
Appendix G

Data Usability Study Report

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

Date: June 19th, 2022

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD41695**

Client Project ID: 12123:6 – 23-34 Pearl Street, Port Chester, NY

Dear Mr. Noonan,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD41695 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-12123:6 – 23-34 Pearl Street, Port Chester, NY- JD41695

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 23-34 Pearl Street, Port Chester, NY

SGS North America Inc.

Laboratory (SDG) # JD41695

Project No. 12123:6

Prepared for:

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.
Data Validation and Forensic Geochemistry Expert

On

June 19th, 2022

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1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

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IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008

6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD41695

NYS DEC Data Usability Summary Report**SDG # JD41695**

Site Location	12123:6 – 23-34 Pearl Street, Port Chester, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	7 Soil Samples, 1 Trip Blank
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-1A-2-2A-3-3A-4-4A-5-5A-6-6A-7-7A-8)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- SAMPLE HANDLING AND MANAGEMENT**

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on 03/21/2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on 03/22/2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
RI-SB-9 (0.5-1)	JD41695-1
RI-SB-9 (0.5-1)	JD41695-1A
RI-SB-9 (4-4.5)	JD41695-2
RI-SB-9 (4-4.5)	JD41695-2A
RI-SB-9 (9-9.5)	JD41695-3
RI-SB-9 (9-9.5)	JD41695-3A
RI-SB-6 (0.5-1)	JD41695-4
RI-SB-6 (0.5-1)	JD41695-4A
RI-SB-6 (4.5-5)	JD41695-5
RI-SB-6 (4.5-5)	JD41695-5A
RI-SB-6 (9.5-10)	JD41695-6
RI-SB-6 (9.5-10)	JD41695-6A
RI-SB-6 (11.5-12)	JD41695-7
RI-SB-6 (11.5-12)	JD41695-7A
TB	JD41695-8

- **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference

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1	-Detected results of 1,3-Butadiene, Hexane, t-butyl formate iodomethane, in the associated samples, RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified estimated (J). -Detected results of Chlorodifluoromethane, tert amyl alcohol, iodomethane, in the associated sample, TB/JD41695-8, should be qualified estimated (J).	ICV
2	-Detected results of Ethanol, Dichlorodifluoromethane, 1,3-Butadiene, Acrolein, Acrylonitrile, 2-Nitropropane, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, tert amyl alcohol, n-Butyl alcohol, 3-methyl-1-butanol, in the associated samples, RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified estimated (J). -Detected results of 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, 1,3-Butadiene, Ethyl Ether, Acetone, acetonitrile, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Propionitrile, Tetrahydrofuran, t-Butyl Formate, iso-butyl alcohol, tert-Amyl-Alcohol, n-butyl alcohol, 2-chloroethyl vinyl ether, 3-methyl-1-butanol, Bromoform, Hexachloroethane, 2-Methylnaphthalene, in the associated sample, TB/JD41695-8, should be qualified estimated (J).	CCV
3	-Detected results of target VOCs compounds minus Methylcyclohexane , in sample RI-SB-9 (9-9.5)/JD41695-3, should be qualified Estimated Bias High (J+).	SR
4	-Detected results of Acetone, 2-Butanone (MEK), Dichlorodifluoromethane, in sample TB/JD41695-8, must be qualified estimated-Bias High (J+).	LCS

✓ Semi-Volatile Organic Compounds – SW846 8270E Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Pentachloronitrobenzene, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be considered Estimated (J).	ICV
2	-Detected results of Hydroquinone, 2,4-Dinitrophenol, Pentachlorophenol, Pentachloronitrobenzene, in samples RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (J). -Detected results of Benzoic Acid, 2,4-Dinitrophenol, Pentachlorophenol, Pyrene, Indeno[1,2,3-cd]pyrene, Dibenz(a,h)acridine, Dibenz(a,h)anthracene,	CCV

	Benzo[g,h,i]perylene, Pentachloronitrobenzene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (J).	
3	-Detected results of 2,4-Dimethylphenol, 4-Nitrophenol, Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, 2,4,6-Trichlorophenol, 1,4-Dioxane, Hexachlorocyclopentadiene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias Low (J-). -Non-Detected results of Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, 2,4,6-Trichlorophenol, 1,4-Dioxane, Hexachlorocyclopentadiene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (UJ). -Non-Detected results of 2,4-Dimethylphenol, 4-Nitrophenol, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Unusable (R).	MS/MSD

✓ **Pesticides - SW846 8081B Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of 4,4'-DDT, in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (J). -Detected results of Mirex, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (J).	CCV
2	-Detected results of alpha-BHC, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, that are less than 2X the blank concentration (2.6, 1.46, 1.68, 83.2), in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be reported Not Detected (U). -Detected results of 4,4'-DDT, that are less than the blank concentration (41.6), in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Unusable (R). -Detected results of alpha-BHC, 4,4'-DDD, 4,4'-DDT, that are less than 2X the blank concentration (1.78; 12.6, 27.8), in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be reported Not Detected (U). -Detected results of 4,4'-DDD, 4,4'-DDT, that are less than the blank concentration (6.3; 13.9), in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be qualified Unusable (R).	BLK
3	-Detected results of 4,4'-DDT, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be considered Estimated Bias-High (J+).	LCS
4	-Detected results of 4,4'-DDD, 4,4'-DDT, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias-High (J+). -Detected results of Endrin aldehyde, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias-Low (J-).	MS/MSD

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	-Non-Detected results of Endrin aldehyde, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (UJ).	

✓ Polychlorinated Biphenyls (PCBs) – SW846 8082A Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Aroclor target compounds in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated Bias Low (J-). -Non-Detected results of Aroclor target compounds in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (UJ).	LCS

✓ PFAS-NYSDEC Target List - EPA 537M Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ TAL Metals - SW846 6010D, 7471B Methods

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Antimony, Manganese, Potassium, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated Bias-Low (J-). -Non- Detected results of Antimony, Manganese, Potassium, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (UJ). -Detected results of Calcium, Lead in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated Bias High (J+).	SSR
2	-Detected results of Calcium, Copper, Lead, Magnesium, Zinc, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (J).	ISDil

✓ Cyanide - SW846 9012B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	7 Soil Samples, 1 Trip Blank
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7-8)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V1C7993-ICC7993 analyzed on 01/11/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*1,3-Butadiene, Hexane, t-butyl formate, failed Initial Calibration Criteria for Mean RRFs where Mean RRFs were below the allowable minimum.

*%RSDs for Iodomethane was above the allowable maximum.

-In the initial calibration reference sample: V3D7392-ICC7392 analyzed on 03/11/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*Chlorodifluoromethane, tert amyl alcohol, failed Initial Calibration Criteria for Mean RRFs where Mean RRFs were below the allowable minimum.

*%RSDs for Iodomethane, tert amyl alcohol, were above the allowable maximum.

-In the initial calibration reference sample: VD11224-ICC11224 analyzed on 11/09/2021, both the average RRFs and %RSDs for target compound Methylcyclohexane, were in compliance with the method calibration criteria.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of 1,3-Butadiene, Hexane, t-butyl formate iodomethane, in the associated samples, RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified estimated (J).

-Detected results of Chlorodifluoromethane, tert amyl alcohol, iodomethane, in the associated sample, TB/JD41695-8, should be qualified estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

-The continuing calibration reference sample: V1C8045-CC7993, analyzed on 03/23/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, Dichlorodifluoromethane, 1,3-Butadiene, Acrolein, Acrylonitrile, 2-Nitropropane, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, Where %Ds were above the method allowable maximums. RRFs for tert amyl alcohol, n-Butyl alcohol, 3-methyl-1-butanol, were below the allowable minimum.

-The continuing calibration reference sample: V3D7412-CC7392, analyzed on 03/23/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, 1,3-Butadiene, Ethyl Ether, Acetone, acetonitrile, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Propionitrile, Tetrahydrofuran, t-Butyl Formate, iso-butyl alcohol, tert-Amyl-Alcohol, n-butyl alcohol, 2-chloroethyl vinyl ether, 3-methyl-1-butanol, Bromoform,

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Hexachloroethane, 2-Methylnaphthalene, Where %Ds were above the method allowable maximums. RRFs for n-butyl alcohol, was below the allowable minimum.

-The continuing calibration reference sample: VD11374-CC11224, analyzed on 03/24/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) for target VOC compound Methylcyclohexane.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Ethanol, Dichlorodifluoromethane, 1,3-Butadiene, Acrolein, Acrylonitrile, 2-Nitropropane, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, tert amyl alcohol, n-Butyl alcohol, 3-methyl-1-butanol, in the associated samples, RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified estimated (J).

-Detected results of 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, 1,3-Butadiene, Ethyl Ether, Acetone, acetonitrile, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Propionitrile, Tetrahydrofuran, t-Butyl Formate, iso-butyl alcohol, tert-Amyl-Alcohol, n-butyl alcohol, 2-chloroethyl vinyl ether, 3-methyl-1-butanol, Bromoform, Hexachloroethane, 2-Methylnaphthalene, in the associated sample, TB/JD41695-8, should be qualified estimated (J).

- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: V3D7412-MB, V1C8045-MB, on 03/23/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples, EXCEPT:

*%Rs of Surrogate 1,2-Dichloroethane-D4, in sample RI-SB-9 (9-9.5)/JD41695-3, analyzed on 03/23/2022, was above method control limit.

Quality Judgement:

-Detected results of target VOCs compounds **minus** Methylcyclohexane, in sample RI-SB-9 (9-9.5)/JD41695-3, should be qualified Estimated Bias High (J+).

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- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:
-In LCS ID# V3D7412-BS, on 03/23/2022, %Rs for all target volatile compounds were within the method control limits, EXCEPT:
*%Rs for Acetone, 2-Butanone (MEK), Dichlorodifluoromethane, were above control limits.
-In LCS ID# V1C8045-BS, on 03/23/2022, %Rs for all target volatile compounds were within the method control limits.

Quality Judgement:

-Detected results of Acetone, 2-Butanone (MEK), Dichlorodifluoromethane, in sample TB/JD41695-8, must be qualified estimated-Bias High (J+).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was analyzed using sample RI-SB-6 (4.5-5)/JD41695-5.
The following summarizes this evaluation:

	Detected Compounds	RI-SB-6 (4.5-5)/JD41695-5 (ug/kg)	JD41695-5DUP (ug/kg)	%RPDs
1	Methylene Chloride	ND	3.4J	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs was not calculated.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
-Sample RI-SB-6 (0.5-1)/JD41695-4 was analyzed for matrix spike (JD41695-4MS):
%Rs of target compounds were within method control limits.
Quality Judgement: No Actions are required.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of EM7725-ICC7725 on 03/22/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloro-nitrobenzene, where Average RRF was below the allowable minimum. %RSDs were

below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (Sample: EM7730-CC7725 on 03/25/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Hydroquinone, 2,4-Dinitrophenol, Pentachlorophenol, where %Ds were above the allowable maximums. RRFs for Pentachloronitrobenzene, was below the allowable minimum.

-The continuing calibration (Sample: EM7732-CC7725 on 03/28/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Benzoic Acid, 2,4-Dinitrophenol, Pentachlorophenol, Pyrene, Indeno[1,2,3-cd]pyrene, Dibenz(a,h)acridine, Dibenz(a,h)anthracene, Benzo[g,h,i]perylene, where %Ds were above the allowable maximums. RRFs for Pentachloronitrobenzene, was below the allowable minimum.

-Note: Sample RI-SB-9 (9-9.5)/JD41695-3, was re-analyzed with dilution on 03/28/2022 for 2-Methylnaphthalene. CCV was acceptable for this compound.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Hydroquinone, 2,4-Dinitrophenol, Pentachlorophenol, Pentachloronitrobenzene, in samples RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (J).

-Detected results of Benzoic Acid, 2,4-Dinitrophenol, Pentachlorophenol, Pyrene, Indeno[1,2,3-cd]pyrene, Dibenz(a,h)acridine, Dibenz(a,h)anthracene, Benzo[g,h,i]perylene, Pentachloronitrobenzene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, in OP38774-MB1 on 03/25/2022.

Quality Judgement: No actions are required.

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- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.Quality Judgement: No actions are required.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38774-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was not analyzed in this samples set.
 - No field duplicate sample was included in this samples set.Quality Judgement: No actions are required.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SB-9 (0.5-1)/JD41695-1. The following summarizes MS/MSD evaluation:
 - * In OP38774-MS, % Rs for 2,4-Dimethylphenol, 4-Nitrophenol, were ZERO. %Rs for Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, 2,4,6-Trichlorophenol, 1,4-Dioxane, Hexachlorocyclopentadiene, were below control limits.
 - * In OP38774-MSD, %RPDs of over 90% of target VOCs were above the allowable maximum.Quality Judgement:
 - Detected results of 2,4-Dimethylphenol, 4-Nitrophenol, Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, 2,4,6-Trichlorophenol, 1,4-Dioxane, Hexachlorocyclopentadiene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias Low (J-).
 - Non-Detected results of Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, 2,4,6-Trichlorophenol, 1,4-Dioxane, Hexachlorocyclopentadiene, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (UJ).
 - Non-Detected results of 2,4-Dimethylphenol, 4-Nitrophenol, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Unusable (R).
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: G4G3719-ICC3719 on 03/23/2022, %RSDs for pesticides target compounds, were below the allowable maximum.Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G4G3724-CC3719 on 03/29/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G4G3724-CC3719 on 03/30/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT:

*%Ds for Alachlor (Column 1), 4,4'-DDT (both columns), were above the allowable maximum.

-In continuing calibration (G4G3727-CC3719 on 03/31/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G4G3728-CC3719 on 03/31/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for Mirex (both columns), Endrin Ketone (Column 1), where %Ds were above the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDT, in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (J).

-Detected results of Mirex, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (J).

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds, EXCEPT:
 - *In Blank OP38829-MB1, on 03/29/2022, a detection of alpha-BHC (1.3 ug/kg), 4,4'-DDD (0.73 ug/kg), 4,4'-DDE (0.84 ug/kg), 4,4'-DDT (**41.6 ug/kg**), has been reported.
 - *In Blank OP38829-MB1, on 03/31/2022, a detection of alpha-BHC (0.89 ug/kg), 4,4'-DDD (**6.3 ug/kg**), 4,4'-DDT (**13.9 ug/kg**), has been reported.

Quality Judgement:

-Detected results of alpha-BHC, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, that are less than 2X the blank concentration (**2.6, 1.46, 1.68, 83.2**), in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be reported Not Detected (U).

-Detected results of 4,4'-DDT, that are less than the blank concentration (**41.6**), in samples RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Unusable (R).

-Detected results of alpha-BHC, 4,4'-DDD, 4,4'-DDT, that are less than 2X the blank concentration (**1.78; 12.6, 27.8**), in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be reported Not Detected (U).

-Detected results of 4,4'-DDD, 4,4'-DDT, that are less than the blank concentration (**6.3; 13.9**), in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (9.5-10)/JD41695-6, should be qualified Unusable (R).

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- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS (OP38829-BS13), %Rs for Toxaphene, was within the method control limits.

-In LCS (OP38829-BS1, OP38829-BSD, on 03/29/2022), %Rs were within the method control limits, EXCEPT:

*%Rs for 4,4'-DDT, were above method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDT, in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated Bias-High (J+).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SB-9 (0.5-1)/JD41695-1. The following summarizes MS/MSD evaluation:

*In OP38829-MS, %Rs for 4,4'-DDD, 4,4'-DDT, were above control limits. %Rs for Endrin aldehyde, was below control limit.

*In OP38829-MSD, %Rs were within control limits. %RPDS for 4,4'-DDT, was above the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDD, 4,4'-DDT, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias-High (J+).

-Detected results of Endrin aldehyde, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Endrin aldehyde, in sample RI-SB-9 (0.5-1)/JD41695-1, should be qualified Estimated (UJ).

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of GRK225-ICC225 on 03/24/2022, %RSDs for all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: GRK231-CC225, GRK232-CC225 on 03/30/2022, GRK233-CC225 on 03/31/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38830-MB1 analyzed on 03/30/2022, OP38830-MB1 on 03/31/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38830-BS1), %Rs for Aroclor 1016, Aroclor 1260 were below method control limits.
 - In LCSDUP (OP38830-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were above the allowable maximum.

Quality Judgement:

-Detected results of Aroclor target compounds in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Aroclor target compounds in samples RI-SB-9 (0.5-1)/JD41695-1, RI-SB-9 (4-4.5)/JD41695-2, RI-SB-9 (9-9.5)/JD41695-3, RI-SB-6 (0.5-1)/JD41695-4, RI-SB-6 (4.5-5)/JD41695-5, RI-SB-6 (9.5-10)/JD41695-6, RI-SB-6 (11.5-12)/JD41695-7, should be qualified Estimated (UJ).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SB-9 (4-4.5)/JD41695-2. The following summarizes MS/MSD evaluation:
 - *%Rs for target aroclor compounds in OP38830-MS, OP38830-MSD, were within method control limits.Quality Judgement: No actions are required.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1A-2A-3A-4A-5A-6A-7A)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
 - The initial calibration methods used in this data set, sample reference ID: S3Q784-ICC784 on 03/29/2022, display an acceptable performance and compliance with the method criteria listed above.Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for all target PFAS compounds: Required frequency (one

per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference IDs: S3Q785-CC784 on 03/28/2022, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S3Q785-IBLK, on 03/29/2022, OP90437-MB, on 03/30/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:

-Isotope Dilution Standard Recoveries (%Rs) of 18 spiked surrogate standards in all samples of this set, were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP90437-BS analyzed on 03/30/2022, %Rs of all target PFAS compounds were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

Quality Judgement: No actions are required.

- **Laboratory and Field Duplicates (DUP):** Laboratory duplicate from the samples set wasn't analyzed.

-No field duplicate sample was included in this samples set.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in RI-SB-9 (0.5-1)/JD41695-1A. The following summarizes MS/MSD evaluation:

-In OP90437-MS, %Rs for target PFAS compounds were within method control limits.

-In OP90437-MSD, %Rs for target PFAS compounds were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
-In File ID: SF032422M1.ICP, analyzed on 03/24/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.

Quality Judgement: No actions are required.

- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
-In File ID: SF032422M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/24/2022, %Rs for total target metals were within method control limits (70-130%).

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
-In QC Batch ID: MP31847, on 03/23/2022, File ID: SF032422M1.ICP, on 03/24/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - In File ID: SF032422M1.ICP, analyzed on 03/24/2022, %Rs for target metals (EPA 6010D), were within the method control limits.
 - File ID: SD021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
 - In LCS QC Batch ID: MP31847, on 03/23/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.

Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
 - In QC Batch ID: MP31847, laboratory used sample RI-SB-6 (9.5-10)/JD41695-6, for matrix spike processes. %Rs were within method control limits, EXCEPT:
 - *In MS sample, %Rs for Antimony, Manganese, Potassium, were below control limits. %Rs for Calcium was above control limit.
 - *In MSD sample, %Rs for Antimony, Manganese, Potassium, were below control limits. %Rs for Lead was above control limit. %RPDs for Calcium, Lead, were above the allowable maximum.

Quality Judgement:

 - Detected results of Antimony, Manganese, Potassium, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated Bias-Low (J-).
 - Non- Detected results of Antimony, Manganese, Potassium, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (UJ).
 - Detected results of Calcium, Lead in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated Bias High (J+).
- **Laboratory Duplicate (DUP):** Target metals for Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
 - No field duplicate sample, nor laboratory duplicate sample were included in this samples set.

Quality Judgement: No actions are required.
- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x

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the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):

-In QC Batch ID: MP31847/sample RI-SB-6 (9.5-10)/JD41695-6, on 03/23/2022, was used for ICP Serial Dilution Evaluation. %Ds of target metals (EPA 6010D) were below the allowable maximum, EXCEPT for Calcium, Copper, Lead, Magnesium, Zinc, where %Ds were above the allowable maximum.

Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.

Quality Judgement:

-Detected results of Calcium, Copper, Lead, Magnesium, Zinc, in sample RI-SB-6 (9.5-10)/JD41695-6, should be qualified Estimated (J).

- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, in File ID: H9032822S1.CSV, analyzed on 03/28/2022, were in compliance with method quality control criteria.

Quality Judgement: No actions are required.

- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41695

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	7 Soil Samples
Sampled On	03/21/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41695 (1-2-3-4-5-6-7)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria (90%<%Rs<110%):
-In File ID: E032422W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package in batch ID # GP39144/GN27549, reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits-80-120%). The following summarizes this evaluation:
-In Batch IDs (GP39144/GN27549), for Cyanide LCS evaluation, %Rs were within the method control limits.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
-In batch ID: GP39144/GN27549 JD41577-1, the out of samples set, was spiked with Cyanide standard for matrix spike evaluation, %Rs was below the method control limits (75-125%).
-Quality Judgement: No actions are required.

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- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-%RPDs for laboratory duplicate of out of samples set in batch ID# GP39144/GN27549 JD41577-1, were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

Page 1 of 5

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

Response Factor Report GCMS1C

Method : C:\MSDCHEM\1\METHODS\M1CS7993.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Jan 11 14:50:44 2022
Response via : Initial Calibration

Calibration Files

1 =1C183570.D 0.5 =1C183569.D 100 =1C183576.D 50 =1C183575.D
20 =1C183574.D 200 =1C183577.D 4 =1C183572.D 2 =1C183571.D
8 =1C183573.D 0.2 =1C183568.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol	1.041	1.186	1.159	1.142	1.147	1.180	1.278	1.150		1.160	5.62	
3) ethanol		0.144	0.139	0.118	0.112	0.125	0.112	0.117		0.124	10.42	
4) 1,4-dioxane		0.129	0.125	0.122	0.120	0.121	0.116	0.121		0.122	3.42	
5) I pentafluorobenzene -----ISTD-----												
6) dichlorodifluoromethane	0.497	0.584	0.548	0.547	0.524	0.504	0.490	0.540	0.517	0.686	0.544	10.55
7) chlorodifluoromethane	0.466	0.456	0.452	0.469	0.448	0.407	0.446	0.476	0.466	0.593	0.468	10.25
8) chloromethane	0.656		0.549	0.579	0.569	0.492	0.562	0.634	0.569		0.576	8.78
9) vinyl chloride	0.454	0.501	0.475	0.482	0.471	0.435	0.432	0.486	0.463	0.468	0.466	4.62
10) 1,3-butadiene *This compound fails Initial Calibration criteria*	0.277	0.276	0.274	0.290	0.283	0.250	0.272	0.299	0.288	0.320	0.283	6.51
11) bromomethane		0.313	0.317	0.337	0.285	0.386		0.367		0.334	11.19	
12) chloroethane	0.202	0.228	0.227	0.227	0.218	0.214	0.200	0.222	0.216	0.243	0.220	5.91
13) trichlorofluoromethane	0.589	0.643	0.604	0.603	0.586	0.558	0.535	0.596	0.583	0.668	0.596	6.36
14) ethyl ether	0.108		0.145	0.142	0.133	0.139	0.130	0.132	0.129		0.132	8.72
15) acrolein		0.042	0.039	0.034	0.040			0.032		0.037	11.28	
16) freon 113	0.301	0.239	0.285	0.292	0.277	0.268	0.278	0.286	0.284	0.291	0.280	6.06
17) 1,1-dichloroethene	0.365		0.307	0.317	0.314	0.288	0.333	0.341	0.329		0.324	7.21
18) acetone	0.069	0.084	0.072	0.069	0.064	0.064	0.076	0.070	0.067		0.071	8.96
19) acetonitrile	0.032	0.035	0.035	0.035	0.033	0.031	0.033	0.035	0.033		0.034	4.13
20) iodomethane *This compound fails Initial Calibration criteria*		0.478	0.417	0.291	0.467	0.146		0.197		0.333	42.79	
21) carbon disulfide	1.056	1.188	0.963	0.986	0.947	0.909	0.968	1.032	0.970		1.002	8.20
22) methylene chloride	0.381		0.318	0.319	0.309	0.304	0.340	0.383	0.332		0.336	9.24
23) methyl acetate												

Initial Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

	0.195	0.214	0.210	0.195	0.197	0.213	0.191	0.190	0.201	4.98
24)	methyl tert butyl ether									
	0.615	0.593	0.724	0.701	0.646	0.681	0.665	0.664	0.646	5.88
25)	trans-1,2-dichloroethene									
	0.417	0.345	0.353	0.343	0.325	0.357	0.399	0.373	0.364	8.45
26)	di-isopropyl ether									
	0.999	0.968	1.155	1.137	1.067	1.070	1.094	1.114	1.058	5.37
27)	2-butanone									
	0.025	0.025	0.022	0.023	0.020	0.017	0.021		0.022	12.53
28)	1,1-dichloroethane									
	0.540	0.508	0.541	0.554	0.539	0.495	0.555	0.570	0.553	4.33
29)	chloroprene									
	0.431	0.415	0.501	0.508	0.480	0.464	0.466	0.481	0.494	7.42
30)	acrylonitrile									
	0.095	0.091	0.084	0.087	0.070		0.075		0.084	11.24
31)	hexane *This compound fails Initial Calibration criteria*									
	0.552	0.581	0.533	0.540	0.512	0.500	0.506	0.531	0.526	4.72
32)	vinyl acetate									
	0.049	0.049	0.041	0.046			0.040		0.045	9.63
33)	ethyl tert-butyl ether									
	0.772	0.736	0.972	0.952	0.866	0.920	0.880	0.900	0.857	9.06
34)	ethyl acetate									
	0.041	0.040	0.037	0.037	0.034		0.040		0.038	7.34
35)	2,2-dichloropropane									
	0.470	0.465	0.472	0.480	0.463	0.438	0.475	0.485	0.482	3.85
36)	cis-1,2-dichloroethene									
	0.400	0.447	0.367	0.376	0.364	0.341	0.394	0.400	0.380	7.43
37)	methyl acrylate									
	0.039	0.036	0.032	0.036	0.027		0.032		0.034	11.76
38)	propionitrile									
	0.028	0.036	0.035	0.033	0.033	0.034	0.034	0.034	0.033	7.11
39)	bromochloromethane									
	0.158	0.131	0.181	0.173	0.167	0.179	0.179	0.176	0.169	9.54
40)	tetrahydrofuran									
	0.091	0.091	0.088	0.081	0.103	0.117	0.093		0.095	12.58
41)	chloroform									
	0.449	0.374	0.377	0.367	0.349	0.404	0.428	0.384	0.392	8.49
42)	t-butyl formate *This compound fails Initial Calibration criteria*									
	0.186	0.236	0.226	0.202	0.223	0.202	0.197	0.195	0.209	8.50
43)	dibromofluoromethane (s)									
	0.409	0.402	0.417	0.418	0.413	0.428	0.415	0.410	0.414	1.92
44)	methacrylonitrile									
	0.096	0.092	0.084	0.092	0.082	0.076	0.079		0.086	8.62
45)	1,1,1-trichloroethane									
	0.516	0.493	0.546	0.551	0.522	0.519	0.532	0.545	0.536	8.65
46)	cyclohexane									
	0.445	0.530	0.472	0.471	0.459	0.438	0.426	0.490	0.455	6.66
47)	1,1-dichloropropene									
	0.388	0.355	0.420	0.422	0.403	0.392	0.411	0.433	0.415	6.14
48)	iso-butyl alcohol									
	0.010	0.011	0.010	0.009	0.010	0.010	0.009	0.009	0.010#	8.53
49)	carbon tetrachloride									
	0.479	0.479	0.501	0.509	0.496	0.466	0.501	0.508	0.510	3.52
50)	tert amyl alcohol									
	0.011	0.010	0.009	0.009	0.010	0.009	0.010		0.010#	4.89
51)	I 1,4-difluorobenzene -----ISTD-----									
52)	1,2-dichloroethane-d4 (s)									
	0.252	0.250	0.243	0.245	0.248	0.235	0.255	0.255	0.253	2.47
53)	n-butyl alcohol									

Initial Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

		0.006	0.005	0.005	0.005	0.004	0.004	0.004			0.005#	14.34	
54)	2,2,4-trimethylpentane	0.958	1.039	0.895	0.926	0.919	0.804	0.939	0.978	0.962	0.935	6.86	
55)	benzene	0.821	0.862	0.814	0.841	0.821	0.753	0.848	0.900	0.849	0.938	0.845	5.94
56)	tert-amyl methyl ether	0.126	0.093	0.131	0.129	0.122	0.122	0.130	0.132	0.126	0.124	9.62	
57)	heptane	0.172	0.196	0.179	0.183	0.178	0.164	0.179	0.186	0.190	0.196	0.182	5.59
58)	isopropyl acetate	0.037	0.036	0.032	0.034	0.033	0.023	0.033			0.033	14.31	
59)	1,2-dichloroethane	0.280	0.300	0.248	0.254	0.246	0.224	0.279	0.281	0.261	0.264	8.82	
60)	trichloroethene	0.249	0.274	0.281	0.289	0.281	0.258	0.274	0.293	0.285	0.315	0.280	6.54
61)	ethyl acrylate	0.179	0.225	0.221	0.206	0.200	0.213	0.215	0.208		0.208	6.92	
62)	2-nitropropane	0.004	0.004	0.004	0.003				0.002		0.004#	24.01	
	----- Quadratic regression -----										Coefficient =	0.9999	
	Response Ratio =	-0.00044	+	0.00497	*A	+	-0.00035	*A^2					
63)	2-chloroethyl vinyl ether	0.100	0.104	0.118	0.119	0.110	0.103	0.114	0.115	0.110	0.093	0.108	7.63
64)	methyl methacrylate	0.046	0.044	0.042	0.042	0.039	0.039	0.038			0.041	7.06	
65)	1,2-dichloropropane	0.201	0.187	0.211	0.216	0.209	0.195	0.223	0.214	0.209	0.214	0.208	5.10
66)	dibromomethane	0.128	0.116	0.133	0.131	0.126	0.122	0.136	0.146	0.128	0.130	6.67	
67)	methylcyclohexane	0.386	0.426	0.392	0.399	0.388	0.359	0.388	0.413	0.393	0.394	4.77	
68)	bromodichloromethane	0.285	0.273	0.305	0.305	0.291	0.284	0.305	0.316	0.298	0.250	0.291	6.61
69)	epichlorohydrin	0.014	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	9.20	
70)	cis-1,3-dichloropropene	0.319	0.302	0.350	0.351	0.329	0.324	0.342	0.344	0.329	0.316	0.331	4.79
71)	4-methyl-2-pentanone	0.058	0.047	0.063	0.064	0.060	0.056	0.063	0.063	0.061	0.059	9.25	
72)	3-methyl-1-butanol	0.006	0.008	0.008	0.007	0.007	0.007	0.006	0.007		0.007#	11.21	
73)	I chlorobenzene-d5	-----ISTD-----											
74)	toluene-d8 (s)	1.272	1.265	1.286	1.275	1.258	1.306	1.257	1.270	1.261	1.259	1.271	1.20
75)	toluene	0.692	0.706	0.701	0.700	0.665	0.664	0.707	0.696	0.685	0.847	0.706	7.31
76)	trans-1,3-dichloropropene	0.316	0.277	0.379	0.370	0.338	0.355	0.346	0.351	0.330	0.369	0.343	8.82
77)	ethyl methacrylate	0.205	0.273	0.260	0.231	0.252	0.236	0.234	0.222		0.239	9.09	
78)	1,1,2-trichloroethane	0.163	0.153	0.201	0.192	0.176	0.188	0.177	0.192	0.181	0.160	0.178	8.79
79)	tetrachloroethene	0.285	0.300	0.285	0.289	0.275	0.263	0.275	0.288	0.282	0.282	3.70	
80)	1,3-dichloropropane	0.324	0.303	0.327	0.328	0.308	0.304	0.328	0.330	0.311	0.287	0.315	4.60
81)	2-hexanone	0.063	0.057	0.078	0.078	0.072	0.068	0.072	0.070	0.070	0.070	9.65	

