachlorophenol	1 ug/mL
							2-Naphthylamine	1 ug/mL
							7,12-Dimethylbenz(a)anthracene	1 ug/mL
							1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,2'-oxybis[1-chloropropane]	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Azobenzene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Hexadecane	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							m & p-Cresol	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							o-Cresol	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	2 ug/mL
							Atrazine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Caprolactam	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Benzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							Methyl methanesulfonate	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22		Restek, Lot a0149278		(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22		Restek, Lot A0164214		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23		Absolute, Lot 030218		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD20i_00022	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	250 uL	Benzo[e]pyrene	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2-Naphthylamine	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Azobenzene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							m & p-Cresol	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							o-Cresol	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	20 ug/mL
							Atrazine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Caprolactam	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							Methyl methanesulfonate	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22		Restek, Lot a0149278		(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22		Restek, Lot A0164214		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23		Absolute, Lot 030218		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22		Ultra Scientific, Lot Cs-5614		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22		Restek, Lot A0168059		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00024	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	50 uL	Benzo[e]pyrene	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2-Naphthylamine	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,2'-oxybis[1-chloropropane]	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Azobenzene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							m & p-Cresol	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							o-Cresol	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	4 ug/mL
							Atrazine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Caprolactam	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Benzidine	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22	Restek, Lot a0149278			(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22	Restek, Lot A0164214			(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23	Absolute, Lot 030218			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD40i_00022	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	500 uL	Benzo[e]pyrene	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2-Naphthylamine	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							m & p-Cresol	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							o-Cresol	20 ug/mL
							Pentachlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	40 ug/mL
							Atrazine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Caprolactam	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzidine	20 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22	Restek, Lot a0149278			(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22	Restek, Lot A0164214			(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23	Absolute, Lot 030218			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00022	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	750 uL	Benzo[e]pyrene	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							2,3,5,6-Tetrachlorophenol	30 ug/mL
							2-Naphthylamine	30 ug/mL
							7,12-Dimethylbenz(a)anthracene	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1'-Biphenyl	30 ug/mL
							1,2,4,5-Tetrachlorobenzene	30 ug/mL
							1,2,4-Trichlorobenzene	30 ug/mL
							1,2-Dichlorobenzene	30 ug/mL
							1,2-Diphenylhydrazine	30 ug/mL
							1,3-Dichlorobenzene	30 ug/mL
							1,3-Dinitrobenzene	30 ug/mL
							1,4-Dichlorobenzene	30 ug/mL
							1,4-Dioxane	30 ug/mL
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dichlorophenol	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
							2-Methylnaphthalene	30 ug/mL
							2-Nitroaniline	30 ug/mL
							2-Nitrophenol	30 ug/mL
							3-Nitroaniline	30 ug/mL
							4,6-Dinitro-2-methylphenol	60 ug/mL
							4-Bromophenyl phenyl ether	30 ug/mL
							4-Chloro-3-methylphenol	30 ug/mL
							4-Chloroaniline	30 ug/mL
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Azobenzene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	30 ug/mL
							Carbazole	30 ug/mL
							Chrysene	30 ug/mL
							Di-n-butyl phthalate	30 ug/mL
							Di-n-octyl phthalate	30 ug/mL
							Dibenz(a,h)anthracene	30 ug/mL
							Dibenzofuran	30 ug/mL
							Diethyl phthalate	30 ug/mL
							Dimethyl phthalate	30 ug/mL
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							Hexachlorocyclopentadiene	30 ug/mL
							Hexachloroethane	30 ug/mL
							Hexadecane	30 ug/mL
							Indeno[1,2,3-cd]pyrene	30 ug/mL
							Isophorone	30 ug/mL
							m & p-Cresol	30 ug/mL
							n-Decane	30 ug/mL
							N-Nitrosodi-n-propylamine	30 ug/mL
							N-Nitrosodimethylamine	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							n-Octadecane	30 ug/mL
							Naphthalene	30 ug/mL
							Nitrobenzene	30 ug/mL
							o-Cresol	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	60 ug/mL
							Atrazine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Caprolactam	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Benzidine	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							Methyl methanesulfonate	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22	Restek, Lot a0149278			(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22	Restek, Lot A0164214			(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23	Absolute, Lot 030218			(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22	Ultra Scientific, Lot Cs-5614			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22	Absolute, Lot 053116			(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22	Restek, Lot A0168059			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00022	01/06/22	07/06/21	MeCl2, Lot 4275032	1 mL	SVTAPITINTRNi_00027	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTCKi_00030	1000 uL	Benzo[e]pyrene	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2-Naphthylamine	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
							Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRNi_00027	03/24/22	03/24/21	MeCl2, Lot 4096202	25 mL	SVLVIntstd_00012	5 mL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00012	03/31/25	Restek, Lot A0159166			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTCKi_00030	01/06/22	07/06/21	MeCl2, Lot 4275032	20 mL	SV LIST3/STD1_00005	400 uL	Benzo[e]pyrene	40 ug/mL
					SV LST1/STD10_00005	400 uL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					SV2356TCPs_00005	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
					SV2NAPAMINEs_00009	800 uL	2-Naphthylamine	40 ug/mL
					sv712dimbenza_00014	800 uL	7,12-Dimethylbenz(a)anthracene	40 ug/mL
					SVLIST1/STD1_00008	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Diphenylhydrazine	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Azobenzene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							m & p-Cresol	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							o-Cresol	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	80 ug/mL
					SVLIST1/STD11_00006	400 uL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
					SVLIST1/STD9_00008	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
					SVLVSURSPK_00014	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					svmethylmetha_00013	800 uL	Methyl methanesulfonate	40 ug/mL
					SVNNITROPYROs_00020	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV LIST3/STD1_00005	05/31/22		Restek, Lot a0149278		(Purchased Reagent)		Benzo[e]pyrene	2000 ug/mL
..SV LST1/STD10_00005	03/31/22		Restek, Lot A0164214		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SV2356TCPs_00005	03/02/23		Absolute, Lot 030218		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
..SV2NAPAMINEs_00009	11/19/22		Ultra Scientific, Lot Cs-5614		(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..sv712dimbenza_00014	05/31/22		Absolute, Lot 053116		(Purchased Reagent)		7,12-Dimethylbenz(a)anthracene	1000 ug/mL
..SVLIST1/STD1_00008	07/31/22		Restek, Lot A0168059		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							m & p-Cresol	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							o-Cresol	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SVLIST1/STD11_00006	03/31/22		Restek, Lot A0164387		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLIST1/STD9_00008	02/28/22		Restek, Lot A0164053		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SVLVSURSPK_00014	09/30/25		Restek, Lot A0164104		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..svmethylmetha_00013	03/27/22		Absolute, Lot 032717		(Purchased Reagent)		Methyl methanesulfonate	1000 ug/mL
..SVNNITROPYROs_00020	11/06/22		absolute, Lot 110618		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
TA-SPIKE1_00017	03/09/23		CPI, Lot 1146438-1		(Purchased Reagent)		Arsenic	200 mg/L
							Barium	200 mg/L
							Be	100 mg/L
							Cadmium	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	100 mg/L
							Co	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Li	100 mg/L
							Mn	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	200 mg/L
							Si	200 mg/L
							SiO2	428 mg/L
							Sn	200 mg/L
							Sr	100 mg/L
							Ti	100 mg/L
							Tl	200 mg/L
							V	100 mg/L
TA-SPIKE2_00014	03/09/23	CPI, Lot 1136606-1			(Purchased Reagent)		Al	1000 mg/L
							Ca	5000 mg/L
							Fe	1000 mg/L
							K	5000 mg/L
							Mg	5000 mg/L
							Na	5000 mg/L
TA-Spike3 INT_00011	06/29/23	CPI International, Lot 10100317-8			(Purchased Reagent)		B	250 mg/L
							Sb	50 mg/L
							Silver	50 mg/L
							Zinc	50 mg/L
VOA8260INT_00130	12/16/21	11/16/21	Methanol, Lot 4292562	10 mL	VOA8260INTRES_00191	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00191	01/31/26	Restek, Lot A0168626			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00128	12/22/21	11/22/21	Methanol, Lot 4292561	100 mL	VOA8260SURRES_00168	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00168	01/31/25	Restek, Lot A0156891			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00129	01/22/22	12/22/21	Methanol, Lot 4292562	100 mL	VOA8260SURRES_00182	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOA8260SURRES_00182	05/31/26		Restek, Lot A0172587		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260VOAPRI_00495	12/21/21	12/14/21	Methanol, Lot 4292562	10 mL	VOA8260GAS1ST_00361	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00493	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	50 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00361	04/30/24	Restek, Lot A0171131			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VOA8260VOAPRI_00493	01/02/22	12/02/21	Methanol, Lot 4292562	10 mL	VOA8260KET1ST_00164	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00116	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorobromomethane	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromomethane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethyl ether	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	500 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00164	01/31/24	Restek, Lot A0168313			(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00116	10/31/22	Restek, Lot A0159680			(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOA8260VOAPRI_00499	01/19/22	01/12/22	Methanol, Lot 4292561	10 mL	VOA8260GAS1ST_00369	0.1 mL	Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00497	1 mL	2-Butanone (MEK)	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							Benzene	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00369	04/30/24		Restek, Lot A0171131		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00497	02/03/22	01/03/22	Methanol, Lot 4292561	10 mL	VOA8260KET1ST_00165	0.2 mL	2-Butanone (MEK)	250 ug/mL
					VOA8260MEGA1_00122	1 mL	1,1-Dichloroethene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							Benzene	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00165	07/31/24		Restek, Lot A0174287		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
..VOA8260MEGA1_00122	10/31/22		Restek, Lot A0159680		(Purchased Reagent)		1,1-Dichloroethene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							Benzene	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOABFB25_00143							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00147	5 mL	BFB	25 ug/mL
.VOABFB50_00147	01/02/22	12/02/21	Methanol, Lot 4292562	50 mL	VOABFBRES_00112	1 mL	BFB	50 ug/mL
..VOABFBRES_00112	06/30/26		Restek, Lot A0173810		(Purchased Reagent)		BFB	2500 ug/mL
VOABFB25_00144							1,2-Dichloroethene, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00148	5 mL	BFB	25 ug/mL
.VOABFB50_00148	01/30/22	12/30/21	Methanol, Lot 4292562	50 mL	VOABFBRES_00108	1 mL	BFB	50 ug/mL
..VOABFBRES_00108	06/30/26		Restek, Lot A0173810		(Purchased Reagent)		BFB	2500 ug/mL
WCODLL 100ppm_00680	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	5 mL	Chemical Oxygen Demand	100 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 10ppm_00683	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	0.5 mL	Chemical Oxygen Demand	10 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 125ppm_00675	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	6.25 mL	Chemical Oxygen Demand	125 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 150ppm_00687	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	7.5 mL	Chemical Oxygen Demand	150 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 25ppm_00681	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	1.25 mL	Chemical Oxygen Demand	25 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 50ppm_00678	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	2.5 mL	Chemical Oxygen Demand	50 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL 75ppm_00676	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	3.75 mL	Chemical Oxygen Demand	75 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL CCV_00674	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000P_00036	3.75 mL	Chemical Oxygen Demand	75 mg/L
.WCOD1000P_00036	08/31/22		Lab Chem, Lot K239-20		(Purchased Reagent)		Chemical Oxygen Demand	1000 mL
WCODLL ICVLCS_00681	01/13/22	01/12/22	DI Water, Lot Super Q	50 mL	WCOD1000S_00021	3.75 mL	Chemical Oxygen Demand	75 mg/L
.WCOD1000S_00021	08/31/22		Ricca Chemical Co., Lot 2103D87		(Purchased Reagent)		Chemical Oxygen Demand	1000 mg/L
WH2SO4ConcP_00107	12/29/25		Macron Chemicals, Lot 000276386		(Purchased Reagent)		Sulfuric acid	36 N
WHemPSP_00266	09/23/27		J.T.Baker, Lot 0000250309		(Purchased Reagent)		Acetone	0.002 mg/L
							HEM Polar (Oil and Grease - Polar)	3980 mg/L
							Hexadecane	1980 mg/L
							Oil & Grease (HEM)	3980 mg/L
							SGT HEM (Oil and Grease - Nonpolar)	1980 mg/L
							SGT-HEM	1980 mg/L
							Stearic Acid	2000 mg/L
WHemPSP_00267	09/23/27		J.T.Baker, Lot 0000250309		(Purchased Reagent)		Acetone	0.002 mg/L
							HEM Polar (Oil and Grease - Polar)	3980 mg/L
							Hexadecane	1980 mg/L
							Oil & Grease (HEM)	3980 mg/L
							SGT HEM (Oil and Grease - Nonpolar)	1980 mg/L
							SGT-HEM	1980 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Pittsburgh Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Stearic Acid	2000 mg/L
WpHBuffer7CCV_00079	09/29/23	LabChem, Lot L265-02			(Purchased Reagent)		pH	7 SU
WpHBuffer7P_00038	08/09/23	Lab Chem, Lot L172-28			(Purchased Reagent)		pH	7 SU
WResPSP_00080	04/30/24	Phenova, Lot 8222-09			(Purchased Reagent)		Total Solids	179 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Edison Job No.: 180-132081-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WTcreacSP_00032	04/14/22		ERA, Lot 430421M		(Purchased Reagent)		Cyanide, Reactive	1000 mg/L
WTsfideLCS_00084	08/31/23		phenova, Lot 8217-22		(Purchased Reagent)		Sulfide	70.9 mg/L
							Sulfide, Reactive	70.9 mg/L

Reagent

AR1016(10000)_00005

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572370 **Lot No.:** A0174171

Description : Custom Aroclor 1016 Standard

Custom Aroclor 1016 Standard 10,000µg/mL, Isooctane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: This product contains PCBs. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1016	10,090.0 µg/mL	+/- 93.3748 µg/mL	Gravimetric
	CAS # 12674-11-2 (Lot 129-02)		+/- 327.8408 µg/mL	Unstressed
	Purity ----%		+/- 423.9478 µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Reagent

AR1260(10000)_00003

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Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 572371 **Lot No.:** A0175178

Description : Custom Aroclor 1260 Standard

Custom Aroclor 1260 Standard 10,000µg/mL, Isooctane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2026 **Storage:** 10°C or colder

Handling: This product contains PCBs. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1260	10,000.0 µg/mL	+/- 92.5419 µg/mL	Gravimetric
	CAS # 11096-82-5 (Lot 1072036)		+/- 324.9165 µg/mL	Unstressed
	Purity ----%		+/- 420.1663 µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Reagent

DBC Internal_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32025 **Lot No.:** A0152900

Description : Dibutyl Chlorendate Mix

Dibutylchlorendate 200µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibutyl chlorendate **CAS #** 1770-80-5 (Lot CAP-25493-47) **Purity** 99%	202.0 µg/mL	+/- 1.4323	µg/mL	Gravimetric
			+/- 9.3150	µg/mL	Unstressed
			+/- 9.5516	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

DBC
5-6-20

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

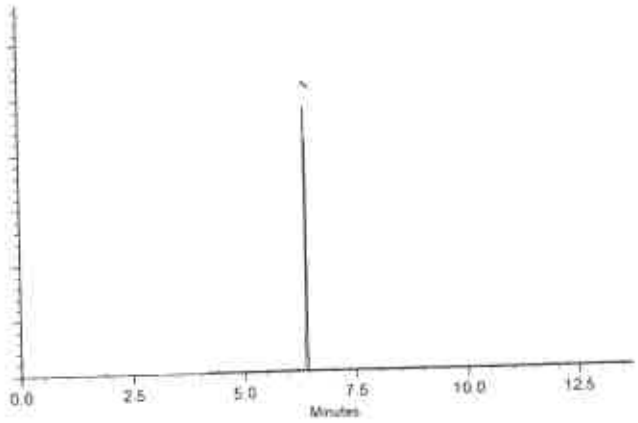
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 16-Sep-2019 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 17-Sep-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