Initial Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

82)	butyl acetate	0.118	0.152	0.149	0.138	0.139	0.141	0.140	0.140	0.140	7.41
83)	dibromochloromethane	0.298	0.284	0.348	0.333	0.301	0.331	0.308	0.318	0.296	7.06
84)	1,2-dibromoethane	0.219	0.213	0.269	0.256	0.230	0.253	0.234	0.246	0.233	7.66
85)	n-butyl ether	1.164	1.080	1.227	1.234	1.152	1.105	1.166	1.182	1.170	4.10
86)	chlorobenzene	0.793	0.795	0.795	0.801	0.762	0.737	0.799	0.837	0.786	6.41
87)	1,1,1,2-tetrachloroethane	0.275	0.263	0.294	0.290	0.274	0.273	0.283	0.293	0.281	4.73
88)	ethylbenzene	1.303	1.352	1.259	1.302	1.250	1.138	1.298	1.360	1.302	10.55
89)	m,p-xylene	0.533	0.520	0.507	0.516	0.505	0.455	0.516	0.546	0.523	8.64
90)	o-xylene	0.494	0.517	0.517	0.523	0.501	0.469	0.514	0.547	0.518	6.27
91)	styrene	0.822	0.786	0.830	0.850	0.818	0.744	0.835	0.884	0.841	6.81
92)	bromoform	0.173	0.228	0.213	0.188	0.213	0.193	0.196	0.185	0.199	9.11
93)	butyl acrylate	0.386	0.346	0.479	0.457	0.408	0.429	0.413	0.416	0.406	8.70
94)	isopropylbenzene	1.322	1.385	1.315	1.351	1.299	1.181	1.299	1.394	1.331	9.07
95)	cis-1,4-dichloro-2-butene	0.071	0.099	0.094	0.080	0.092	0.086	0.086	0.081	0.086	10.22
96)	I 1,4-dichlorobenzene-d -----ISTD-----										
97)	4-bromofluorobenzene (s)	0.870	0.869	0.886	0.874	0.866	0.945	0.865	0.864	0.863	2.82
98)	bromobenzene	0.703	0.673	0.684	0.699	0.682	0.662	0.718	0.752	0.695	6.97
99)	1,1,1,2-tetrachloroethane	0.470	0.468	0.550	0.527	0.485	0.534	0.507	0.517	0.486	6.28
100)	trans-1,4-dichloro-2-butene	0.132	0.111	0.159	0.153	0.141	0.149	0.155	0.144	0.143	10.14
101)	1,2,3-trichloropropane	0.110	0.137	0.134	0.128	0.128	0.146	0.124	0.129	0.129	8.04
102)	n-propylbenzene	3.048	3.060	2.850	2.993	2.973	2.670	3.035	3.211	3.092	5.17
103)	2-chlorotoluene	0.645	0.612	0.613	0.643	0.629	0.586	0.659	0.655	0.651	5.41
104)	4-chlorotoluene	1.807	1.797	1.749	1.796	1.750	1.696	1.817	1.875	1.798	2.82
105)	1,3,5-trimethylbenzene	2.084	2.049	2.018	2.106	2.043	1.890	2.116	2.147	2.102	3.68
106)	tert-butylbenzene	0.417	0.385	0.421	0.427	0.413	0.398	0.403	0.411	0.409	4.46
107)	1,2,4-trimethylbenzene	2.174	2.174	2.066	2.158	2.061	1.941	2.106	2.212	2.140	3.91
108)	sec-butylbenzene	2.829	2.918	2.811	2.894	2.799	2.574	2.795	2.925	2.874	3.77
109)	1,3-dichlorobenzene	1.357	1.424	1.304	1.332	1.278	1.224	1.334	1.408	1.328	4.61
110)	p-isopropyltoluene	2.319	2.566	2.411	2.482	2.409	2.194	2.327	2.449	2.463	4.54
111)	1,2,3-trimethylbenzene	1.998	2.038	1.963	1.998	1.924	1.789	2.013	2.132	1.983	4.65

Initial Calibration Summary

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Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

112)	1,4-dichlorobenzene	1.321	1.364	1.224	1.272	1.204	1.115	1.301	1.329	1.275	1.267	6.00	
113)	benzyl chloride	0.942	0.994	1.086	1.054	0.969	1.037	0.965	1.014	0.947	1.278	1.029	9.70
114)	1,2-dichlorobenzene	1.232	1.215	1.252	1.269	1.196	1.171	1.245	1.291	1.222	1.658	1.275	10.90
115)	n-butylbenzene	1.197	1.242	1.190	1.243	1.183	1.101	1.174	1.190	1.218	1.193	3.56	
116)	1,2-dibromo-3-chloropropane	0.070	0.099	0.095	0.087	0.094	0.092	0.093	0.089	0.090	9.98		
117)	1,3,5-trichlorobenzene	0.995	1.168	1.018	1.064	1.007	0.941	1.046	1.085	1.008	1.037	6.22	
118)	1,2,4-trichlorobenzene	0.825	0.874	0.809	0.856	0.805	0.750	0.808	0.842	0.816	0.821	4.33	
119)	hexachlorobutadiene	0.547	0.649	0.487	0.533	0.529	0.446	0.523	0.578	0.552	0.538	10.54	
120)	naphthalene	1.522	1.509	1.631	1.629	1.539	1.497	1.521	1.574	1.474	1.544	3.63	
121)	1,2,3-trichlorobenzene	0.742	0.837	0.746	0.758	0.723	0.692	0.716	0.755	0.702	0.741	5.77	
122)	hexachloroethane	0.405	0.420	0.495	0.479	0.433	0.470	0.420	0.429	0.419	0.432	0.440	6.83
123)	2-methylnaphthalene	1.034	0.995	0.828	0.983	0.801	0.928	11.40					

(#) = Out of Range ### Number of calibration levels exceeded format ###

M1CS7993.M

Thu Jan 13 12:55:45 2022

6.9.1
6

Initial Calibration Summary

Page 1 of 5

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7392-ICC7392
Lab FileID: 3D174409.D

Response Factor Report MS3D

Method : C:\msdchem\1\METHODS\M3D7392.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xFri Mar 11 09:53:10 2022
Last Update : Fri Mar 11 09:53:10 2022
Response via : Initial Calibration

Calibration Files

1 =3D174404.D 0.5 =3D174403.D 100 =3D174410.D 50 =3D174409.D
20 =3D174408.D 200 =3D174411.D 4 =3D174406.D 2 =3D174405.D
8 =3D174407.D 0.2 =3D174402.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
	1.593	1.560	1.435	1.442	1.351	1.395	1.596	1.592	1.518		1.498	6.30
3) ethanol												
	0.111		0.067	0.069	0.080		0.094	0.117	0.097		0.091	21.38
----- Quadratic regression -----												
Response Ratio = 0.01085 + 0.07902 *A + -0.00066 *A^2												
4) 1,4-dioxane												
	0.101		0.078	0.082	0.087	0.087	0.092	0.088	0.107		0.090	10.56
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane *This compound fails Initial Calibration criteria*												
	0.427	0.414	0.437	0.398	0.502		0.447		0.437		8.28	
7) dichlorodifluoromethane												
	0.529	0.485	0.492	0.525	0.554	0.541	0.493		0.517		5.25	
8) chloromethane												
	0.607	0.437	0.451	0.480	0.387	0.539	0.530	0.504		0.492	13.95	
9) vinyl chloride												
	0.587	0.501	0.519	0.530	0.446	0.572	0.551	0.544		0.531	8.31	
10) 1,3-butadiene												
	0.460	0.470	0.518		0.710		0.564		0.544		18.68	
11) bromomethane												
	0.212	0.217	0.260	0.188	0.181	0.175	0.164	0.145		0.193	18.62	
12) chloroethane												
	0.432	0.318	0.312	0.329	0.300	0.389	0.427	0.357		0.358	14.65	
13) trichlorofluoromethane												
	0.796	0.868	0.682	0.702	0.733	0.631	0.850	0.815	0.766	0.832	0.768	10.22
14) ethyl ether												
	0.254	0.259	0.225	0.231	0.238	0.209	0.279	0.268	0.266		0.248	9.37
15) acrolein												
	0.064	0.067	0.068	0.062	0.078	0.085	0.066		0.070		11.99	
16) freon 113												
	0.339	0.361	0.338	0.350	0.378	0.328	0.413	0.392	0.399	0.382	0.368	7.87
17) 1,1-dichloroethene												
	0.363	0.381	0.324	0.340	0.363	0.302	0.449	0.390	0.382		0.366	11.64
18) acetone												
	0.023	0.027	0.030	0.022	0.034	0.025	0.032		0.028		15.82	
19) acetonitrile												
	0.031	0.036	0.037	0.028		0.046		0.036			19.83	
20) iodomethane *This compound fails Initial Calibration criteria*												
	0.445	0.344	0.249	0.464	0.159	0.132	0.182		0.282		48.46	
21) carbon disulfide												
	1.091	1.136	0.929	0.971	1.041	0.839	1.193	1.111	1.112		1.047	10.80

Initial Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7392-ICC7392
Lab FileID: 3D174409.D

22)	methylene chloride	0.403	0.410	0.438	0.366	0.534	0.523	0.462		0.448	14.02		
23)	methyl acetate	0.224	0.250	0.260	0.203	0.346		0.289		0.262	19.46		
24)	methyl tert butyl ether	1.183	1.145	1.077	1.140	1.204	0.969	1.376	1.244	1.277	1.261	1.188	9.58
25)	trans-1,2-dichloroethene	0.440	0.469	0.376	0.394	0.422	0.350	0.490	0.452	0.453		0.427	10.70
26)	di-isopropyl ether	1.219		1.019	1.085	1.185	0.901	1.417	1.275	1.255		1.169	13.87
27)	2-butanone	0.046		0.040	0.043	0.043	0.040	0.054	0.040	0.048		0.044	11.19
28)	1,1-dichloroethane	0.828	0.762	0.633	0.670	0.728	0.572	0.835	0.803	0.749	0.770	0.735	11.70
29)	chloroprene	0.627	0.690	0.557	0.584	0.610	0.502	0.689	0.639	0.658	0.719	0.628	10.61
30)	acrylonitrile		0.119	0.124	0.120	0.113	0.139		0.126			0.123	7.11
31)	hexane	0.438		0.342	0.353	0.369	0.309	0.440	0.389	0.385		0.378	11.97
32)	vinyl acetate	0.111	0.110	0.103	0.108	0.112	0.103	0.123	0.096	0.105		0.108	6.98
33)	ethyl tert-butyl ether	1.399	1.255	1.200	1.255	1.318	1.072	1.438	1.337	1.406	1.284	1.296	8.45
34)	ethyl acetate		0.051	0.052	0.058	0.050	0.069	0.062	0.066			0.058	13.13
35)	2,2-dichloropropane	0.733		0.622	0.642	0.687	0.550	0.797	0.767	0.744		0.693	12.05
36)	cis-1,2-dichloroethene	0.481	0.490	0.441	0.450	0.466	0.406	0.530	0.494	0.490	0.555	0.480	8.94
37)	methyl acrylate	0.075	0.075	0.063	0.066	0.066	0.062	0.086	0.069	0.073		0.071	10.80
38)	propionitrile	0.051		0.040	0.044	0.046	0.037	0.058	0.047	0.053		0.047	14.97
39)	bromochloromethane	0.284	0.267	0.247	0.246	0.235	0.244	0.260	0.220	0.254		0.251	7.32
40)	tetrahydrofuran		0.079	0.091	0.101	0.079			0.124			0.095	19.88
41)	chloroform	0.705		0.479	0.486	0.514	0.436	0.622	0.562	0.554		0.545	15.94
42)	t-butyl formate	0.388	0.463	0.385	0.413	0.408	0.357	0.479	0.467	0.442	0.490	0.429	10.56
43)	dibromofluoromethane (s)	0.437	0.444	0.438	0.424	0.430	0.423	0.443	0.437	0.439	0.425	0.434	1.84
44)	methacrylonitrile	0.172		0.150	0.164	0.167	0.152	0.216	0.159	0.178		0.170	12.28
45)	1,1,1-trichloroethane	0.761	0.819	0.693	0.703	0.709	0.645	0.826	0.719	0.752	0.882	0.751	9.64
46)	cyclohexane	0.798	0.740	0.637	0.650	0.661	0.595	0.698	0.699	0.681		0.684	8.69
47)	1,1-dichloropropene	0.586	0.563	0.530	0.549	0.574	0.482	0.657	0.602	0.582	0.601	0.572	8.19
48)	iso-butyl alcohol		0.007	0.008	0.009	0.007	0.011		0.010			0.009#	18.23
49)	carbon tetrachloride	0.641	0.653	0.626	0.644	0.656	0.586	0.721	0.632	0.691	0.614	0.646	5.90
50)	tert amyl alcohol	*This compound fails Initial Calibration criteria*											
		0.008	0.010	0.010		0.011		0.014				0.011	21.18

----- Quadratic regression ----- Coefficient = 0.9920
Response Ratio = 0.00049 + 0.01135 *A + -0.00033 *A^2

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7392-ICC7392
Lab FileID: 3D174409.D

51)	I	1,4-difluorobenzene	-----ISTD-----											
52)		1,2-dichloroethane-d4 (s)	0.348	0.348	0.309	0.312	0.326	0.294	0.343	0.343	0.344	0.338	0.330	5.84
53)		n-butyl alcohol												
			0.003	0.004	0.004	0.004	0.005	0.004	0.005				0.004#	14.51
54)		2,2,4-trimethylpentane												
			0.983		0.778	0.818	0.869	0.715	1.004	0.967	0.917		0.881	11.87
55)		benzene												
			1.159	1.161	0.998	1.051	1.100	0.901	1.302	1.170	1.171		1.113	10.49
56)		tert-amyl methyl ether												
			0.241	0.229	0.208	0.216	0.219	0.207	0.254	0.216	0.229	0.198	0.222	7.69
57)		heptane												
			0.262	0.306	0.230	0.229	0.234	0.215	0.258	0.255	0.244		0.248	10.73
58)		isopropyl acetate												
				0.066	0.068	0.068	0.066	0.077		0.076			0.070	7.08
59)		1,2-dichloroethane												
			0.445		0.361	0.382	0.400	0.335	0.463	0.466	0.435		0.411	11.89
60)		trichloroethene												
			0.333	0.322	0.350	0.357	0.339	0.349	0.365	0.326	0.347	0.356	0.344	4.10
61)		ethyl acrylate												
				0.290	0.317	0.323	0.275	0.397		0.363			0.328	13.89
62)		2-nitropropane												
				0.074	0.080	0.083	0.074	0.097	0.089	0.100			0.085	12.21
63)		2-chloroethyl vinyl ether												
			0.151	0.151	0.161	0.170	0.174	0.148	0.191	0.165	0.188	0.144	0.164	10.15
64)		methyl methacrylate												
			0.081	0.070	0.077	0.079	0.080	0.077	0.091	0.074	0.084		0.079	7.55
65)		1,2-dichloropropane												
			0.309	0.316	0.270	0.280	0.281	0.256	0.341	0.282	0.299	0.275	0.291	8.65
66)		dibromomethane												
			0.207	0.212	0.178	0.188	0.184	0.176	0.226	0.187	0.202		0.195	8.73
67)		methylcyclohexane												
			0.500	0.575	0.487	0.499	0.513	0.458	0.588	0.537	0.560		0.524	8.29
68)		bromodichloromethane												
			0.441	0.548	0.412	0.417	0.423	0.389	0.468	0.443	0.435		0.442	10.33
69)		epichlorohydrin												
				0.022	0.024	0.024	0.022			0.028			0.024	9.96
70)		cis-1,3-dichloropropene												
			0.469	0.576	0.486	0.498	0.495	0.465	0.566	0.490	0.506	0.466	0.502	7.81
71)		4-methyl-2-pentanone												
			0.092	0.103	0.086	0.091	0.091	0.081	0.106	0.088	0.101		0.093	8.94
72)		3-methyl-1-butanol												
				0.007	0.007	0.008	0.007	0.010	0.010	0.009			0.008#	17.64
73)	I	chlorobenzene-d5	-----ISTD-----											
74)		toluene-d8 (s)	1.313	1.290	1.181	1.202	1.268	1.157	1.329	1.316	1.317	1.316	1.269	5.08
75)		toluene												
			0.825	0.953	0.746	0.791	0.819	0.686	0.972	0.905	0.887	0.961	0.855	11.37
76)		trans-1,3-dichloropropene												
			0.463	0.512	0.457	0.483	0.490	0.440	0.543	0.481	0.515	0.542	0.493	7.10
77)		ethyl methacrylate												
			0.437		0.365	0.390	0.415	0.339	0.487	0.435	0.441		0.414	11.46
78)		1,1,2-trichloroethane												
			0.226		0.216	0.229	0.230	0.212	0.285	0.243	0.265		0.238	10.54
79)		tetrachloroethene												
			0.303	0.318	0.294	0.307	0.318	0.286	0.366	0.329	0.347	0.332	0.320	7.63
80)		1,3-dichloropropane												

Initial Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7392-ICC7392
Lab FileID: 3D174409.D

	0.491	0.497	0.421	0.454	0.484	0.403	0.565	0.499	0.520	0.535	0.487	10.21
81)	2-hexanone											
	0.093	0.102	0.077	0.087	0.094	0.074	0.112	0.096	0.105	0.101	0.094	12.82
82)	butyl acetate											
	0.159	0.171	0.182	0.155	0.227	0.202	0.201				0.185	14.07
83)	dibromochloromethane											
	0.365	0.390	0.353	0.369	0.359	0.359	0.381	0.362	0.378	0.412	0.373	4.80
84)	1,2-dibromoethane											
	0.305	0.339	0.291	0.313	0.311	0.292	0.340	0.302	0.318	0.264	0.307	7.41
85)	n-butyl ether											
	1.417	1.607	1.092	1.227	1.331	0.941	1.567	1.546	1.489	1.589	1.380	16.60
86)	chlorobenzene											
	1.015	1.045	0.906	0.931	0.960	0.817	1.092	0.971	1.019	1.059	0.982	8.36
87)	1,1,1,2-tetrachloroethane											
	0.352	0.388	0.352	0.349	0.347	0.329	0.398	0.327	0.372	0.356	0.357	6.42
88)	ethylbenzene											
	1.658	1.581	1.291	1.449	1.576	1.109	1.842	1.636	1.730		1.541	14.68
89)	m,p-xylene											
	0.666	0.708	0.590	0.641	0.649	0.519	0.770	0.680	0.700	0.677	0.660	10.36
90)	o-xylene											
	0.644	0.663	0.632	0.657	0.684	0.567	0.745	0.661	0.694	0.731	0.668	7.56
91)	styrene											
	1.107	1.037	0.994	1.097	1.099	0.858	1.233	1.077	1.163	1.251	1.092	10.50
92)	bromoform											
	0.234	0.211	0.283	0.276	0.243	0.276	0.258	0.224	0.255	0.220	0.248	10.38
93)	butyl acrylate											
	0.520	0.564	0.578	0.475	0.672			0.623			0.572	12.34
94)	n-amyl acetate											
	0.268	0.275	0.213	0.234	0.231	0.199	0.261	0.229	0.250		0.240	10.65
95)	isopropylbenzene											
	1.731	1.752	1.518	1.661	1.672	1.269	1.802	1.684	1.733	1.654	1.648	9.30
96)	cis-1,4-dichloro-2-butene											
	0.123	0.127	0.112	0.123	0.112	0.095	0.107				0.114	9.84
97)	I 1,4-dichlorobenzene-d -----ISTD-----											
98)	4-bromofluorobenzene (s)											
	0.935	0.925	0.855	0.820	0.953	0.867	0.931	0.946	0.939	0.929	0.910	5.02
99)	bromobenzene											
	0.838	0.875	0.741	0.723	0.822	0.708	0.879	0.791	0.878		0.806	8.50
100)	1,1,2,2-tetrachloroethane											
	0.720	0.728	0.574	0.585	0.665	0.562	0.741	0.722	0.693		0.665	10.90
101)	trans-1,4-dichloro-2-butene											
	0.122	0.129	0.144	0.126	0.164			0.161			0.141	12.81
102)	1,2,3-trichloropropane											
	0.189	0.195	0.220	0.186	0.255	0.204	0.241				0.213	12.59
103)	n-propylbenzene											
	3.396	3.803	2.732	3.063	3.588	2.392	4.101	3.698	3.848		3.402	16.61
104)	2-chlorotoluene											
	0.748	0.899	0.720	0.737	0.791	0.684	0.938	0.851	0.859	0.828	0.806	10.29
105)	4-chlorotoluene											
	0.910	0.788	0.736	0.778	0.826	0.690	0.874	0.830	0.871	0.889	0.819	8.66
106)	1,3,5-trimethylbenzene											
	2.425	2.746	2.132	2.362	2.645	1.889	2.944	2.644	2.739	2.712	2.524	12.73
107)	tert-butylbenzene											
	0.697	0.585	0.584	0.600	0.635	0.566	0.712	0.633	0.629		0.627	8.03
108)	1,2,4-trimethylbenzene											
	2.583	2.569	2.190	2.425	2.682	1.937	3.002	2.719	2.792	2.415	2.531	12.12
109)	sec-butylbenzene											
	3.108	3.189	2.687	2.977	3.290	2.373	3.669	3.270	3.418	3.300	3.128	11.88
110)	1,3-dichlorobenzene											

Initial Calibration Summary

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Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7392-ICC7392
Lab FileID: 3D174409.D

	1.369	1.589	1.416	1.502	1.574	1.312	1.660	1.552	1.598	1.542	1.511	7.36
111)	p-isopropyltoluene											
	2.586	2.624	2.337	2.599	2.846	2.056	3.062	2.741	2.886	2.714	2.645	10.80
112)	1,4-dichlorobenzene											
	1.368	1.640	1.369	1.466	1.468	1.263	1.667	1.610	1.586	1.746	1.518	10.23
113)	1,2,3-trimethylbenzene											
	2.507	2.127	2.357	2.517	1.892	2.945	2.680	2.769			2.474	13.90
114)	benzyl chloride											
	1.336	1.564	1.211	1.329	1.392	1.152	1.513	1.468	1.523	1.327	1.382	9.88
115)	1,2-dichlorobenzene											
	1.372	1.442	1.303	1.401	1.432	1.200	1.633	1.447	1.550	1.530	1.431	8.68
116)	n-butylbenzene											
	1.144	1.238	1.128	1.204	1.325	1.057	1.392	1.296	1.364	1.423	1.257	9.78
117)	1,2-dibromo-3-chloropropane											
	0.151	0.126	0.163	0.159	0.160	0.178	0.177	0.161	0.152		0.159	9.84
118)	1,3,5-trichlorobenzene											
	0.932	0.884	1.010	1.024	1.047	1.011	1.103	1.096	1.054	1.111	1.027	7.18
119)	1,2,4-trichlorobenzene											
	0.856	0.769	0.835	0.814	0.807	0.845	0.894	0.830	0.828	0.904	0.838	4.75
120)	hexachlorobutadiene											
	0.263	0.298	0.319	0.324	0.322	0.333	0.342	0.358	0.337		0.322	8.58
121)	naphthalene											
	1.864	1.848	1.795	1.888	1.924	1.726	2.115	1.843	2.017	2.082	1.910	6.56
122)	1,2,3-trichlorobenzene											
	0.589	0.677	0.718	0.693	0.686	0.745	0.772	0.687	0.718	0.648	0.693	7.34
123)	hexachloroethane											
	0.361	0.413	0.399	0.403	0.420	0.401	0.384	0.361			0.393	5.63
124)	2-methylnaphthalene											
	0.831	0.999	0.964	0.859	1.125	0.928	0.830	0.935			0.934	10.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3D7392.M Fri Mar 11 18:53:53 2022 3D

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8045-CC7993
 Lab FileID: 1C184883.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...22\v1c8045\1c184883.d Vial: 1
 Acq On : 23 Mar 2022 10:33 am Operator: PrashanS
 Sample : cc7993-50 Inst : GCMS1C
 Misc : MS57586,V1C8045,5.0,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7993.M (RTE Integrator)
 Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Tue Jan 11 14:50:44 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	75	-0.01	7.21
2 M	tertiary butyl alcohol	1.160	1.282	-10.5	83	0.00	7.32
3	ethanol	0.124	0.166	-33.9#	89	-0.02	5.97
4 M	1,4-dioxane	0.122	0.142	-16.4	85	0.00	11.09
5 I	pentafluorobenzene	1.000	1.000	0.0	84	0.00	9.45
6 M	dichlorodifluoromethane	0.544	0.410	24.6#	63	0.00	3.77
7	chlorodifluoromethane	0.468	0.489	-4.5	87	0.00	3.80
8 M	chloromethane	0.576	0.561	2.6	81	0.00	4.17
9 M	vinyl chloride	0.466	0.450	3.4	78	0.00	4.40
10	1,3-butadiene	0.283	0.426	-50.5#	123	0.00	4.47
11 M	bromomethane	0.334	0.296	11.4	78	0.01	5.06
12 M	chloroethane	0.220	0.201	8.6	74	0.00	5.23
13 M	trichlorofluoromethane	0.596	0.542	9.1	75	0.00	5.67
14 M	ethyl ether	0.132	0.140	-6.1	83	0.00	6.11
15 M	acrolein	0.037	0.049	-32.4#	106	0.00	6.38
16	freon 113	0.280	0.286	-2.1	82	0.00	6.47
17 M	1,1-dichloroethene	0.324	0.296	8.6	78	0.00	6.53
18 M	acetone	0.071	0.074	-4.2	90	0.00	6.59
19 M	acetonitrile	0.034	0.037	-8.8	89	0.00	7.04
20 M	iodomethane	0.333	0.392	-17.7	79	0.00	6.81
21 M	carbon disulfide	1.002	0.912	9.0	77	0.00	6.92
22 M	methylene chloride	0.336	0.322	4.2	85	0.00	7.25
23 M	methyl acetate	0.201	0.211	-5.0	84	0.00	7.05
24 M	methyl tert butyl ether	0.662	0.710	-7.3	85	0.00	7.56
25 M	trans-1,2-dichloroethene	0.364	0.344	5.5	82	0.00	7.62
26 M	di-isopropyl ether	1.072	1.169	-9.0	86	0.00	8.15
27 M	2-butanone	0.022	0.025	-13.6	85	0.00	8.90
28 M	1,1-dichloroethane	0.542	0.545	-0.6	82	0.00	8.20
29 M	chloroprene	0.465	0.493	-6.0	81	0.00	8.29
30 M	acrylonitrile	0.084	0.105	-25.0#	97	0.00	7.60
31	hexane	0.531	0.551	-3.8	85	0.00	7.91
32 M	vinyl acetate	0.045	0.049	-8.9	84	0.00	8.18
33 M	ethyl tert-butyl ether	0.864	0.956	-10.6	84	0.00	8.61
34 M	ethyl acetate	0.038	0.044	-15.8	90	0.00	8.91
35 M	2,2-dichloropropane	0.474	0.471	0.6	82	0.00	8.92
36 M	cis-1,2-dichloroethene	0.387	0.367	5.2	82	0.00	8.93
37	methyl acrylate	0.034	0.037	-8.8	87	0.00	8.99
38 M	propionitrile	0.033	0.036	-9.1	85	0.00	9.01
39 M	bromochloromethane	0.169	0.193	-14.2	90	0.00	9.25
40 M	tetrahydrofuran	0.095	0.097	-2.1	89	0.00	9.28
41 M	chloroform	0.392	0.383	2.3	85	0.00	9.30

Continuing Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8045-CC7993
Lab FileID: 1C184883.D

42	M	t-butyl formate	0.209	0.241	-15.3	89	0.00	9.32
43	S	dibromofluoromethane (s)	0.413	0.439	-6.3	88	0.00	9.50
44	M	methacrylonitrile	0.086	0.091	-5.8	83	0.00	9.19
45	M	1,1,1-trichloroethane	0.516	0.553	-7.2	84	0.00	9.54
46		cyclohexane	0.465	0.414	11.0	74	0.00	9.60
47		1,1-dichloropropene	0.408	0.404	1.0	80	0.00	9.72
48		iso-butyl alcohol	0.010	0.011	-10.0	93	0.00	9.74
49		carbon tetrachloride	0.492	0.518	-5.3	85	0.00	9.74
50		tert amyl alcohol	0.010	0.010#	0.0	80	0.00	9.86
51	I	1,4-difluorobenzene	1.000	1.000	0.0	82	0.00	10.36
52	S	1,2-dichloroethane-d4 (s)	0.248	0.265	-6.9	89	0.00	9.92
53	M	n-butyl alcohol	0.005	0.005#	0.0	85	0.00	10.49
54		2,2,4-trimethylpentane	0.935	0.827	11.6	73	0.00	9.96
55	M	benzene	0.845	0.845	0.0	83	0.00	9.98
56	M	tert-amyl methyl ether	0.124	0.136	-9.7	87	0.00	10.00
57	M	heptane	0.182	0.159	12.6	71	0.00	10.14
58	M	isopropyl acetate	0.033	0.037	-12.1	85	0.00	9.90
59	M	1,2-dichloroethane	0.264	0.274	-3.8	89	0.00	10.01
60	M	trichloroethene	0.280	0.300	-7.1	85	0.00	10.70
61		ethyl acrylate	0.208	0.238	-14.4	88	0.00	10.71
----- True Calc. % Drift -----								
62	M	2-nitropropane	50.000	65.808	-31.6#	109	0.00	11.49
----- AvgRF CCRF % Dev -----								
63	M	2-chloroethyl vinyl ether	0.108	0.123	-13.9	85	0.00	11.50
64	M	methyl methacrylate	0.041	0.046	-12.2	87	0.00	10.97
65	M	1,2-dichloropropane	0.208	0.222	-6.7	85	0.00	10.97
66	M	dibromomethane	0.130	0.143	-10.0	89	0.00	11.13
67	M	methylcyclohexane	0.394	0.355	9.9	73	0.00	10.90
68	M	bromodichloromethane	0.291	0.332	-14.1	90	0.00	11.27
69		epichlorohydrin	0.017	0.019	-11.8	88	0.00	11.63
70	M	cis-1,3-dichloropropene	0.331	0.364	-10.0	85	0.00	11.72
71	M	4-methyl-2-pentanone	0.059	0.068	-15.3	88	0.00	11.81
72	M	3-methyl-1-butanol	0.007	0.008#	-14.3	87	0.00	11.83
73	I	chlorobenzene-d5	1.000	1.000	0.0	89	0.00	13.51
74	S	toluene-d8 (s)	1.271	1.236	2.8	86	0.00	12.00
75		toluene	0.706	0.639	9.5	81	0.00	12.07
76		trans-1,3-dichloropropene	0.343	0.369	-7.6	88	0.00	12.28
77		ethyl methacrylate	0.239	0.248	-3.8	85	0.00	12.26
78		1,1,2-trichloroethane	0.178	0.188	-5.6	87	0.00	12.49
79	M	tetrachloroethene	0.282	0.269	4.6	82	0.00	12.66
80	M	1,3-dichloropropane	0.315	0.321	-1.9	87	0.00	12.68
81		2-hexanone	0.070	0.080	-14.3	91	0.00	12.66
82	M	butyl acetate	0.140	0.142	-1.4	84	0.00	12.73
83	M	dibromochloromethane	0.310	0.331	-6.8	88	0.00	12.94
84	M	1,2-dibromoethane	0.239	0.252	-5.4	87	0.00	13.09
85		n-butyl ether	1.167	1.238	-6.1	89	0.00	13.44
86	M	chlorobenzene	0.803	0.776	3.4	86	0.00	13.55
87	M	1,1,1,2-tetrachloroethane	0.278	0.294	-5.8	90	0.00	13.60
88	M	ethylbenzene	1.325	1.261	4.8	86	0.00	13.59
89	M	m,p-xylene	0.526	0.495	5.9	85	0.00	13.70
90	M	o-xylene	0.519	0.520	-0.2	88	0.00	14.12
91	M	styrene	0.837	0.836	0.1	87	0.00	14.13
92	M	bromoform	0.199	0.216	-8.5	90	0.00	14.40
93		butyl acrylate	0.416	0.480	-15.4	93	0.00	13.94
94		isopropylbenzene	1.354	1.307	3.5	86	0.00	14.46
95		cis-1,4-dichloro-2-butene	0.086	0.109	-26.7#	103	0.00	14.54

Continuing Calibration Summary

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Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8045-CC7993
Lab FileID: 1C184883.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	90	0.00	15.83
97	S	4-bromofluorobenzene (s)	0.878	0.862	1.8	89	0.00	14.66
98	M	bromobenzene	0.710	0.683	3.8	88	0.00	14.86
99	M	1,1,2,2-tetrachloroethane	0.500	0.544	-8.8	93	0.00	14.77
100	M	trans-1,4-dichloro-2-bute	0.143	0.174	-21.7#	102	0.00	14.82
101	M	1,2,3-trichloropropane	0.129	0.140	-8.5	94	0.00	14.85
102	M	n-propylbenzene	2.992	2.998	-0.2	90	0.00	14.86
103	M	2-chlorotoluene	0.641	0.626	2.3	88	0.00	15.02
104	M	4-chlorotoluene	1.788	1.735	3.0	87	0.00	15.11
105	M	1,3,5-trimethylbenzene	2.062	2.062	0.0	88	0.00	15.01
106	M	tert-butylbenzene	0.414	0.396	4.3	84	0.00	15.36
107	M	1,2,4-trimethylbenzene	2.114	2.102	0.6	88	0.00	15.41
108	M	sec-butylbenzene	2.824	2.738	3.0	85	0.00	15.57
109	M	1,3-dichlorobenzene	1.332	1.282	3.8	87	0.00	15.77
110	M	p-isopropyltoluene	2.402	2.316	3.6	84	0.00	15.69
111		1,2,3-trimethylbenzene	1.982	2.074	-4.6	94	0.00	15.85
112	M	1,4-dichlorobenzene	1.267	1.261	0.5	89	0.00	15.86
113		benzyl chloride	1.029	1.133	-10.1	97	0.00	15.98
114	M	1,2-dichlorobenzene	1.275	1.227	3.8	87	0.00	16.26
115	M	n-butylbenzene	1.193	1.208	-1.3	88	0.00	16.11
116	M	1,2-dibromo-3-chloropropa	0.090	0.106	-17.8	100	0.00	17.05
117		1,3,5-trichlorobenzene	1.037	1.047	-1.0	89	0.00	17.22
118	M	1,2,4-trichlorobenzene	0.821	0.855	-4.1	90	0.00	17.79
119	M	hexachlorobutadiene	0.538	0.468	13.0	79	0.00	17.89
120	M	naphthalene	1.544	1.707	-10.6	95	0.00	18.04
121	M	1,2,3-trichlorobenzene	0.741	0.750	-1.2	89	0.00	18.25
122	m	hexachloroethane	0.440	0.437	0.7	82	0.00	16.52
123		2-methylnaphthalene	0.928	1.001	-7.9	91	0.00	19.01

(#) = Out of Range
 1C183575.D M1CS7993.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 24 04:26:21 2022

6.9.4
 6

Continuing Calibration Summary

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7412-CC7392
 Lab FileID: 3D174960.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...12-halfway\3d174960.d Vial: 3
 Acq On : 23 Mar 2022 9:39 am Operator: nickw
 Sample : CC7392-20 Inst : MS3D
 Misc : MS57512,V3D7412,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7392.M (RTE Integrator)
 Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xFri Mar 11 09:53:10 2022
 Last Update : Fri Mar 11 09:53:10 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	169	0.00	2.87
2 M	tertiary butyl alcohol	1.498	1.388	7.3	174	0.00	2.92
----- True Calc. % Drift -----							
3	ethanol	2000.000	4443.732	-122.2#	351	0.00	2.32
----- AvgRF CCRF % Dev -----							
4 M	1,4-dioxane	0.090	0.168	-86.7#	325#	0.00	5.04
5 I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	4.07
6	chlorodifluoromethane	0.437	0.544	-24.5#	130	0.00	1.54
7 M	dichlorodifluoromethane	0.517	0.883	-70.8#	188	0.00	1.53
8 M	chloromethane	0.492	0.538	-9.3	117	0.00	1.67
9 M	vinyl chloride	0.531	0.545	-2.6	108	0.00	1.75
10	1,3-butadiene	0.544	0.428	21.3#	87	0.00	1.78
11 M	bromomethane	0.193	0.228	-18.1	132	0.00	1.99
12 M	chloroethane	0.358	0.376	-5.0	120	0.00	2.06
13 M	trichlorofluoromethane	0.768	0.898	-16.9	128	0.00	2.25
14 M	ethyl ether	0.248	0.301	-21.4#	132	0.00	2.42
15 M	acrolein	0.070	0.078	-11.4	121	0.00	2.51
16	freon 113	0.368	0.378	-2.7	105	0.00	2.59
17 M	1,1-dichloroethene	0.366	0.417	-13.9	120	0.00	2.59
18 M	acetone	0.028	0.047	-67.9#	167	0.00	2.59
19 M	acetonitrile	0.036	0.059	-63.9#	166	0.00	2.76
20 M	iodomethane	0.282	0.379	-34.4#	160	0.00	2.70
21 M	carbon disulfide	1.047	1.074	-2.6	108	0.00	2.76
22 M	methylene chloride	0.448	0.531	-18.5	127	0.00	2.90
23 M	methyl acetate	0.262	0.317	-21.0#	128	0.00	2.79
24 M	methyl tert butyl ether	1.188	1.406	-18.4	122	0.00	3.07
25 M	trans-1,2-dichloroethene	0.427	0.458	-7.3	114	0.00	3.08
26 M	di-isopropyl ether	1.169	1.409	-20.5#	125	0.00	3.37
27 M	2-butanone	0.044	0.058	-31.8#	141	0.00	3.71
28 M	1,1-dichloroethane	0.735	0.834	-13.5	120	0.00	3.37
29 M	chloroprene	0.628	0.691	-10.0	119	0.00	3.42
30 M	acrylonitrile	0.123	0.153	-24.4#	134	0.00	3.03
31	hexane	0.378	0.369	2.4	105	0.00	3.26
32 M	vinyl acetate	0.108	0.113	-4.6	106	0.00	3.34
33 M	ethyl tert-butyl ether	1.296	1.506	-16.2	120	0.00	3.61
34 M	ethyl acetate	0.058	0.067	-15.5	120	0.00	3.73
35 M	2,2-dichloropropane	0.693	0.796	-14.9	121	0.00	3.75
36 M	cis-1,2-dichloroethene	0.480	0.537	-11.9	121	0.00	3.74
37	methyl acrylate	0.071	0.072	-1.4	114	0.00	3.77

Continuing Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7412-CC7392
Lab FileID: 3D174960.D

Page 2 of 3

38 M	propionitrile	0.047	0.063	-34.0#	142	0.00	3.75
39 M	bromochloromethane	0.251	0.264	-5.2	118	0.00	3.90
40 M	tetrahydrofuran	0.095	0.123	-29.5#	128	0.00	3.92
41 M	chloroform	0.545	0.618	-13.4	126	0.00	3.96
42 M	t-butyl formate	0.429	0.264	38.5#	68	0.00	3.98
43 S	dibromofluoromethane (s)	0.434	0.475	-9.4	116	0.00	4.07
44 M	methacrylonitrile	0.170	0.186	-9.4	117	0.00	3.86
45 M	1,1,1-trichloroethane	0.751	0.803	-6.9	119	0.00	4.10
46	cyclohexane	0.684	0.729	-6.6	116	0.00	4.17
47	1,1-dichloropropene	0.572	0.632	-10.5	115	0.00	4.21
48	iso-butyl alcohol	0.009	0.013	-44.4#	160	0.00	4.20
49	carbon tetrachloride	0.646	0.651	-0.8	104	0.00	4.22

		True	Calc.	% Drift			
50	tert amyl alcohol	100.000	152.998	-53.0#	163	0.00	4.30

		AvgRF	CCRF	% Dev			
51 I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	4.62
52 S	1,2-dichloroethane-d4 (s)	0.330	0.366	-10.9	120	0.00	4.31
53 M	n-butyl alcohol	0.004	0.007#	-75.0#	197	0.00	4.68
54	2,2,4-trimethylpentane	0.881	0.781	11.4	96	0.00	4.42
55 M	benzene	1.113	1.225	-10.1	119	0.00	4.35
56 M	tert-amyl methyl ether	0.222	0.236	-6.3	115	0.00	4.42
57 M	heptane	0.248	0.219	11.7	100	0.00	4.54
58 M	isopropyl acetate	0.070	0.072	-2.9	114	0.00	4.32
59 M	1,2-dichloroethane	0.411	0.469	-14.1	126	0.00	4.37
60 M	trichloroethene	0.344	0.348	-1.2	110	0.00	4.82
61	ethyl acrylate	0.328	0.343	-4.6	114	0.00	4.83
62 M	2-nitropropane	0.085	0.075	11.8	97	0.00	5.34
63 M	2-chloroethyl vinyl ether	0.164	0.111	32.3#	69	0.00	5.39
64 M	methyl methacrylate	0.079	0.086	-8.9	115	0.00	5.01
65 M	1,2-dichloropropane	0.291	0.318	-9.3	121	0.00	5.00
66 M	dibromomethane	0.195	0.206	-5.6	120	0.00	5.07
67 M	methylcyclohexane	0.524	0.485	7.4	101	0.00	5.01
68 M	bromodichloromethane	0.442	0.465	-5.2	118	0.00	5.19
69	epichlorohydrin	0.024	0.028	-16.7	121	0.00	5.43
70 M	cis-1,3-dichloropropene	0.502	0.548	-9.2	119	0.00	5.53
71 M	4-methyl-2-pentanone	0.093	0.102	-9.7	120	0.00	5.62
72 M	3-methyl-1-butanol	0.008	0.010	-25.0#	138	0.00	5.65

73 I	chlorobenzene-d5	1.000	1.000	0.0	115	0.00	7.00
74 S	toluene-d8 (s)	1.269	1.217	4.1	110	0.00	5.76
75	toluene	0.855	0.823	3.7	115	0.00	5.81
76	trans-1,3-dichloropropene	0.493	0.477	3.2	112	0.00	5.98
77	ethyl methacrylate	0.414	0.407	1.7	113	0.00	6.01
78	1,1,2-trichloroethane	0.238	0.237	0.4	118	0.00	6.15
79 M	tetrachloroethene	0.320	0.292	8.8	105	0.00	6.26
80 M	1,3-dichloropropane	0.487	0.498	-2.3	118	0.00	6.29
81	2-hexanone	0.094	0.104	-10.6	128	0.00	6.31
82 M	butyl acetate	0.185	0.180	2.7	114	0.00	6.40
83 M	dibromochloromethane	0.373	0.335	10.2	107	0.00	6.48
84 M	1,2-dibromoethane	0.307	0.287	6.5	106	0.00	6.59
85	n-butyl ether	1.380	1.338	3.0	116	0.00	7.09
86 M	chlorobenzene	0.982	0.926	5.7	111	0.00	7.03
87 M	1,1,1,2-tetrachloroethane	0.357	0.324	9.2	107	0.00	7.09
88 M	ethylbenzene	1.541	1.562	-1.4	114	0.00	7.10
89 M	m,p-xylene	0.660	0.642	2.7	114	0.00	7.22
90 M	o-xylene	0.668	0.663	0.7	111	0.00	7.57
91 M	styrene	1.092	1.086	0.5	113	0.00	7.59

Continuing Calibration Summary

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Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3D7412-CC7392
Lab FileID: 3D174960.D

92 M	bromoform	0.248	0.198	20.2#	93	0.00	7.76
93	butyl acrylate	0.572	0.540	5.6	107	0.00	7.49
94	n-amyl acetate	0.240	0.232	3.3	116	0.00	7.70
95	isopropylbenzene	1.648	1.639	0.5	113	0.00	7.91
96	cis-1,4-dichloro-2-butene	0.114	0.099	13.2	101	0.00	7.95
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	9.18
98 S	4-bromofluorobenzene (s)	0.910	0.974	-7.0	117	0.00	8.07
99 M	bromobenzene	0.806	0.770	4.5	108	0.00	8.21
100 M	1,1,2,2-tetrachloroethane	0.665	0.645	3.0	111	0.00	8.18
101 M	trans-1,4-dichloro-2-bute	0.141	0.140	0.7	112	0.00	8.22
102 M	1,2,3-trichloropropane	0.213	0.217	-1.9	113	0.00	8.24
103 M	n-propylbenzene	3.402	3.461	-1.7	111	0.00	8.31
104 M	2-chlorotoluene	0.806	0.744	7.7	108	0.00	8.40
105 M	4-chlorotoluene	0.819	0.766	6.5	107	0.00	8.51
106 M	1,3,5-trimethylbenzene	2.524	2.483	1.6	108	0.00	8.48
107 M	tert-butylbenzene	0.627	0.550	12.3	99	0.00	8.78
108 M	1,2,4-trimethylbenzene	2.531	2.555	-0.9	109	0.00	8.84
109 M	sec-butylbenzene	3.128	3.004	4.0	105	0.00	8.99
110 M	1,3-dichlorobenzene	1.511	1.500	0.7	109	0.00	9.12
111 M	p-isopropyltoluene	2.645	2.533	4.2	102	0.00	9.14
112 M	1,4-dichlorobenzene	1.518	1.489	1.9	116	0.00	9.21
113	1,2,3-trimethylbenzene	2.474	2.504	-1.2	114	0.00	9.23
114	benzyl chloride	1.382	1.146	17.1	95	0.00	9.31
115 M	1,2-dichlorobenzene	1.431	1.425	0.4	114	0.00	9.56
116 M	n-butylbenzene	1.257	1.172	6.8	102	0.00	9.54
117 M	1,2-dibromo-3-chloropropa	0.159	0.136	14.5	97	0.00	10.32
118	1,3,5-trichlorobenzene	1.027	0.926	9.8	102	0.00	10.52
119 M	1,2,4-trichlorobenzene	0.838	0.725	13.5	103	0.00	11.15
120 M	hexachlorobutadiene	0.322	0.269	16.5	96	0.00	11.30
121 M	naphthalene	1.910	1.720	9.9	103	0.00	11.40
122 M	1,2,3-trichlorobenzene	0.693	0.572	17.5	96	0.00	11.63
123 m	hexachloroethane	0.393	0.295	24.9#	84	0.00	9.84
124	2-methylnaphthalene	0.934	0.365	60.9#	49#	0.00	12.54

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

3D174408.D M3D7392.M

Wed Mar 23 23:43:03 2022

Surrogate Recovery Summary

Page 1 of 1

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Method: SW846 8260D

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD41695-1	1C184888.D	109	112	99	99
JD41695-2	1C184893.D	110	116	99	95
JD41695-3	D281813.D	106	98	96	112
JD41695-3	1C184894.D	113	144* a	98	99
JD41695-4	1C184889.D	110	112	98	97
JD41695-5	1C184890.D	109	112	101	98
JD41695-6	1C184891.D	110	111	101	98
JD41695-7	1C184892.D	111	112	99	96
JD41695-3MS	D281816.D	108	100	101	96
JD41695-3MSD	D281817.D	103	97	100	96
JD41695-4MS	1C184895.D	108	107	99	99
JD41695-5DUP	1C184896.D	104	111	99	96
V1C8045-BS	1C184885.D	107	107	98	97
V1C8045-MB	1C184887.D	104	102	100	96
VD11374-BS	D281807.D	107	98	95	90
VD11374-MB	D281809.D	111	102	92	128

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane	80-124%
S2 = 1,2-Dichloroethane-D4	75-133%
S3 = Toluene-D8	79-125%
S4 = 4-Bromofluorobenzene	58-148%

(a) Outside control limits due to matrix interference.

6.8.2

6

Blank Spike Summary

Page 1 of 2

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7412-BS	3D174962.D	1	03/23/22	NW	n/a	n/a	V3D7412

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41695-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	518	259* a	27-175
71-43-2	Benzene	50	53.1	106	80-115
74-97-5	Bromochloromethane	50	55.3	111	83-122
75-27-4	Bromodichloromethane	50	52.7	105	82-119
75-25-2	Bromoform	50	41.7	83	77-135
74-83-9	Bromomethane	50	73.6	147	40-162
78-93-3	2-Butanone (MEK)	200	308	154* b	61-150
75-15-0	Carbon disulfide	50	53.6	107	64-130
56-23-5	Carbon tetrachloride	50	53.8	108	75-127
108-90-7	Chlorobenzene	50	45.9	92	80-115
75-00-3	Chloroethane	50	50.3	101	56-144
67-66-3	Chloroform	50	56.6	113	75-116
74-87-3	Chloromethane	50	57.7	115	41-153
110-82-7	Cyclohexane	50	56.1	112	66-129
96-12-8	1,2-Dibromo-3-chloropropane	50	44.9	90	69-134
124-48-1	Dibromochloromethane	50	46.4	93	81-123
106-93-4	1,2-Dibromoethane	50	48.3	97	67-138
95-50-1	1,2-Dichlorobenzene	50	47.5	95	81-117
541-73-1	1,3-Dichlorobenzene	50	48.9	98	81-115
106-46-7	1,4-Dichlorobenzene	50	46.7	93	80-114
75-71-8	Dichlorodifluoromethane	50	90.2	180* b	43-152
75-34-3	1,1-Dichloroethane	50	55.7	111	75-125
107-06-2	1,2-Dichloroethane	50	53.9	108	73-117
75-35-4	1,1-Dichloroethene	50	55.7	111	70-124
156-59-2	cis-1,2-Dichloroethene	50	55.6	111	80-120
156-60-5	trans-1,2-Dichloroethene	50	55.2	110	77-121
78-87-5	1,2-Dichloropropane	50	53.3	107	79-121
10061-01-5	cis-1,3-Dichloropropene	50	55.3	111	83-123
10061-02-6	trans-1,3-Dichloropropene	50	49.2	98	83-122
100-41-4	Ethylbenzene	50	47.2	94	78-116
76-13-1	Freon 113	50	53.7	107	68-134
591-78-6	2-Hexanone	200	216	108	66-136
98-82-8	Isopropylbenzene	50	47.4	95	78-121
79-20-9	Methyl Acetate	50	60.4	121	60-143
108-87-2	Methylcyclohexane	50	46.0	92	71-123
1634-04-4	Methyl Tert Butyl Ether	50	56.6	113	76-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7412-BS	3D174962.D	1	03/23/22	NW	n/a	n/a	V3D7412

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41695-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	200	100	73-134
75-09-2	Methylene chloride	50	57.2	114	73-123
100-42-5	Styrene	50	47.4	95	81-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.1	94	73-126
127-18-4	Tetrachloroethene	50	45.6	91	73-119
108-88-3	Toluene	50	46.3	93	79-116
87-61-6	1,2,3-Trichlorobenzene	50	40.8	82	63-137
120-82-1	1,2,4-Trichlorobenzene	50	43.4	87	68-135
71-55-6	1,1,1-Trichloroethane	50	55.3	111	76-124
79-00-5	1,1,2-Trichloroethane	50	48.5	97	83-117
79-01-6	Trichloroethene	50	51.0	102	80-118
75-69-4	Trichlorofluoromethane	50	58.0	116	67-134
75-01-4	Vinyl chloride	50	52.7	105	52-146
	m,p-Xylene	100	90.9	91	79-119
95-47-6	o-Xylene	50	47.7	95	81-119
1330-20-7	Xylene (total)	150	139	93	80-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	80-120%
17060-07-0	1,2-Dichloroethane-D4	107%	80-120%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	108%	82-114%

(a) Outside in house control limits.

(b) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Duplicate Summary**Job Number:** JD41695**Account:** SESINJPB SESI Consulting Engineers**Project:** 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD41695-5DUP	1C184896.D	1	03/23/22	PS	n/a	n/a	V1C8045
JD41695-5	1C184890.D	1	03/23/22	PS	n/a	n/a	V1C8045

The QC reported here applies to the following samples:**Method:** SW846 8260D

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	JD41695-5 ug/kg	DUP Q ug/kg	Q	RPD	Limits
67-64-1	Acetone	ND	ND		nc	109
71-43-2	Benzene	ND	ND		nc	44
74-97-5	Bromochloromethane	ND	ND		nc	30
75-27-4	Bromodichloromethane	ND	ND		nc	22
75-25-2	Bromoform	ND	ND		nc	30
74-83-9	Bromomethane	ND	ND		nc	10
78-93-3	2-Butanone (MEK)	ND	ND		nc	15
75-15-0	Carbon disulfide	ND	ND		nc	43
56-23-5	Carbon tetrachloride	ND	ND		nc	38
108-90-7	Chlorobenzene	ND	ND		nc	11
75-00-3	Chloroethane	ND	ND		nc	10
67-66-3	Chloroform	ND	ND		nc	14
74-87-3	Chloromethane	ND	ND		nc	30
110-82-7	Cyclohexane	ND	ND		nc	44
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND		nc	30
124-48-1	Dibromochloromethane	ND	ND		nc	10
106-93-4	1,2-Dibromoethane	ND	ND		nc	30
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	10
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	30
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	10
75-71-8	Dichlorodifluoromethane	ND	ND		nc	30
75-34-3	1,1-Dichloroethane	ND	ND		nc	25
107-06-2	1,2-Dichloroethane	ND	ND		nc	10
75-35-4	1,1-Dichloroethene	ND	ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND	ND		nc	36
156-60-5	trans-1,2-Dichloroethene	ND	ND		nc	14
78-87-5	1,2-Dichloropropane	ND	ND		nc	30
10061-01-5	cis-1,3-Dichloropropene	ND	ND		nc	30
10061-02-6	trans-1,3-Dichloropropene	ND	ND		nc	30
100-41-4	Ethylbenzene	ND	ND		nc	35
76-13-1	Freon 113	ND	ND		nc	10
591-78-6	2-Hexanone	ND	ND		nc	10
98-82-8	Isopropylbenzene	ND	ND		nc	28
79-20-9	Methyl Acetate	ND	ND		nc	37
108-87-2	Methylcyclohexane	ND	ND		nc	43
1634-04-4	Methyl Tert Butyl Ether	ND	ND		nc	21

* = Outside of Control Limits.

Duplicate Summary

Page 2 of 2

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD41695-5DUP	1C184896.D	1	03/23/22	PS	n/a	n/a	V1C8045
JD41695-5	1C184890.D	1	03/23/22	PS	n/a	n/a	V1C8045

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	JD41695-5 ug/kg	DUP Q	Q	RPD	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	ND		nc	10
75-09-2	Methylene chloride	ND	3.4	J	200* ^a	10
100-42-5	Styrene	ND	ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	10
127-18-4	Tetrachloroethene	ND	ND		nc	43
108-88-3	Toluene	ND	ND		nc	37
87-61-6	1,2,3-Trichlorobenzene	ND	ND		nc	30
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	10
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	21
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	10
79-01-6	Trichloroethene	ND	ND		nc	44
75-69-4	Trichlorofluoromethane	ND	ND		nc	30
75-01-4	Vinyl chloride	ND	ND		nc	22
	m,p-Xylene	ND	ND		nc	44
95-47-6	o-Xylene	ND	ND		nc	45
1330-20-7	Xylene (total)	ND	ND		nc	60

CAS No.	Surrogate Recoveries	DUP	JD41695-5	Limits
1868-53-7	Dibromofluoromethane	104%	109%	80-124%
17060-07-0	1,2-Dichloroethane-D4	111%	112%	75-133%
2037-26-5	Toluene-D8	99%	101%	79-125%
460-00-4	4-Bromofluorobenzene	96%	98%	58-148%

(a) RPD acceptable due to low DUP and sample concentrations.

* = Outside of Control Limits.