EUROPITT-CRA1_00002

4525865
ID: EUROPITT-CRA1_00002
Exp: 04/20/23 Prpd: RJG
ICP ICVL/CCVL STOCK SOLN#

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR20-PIT1

Custom EUROPITT-CRA-1

Lot #: 10114318-4

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	500.7 ± 2.5 µg/L	Cr	500.4 ± 2.5 µg/L	Ni	4.000 ± 0.020 µg/mL
Al	20.00 ± 0.10 µg/mL	Cu	2.499 ± 0.012 µg/mL	Pb	1.000 ± 0.005 µg/mL
As	999.3 ± 5.0 µg/L	Fe	10.00 ± 0.05 µg/mL	Se	1.000 ± 0.005 µg/mL
Ba	20.00 ± 0.10 µg/mL	K	500.0 ± 2.5 µg/mL	Sr	5.000 ± 0.025 µg/mL
Be	400.4 ± 2.0 µg/L	Li	5.000 ± 0.025 µg/mL	Tl	2.000 ± 0.010 µg/mL
Ca	500.0 ± 2.5 µg/mL	Mg	500.0 ± 2.5 µg/mL	V	5.001 ± 0.025 µg/mL
Cd	500.5 ± 2.5 µg/L	Mn	1.501 ± 0.008 µg/mL	Zn	2.000 ± 0.010 µg/mL
Co	5.000 ± 0.025 µg/mL	Na	500.0 ± 2.5 µg/mL		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	1106123	Cr	1123848	Ni	984273
Al	1063015	Cu	1074805	Pb	1046594
As	1103713	Fe	1046975	Se	1135995
Ba	1112442	K	1053109	Sr	1096004
Be	1072683	Li	1094768	Tl	1124114
Ca	1072921	Mg	1075232	V	1055682
Cd	1080470	Mn	1063019	Zn	1095528
Co	1107088	Na	1055526		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

October 20, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

EUROPITT-CRA2_00002

4525866
ID: EUROPITT-CRA2_00002
Exp: 04/20/23 Prpd: RJG
ICP ICVL/CCVL STOCK SOLN#

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR20-PIT2

Custom EUROPITT-CRA-2

Lot #: 10114318-3

Matrix: 2% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
B	20.00 ± 0.10 µg/mL	Sb	1.002 ± 0.005 µg/mL	Sn	9.998 ± 0.050 µg/mL
Mo	4.001 ± 0.020 µg/mL	Si	50.01 ± 0.25 µg/mL	Ti	5.000 ± 0.025 µg/mL

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
B	1101946	Sb	1129139	Sn	1128650
Mo	1075718	Si	1094765	Ti	1038255

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

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Chuck Goudreau

Chuck Goudreau, Certifying Officer

October 20, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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F: 707.545.7901

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1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

GCBZ#205STD1_00006

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: C-205S-TP
Description: 2,3,3',4,4',5,5',6-Octachlorobiphenyl
Lot: 216091034
Solvent: Isooctane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 6, 2016
Expiration: Sep 6, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)/Sonicate

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
2,3,3',4,4',5,5',6-Octachlorobiphenyl	74472-53-0	99.0	100.2	99.2

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

GCDCAASSTD_00009

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32049 **Lot No.:** A0150937

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid	201.0 µg/mL	+/- 1.4253	µg/mL	Gravimetric
	CAS # 19719-28-9 (Lot S30618V)		+/- 10.7216	µg/mL	Unstressed
	Purity 99%		+/- 10.7395	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

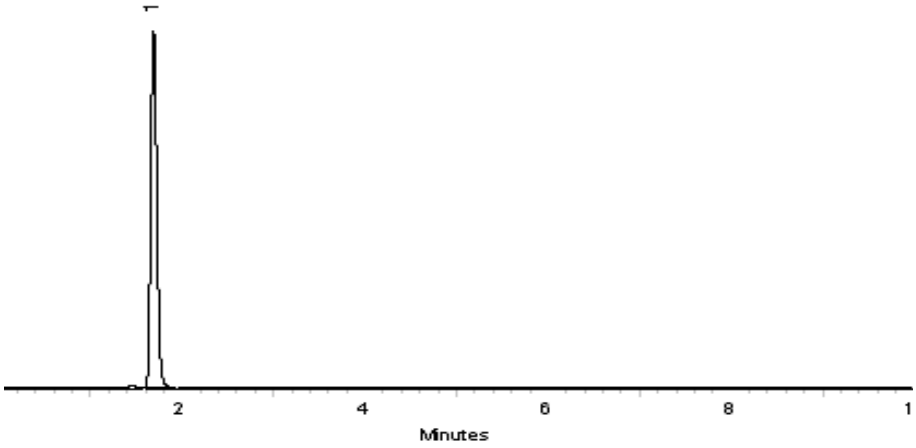
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 17-Jul-2019 **Balance:** 1128360905

Jennifer L Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Jul-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

GCDCBStock_00010

Agilent

Certificate of Analysis

Product Name: Decachlorobiphenyl Standard

Product Number: PPS-150-1 **Lot Issue Date:** 27-Apr-2021

Lot Number: 0006599545 **Expiration Date:** 31-May-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
decachlorobiphenyl (BZ # 209)	002051-24-3	RM18287	1001 ± 5 µg/mL

Matrix: toluene

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Reagent

GCHERBICALMIX_00019

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569749 **Lot No.:** A0142217

Description : Herbicide List #1 Standard (2015)

Herbicide List #1 Standard (2015) 50-20,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2021 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5-T		50.5 µg/mL	+/- 0.3581	µg/mL	Gravimetric
	CAS # 93-76-5	(Lot 6693400)		+/- 2.6937	µg/mL	Unstressed
	Purity 99%			+/- 2.6982	µg/mL	Stressed
2	2,4,5-TP (silvex)		50.0 µg/mL	+/- 0.3545	µg/mL	Gravimetric
	CAS # 93-72-1	(Lot 5299900)		+/- 2.6671	µg/mL	Unstressed
	Purity 99%			+/- 2.6715	µg/mL	Stressed
3	2,4-D		201.0 µg/mL	+/- 1.4253	µg/mL	Gravimetric
	CAS # 94-75-7	(Lot 7677600)		+/- 10.7216	µg/mL	Unstressed
	Purity 99%			+/- 10.7395	µg/mL	Stressed
4	2,4-DB		201.0 µg/mL	+/- 1.4253	µg/mL	Gravimetric
	CAS # 94-82-6	(Lot 5262300)		+/- 10.7216	µg/mL	Unstressed
	Purity 99%			+/- 10.7395	µg/mL	Stressed
5	Dalapon		200.5 µg/mL	+/- 1.4214	µg/mL	Gravimetric
	CAS # 75-99-0	(Lot 7138100)		+/- 10.6923	µg/mL	Unstressed
	Purity 95%			+/- 10.7101	µg/mL	Stressed
6	Dicamba		100.5 µg/mL	+/- 0.7126	µg/mL	Gravimetric
	CAS # 1918-00-9	(Lot 7173700)		+/- 5.3608	µg/mL	Unstressed
	Purity 99%			+/- 5.3697	µg/mL	Stressed
7	Dichlorprop		201.0 µg/mL	+/- 1.4253	µg/mL	Gravimetric
	CAS # 120-36-5	(Lot 4619200)		+/- 10.7216	µg/mL	Unstressed
	Purity 99%			+/- 10.7395	µg/mL	Stressed

8	Dinoseb			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	88-85-7	(Lot 50001)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
9	MCPA			20,198.3	µg/mL	+/-	118.2655	µg/mL	Gravimetric
	CAS #	94-74-6	(Lot 7204500)			+/-	1,074.3731	µg/mL	Unstressed
	Purity	97%				+/-	1,076.1727	µg/mL	Stressed
10	MCPP (Mecoprop)			20,094.0	µg/mL	+/-	117.6548	µg/mL	Gravimetric
	CAS #	93-65-2	(Lot 6899400)			+/-	1,068.8247	µg/mL	Unstressed
	Purity	99%				+/-	1,070.6150	µg/mL	Stressed
11	Pentachlorophenol			50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric
	CAS #	87-86-5	(Lot 180924JACG)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
12	Picloram			201.8	µg/mL	+/-	1.4306	µg/mL	Gravimetric
	CAS #	1918-02-1	(Lot 34ATO)			+/-	10.7622	µg/mL	Unstressed
	Purity	97%				+/-	10.7801	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Tom Suckar - Mix Technician

Date Mixed: 09-Oct-2018 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

GCNa2SO3_00015

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	S430	Quality Test / Release Date	08/27/2020
Lot Number	203490		
Description	SODIUM SULFITE, A.C.S.		
Country of Origin	Italy	Suggested Retest Date	Aug/2025
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White crystals, or crystalline powder
ASSAY	%	>= 98	98.7
CHLORIDE	%	<= 0.02	<0.02
FREE ACID	PASS/FAIL	= PASS TEST	PASS TEST
HEAVY METALS (as Pb)	%	<= 0.001	<0.001
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	0.002
IRON (Fe)	%	<= 0.001	<0.001
TITRATABLE FREE BASE	MEQ/G	<= 0.03	<0.03

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

GCPCB2154 mix_00007

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569745 **Lot No.:** A0131802

Description : PCB-1221/1254 Standard

PCB-1221/1254 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Aroclor 1221 **CAS #** 11104-28-2 **Purity** ----%	(Lot 2781200)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 31.8975 µg/mL +/- 41.6615 µg/mL	Gravimetric Unstressed Stressed
2	Aroclor 1254 **CAS #** 11097-69-1 **Purity** ----%	(Lot 124-191-B)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 31.7706 µg/mL +/- 41.4958 µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

GCPCB3262 mix_00005

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569746 **Lot No.:** A0132023

Description : PCB-1232/1262 Standard

PCB-1232/1262 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232 **CAS #** 11141-16-5 **Purity** ----%	(Lot W-107-05)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 31.8340 µg/mL +/- 41.5787 µg/mL		Gravimetric Unstressed Stressed
2	Aroclor 1262 **CAS #** 37324-23-5 **Purity** ----%	(Lot 3067100)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 31.7706 µg/mL +/- 41.4958 µg/mL		Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

GCPCB4268 mix_00005

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Certificate of Analysis

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Certificate #3222.01

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569747 **Lot No.:** A0133093

Description : PCB-1242/1268 Standard

PCB-1242/1268 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2024 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1242 **CAS #** 53469-21-9 (Lot 01141-A) **Purity** ----%	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 31.9609 µg/mL +/- 41.7443 µg/mL	Gravimetric Unstressed Stressed
2	Aroclor 1268 **CAS #** 11100-14-4 (Lot 2743900) **Purity** ----%	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 31.7072 µg/mL +/- 41.4130 µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

GCPCBI1248STD_00011

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010 **Lot No.:** A0142661

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2025 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Aroclor 1248 **CAS #** 12672-29-6 (Lot 7872900) **Purity** ----%	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
			+/- 31.6940	µg/mL	Unstressed
			+/- 41.4029	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

GCPCBI1660STD_00019

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039 **Lot No.:** A0150739

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016		1,003.6 µg/mL	+/- 5.8485	µg/mL	Gravimetric
	CAS # 12674-11-2	(Lot 982931)		+/- 31.8005	µg/mL	Unstressed
	Purity ----%			+/- 41.5461	µg/mL	Stressed
2	Aroclor 1260		1,000.0 µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 11096-82-5	(Lot 855895)		+/- 31.6864	µg/mL	Unstressed
	Purity ----%			+/- 41.3971	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

GCPEST(PEM2)_00002

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571991 **Lot No.:** A0150215

Description : 8081 Performance Evaluation Mix

8081 Performance Evaluation Mix 5-10µg/mL, Hexane/Toluene (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Endrin **CAS #** 72-20-8 **Purity** 99%	(Lot 8429200)	5.0 µg/mL	+/- 0.1542 µg/mL +/- 0.2735 µg/mL +/- 0.3620 µg/mL		Gravimetric Unstressed Stressed
2	4,4'-DDT **CAS #** 50-29-3 **Purity** 99%	(Lot S37912V)	10.0 µg/mL	+/- 0.3096 µg/mL +/- 0.5491 µg/mL +/- 0.7269 µg/mL		Gravimetric Unstressed Stressed

Solvent: Hexane/Toluene (90:10)
CAS # 110-54-3/108-88-3
Purity 99%

Rec'd
11-1-19

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

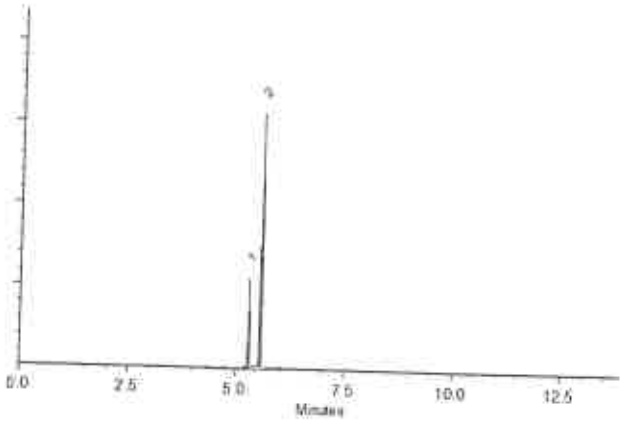
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 19-Jun-2019 **Balance:** 1128353505

Justine Albertson - Operations Tech-ARM QC

Date Passed: 21-Jun-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

GCPEST(SURR)S_00010

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Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0141110

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,5,6-Tetrachloro-m-xylene **CAS #** 877-09-8 (Lot 0052481) **Purity** 98%	201.4 µg/mL	+/- 1.1736 µg/mL +/- 6.3813 µg/mL +/- 8.3370 µg/mL	Gravimetric Unstressed Stressed
2	Decachlorobiphenyl (BZ# 209) **CAS #** 2051-24-3 (Lot ER071509-01) **Purity** 99%	200.6 µg/mL	+/- 1.1690 µg/mL +/- 6.3563 µg/mL +/- 8.3043 µg/mL	Gravimetric Unstressed Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

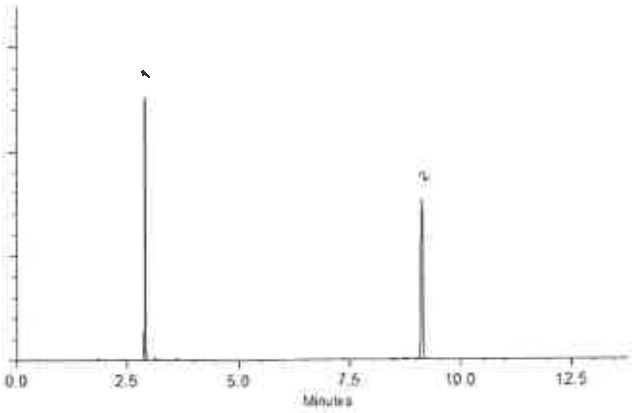
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 29-Aug-2018 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Sep-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

GCpest/pcbINT_00006

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0157061

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)		+/- 56.1383	µg/mL	Unstressed
	Purity 99%			+/- 57.4512	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