Initial Calibration Summary

Page 1 of 3

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7725-ICC7725
 Lab FileID: M179083.D

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Tue Mar 22 15:53:49 2022
 Response via : Initial Calibration

Calibration Files

2 =m179080.D 5 =m179082.D 100 =m179079.D 50 =m179083.D
 1 =m179078b.D 10 =m179084c.D 80 =m179081.D 25 =m179085.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.753	0.636	0.756	0.742	0.796	0.711	0.755	0.702	0.731	6.63
3) Pyridine	1.830	1.708	1.707	1.721	1.860	1.772	1.711	1.747	1.757	3.37
4) N-Nitrosodim	0.628	0.643	0.728	0.703	0.711	0.709	0.715	0.684	0.690	5.24
5) 2-Fluorophen	1.522	1.497	1.578	1.576	1.618	1.571	1.579	1.555	1.562	2.40
6) Indene	2.673	2.510	2.110	2.157	2.645	2.466	2.105	2.277	2.368	9.95
7) Cumene	3.658	3.614	3.162	3.324	3.674	3.733	3.197	3.527	3.486	6.49
8) Phenol-d5	2.064	1.885	1.971	1.983	1.952	1.999	1.958	1.987	1.975	2.54
9) Phenol	2.150	2.103	1.786	1.863	2.387	2.120	1.794	1.998	2.025	10.22
10) Aniline	2.507	2.426	1.917	2.042	2.700	2.447	1.960	2.174	2.272	12.65
11) bis(2-Chloro	1.542	1.473	1.260	1.292	1.611	1.437	1.282	1.370	1.408	9.17
12) 2-Chlorophen	1.599	1.542	1.324	1.351	1.685	1.510	1.332	1.395	1.467	9.27
13) Decane	1.447	1.232	0.959	1.015	1.541	1.252	0.975	1.100	1.190	18.34
14) 1,3-Dichloro	1.795	1.703	1.435	1.480	1.832	1.678	1.452	1.520	1.612	9.88
15) 1,4-Dichloro	1.491	1.443	1.317	1.336	1.510	1.457	1.331	1.354	1.405	5.60
16) Benzyl alcoh	1.039	0.970	0.991	0.976	1.006	1.000	0.984	0.967	0.992	2.38
17) 1,2-Dichloro	1.628	1.500	1.264	1.307	1.672	1.499	1.278	1.401	1.444	10.87
18) Acetophenone	2.130	1.919	1.562	1.623	2.284	1.934	1.570	1.713	1.842	14.64
19) 2-Methylphen	1.347	1.322	1.152	1.191	1.530	1.355	1.156	1.232	1.286	10.03
20) 2,2'-oxybis(	0.404	0.395	0.334	0.339	0.424	0.392	0.339	0.366	0.374	9.14
21) 3&4-Methylph	1.459	1.374	1.173	1.221	1.424	1.402	1.183	1.277	1.314	8.70
22) n-Nitroso-di	1.128	0.930	0.752	0.745		0.924	0.731	0.813	0.861	16.76
23) Hexachloroet	0.483	0.505	0.491	0.482	0.618	0.483	0.499	0.482	0.505	9.14
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.428	0.397	0.338	0.350	0.427	0.397	0.339	0.364	0.380	9.84
26) Nitrobenzene	0.425	0.419	0.318	0.340	0.460	0.395	0.327	0.364	0.381	13.55
27) Quinoline	0.886	0.892	0.795	0.815	0.889	0.878	0.802	0.828	0.848	4.93
28) Isophorone	0.874	0.815	0.720	0.755	0.868	0.861	0.732	0.781	0.801	7.82
29) 2-Nitropheno	0.229	0.239	0.207	0.216	0.227	0.229	0.210	0.221	0.222	4.86
30) 2,4-Dimethyl	0.398	0.390	0.316	0.330	0.461	0.397	0.322	0.358	0.371	13.36
31) Benzoic acid		0.144	0.258	0.253		0.173	0.256	0.217	0.217	22.29
---- Quadratic regression ---- Coefficient = 0.9991										
Response Ratio = -0.01501 + 0.24614 *A + 0.00795 *A^2										
32) bis(2-Chloro	0.559	0.505	0.398	0.403	0.571	0.485	0.401	0.444	0.470	14.96
33) 2,4-Dichloro	0.360	0.343	0.292	0.300	0.359	0.322	0.293	0.317	0.323	8.66
34) 2,6-Dichloro	0.329	0.290	0.255	0.260	0.304	0.291	0.258	0.271	0.282	9.22
35) 1,3,5-Trichl	0.408	0.367	0.272	0.297	0.385	0.354	0.285	0.324	0.337	14.75
36) 1,2,4-Trichl	0.357	0.362	0.300	0.316	0.412	0.349	0.309	0.326	0.341	10.67
37) 1,2,3-Trichl	0.345	0.335	0.263	0.270	0.364	0.308	0.267	0.288	0.305	12.79
38) Naphthalene	1.112	1.048	0.922	0.963	1.141	1.058	0.946	1.003	1.024	7.74
39) 4-Chloroanil	0.497	0.502	0.432	0.451	0.516	0.498	0.441	0.469	0.476	6.64
40) 2,3-Dichloro	0.441	0.442	0.364	0.379	0.423	0.420	0.367	0.391	0.403	7.93
41) Hydroquinone	0.487	0.457	0.413	0.403	0.509	0.427	0.408	0.412	0.439	9.14
42) Hexachlorobu	0.184	0.184	0.163	0.166	0.202	0.176	0.163	0.171	0.176	7.68

87.1

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Initial Calibration Summary

Page 2 of 3

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7725-ICC7725
Lab FileID: M179083.D

43)	4-Chloro-3-m	0.371	0.370	0.333	0.349	0.375	0.389	0.341	0.363	0.362	5.20
44)	2-Methylnaph	0.797	0.738	0.609	0.645	0.805	0.745	0.628	0.693	0.707	10.65
45)	1-Methylnaph	0.885	0.808	0.687	0.714	0.869	0.804	0.702	0.752	0.777	9.74
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.232	0.265	0.262		0.267	0.279	0.271	0.262		6.18
48)	1,2,4,5-Tetr	0.669	0.568	0.422	0.449		0.565	0.449	0.500	0.517	17.03
49)	2,4,6-Trichl	0.500	0.427	0.340	0.359	0.447	0.400	0.363	0.381	0.402	13.32
50)	2,4,5-Trichl	0.483	0.485	0.375	0.372	0.495	0.436	0.385	0.400	0.429	12.26
51)	2-Fluorobiph	1.585	1.514	1.204	1.234	1.656	1.422	1.267	1.350	1.404	12.02
52)	2-Chloronaph	1.443	1.290	0.939	0.982		1.235	1.001	1.089	1.140	16.43
53)	Biphenyl	1.798	1.727	1.334	1.394	1.886	1.666	1.426	1.538	1.596	12.73
54)	2-Nitroanili	0.425	0.398	0.355	0.360	0.443	0.414	0.367	0.381	0.393	8.22
55)	Dimethylphth	1.695	1.639	1.370	1.427	1.654	1.626	1.450	1.510	1.546	7.91
56)	Acenaphthyle	2.236	2.120	1.581	1.655	2.136	2.001	1.687	1.822	1.905	13.17
57)	2,6-Dinitrot	0.348	0.338	0.319	0.314	0.265	0.336	0.335	0.323	0.322	7.95
58)	3-Nitroanili	0.392	0.382	0.397	0.390	0.405	0.430	0.417	0.388	0.400	4.07
59)	Acenaphthene	1.275	1.235	1.032	1.056	1.297	1.196	1.089	1.130	1.164	8.69
60)	2,4-Dinitrop	0.023	0.050		0.171		0.091	0.197	0.132	0.111	61.62
---- Quadratic regression ---- Coefficient = 0.9983											
Response Ratio = -0.01193 + 0.11360 *A + 0.02213 *A^2											
61)	4-Nitropheno	0.156	0.188	0.182	0.197	0.197	0.197	0.192	0.190	0.187	7.28
62)	Dibenzofuran	2.068	1.932	1.532	1.587	1.939	1.891	1.616	1.727	1.786	11.02
63)	2,4-Dinitrot	0.411	0.432	0.361	0.368	0.374	0.448	0.380	0.394	0.396	7.98
64)	2,3,4,6-Tetr	0.315	0.345	0.352	0.341	0.339	0.379	0.365	0.354	0.349	5.45
65)	Diethylphtha	1.743	1.669	1.394	1.448	1.770	1.638	1.485	1.554	1.588	8.76
66)	Fluorene	1.727	1.657	1.283	1.342	1.860	1.616	1.360	1.460	1.538	13.48
67)	4-Chlorophen	0.780	0.689	0.567	0.566	0.734	0.671	0.594	0.609	0.651	12.28
68)	4-Nitroanili	0.365	0.388	0.322	0.317	0.382	0.403	0.330	0.336	0.355	9.38
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.060	0.117	0.113		0.088	0.120	0.103	0.100		22.77
---- Quadratic regression ---- Coefficient = 0.9994											
Response Ratio = -0.00734 + 0.11701 *A + 0.00192 *A^2											
71)	n-Nitrosodip	0.816	0.750	0.553	0.586	0.794	0.710	0.578	0.655	0.680	15.05
72)	Pentachloron	0.048	0.046	0.033	0.035		0.044	0.034	0.038	0.040#	15.41
73)	1,2-Diphenyl	0.896	0.878		0.629	1.003	0.831	0.610	0.722	0.796	18.44
74)	2,4,6-Tribo	0.126	0.121	0.101	0.106	0.145	0.125	0.103	0.111	0.117	12.64
75)	4-Bromopheny	0.278	0.253	0.199	0.218	0.266	0.254	0.213	0.233	0.239	11.66
76)	Hexachlorobe	0.291	0.272	0.196	0.210	0.273	0.268	0.207	0.239	0.245	14.84
77)	Pentachlorop	0.075	0.125	0.137	0.142		0.142	0.142	0.151	0.131	19.65
78)	Phenanthrene	1.120	1.047	0.780	0.845	1.178	1.015	0.837	0.933	0.969	14.81
79)	Anthracene	1.195	1.198	0.893	0.960	1.267	1.128	0.943	1.047	1.079	12.81
80)	Carbazole	1.340	1.300	0.956	1.045	1.395	1.248	1.007	1.123	1.177	14.09
81)	Di-n-butylph	1.675	1.677	1.204	1.342	1.826	1.635	1.288	1.489	1.517	14.56
82)	Fluoranthene	1.414	1.473	1.032	1.155	1.390	1.446	1.111	1.267	1.286	13.16
83)	Octadecane	0.465	0.421	0.290	0.318		0.413	0.306	0.368	0.369	18.04
84)	I Chrysene-d12	-----ISTD-----									
85)	Benidine	0.753	0.828	0.874	0.905	0.608	0.864	0.915	0.895	0.830	12.50
86)	Pyrene	1.694	1.570	1.322	1.273	1.780	1.484	1.331	1.349	1.475	12.84
87)	Terphenyl-d1	1.268	1.182	1.125	1.073	1.191	1.176	1.133	1.106	1.157	5.23
88)	Butylbenzylp	0.835	0.791	0.782	0.762	0.801	0.805	0.797	0.790	0.795	2.63
89)	Benzo[a]anth	1.480	1.395	1.352	1.299	1.461	1.374	1.355	1.330	1.381	4.53
90)	3,3'-Dichlor	0.468	0.445	0.471	0.444	0.416	0.450	0.470	0.441	0.451	4.20
91)	Chrysene	1.244	1.155	1.148	1.066	1.301	1.142	1.143	1.082	1.160	6.75
92)	bis(2-Ethylh	1.094	1.077	1.058	1.012	1.069	1.051	1.070	1.029	1.057	2.53

8.7.1
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Sample: EM7725-ICC7725
Lab FileID: M179083.D