GCPESTAB3STD_00004

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Certificate of Analysis

AB#3

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Rec'd 10-26-18

Catalog No. : 32415 **Lot No.:** A0137734

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2022 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	alpha-BHC **CAS #** 319-84-6 **Purity** 99%	(Lot 0911942)	2,016.5 µg/mL	+/- 11.8340 +/- 91.8500 +/- 132.6190	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) **CAS #** 58-89-9 **Purity** 99%	(Lot 6815700)	2,018.5 µg/mL	+/- 11.8457 +/- 91.9411 +/- 132.7505	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	beta-BHC **CAS #** 319-85-7 **Purity** 98%	(Lot BCBS8692V)	2,009.5 µg/mL	+/- 11.7928 +/- 91.5307 +/- 132.1579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	delta-BHC **CAS #** 319-86-8 **Purity** 99%	(Lot ER02101401)	2,018.5 µg/mL	+/- 11.8457 +/- 91.9411 +/- 132.7505	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Heptachlor **CAS #** 76-44-8 **Purity** 99%	(Lot NT060133)	2,015.0 µg/mL	+/- 11.8251 +/- 91.7817 +/- 132.5203	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Aldrin **CAS #** 309-00-2 **Purity** 99%	(Lot 7321900)	2,014.5 µg/mL	+/- 11.8222 +/- 91.7589 +/- 132.4874	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) **CAS #** 1024-57-3 **Purity** 99%	(Lot ER121511-01)	2,007.5 µg/mL	+/- 11.7811 +/- 91.4401 +/- 132.0271	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	trans-Chlordane		2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/-	91.5084	µg/mL	Unstressed
	Purity 99%				+/-	132.1257	µg/mL	Stressed
9	cis-Chlordane		2,008.0	µg/mL	+/-	11.7841	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/-	91.4628	µg/mL	Unstressed
	Purity 99%				+/-	132.0599	µg/mL	Stressed
10	Endosulfan I		2,016.0	µg/mL	+/-	11.8310	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/-	91.8272	µg/mL	Unstressed
	Purity 99%				+/-	132.5861	µg/mL	Stressed
11	4,4'-DDE		2,012.5	µg/mL	+/-	11.8105	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	91.6678	µg/mL	Unstressed
	Purity 99%				+/-	132.3559	µg/mL	Stressed
12	Dieldrin		1,999.2	µg/mL	+/-	11.7324	µg/mL	Gravimetric
	CAS # 60-[illegible]	(Lot 5709400)			+/-	91.0620	µg/mL	Unstressed
	Purity 98%				+/-	131.4812	µg/mL	Stressed
13	Endrin		2,012.4	µg/mL	+/-	11.8101	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 6898800)			+/-	91.6646	µg/mL	Unstressed
	Purity 98%				+/-	132.3513	µg/mL	Stressed
14	4,4'-DDD		2,005.5	µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02-KNCK)			+/-	91.3490	µg/mL	Unstressed
	Purity 99%				+/-	131.8955	µg/mL	Stressed
15	Endosulfan II		2,018.0	µg/mL	+/-	11.8428	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 7276300)			+/-	91.9183	µg/mL	Unstressed
	Purity 99%				+/-	132.7176	µg/mL	Stressed
16	Endrin aldehyde		2,015.5	µg/mL	+/-	11.8281	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/-	91.8045	µg/mL	Unstressed
	Purity 99%				+/-	132.5532	µg/mL	Stressed
17	4,4'-DDT		2,016.5	µg/mL	+/-	11.8340	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/-	91.8500	µg/mL	Unstressed
	Purity 99%				+/-	132.6190	µg/mL	Stressed
18	Endosulfan sulfate		2,009.3	µg/mL	+/-	11.7914	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCBT8804)			+/-	91.5198	µg/mL	Unstressed
	Purity 95%				+/-	132.1422	µg/mL	Stressed
19	Methoxychlor		2,006.5	µg/mL	+/-	11.7753	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 7322100)			+/-	91.3945	µg/mL	Unstressed
	Purity 99%				+/-	131.9613	µg/mL	Stressed
20	Endrin ketone		2,007.0	µg/mL	+/-	11.7782	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 160405JLM)			+/-	91.4173	µg/mL	Unstressed
	Purity 99%				+/-	131.9942	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

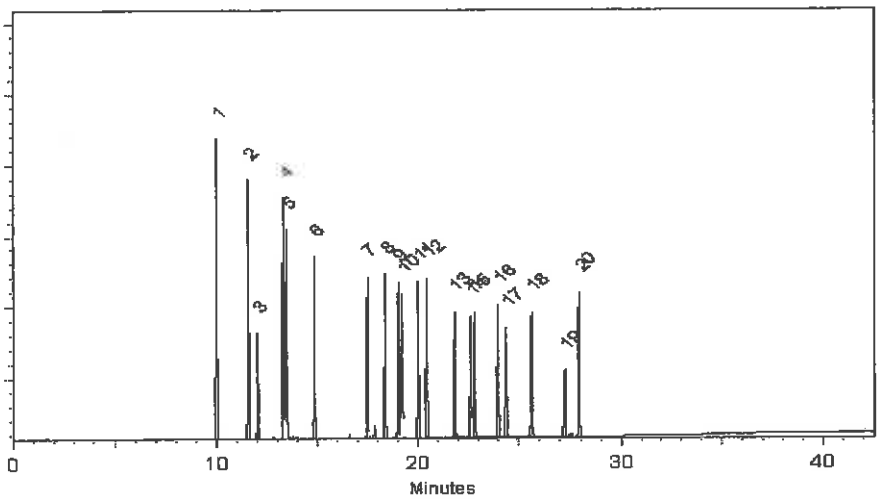
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 03-May-2018 **Balance:** B442140311

Amanda Miller - Operations Tech-ARM QC

Date Passed: 18-May-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

GCTBA98.0_00008

Version	00
Molecular weight	339.53
Quality Test / Release Date	06/06/2018
Molecular Formula	C16 H35 N . H2 S O4
CAS No	32503-27-8
Linear Formula	[CH3(CH2)3]4NHSO4
Flash Point (°C)	

Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	16838	**Quality Test / Release Date**	06/06/2018
Lot Number	A0397220		
Description	Tetrabutylammonium hydrogen sulfate,98%		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

BSE/TSE comment	

Chemical Comment	

Result name	Units	Specifications	Test Value
Appearance (Color)		White to off-white	White
Appearance (Form)		Crystalline powder or crystals	Crystalline powder
Infrared spectrum		Authentic	Authentic
Melting point		168°C to 173°C	172°C
Titration with NaOH		>=97.5 %	100 %

L. Van den Broek, QA Manager Issued: 06-07-2018

Acros Organics
ENA23, zone1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

GCTCMXSTD_00012

Agilent

Certificate of Analysis

Product Name: 2,4,5,6-Tetrachloro-m-xylene Standard

Product Number: IST-440-1 **Lot Issue Date:** 28-Jun-2021

Lot Number: 0006612638 **Expiration Date:** 31-Jul-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
2,4,5,6-tetrachloro-m-xylene	000877-09-8	RM18673	2005 ± 10 µg/mL

Matrix: acetone

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO/IEC 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Reagent

GCTOXSTDSTD_00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32071 **Lot No.:** A0155399

Description : Toxaphene Standard

Toxaphene Standard 5,000 µg/mL, Isooctane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Toxaphene		5,010.0	µg/mL	+/-	29.4015	µg/mL	Gravimetric
	CAS # 8001-35-2	(Lot 0006492075)			+/-	158.7868	µg/mL	Unstressed
	Purity ----%				+/-	207.4284	µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

TOX 1320

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

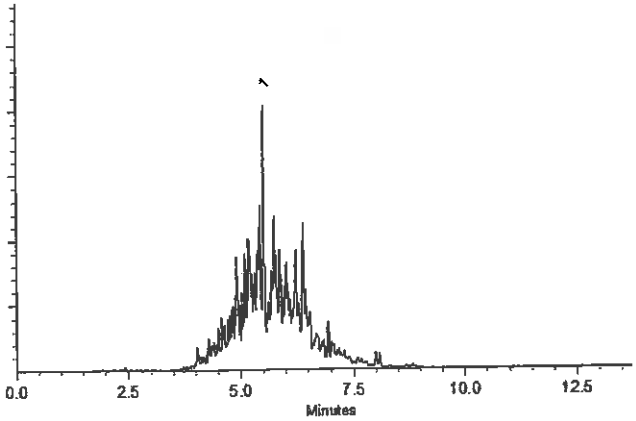
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer - Operations Technician I

Date Mixed: 26-Nov-2019 **Balance:** 1128360905

Justine Alberson - Operations Tech-ARM QC

Date Passed: 03-Dec-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

Herb(RTS)spk_00013

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569750 **Lot No.:** A0164201

Description : Herbicide LCS RTS (2015)

Herbicide LCS RTS (2015) 5-2000 µg/mL, Methanol, 25mL/bottle

Container Size : 25 mL **Pkg Amt:** > 25 mL

Expiration Date : September 30, 2022 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5-T		5.0 µg/mL	+/- 0.0434	µg/mL	Gravimetric
	CAS # 93-76-5	(Lot 8815100)		+/- 0.2679	µg/mL	Unstressed
	Purity 99%			+/- 0.2683	µg/mL	Stressed
2	2,4,5-TP (silvex)		5.0 µg/mL	+/- 0.0434	µg/mL	Gravimetric
	CAS # 93-72-1	(Lot 10036700)		+/- 0.2679	µg/mL	Unstressed
	Purity 99%			+/- 0.2683	µg/mL	Stressed
3	2,4-D		20.1 µg/mL	+/- 0.1560	µg/mL	Gravimetric
	CAS # 94-75-7	(Lot 9964300)		+/- 1.0719	µg/mL	Unstressed
	Purity 99%			+/- 1.0737	µg/mL	Stressed
4	2,4-DB		20.0 µg/mL	+/- 0.1558	µg/mL	Gravimetric
	CAS # 94-82-6	(Lot 9276100)		+/- 1.0709	µg/mL	Unstressed
	Purity 99%			+/- 1.0726	µg/mL	Stressed
5	Dalapon		20.0 µg/mL	+/- 0.1552	µg/mL	Gravimetric
	CAS # 75-99-0	(Lot 10455100)		+/- 1.0669	µg/mL	Unstressed
	Purity 94%			+/- 1.0687	µg/mL	Stressed
6	Dicamba		10.0 µg/mL	+/- 0.0780	µg/mL	Gravimetric
	CAS # 1918-00-9	(Lot 10580800)		+/- 0.5362	µg/mL	Unstressed
	Purity 98%			+/- 0.5371	µg/mL	Stressed
7	Dichlorprop		20.1 µg/mL	+/- 0.1561	µg/mL	Gravimetric
	CAS # 120-36-5	(Lot 10280100)		+/- 1.0730	µg/mL	Unstressed
	Purity 99%			+/- 1.0748	µg/mL	Stressed

8	Dinoseb			20.1	µg/mL	+/-	0.1560	µg/mL	Gravimetric
	CAS #	88-85-7	(Lot 50001)			+/-	1.0719	µg/mL	Unstressed
	Purity	99%				+/-	1.0737	µg/mL	Stressed
9	MCPA			2,000.9	µg/mL	+/-	11.6332	µg/mL	Gravimetric
	CAS #	94-74-6	(Lot 10591500)			+/-	106.4195	µg/mL	Unstressed
	Purity	98%				+/-	106.5978	µg/mL	Stressed
10	MCPP (Mecoprop)			2,000.9	µg/mL	+/-	11.6334	µg/mL	Gravimetric
	CAS #	93-65-2	(Lot 10558500)			+/-	106.4213	µg/mL	Unstressed
	Purity	99%				+/-	106.5996	µg/mL	Stressed
11	Pentachlorophenol			5.0	µg/mL	+/-	0.0434	µg/mL	Gravimetric
	CAS #	87-86-5	(Lot 200820KJ)			+/-	0.2679	µg/mL	Unstressed
	Purity	99%				+/-	0.2683	µg/mL	Stressed
12	Picloram			20.1	µg/mL	+/-	0.1562	µg/mL	Gravimetric
	CAS #	1918-02-1	(Lot CY2QG)			+/-	1.0735	µg/mL	Unstressed
	Purity	98%				+/-	1.0753	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Matt Fragassi - Mix Technician

Date Mixed: 08-Sep-2020 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Reagent

LPTCLPSpike_00020

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-JAN21-PIT3

TCLP-SPIKE

Lot #: 10125125-1

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	100.1 ± 0.5 µg/mL	Cd	100.1 ± 0.5 µg/mL	Se	100.1 ± 0.5 µg/mL
As	500.1 ± 2.5 µg/mL	Cr	500.1 ± 2.5 µg/mL		
Ba	5000 ± 25 µg/mL	Pb	500.1 ± 2.5 µg/mL		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	983032	Cd	983033	Se	929078
As	981756	Cr	880115		
Ba	994427	Pb	1035677		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

March 3, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

M6500ICSA_00013

4484233
ID: M6500ICSA_00013
Exp: 03/13/23 Prpd: RJG
ICP ICSA STOCK

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSA

ICP ICSA Mix

Lot #: 1121422-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	5000 ± 25 mg/L	Fe	2000 ± 10 mg/L
Ca	5000 ± 25 mg/L	Mg	5000 ± 25 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #
Al	1077624	Fe	1114543
Ca	1121798	Mg	1075231

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

September 13, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

MCGHG1-1_00016

4368406
ID: MCGHG1-1_00016
Exp:11/24/22 Prpd:RJR Opn:07/27/21
Hg Stock solution CAL

RECEIVED
6/21/21
RJR

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: S4400-1000331

Mercury (Hg) – 1000 µg/mL

Lot #: 1084154-49

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Hg	1004 ± 5 µg/mL (w/v)
	989.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025 and ISO 9001**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9% pure mercury (Hg) metal. The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3133, lot #160921**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	6	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	MAJOR	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	13	Cu	2	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	56	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

May 24, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

MHGICV-1_00012

ENVIRONMENTAL EXPRESS®
a Cole-Parmer company

Certificate of Analysis

Certified Reference Material

Product Description: Mercury

Product Number: **HP100033-1-100**

Lot Number: **2107432-100EE**

Matrix: 2% HNO3

Density: 1.014 g/mL ± 0.002 g/mL @ 22.0°C ± 0.3°C

Certified Value:

Element	µg/mL	SRM ID
Hg	1000 ± 6	3133

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section 4

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

Ag	7	Cu	<0.02	La	<0.02	Pt	<2	Te	<0.02
Al	<0.3	Dy	<0.02	Li	<0.02	Rb	<0.02	Th	<0.02
As	na	Er	<0.02	Lu	<0.02	Re	<0.02	Ti	<0.02
Au	<0.02	Eu	<0.02	Mg	<0.1	Rh	<0.02	Tl	<0.02
B	<1	Fe	<1	Mn	<0.5	Ru	<0.02	Tm	<0.02
Ba	<0.02	Ga	<0.02	Mo	<0.02	Sb	<0.02	U	<0.05
Be	<0.02	Gd	<0.02	Na	<3	Sc	<3	V	<0.05
Bi	<0.02	Ge	<0.02	Nb	<0.02	Se	<0.1	W	<0.02
Ca	<1	Hf	<0.02	Nd	<0.02	Si	<5	Y	<0.02
Cd	<0.02	Hg	M	Ni	<0.6	Sm	<0.02	Yb	<0.02
Ce	<0.02	Ho	<0.02	Os	<2	Sn	<0.5	Zn	<0.02
Co	<0.05	In	<0.02	Pb	<0.05	Sr	<0.02	Zr	<0.02
Cr	<0.05	Ir	<0.02	Pd	<0.02	Ta	<0.02		
Cs	na	K	<1	Pr	<0.02	Tb	<0.02		

Packaging and Storage Conditions:

The standard is packaged in a a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: July 2021

Expiration Date: January 31, 2023

Certificate Issue Date: April 26, 2021

Moven Mututuvari

Moven Mututuvari, Ph. D, VP Manufacturing

2345A Charleston Regional Pkwy, Charleston, South Carolina 29492
843-881-6560 • 800-343-5319 • 843-881-3964 (Fax) • EnvExp.com

Preparation Information:

This standard is prepared using **99.9993%** pure **Mercury Metal** which was purchased from a qualified vendor per ISO 9001 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. Stability of this product is based upon rigorous short-term and long-term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If, during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO 17034 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

1. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in 'NIST Weights and Measures Measurement Assurance Program' with a certificate of measurement traceability to NIST primary standards. The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
2. **Volumetric Device**
   The calibrations of volumetric vessels are verified using the ASTM method E542.
3. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
4. **Calibration Standards**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not available, a second source standard or independent lot is used.