93)	I	Perylene-d12	-----ISTD-----								
94)	Di-n-octylph	1.917	1.884	1.498	1.587	1.976	1.848	1.558	1.706	1.747	10.48
95)	Benzo[b]fluo	1.525	1.440	1.088	1.165	1.452	1.385	1.144	1.259	1.308	12.57
96)	Benzo[k]fluo	1.442	1.332	0.977	1.000	1.493	1.241	1.008	1.072	1.196	17.52
97)	Benzo[a]pyre	1.348	1.311	1.072	1.137	1.427	1.286	1.116	1.219	1.240	10.05
98)	Indeno[1,2,3	1.013	0.960	0.890	0.899	1.006	1.007	0.915	0.980	0.959	5.31
99)	Dibenz(a,h)a	0.947	0.969	0.854	0.891	0.954	1.004	0.907	1.009	0.942	5.79
100)	Dibenz[a,h]a	1.147	1.037	0.964	0.966	1.053	1.054	0.990	1.045	1.032	5.81
101)	7,12-Dimethy	0.645	0.611	0.495	0.495	0.731	0.580	0.500	0.530	0.573	14.88
102)	Benzo[g,h,i]	1.247	1.120	1.039	1.058	1.175	1.168	1.065	1.157	1.129	6.33

```
(#) = Out of Range   ###  Number of calibration levels exceeded format  ###
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Tue Mar 22 15:59:08 2022

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7730-CC7725
 Lab FileID: M179177.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2822\em7730\m179177.d Vial: 2
 Acq On : 25 Mar 2022 12:21 am Operator: chriss2
 Sample : cc7725-25 Inst : MSM
 Misc : op37014,em7730,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Wed Mar 23 22:05:44 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.02	4.57
2 t	1,4-Dioxane	0.731	0.790	-8.1	102	-0.03	2.06
3 t	Pyridine	1.757	1.809	-3.0	94	-0.04	2.39
4 t	N-Nitrosodimethylamine	0.690	0.721	-4.5	96	-0.03	2.36
5 S	2-Fluorophenol	1.562	1.601	-2.5	94	-0.02	3.56
6 t	Indene	2.368	2.352	0.7	94	-0.02	4.77
7 t	Cumene	3.486	3.552	-1.9	92	-0.02	3.97
8 S	Phenol-d5	1.975	2.036	-3.1	93	-0.02	4.29
9 t	Phenol	2.025	2.091	-3.3	95	-0.02	4.30
10 t	Aniline	2.272	2.260	0.5	95	-0.02	4.32
11 t	bis(2-Chloroethyl)ether	1.408	1.399	0.6	93	-0.02	4.38
12 t	2-Chlorophenol	1.467	1.475	-0.5	96	-0.02	4.41
13 t	Decane	1.190	1.171	1.6	97	-0.02	4.46
14 t	1,3-Dichlorobenzene	1.612	1.585	1.7	95	-0.02	4.53
15 t	1,4-Dichlorobenzene	1.405	1.435	-2.1	97	-0.02	4.58
16 t	Benzyl alcohol	0.992	1.010	-1.8	95	-0.02	4.67
17 t	1,2-Dichlorobenzene	1.444	1.416	1.9	92	-0.02	4.70
18 t	Acetophenone	1.842	1.767	4.1	94	-0.02	4.89
19 t	2-Methylphenol	1.286	1.288	-0.2	95	-0.02	4.76
20 t	2,2'-oxybis(1-Chloropropa	0.374	0.361	3.5	90	-0.02	4.79
21 t	3&4-Methylphenol	1.314	1.330	-1.2	95	-0.01	4.89
22 t	n-Nitroso-di-n-propylamin	0.861	0.870	-1.0	98	-0.02	4.89
23 t	Hexachloroethane	0.505	0.474	6.1	90	-0.03	4.97
24 I	Naphthalene-d8	1.000	1.000	0.0	92	-0.03	5.68
25 S	Nitrobenzene-d5	0.380	0.373	1.8	94	-0.02	5.01
26 t	Nitrobenzene	0.381	0.376	1.3	95	-0.02	5.03
27 t	Quinoline	0.848	0.825	2.7	92	-0.02	6.07
28 t	Isophorone	0.801	0.790	1.4	93	-0.02	5.24
29 t	2-Nitrophenol	0.222	0.219	1.4	92	-0.02	5.31
30 t	2,4-Dimethylphenol	0.371	0.368	0.8	95	-0.03	5.35
	----- True		Calc.	% Drift		-----	
31 t	Benzoic acid	25.000	29.500	-18.0	116	-0.03	5.42
	----- AvgRF		CCRF	% Dev		-----	
32 t	bis(2-Chloroethoxy)methan	0.470	0.453	3.6	94	-0.02	5.44
33 t	2,4-Dichlorophenol	0.323	0.311	3.7	90	-0.03	5.54
34 t	2,6-Dichlorophenol	0.282	0.279	1.1	95	-0.03	5.77
35 t	1,3,5-Trichlorobenzene	0.337	0.328	2.7	93	-0.02	5.32
36 t	1,2,4-Trichlorobenzene	0.341	0.329	3.5	93	-0.03	5.63
37 t	1,2,3-Trichlorobenzene	0.305	0.292	4.3	93	-0.03	5.86

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7730-CC7725
Lab FileID: M179177.D

38 t	Naphthalene	1.024	1.011	1.3	93	-0.03	5.71
39 t	4-Chloroaniline	0.476	0.472	0.8	93	-0.03	5.76
40 t	2,3-Dichloroaniline	0.403	0.391	3.0	92	-0.03	6.87
41 t	Hydroquinone	0.439	0.336	23.5#	75	-0.08	6.12
42 t	Hexachlorobutadiene	0.176	0.171	2.8	92	-0.03	5.84
43 t	4-Chloro-3-methylphenol	0.362	0.370	-2.2	94	-0.03	6.31
44 t	2-Methylnaphthalene	0.707	0.706	0.1	94	-0.03	6.51
45 t	1-Methylnaphthalene	0.777	0.765	1.5	94	-0.03	6.63
46 I	Acenaphthene-d10	1.000	1.000	0.0	90	-0.03	8.00
47 t	Hexachlorocyclopentadiene	0.262	0.314	-19.8	105	-0.03	6.71
48	1,2,4,5-Tetrachlorobenzen	0.517	0.501	3.1	91	-0.03	6.72
49 t	2,4,6-Trichlorophenol	0.402	0.386	4.0	91	-0.04	6.88
50 t	2,4,5-Trichlorophenol	0.429	0.403	6.1	91	-0.06	6.92
51 S	2-Fluorobiphenyl	1.404	1.383	1.5	93	-0.03	7.00
52 t	2-Chloronaphthalene	1.140	1.141	-0.1	95	-0.03	7.16
53 t	Biphenyl	1.596	1.568	1.8	92	-0.03	7.14
54 t	2-Nitroaniline	0.393	0.398	-1.3	95	-0.03	7.31
55 t	Dimethylphthalate	1.546	1.512	2.2	90	-0.03	7.63
56 t	Acenaphthylene	1.905	1.868	1.9	93	-0.03	7.77
57 t	2,6-Dinitrotoluene	0.322	0.341	-5.9	95	-0.03	7.70
58 t	3-Nitroaniline	0.400	0.416	-4.0	97	-0.03	7.95
59 t	Acenaphthene	1.164	1.151	1.1	92	-0.03	8.06
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	64.638	-29.3#	125	-0.09	8.13
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.187	0.184	1.6	87	-0.08	8.26
62 t	Dibenzofuran	1.786	1.796	-0.6	94	-0.04	8.34
63 t	2,4-Dinitrotoluene	0.396	0.404	-2.0	93	-0.03	8.35
64 t	2,3,4,6-Tetrachlorophenol	0.349	0.374	-7.2	95	-0.05	8.55
65 t	Diethylphthalate	1.588	1.540	3.0	90	-0.03	8.83
66 t	Fluorene	1.538	1.481	3.7	92	-0.04	8.92
67 t	4-Chlorophenyl-phenylethe	0.651	0.629	3.4	93	-0.04	8.97
68 t	4-Nitroaniline	0.355	0.345	2.8	93	-0.04	8.98
69 I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.04	10.62
----- True Calc. % Drift -----							
70 t	4,6-Dinitro-2-methylpheno	25.000	26.761	-7.0	101	-0.05	9.04
----- AvgRF CCRF % Dev -----							
71 t	n-Nitrosodiphenylamine	0.680	0.666	2.1	92	-0.03	9.18
72	Pentachloronitrobenzene	0.040	0.040#	0.0	95	-0.03	10.31
73 t	1,2-Diphenylhydrazine	0.796	0.738	7.3	93	-0.03	9.25
74 S	2,4,6-Tribromophenol	0.117	0.115	1.7	94	-0.04	9.34
75 t	4-Bromophenyl-phenylether	0.239	0.237	0.8	92	-0.04	9.85
76 t	Hexachlorobenzene	0.245	0.242	1.2	92	-0.03	9.89
77 t	Pentachlorophenol	0.131	0.161	-22.9#	96	-0.07	10.28
78 t	Phenanthrene	0.969	0.956	1.3	93	-0.03	10.66
79 t	Anthracene	1.079	1.056	2.1	91	-0.03	10.75
80 t	Carbazole	1.177	1.153	2.0	93	-0.04	11.10
81 t	Di-n-butylphthalate	1.517	1.488	1.9	90	-0.04	11.95
82 t	Fluoranthene	1.286	1.279	0.5	91	-0.04	12.94
83 t	Octadecane	0.369	0.384	-4.1	95	-0.04	10.66
84 I	Chrysene-d12	1.000	1.000	0.0	89	-0.03	15.79
85	Benzidine	0.830	0.936	-12.8	93	-0.04	13.31
86 t	Pyrene	1.475	1.388	5.9	92	-0.04	13.37

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7730-CC7725
Lab FileID: M179177.D

87	S	Terphenyl-d14	1.157	1.156	0.1	93	-0.03	13.82
88	t	Butylbenzylphthalate	0.795	0.785	1.3	89	-0.04	14.90
89	t	Benzo[a]anthracene	1.381	1.372	0.7	92	-0.03	15.77
90	t	3,3'-Dichlorobenzidine	0.451	0.465	-3.1	94	-0.04	15.81
91	t	Chrysene	1.160	1.134	2.2	94	-0.03	15.83
92	t	bis(2-Ethylhexyl)phthalat	1.057	1.046	1.0	91	-0.03	16.14
93	I	Perylene-d12	1.000	1.000	0.0	90	-0.03	18.40
94	t	Di-n-octylphthalate	1.747	1.718	1.7	91	-0.03	17.38
95	t	Benzo[b]fluoranthene	1.308	1.301	0.5	93	-0.03	17.76
96	t	Benzo[k]fluoranthene	1.196	1.070	10.5	90	-0.03	17.81
97	t	Benzo[a]pyrene	1.240	1.232	0.6	91	-0.03	18.30
98	t	Indeno[1,2,3-cd]pyrene	0.959	1.042	-8.7	96	-0.03	20.08
99	t	Dibenz(a,h)acridine	0.942	1.038	-10.2	93	-0.03	19.74
100	t	Dibenz[a,h]anthracene	1.032	1.081	-4.7	93	-0.04	20.14
101	t	7,12-Dimethylbenz(a)anthr	0.573	0.543	5.2	92	-0.03	17.78
102	t	Benzo[g,h,i]perylene	1.129	1.206	-6.8	94	-0.04	20.51

(#) = Out of Range
 m179095a.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Sun Mar 27 22:59:44 2022

8.7.10
 8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7730-CC7726
 Lab FileID: M179178.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2822\em7730\m179178.d Vial: 3
 Acq On : 25 Mar 2022 12:52 am Operator: chriss2
 Sample : cc7726-25 Inst : MSM
 Misc : op37014,em7730,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Wed Mar 23 22:05:44 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	121	-0.02	4.57
104 t	Benzaldehyde	1.166	1.208	-3.6	121	-0.02	4.24
105 I	Acenaphthene-d10a	1.000	1.000	0.0	118	-0.03	8.00
106 t	Atrazine	0.213	0.213	0.0	117	-0.03	10.23
107 I	Chrysene-d12a	1.000	1.000	0.0	116	-0.03	15.78
108 s	1-chlorooctadecane	0.359	0.375	-4.5	117	-0.03	13.01
109	Phenanthrene-d10a	1.000	1.000	0.0	116	-0.03	10.61
110 s	o-terphenyl	0.593	0.614	-3.5	119	-0.03	11.45
111 I	Naphthalene-d8a	1.000	1.000	0.0	118	-0.03	5.68
112	Caprolactam	0.155	0.169	-9.0	118	-0.01	6.12

(#) = Out of Range
 m179095a.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Sun Mar 27 22:59:48 2022

8.7.11

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Continuing Calibration Summary

Page 1 of 3

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7732-CC7725
 Lab FileID: M179227.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM7732\m179227.D Vial: 2
 Acq On : 28 Mar 2022 11:54 am Operator: jackleey
 Sample : cc7725-25 Inst : MSM
 Misc : op37014,em7732,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Mon Mar 28 16:41:44 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	54	0.00	4.55
2 t	1,4-Dioxane	0.731	0.791	-8.2	61	0.00	2.03
3 t	Pyridine	1.757	1.947	-10.8	60	0.00	2.37
4 t	N-Nitrosodimethylamine	0.690	0.819	-18.7	64	0.00	2.33
5 S	2-Fluorophenol	1.562	1.601	-2.5	55	0.00	3.54
6 t	Indene	2.368	2.385	-0.7	56	0.00	4.75
7 t	Cumene	3.486	3.542	-1.6	54	0.00	3.95
8 S	Phenol-d5	1.975	2.095	-6.1	57	0.00	4.28
9 t	Phenol	2.025	2.133	-5.3	57	0.00	4.29
10 t	Aniline	2.272	2.460	-8.3	61	0.00	4.30
11 t	bis(2-Chloroethyl)ether	1.408	1.474	-4.7	58	0.00	4.36
12 t	2-Chlorophenol	1.467	1.453	1.0	56	0.00	4.39
13 t	Decane	1.190	1.182	0.7	58	0.00	4.43
14 t	1,3-Dichlorobenzene	1.612	1.545	4.2	55	0.00	4.51
15 t	1,4-Dichlorobenzene	1.405	1.451	-3.3	58	0.00	4.56
16 t	Benzyl alcohol	0.992	1.052	-6.0	59	0.00	4.66
17 t	1,2-Dichlorobenzene	1.444	1.396	3.3	54	0.00	4.68
18 t	Acetophenone	1.842	1.992	-8.1	63	0.00	4.86
19 t	2-Methylphenol	1.286	1.279	0.5	56	0.00	4.74
20 t	2,2'-oxybis(1-Chloropropa	0.374	0.382	-2.1	56	0.00	4.76
21 t	3&4-Methylphenol	1.314	1.375	-4.6	58	0.00	4.86
22 t	n-Nitroso-di-n-propylamin	0.861	0.979	-13.7	65	0.00	4.86
23 t	Hexachloroethane	0.505	0.434	14.1	49#	0.00	4.95
24 I	Naphthalene-d8	1.000	1.000	0.0	56	0.00	5.65
25 S	Nitrobenzene-d5	0.380	0.383	-0.8	59	0.00	4.99
26 t	Nitrobenzene	0.381	0.372	2.4	57	0.00	5.00
27 t	Quinoline	0.848	0.944	-11.3	64	0.00	6.04
28 t	Isophorone	0.801	0.861	-7.5	62	0.00	5.22
29 t	2-Nitrophenol	0.222	0.222	0.0	56	0.00	5.29
30 t	2,4-Dimethylphenol	0.371	0.377	-1.6	59	0.00	5.33
	----- True Calc. % Drift -----						
31 t	Benzoic acid	25.000	32.823	-31.3#	79	0.00	5.40
	----- AvgRF CCRF % Dev -----						
32 t	bis(2-Chloroethoxy)methan	0.470	0.455	3.2	57	0.00	5.42
33 t	2,4-Dichlorophenol	0.323	0.306	5.3	54	0.00	5.52
34 t	2,6-Dichlorophenol	0.282	0.281	0.4	58	0.00	5.75
35 t	1,3,5-Trichlorobenzene	0.337	0.317	5.9	55	0.00	5.30
36 t	1,2,4-Trichlorobenzene	0.341	0.322	5.6	55	0.00	5.60
37 t	1,2,3-Trichlorobenzene	0.305	0.286	6.2	55	0.00	5.83

Continuing Calibration Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7732-CC7725
Lab FileID: M179227.D

38 t	Naphthalene	1.024	1.048	-2.3	58	0.00	5.68
39 t	4-Chloroaniline	0.476	0.477	-0.2	57	0.00	5.73
40 t	2,3-Dichloroaniline	0.403	0.408	-1.2	58	0.00	6.84
41 t	Hydroquinone	0.439	0.436	0.7	59	0.00	6.10
42 t	Hexachlorobutadiene	0.176	0.159	9.7	52	0.00	5.82
43 t	4-Chloro-3-methylphenol	0.362	0.372	-2.8	57	0.00	6.29
44 t	2-Methylnaphthalene	0.707	0.701	0.8	57	0.00	6.47
45 t	1-Methylnaphthalene	0.777	0.765	1.5	57	0.00	6.60
46 I	Acenaphthene-d10	1.000	1.000	0.0	58	0.00	7.97
47 t	Hexachlorocyclopentadiene	0.262	0.293	-11.8	63	0.00	6.68
48	1,2,4,5-Tetrachlorobenzen	0.517	0.502	2.9	58	0.00	6.69
49 t	2,4,6-Trichlorophenol	0.402	0.378	6.0	57	0.00	6.85
50 t	2,4,5-Trichlorophenol	0.429	0.404	5.8	58	0.00	6.89
51 S	2-Fluorobiphenyl	1.404	1.328	5.4	57	0.00	6.97
52 t	2-Chloronaphthalene	1.140	1.092	4.2	58	0.00	7.12
53 t	Biphenyl	1.596	1.528	4.3	57	0.00	7.11
54 t	2-Nitroaniline	0.393	0.401	-2.0	61	0.00	7.28
55 t	Dimethylphthalate	1.546	1.630	-5.4	62	0.00	7.60
56 t	Acenaphthylene	1.905	1.828	4.0	58	0.00	7.74
57 t	2,6-Dinitrotoluene	0.322	0.345	-7.1	62	0.00	7.67
58 t	3-Nitroaniline	0.400	0.448	-12.0	67	0.00	7.92
59 t	Acenaphthene	1.164	1.169	-0.4	60	0.00	8.02
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	79.173	-58.3#	105	0.00	8.10
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.187	0.214	-14.4	65	0.00	8.24
62 t	Dibenzofuran	1.786	1.758	1.6	59	0.00	8.31
63 t	2,4-Dinitrotoluene	0.396	0.445	-12.4	65	0.00	8.32
64 t	2,3,4,6-Tetrachlorophenol	0.349	0.363	-4.0	59	0.00	8.52
65 t	Diethylphthalate	1.588	1.690	-6.4	63	0.00	8.80
66 t	Fluorene	1.538	1.503	2.3	60	0.00	8.89
67 t	4-Chlorophenyl-phenylethe	0.651	0.636	2.3	60	0.00	8.93
68 t	4-Nitroaniline	0.355	0.426	-20.0#	73	0.00	8.94
69 I	Phenanthrene-d10	1.000	1.000	0.0	63	0.00	10.58
----- True Calc. % Drift -----							
70 t	4,6-Dinitro-2-methylpheno	25.000	29.767	-19.1	79	0.00	9.01
----- AvgRF CCRF % Dev -----							
71 t	n-Nitrosodiphenylamine	0.680	0.618	9.1	59	0.00	9.15
72	Pentachloronitrobenzene	0.040	0.042#	-5.0	69	0.00	10.27
73 t	1,2-Diphenylhydrazine	0.796	0.711	10.7	62	0.00	9.21
74 S	2,4,6-Tribromophenol	0.117	0.107	8.5	61	0.00	9.31
75 t	4-Bromophenyl-phenylether	0.239	0.216	9.6	58	0.00	9.81
76 t	Hexachlorobenzene	0.245	0.237	3.3	62	0.00	9.86
77 t	Pentachlorophenol	0.131	0.166	-26.7#	69	0.00	10.24
78 t	Phenanthrene	0.969	0.987	-1.9	66	0.00	10.62
79 t	Anthracene	1.079	1.048	2.9	63	0.00	10.72
80 t	Carbazole	1.177	1.200	-2.0	67	0.00	11.07
81 t	Di-n-butylphthalate	1.517	1.567	-3.3	66	0.00	11.92
82 t	Fluoranthene	1.286	1.388	-7.9	69	0.00	12.90
83 t	Octadecane	0.369	0.368	0.3	63	0.00	10.62
84 I	Chrysene-d12	1.000	1.000	0.0	80	0.00	15.75
85	Benzidine	0.830	0.886	-6.7	79	0.00	13.28
86 t	Pyrene	1.475	1.176	20.3#	70	0.00	13.33

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7732-CC7725
Lab FileID: M179227.D

87	S	Terphenyl-d14	1.157	0.982	15.1	71	0.00	13.77
88	t	Butylbenzylphthalate	0.795	0.735	7.5	74	0.00	14.86
89	t	Benzo[a]anthracene	1.381	1.344	2.7	81	0.00	15.72
90	t	3,3'-Dichlorobenzidine	0.451	0.486	-7.8	88	0.00	15.77
91	t	Chrysene	1.160	1.096	5.5	81	0.00	15.79
92	t	bis(2-Ethylhexyl)phthalat	1.057	1.043	1.3	81	0.00	16.10
93	I	Perylene-d12	1.000	1.000	0.0	88	0.00	18.35
94	t	Di-n-octylphthalate	1.747	1.542	11.7	80	0.00	17.34
95	t	Benzo[b]fluoranthene	1.308	1.290	1.4	90	0.00	17.71
96	t	Benzo[k]fluoranthene	1.196	1.057	11.6	87	0.00	17.77
97	t	Benzo[a]pyrene	1.240	1.227	1.0	89	0.00	18.25
98	t	Indeno[1,2,3-cd]pyrene	0.959	1.212	-26.4#	109	0.00	20.03
99	t	Dibenz(a,h)acridine	0.942	1.159	-23.0#	101	0.00	19.70
100	t	Dibenz[a,h]anthracene	1.032	1.267	-22.8#	107	0.00	20.09
101	t	7,12-Dimethylbenz(a)anthr	0.573	0.509	11.2	85	0.00	17.73
102	t	Benzo[g,h,i]perylene	1.129	1.409	-24.8#	108	0.00	20.46

(#) = Out of Range
 m179227.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Mon Mar 28 16:42:22 2022

8.7.12
 8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7732-CC7726
Lab FileID: M179229.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM7732\m179229.D Vial: 4
 Acq On : 28 Mar 2022 12:57 pm Operator: jackleey
 Sample : cc7726-25 Inst : MSM
 Misc : op37014,em7732,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Mon Mar 28 16:33:28 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.

103 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	0.00	4.55
104 t	Benzaldehyde	1.166	1.225	-5.1	62	-0.04	4.22
105 I	Acenaphthene-d10a	1.000	1.000	0.0	62	0.00	7.97
106 t	Atrazine	0.213	0.249	-16.9	72	-0.06	10.20
107 I	Chrysene-d12a	1.000	1.000	0.0	89	-0.01	15.73
108 s	1-chlorooctadecane	0.359	0.303	15.6	72	-0.07	12.97
109	Phenanthrene-d10a	1.000	1.000	0.0	70	0.00	10.57
110 s	o-terphenyl	0.593	0.592	0.2	69	-0.07	11.41
111 I	Naphthalene-d8a	1.000	1.000	0.0	59	0.00	5.65
112	Caprolactam	0.155	0.170	-9.7	60	-0.04	6.09

(#) = Out of Range
 m179227.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Mon Mar 28 16:35:23 2022

8.7.13

8

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38774-MS	M179238.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
OP38774-MSD	M179239.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
JD41695-1 ^a	M179236.D	5	03/28/22	JY	03/24/22	OP38774	EM7732

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	JD41695-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		1670	294	18	1660	780	47	91* ^b	10-148/50
59-50-7	4-Chloro-3-methyl phenol	ND		1670	310	19	1660	830	50	91* ^b	10-157/50
120-83-2	2,4-Dichlorophenol	ND		1670	261	16	1660	662	40	87* ^b	10-153/50
105-67-9	2,4-Dimethylphenol	ND		1670	ND	0* ^c	1660	863	52	200* ^b	10-163/50
51-28-5	2,4-Dinitrophenol	ND		3330	817	25	3320	881	27	8	10-107/50
534-52-1	4,6-Dinitro-o-cresol	ND		1670	482	29	1660	527	32	9	10-156/50
95-48-7	2-Methylphenol	ND		1670	311	19	1660	864	52	94* ^b	10-150/50
	3&4-Methylphenol	ND		3330	627	19	3320	1830	55	98* ^b	10-199/50
88-75-5	2-Nitrophenol	ND		1670	197	12	1660	304	18	43	10-161/50
100-02-7	4-Nitrophenol	ND		1670	ND	0* ^c	1660	ND	0* ^c	nc	10-159/50
87-86-5	Pentachlorophenol	ND		3330	295	9* ^c	3320	1090	33	115* ^b	10-171/50
108-95-2	Phenol	ND		1670	292	18	1660	795	48	93* ^b	10-120/50
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1670	131	8* ^c	1660	510	31	118* ^b	10-165/50
95-95-4	2,4,5-Trichlorophenol	ND		1670	201	12	1660	557	34	94* ^b	10-158/50
88-06-2	2,4,6-Trichlorophenol	ND		1670	100	6* ^c	1660	444	27	126* ^b	10-166/50
83-32-9	Acenaphthene	ND		1670	289	17	1660	785	47	92* ^b	10-166/50
208-96-8	Acenaphthylene	ND		1670	217	13	1660	602	36	94* ^b	10-174/50
98-86-2	Acetophenone	ND		1670	310	19	1660	953	57	102* ^b	10-126/50
120-12-7	Anthracene	ND		1670	314	19	1660	837	50	91* ^b	10-174/50
1912-24-9	Atrazine	ND		1670	379	23	1660	873	53	79* ^b	10-169/50
56-55-3	Benzo(a)anthracene	59.7	J	1670	291	14	1660	767	43	90* ^b	10-175/50
50-32-8	Benzo(a)pyrene	ND		1670	274	16	1660	747	45	93* ^b	10-175/50
205-99-2	Benzo(b)fluoranthene	78.9	J	1670	308	14	1660	791	43	88* ^b	10-172/50
191-24-2	Benzo(g,h,i)perylene	ND		1670	301	18	1660	768	46	87* ^b	10-178/50
207-08-9	Benzo(k)fluoranthene	ND		1670	306	18	1660	800	48	89* ^b	10-158/50
101-55-3	4-Bromophenyl phenyl ether	ND		1670	261	16	1660	685	41	90* ^b	10-187/50
85-68-7	Butyl benzyl phthalate	ND		1670	275	17	1660	752	45	93* ^b	10-173/50
92-52-4	1,1'-Biphenyl	ND		1670	287	17	1660	765	46	91* ^b	10-154/50
100-52-7	Benzaldehyde	ND		1670	385	23	1660	1020	61	90* ^b	10-160/50
91-58-7	2-Chloronaphthalene	ND		1670	290	17	1660	789	48	92* ^b	10-155/50
106-47-8	4-Chloroaniline	ND		1670	432	26	1660	694	42	47	10-113/50
86-74-8	Carbazole	ND		1670	307	18	1660	851	51	94* ^b	10-173/50
105-60-2	Caprolactam	ND		1670	303	18	1660	941	57	103* ^b	10-169/50
218-01-9	Chrysene	90.0	J	1670	331	14	1660	880	48	91* ^b	10-173/50
111-91-1	bis(2-Chloroethoxy)methane	ND		1670	287	17	1660	800	48	94* ^b	10-143/50
111-44-4	bis(2-Chloroethyl)ether	ND		1670	256	15	1660	805	48	103* ^b	10-136/50

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38774-MS	M179238.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
OP38774-MSD	M179239.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
JD41695-1 ^a	M179236.D	5	03/28/22	JY	03/24/22	OP38774	EM7732

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	JD41695-1 ug/kg	Spike Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	ND		1670	346	21	1660	888	53	88* ^b	10-146/50
7005-72-3	4-Chlorophenyl phenyl ether	ND		1670	313	19	1660	818	49	89* ^b	10-173/50
121-14-2	2,4-Dinitrotoluene	ND		1670	267	16	1660	621	37	80* ^b	10-187/50
606-20-2	2,6-Dinitrotoluene	ND		1670	298	18	1660	660	40	76* ^b	10-192/50
91-94-1	3,3'-Dichlorobenzidine	ND		1667	467	28	1660	730	44	44	10-116/50
123-91-1	1,4-Dioxane	ND		1670	141	8* ^c	1660	359	22	87* ^b	10-103/50
53-70-3	Dibenzo(a,h)anthracene	ND		1670	294	18	1660	805	48	93* ^b	10-167/50
132-64-9	Dibenzofuran	ND		1670	300	18	1660	808	49	92* ^b	10-159/50
84-74-2	Di-n-butyl phthalate	ND		1670	297	18	1660	771	46	89* ^b	10-170/50
117-84-0	Di-n-octyl phthalate	ND		1670	315	19	1660	846	51	91* ^b	10-179/50
84-66-2	Diethyl phthalate	ND		1670	294	18	1660	774	47	90* ^b	10-167/50
131-11-3	Dimethyl phthalate	ND		1670	261	16	1660	602	36	79* ^b	10-156/50
117-81-7	bis(2-Ethylhexyl)phthalate	86.5	J	1670	313	14	1660	838	45	91* ^b	10-145/50
206-44-0	Fluoranthene	99.0	J	1670	331	14	1660	987	53	100* ^b	10-195/50
86-73-7	Fluorene	ND		1670	306	18	1660	808	49	90* ^b	10-166/50
118-74-1	Hexachlorobenzene	ND		1670	284	17	1660	727	44	88* ^b	10-159/50
87-68-3	Hexachlorobutadiene	ND		1670	262	16	1660	729	44	94* ^b	10-148/50
77-47-4	Hexachlorocyclopentadiene	ND		3330	89.4	3* ^c	3320	ND	0* ^c	200* ^b	10-143/50
67-72-1	Hexachloroethane	ND		1670	212	13	1660	476	29	77* ^b	10-142/50
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1670	319	19	1660	819	49	88* ^b	10-186/50
78-59-1	Isophorone	ND		1670	246	15	1660	753	45	102* ^b	10-148/50
91-57-6	2-Methylnaphthalene	94.9	J	1670	315	13	1660	863	46	93* ^b	10-160/50
88-74-4	2-Nitroaniline	ND		1670	512	31	1660	821	49	46	10-170/50
99-09-2	3-Nitroaniline	ND		1670	472	28	1660	802	48	52* ^b	10-144/50
100-01-6	4-Nitroaniline	ND		1670	642	39	1660	977	59	41	10-143/50
91-20-3	Naphthalene	63.0	J	1670	285	13	1660	807	45	96* ^b	10-174/50
98-95-3	Nitrobenzene	ND		1670	289	17	1660	723	44	86* ^b	10-152/50
621-64-7	N-Nitroso-di-n-propylamine	ND		1670	647	39	1660	992	60	42	10-154/50
86-30-6	N-Nitrosodiphenylamine	ND		1670	558	33	1660	826	50	39	10-184/50
85-01-8	Phenanthrene	60.5	J	1670	332	16	1660	910	51	93* ^b	10-192/50
129-00-0	Pyrene	103	J	1670	334	14	1660	958	51	97* ^b	10-197/50
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1670	313	19	1660	804	48	88* ^b	10-150/50

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38774-MS	M179238.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
OP38774-MSD	M179239.D	5	03/28/22	JY	03/24/22	OP38774	EM7732
JD41695-1 ^a	M179236.D	5	03/28/22	JY	03/24/22	OP38774	EM7732

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Surrogate Recoveries	MS	MSD	JD41695-1	Limits
367-12-4	2-Fluorophenol	62%	42%	47%	10-109%
4165-62-2	Phenol-d5	67%	52%	56%	10-105%
118-79-6	2,4,6-Tribromophenol	58%	34%	40%	10-135%
4165-60-0	Nitrobenzene-d5	68%	50%	56%	10-119%
321-60-8	2-Fluorobiphenyl	68%	52%	60%	18-112%
1718-51-0	Terphenyl-d14	73%	54%	57%	18-125%

(a) Dilution required due to viscosity of the extract matrix.

(b) Outside of in house control limits.

(c) Outside control limits due to matrix interference and dilution.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3724-CC3719
 Lab FileID: 4G9724389.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...\4g9724389.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\syrap\4g3724\4g9724389.d\ECD2B.ch
 Acq On : 30 Mar 2022 4:12 am Operator: rebeccak
 Sample : cc3719-25 Inst : GC4G
 Misc : op38829,g4g3724,16.1,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Wed Mar 30 21:48:08 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.21-	2.21
2 SAB	Tetrachloro-m-xylene	0.844	0.900	-6.6	113	0.00	2.35-	2.41
3	hexachlorobenzene	1.123	1.114	0.8	119	0.00	2.72-	2.78
4 A	alpha-BHC	1.462	1.575	-7.7	118	0.00	2.88-	2.94
5 MA	gamma-BHC	1.307	1.461	-11.8	121	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.344	1.0	108	0.00	3.74-	3.80
7 B	beta-BHC	0.570	0.625	-9.6	123	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.402	-7.8	124	0.00	3.49-	3.55
9 MB	Aldrin	1.317	1.411	-7.1	119	0.00	4.10-	4.16
10	alachlor	0.123	0.164	-33.3#	133	0.00	4.26-	4.32
11 B	Heptachlor Epoxide	1.180	1.305	-10.6	122	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.334	-12.0	121	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.272	-7.9	119	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.211	-5.9	117	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.277	-5.5	116	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.363	-5.7	117	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.207	-3.2	113	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	1.146	-12.6	124	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.998	-2.9	114	0.00	6.42-	6.48
20 MA	4,4'-DDT	0.968	0.768	20.7#	88	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.896	-6.8	119	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	1.020	-7.7	117	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.432	10.9	97	0.00	7.43-	7.49
24	Mirex	0.785	0.794	-1.1	113	0.00	7.61-	7.67
25 B	Endrin Ketone	0.972	1.021	-5.0	110	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.752	13.0	99	0.00	10.04-	10.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.21-	2.21
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.21-	2.21
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.8 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3724-CC3719
Lab FileID: 4G9724389.D

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.45-	2.45
2 SAB	Tetrachloro-m-xylene	0.833	0.849	-1.9	113	0.00	2.83-	2.89
3	hexachlorobenzene	1.092	1.072	1.8	117	0.00	3.38-	3.44
4 A	alpha-BHC	1.299	1.361	-4.8	116	0.00	3.55-	3.61
5 MA	gamma-BHC	1.209	1.237	-2.3	114	0.00	4.00-	4.06
6 MA	Heptachlor	1.181	1.114	5.7	103	0.00	4.61-	4.67
7 B	beta-BHC	0.535	0.550	-2.8	115	0.00	4.09-	4.15
8 B	delta-BHC	1.131	1.207	-6.7	119	0.00	4.51-	4.57
9 MB	Aldrin	1.131	1.163	-2.8	114	0.00	5.08-	5.14
10	alachlor	0.132	0.150	-13.6	126	0.00	4.88-	4.94
11 B	Heptachlor Epoxide	1.055	1.089	-3.2	115	0.00	5.94-	6.00
12 B	gamma-Chlordane	1.054	1.097	-4.1	114	0.00	6.23-	6.29
13 B	alpha-Chlordane	1.032	1.063	-3.0	115	0.00	6.46-	6.52
14 A	Endosulfan I	0.972	1.002	-3.1	115	0.00	6.57-	6.63
15 B	4,4'-DDE	1.041	1.045	-0.4	112	0.00	6.73-	6.79
16 MA	Dieldrin	1.080	1.110	-2.8	113	0.00	7.01-	7.07
17 MA	Endrin	1.003	0.990	1.3	107	0.00	7.53-	7.59
18 A	4,4'-DDD	0.876	0.956	-9.1	122	0.00	7.70-	7.76
19 B	Endosulfan II	0.848	0.863	-1.8	113	0.00	7.89-	7.95
20 MA	4,4'-DDT	0.785	0.588	25.1#	83	0.00	8.25-	8.31
21 B	Endrin Aldehyde	0.731	0.731	0.0	109	0.00	8.47-	8.53
22 B	Endosulfan Sulfate	0.804	0.830	-3.2	111	0.00	8.94-	9.00
23 A	Methoxychlor	0.390	0.337	13.6	92	0.00	9.50-	9.56
24	Mirex	0.690	0.635	8.0	108	0.00	9.86-	9.92
25 B	Endrin Ketone	0.967	0.864	10.7	102	0.00	9.92-	9.98
26 SA	Decachlorobiphenyl	0.684	0.641	6.3	102	0.00	12.00-	12.06
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724325.d 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Wed Mar 30 23:10:31 2022

10.10.8
10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3727-CC3719
 Lab FileID: 4G9724448.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9724448.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\chrisc...3727\4g9724448.d\ECD2B.ch
 Acq On : 31 Mar 2022 3:25 pm Operator: thomasl
 Sample : cc3719-25 Inst : GC4G
 Misc : op38834,g4g3727,15.5,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Fri Apr 01 01:32:16 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.842	0.2	105	0.00	2.35-	2.41
3	hexachlorobenzene	1.123	1.050	6.5	112	0.00	2.72-	2.78
4 A	alpha-BHC	1.462	1.521	-4.0	113	0.00	2.88-	2.94
5 MA	gamma-BHC	1.307	1.373	-5.0	114	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.395	-2.8	112	0.00	3.74-	3.80
7 B	beta-BHC	0.570	0.591	-3.7	116	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.285	1.2	113	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.326	-0.7	112	0.00	4.10-	4.16
10	alachlor	0.123	0.135	-9.8	110	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.200	-1.7	112	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.243	-4.4	112	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.240	-5.2	116	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.159	-1.3	112	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.239	-2.4	112	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.326	-2.9	114	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.216	-3.9	113	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	1.023	-0.5	111	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.986	-1.6	113	0.00	6.42-	6.48
20 MA	4,4'-DDT	0.968	1.034	-6.8	118	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.907	-8.1	120	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	1.002	-5.8	115	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.526	-8.5	118	0.00	7.43-	7.49
24	Mirex	0.785	0.799	-1.8	113	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	1.102	-13.4	119	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.867	-0.3	114	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.9 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3727-CC3719
Lab FileID: 4G9724448.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.45-	2.45
2	SAB	Tetrachloro-m-xylene	0.833	0.814	2.3	101	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.967	11.4	98	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.311	-0.9	104	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.212	-0.2	104	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.211	-2.5	104	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.530	0.9	103	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.157	-2.3	106	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.140	-0.8	104	0.00	5.08-	5.14
10		alachlor	0.132	0.137	-3.8	107	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.066	-1.0	105	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.072	-1.7	104	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.043	-1.1	105	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.988	-1.6	105	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.029	1.2	103	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.100	-1.9	104	0.00	7.01-	7.07
17	MA	Endrin	1.003	1.017	-1.4	102	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.859	1.9	102	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.842	0.7	103	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.794	-1.1	105	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.715	2.2	99	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.845	-5.1	105	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.443	-13.6	113	0.00	9.50-	9.56
24		Mirex	0.690	0.671	2.8	106	0.00	9.85-	9.91
25	B	Endrin Ketone	0.967	0.949	1.9	104	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.669	2.2	99	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724288.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Fri Apr 01 02:23:22 2022

10.10.9
10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41695
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3728-CC3719