Accreditation:

This CRM was manufactured by an ISO 17025:2017 chemical testing lab (Certificate number AT-1529) and ISO 17034:2016 Reference Material Producer (RMP) Certificate number AR-1436 accredited by ANSI National Accreditation Board (ANAB).

Refer to Safety Datasheet (SDS) for hazardous information.

Reagent

MLI1000_00003

CPI INTERNATIONAL

4321103
ID: MLI1000_00003
Exp: 09/30/22 Prpd: RSK
1000ppm LITHIUM

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000291

SE Std Lithium (Li) – 1000 µg/mL

Product Lot #: 1094768-25

Matrix: 5% HNO_3

Source Material Lot #: 1084156

Element	Certified Concentration & Uncertainty
Li	993 ± 5 µg/mL (w/v)
	983 ± 5 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure lithium carbonate (Li_2CO_3) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3129a, lot #100714**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	42	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	27	Cs	0.6	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	44	Pt	<0.5	Sm	<0.2	V	<1
Ba	2	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	0.7	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	2	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	MAJOR	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	3
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

June 24, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
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Santa Rosa, CA 95403 P: 800.878.7654
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Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Reagent

MTAPITTCALTRA_00013

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-CAL-TRA
Lot Number:	S2-MEB704932
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	100 µg/mL ea: Silver, Thallium, 50 µg/mL ea: Arsenic, Cadmium, Lead, Antimony, Selenium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**50.05 ± 0.39 µg/mL**	**Arsenic, As**	**49.98 ± 0.32 µg/mL**
Cadmium, Cd	**49.98 ± 0.22 µg/mL**	**Lead, Pb**	**50.06 ± 0.22 µg/mL**
Selenium, Se	**50.00 ± 0.35 µg/mL**	**Silver, Ag**	**100.0 ± 0.4 µg/mL**
Thallium, Tl	**100.0 ± 0.6 µg/mL**		

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 03, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 03, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MTAPITTCALTRC_00013

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-CAL-TRC-REV
Lot Number:	S2-MEB704934
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	200 µg/mL ea:

Boron,	Barium,
Beryllium,	Cobalt,
Chromium,	Copper,
Lithium,	Manganese,
Nickel,	Strontium,
Vanadium,	Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	**200.1 ± 0.9 µg/mL**	**Beryllium, Be**	**200.1 ± 1.3 µg/mL**
Boron, B	**200.0 ± 1.4 µg/mL**	**Chromium, Cr**	**200.3 ± 1.5 µg/mL**
Cobalt, Co	**199.9 ± 0.9 µg/mL**	**Copper, Cu**	**199.8 ± 0.8 µg/mL**
Lithium, Li	**199.8 ± 0.8 µg/mL**	**Manganese, Mn**	**199.9 ± 0.8 µg/mL**
Nickel, Ni	**200.1 ± 0.9 µg/mL**	**Strontium, Sr**	**199.9 ± 0.8 µg/mL**
Vanadium, V	**200.0 ± 0.9 µg/mL**	**Zinc, Zn**	**200.0 ± 0.8 µg/mL**

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

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$u_{char\ a}$ = the standard uncertainty of characterization Method A

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- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

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- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 03, 2021

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12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MTAPITTCALTRD_00014

Certificate of Analysis

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ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TAPITT-CAL-TRD
Lot Number:	S2-MEB704935
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	200 µg/mL ea: Molybdenum, Silicon, Tin, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Molybdenum, Mo	**199.9 ± 1.0 µg/mL**	**Silicon, Si**	**200.2 ± 1.5 µg/mL**
Tin, Sn	**199.9 ± 1.3 µg/mL**	**Titanium, Ti**	**200.0 ± 1.4 µg/mL**

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925

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Characterization of CRM/RM by Two or More Methods

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X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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X_a = mean of Assay Method A with

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CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

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- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 03, 2021

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11.2 Lot Expiration Date

- **May 03, 2025**

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11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

MTAPITTICPICV_00018

spex certiprep

4408772
ID: MTAPITTICPICV_00018
Exp: 08/30/22 Prpd: RJG
TAPITT-ICP-ICV

ACCREDITED
Reference Materials Producer
Cert #2495.01

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Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: XCAL-59-250 **Lot No.** 17-037AB

Description: Custom Assurance Standard

Matrix: 10% HNO_3 / Tr. Tart. Acid / Tr. HF

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for analytical instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
K	2500 µg/mL	±50 µg/mL	3141a*	Ni	50 µg/mL	±1 µg/mL	3136*
Na	2500 µg/mL	±50 µg/mL	3152a*	Si	50 µg/mL	±1 µg/mL	3150*
Ca	1250 µg/mL	±30 µg/mL	3109a*	Sn	50 µg/mL	±1 µg/mL	3161a*
Mg	1250 µg/mL	±30 µg/mL	3131a*	Sr	50 µg/mL	±1 µg/mL	3153a*
Al	625 µg/mL	±10 µg/mL	3101a*	Ti	50 µg/mL	±1 µg/mL	3162a*
Fe	625 µg/mL	±10 µg/mL	3126a*	V	50 µg/mL	±1 µg/mL	3165*
B	50 µg/mL	±1 µg/mL	3107*	Zn	50 µg/mL	±1 µg/mL	3168a*
Ba	50 µg/mL	±1 µg/mL	3104a*	Ag	25 µg/mL	±0.5 µg/mL	3151*
Be	50 µg/mL	±1 µg/mL	3105a*	Tl	25 µg/mL	±0.5 µg/mL	3158*
Co	50 µg/mL	±1 µg/mL	3113*	As	12.5 µg/mL	±0.3 µg/mL	3103a*
Cr	50 µg/mL	±1 µg/mL	3112a*	Cd	12.5 µg/mL	±0.3 µg/mL	3108*
Cu	50 µg/mL	±1 µg/mL	3114*	Pb	12.5 µg/mL	±0.3 µg/mL	3128*
Li	50 µg/mL	±1 µg/mL	3129a*	Sb	12.5 µg/mL	±0.3 µg/mL	3102a*
Mn	50 µg/mL	±1 µg/mL	3132*	Se	12.5 µg/mL	±0.3 µg/mL	3149*
Mo	50 µg/mL	±1 µg/mL	3134*				

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# MULTI1YP

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±2% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: AUG - - 2021 Certifying Officer: Katherine Cullinan, QC Manager

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at CRMSales@spex.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached, triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at CRMSales@spex.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & 17034 ISO Certified to 9001

Reagent

OPHERBRTSSURR_00013

110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568751 **Lot No.:** A0165153

Description : Herbicide Surrogate RTS

Herbicide Surrogate RTS 10µg/mL, Methanol, 100mL/bottle

Container Size : 100 mL **Pkg Amt:** > 100 mL

Expiration Date : October 31, 2022 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid	10.1 µg/mL	+/- 0.0710	µg/mL	Gravimetric
	CAS # 19719-28-9 (Lot S30618V)		+/- 0.5369	µg/mL	Unstressed
	Purity 99%		+/- 0.5378	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Reagent

SV LST1/STD10_00005

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731 **Lot No.:** A0164214

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Indene **CAS #** 95-13-6 (Lot MKBT8433V) **Purity** 97%	2,007.3 µg/mL	+/- 11.6706 µg/mL +/- 112.5470 µg/mL +/- 115.1804 µg/mL	Gravimetric Unstressed Stressed
2	Benzoic acid **CAS #** 65-85-0 (Lot MKCG6487) **Purity** 99%	2,000.6 µg/mL	+/- 11.6318 µg/mL +/- 112.1731 µg/mL +/- 114.7978 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

SV2356TCPs_00005

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ISO 17034 Accredited
Scopes: http://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT

Part Number: 70315
Lot Number: 030218
Description: 2,3,5,6-Tetrachlorophenol

Solvent(s): Methylene chloride **Lot#** 76782

Expiration Date: 030223
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 2506734D

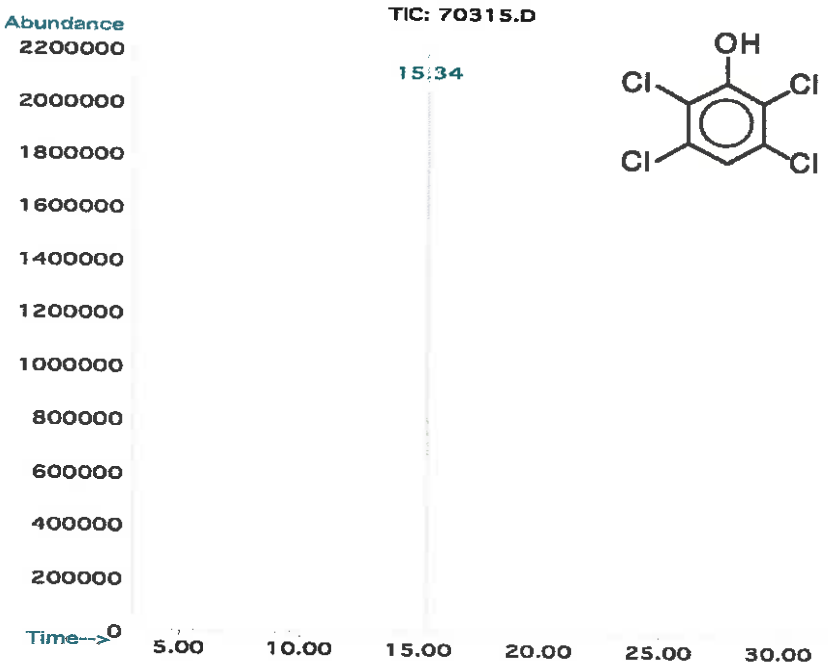
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

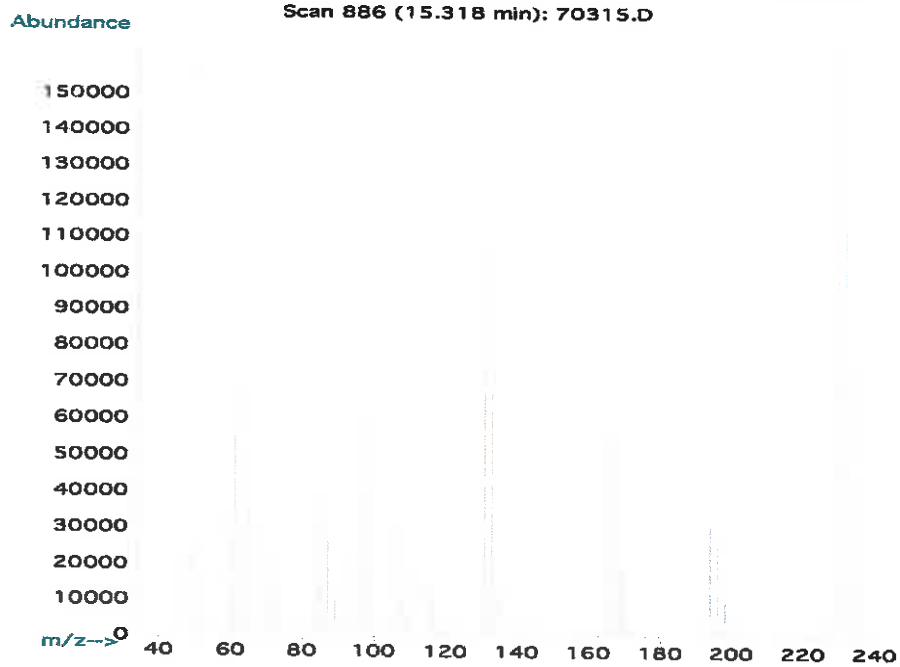
Giovanni Esposito 030218
Formulated By: Giovanni Esposito DATE

Pedro Rentas 030218
Reviewed By: Pedro L. Rentas DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. 2,3,5,6-Tetrachlorophenol	315	100317	1000	99.3	0.2	0.02517	0.02523	1002.3	5.7	935-95-5	N/A	N/A

Method GC8MSD-3.M: Column: SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C. Scan Rate = 2, Split Ratio = 100:1. Analysis performed by Melissa Stonier.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

SV2NAPAMINEs_00009

Agilent

Certificate of Analysis
ISO Guide 34

2-Naphthylamine Standard

Product Number:	EPA-1135			**Page:**	1 of 1
Lot Number:	CS-5614	**Lot Issue Date:**	19-Nov-2018	**Expiration Date:**	31-Dec-2022

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2-naphthylamine	000091-59-8	RM10617	1002 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15° to 30°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Managment System

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.ultrasci.com

Reagent

SVLIST1/STD1_00008

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0168059

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2022 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane		1,001.0 µg/mL	+/- 5.8199	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBL6661)		+/- 11.9660	µg/mL	Unstressed
	Purity 99%			+/- 19.0437	µg/mL	Stressed
2	N-Nitrosodimethylamine		1,002.7 µg/mL	+/- 5.8296	µg/mL	Gravimetric
	CAS # 62-75-9	(Lot 201110JLM)		+/- 11.9859	µg/mL	Unstressed
	Purity 99%			+/- 19.0754	µg/mL	Stressed
3	Pyridine		2,003.0 µg/mL	+/- 11.6456	µg/mL	Gravimetric
	CAS # 110-86-1	(Lot SHBL0433)		+/- 23.9440	µg/mL	Unstressed
	Purity 99%			+/- 38.1065	µg/mL	Stressed
4	Phenol		1,000.6 µg/mL	+/- 5.8176	µg/mL	Gravimetric
	CAS # 108-95-2	(Lot MKCK1120)		+/- 11.9612	µg/mL	Unstressed
	Purity 99%			+/- 19.0361	µg/mL	Stressed
5	Aniline		1,000.7 µg/mL	+/- 5.8183	µg/mL	Gravimetric
	CAS # 62-53-3	(Lot K22Z462)		+/- 11.9628	µg/mL	Unstressed
	Purity 99%			+/- 19.0387	µg/mL	Stressed
6	Bis(2-chloroethyl)ether		1,000.2 µg/mL	+/- 5.8152	µg/mL	Gravimetric
	CAS # 111-44-4	(Lot SHBJ2059)		+/- 11.9565	µg/mL	Unstressed
	Purity 99%			+/- 19.0285	µg/mL	Stressed
7	n-Decane (C10)		1,000.2 µg/mL	+/- 5.8152	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBL4313)		+/- 11.9565	µg/mL	Unstressed
	Purity 99%			+/- 19.0285	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,000.3	µg/mL	+/-	5.8160	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 9890600)			+/-	11.9580	µg/mL	Unstressed
	Purity 99%				+/-	19.0311	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.8	µg/mL	+/-	5.8187	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBJ8113V)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0399	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,002.9	µg/mL	+/-	5.8308	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	11.9883	µg/mL	Unstressed
	Purity 99%				+/-	19.0792	µg/mL	Stressed
27	Naphthalene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	11.9612	µg/mL	Unstressed
	Purity 99%				+/-	19.0361	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKCK2863)			+/-	11.9628	µg/mL	Unstressed
	Purity 99%				+/-	19.0387	µg/mL	Stressed
29	4-Chloroaniline		1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	11.9628	µg/mL	Unstressed
	Purity 99%				+/-	19.0387	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot N21G023)			+/-	11.9626	µg/mL	Unstressed
	Purity 98%				+/-	19.0382	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	11.9628	µg/mL	Unstressed
	Purity 99%				+/-	19.0387	µg/mL	Stressed
32	2-Methylnaphthalene		1,000.5	µg/mL	+/-	5.8171	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	11.9602	µg/mL	Unstressed
	Purity 96%				+/-	19.0345	µg/mL	Stressed
33	1-Methylnaphthalene		1,001.1	µg/mL	+/-	5.8207	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 523400-9)			+/-	11.9676	µg/mL	Unstressed
	Purity 99%				+/-	19.0463	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot MKCG5992)			+/-	11.9573	µg/mL	Unstressed
	Purity 99%				+/-	19.0298	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012019)			+/-	11.9573	µg/mL	Unstressed
	Purity 99%				+/-	19.0298	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,000.9	µg/mL	+/-	5.8191	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBH7520)			+/-	11.9644	µg/mL	Unstressed
	Purity 99%				+/-	19.0412	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,001.0	µg/mL	+/-	5.8201	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	11.9665	µg/mL	Unstressed
	Purity 98%				+/-	19.0444	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot TWYRD)			+/-	11.9620	µg/mL	Unstressed
	Purity 99%				+/-	19.0374	µg/mL	Stressed
39	Biphenyl		1,000.9	µg/mL	+/-	5.8191	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKCJ6240)			+/-	11.9644	µg/mL	Unstressed
	Purity 99%				+/-	19.0412	µg/mL	Stressed

56	4-Nitroaniline			1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS #	100-01-6	(Lot BCCC2312)			+/-	11.9628	µg/mL	Unstressed
	Purity	99%				+/-	19.0387	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)			2,000.3	µg/mL	+/-	11.6297	µg/mL	Gravimetric
	CAS #	534-52-1	(Lot RP201203)			+/-	23.9113	µg/mL	Unstressed
	Purity	99%				+/-	38.0545	µg/mL	Stressed
58	Diphenylamine			851.5	µg/mL	+/-	4.9505	µg/mL	Gravimetric
	CAS #	122-39-4	(Lot MKBN8295V)			+/-	10.1785	µg/mL	Unstressed
	Purity	99%				+/-	16.1989	µg/mL	Stressed
59	Azobenzene			1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS #	103-33-3	(Lot BCCB8438)			+/-	11.9573	µg/mL	Unstressed
	Purity	99%				+/-	19.0298	µg/mL	Stressed
60	4-Bromophenyl phenyl ether			1,002.7	µg/mL	+/-	5.8296	µg/mL	Gravimetric
	CAS #	101-55-3	(Lot STBB9729V)			+/-	11.9859	µg/mL	Unstressed
	Purity	99%				+/-	19.0754	µg/mL	Stressed
61	Hexachlorobenzene			1,001.3	µg/mL	+/-	5.8218	µg/mL	Gravimetric
	CAS #	118-74-1	(Lot 11004100)			+/-	11.9700	µg/mL	Unstressed
	Purity	99%				+/-	19.0501	µg/mL	Stressed
62	Pentachlorophenol			2,001.1	µg/mL	+/-	11.6348	µg/mL	Gravimetric
	CAS #	87-86-5	(Lot 200820KJ)			+/-	23.9217	µg/mL	Unstressed
	Purity	99%				+/-	38.0710	µg/mL	Stressed
63	n-Octadecane (C18)			1,000.9	µg/mL	+/-	5.8191	µg/mL	Gravimetric
	CAS #	593-45-3	(Lot RI6FI)			+/-	11.9644	µg/mL	Unstressed
	Purity	99%				+/-	19.0412	µg/mL	Stressed
64	Phenanthrene			1,001.0	µg/mL	+/-	5.8199	µg/mL	Gravimetric
	CAS #	85-01-8	(Lot MKCL7390)			+/-	11.9660	µg/mL	Unstressed
	Purity	99%				+/-	19.0437	µg/mL	Stressed
65	Anthracene			1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS #	120-12-7	(Lot MKCM0015)			+/-	11.9620	µg/mL	Unstressed
	Purity	99%				+/-	19.0374	µg/mL	Stressed
66	Carbazole			1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS #	86-74-8	(Lot 10812100)			+/-	11.9780	µg/mL	Unstressed
	Purity	99%				+/-	19.0628	µg/mL	Stressed
67	Di-n-butylphthalate			1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS #	84-74-2	(Lot MKCJ3790)			+/-	11.9620	µg/mL	Unstressed
	Purity	99%				+/-	19.0374	µg/mL	Stressed
68	Fluoranthene			1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS #	206-44-0	(Lot MKCF7378)			+/-	11.9596	µg/mL	Unstressed
	Purity	99%				+/-	19.0336	µg/mL	Stressed
69	Pyrene			1,000.7	µg/mL	+/-	5.8183	µg/mL	Gravimetric
	CAS #	129-00-0	(Lot BCCB9880)			+/-	11.9628	µg/mL	Unstressed
	Purity	99%				+/-	19.0387	µg/mL	Stressed
70	Benzyl butyl phthalate			1,000.3	µg/mL	+/-	5.8160	µg/mL	Gravimetric
	CAS #	85-68-7	(Lot MKCF0058)			+/-	11.9580	µg/mL	Unstressed
	Purity	99%				+/-	19.0311	µg/mL	Stressed
71	Benz(a)anthracene			1,002.7	µg/mL	+/-	5.8296	µg/mL	Gravimetric
	CAS #	56-55-3	(Lot 0012012)			+/-	11.9859	µg/mL	Unstressed
	Purity	99%				+/-	19.0754	µg/mL	Stressed

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

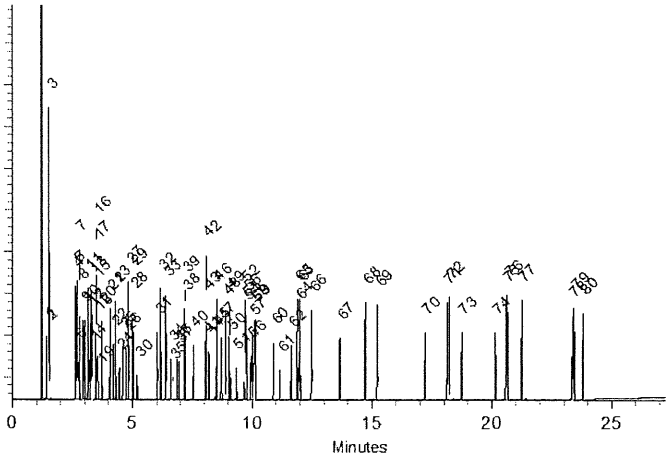
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer - Operations Technician I

Date Mixed: 12-Jan-2021 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 20-Jan-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

SVLIST1/STD11_00006

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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0164387

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Benzaldehyde **CAS #** 100-52-7 (Lot SHBG8690V) **Purity** 99%	2,001.8 µg/mL	+/- 11.6383 µg/mL +/- 39.9656 µg/mL +/- 89.7049 µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	2,000.6 µg/mL	+/- 11.6316 µg/mL +/- 39.9423 µg/mL +/- 89.6527 µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 (Lot PI8FG) **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 39.9306 µg/mL +/- 89.6265 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLIST1/STD9_00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0164053

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2000 µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : February 28, 2022 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine		2,003.2 µg/mL	+/- 11.6468	µg/mL	Gravimetric
	CAS # 92-87-5	(Lot CYGNUSX2)		+/- 23.9464	µg/mL	Unstressed
	Purity 99%			+/- 38.1103	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,003.6 µg/mL	+/- 11.6491	µg/mL	Gravimetric
	CAS # 91-94-1	(Lot 200227RSR)		+/- 23.9512	µg/mL	Unstressed
	Purity 99%			+/- 38.1179	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

SVLVIntstd_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567684 **Lot No.:** A0159166

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : March 31, 2025 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	(Lot PR-30447)	2,004.0 µg/mL	+/- 11.6511 µg/mL +/- 90.2591 µg/mL +/- 100.1536 µg/mL		Gravimetric Unstressed Stressed
2	Naphthalene-d8 **CAS #** 1146-65-2 **Purity** 99%	(Lot M-1452)	2,004.9 µg/mL	+/- 11.6567 µg/mL +/- 90.3019 µg/mL +/- 100.2011 µg/mL		Gravimetric Unstressed Stressed
3	Acenaphthene-d10 **CAS #** 15067-26-2 **Purity** 99%	(Lot PR-28021)	2,000.4 µg/mL	+/- 11.6302 µg/mL +/- 90.0970 µg/mL +/- 99.9737 µg/mL		Gravimetric Unstressed Stressed
4	Phenanthrene-d10 **CAS #** 1517-22-2 **Purity** 99%	(Lot PR-29119)	2,004.5 µg/mL	+/- 11.6540 µg/mL +/- 90.2816 µg/mL +/- 100.1786 µg/mL		Gravimetric Unstressed Stressed
5	Chrysene-d12 **CAS #** 1719-03-5 **Purity** 99%	(Lot PR-30486)	2,002.1 µg/mL	+/- 11.6401 µg/mL +/- 90.1735 µg/mL +/- 100.0587 µg/mL		Gravimetric Unstressed Stressed
6	Perylene-d12 **CAS #** 1520-96-3 **Purity** 99%	(Lot PR-27342)	2,002.3 µg/mL	+/- 11.6413 µg/mL +/- 90.1825 µg/mL +/- 100.0687 µg/mL		Gravimetric Unstressed Stressed

Reagent

SVLVSURSPK_00014

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A0164104

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol **CAS #** 367-12-4 **Purity** 99%	(Lot STBF3761V)	5,030.3 µg/mL	+/- 29.2464 µg/mL +/- 146.8000 µg/mL +/- 178.1362 µg/mL		Gravimetric Unstressed Stressed
2	Phenol-d5 **CAS #** 4165-62-2 **Purity** 99%	(Lot CD-105)	5,023.7 µg/mL	+/- 29.2084 µg/mL +/- 146.6094 µg/mL +/- 177.9048 µg/mL		Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 **CAS #** 4165-60-0 **Purity** 99%	(Lot PR-29940B)	5,047.2 µg/mL	+/- 29.3449 µg/mL +/- 147.2942 µg/mL +/- 178.7359 µg/mL		Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl **CAS #** 321-60-8 **Purity** 99%	(Lot 00017945)	5,045.5 µg/mL	+/- 29.3348 µg/mL +/- 147.2436 µg/mL +/- 178.6745 µg/mL		Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol **CAS #** 118-79-6 **Purity** 99%	(Lot MKCJ7664)	5,004.7 µg/mL	+/- 29.0980 µg/mL +/- 146.0549 µg/mL +/- 177.2320 µg/mL		Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 **CAS #** 1718-51-0 **Purity** 99%	(Lot PR-27278)	5,048.9 µg/mL	+/- 29.3545 µg/mL +/- 147.3429 µg/mL +/- 178.7949 µg/mL		Gravimetric Unstressed Stressed

Reagent

SVLVSURSPK_00018

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A0172807

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol		5,004.6 µg/mL	+/- 29.0972	µg/mL	Gravimetric
	CAS # 367-12-4	(Lot STBJ2508)		+/- 146.0510	µg/mL	Unstressed
	Purity 99%			+/- 177.2273	µg/mL	Stressed
2	Phenol-d5		5,011.4 µg/mL	+/- 29.1367	µg/mL	Gravimetric
	CAS # 4165-62-2	(Lot CD-105)		+/- 146.2494	µg/mL	Unstressed
	Purity 99%			+/- 177.4681	µg/mL	Stressed
3	Nitrobenzene-d5		5,003.0 µg/mL	+/- 29.0879	µg/mL	Gravimetric
	CAS # 4165-60-0	(Lot PR-29940B)		+/- 146.0043	µg/mL	Unstressed
	Purity 99%			+/- 177.1706	µg/mL	Stressed
4	2-Fluorobiphenyl		5,010.2 µg/mL	+/- 29.1297	µg/mL	Gravimetric
	CAS # 321-60-8	(Lot 00019169)		+/- 146.2144	µg/mL	Unstressed
	Purity 99%			+/- 177.4256	µg/mL	Stressed
5	2,4,6-Tribromophenol		5,003.9 µg/mL	+/- 29.0931	µg/mL	Gravimetric
	CAS # 118-79-6	(Lot MKCJ7664)		+/- 146.0306	µg/mL	Unstressed
	Purity 99%			+/- 177.2025	µg/mL	Stressed
6	p-Terphenyl-d14		5,013.8 µg/mL	+/- 29.1507	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)		+/- 146.3195	µg/mL	Unstressed
	Purity 99%			+/- 177.5531	µg/mL	Stressed

Reagent

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svmethylmetha_00013

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Certified Reference Material CRM

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CERTIFIED WEIGHT REPORT

Part Number: 70443
Lot Number: 032717
Description: Methyl methane sulfonate

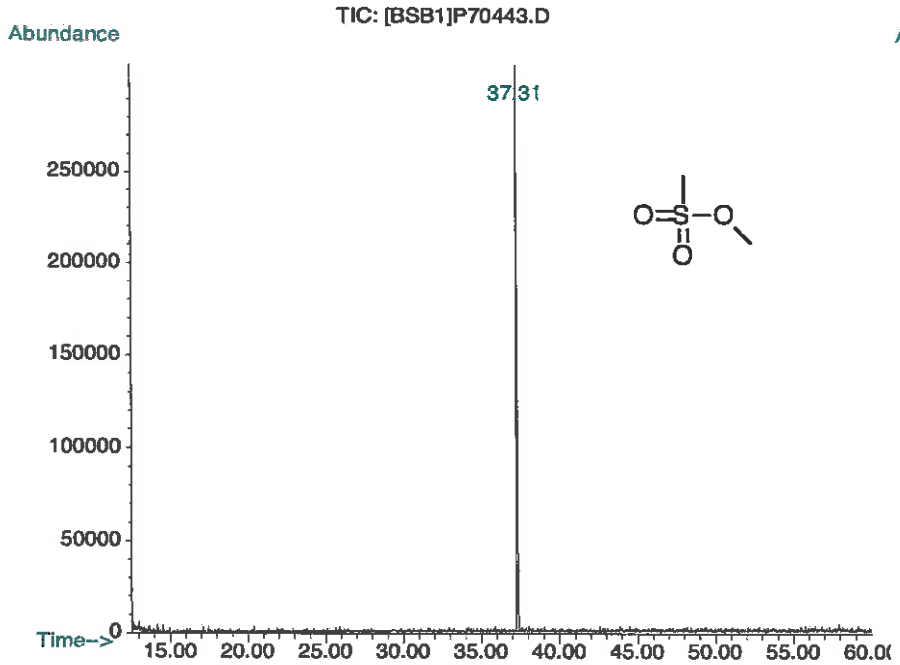
Solvent(s): **Lot#**
Methylene chloride 76782

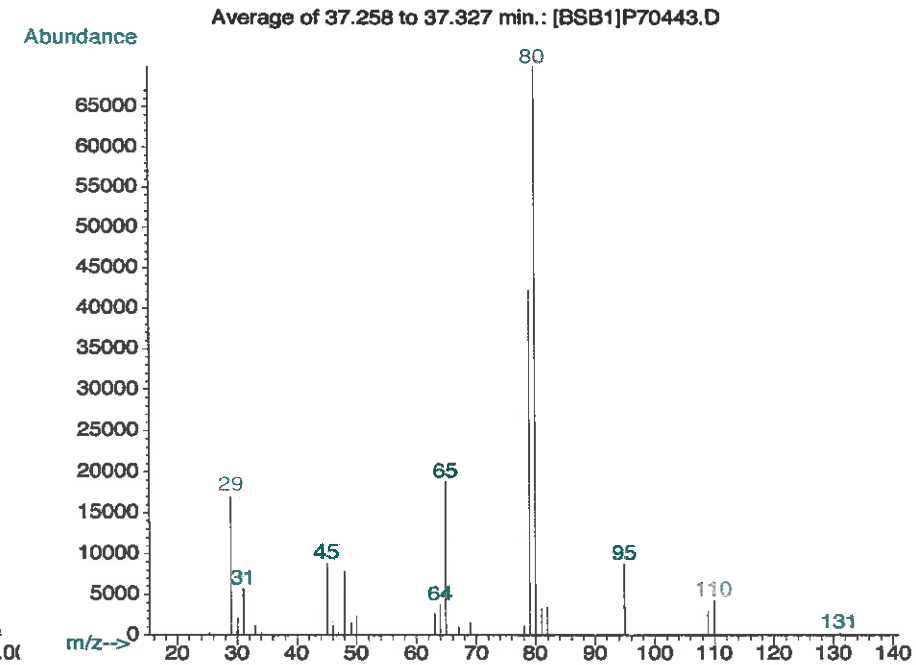
Expiration Date: 032722
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 822-275872-11 5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty

		032717
Formulated By:	Bryan Njeba	DATE
		032717
Reviewed By:	Pedro L. Rentas	DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1. Methyl methane sulfonate	443	07322PW	1000	99	0.2	0.02525	0.02527	1000.8	5.7	66-27-3	N/A	orl-rat 225mg/kg

Method GC6MSD-1: Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Analysis performed by Pedro Rentas.





- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kayat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

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svTCLPacids_00013

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31027 **Lot No.:** A0165463

Description : TCLP Acid Mix

TCLP Acids Method 1311 Std 2000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2023 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylphenol (o-cresol) **CAS #** 95-48-7 **Purity** 99%	(Lot SHBH6379)	2,005.6 µg/mL	+/- 11.7700 µg/mL +/- 58.5520 µg/mL +/- 71.0421 µg/mL		Gravimetric Unstressed Stressed
2	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot SHBD0627V)	2,005.6 µg/mL	+/- 11.7700 µg/mL +/- 58.5520 µg/mL +/- 71.0421 µg/mL		Gravimetric Unstressed Stressed
3	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396AP)	2,005.3 µg/mL	+/- 11.7682 µg/mL +/- 58.5432 µg/mL +/- 71.0315 µg/mL		Gravimetric Unstressed Stressed
4	2,4,5-Trichlorophenol **CAS #** 95-95-4 **Purity** 98%	(Lot FHN01)	2,003.4 µg/mL	+/- 11.7572 µg/mL +/- 58.4882 µg/mL +/- 70.9646 µg/mL		Gravimetric Unstressed Stressed
5	2,4,6-Trichlorophenol **CAS #** 88-06-2 **Purity** 99%	(Lot STBH7520)	2,005.4 µg/mL	+/- 11.7688 µg/mL +/- 58.5462 µg/mL +/- 71.0350 µg/mL		Gravimetric Unstressed Stressed
6	Pentachlorophenol **CAS #** 87-86-5 **Purity** 99%	(Lot 200609JLM)	2,004.1 µg/mL	+/- 11.7612 µg/mL +/- 58.5082 µg/mL +/- 70.9889 µg/mL		Gravimetric Unstressed Stressed

Reagent

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svTCLPbns_00011

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31028 **Lot No.:** A0158475

Description : TCLP B/N Mix

TCLP B/N Mix 2000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2023 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CT# 363144 - 363147
SR 3/16/22

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBK6453)	2,012.0 µg/mL	+/- 11.8075 µg/mL +/- 99.5423 µg/mL +/- 102.0168 µg/mL		Gravimetric Unstressed Stressed
2	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 99.2454 µg/mL +/- 101.7126 µg/mL		Gravimetric Unstressed Stressed
3	Hexachloroethane **CAS #** 67-72-1 **Purity** 99%	(Lot ENSIK)	2,011.0 µg/mL	+/- 11.8017 µg/mL +/- 99.4928 µg/mL +/- 101.9661 µg/mL		Gravimetric Unstressed Stressed
4	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	2,005.0 µg/mL	+/- 11.7665 µg/mL +/- 99.1959 µg/mL +/- 101.6619 µg/mL		Gravimetric Unstressed Stressed
5	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,000.2 µg/mL	+/- 11.7382 µg/mL +/- 98.9575 µg/mL +/- 101.4175 µg/mL		Gravimetric Unstressed Stressed
6	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	2,007.0 µg/mL	+/- 11.7782 µg/mL +/- 99.2949 µg/mL +/- 101.7633 µg/mL		Gravimetric Unstressed Stressed
7	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC19614V)	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 99.3444 µg/mL +/- 101.8140 µg/mL		Gravimetric Unstressed Stressed

Reagent

SVTUNINGMIXs_00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31615 **Lot No.:** A0147424

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2022 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachlorophenol **CAS #** 87-86-5 (Lot 190227CGKJ) **Purity** 99%	1,000.4 µg/mL	+/- 5.8709 µg/mL +/- 45.5674 µg/mL +/- 65.7932 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) **CAS #** 5074-71-5 (Lot 10198748) **Purity** 99%	1,000.0 µg/mL	+/- 5.8686 µg/mL +/- 45.5492 µg/mL +/- 65.7669 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 190115JACG) **Purity** 99%	1,000.0 µg/mL	+/- 5.8686 µg/mL +/- 45.5492 µg/mL +/- 65.7669 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT **CAS #** 50-29-3 (Lot S37912V) **Purity** 99%	1,000.4 µg/mL	+/- 5.8709 µg/mL +/- 45.5674 µg/mL +/- 65.7932 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

SVTUNINGMIXs_00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31615 **Lot No.:** A0178508

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachlorophenol **CAS #** 87-86-5 (Lot 210706RSR) **Purity** 99%	1,005.2 µg/mL	+/- 5.8991 µg/mL +/- 45.7861 µg/mL +/- 66.1089 µg/mL		Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) **CAS #** 5074-71-5 (Lot Q117-147) **Purity** 95%	1,003.6 µg/mL	+/- 5.8896 µg/mL +/- 45.7123 µg/mL +/- 66.0023 µg/mL		Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 210907JLM) **Purity** 99%	1,000.0 µg/mL	+/- 5.8686 µg/mL +/- 45.5492 µg/mL +/- 65.7669 µg/mL		Gravimetric Unstressed Stressed
4	4,4'-DDT **CAS #** 50-29-3 (Lot 210916JLM) **Purity** 99%	1,003.6 µg/mL	+/- 5.8897 µg/mL +/- 45.7132 µg/mL +/- 66.0037 µg/mL		Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Reagent

TA-ICP-ICSAB1_00002

4410733
ID: TA-ICP-ICSAB1_00002
Exp: 01/22/23 Prpd: RJG
ICP ICSAB MIX #1

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSAB-1

ICP ICSAB Mix Solution 1

Lot #: 1115088-1

Matrix: 5% HNO_3/0.5% HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Mo	100.2 ± 0.5 mg/L	Si	1000 ± 5 mg/L	Ti	100.3 ± 0.5 mg/L
Sb	100.2 ± 0.5 mg/L	Sn	100.3 ± 0.5 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Mo	175215	Si	1004987	Ti	983035
Sb	987317	Sn	1025087		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3), hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 22, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

TA-ICP-ICSAB2_00002

4410794
ID: TA-ICP-ICSAB2_00002
Exp: 01/22/23 Prpd: RJG
ICP ICSAB MIX#2

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-ICP-ICSAB-2

ICP ICSAB Mix Solution 2

Lot #: 1133580-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	99.98 ± 0.50 mg/L	Cr	99.99 ± 0.50 mg/L	Pb	100.1 ± 0.5 mg/L
As	100.0 ± 0.5 mg/L	Cu	99.99 ± 0.50 mg/L	Se	99.97 ± 0.50 mg/L
B	1000 ± 5 mg/L	K	999.8 ± 5.0 mg/L	Sr	100.1 ± 0.5 mg/L
Ba	99.98 ± 0.50 mg/L	Mn	99.99 ± 0.50 mg/L	Tl	100.1 ± 0.5 mg/L
Be	49.95 ± 0.25 mg/L	Na	999.7 ± 5.0 mg/L	V	99.95 ± 0.50 mg/L
Cd	100.0 ± 0.5 mg/L	Ni	99.96 ± 0.50 mg/L	Zn	99.93 ± 0.50 mg/L
Co	100.0 ± 0.5 mg/L	P	1001 ± 5 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	983032	Cr	880115	Pb	1035677
As	981756	Cu	982824	Se	929078
B	999861R	K	1073557	Sr	1065634
Ba	150283R	Mn	985851	Tl	1059794
Be	989234	Na	1122654	V	1035777
Cd	983033	Ni	752769	Zn	1025267
Co	979870	P	1107349		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2

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1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 22, 2021
Certification Date

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 8, February 10, 2021

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
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Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

TA-SPIKE1_00017

4444950
ID: TA-SPIKE1_00017
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #1

4444949
ID: TA-SPIKE1_00017
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #1

4444948
ID: TA-SPIKE1_00017
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #1

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Recieved 9/14/21

Multi-Element Aqueous CRM

Product #: TA-SPIKE1+

Spike Mix # 1

Lot #: 1146438-1

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	200.0 ± 1.0 mg/L	Li	100.0 ± 0.5 mg/L	Sn	200.0 ± 1.0 mg/L
Ba	200.0 ± 1.0 mg/L	Mn	99.98 ± 0.50 mg/L	Sr	100.0 ± 0.5 mg/L
Be	100.0 ± 0.5 mg/L	Mo	100.0 ± 0.5 mg/L	Ti	99.98 ± 0.50 mg/L
Cd	100.0 ± 0.5 mg/L	Ni	100.0 ± 0.5 mg/L	Tl	200.0 ± 1.0 mg/L
Co	100.0 ± 0.5 mg/L	Pb	99.96 ± 0.50 mg/L	V	100.0 ± 0.5 mg/L
Cr	100.0 ± 0.5 mg/L	Se	200.0 ± 1.0 mg/L		
Cu	99.99 ± 0.50 mg/L	Si	200.0 ± 1.0 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
As	981756	Li	1062674	Sn	1025087
Ba	1052674	Mn	985851	Sr	1065634
Be	989234	Mo	984974	Ti	1010581
Cd	983033	Ni	752769	Tl	1059794
Co	1084160	Pb	1035677	V	1035777
Cr	880115	Se	929078		
Cu	1063159	Si	1004987		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see last page)**. The solution was stabilized using high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

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F: 707.545.7901

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Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

September 9, 2021
Certification Date

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
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- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

TA-SPIKE2_00014

4445101
ID: TA-SPIKE2_00014
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #2

4445100
ID: TA-SPIKE2_00014
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #2

4445099
ID: TA-SPIKE2_00014
Exp: 03/09/23 Prpd: TLP
CPI Spiking Solution #2

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Received 9/14/21

Multi-Element Aqueous CRM

Product #: TA-SPIKE2

Spike Mix # 2

Lot #: 1136606-1

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	1000 ± 5 mg/L	Fe	1000 ± 5 mg/L	Mg	5000 ± 25 mg/L
Ca	5000 ± 25 mg/L	K	5000 ± 25 mg/L	Na	5000 ± 25 mg/L

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Al	1077624	Fe	1114543	Mg	1075231
Ca	1121798	K	1073557	Na	1122654

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

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Chuck Goudreau

Chuck Goudreau, Certifying Officer

September 9, 2021
Certification Date

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Health and Safety Information: Refer to the Safety Data Sheet (SDS).

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As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

TA-Spike3 INT_00011

4528660
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

4528661
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

4528662
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

4528663
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

CPI INTERNATIONAL

KEM Received 11/04/21

CERTIFICATE OF ANALYSIS

4528664
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

4528665
ID: TA-Spike3 INT_00011
Exp: 06/29/23 Prpd: KEM
TA-Spike3 (PittMix)

Multi-Element Aqueous CRM

Product #: TA-CM-MAY19-PIT1

TA-Spike3INT

Lot #: 10100317-8

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	50.00 ± 0.50 µg/mL	Sb	49.99 ± 0.50 µg/mL
B	250.0 ± 1.3 µg/mL	Zn	50.01 ± 0.50 µg/mL

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #
Ag	983032	Sb	978317
B	1121434	Zn	1025088

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

October 29, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

TECHCHLORDANE_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571052-FL **Lot No.:** A0137638

Description : Chlordane Standard

Chlordane Standard 5,000µg/mL, Isooctane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Chlordane **CAS #** 57-74-9 (Lot 142990) **Purity** ----%	5,040.0 µg/mL	+/- 29.5775 µg/mL +/- 159.7376 µg/mL +/- 208.6704 µg/mL	Gravimetric Unstressed Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Specific Reference Material Notes:
This material may be reported as technical chlordane, with CAS number 12789-03-6

Tech Tips:
CAS #57-74-9 nomenclature is based on EPA method 8081B.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

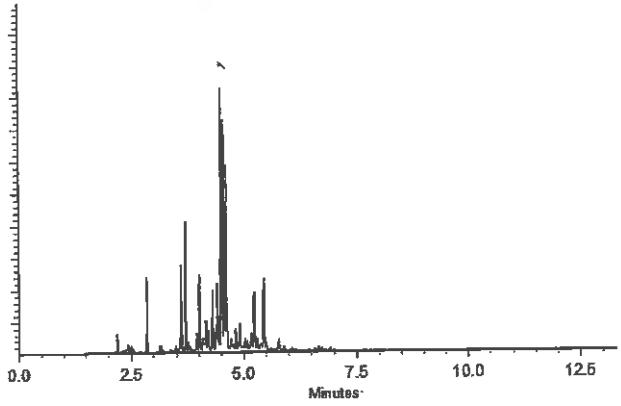
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician

Date Mixed: 01-May-2018 **Balance:** B345965662

Justine Albertson - Operations Tech-ARM QC

Date Passed: 02-May-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VOA8260GAS1ST_00361

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

VOA8260GAS1ST_00369

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0171131

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.2	µg/mL	+/-	16.2200	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4243	µg/mL	Unstressed
	Purity 99%				+/-	143.7015	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

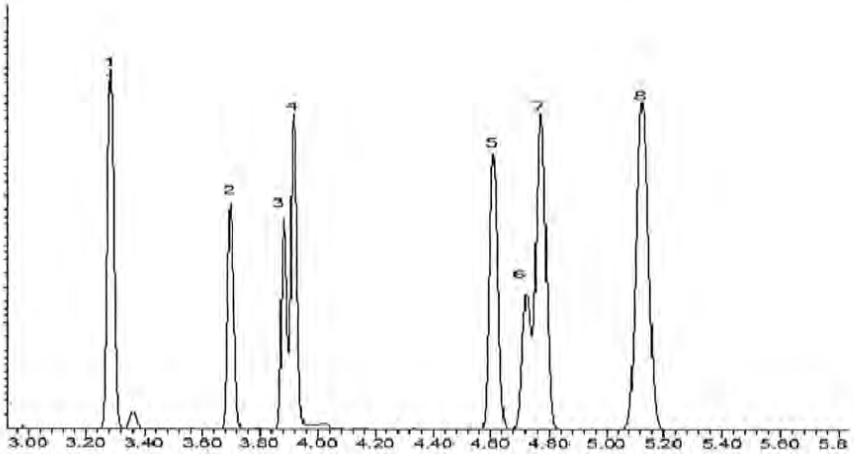
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 13-Apr-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

VOA8260INTRES_00191

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RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0168626

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,000.5 µg/mL	+/- 29.0733	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0613	µg/mL	Unstressed
	Purity 99%			+/- 110.1738	µg/mL	Stressed
2	2-Butanone-d5		1,256.6 µg/mL	+/- 7.3060	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.9040	µg/mL	Unstressed
	Purity 99%			+/- 27.6861	µg/mL	Stressed
3	Fluorobenzene		251.0 µg/mL	+/- 1.4627	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3749	µg/mL	Unstressed
	Purity 99%			+/- 5.5311	µg/mL	Stressed
4	1,4-Dioxane-d8		5,003.4 µg/mL	+/- 29.0902	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I19942-0122JM)		+/- 107.1234	µg/mL	Unstressed
	Purity 99%			+/- 110.2377	µg/mL	Stressed
5	Chlorobenzene-d5		250.6 µg/mL	+/- 1.4604	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 5.3663	µg/mL	Unstressed
	Purity 99%			+/- 5.5222	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.9 µg/mL	+/- 1.4621	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)		+/- 5.3727	µg/mL	Unstressed
	Purity 99%			+/- 5.5289	µg/mL	Stressed