 Lab FileID: 4G9724469.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...\4g9724469.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\syrap\4g3728\4g9724469.d\ECD2B.ch
 Acq On : 31 Mar 2022 11:35 pm Operator: christp
 Sample : cc3719-50 Inst : GC4G
 Misc : op38829,g4g3728,15.0,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Sun Apr 03 20:22:49 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.21-	2.21
2 SAB	Tetrachloro-m-xylene	0.844	0.837	0.8	105	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	0.962	14.3	99	0.00	2.72-	2.78
4 A	alpha-BHC	1.462	1.437	1.7	105	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.303	0.3	106	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.295	4.6	104	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.533	6.5	104	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.233	5.2	106	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.220	7.4	101	0.00	4.09-	4.15
10	alachlor	0.123	0.129	-4.9	116	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.058	10.3	98	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.113	6.5	99	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.086	7.9	100	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.042	8.9	100	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.127	6.9	100	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.165	9.6	100	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.084	7.4	101	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.931	8.5	100	0.00	6.19-	6.25
19 B	Endosulfan II	0.970	0.850	12.4	97	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.882	8.9	98	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.681	18.8	90	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.765	19.2	87	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.402	17.1	91	0.00	7.43-	7.49
24	Mirex	0.785	0.589	25.0#	83	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.762	21.6#	82	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.488	43.5#	65	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.21-	2.21
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.21-	2.21
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.10 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3728-CC3719
Lab FileID: 4G9724469.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.46-	2.46
2	SAB	Tetrachloro-m-xylene	0.833	0.836	-0.4	100	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.982	10.1	97	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.357	-4.5	100	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.239	-2.5	100	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.231	-4.2	100	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.526	1.7	100	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.219	-7.8	104	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.147	-1.4	99	0.00	5.08-	5.14
10		alachlor	0.132	0.137	-3.8	105	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.056	-0.1	98	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.070	-1.5	98	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.020	1.2	96	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.959	1.3	96	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.017	2.3	95	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.051	2.7	94	0.00	7.01-	7.07
17	MA	Endrin	1.003	0.952	5.1	92	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.805	8.1	91	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.760	10.4	89	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.711	9.4	87	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.648	11.4	86	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.755	6.1	90	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.366	6.2	87	0.00	9.50-	9.56
24		Mirex	0.690	0.538	22.0#	83	0.00	9.85-	9.91
25	B	Endrin Ketone	0.967	0.777	19.6	81	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.506	26.0#	74	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.46-	2.46
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.46-	2.46
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724289.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Sun Apr 03 20:24:29 2022

10.10.10 10

Method Blank Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38829-MB1 ^a	4G9724370.D	1	03/29/22	RK	03/28/22	OP38829	G4G3724

The QC reported here applies to the following samples: Method: SW846 8081B

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	1.3	0.67	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	0.73	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	0.84	0.67	0.58	ug/kg	
50-29-3	4,4'-DDT	41.6	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	78% 14-145%
877-09-8	Tetrachloro-m-xylene	77% 14-145%
2051-24-3	Decachlorobiphenyl	74% 10-197%
2051-24-3	Decachlorobiphenyl	92% 10-197%

(a) Detections due to lab contamination.

Method Blank Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38829-MB1 ^a	4G9724464.D	1	03/31/22	TL	03/28/22	OP38829	G4G3727

The QC reported here applies to the following samples: Method: SW846 8081B

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	0.89	0.67	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	6.3	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	ND	0.67	0.58	ug/kg	
50-29-3	4,4'-DDT	13.9	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	73% 14-145%
877-09-8	Tetrachloro-m-xylene	73% 14-145%
2051-24-3	Decachlorobiphenyl	29% 10-197%
2051-24-3	Decachlorobiphenyl	44% 10-197%

(a) Had TBA cleanup. Detections are due to lab contamination.

10.1.2
10

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD41695
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38829-BS1	4G9724371.D	1	03/29/22	RK	03/28/22	OP38829	G4G3724
OP38829-BSD	4G9724372.D	1	03/29/22	RK	03/28/22	OP38829	G4G3724

The QC reported here applies to the following samples: Method: SW846 8081B

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	16.7	13.8	83	13.2	79	4	41-146/45
319-84-6	alpha-BHC	16.7	20.6	124	16.8	101	20	39-138/41
319-85-7	beta-BHC	16.7	15.8	95	14.4	86	9	44-134/40
319-86-8	delta-BHC	16.7	13.4	80	12.1	73	10	10-147/41
58-89-9	gamma-BHC (Lindane)	16.7	14.0	84	12.2	73	14	42-133/42
5103-71-9	alpha-Chlordane	16.7	13.6	82	11.9	71	13	43-140/46
5103-74-2	gamma-Chlordane	16.7	14.8	89	13.7	82	8	45-135/46
60-57-1	Dieldrin	16.7	19.1	115	18.4	110	4	40-151/45
72-54-8	4,4'-DDD	16.7	14.8	89	12.8	77	11	42-133/45
72-55-9	4,4'-DDE	16.7	15.2	91	13.3	80	13	43-139/45
50-29-3	4,4'-DDT	16.7	114	684* a	88.6	532* a	25	44-150/46
72-20-8	Endrin	16.7	14.1	85	13.0	78	8	43-145/45
1031-07-8	Endosulfan sulfate	16.7	12.1	73	11.0	66	10	27-131/46
7421-93-4	Endrin aldehyde	16.7	13.1	79	12.7	76	3	34-139/49
959-98-8	Endosulfan-I	16.7	13.3	80	11.7	70	13	41-137/44
33213-65-9	Endosulfan-II	16.7	15.9	95	13.1	79	7	35-143/46
76-44-8	Heptachlor	16.7	13.9	83	12.2	73	13	44-136/47
1024-57-3	Heptachlor epoxide	16.7	14.2	85	12.1	73	16	45-138/43
72-43-5	Methoxychlor	16.7	14.8	89	14.8	89	0	39-149/46
53494-70-5	Endrin ketone	16.7	14.3	86	12.6	76	13	41-153/50

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	86%	75%	14-145%
877-09-8	Tetrachloro-m-xylene	79%	69%	14-145%
2051-24-3	Decachlorobiphenyl	71%	57%	10-197%
2051-24-3	Decachlorobiphenyl	89%	82%	10-197%

(a) Outside of control limits due to lab contamination.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38829-MS ^a	4G9724462.D	1	03/31/22	TL	03/28/22	OP38829	G4G3727
OP38829-MSD ^a	4G9724463.D	1	03/31/22	TL	03/28/22	OP38829	G4G3727
JD41695-1 ^b	4G9724461.D	1	03/31/22	TL	03/28/22	OP38829	G4G3727

The QC reported here applies to the following samples:

Method: SW846 8081B

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	JD41695-1 ug/kg	Spike Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		17	6.7	39	17	7.2	42	7	23-156/72
319-84-6	alpha-BHC	0.96	B	17	11.6	63	17	14.2	78	20	15-162/63
319-85-7	beta-BHC	ND		17	10.9	64	17	7.8	46	33	17-148/79
319-86-8	delta-BHC	ND		17	6.3	37	17	8.1	48	25	10-159/81
58-89-9	gamma-BHC (Lindane)	1.1		17	8.4	43	17	8.9	46	6	30-139/67
5103-71-9	alpha-Chlordane	1.0		17	8.0	41	17	9.3	49	15	12-167/63
5103-74-2	gamma-Chlordane	0.95		17	7.2	37	17	7.8	40	8	10-184/65
60-57-1	Dieldrin	ND		17	6.1	36	17	6.7	39	9	10-266/78
72-54-8	4,4'-DDD	5.2	B	17	31.3	154* ^c	17	16.4	66	62	24-143/82
72-55-9	4,4'-DDE	1.6	B	17	9.5	47	17	7.4	34	25	10-172/71
50-29-3	4,4'-DDT	12.5	B	17	74.8	367* ^c	17	30.2	104	85* ^d	10-191/84
72-20-8	Endrin	ND		17	5.3	31	17	5.3	31	0	10-200/74
1031-07-8	Endosulfan sulfate	ND		17	4.5	26	17	5.5	32	20	10-149/69
7421-93-4	Endrin aldehyde	1.2		17	2.3	6* ^c	17	3.0	11	26	10-165/81
959-98-8	Endosulfan-I	ND		17	5.1	30	17	5.5	32	8	10-171/75
33213-65-9	Endosulfan-II	ND		17	4.9	29	17	5.7	34	15	10-153/76
76-44-8	Heptachlor	ND		17	6.7	39	17	7.4	44	10	15-162/77
1024-57-3	Heptachlor epoxide	ND		17	6.4	38	17	6.7	39	5	26-151/66
72-43-5	Methoxychlor	ND		17	3.1	18	17	3.6	21	15	10-172/85
53494-70-5	Endrin ketone	ND		17	5.1	30	17	6.5	38	24	10-182/72
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JD41695-1	Limits
877-09-8	Tetrachloro-m-xylene	58%	62%	60%	14-145%
877-09-8	Tetrachloro-m-xylene	56%	67%	58%	14-145%
2051-24-3	Decachlorobiphenyl	28%	34%	23%	10-197%
2051-24-3	Decachlorobiphenyl	37%	44%	41%	10-197%

(a) Had TBA cleanup.

(b) Had TBA cleanup. Detections could be due to lab contamination.

(c) Outside of in house control limits.

(d) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD41695

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38830-BS1 ^a	RK8912.D	1	03/30/22	CL	03/28/22	OP38830	GRK232
OP38830-BSD	RK8954.D	1	03/31/22	CP	03/28/22	OP38830	GRK233

The QC reported here applies to the following samples:

Method: SW846 8082A

JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	68.2	51* ^b	113	85	51* ^c	53-157/32
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	133	68.4	51* ^b	124	93	58* ^c	53-159/45
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	43%	84%	10-163%
877-09-8	Tetrachloro-m-xylene	42%	82%	10-163%
2051-24-3	Decachlorobiphenyl	47%	83%	10-215%
2051-24-3	Decachlorobiphenyl	46%	81%	10-215%

(a) BS1 and BSD both prepped and analyzed. Since BSD is within method limits, data is qualified and reported.

(b) Outside of in house control limits.

(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41695
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/23/22

Metal	JD41695-6 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	20400	22100	2880	59.1 (a)	75-125
Antimony	0.0	77.4	230	33.6N(b)	75-125
Arsenic	3.6	211	230	90.1	75-125
Barium	106	303	230	85.6	75-125
Beryllium	0.85	211	230	91.3	75-125
Bismuth					
Boron					
Cadmium	0.0	208	230	90.3	75-125
Calcium	3440	9660	2880	216.1N(b)	75-125
Chromium	42.9	238	230	84.7	75-125
Cobalt	17.1	228	230	91.6	75-125
Copper	40.4	243	230	88.0	75-125
Iron	35300	31000	2880	-149.4(a)	75-125
Lead	48.9	286	230	103.0	75-125
Lithium					
Magnesium	7170	9750	2880	89.6	75-125
Manganese	364	529	230	71.7N(b)	75-125
Molybdenum					
Nickel	29.7	232	230	87.9	75-125
Phosphorus					
Potassium	3720	5850	2880	74.0N(b)	75-125
Selenium	0.0	205	230	89.0	75-125
Silicon					
Silver	0.74	27.9	28.8	94.4	75-125
Sodium	380	3110	2880	94.9	75-125
Strontium					
Sulfur	anr				
Thallium	0.0	222	230	96.4	75-125
Tin					
Tungsten					
Vanadium	53.6	244	230	82.7	75-125
Zinc	88.1	289	230	87.3	75-125
Zirconium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41695
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/23/22

Metal	JD41695-6 Original MS	Spike lot MPSPK2	% Rec	QC Limits

Associated samples MP31847: JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41695
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 03/23/22

Metal	JD41695-6 Original MSD		Spike lot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	20400	24200	2880	132.0(a)	6.0	20
Antimony	0.0	76.4	230	33.2N(b)	1.3	20
Arsenic	3.6	215	230	91.8	1.9	20
Barium	106	324	230	94.7	6.7	20
Beryllium	0.85	214	230	92.6	4.9	20
Bismuth						
Boron						
Cadmium	0.0	211	230	91.6	1.4	20
Calcium	3440	6700	2880	113.3	36.2 (c)	20
Chromium	42.9	258	230	93.4	8.1	20
Cobalt	17.1	232	230	93.3	1.7	20
Copper	40.4	253	230	92.3	4.0	20
Iron	35300	33300	2880	-69.5(a)	7.2	20
Lead	48.9	370	230	139.5N(b)	25.6 (c)	20
Lithium						
Magnesium	7170	8410	2880	43.1N(b)	14.8	20
Manganese	364	562	230	86.0	6.0	20
Molybdenum						
Nickel	29.7	234	230	88.7	0.9	20
Phosphorus						
Potassium	3720	5600	2880	65.3N(b)	4.4	20
Selenium	0.0	206	230	89.5	0.5	20
Silicon						
Silver	0.74	28.3	28.8	95.8	1.4	20
Sodium	380	3080	2880	93.8	3.5	20
Strontium						
Sulfur	anr					
Thallium	0.0	224	230	97.3	0.9	20
Tin						
Tungsten						
Vanadium	53.6	245	230	83.1	2.4	20
Zinc	88.1	371	230	122.9	18.6	20
Zirconium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41695
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/23/22

Metal	JD41695-6 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit

Associated samples MP31847: JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference.

(c) High rpd due to possible sample nonhomogeneity.

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD41695
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
Matrix Type: SOLID

Methods: SW846 6010D
Units: ug/l

Prep Date: 03/23/22

Metal	JD41695-6 Original	SDL 1:5	%DIF	QC Limits
Aluminum	177000	192000	8.6	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	31.3	0.00	100.0(a)	0-10
Barium	918	1000	9.1	0-10
Beryllium	7.40	5.40	27.0 (a)	0-10
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	29900	33400	11.5*(b)	0-10
Chromium	373	408	9.4	0-10
Cobalt	148	155	4.2	0-10
Copper	351	401	14.4*(b)	0-10
Iron	307000	325000	5.9	0-10
Lead	425	476	12.2*(b)	0-10
Lithium				
Magnesium	62300	68800	10.4*(b)	0-10
Manganese	3160	3290	4.0	0-10
Molybdenum				
Nickel	258	282	9.1	0-10
Phosphorus				
Potassium	32300	34500	6.9	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	6.40	0.00	100.0(a)	0-10
Sodium	3300	3420	3.8	0-10
Strontium				
Sulfur	anr			
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	466	508	9.0	0-10
Zinc	765	845	10.4*(b)	0-10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD41695
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31847
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: ug/l

Prep Date: 03/23/22

Metal	JD41695-6		QC Limits
	Original	SDL 1:5 %DIF	

Zirconium

Associated samples MP31847: JD41695-1, JD41695-2, JD41695-3, JD41695-4, JD41695-5, JD41695-6, JD41695-7

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

12.3.4
12

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

Date: June 19th, 2022

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD41808**

Client Project ID: 12123:6 – 23-34 Pearl Street, Port Chester, NY

Dear Mr. Noonan,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD41808 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-12123:6 – 23-34 Pearl Street, Port Chester, NY- JD41808

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 23-34 Pearl Street, Port Chester, NY

SGS North America Inc.

Laboratory (SDG) # JD41808

Project No. 12123:6

Prepared for:

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.
Data Validation and Forensic Geochemistry Expert

On

June 19th, 2022

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- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IDL	Instrument Detection Limit
IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008

6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD41808

NYS DEC Data Usability Summary Report

SDG # JD41808

Site Location	12123:6 – 23-34 Pearl Street, Port Chester, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank, 1 Trip Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-1A-2-2A-3-3A-4-4A-5-5A-6-6A-7-7A-8-8A-9-9A-10-10A-11-11A-12-12A-13-13A-14-14A-15-15A-16-16A-17-17A-18-18A-19-19A-20-20A-21-21A-22-22A-23-23A-24-24A-25-25A)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

• SAMPLE HANDLING AND MANAGEMENT

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on 03/22/2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on 03/23/2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification (organics/Inorganics)	Laboratory Sample Identification (PFAS)
RI-SB11(0.5-1.0)	JD41808-1	JD41808-1A
RI-SB11(4.5-5)	JD41808-2	JD41808-2A
RI-SB11(9.5-10)	JD41808-3	JD41808-3A
DUP2	JD41808-4	JD41808-4A
RI-SB11(14.5-15)	JD41808-5	JD41808-5A
RI-SB10(0.5-1)	JD41808-6	JD41808-6A
RI-SB10(4.5-5)	JD41808-7	JD41808-7A
RI-SB10(9.5-10)	JD41808-8	JD41808-8A
RI-SB10(14.5-15)	JD41808-9	JD41808-9A
DUP1	JD41808-10	JD41808-10A

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RI-SB1(0.5-1)	JD41808-11	JD41808-11A
RI-SB1(4.5-5)	JD41808-12	JD41808-12A
RI-SB1(5.5-6)	JD41808-13	JD41808-13A
RI-SB7(0.5-1)	JD41808-14	JD41808-14A
RI-SB7(4.5-5)	JD41808-15	JD41808-15A
RI-SB7(7.5-8)	JD41808-16	JD41808-16A
RI-SB12(0.5-1)	JD41808-17	JD41808-17A
RI-SB12(4.5-5)	JD41808-18	JD41808-18A
RI-SB12(9.5-10)	JD41808-19	JD41808-19A
RI-SB12(11.5-12)	JD41808-20	JD41808-20A
MW-5	JD41808-21	JD41808-21A
DUP-20220322	JD41808-22	JD41808-22A
MS	JD41808-23	JD41808-23A
FB	JD41808-24	JD41808-24A
TRIP BLANK	JD41808-25	JD41808-25A

- **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

• **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of 2-chloroethyl vinyl ether, in the associated samples, MW-5/JD41808-21, DUP-20220322/JD41808-22, FB/JD41808-24, TRIP BLANK/JD41808-25, should be qualified estimated (J). -Detected results of Methyl acrylate, tert-Butyl Formate, in the associated sample, MS/JD41808-23, should be qualified estimated (J).	ICV
2	-Detected results of Chlorodifluoromethane, Acrolein, Acetone, Methyl acetate, Hexane, Acrylonitrile, Ethyl acetate, Heptane, 2-Nitropropane, trans-1,4-dichloro-2-butene, in the associated samples, MW-5/JD41808-21, DUP-20220322/JD41808-22, FB/JD41808-24, TRIP BLANK/JD41808-25, should be qualified estimated (J). -Detected results of Chlorodifluoromethane, Carbon Disulfide, Methylene Chloride, trans-1,2-dichloroethene, 1,1-Dichloroethane, tert-Butyl Formate, Carbon Tetrachloride, Ethyl acrylate, Methyl methacrylate, Naphthalene, 2-Methylnaphthalene, in the associated sample, MS/JD41808-23, should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, Acrylonitrile, tert-butyl formate, Isobutyl alcohol, in the associated samples, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14,, should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Ethyl ether, Acrylonitrile, tert-butyl formate, tert-amyl alcohol, 3-Methyl-1-butanol, Hexachlorobutadiene, in the associated samples, RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, should be qualified estimated (J). -Detected results of 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, Chloromethane, Chloroethane, Acetonitrile, Di-isopropyl ether, Acrylonitrile, Ethyl acetate, 1,2,3-Trichlorobenzene, in the associated samples, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16,	CCV

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	RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified estimated (J).	
3	-Detected results of Dichlorodifluoromethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, in samples RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, must be qualified estimated-Bias High (J+).	LCS
4	-Detected results of Acetone in samples DUP1/JD41808-10, RI-SB-10(14.5-15)/JD41808-9, should be qualified Estimated (J).	DUP

✓ Semi-Volatile Organic Compounds – SW846 8270E Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Pentachloronitrobenzene, in samples RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, RI-SB11(14.5-15)/JD41808-5, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, should be considered Estimated (J).	ICV
2	-Detected results of 2,2'-oxybis(1-Chloropropane), 2-Nitroaniline, Butylbenzylphthalate, Bis (2-Ethylhexyl) Phthalate, in samples RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, should be qualified Estimated (J). -Detected results of Octadecane, Benzidine, 7,12-Dimethylbenz(a)anthracene, in samples RI-SB11(0.5-1.0)/JD41808-1, DUP2/JD41808-4, RI-SB10(0.5-1)/JD41808-6, RI-SB1(0.5-1)/JD41808-11, RI-SB12(0.5-1)/JD41808-17, RI-SB12(11.5-12)/JD41808-20, should be qualified Estimated (J).	CCV
3	-Detected results of bis(2-Ethylhexyl)phthalate, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, that are less than 2X the blank concentration (<4.6 ug/L), should be reported Not Detected (U).	BLK
4	-Detected results of 2,4-Dimethylphenol, Hexachlorocyclopentadiene, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated Bias Low (J-). -Non-Detected results of 2,4-Dimethylphenol, Hexachlorocyclopentadiene, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (UJ).	LCS

✓ Pesticides - SW846 8081B Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of beta-BHC (0.38 ug/L), delta-BHC (0.096 ug/L), gamma-BHC (Lindane 0.48 ug/L), 4,4'-DDD (1.22 ug/L), 4,4'-DDE (0.80 ug/L), that are less than 2X the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be reported Not Detected (U). -Detected results of alpha-BHC (2.7 ug/L), 4,4'-DDT (31.9 ug/L), that are less than the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Unusable (R). -Detected results of alpha-BHC (5.4 ug/L), 4,4'-DDT (63.8 ug/L), that are less than 2X the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Not Detected (U). -Detected results of 4,4'-DDD, 4,4'-DDE, that are less than 2X the blank concentration (1.42; 2.0), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be reported Not Detected (U). -Detected results of 4,4'-DDT, that are less than the blank concentration (28.2), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Unusable (R). -Detected results of 4,4'-DDT, that are less than 2X the blank concentration (56.4), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-	BLK

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	5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Not Detected (U).	
2	-Detected results of 4,4'-DDT, in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Estimated Bias-High (J+). -Detected results of alpha-BHC, 4,4'-DDT, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated Bias-High (J+). -Detected results of Methoxychlor, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (J).	LCS
3	-Detected results of 4,4'-DDT, in sample RI-SB10(0.5-1)/JD41808-6, should be qualified Estimated Bias-High (J+).	MS/MSD

✓ Polychlorinated Biphenyls (PCBs) – SW846 8082A Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data Group was in compliance with the method requirements.	ALL

✓ PFAS-NYSDEC Target List - EPA 537M Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Perfluorononanoic acid, in samples MW-5/JD41808-21A, DUP-20220322/JD41808-22A, should be qualified Estimated (J).	DUP

✓ **TAL Metals - SW846 6010D, 7471B Methods**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Antimony, Sodium, in sample RI-SB11(9.5-10)/JD41808-3, should be qualified Estimated Bias Low (J-). -Non-Detected results of Antimony, Sodium, in sample RI-SB11(9.5-10)/JD41808-3, should be qualified Estimated (UJ).	SSR
2	-Detected results of Potassium, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (J).	ISDiI
3	-Detected results of Aluminum, Beryllium, Calcium, Lead, Nickel, in samples RI-SB-11(9.5-10)/JD41808-3, DUP2/JD41808-4, should be qualified Estimated (J). -Detected results of Aluminum, Calcium, Chromium, Cobalt, Copper, Lead, Magnesium, Nickel, Potassium, Vanadium, Zinc, in samples RI-SB-10(14.5-15)/JD41808-9, DUP1/JD41808-10, should be qualified Estimated (J). -Detected results of Manganese, Zinc, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, should be qualified Estimated (J).	DUP

✓ **Cyanide - SW846 9012B Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data Group was in compliance with the method requirements.	ALL

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank, 1 Trip Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V2A9367-ICC9367 analyzed on 03/25/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*2-chloroethyl vinyl ether, failed Initial Calibration Criteria for %RSDs, where %RSDs was above the allowable maximum.

-In the initial calibration reference sample: V3B7639-ICC7639 analyzed on 03/03/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

* Methyl acrylate, tert-Butyl Formate, failed Initial Calibration Criteria for Mean RRFs and %RSDs, where Mean RRF for Methyl acrylate, was below the allowable minimum. %RSDs for tert-Butyl Formate, was above the allowable maximum.

-In the initial calibration reference sample: V3C7629-ICC7629, VY8522-ICC8522, analyzed on 02/04/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of 2-chloroethyl vinyl ether, in the associated samples, MW-5/JD41808-21, DUP-20220322/JD41808-22, FB/JD41808-24, TRIP BLANK/JD41808-25, should be qualified estimated (J).

-Detected results of Methyl acrylate, tert-Butyl Formate, in the associated sample, MS/JD41808-23, should be qualified estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:
 - The continuing calibration reference sample: V2A9387-CC9367, analyzed on 03/30/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Chlorodifluoromethane, Acrolein, Acetone, Methyl acetate, Hexane, Acrylonitrile, Ethyl acetate, Heptane, 2-Nitropropane, trans-1,4-dichloro-2-butene, Where %Ds were above the method allowable maximums.
 - The continuing calibration reference sample: V3B7672-CC7639, analyzed on 03/31/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Chlorodifluoromethane, Carbon Disulfide, Methylene Chloride, trans-1,2-dichloroethene, 1,1-Dichloroethane, tert-Butyl Formate, Carbon Tetrachloride, Ethyl acrylate, Methyl methacrylate, Naphthalene, 2-Methylnaphthalene, Where %Ds were above the method allowable maximums.
 - The continuing calibration reference sample: V3C7673-CC7629, analyzed on 03/24/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, Acrylonitrile, tert-butyl formate, Isobutyl alcohol, Where %Ds were above the method allowable maximums.

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-The continuing calibration reference sample: V3C7674-CC7629, analyzed on 03/25/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Ethyl ether, Acrylonitrile, tert-butyl formate, tert-amyl alcohol, 3-Methyl-1-butanol, Hexachlorobutadiene, Where %Ds were above the method allowable maximums.

-The continuing calibration reference sample: VY8548-CC8522, analyzed on 03/25/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, Chloromethane, Chloroethane, Acetonitrile, Di-isopropyl ether, Acrylonitrile, Ethyl acetate, 1,2,3-Trichlorobenzene, Where %Ds were above the method allowable maximums.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Chlorodifluoromethane, Acrolein, Acetone, Methyl acetate, Hexane, Acrylonitrile, Ethyl acetate, Heptane, 2-Nitropropane, trans-1,4-dichloro-2-butene, in the associated samples, MW-5/JD41808-21, DUP-20220322/JD41808-22, FB/JD41808-24, TRIP BLANK/JD41808-25, should be qualified estimated (J).

-Detected results of Chlorodifluoromethane, Carbon Disulfide, Methylene Chloride, trans-1,2-dichloroethene, 1,1-Dichloroethane, tert-Butyl Formate, Carbon Tetrachloride, Ethyl acrylate, Methyl methacrylate, Naphthalene, 2-Methylnaphthalene, in the associated sample, MS/JD41808-23, should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, Acrylonitrile, tert-butyl formate, Isobutyl alcohol, in the associated samples, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14,, should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Ethyl ether, Acrylonitrile, tert-butyl formate, tert-amyl alcohol, 3-Methyl-1-butanol, Hexachlorobutadiene, in the associated samples, RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, should be qualified estimated (J).

-Detected results of 1,4-Dioxane, Chlorodifluoromethane, Dichlorodifluoromethane, Chloromethane, Chloroethane, Acetonitrile, Di-isopropyl ether, Acrylonitrile, Ethyl acetate, 1,2,3-Trichlorobenzene, in the associated samples, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified estimated (J).

- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample

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reference: V3C7673-MB, on 03/24/2022, VY8548-MB, V3C7674-MB, on 03/25/2022, V2A9387-MB, on 03/30/2022, V3B7672-MB, on 03/31/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.
Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:
 - In LCS IDs# V3C7673-BS, on 03/24/2022, V3C7674-BS, on 03/25/2022, V2A9387-BS, on 03/30/2022, V3B7672-BS, on 03/31/2022, %Rs for all target compounds were within method control limits.
 - In LCS ID# VY8548-BS, on 03/25/2022, %Rs for all target volatile compounds were within the method control limits, EXCEPT:
 - *%Rs for Dichlorodifluoromethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, were above control limits.

Quality Judgement:

-Detected results of Dichlorodifluoromethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, in samples RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, must be qualified estimated-Bias High (J+).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, both a laboratory duplicate analyzes and few Field Duplicate samples were analyzed in this samples group. The following summarizes this evaluation:

Laboratory Duplicate:

-Sample RI-SB7(7.5-8)/JD41808-16, was analyzed for laboratory duplicate (JD41808-16DUP): %RPDs of all target compounds were below the allowable maximum.

NOTE: The laboratory analyzed additional laboratory duplicate processes using few samples that are out of this samples set:

*In JD41692-6DUP, JD41846-4DUP, JD42197-4DUP, %RPDs were below the allowable maximum EXCEPT for few analytes where RPDs were above the allowable maximum due to low concentration of hit.

Field Duplicates:

- In field duplicate ID# DUP2/JD41808-4 that is originated from RI-SB-11(9.5-10)/JD41808-3, %RPDs of all target VOCs compounds were not calculated due to no detection of target compounds above the reporting limits.
- In field duplicate ID# DUP1/JD41808-10 that is originated from RI-SB-10(14.5-15)/JD41808-9, %RPDs for **Acetone** was above the allowable maximum (**RPD=119**).