Reagent

VOA8260INTRES_00193

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0172729

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,000.7 µg/mL	+/- 29.0730	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0652	µg/mL	Unstressed
	Purity 99%			+/- 110.1778	µg/mL	Stressed
2	2-Butanone-d5		1,250.3 µg/mL	+/- 7.2695	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.7698	µg/mL	Unstressed
	Purity 99%			+/- 27.5480	µg/mL	Stressed
3	Fluorobenzene		250.6 µg/mL	+/- 1.4604	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)		+/- 5.3663	µg/mL	Unstressed
	Purity 99%			+/- 5.5222	µg/mL	Stressed
4	1,4-Dioxane-d8		5,000.9 µg/mL	+/- 29.0740	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot RP210421V)		+/- 107.0687	µg/mL	Unstressed
	Purity 99%			+/- 110.1814	µg/mL	Stressed
5	Chlorobenzene-d5		250.8 µg/mL	+/- 1.4615	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 5.3706	µg/mL	Unstressed
	Purity 99%			+/- 5.5267	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.4 µg/mL	+/- 1.4590	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)		+/- 5.3613	µg/mL	Unstressed
	Purity 99%			+/- 5.5171	µg/mL	Stressed

Reagent

VOA8260KET1ST_00164

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0168313

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 **Purity** 99%	(Lot SHBM6699)	12,516.4 µg/mL	+/- 73.2863 µg/mL +/- 755.2197 µg/mL +/- 757.0124 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 99%	(Lot SHBL6194)	12,515.2 µg/mL	+/- 73.2792 µg/mL +/- 755.1473 µg/mL +/- 756.9399 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBM2797)	12,512.0 µg/mL	+/- 73.2605 µg/mL +/- 754.9542 µg/mL +/- 756.7463 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKCL1599)	12,504.4 µg/mL	+/- 73.2160 µg/mL +/- 754.4956 µg/mL +/- 756.2867 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260KET1ST_00165

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0174287

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot SHBN3661) **Purity** 99%	12,526.4 µg/mL	+/- 73.3448 µg/mL +/- 755.8230 µg/mL +/- 757.6173 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBL5543) **Purity** 99%	12,543.6 µg/mL	+/- 73.4455 µg/mL +/- 756.8609 µg/mL +/- 758.6575 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBM7956) **Purity** 99%	12,534.8 µg/mL	+/- 73.3940 µg/mL +/- 756.3299 µg/mL +/- 758.1253 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCL1599) **Purity** 99%	12,617.6 µg/mL	+/- 73.8788 µg/mL +/- 761.3259 µg/mL +/- 763.1332 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260MEGA1_00116

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBL3107)	2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
					+/-	151.9598	µg/mL	Unstressed
					+/-	152.3206	µg/mL	Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
					+/-	152.1559	µg/mL	Unstressed
					+/-	152.5171	µg/mL	Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot A0387097)	25,178.5	µg/mL	+/-	146.3823	µg/mL	Gravimetric
					+/-	1,519.1297	µg/mL	Unstressed
					+/-	1,522.7364	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBL0822)	2,513.9	µg/mL	+/-	14.6159	µg/mL	Gravimetric
					+/-	151.6732	µg/mL	Unstressed
					+/-	152.0333	µg/mL	Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKCK1803)	2,517.3	µg/mL	+/-	14.6355	µg/mL	Gravimetric
					+/-	151.8768	µg/mL	Unstressed
					+/-	152.2374	µg/mL	Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBL0924)	2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
					+/-	152.1106	µg/mL	Unstressed
					+/-	152.4718	µg/mL	Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 580900)	2,524.5	µg/mL	+/-	14.6777	µg/mL	Gravimetric
					+/-	152.3143	µg/mL	Unstressed
					+/-	152.6759	µg/mL	Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBX0066)	2,523.0	µg/mL	+/-	14.6690	µg/mL	Gravimetric
					+/-	152.2244	µg/mL	Unstressed
					+/-	152.5858	µg/mL	Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,523.8	µg/mL	+/-	14.6733	µg/mL	Gravimetric
					+/-	152.2690	µg/mL	Unstressed
					+/-	152.6305	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,671.0	µg/mL	+/-	364.3555	µg/mL	Gravimetric
					+/-	3,781.2173	µg/mL	Unstressed
					+/-	3,790.1946	µg/mL	Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBL6923)	2,524.3	µg/mL	+/-	14.6762	µg/mL	Gravimetric
					+/-	152.2992	µg/mL	Unstressed
					+/-	152.6608	µg/mL	Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,516.6	µg/mL	+/-	14.6320	µg/mL	Gravimetric
					+/-	151.8400	µg/mL	Unstressed
					+/-	152.2005	µg/mL	Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,045.5	µg/mL	+/-	29.3350	µg/mL	Gravimetric
					+/-	304.4174	µg/mL	Unstressed
					+/-	305.1401	µg/mL	Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 98%	(Lot 190123CG)	2,514.9	µg/mL	+/-	14.6220	µg/mL	Gravimetric
					+/-	151.7366	µg/mL	Unstressed
					+/-	152.0968	µg/mL	Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCF5831)	2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
					+/-	152.1333	µg/mL	Unstressed
					+/-	152.4945	µg/mL	Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 190919JLM)	2,522.3	µg/mL	+/-	14.6646	µg/mL	Gravimetric
					+/-	152.1785	µg/mL	Unstressed
					+/-	152.5398	µg/mL	Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG8938V)	2,523.6	µg/mL	+/- +/- +/-	14.6726 152.2615 152.6230	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 98%	(Lot SHBK8626)	2,515.8	µg/mL	+/- +/- +/-	14.6270 151.7883 152.1487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot MKCH9948)	2,522.6	µg/mL	+/- +/- +/-	14.6668 152.2011 152.5625	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBL4231)	2,514.6	µg/mL	+/- +/- +/-	14.6202 151.7185 152.0787	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBJ4611)	2,512.9	µg/mL	+/- +/- +/-	14.6101 151.6129 151.9728	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,517.4	µg/mL	+/- +/- +/-	14.6362 151.8844 152.2450	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,519.5	µg/mL	+/- +/- +/-	14.6486 152.0126 152.3735	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBL3022)	50,250.0	µg/mL	+/- +/- +/-	292.1426 3,031.8037 3,039.0017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10215970)	2,523.5	µg/mL	+/- +/- +/-	14.6718 152.2539 152.6154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 200107JLM)	2,523.0	µg/mL	+/- +/- +/-	14.6689 152.2238 152.5852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot MKCH9232)	2,523.3	µg/mL	+/- +/- +/-	14.6704 152.2389 152.6003	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBF9649V)	2,515.4	µg/mL	+/- +/- +/-	14.6246 151.7637 152.1240	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot 19420164-D1119)	2,521.1	µg/mL	+/- +/- +/-	14.6576 152.1061 152.4672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,515.8	µg/mL	+/- +/- +/-	14.6268 151.7863 152.1467	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBC6265)	2,518.8	µg/mL	+/- +/- +/-	14.6442 151.9673 152.3281	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBJ7422)	2,513.1	µg/mL	+/- +/- +/-	14.6115 151.6280 151.9880	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 99%	(Lot MKCK6472)	2,513.5	µg/mL	+/-	14.6137	µg/mL	Gravimetric
					+/-	151.6506	µg/mL	Unstressed
					+/-	152.0106	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
					+/-	152.1559	µg/mL	Unstressed
					+/-	152.5171	µg/mL	Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBJ0839)	2,521.0	µg/mL	+/-	14.6573	µg/mL	Gravimetric
					+/-	152.1031	µg/mL	Unstressed
					+/-	152.4642	µg/mL	Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBL0265)	1,257.9	µg/mL	+/-	7.3134	µg/mL	Gravimetric
					+/-	75.8932	µg/mL	Unstressed
					+/-	76.0734	µg/mL	Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ7329)	1,260.0	µg/mL	+/-	7.3257	µg/mL	Gravimetric
					+/-	76.0214	µg/mL	Unstressed
					+/-	76.2019	µg/mL	Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBL0706)	2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
					+/-	152.1106	µg/mL	Unstressed
					+/-	152.4718	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 98%	(Lot GC01)	2,515.5	µg/mL	+/-	14.6256	µg/mL	Gravimetric
					+/-	151.7735	µg/mL	Unstressed
					+/-	152.1339	µg/mL	Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBK7739)	2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
					+/-	151.9146	µg/mL	Unstressed
					+/-	152.2752	µg/mL	Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCG7519)	2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
					+/-	151.8014	µg/mL	Unstressed
					+/-	152.1618	µg/mL	Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot P15E008)	2,516.8	µg/mL	+/-	14.6326	µg/mL	Gravimetric
					+/-	151.8467	µg/mL	Unstressed
					+/-	152.2072	µg/mL	Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBJ4835)	2,518.4	µg/mL	+/-	14.6420	µg/mL	Gravimetric
					+/-	151.9447	µg/mL	Unstressed
					+/-	152.3055	µg/mL	Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCJ0238)	2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
					+/-	152.2389	µg/mL	Unstressed
					+/-	152.6003	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,520.9	µg/mL	+/-	14.6566	µg/mL	Gravimetric
					+/-	152.0956	µg/mL	Unstressed
					+/-	152.4567	µg/mL	Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
					+/-	152.0579	µg/mL	Unstressed
					+/-	152.4189	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBZ5026V)	2,511.8	µg/mL	+/-	14.6038	µg/mL	Gravimetric
					+/-	151.5480	µg/mL	Unstressed
					+/-	151.9078	µg/mL	Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKCG9378)	2,518.3	µg/mL	+/-	14.6413	µg/mL	Gravimetric
					+/-	151.9372	µg/mL	Unstressed
					+/-	152.2979	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,520.1	µg/mL	+/-	14.6522	µg/mL	Gravimetric
					+/-	152.0503	µg/mL	Unstressed
					+/-	152.4113	µg/mL	Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBZ6781)	2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
					+/-	152.0051	µg/mL	Unstressed
					+/-	152.3659	µg/mL	Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKCF5243)	2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
					+/-	152.0051	µg/mL	Unstressed
					+/-	152.3659	µg/mL	Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKCC8496)	2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
					+/-	151.9673	µg/mL	Unstressed
					+/-	152.3281	µg/mL	Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
					+/-	151.9598	µg/mL	Unstressed
					+/-	152.3206	µg/mL	Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 99%	(Lot WXBC4246V)	2,522.0	µg/mL	+/-	14.6631	µg/mL	Gravimetric
					+/-	152.1634	µg/mL	Unstressed
					+/-	152.5247	µg/mL	Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKCG5431)	2,519.8	µg/mL	+/-	14.6500	µg/mL	Gravimetric
					+/-	152.0277	µg/mL	Unstressed
					+/-	152.3886	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKCJ9905)	2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
					+/-	152.1333	µg/mL	Unstressed
					+/-	152.4945	µg/mL	Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,517.6	µg/mL	+/-	14.6377	µg/mL	Gravimetric
					+/-	151.8995	µg/mL	Unstressed
					+/-	152.2601	µg/mL	Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
					+/-	152.0579	µg/mL	Unstressed
					+/-	152.4189	µg/mL	Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,523.9	µg/mL	+/-	14.6740	µg/mL	Gravimetric
					+/-	152.2766	µg/mL	Unstressed
					+/-	152.6381	µg/mL	Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBK7741)	2,514.4	µg/mL	+/-	14.6188	µg/mL	Gravimetric
					+/-	151.7034	µg/mL	Unstressed
					+/-	152.0636	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 97%	(Lot FBL01)	2,510.7	µg/mL	+/-	14.5976	µg/mL	Gravimetric
					+/-	151.4831	µg/mL	Unstressed
					+/-	151.8427	µg/mL	Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,521.6	µg/mL	+/-	14.6609	µg/mL	Gravimetric
					+/-	152.1408	µg/mL	Unstressed
					+/-	152.5020	µg/mL	Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,517.0	µg/mL	+/-	14.6341	µg/mL	Gravimetric
					+/-	151.8622	µg/mL	Unstressed
					+/-	152.2228	µg/mL	Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
					+/-	151.5224	µg/mL	Unstressed
					+/-	151.8821	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

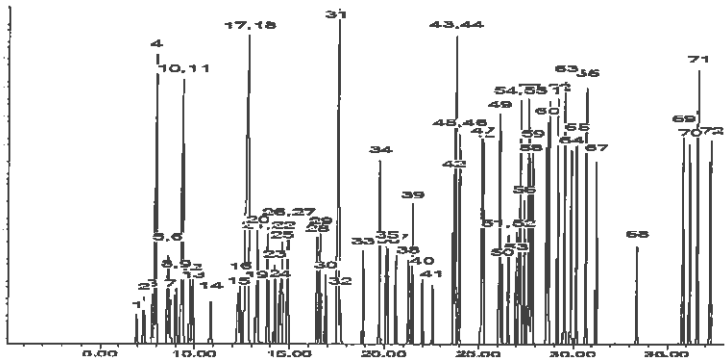
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 07-Apr-2020 **Balance:** B707717271

Fang-Yun Lo - QC Analyst

Date Passed: 13-Apr-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VOA8260MEGA1_00122

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0159680

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBL3107)	2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
					+/-	151.9598	µg/mL	Unstressed
					+/-	152.3206	µg/mL	Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot U22D706)	2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
					+/-	152.1559	µg/mL	Unstressed
					+/-	152.5171	µg/mL	Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot A0387097)	25,178.5	µg/mL	+/-	146.3823	µg/mL	Gravimetric
					+/-	1,519.1297	µg/mL	Unstressed
					+/-	1,522.7364	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBL0822)	2,513.9	µg/mL	+/-	14.6159	µg/mL	Gravimetric
					+/-	151.6732	µg/mL	Unstressed
					+/-	152.0333	µg/mL	Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 99%	(Lot MKCK1803)	2,517.3	µg/mL	+/-	14.6355	µg/mL	Gravimetric
					+/-	151.8768	µg/mL	Unstressed
					+/-	152.2374	µg/mL	Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBL0924)	2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
					+/-	152.1106	µg/mL	Unstressed
					+/-	152.4718	µg/mL	Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 580900)	2,524.5	µg/mL	+/-	14.6777	µg/mL	Gravimetric
					+/-	152.3143	µg/mL	Unstressed
					+/-	152.6759	µg/mL	Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBX0066)	2,523.0	µg/mL	+/-	14.6690	µg/mL	Gravimetric
					+/-	152.2244	µg/mL	Unstressed
					+/-	152.5858	µg/mL	Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot MKBH9850V)	2,523.8	µg/mL	+/-	14.6733	µg/mL	Gravimetric
					+/-	152.2690	µg/mL	Unstressed
					+/-	152.6305	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBK0551)	62,671.0	µg/mL	+/-	364.3555	µg/mL	Gravimetric
					+/-	3,781.2173	µg/mL	Unstressed
					+/-	3,790.1946	µg/mL	Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot SHBL6923)	2,524.3	µg/mL	+/-	14.6762	µg/mL	Gravimetric
					+/-	152.2992	µg/mL	Unstressed
					+/-	152.6608	µg/mL	Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 98%	(Lot 00008541)	2,516.6	µg/mL	+/-	14.6320	µg/mL	Gravimetric
					+/-	151.8400	µg/mL	Unstressed
					+/-	152.2005	µg/mL	Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBJ6179)	5,045.5	µg/mL	+/-	29.3350	µg/mL	Gravimetric
					+/-	304.4174	µg/mL	Unstressed
					+/-	305.1401	µg/mL	Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 98%	(Lot 190123CG)	2,514.9	µg/mL	+/-	14.6220	µg/mL	Gravimetric
					+/-	151.7366	µg/mL	Unstressed
					+/-	152.0968	µg/mL	Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKCF5831)	2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
					+/-	152.1333	µg/mL	Unstressed
					+/-	152.4945	µg/mL	Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 190919JLM)	2,522.3	µg/mL	+/-	14.6646	µg/mL	Gravimetric
					+/-	152.1785	µg/mL	Unstressed
					+/-	152.5398	µg/mL	Stressed