- In field duplicate ID# DUP-20220322/JD41808-22 that is originated from MW-5/JD41808-21, %RPDs of all target VOCs compounds were not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement:

-Detected results of Acetone in samples DUP1/JD41808-10, RI-SB-10(14.5-15)/JD41808-9, should be qualified Estimated (J).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
 - Sample RI-SB7(4.5-5)/JD41808-15, was analyzed for matrix spike (JD41808-15MS): %Rs of all target compounds were within method control limits.
 - NOTE: The laboratory analyzed additional Matrix Spike processes using few samples that are out of this samples set:
 - *In JD41692-5MS, JD41846-2MS, JD42197-3MS, %Rs were within method control limits.
 - *In JD41792-5MS & JD41792-5MSD, %Rs for Benzene, Bromoform, Dibromochloromethane, were below control limits due to high level in sample relative to spike amount and matrix interference. %RPDs were below the allowable maximum.

Quality Judgement: No Actions are required.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

-In the initial calibration of E2M5501-ICC5501 on 03/11/2022, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the allowable maximum.

-In the initial calibration of E2M5502-ICC5502, on 03/11/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, where Average RRF was below the allowable minimum. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EF8913-ICC8913, EF8914-ICC8914, on 11/10/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EP6741-ICC6741, EP6742-ICC6742, on 12/03/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, in samples RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, RI-SB11(14.5-15)/JD41808-5, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:
 - The continuing calibration (Sample: E2M5521-CC5502, E2M5521-CC5501, on 03/28/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EF9058-CC8913, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for 2,2'-oxybis(1-Chloropropane), 2-Nitroaniline, Butylbenzylphthalate, Bis (2-Ethylhexyl) Phthalate, were above the allowable maximums.
 - The continuing calibration (Sample: EF9058-CC8914, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EP6838-CC6741, EP6838-CC6742, on 03/26/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EP6840-CC6741, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums, EXCEPT for Octadecane, Benzidine, 7,12-Dimethylbenz(a)anthracene, Where %Ds were above the allowable maximum.
 - The continuing calibration (Sample: EP6840-CC6742, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.

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No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of 2,2'-oxybis(1-Chloropropane), 2-Nitroaniline, Butylbenzylphthalate, Bis (2-Ethylhexyl) Phthalate, in samples RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, should be qualified Estimated (J).

-Detected results of Octadecane, Benzidine, 7,12-Dimethylbenz(a)anthracene, in samples RI-SB11(0.5-1.0)/JD41808-1, DUP2/JD41808-4, RI-SB10(0.5-1)/JD41808-6, RI-SB1(0.5-1)/JD41808-11, RI-SB12(0.5-1)/JD41808-17, RI-SB12(11.5-12)/JD41808-20, should be qualified Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, in OP38807-MB1 on 03/26/2022, OP38788-MB1, on 03/28/2022, OP38788-MB1, OP38788-MB1, on 03/29/2022, EXCEPT:
-In OP38807-MB1 on 03/26/2022, a detection of bis(2-Ethylhexyl)phthalate (2.3 ug/L), has been reported.

Quality Judgement:

-Detected results of bis(2-Ethylhexyl)phthalate, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, that are less than 2X the blank concentration (<4.6 ug/L), should be reported Not Detected (U).

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS OP38788-BS1, on 03/28/2022, Percent recoveries (%Rs) for all target compounds were within method control limits.
 - In LCS OP38807-BS1, on 03/26/2022, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT: %Rs for 2,4-Dimethylphenol was below method control limit.

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-In LCS DUP OP38807-BSD, on 03/26/2022, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT: %Rs for 2,4-Dimethylphenol, Hexachlorocyclopentadiene, were below method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of 2,4-Dimethylphenol, Hexachlorocyclopentadiene, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated Bias Low (J-).

-Non-Detected results of 2,4-Dimethylphenol, Hexachlorocyclopentadiene, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (UJ).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.

A three (3) Field Duplicate samples were analyzed in this samples group. The following summarizes this evaluation:

Field Duplicates:

-In field duplicate ID# DUP2/JD41808-4 that is originated from RI-SB-11(9.5-10)/JD41808-3, %RPDs of all target SVOCs compounds were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP1/JD41808-10 that is originated from RI-SB-10(14.5-15)/JD41808-9, %RPDs of all target SVOCs compounds were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP-20220322/JD41808-22 that is originated from MW-5/JD41808-21, %RPDs of all target SVOCs compounds were not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-A Matrix spike/Matrix spike duplicate were performed in sample RI-SB11(0.5-1.0)/JD41808-1.

* In MS OP38788-MS, OP38788-MSD, (Sample RI-SB11(0.5-1.0)/JD41808-1), % Rs for target compounds were within control limits. %RPDS were below the allowable maximum.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

Data Validation Assessment

SDG # JD JD41808

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
- In the initial calibration sample reference: G1G6061-ICC6061, on 03/23/2022, %RSDs for pesticides target compounds, were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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- In continuing calibration (G1G6066-CC6061 on 03/27/2022 & 03/28/2022), %Ds for all pesticides target compounds were below the allowable maximums.
- In continuing calibration (G1G6070-CC6061 on 03/30/2022), %Ds for all pesticides target compounds were below the allowable maximums.
- In continuing calibration (G1G6070-CC6061 on 03/31/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for Alachlor (Column 1), where %Ds was above the allowable maximum.
- In continuing calibration (G1G6072-CC6061 on 03/31/2022), %Ds for all pesticides target compounds were below the allowable maximums.
- In continuing calibration (G1G6073-CC6061 on 04/01/2022), %Ds for all pesticides target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds, EXCEPT:
*In Blank OP38810-MB1, on 03/27/2022, a detection of alpha-BHC (**2.7 ug/L**), beta-BHC (**0.19 ug/L**), delta-BHC (**0.048 ug/L**), gamma-BHC (**Lindane 0.24 ug/L**), 4,4'-DDD (**0.61 ug/L**), 4,4'-DDE (**0.40 ug/L**), 4,4'-DDT (**31.9 ug/L**), has been reported.

*In Blank OP38832-MB1, on 03/30/2022, a detection of 4,4'-DDD (**0.71 ug/kg**), 4,4'-DDE (**1.0 ug/kg**), 4,4'-DDT (**28.2 ug/kg**), has been reported.

Quality Judgement:

-Detected results of beta-BHC (**0.38 ug/L**), delta-BHC (**0.096 ug/L**), gamma-BHC (**Lindane 0.48 ug/L**), 4,4'-DDD (**1.22 ug/L**), 4,4'-DDE (**0.80 ug/L**), that are less than 2X the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be reported Not Detected (U).

-Detected results of alpha-BHC (**2.7 ug/L**), 4,4'-DDT (**31.9 ug/L**), that are less than the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Unusable (R).

-Detected results of alpha-BHC (**5.4 ug/L**), 4,4'-DDT (**63.8 ug/L**), that are less than 2X the blank concentration as indicated in Bold, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Not Detected (U).

-Detected results of 4,4'-DDD, 4,4'-DDE, that are less than 2X the blank concentration (**1.42; 2.0**), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-

SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10) /JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be reported Not Detected (U).

-Detected results of 4,4'-DDT, that are less than the blank concentration (28.2), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Unusable (R).

-Detected results of 4,4'-DDT, that are less than 2X the blank concentration (56.4), in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10)/JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Not Detected (U).

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.

Note: %Rs for both Surrogates (Tetrachloro-m-xylene, Decachlorobiphenyl), in diluted samples JD41808-22, JD41808-24, were reported Zero due to dilution cause. The %Rs of both Surrogates in the stated above undiluted samples, were within method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38832-BS1, on 03/30/2022), %Rs for 4,4'-DDT, was above the method control limits.
 - In LCS (OP38810-BS1, on 03/27/2022), %Rs for alpha-BHC, 4,4'-DDT, were above method control limits.
 - In LCS DUP (OP38810-BSD, on 03/27/2022), %Rs for alpha-BHC, 4,4'-DDT, were above method control limits. %RPDs for Methoxychlor, was above the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDT, in samples RI-SB11(0.5-1.0)/JD41808-1, RI-SB11(4.5-5)/JD41808-2, RI-SB11(9.5-10)/JD41808-3, DUP2/JD41808-4, RI-SB11(14.5-15)/JD41808-5, RI-SB10(0.5-1)/JD41808-6, RI-SB10(4.5-5)/JD41808-7, RI-SB10(9.5-10)/JD41808-8, RI-SB10(14.5-15)/JD41808-9, DUP1/JD41808-10, RI-SB1(0.5-1)/JD41808-11, RI-SB1(4.5-5)/JD41808-12, RI-SB1(5.5-6)/JD41808-13, RI-SB7(0.5-1)/JD41808-14, RI-SB7(4.5-5)/JD41808-15, RI-SB7(7.5-8)/JD41808-16, RI-SB12(0.5-1)/JD41808-17, RI-SB12(4.5-5)/JD41808-18, RI-SB12(9.5-10) /JD41808-19, RI-SB12(11.5-12)/JD41808-20, should be qualified Estimated Bias-High (J+).

-Detected results of alpha-BHC, 4,4'-DDT, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated Bias-High (J+).

-Detected results of Methoxychlor, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (J).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SB10(0.5-1)/JD41808-6. The following summarizes MS/MSD evaluation:
-In MS & MSD samples OP38832-MS, OP38832-MSD, %Rs for 4,4'-DDT, were above control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDT, in sample RI-SB10(0.5-1)/JD41808-6, should be qualified Estimated Bias-High (J+).

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of GRK225-ICC225, on 03/24/2022, %RSDs for all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: GRK229-CC225, GRK230-CC225, on 03/29/2022, GRK231-CC225, on 03/30/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38800-MB1 analyzed on 03/29/2022, OP38833-MB1 on 03/30/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38833-BS1 on 03/30/2022), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCS (OP38800-BS1 on 03/29/2022), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38800-BS1, on 03/29/2022), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.
A three (3) Field Duplicate samples were analyzed in this samples group. The following summarizes this evaluation:

Field Duplicates:

-In field duplicate ID# DUP2/JD41808-4 that is originated from RI-SB-11(9.5-10)/JD41808-3, %RPDs of all target PCBs were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP1/JD41808-10 that is originated from RI-SB-10(14.5-15)/JD41808-9, %RPDs of all target PCBs were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP-20220322/JD41808-22 that is originated from MW-5/JD41808-21, %RPDs of all target PCBs were not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement: No actions are required.

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- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SB10(4.5-5)/JD41808-7. The following summarizes MS/MSD evaluation:
- %Rs for target aroclor compounds in OP38833-MS, OP38833-MSD, were within method control limits. %RPDS were below the allowable maximum.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank, 1 Trip Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1A-2A-3A-4A-5A-6A-7A-8A-9A-10A-11A-12A-13A-14A-15A-16A-17A-18A-19A-20A-21A-22A-23A-24A-25A)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
 -The initial calibration methods used in this data set, sample reference ID: S2Q1218-ICC1218 on 03/07/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:
-In continuing calibration laboratory reference IDs: S2Q1239-CC1218, S2Q1240-CC1218, on 03/27/2022, %Ds for target PFAS compounds below the allowable maximum.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S2Q1239-IBLK, OP90436-MB, on 03/31/2022, OP90453-MB, on 04/01/2022.
Quality Judgement: No actions are required.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
- Isotope Dilution Standard Recoveries (%Rs) of 18 spiked surrogate standards in all samples of this set, were within the method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
-In LCS OP90436-BS analyzed on 03/31/2022, OP90453-BS, on 04/01/2022, %Rs of all target PFAS compounds were within the method control limits.
Quality Judgement: No actions are required.
- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).
-No forms or data were provided.
Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.
A three (3) Field Duplicate samples were analyzed in this samples group. The following summarizes this evaluation:

Field Duplicates:

-In field duplicate ID# DUP2/JD41808-4A that is originated from RI-SB-11(9.5-10)/JD41808-3A, %RPDs of all target PFAS were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP1/JD41808-10A that is originated from RI-SB-10(14.5-15)/JD41808-9A, %RPDs of all target PFAS were not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP-20220322/JD41808-22A that is originated from MW-5/JD41808-21A, %RPDs have been calculated and reported in the table below.

Detected PFAS Compound > RL	DUP-20220322 JD41808-22A (ng/L)	MW-5 JD41808-21A (ng/L)	%RPDs
Perfluorobutanoic acid	8.0	9.0	11.8
Perfluoropentanoic acid	21.9	25.2	14
Perfluorohexanoic acid	19.4	22.0	12.6
Perfluoroheptanoic acid	7.5	8.7	14.8
Perfluorooctanoic acid	21.2	26.4	21.8
Perfluorononanoic acid	1.9	2.8	38.3
Perfluorobutanesulfonic acid	12.1	12.6	4.0
Perfluorohexanesulfonic acid	9.2	10.1	9.3
Perfluorooctanesulfonic acid	24.6	29.1	16.8

%RPDs for Perfluorononanoic acid, was above the allowable maximum (<30%).

Quality Judgement:

-Detected results of Perfluorononanoic acid, in samples MW-5/JD41808-21A, DUP-20220322/JD41808-22A, should be qualified Estimated (J).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in RI-SB7(7.5-8)/JD41808-16A. The following summarizes MS/MSD evaluation:
 - In OP90436-MS, %Rs for target PFAS compounds were within method control limits.
 - In OP90436-MSD, %Rs for target PFAS compounds were within method control limits.%RPDs were below the allowable maximum.

Note: Laboratory analyzed another matrix spike and matrix spike duplicate from out of samples set source. %Rs of target PFAS compounds in OP90453-MS, and OP90453-MSD, were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SD032522M1.ICP, analyzed on 03/25/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SD032822M1.ICP, analyzed on 03/28/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD032522M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/25/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).
 - In File ID: SD032822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/28/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SD032522M1.ICP, on 03/25/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

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-In File ID: SD032822M1.ICP, on 03/28/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):

-In File ID: SD032522M1.ICP, analyzed on 03/25/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.

-In File ID: SD032822M1.ICP, analyzed on 03/28/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:

-In LCS QC Batch ID: MP31898, on 03/24/2022, (EPA 6010D) for total metals, %Rs for target Metals, were within the method control limits.

-In LCS QC Batch ID: MP31903, on 03/24/2022, (EPA 6010D) for total metals, %Rs for target Metals, were within the method control limits.

Quality Judgement: No actions are required.

- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:

-In QC Batch ID: MP31903, sample RI-SB11(9.5-10)/JD41808-3, was analyzed for matrix spike and matrix spike duplicate evaluation:

*In MS sample, %Rs for Antimony, was below control limits.

*In MSD sample, %RS for Antimony, Sodium, were below control limits. %RPDS were below the allowable maximum.

Note: Out of samples group MS and MSD were used for matrix spike and matrix spike evaluation. In MS & MSD JD41761-1, %RS for target metals were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of Antimony, Sodium, in sample RI-SB11(9.5-10)/JD41808-3, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Antimony, Sodium, in sample RI-SB11(9.5-10)/JD41808-3, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Target metals for Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):

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-No laboratory duplicate samples were included in this samples set.
-A three (3) Field Duplicate samples were analyzed in this samples group. The following summarizes this evaluation:

Field Duplicates:

-In field duplicate ID# DUP2/JD41808-4 that is originated from RI-SB-11(9.5-10)/JD41808-3, %RPDs are calculated below:

Detected TAL Compound > RL	DUP2 JD41808-4 (mg/kg)	RI-SB-11(9.5-10) JD41808-3 (mg/kg)	%RPDs
Aluminum	17700	37100	70.8
Arsenic	3.3	<4.6	NC
Barium	88.0	107	19.5
Beryllium	0.59	1.7	96.9
Calcium	2320	17900	154
Chromium	38.9	44.3	13.0
Cobalt	<11	11.9	NC
Copper	38.1	40.6	6.4
Iron	21200	26100	20.7
Lead	25.5	11.9	72.7
Magnesium	7040	5780	19.7
Manganese	210	250	17.4
Mercury	0.036	<0.034	NC
Nickel	28.0	82.5	98.6
Potassium	2280	1980	14.1
Vanadium	46.3	41.8	10.2
Zinc	62.1	47.9	25.8

-In field duplicate ID# DUP1/JD41808-10 that is originated from RI-SB-10(14.5-15)/JD41808-9, %RPDs are calculated below:

Detected TAL Compound > RL	DUP1 JD41808-10 (mg/kg)	RI-SB-10(14.5-15) JD41808-9 (mg/kg)	%RPDs
Aluminum	10100	6560	42.5
Arsenic	<2.2	<2.2	NC
Barium	77.3	60.0	25.2
Beryllium	0.45	0.35	25
Calcium	2750	1310	70.9
Chromium	22.2	13.9	46
Cobalt	11.1	5.7	64.3
Copper	24.3	13.3	58.5
Iron	15000	11700	24.7
Lead	7.8	5.0	43.8

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Magnesium	3820	2020	61.6
Manganese	333	291	13.5
Mercury	<0.034	<0.034	NC
Nickel	32.2	17.0	61.8
Potassium	2490	1720	36.6
Vanadium	23.0	14.6	44.7
Zinc	31.4	21.0	39.7

-In field duplicate ID# DUP-20220322/JD41808-22 that is originated from MW-5/JD41808-21, %RPDs are calculated below:

Detected TAL Compound > RL	DUP-20220322 JD41808-22 (ug/L)	MW-5 JD41808-21 (ug/L)	%RPDs
Aluminum	3040	3540	15.2
Calcium	40300	39100	3.0
Iron	4190	4850	14.6
Lead	4.1	4.4	7.1
Magnesium	10300	10200	0.98
Manganese	378	470	21.7
Nickel	14.4	16.7	14.8
Selenium	<10	10.1	NC
Sodium	33100	32500	1.8
Zinc	62.1	27.9	76

Quality Judgement:

-Detected results of Aluminum, Beryllium, Calcium, Lead, Nickel, in samples RI-SB-11(9.5-10)/JD41808-3, DUP2/JD41808-4, should be qualified Estimated (J).

-Detected results of Aluminum, Calcium, Chromium, Cobalt, Copper, Lead, Magnesium, Nickel, Potassium, Vanadium, Zinc, in samples RI-SB-10(14.5-15)/JD41808-9, DUP1/JD41808-10, should be qualified Estimated (J).

-Detected results of Manganese, Zinc, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, should be qualified Estimated (J).

- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
 - In QC Batch ID: MP31898/Out of samples group, sample JD41761-1, on 03/24/2022, was used for ICP Serial Dilution Evaluation. %Ds of target metals (EPA 6010D) were below the allowable maximum, EXCEPT for Potassium, where %Ds were above the allowable maximum.
 - Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.

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-In QC Batch ID: MP31903, sample RI-SB11(9.5-10)/JD41808-3, was used for Serial Dilution evaluation. %Ds for the target metals with concentrations > 50x the MDL, were below the allowable maximum.

Quality Judgement:

-Detected results of Potassium, in samples MW-5/JD41808-21, DUP-20220322/JD41808-22, MS/JD41808-23, FB/JD41808-24, should be qualified Estimated (J).

- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, in QC Batch ID: MP31957, QC Batch ID: MP31958, analyzed on 03/28/2022, were in compliance with method quality control criteria.

Quality Judgement: No actions are required.

- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41808

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	18 Soil Samples, 2 Soil Duplicates, 1 Ground Water Sample, 1 Water Duplicate, 1 MS Sample, 1 Field Blank
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria (90%<%Rs<110%):
 -File ID: E032522W1.CN, on 03/25/2022, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package in batch ID # GP39160/GN27599, GP39162/GN27599, reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits-80-120%). The following summarizes this evaluation:
 -In Batch IDs# GP39160/GN27599, GP39162/GN27599, for Cyanide LCS evaluation, %Rs were within the method control limits.
Quality Judgement: No actions are required.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
 -In batch ID: GP39162/GN27599 JD41808-1, %Rs for Cyanide Matrix spike standard was within the method control limits (75-125%).

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-In batch ID: GP39162/GN27599 JD41808-2, %Rs for Cyanide Matrix spike standard was within the method control limits (75-125%).

-Quality Judgement: No actions are required.

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-%RPDs for laboratory duplicate in batch ID# GP39162/GN27599 JD41808-1, was below the allowable maximum.

Field Duplicates Evaluation:

-In field duplicate ID# DUP2/JD41808-4 that is originated from RI-SB-11(9.5-10)/JD41808-3, %RPDs of Cyanide was not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP1/JD41808-10 that is originated from RI-SB-10(14.5-15)/JD41808-9, %RPDs of Cyanide was not calculated due to no detection of target compounds above the reporting limits.

-In field duplicate ID# DUP-20220322/JD41808-22 that is originated from MW-5/JD41808-21, %RPDs of Cyanide was not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

Page 1 of 5

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9367-ICC9367
Lab FileID: 2A215270.D

Response Factor Report GCMS2A

Method : C:\MSDCHEM\1\METHODS\M2A9367.M (RTE Integrator)
Title : Method SW846 8260D, ZB624.1 60m x 0.25mm xFri May Fri Mar 25 18:42:27 2022
Last Update : Fri Mar 25 18:42:27 2022
Response via : Initial Calibration

Calibration Files

4 =2A215267.D 8 =2A215268.D 0.5 =2A215264.D 50 =2A215270.D
100 =2A215271.D 1 =2A215265.D 200 =2A215272.D 20 =2A215269.D
2 =2A215266.D 0.2 =2A215263.D = =

Compound	4	8	0.5	50	100	1	200	20	2	0.2	Avg	%RSD
1) I tert butyl alcohol-d9 -----ISTD-----												
2) ethanol												
	0.109	0.103	0.118	0.139	0.109	0.137	0.113	0.107		0.117	11.83	
3) tertiary butyl alcohol												
	1.530	1.508	1.266	1.507	1.499	1.560	1.480	1.465	1.375	1.466	6.20	
4) 1,4-dioxane												
	0.099	0.099	0.113	0.112		0.119	0.104			0.108	7.67	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
	0.750	0.675	0.712	0.682		0.627	0.731	0.808		0.712	8.20	
7) Freon 143A										0.000	-1.00	
8) dichlorodifluoromethane												
	0.730	0.710	0.775	0.726		0.681	0.801	0.895		0.760	9.48	
9) chloromethane												
	0.943	0.879	0.938	0.899	1.221	0.852	0.940	1.106		0.972	12.97	
10) vinyl chloride												
	0.694	0.656	0.804	0.717	0.688	0.892	0.659	0.729	0.815	0.739	10.87	
11) 1,3-butadiene												
	0.706	0.634	0.632	0.590	0.749	0.554	0.660	0.689		0.652	9.67	
12) bromomethane												
	0.486	0.457	0.472	0.446		0.328	0.494	0.570		0.465	15.61	
13) chloroethane												
	0.436	0.413	0.440	0.421	0.552	0.377	0.450	0.472		0.445	11.54	
14) trichlorofluoromethane												
	0.854	0.779	0.822	0.875	0.824	0.983	0.869	0.889	0.917	0.868	6.85	
15) ethyl ether												
	0.316	0.286	0.253	0.315	0.298	0.335	0.285	0.322	0.308	0.302	8.09	
16) acrolein												
	0.151	0.131	0.141	0.140		0.129	0.144			0.139	6.05	
17) freon 113												
	0.447	0.404	0.466	0.443	0.468	0.427	0.461	0.434		0.444	4.92	
18) 1,1-dichloroethene												
	0.539	0.487	0.660	0.498	0.475	0.620	0.452	0.506	0.533	0.530	12.96	
19) acetone												
	0.243	0.165	0.177	0.167	0.190	0.154	0.181	0.198		0.184	14.94	
20) acetonitrile												
	0.085	0.076	0.083	0.084	0.082	0.079	0.085	0.077		0.081	4.48	
21) iodomethane												
	0.979	0.900	0.873	0.953	0.913	1.022	0.868	0.954	0.944	0.790	0.920	7.16
22) carbon disulfide												
	1.566	1.445	1.671	1.507	1.442	1.776	1.357	1.534	1.536	1.702	1.554	8.34
23) methylene chloride												

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9367-ICC9367
Lab FileID: 2A215270.D

	0.588	0.529	0.696	0.557	0.537	0.711	0.514	0.569	0.608	0.590	11.99
24)	methyl acetate										
	0.646	0.483		0.534	0.516	0.598	0.479	0.521	0.538	0.540	10.49
25)	methyl tert butyl ether										
	1.583	1.449	1.590	1.527	1.448	1.787	1.337	1.563	1.536	1.642	1.546
26)	trans-1,2-dichloroethene										
	0.581	0.530	0.676	0.557	0.527	0.754	0.506	0.569	0.584	0.673	0.596
27)	hexane										
	1.231	1.133		1.204	1.123		1.059	1.244	1.252		1.178
28)	di-isopropyl ether										
	2.262	2.112	2.373	2.132	1.982	2.655	1.776	2.234	2.262	2.358	2.215
29)	ethyl tert-butyl ether										
	2.102	1.964	2.083	2.019	1.898	2.367	1.736	2.077	2.062	1.723	2.003
30)	2-butanone										
	0.065	0.062		0.066	0.066	0.062	0.062	0.070	0.068		0.065
31)	1,1-dichloroethane										
	1.160	1.030	1.147	1.073	0.997	1.310	0.939	1.101	1.119	0.977	1.085
32)	chloroprene										
	0.976	0.876	0.873	0.942	0.884	1.059	0.836	0.958	0.918	0.926	0.925
33)	acrylonitrile										
	0.278	0.259		0.281	0.281	0.240	0.264	0.286	0.303		0.274
34)	vinyl acetate										
	0.121	0.114		0.123	0.123	0.100	0.119	0.123	0.111		0.117
35)	ethyl acetate										
	0.130	0.108		0.110	0.105		0.098	0.116	0.122		0.113
36)	2,2-dichloropropane										
	0.744	0.659	0.787	0.689	0.644	0.902	0.602	0.712	0.752	0.764	0.725
37)	cis-1,2-dichloroethene										
	0.657	0.581		0.607	0.576	0.776	0.544	0.631	0.665		0.630
38)	propionitrile										
	0.104	0.097	0.089	0.100	0.095	0.108	0.085	0.105	0.104		0.099
39)	bromochloromethane										
	0.419	0.390	0.379	0.422	0.405	0.460	0.385	0.424	0.419		0.412
40)	tetrahydrofuran										
	0.268	0.208		0.209	0.208		0.191	0.221			0.218
41)	chloroform										
	1.003	0.910		0.929	0.882	1.252	0.829	0.956	1.047		0.976
42)	tert-butyl formate										
	0.449	0.457		0.562	0.555		0.529	0.533	0.404		0.498
43)	isobutyl alcohol										
	0.031	0.031		0.032	0.034		0.032	0.033	0.028		0.032
44)	dibromofluoromethane (s)										
	0.450	0.450	0.455	0.450	0.445	0.452	0.452	0.447	0.450	0.447	0.450
45)	methacrylonitrile										
	0.244	0.235		0.254	0.247	0.303	0.235	0.253	0.241		0.251
46)	1,1,1-trichloroethane										
	0.856	0.782	0.837	0.842	0.809	0.963	0.762	0.863	0.859	0.836	0.841
47)	cyclohexane										
	0.801	0.764	0.807	0.824	0.778	0.982	0.750	0.840	0.930	0.844	0.832
48)	1,1-dichloropropene										
	0.741	0.691	0.709	0.719	0.687	0.844	0.650	0.735	0.701	0.564	0.704
49)	tert-amyl alcohol										
	0.041	0.032		0.035	0.038		0.036	0.038	0.044		0.037
50)	carbon tetrachloride										
	0.788	0.742	0.789	0.787	0.750	0.883	0.704	0.800	0.794	0.694	0.773
51)	I 1,4-difluorobenzene -----ISTD-----										
52)	1,2-dichloroethane-d4 (s)										
	0.332	0.331	0.334	0.321	0.318	0.328	0.311	0.327	0.330	0.332	0.326
53)	2,2,4-trimethylpentane										

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9367-ICC9367
Lab FileID: 2A215270.D

	1.612	1.445	1.390	1.210	1.039	1.498	1.610	1.401	15.07	
54)	tert-amyl methyl ether									
	1.163	1.079	1.218	1.119	1.063	1.287	0.949	1.144	1.172	1.277
55)	n-butyl alcohol									
	0.015	0.015	0.015	0.016	0.016	0.017	0.015	0.017	0.014	0.016
56)	benzene									
	1.515	1.430	1.515	1.463	1.367	1.686	1.210	1.498	1.483	1.485
57)	heptane									
	0.350	0.308	0.423	0.499	0.499	0.530	0.369	0.399	0.422	18.99
58)	isopropyl acetate									
	0.092	0.086	0.092	0.092	0.108	0.086	0.093	0.079	0.091	9.11
59)	1,2-dichloroethane									
	0.514	0.490	0.598	0.504	0.482	0.602	0.440	0.524	0.526	0.520
60)	trichloroethene									
	0.396	0.361	0.433	0.380	0.365	0.435	0.337	0.392	0.389	0.335
61)	ethyl acrylate									
	0.642	0.616	0.710	0.618	0.597	0.748	0.524	0.645	0.712	0.646
62)	2-nitropropane									
	0.105	0.092	0.098	0.096	0.088	0.097	0.128	0.101	12.92	
63)	2-chloroethyl vinyl ether *This compound fails Initial Calibration criteria*									
	0.027	0.039	0.135	0.163	0.164	0.080	0.018	0.089	71.90	
64)	methyl methacrylate									
	0.114	0.107	0.091	0.118	0.117	0.108	0.110	0.119	0.109	0.110
65)	1,2-dichloropropane									
	0.436	0.410	0.452	0.422	0.395	0.465	0.359	0.435	0.440	0.436
66)	methylcyclohexane									
	0.628	0.584	0.618	0.608	0.579	0.723	0.529	0.625	0.608	0.576
67)	dibromomethane									
	0.229	0.214	0.222	0.228	0.224	0.257	0.208	0.232	0.226	0.230
68)	bromodichloromethane									
	0.501	0.454	0.490	0.488	0.469	0.538	0.433	0.493	0.490	0.460
69)	epichlorohydrin									
	0.050	0.043	0.046	0.047	0.055	0.043	0.046	0.043	0.047	9.05
70)	cis-1,3-dichloropropene									
	0.608	0.566	0.559	0.607	0.578	0.678	0.529	0.615	0.608	0.473
71)	4-methyl-2-pentanone									
	0.196	0.181	0.182	0.180	0.172	0.205	0.148	0.193	0.193	0.183
72)	3-methyl-1-butanol									
	0.011	0.011	0.010	0.012	0.012	0.013	0.011	0.012	0.011	0.011
73)	I chlorobenzene-d5 -----ISTD-----									
74)	toluene-d8 (s)									
	1.249	1.250	1.249	1.274	1.300	1.258	1.334	1.257	1.259	1.253
75)	toluene									
	1.073	1.020	1.080	1.071	1.026	1.185	0.957	1.085	1.087	0.930
76)	trans-1,3-dichloropropene									
	0.632	0.594	0.568	0.637	0.616	0.684	0.575	0.646	0.599	0.503
77)	ethyl methacrylate									
	0.577	0.559	0.580	0.597	0.570	0.670	0.525	0.610	0.615	0.506
78)	1,1,2-trichloroethane									