24	carbon tetrachloride		2,523.6	µg/mL	+/-	14.6726	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG8938V)			+/-	152.2615	µg/mL	Unstressed
	Purity 99%				+/-	152.6230	µg/mL	Stressed
25	n-Heptane (C7)		2,515.8	µg/mL	+/-	14.6270	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBK8626)			+/-	151.7883	µg/mL	Unstressed
	Purity 98%				+/-	152.1487	µg/mL	Stressed
26	1,2-Dichloroethane		2,522.6	µg/mL	+/-	14.6668	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCH9948)			+/-	152.2011	µg/mL	Unstressed
	Purity 99%				+/-	152.5625	µg/mL	Stressed
27	Benzene		2,514.6	µg/mL	+/-	14.6202	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBL4231)			+/-	151.7185	µg/mL	Unstressed
	Purity 99%				+/-	152.0787	µg/mL	Stressed
28	Trichloroethene		2,512.9	µg/mL	+/-	14.6101	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBJ4611)			+/-	151.6129	µg/mL	Unstressed
	Purity 99%				+/-	151.9728	µg/mL	Stressed
29	Methylcyclohexane		2,517.4	µg/mL	+/-	14.6362	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)			+/-	151.8844	µg/mL	Unstressed
	Purity 99%				+/-	152.2450	µg/mL	Stressed
30	1,2-Dichloropropane		2,519.5	µg/mL	+/-	14.6486	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	152.0126	µg/mL	Unstressed
	Purity 99%				+/-	152.3735	µg/mL	Stressed
31	1,4-Dioxane		50,250.0	µg/mL	+/-	292.1426	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBL3022)			+/-	3,031.8037	µg/mL	Unstressed
	Purity 99%				+/-	3,039.0017	µg/mL	Stressed
32	Dibromomethane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	152.2539	µg/mL	Unstressed
	Purity 99%				+/-	152.6154	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,523.0	µg/mL	+/-	14.6689	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 200107JLM)			+/-	152.2238	µg/mL	Unstressed
	Purity 99%				+/-	152.5852	µg/mL	Stressed
34	Toluene		2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKCH9232)			+/-	152.2389	µg/mL	Unstressed
	Purity 99%				+/-	152.6003	µg/mL	Stressed
35	Ethyl methacrylate		2,515.4	µg/mL	+/-	14.6246	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBF9649V)			+/-	151.7637	µg/mL	Unstressed
	Purity 99%				+/-	152.1240	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,521.1	µg/mL	+/-	14.6576	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot 19420164-D1119)			+/-	152.1061	µg/mL	Unstressed
	Purity 98%				+/-	152.4672	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,515.8	µg/mL	+/-	14.6268	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	151.7863	µg/mL	Unstressed
	Purity 99%				+/-	152.1467	µg/mL	Stressed
38	1,3-Dichloropropane		2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	151.9673	µg/mL	Unstressed
	Purity 99%				+/-	152.3281	µg/mL	Stressed
39	Tetrachloroethene		2,513.1	µg/mL	+/-	14.6115	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	151.6280	µg/mL	Unstressed
	Purity 99%				+/-	151.9880	µg/mL	Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 99%	(Lot MKCK6472)	2,513.5	µg/mL	+/-	14.6137	µg/mL	Gravimetric
					+/-	151.6506	µg/mL	Unstressed
					+/-	152.0106	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
					+/-	152.1559	µg/mL	Unstressed
					+/-	152.5171	µg/mL	Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBJ0839)	2,521.0	µg/mL	+/-	14.6573	µg/mL	Gravimetric
					+/-	152.1031	µg/mL	Unstressed
					+/-	152.4642	µg/mL	Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBL0265)	1,257.9	µg/mL	+/-	7.3134	µg/mL	Gravimetric
					+/-	75.8932	µg/mL	Unstressed
					+/-	76.0734	µg/mL	Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ7329)	1,260.0	µg/mL	+/-	7.3257	µg/mL	Gravimetric
					+/-	76.0214	µg/mL	Unstressed
					+/-	76.2019	µg/mL	Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBL0706)	2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
					+/-	152.1106	µg/mL	Unstressed
					+/-	152.4718	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 98%	(Lot GC01)	2,515.5	µg/mL	+/-	14.6256	µg/mL	Gravimetric
					+/-	151.7735	µg/mL	Unstressed
					+/-	152.1339	µg/mL	Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBK7739)	2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
					+/-	151.9146	µg/mL	Unstressed
					+/-	152.2752	µg/mL	Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCG7519)	2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
					+/-	151.8014	µg/mL	Unstressed
					+/-	152.1618	µg/mL	Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot P15E008)	2,516.8	µg/mL	+/-	14.6326	µg/mL	Gravimetric
					+/-	151.8467	µg/mL	Unstressed
					+/-	152.2072	µg/mL	Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBJ4835)	2,518.4	µg/mL	+/-	14.6420	µg/mL	Gravimetric
					+/-	151.9447	µg/mL	Unstressed
					+/-	152.3055	µg/mL	Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCJ0238)	2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
					+/-	152.2389	µg/mL	Unstressed
					+/-	152.6003	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,520.9	µg/mL	+/-	14.6566	µg/mL	Gravimetric
					+/-	152.0956	µg/mL	Unstressed
					+/-	152.4567	µg/mL	Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
					+/-	152.0579	µg/mL	Unstressed
					+/-	152.4189	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBZ5026V)	2,511.8	µg/mL	+/-	14.6038	µg/mL	Gravimetric
					+/-	151.5480	µg/mL	Unstressed
					+/-	151.9078	µg/mL	Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKCG9378)	2,518.3	µg/mL	+/-	14.6413	µg/mL	Gravimetric
					+/-	151.9372	µg/mL	Unstressed
					+/-	152.2979	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,520.1	µg/mL	+/-	14.6522	µg/mL	Gravimetric
					+/-	152.0503	µg/mL	Unstressed
					+/-	152.4113	µg/mL	Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBZ6781)	2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
					+/-	152.0051	µg/mL	Unstressed
					+/-	152.3659	µg/mL	Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKCF5243)	2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
					+/-	152.0051	µg/mL	Unstressed
					+/-	152.3659	µg/mL	Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKCC8496)	2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
					+/-	151.9673	µg/mL	Unstressed
					+/-	152.3281	µg/mL	Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
					+/-	151.9598	µg/mL	Unstressed
					+/-	152.3206	µg/mL	Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 99%	(Lot WXBC4246V)	2,522.0	µg/mL	+/-	14.6631	µg/mL	Gravimetric
					+/-	152.1634	µg/mL	Unstressed
					+/-	152.5247	µg/mL	Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKCG5431)	2,519.8	µg/mL	+/-	14.6500	µg/mL	Gravimetric
					+/-	152.0277	µg/mL	Unstressed
					+/-	152.3886	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKCJ9905)	2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
					+/-	152.1333	µg/mL	Unstressed
					+/-	152.4945	µg/mL	Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,517.6	µg/mL	+/-	14.6377	µg/mL	Gravimetric
					+/-	151.8995	µg/mL	Unstressed
					+/-	152.2601	µg/mL	Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
					+/-	152.0579	µg/mL	Unstressed
					+/-	152.4189	µg/mL	Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,523.9	µg/mL	+/-	14.6740	µg/mL	Gravimetric
					+/-	152.2766	µg/mL	Unstressed
					+/-	152.6381	µg/mL	Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBK7741)	2,514.4	µg/mL	+/-	14.6188	µg/mL	Gravimetric
					+/-	151.7034	µg/mL	Unstressed
					+/-	152.0636	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 97%	(Lot FBL01)	2,510.7	µg/mL	+/-	14.5976	µg/mL	Gravimetric
					+/-	151.4831	µg/mL	Unstressed
					+/-	151.8427	µg/mL	Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,521.6	µg/mL	+/-	14.6609	µg/mL	Gravimetric
					+/-	152.1408	µg/mL	Unstressed
					+/-	152.5020	µg/mL	Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,517.0	µg/mL	+/-	14.6341	µg/mL	Gravimetric
					+/-	151.8622	µg/mL	Unstressed
					+/-	152.2228	µg/mL	Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
					+/-	151.5224	µg/mL	Unstressed
					+/-	151.8821	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

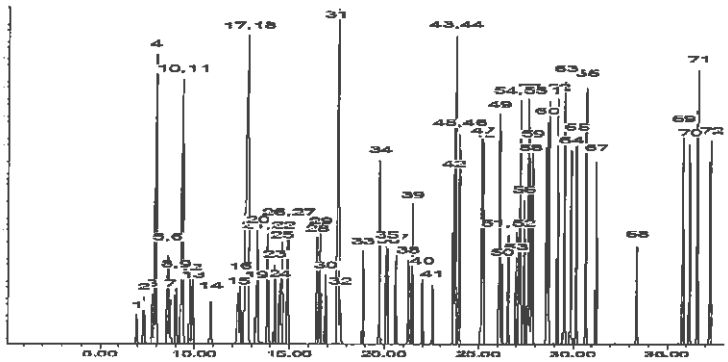
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 07-Apr-2020 **Balance:** B707717271

Fang-Yun Lo - QC Analyst

Date Passed: 13-Apr-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VOA8260SURRES_00168

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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0156891

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,510.9 µg/mL	+/- 14.5986 µg/mL +/- 140.7837 µg/mL +/- 144.0778 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,510.2 µg/mL	+/- 14.5945 µg/mL +/- 140.7444 µg/mL +/- 144.0377 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot I-21928) **Purity** 99%	2,513.0 µg/mL	+/- 14.6105 µg/mL +/- 140.8986 µg/mL +/- 144.1955 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,514.4 µg/mL	+/- 14.6186 µg/mL +/- 140.9771 µg/mL +/- 144.2758 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOA8260SURRES_00182

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0172587

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane		2,510.9 µg/mL	+/-	14.5983	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 012021)		+/-	140.7809	µg/mL	Unstressed
	Purity 99%			+/-	144.0750	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,518.0 µg/mL	+/-	14.6399	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-29377)		+/-	141.1818	µg/mL	Unstressed
	Purity 99%			+/-	144.4852	µg/mL	Stressed
3	Toluene-d8		2,500.4 µg/mL	+/-	14.5375	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-31750)		+/-	140.1949	µg/mL	Unstressed
	Purity 99%			+/-	143.4753	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,520.9 µg/mL	+/-	14.6567	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)		+/-	141.3444	µg/mL	Unstressed
	Purity 99%			+/-	144.6516	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOABFBRES_00108

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0173810

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,504.0 µg/mL	+/- 14.8730	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 140.4298	µg/mL	Unstressed
	Purity 99%		+/- 143.7141	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOABFBRES_00112

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0173810

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,504.0 µg/mL	+/- 14.8730	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 140.4298	µg/mL	Unstressed
	Purity 99%		+/- 143.7141	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

WCOD1000P_00036

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CERTIFICATE OF ANALYSIS

Description: COD STANDARD, 1mL = 1mg COD

Mfg. Date: 08/31/2020

Catalog Number: LC13245

Exp. Date: 08/31/2022

Lot Number: K239-20

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Assay (as mg/mL COD)	1.00 mg/mL +/- 0.01	1.00 mg/mL
Traceable to NIST	Potassium Hydrogen Phthalate	84L

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

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04/19/2021 4:35 PM

Form #17.13 07/28/2016

Reagent

WCOD1000S_00021

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customerservice@riccachemical.com

Certificate of Analysis

Potassium Acid Phthalate Standard, 1000 ppm Chemical Oxygen Demand (COD)

Lot Number: 2103D87 **Product Number:** 5868

Manufacture Date: MAR 11, 2021
Expiration Date: AUG 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is estimated based upon the volumetric method of preparation. It is certified that a COD of 500 mg/L should be obtained on a 25.0 mL aliquot of this standard solution diluted to 50 mL. The manufacturing specification for this product is Chemical Oxygen Demand (COD) = 1.000 ± 0.005 mg per mL at 20°C. This is the equivalent quantity of Oxygen that this standard solution will consume, based on the reduction of a Potassium Dichromate Standard Solution under the specified conditions in the ASTM D 1252-95 test methods.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Chemical Oxygen Demand (COD)	995-1005 ppm	1000 ppm

Specification	Reference
Potassium Acid Phthalate Solution, Standard (1 mL = 1 mg COD)	ASTM (D 1252 A)
Potassium Acid Phthalate Solution, Standard (1 mL = 1 mg/L)	ASTM (D 1252 B)
Stock Potassium Acid Phthalate	EPA (410.4)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5868-16	500 mL natural poly	18 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Kerry Kingsbury

Kerry Kingsbury (03/11/2021)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

Reagent

WNH31000P_00031

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4265351
ID WNH21000P_00021
Exp 03/19/23 Prpd PMH Opn 05/25/21
1000 ppm ammonia stock st

4265284
ID WTKN1000F_00006
Exp 03/19/23 Prpd PMH Opn 05/25/21
1000 ppm ammonia stock st

CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 03/19/2021

Catalog Number: LC17940

Exp. Date: 03/19/2023

Lot Number: L078-13

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	996 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	0.996 mg N/mL
Traceable to NIST	Potassium Chloride	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Greg Albright

An ISO9001:2015 certified company. Registration # 0306-01 05/25/2021 1:29 PM

Form #17.13 07/28/2016

Reagent

WNH31000S_00021

3710271
ID: WNH31000S_00020
Exp:03/03/22 Prpd:TAM Opn:05/21/20
1000 ppm ammonia secondar

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CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 03/03/2020

Catalog Number: LC17940

Exp. Date: 03/03/2022

Lot Number: K058-18

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	1006 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	1.006 mg N/mL
Traceable to NIST	Potassium Chloride	999b

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Greg Albright

An ISO9001:2008 certified company. Registration # 0306-01

05/21/2020 8:51 PM

Form #17.13 07/28/2016

Reagent

WpHBuffer7CCV_00079

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4538572
ID: WpHBuffer7CCV_00079
Exp:09/29/23 Prpd:MTW Opn:11/10/21
pH Buffer 7 LCS

CERTIFICATE OF ANALYSIS

Description: BUFFER SOLUTION pH 7.0 Yellow

Catalog Number: LC12380

Lot Number: L265-02

Mfg. Date: 09/29/2021

Exp. Date: 09/29/2023

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, yellow solution	Pass Test
pH @ 25 degrees C	pH 7.00 +/- 0.01	7.01
Traceable to NIST SRMs		186g 187f

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Greg Albright

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11/10/2021 1:43 PM

Form #17.13 07/28/2016

Reagent

WpHBuffer7P_00038

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4538549
ID: WpHBuffer7P_00038
Exp:08/09/23 Prpd:MTW Opn:11/10/21
pH Buffer 7

CERTIFICATE OF ANALYSIS

Description: BUFFER SOLUTION pH 7.0

Mfg. Date: 08/09/2021

Catalog Number: LC12370

Exp. Date: 08/09/2023

Lot Number: L217-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
pH @ 25 degrees C	pH 7.00 +/- 0.01	7.01
Verified against NIST buffer		186g, 187f

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Greg Albright

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Form #17.13 07/28/2016

Reagent

WResPSP_00080

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Certified Reference Materials

4549931
ID: WResPSP_00080
Exp: 04/30/24 Prpd: KMM
Phenova Residue LCS

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WP Solids — Lot #8222-09

TNI Analyte Code	Analyte	Certified Value mg/L	Acceptance Limits mg/L	Acceptance Limits %
1955	Total Dissolved Solids at 180° (TFR)	150	105 - 195	70.0 - 130
1960	Total Suspended Solids (TSS)	29.0	20.2 - 34.9	69.7 - 120
1950	Total Solids (TS)	179	134 - 224	74.9 - 125

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Solvent = Deionized Water

Store at 20-25°C.

Expiration Date: 04/24

Catalog #QC-SOL-WP

Preparation Instructions: The WP Solids standard is provided as a ready-to-use standard that does not require dilution prior to use. Shake adequately to homogenize the standard before removing an aliquot for analysis. Analyze by your normal procedures.

Note: It is strongly recommended that you analyze for TSS prior to removing aliquots for other analyses from the Solids bottle.

Approved by: BJW

Reviewed by: AMB

Date: 10/21

Date: 10/21