	0.334	0.313	0.334	0.338	0.329	0.383	0.312	0.337	0.308	0.346
79)	2-hexanone									
	0.220	0.205	0.204	0.216	0.206	0.236	0.181	0.225	0.218	0.212
80)	tetrachloroethene									
	0.517	0.482	0.470	0.516	0.498	0.573	0.468	0.527	0.505	0.506
81)	1,3-dichloropropane									
	0.632	0.595	0.610	0.618	0.599	0.726	0.557	0.629	0.623	0.515
82)	butyl acetate									
	0.412	0.378	0.383	0.393	0.383	0.493	0.360	0.401	0.409	0.401
83)	dibromochloromethane									

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9367-ICC9367
Lab FileID: 2A215270.D

	0.498	0.466	0.468	0.508	0.502	0.541	0.485	0.507	0.504	0.474	0.495	4.60
84)	1,2-dibromoethane											
	0.416	0.392	0.376	0.424	0.419	0.488	0.399	0.423	0.411		0.416	7.47
85)	n-butyl ether											
	2.226	2.058		2.115	1.912		1.610	2.187	2.261		2.053	11.11
86)	chlorobenzene											
	1.209	1.115	1.183	1.181	1.129	1.331	1.023	1.205	1.167	1.041	1.158	7.63
87)	1,1,1,2-tetrachloroethane											
	0.449	0.437	0.394	0.463	0.449	0.523	0.417	0.467	0.450		0.450	7.94
88)	ethylbenzene											
	1.956	1.764	1.877	1.810	1.649	2.135	1.399	1.881	1.914	1.636	1.802	11.31
89)	m,p-xylene											
	0.769	0.706	0.696	0.741	0.701	0.833	0.640	0.761	0.754	0.614	0.721	8.92
90)	o-xylene											
	1.543	1.452	1.506	1.461	1.342	1.706	1.159	1.522	1.563	1.451	1.471	9.82
91)	styrene											
	1.287	1.203	1.302	1.227	1.141	1.425	1.004	1.277	1.224		1.232	9.46
92)	n-amyl acetate											
	0.302	0.290	0.272	0.311	0.306	0.296	0.292	0.315	0.292		0.297	4.36
93)	bromoform											
	0.338	0.310	0.283	0.353	0.348	0.357	0.334	0.350	0.327	0.266	0.326	9.45
94)	butyl acrylate											
	1.103	1.016	1.126	1.085	1.011	1.195	0.893	1.119	1.038		1.065	8.20
95)	isopropylbenzene											
	1.908	1.765	1.808	1.807	1.691	2.155	1.450	1.902	1.827	1.724	1.804	9.95
96)	cis-1,4-dichloro-2-butene											
	0.151	0.145		0.180	0.184	0.167	0.181	0.172	0.145		0.166	9.85
97)	I 1,4-dichlorobenzene-d -----ISTD-----											
98)	4-bromofluorobenzene (s)											
	0.893	0.908	0.905	0.896	0.900	0.907	0.917	0.897	0.899	0.901	0.902	0.79
99)	bromobenzene											
	1.063	0.995	0.975	1.043	1.001	1.178	0.917	1.070	1.039	0.821	1.010	9.48
100)	1,1,2,2-tetrachloroethane											
	1.009	0.960	0.881	1.002	0.983	1.110	0.892	1.051	1.001	0.832	0.972	8.60
101)	trans-1,4-dichloro-2-butene											
	0.270	0.252		0.286	0.288	0.233	0.271	0.279	0.242		0.265	7.66
102)	1,2,3-trichloropropane											
	0.273	0.267	0.273	0.273	0.268	0.297	0.255	0.288	0.268		0.273	4.55
103)	n-propylbenzene											
	4.343	4.021	4.072	3.975	3.624	4.746	2.974	4.230	4.161	3.738	3.989	11.88
104)	2-chlorotoluene											
	0.955	0.909	0.902	0.968	0.930	1.095	0.860	0.971	0.934	0.831	0.936	7.68
105)	4-chlorotoluene											
	2.626	2.410	2.525	2.471	2.317	2.873	2.008	2.568	2.490	2.367	2.466	9.07
106)	1,3,5-trimethylbenzene											
	3.037	2.812	2.699	2.873	2.662	3.388	2.270	3.003	2.903	2.602	2.825	10.57
107)	tert-butylbenzene											
	2.622	2.528	2.450	2.575	2.444	2.969	2.116	2.681	2.616	2.561	2.556	8.38
108)	1,2,4-trimethylbenzene											
	3.076	2.899		2.908	2.684		2.286	3.008	2.979		2.834	9.58
109)	sec-butylbenzene											
	3.795	3.590	3.567	3.657	3.337	4.209	2.788	3.845	3.704		3.610	10.78
110)	1,3-dichlorobenzene											
	1.887	1.806	1.749	1.811	1.713	2.146	1.510	1.881	1.860		1.818	9.31
111)	p-isopropyltoluene											
	3.326	3.154	3.116	3.230	2.983	3.665	2.508	3.378	3.141		3.167	9.94
112)	benzyl chloride											
	1.585	1.552	1.421	1.665	1.588	1.685	1.411	1.673	1.563	1.326	1.547	7.94
113)	1,2,3-trimethylbenzene											

Initial Calibration Summary

Page 5 of 5

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9367-ICC9367
Lab FileID: 2A215270.D

	3.093	2.856	2.918	2.862	2.615	3.443	2.171	2.998	2.935	2.460	2.835	12.39
114)	1,4-dichlorobenzene											
	1.897	1.773	1.723	1.806	1.683	2.175	1.457	1.874	1.789	1.671	1.785	10.37
115)	1,2-dichlorobenzene											
	1.846	1.736	1.737	1.770	1.678	1.944	1.480	1.807	1.801	1.489	1.729	8.53
116)	n-butylbenzene											
	1.501	1.483	1.346	1.581	1.506	1.619	1.346	1.616	1.472	1.200	1.467	9.13
117)	1,2-dibromo-3-chloropropane											
	0.236	0.224		0.261	0.264	0.221	0.245	0.263	0.222		0.242	7.80
118)	1,3,5-trichlorobenzene											
	1.403	1.344	1.275	1.457	1.398	1.563	1.229	1.456	1.349		1.386	7.30
119)	1,2,4-trichlorobenzene											
	1.173	1.157	1.049	1.280	1.248	1.207	1.112	1.275	1.101		1.178	6.90
120)	hexachlorobutadiene											
	0.590	0.548	0.495	0.600	0.592	0.618	0.543	0.602	0.533		0.569	7.16
121)	naphthalene											
	2.808	2.791		3.093	2.962	2.728	2.518	3.132	2.688		2.840	7.37
122)	1,2,3-trichlorobenzene											
	1.094	1.096	0.902	1.202	1.154	1.117	1.045	1.171	1.033		1.091	8.25
123)	hexachloroethane											
	0.523	0.501	0.445	0.563	0.563	0.573	0.529	0.558	0.495		0.528	7.95
124)	2-methylnaphthalene											
	1.244		1.717	1.829		1.724	1.548				1.612	14.21
125)	pentafluorobenzene(a) -----ISTD-----											
126)	vinyl bromide											
	0.554	0.605		0.534	0.457	0.623	0.518	0.542	0.528		0.545	9.50

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2A9367.M Fri Mar 25 18:42:43 2022 MS2A

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7639-ICC7639
Lab FileID: 3B169483.D

Response Factor Report MS3B											
Method : C:\MSDCHEM\1\METHODS\M3B7639.M (RTE Integrator)											
Title : SW846 8260D, Rxi624Sil MS 60m x 0.25mm x 1.4um											
Last Update : Thu Mar 03 17:13:32 2022											
Response via : Initial Calibration											
Calibration Files											
1 =3B169478.D 4 =3B169480.D 100 =3B169484.D 50 =3B169483.D											
20 =3B169482.D 200 =3B169485.D 8 =3B169481.D 0.5 =3B169477.D											
2 =3B169479.D 0.2 =3B169476.D = =											
Compound	1	4	100	50	20	200	8	0.5	2	0.2	Avg %RSD

1) I tert butyl alcohol-d9 -----ISTD-----											
2) ethanol											
	0.146	0.195	0.159	0.155	0.142	0.153	0.173		0.196	0.165	12.73
3) tertiary butyl alcohol											
	1.401	1.612	1.638	1.487	1.604	1.651		1.894		1.612	9.53
4) 1,4-dioxane											
	0.107	0.105	0.102	0.083	0.104	0.081				0.097	12.16
5) I pentafluorobenzene -----ISTD-----											
6) chlorodifluoromethane											
	1.539	1.685	1.977	1.881	1.801	1.930	1.756		1.776	1.793	7.84
7) dichlorodifluoromethane											
	1.722	2.256	2.149	1.962	2.246	1.939		1.738		2.002	11.16
8) chloromethane											
	1.654	1.816	2.058	1.939	1.860	2.082	1.892		1.957	1.907	7.19
9) vinyl chloride											
	1.307	1.452	1.622	1.564	1.447	1.665	1.492		1.300	1.481	9.05
10) 1,3-butadiene											
	1.240	1.190	1.298	1.280	1.105	1.290	1.140		1.212	1.219	5.84
11) bromomethane											
	0.746	0.847	0.895	0.870	0.895	0.901	0.857		0.904	0.864	6.05
12) chloroethane											
	0.471	0.682	0.691	0.701	0.663	0.693	0.680		0.697	0.660	11.69
13) trichlorofluoromethane											
	1.689	1.810	1.935	1.893	1.801	1.998	1.899		1.803	1.854	5.21
14) ethyl ether											
	0.251	0.310	0.306	0.271	0.341	0.306		0.163		0.279	21.09
----- Linear regression ----- Coefficient = 0.9969											
Response Ratio = -0.00738 + 0.32913 *A											
15) acrolein											
	0.121	0.108	0.096	0.136	0.090					0.110	17.01
16) freon 113											
	0.773	0.868	0.793	0.778	0.733	0.805	0.761		0.621	0.766	9.25
17) 1,1-dichloroethene											
	0.572	0.613	0.629	0.628	0.581	0.662	0.650		0.686	0.628	6.21
18) acetone											
	0.062	0.066	0.062	0.055	0.068	0.046		0.043		0.057	16.95
19) acetonitrile											
	0.104	0.115	0.108	0.104	0.103	0.105	0.099		0.108	0.106	4.44
20) iodomethane											
	1.390	1.184	1.233	1.232	1.115	1.263	1.140		1.136	1.212	7.40
21) carbon disulfide											
	2.488	2.302	2.435	2.458	2.250	2.485	2.419	2.082	2.197	2.346	6.18

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7639-ICC7639
Lab FileID: 3B169483.D

22)	methylene chloride	0.547	0.605	0.683	0.711	0.675	0.711	0.666	0.678	0.659	8.49
23)	methyl acetate	0.505	0.569	0.599	0.532	0.567	0.587		0.646	0.572	8.02
24)	methyl tert butyl ether	2.040	2.285	2.480	2.445	2.236	2.501	2.194	2.718	2.348	8.71
25)	trans-1,2-dichloroethene	0.467	0.658	0.614	0.618	0.567	0.639	0.599	0.556	0.590	10.18
26)	hexane	0.598	0.567	0.611	0.614	0.524	0.626	0.540	0.620	0.588	6.60
27)	di-isopropyl ether	2.773	2.511	2.762	2.744	2.561	2.773	2.711	2.435	2.775	4.96
28)	2-butanone	0.053	0.061	0.063	0.053	0.063	0.052		0.035	0.054	18.08
29)	1,1-dichloroethane	0.976	1.075	1.194	1.212	1.067	1.229	1.201	1.101	1.166	7.51
30)	chloroprene	1.091	1.057	1.089	1.107	0.964	1.132	1.147	1.028	1.077	5.52
31)	acrylonitrile	0.172	0.232	0.254	0.209	0.260	0.207			0.222	14.88
32)	vinyl acetate	0.167	0.171	0.149	0.167	0.143				0.160	7.79
33)	ethyl tert-butyl ether	2.224	2.253	2.554	2.455	2.150	2.625	2.209	1.885	2.151	10.09
34)	ethyl acetate	0.098	0.103	0.109	0.090	0.106	0.062			0.095	18.14
35)	2,2-dichloropropane	1.349	1.433	1.366	1.345	1.240	1.365	1.364	1.173	1.622	9.12
36)	cis-1,2-dichloroethene	0.658	0.640	0.632	0.644	0.557	0.670	0.627	0.530	0.620	7.99
37)	propionitrile	0.083	0.078	0.085	0.083	0.077	0.087	0.079	0.086	0.082	4.52
38)	methyl acrylate	*This compound fails Initial Calibration criteria*									
		0.089	0.084	0.084	0.087	0.057				0.080	16.34
39)	methacrylonitrile	0.188	0.222	0.233	0.202	0.222	0.195			0.210	8.51
40)	bromochloromethane	0.168	0.276	0.303	0.304	0.285	0.326	0.272	0.320	0.282	17.74
41)	tetrahydrofuran	0.197	0.225	0.225	0.202	0.234	0.224		0.247	0.222	7.87
42)	chloroform	1.314	1.303	1.196	1.226	1.138	1.253	1.212	1.549	1.332	9.25
43)	tert-Butyl Formate	*This compound fails Initial Calibration criteria*									
		0.210	0.146	0.103	0.257	0.089				0.161	44.46
44)	dibromofluoromethane (s)	0.502	0.487	0.493	0.486	0.470	0.509	0.487	0.480	0.475	2.45
45)	1,1,1-trichloroethane	1.435	1.459	1.538	1.517	1.388	1.558	1.546	1.327	1.654	6.64
46)	cyclohexane	1.373	1.360	1.329	1.336	1.308	1.411		0.954	1.296	11.91
47)	isobutyl alcohol	0.129	0.099	0.108	0.100	0.096	0.117		0.112	0.109	10.91
48)	1,1-dichloropropene	0.661	0.939	0.843	0.855	0.807	0.842	0.916	0.868	0.842	10.00
49)	carbon tetrachloride	1.297	1.435	1.443	1.433	1.362	1.385	1.405	1.339	1.387	3.75
50)	tert-amyl alcohol	0.073	0.073	0.075	0.072	0.073	0.072			0.073	1.64
51)	isopropyl acetate	0.081	0.128	0.135	0.121	0.135	0.149			0.124	18.83

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7639-ICC7639
Lab FileID: 3B169483.D

52)	I	1,4-difluorobenzene	-----ISTD-----											
53)		1,2-dichloroethane-d4 (s)	0.472	0.475	0.472	0.471	0.470	0.449	0.499	0.484	0.469	0.503	0.476	3.26
54)		n-butyl alcohol	0.012	0.016	0.016	0.012	0.015	0.013		0.011		0.014	15.54	
55)		2,2,4-trimethylpentane	1.677	1.748	2.146	1.999	1.846	2.169	2.018	1.730		1.917	10.05	
56)		benzene	1.774	1.705	1.702	1.676	1.618	1.657	1.696	1.821	1.766	1.687	1.710	3.53
57)		tert-amyl methyl ether	1.408	1.406	1.568	1.476	1.412	1.551	1.450	1.400	1.606	1.475	5.41	
58)		heptane	0.343	0.383	0.359	0.347	0.358	0.363		0.386		0.363	4.55	
59)		1,2-dichloroethane	0.895	0.726	0.723	0.713	0.705	0.698	0.749	0.643	0.831	0.743	10.21	
60)		ethyl acrylate	0.516	0.612	0.572	0.538	0.619	0.523		0.513		0.556	8.15	
61)		trichloroethene	0.484	0.477	0.475	0.453	0.420	0.491	0.494	0.538		0.479	7.07	
62)		2-chloroethyl vinyl ether	0.050	0.074	0.063	0.049	0.089	0.040		0.039		0.057	32.00	
		----- Quadratic regression -----	Coefficient = 0.9988											
		Response Ratio = -0.00445 + 0.05386 *A + 0.00178 *A^2												
63)		methyl methacrylate	0.090	0.111	0.099	0.094	0.110	0.080				0.097	12.12	
64)		methylcyclohexane	0.835	0.911	0.917	0.864	0.864	0.903	0.864	0.876	0.934	0.885	3.63	
65)		1,2-dichloropropane	0.420	0.497	0.517	0.496	0.479	0.528	0.478	0.517	0.469	0.489	6.70	
66)		dibromomethane	0.169	0.290	0.289	0.280	0.269	0.296	0.304	0.244		0.268	16.47	
67)		bromodichloromethane	0.734	0.696	0.721	0.695	0.639	0.750	0.706	0.653	0.837	0.714	8.12	
68)		2-nitropropane	0.169	0.161	0.160	0.142	0.158	0.155				0.157	5.74	
69)		epichlorohydrin	0.048	0.042	0.040	0.049	0.040					0.044	10.08	
70)		cis-1,3-dichloropropene	0.647	0.790	0.775	0.781	0.678	0.787	0.642	0.688	0.742	0.726	8.53	
71)		4-methyl-2-pentanone	0.215	0.225	0.229	0.218	0.205	0.215	0.211	0.232	0.200	0.217	4.93	
72)		isoamyl alcohol	0.014	0.017	0.017	0.014	0.017	0.014		0.014		0.015	9.31	
73)	I	chlorobenzene-d5	-----ISTD-----											
74)		toluene-d8 (s)	1.222	1.161	1.200	1.195	1.193	1.199	1.249	1.207	1.209	1.219	1.205	1.89
75)		toluene	0.887	0.928	1.052	1.037	0.983	1.031	1.068	0.883	1.124	0.999	8.43	
76)		ethyl methacrylate	0.485	0.561	0.556	0.506	0.519	0.609		0.546		0.540	7.58	
77)		trans-1,3-dichloropropene	0.672	0.614	0.661	0.652	0.581	0.652	0.649	0.664		0.643	4.73	
78)		1,1,2-trichloroethane	0.256	0.294	0.327	0.322	0.302	0.311	0.344	0.302		0.307	8.59	
79)		tetrachloroethene	0.301	0.332	0.377	0.391	0.382	0.365	0.441	0.447		0.379	13.02	
80)		2-hexanone												

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7639-ICC7639
Lab FileID: 3B169483.D

	0.145	0.160	0.195	0.197	0.178	0.184	0.199	0.172	0.179	10.74
81)	1,3-dichloropropane							0.626	0.619	3.59
	0.622	0.607	0.629	0.640	0.592	0.587	0.649			
82)	butyl acetate							0.316	0.310	6.19
	0.277	0.329	0.332	0.293	0.312	0.311				
83)	dibromochloromethane								0.476	9.20
	0.419	0.435	0.523	0.510	0.460	0.524	0.527	0.441	0.447	
84)	1,2-dibromoethane							0.344	0.375	6.85
	0.341	0.351	0.398	0.387	0.379	0.398	0.401			
85)	n-butyl ether								2.173	9.46
	1.915	2.062	2.411	2.333	2.143	2.329	2.399	1.863	2.106	
86)	chlorobenzene									
	1.371	1.251	1.248	1.256	1.188	1.239	1.246	1.158	1.217	1.512
87)	1,1,1,2-tetrachloroethane								0.550	9.92
	0.462	0.543	0.541	0.542	0.502	0.534	0.565	0.629	0.632	
88)	ethylbenzene								2.078	6.39
	2.225	2.032	2.113	2.167	2.011	2.073	2.264	1.833	1.985	
89)	m,p-xylene									
	0.813	0.755	0.845	0.851	0.790	0.818	0.912	0.726	0.866	0.608
90)	o-xylene								0.799	10.76
	1.646	1.850	2.020	1.985	1.894	1.941	2.045	1.957	1.900	2.015
91)	styrene								1.925	6.03
	1.466	1.322	1.417	1.408	1.269	1.380	1.428	1.433	1.390	4.66
92)	butyl acrylate									
	1.000	0.901	1.036	1.030	0.943	1.004	1.047	1.000	0.995	4.99
93)	n-amyl acetate									
	0.342	0.376	0.340	0.324	0.350	0.354		0.300	0.341	7.00
94)	isopropylbenzene									
	2.153	2.224	2.635	2.505	2.330	2.530	2.546	2.281	2.440	2.136
95)	bromoform								2.378	7.44
	0.321	0.395	0.415	0.394	0.363	0.412	0.413	0.362	0.384	8.61
96)	cis-1,4-dichloro-2-butene									
	0.168	0.237	0.221	0.192	0.233	0.172			0.204	15.08
97)	I 1,4-dichlorobenzene-d -----ISTD-----									
98)	4-bromofluorobenzene (s)									
	0.758	0.727	0.791	0.802	0.782	0.834	0.787	0.746	0.797	0.770
99)	1,1,2,2-tetrachloroethane								0.779	3.93
	1.074	0.939	1.034	0.982	0.887	1.010	0.996	1.079	0.907	
100)	trans-1,4-dichloro-2-butene								0.990	6.90
	0.172	0.265	0.237	0.202	0.261	0.256				
101)	1,2,3-trichloropropane								0.232	16.19
	0.215	0.295	0.274	0.261	0.282	0.282		0.193	0.257	14.90
102)	bromobenzene									
	0.848	0.927	0.998	0.965	0.915	0.993	0.968	0.985	0.950	5.34
103)	n-propylbenzene									
	4.253	4.247	4.878	4.575	4.206	4.792	4.631	3.802	4.235	4.274
104)	2-chlorotoluene								4.390	7.39
	0.926	0.857	0.955	0.929	0.880	0.969	0.965	0.864	0.918	4.95
105)	4-chlorotoluene									
	2.517	2.557	2.754	2.653	2.435	2.826	2.632	2.095	2.434	2.236
106)	1,3,5-trimethylbenzene								2.514	8.95
	3.112	3.102	3.671	3.436	3.109	3.680	3.275	3.203	3.283	2.652
107)	tert-butylbenzene								3.252	9.28
	2.499	2.441	3.165	2.825	2.612	3.235	2.615	2.654	2.756	10.78
108)	1,2,4-trimethylbenzene									
	3.199	3.107	3.729	3.585	3.330	3.745	3.442	2.885	3.325	
109)	sec-butylbenzene								3.372	8.51
	4.291	4.382	4.925	4.529	4.138	4.962	4.521	4.164	4.489	7.03
110)	p-isopropyltoluene									

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7639-ICC7639
Lab FileID: 3B169483.D

	3.354	3.531	4.234	3.958	3.653	4.259	3.726	4.242	3.707	3.851	8.72
111)	1,2,3-trimethylbenzene										
	3.542	3.594	4.090	3.836	3.531	3.986	3.707	3.060	3.630	3.139	9.08
112)	1,3-dichlorobenzene										
	1.687	1.719	1.890	1.802	1.708	1.935	1.845	1.633	1.679	1.767	5.96
113)	1,4-dichlorobenzene										
	2.121	1.658	1.885	1.725	1.672	1.889	1.779	1.960	1.836	8.64	
114)	1,2-dichlorobenzene										
	1.773	1.727	2.044	1.943	1.781	2.093	1.850	1.778	1.874	7.31	
115)	benzyl chloride										
	1.623	1.568	1.966	1.791	1.597	2.034	1.706	1.568	1.543	1.711	10.65
116)	n-butylbenzene										
	1.851	1.892	2.129	1.998	1.830	2.149	2.129	1.691	1.868	1.949	8.26
117)	hexachloroethane										
	0.547	0.828	0.693	0.564	0.892	0.567	0.418	0.644	26.20		
	----- Quadratic regression -----										
	Coefficient = 0.9980										
	Response Ratio = -0.01288 + 0.66716 *A + 0.05950 *A^2										
118)	1,2-dibromo-3-chloropropane										
	0.247	0.292	0.265	0.238	0.303	0.227	0.256	0.261	10.59		
119)	1,3,5-trichlorobenzene										
	1.927	2.014	2.300	2.079	1.844	2.290	2.002	1.770	1.913	2.015	9.09
120)	1,2,4-trichlorobenzene										
	1.559	1.734	2.031	1.821	1.712	2.041	1.810	1.899	1.826	8.95	
121)	hexachlorobutadiene										
	0.901	0.899	1.145	1.023	0.955	1.128	1.034	0.839	1.001	0.992	10.48
122)	naphthalene										
	2.907	3.267	4.054	3.637	3.349	4.047	3.531	3.495	3.400	3.521	10.35
123)	1,2,3-trichlorobenzene										
	1.333	1.422	1.898	1.670	1.513	1.903	1.687	1.623	1.631	12.62	
124)	2-methylnaphthalene										
	2.112	1.722	1.478	2.193	1.489				1.799	18.82	

 (#) = Out of Range ### Number of calibration levels exceeded format ###

M3B7639.M

Thu Mar 03 17:16:58 2022 RPT1

Continuing Calibration Summary

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9387-CC9367
 Lab FileID: 2A215767.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...le\v2a9387\2a215767.d Vial: 2
 Acq On : 30 Mar 2022 9:47 am Operator: nickw
 Sample : cc9367-20 Inst : GCMS2A
 Misc : MS57665,V2A9387,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2A9367.M (RTE Integrator)
 Title : Method SW846 8260D, ZB624.1 60m x 0.25mm xFri May Fri Mar 25 18:42:27 2022
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	104	0.01	7.26
2	ethanol	0.117	0.121	-3.4	111	0.01	5.99
3	tertiary butyl alcohol	1.466	1.443	1.6	102	0.00	7.37
4	1,4-dioxane	0.108	0.112	-3.7	112	0.00	11.09
5 I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	9.51
6	chlorodifluoromethane	0.712	0.544	23.6#	85	0.00	4.00
7	Freon 143A			-----NA-----			
8	dichlorodifluoromethane	0.760	0.692	8.9	99	0.00	3.96
9	chloromethane	0.972	0.829	14.7	101	0.00	4.35
10	vinyl chloride	0.739	0.638	13.7	100	0.00	4.57
11	1,3-butadiene	0.652	0.582	10.7	101	0.00	4.61
12	bromomethane	0.465	0.453	2.6	105	0.00	5.18
13	chloroethane	0.445	0.387	13.0	98	0.00	5.36
14	trichlorofluoromethane	0.868	0.778	10.4	100	0.00	5.78
15	ethyl ether	0.302	0.279	7.6	99	0.00	6.20
16	acrolein	0.139	0.088	36.7#	70	0.00	6.42
17	freon 113	0.444	0.465	-4.7	115	0.01	6.61
18	1,1-dichloroethene	0.530	0.459	13.4	104	0.00	6.61
19	acetone	0.184	0.146	20.7#	92	0.00	6.61
20	acetonitrile	0.081	0.071	12.3	96	0.01	7.04
21	iodomethane	0.920	0.954	-3.7	115	0.01	6.86
22	carbon disulfide	1.554	1.416	8.9	106	0.00	6.99
23	methylene chloride	0.590	0.498	15.6	100	0.00	7.31
24	methyl acetate	0.540	0.426	21.1#	94	0.00	7.07
25	methyl tert butyl ether	1.546	1.371	11.3	100	0.01	7.67
26	trans-1,2-dichloroethene	0.596	0.510	14.4	103	0.00	7.69
27	hexane	1.178	0.913	22.5#	84	0.00	8.04
28	di-isopropyl ether	2.215	1.874	15.4	96	0.00	8.26
29	ethyl tert-butyl ether	2.003	1.793	10.5	99	0.00	8.71
30	2-butanone	0.065	0.055	15.4	90	0.00	8.91
31	1,1-dichloroethane	1.085	0.942	13.2	98	0.00	8.26
32	chloroprene	0.925	0.770	16.8	92	0.00	8.36
33	acrylonitrile	0.274	0.194	29.2#	78	0.00	7.60
34	vinyl acetate	0.117	0.105	10.3	98	0.01	8.21
35	ethyl acetate	0.113	0.089	21.2#	88	0.00	8.92
36	2,2-dichloropropane	0.725	0.718	1.0	116	0.00	9.01
37	cis-1,2-dichloroethene	0.630	0.559	11.3	101	0.00	8.98
38	propionitrile	0.099	0.085	14.1	93	0.00	8.99
39	bromochloromethane	0.412	0.394	4.4	106	0.00	9.26
40	tetrahydrofuran	0.218	0.181	17.0	94	0.00	9.28
41	chloroform	0.976	0.848	13.1	102	0.00	9.36

Continuing Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9387-CC9367
Lab FileID: 2A215767.D

42	tert-butyl formate	0.498	0.498	0.0	107	0.00	9.39
43	isobutyl alcohol	0.032	0.031	3.1	106	0.00	9.76
44 S	dibromofluoromethane (s)	0.450	0.436	3.1	112	0.00	9.55
45	methacrylonitrile	0.251	0.208	17.1	94	0.00	9.19
46	1,1,1-trichloroethane	0.841	0.761	9.5	101	0.00	9.61
47	cyclohexane	0.832	0.718	13.7	98	0.00	9.72
48	1,1-dichloropropene	0.704	0.633	10.1	99	0.00	9.78
49	tert-amyl alcohol	0.037	0.032	13.5	99	0.00	9.92
50	carbon tetrachloride	0.773	0.730	5.6	105	0.00	9.81
51 I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	10.44
52 S	1,2-dichloroethane-d4 (s)	0.326	0.304	6.7	100	0.00	9.96
53	2,2,4-trimethylpentane	1.401	1.460	-4.2	105	0.00	10.12
54	tert-amyl methyl ether	1.147	1.063	7.3	100	0.00	10.11
55	n-butyl alcohol	0.016	0.015	6.3	94	0.00	10.50
56	benzene	1.465	1.363	7.0	98	0.00	10.03
57	heptane	0.422	0.318	24.6#	92	0.00	10.28
58	isopropyl acetate	0.091	0.085	6.6	98	0.00	9.94
59	1,2-dichloroethane	0.520	0.460	11.5	94	0.00	10.05
60	trichloroethene	0.382	0.371	2.9	102	0.00	10.75
61	ethyl acrylate	0.646	0.555	14.1	92	0.00	10.74
62	2-nitropropane	0.101	0.080	20.8#	89	0.00	11.51
63	2-chloroethyl vinyl ether	0.089	0.086	3.4	116	0.00	11.54
64	methyl methacrylate	0.110	0.104	5.5	94	0.00	11.01
65	1,2-dichloropropane	0.425	0.398	6.4	98	0.00	11.04
66	methylcyclohexane	0.608	0.571	6.1	98	0.00	11.05
67	dibromomethane	0.227	0.222	2.2	103	0.00	11.15
68	bromodichloromethane	0.482	0.457	5.2	100	0.00	11.30
69	epichlorohydrin	0.047	0.042	10.6	99	0.00	11.63
70	cis-1,3-dichloropropene	0.582	0.571	1.9	100	0.00	11.76
71	4-methyl-2-pentanone	0.183	0.170	7.1	95	0.00	11.87
72	3-methyl-1-butanol	0.011	0.011	0.0	101	0.00	11.88
73 I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.57
74 S	toluene-d8 (s)	1.268	1.228	3.2	107	0.00	12.07
75	toluene	1.051	0.983	6.5	99	0.00	12.14
76	trans-1,3-dichloropropene	0.605	0.579	4.3	98	0.00	12.33
77	ethyl methacrylate	0.581	0.522	10.2	93	0.00	12.32
78	1,1,2-trichloroethane	0.334	0.306	8.4	99	0.00	12.54
79	2-hexanone	0.212	0.195	8.0	95	0.00	12.72
80	tetrachloroethene	0.506	0.527	-4.2	109	0.00	12.69
81	1,3-dichloropropane	0.611	0.560	8.3	97	0.00	12.73
82	butyl acetate	0.401	0.349	13.0	95	0.00	12.79
83	dibromochloromethane	0.495	0.485	2.0	104	0.00	12.97
84	1,2-dibromoethane	0.416	0.399	4.1	103	0.00	13.12
85	n-butyl ether	2.053	1.920	6.5	96	0.00	13.57
86	chlorobenzene	1.158	1.150	0.7	104	0.00	13.60
87	1,1,1,2-tetrachloroethane	0.450	0.459	-2.0	107	0.00	13.67
88	ethylbenzene	1.802	1.703	5.5	99	0.00	13.66
89	m,p-xylene	0.721	0.710	1.5	102	0.00	13.79
90	o-xylene	1.471	1.371	6.8	98	0.00	14.18
91	styrene	1.232	1.165	5.4	100	0.00	14.20
92	n-amyl acetate	0.297	0.298	-0.3	103	0.00	14.23
93	bromoform	0.326	0.342	-4.9	107	0.00	14.42
94	butyl acrylate	1.065	0.960	9.9	94	0.00	14.02
95	isopropylbenzene	1.804	1.735	3.8	100	0.00	14.53
96	cis-1,4-dichloro-2-butene	0.166	0.134	19.3	85	0.00	14.57
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	15.90
98 S	4-bromofluorobenzene (s)	0.902	0.807	10.5	104	0.00	14.73

6.9.5

6

Continuing Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2A9387-CC9367
Lab FileID: 2A215767.D

99	bromobenzene	1.010	1.024	-1.4	111	0.00	14.91
100	1,1,2,2-tetrachloroethane	0.972	0.891	8.3	98	0.00	14.81
101	trans-1,4-dichloro-2-bute	0.265	0.203	23.4#	84	0.00	14.84
102	1,2,3-trichloropropane	0.273	0.240	12.1	97	0.00	14.89
103	n-propylbenzene	3.989	3.603	9.7	99	0.00	14.94
104	2-chlorotoluene	0.936	0.890	4.9	106	0.00	15.07
105	4-chlorotoluene	2.466	2.189	11.2	99	0.00	15.19
106	1,3,5-trimethylbenzene	2.825	2.573	8.9	99	0.00	15.11
107	tert-butylbenzene	2.556	2.324	9.1	100	0.00	15.44
108	1,2,4-trimethylbenzene	2.834	2.639	6.9	102	0.00	15.49
109	sec-butylbenzene	3.610	3.277	9.2	99	0.00	15.66
110	1,3-dichlorobenzene	1.818	1.784	1.9	110	0.00	15.82
111	p-isopropyltoluene	3.167	2.924	7.7	100	0.00	15.79
112	benzyl chloride	1.547	1.795	-16.0	124	0.00	16.01
113	1,2,3-trimethylbenzene	2.835	2.608	8.0	101	0.00	15.92
114	1,4-dichlorobenzene	1.785	1.799	-0.8	111	0.00	15.92
115	1,2-dichlorobenzene	1.729	1.727	0.1	111	0.00	16.29
116	n-butylbenzene	1.467	1.354	7.7	97	0.00	16.20
117	1,2-dibromo-3-chloropropa	0.242	0.237	2.1	105	0.00	17.06
118	1,3,5-trichlorobenzene	1.386	1.412	-1.9	112	0.00	17.24
119	1,2,4-trichlorobenzene	1.178	1.203	-2.1	109	0.00	17.89
120	hexachlorobutadiene	0.569	0.566	0.5	109	0.00	18.01
121	naphthalene	2.840	2.709	4.6	100	0.00	18.18
122	1,2,3-trichlorobenzene	1.091	1.084	0.6	107	0.00	18.41
123	hexachloroethane	0.528	0.558	-5.7	116	0.00	16.58
124	2-methylnaphthalene	1.612	1.543	4.3	115	0.00	19.41
125	pentafluorobenzene(a)	1.000	1.000	0.0	92	0.00	9.51
126	vinyl bromide			-----NA-----			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 2A215269.D M2A9367.M Thu Mar 31 02:51:51 2022

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7672-CC7639
 Lab FileID: 3B170461.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ki...22\v3b7672\3b170461.d Vial: 3
 Acq On : 31 Mar 2022 10:10 am Operator: taylors
 Sample : cc7639-20 Inst : MS3B
 Misc : MS57719,V3B7672,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3B7639.M (RTE Integrator)
 Title : SW846 8260D, Rxi624Sil MS 60m x 0.25mm x 1.4um
 Last Update : Thu Mar 03 17:13:32 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	82	0.00	5.32
2	ethanol	0.165	0.185	-12.1	107	0.01	4.73
3	tertiary butyl alcohol	1.612	1.457	9.6	80	0.00	5.37
4	1,4-dioxane	0.097	0.090	7.2	89	0.00	7.33
5 I	pentafluorobenzene	1.000	1.000	0.0	91	0.00	6.42
6	chlorodifluoromethane	1.793	1.418	20.9#	72	0.00	3.81
7	dichlorodifluoromethane	2.002	1.618	19.2	75	-0.02	3.80
8	chloromethane	1.907	1.795	5.9	88	0.00	4.04
9	vinyl chloride	1.481	1.356	8.4	85	0.00	4.15
10	1,3-butadiene	1.219	1.062	12.9	88	0.00	4.16
11	bromomethane	0.864	0.852	1.4	87	0.00	4.47
12	chloroethane	0.660	0.648	1.8	89	0.00	4.53
13	trichlorofluoromethane	1.854	1.594	14.0	81	-0.01	4.74
----- True Calc. % Drift -----							
14	ethyl ether	20.000	20.301	-1.5	106	0.00	4.88
----- AvgRF CCRF % Dev -----							
15	acrolein	0.110	0.122	-10.9	116	0.02	5.00
16	freon 113	0.766	0.766	0.0	95	-0.01	5.09
17	1,1-dichloroethene	0.628	0.719	-14.5	113	0.00	5.11
18	acetone	0.057	0.057	0.0	94	0.00	5.06
19	acetonitrile	0.106	0.114	-7.5	101	0.00	5.25
20	iodomethane	1.212	1.299	-7.2	106	0.00	5.27
21	carbon disulfide	2.346	2.909	-24.0#	118	0.00	5.37
22	methylene chloride	0.659	0.820	-24.4#	111	0.00	5.42
23	methyl acetate	0.572	0.526	8.0	90	0.00	5.26
24	methyl tert butyl ether	2.348	2.253	4.0	92	0.00	5.56
25	trans-1,2-dichloroethene	0.590	0.716	-21.4#	115	0.00	5.61
26	hexane	0.588	0.570	3.1	99	0.00	5.75
27	di-isopropyl ether	2.672	2.797	-4.7	99	0.00	5.82
28	2-butanone	0.054	0.047	13.0	80	0.00	6.15
29	1,1-dichloroethane	1.136	1.365	-20.2#	116	0.00	5.87
30	chloroprene	1.077	1.011	6.1	95	0.00	5.93
31	acrylonitrile	0.222	0.242	-9.0	105	0.01	5.53
32	vinyl acetate	0.160	0.147	8.1	90	0.00	5.75
33	ethyl tert-butyl ether	2.278	2.353	-3.3	100	0.00	6.05
34	ethyl acetate	0.095	0.085	10.5	86	0.00	6.13
35	2,2-dichloropropane	1.362	1.350	0.9	99	0.00	6.25
36	cis-1,2-dichloroethene	0.620	0.642	-3.5	105	0.00	6.22
37	propionitrile	0.082	0.085	-3.7	100	0.00	6.19

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7672-CC7639
Lab FileID: 3B170461.D

38		methyl acrylate	0.080	0.075	6.3	81	0.00	6.20
39		methacrylonitrile	0.210	0.218	-3.8	98	0.00	6.30
40		bromochloromethane	0.282	0.332	-17.7	106	0.00	6.39
41		tetrahydrofuran	0.222	0.218	1.8	98	0.00	6.40
42		chloroform	1.280	1.343	-4.9	107	0.00	6.40
43		tert-Butyl Formate	0.161	0.422	-162.1#	373#	0.00	6.41
44	S	dibromofluoromethane (s)	0.488	0.542	-11.1	105	0.01	6.51
45		1,1,1-trichloroethane	1.491	1.455	2.4	95	0.00	6.58
46		cyclohexane	1.296	1.306	-0.8	89	0.00	6.66
47		isobutyl alcohol	0.109	0.077	29.4#	70	0.00	6.87
48		1,1-dichloropropene	0.842	0.850	-1.0	96	0.00	6.65
49		carbon tetrachloride	1.387	0.180	87.0#	12#	-0.11	6.58
50		tert-amyl alcohol	0.073	0.072	1.4	92	0.01	6.65
51		isopropyl acetate	0.124	0.139	-12.1	105	0.00	6.64
52	I	1,4-difluorobenzene	1.000	1.000	0.0	80	0.00	6.96
53	S	1,2-dichloroethane-d4 (s)	0.476	0.498	-4.6	85	0.00	6.74
54		n-butyl alcohol	0.014	0.013	7.1	85	0.00	6.92
55		2,2,4-trimethylpentane	1.917	2.050	-6.9	89	0.00	6.80
56		benzene	1.710	1.954	-14.3	97	0.00	6.79
57		tert-amyl methyl ether	1.475	1.631	-10.6	92	0.00	6.79
58		heptane	0.363	0.370	-1.9	85	0.00	6.87
59		1,2-dichloroethane	0.743	0.707	4.8	80	0.00	6.78
60		ethyl acrylate	0.556	0.409	26.4#	61	0.00	7.08
61		trichloroethene	0.479	0.447	6.7	85	0.00	7.16
----- True Calc. % Drift -----								
62		2-chloroethyl vinyl ether	100.000	254.469	-154.5#	259	0.00	7.55
----- AvgRF CCRF % Dev -----								
63		methyl methacrylate	0.097	0.067	30.9#	57	0.00	7.23
64		methylcyclohexane	0.885	0.936	-5.8	87	0.00	7.35
65		1,2-dichloropropane	0.489	0.511	-4.5	85	0.00	7.32
66		dibromomethane	0.268	0.281	-4.9	83	0.00	7.39
67		bromodichloromethane	0.714	0.704	1.4	88	0.00	7.45
68		2-nitropropane	0.157	0.161	-2.5	91	0.01	7.55
69		epichlorohydrin	0.044	0.036	18.2	71	0.00	7.61
70		cis-1,3-dichloropropene	0.726	0.708	2.5	83	0.00	7.71
71		4-methyl-2-pentanone	0.217	0.212	2.3	82	0.00	7.73
72		isoamyl alcohol	0.015	0.014	6.7	76	0.00	7.69
73	I	chlorobenzene-d5	1.000	1.000	0.0	76	0.00	8.84
74	S	toluene-d8 (s)	1.205	1.271	-5.5	81	0.00	7.91
75		toluene	0.999	1.027	-2.8	80	0.00	7.95
76		ethyl methacrylate	0.540	0.449	16.9	68	0.00	7.99
77		trans-1,3-dichloropropene	0.643	0.593	7.8	78	0.00	8.03
78		1,1,2-trichloroethane	0.307	0.333	-8.5	84	0.00	8.18
79		tetrachloroethene	0.379	0.419	-10.6	84	0.00	8.30
80		2-hexanone	0.179	0.151	15.6	65	0.00	8.24
81		1,3-dichloropropane	0.619	0.575	7.1	74	0.00	8.29
82		butyl acetate	0.310	0.292	5.8	76	0.01	8.27
83		dibromochloromethane	0.476	0.444	6.7	74	0.00	8.47
84		1,2-dibromoethane	0.375	0.344	8.3	69	0.00	8.58
85		n-butyl ether	2.173	2.110	2.9	75	0.00	8.77
86		chlorobenzene	1.268	1.256	0.9	81	0.00	8.86
87		1,1,1,2-tetrachloroethane	0.550	0.570	-3.6	87	0.00	8.90
88		ethylbenzene	2.078	2.102	-1.2	80	0.00	8.89
89		m,p-xylene	0.799	0.883	-10.5	85	0.00	8.96
90		o-xylene	1.925	1.937	-0.6	78	0.00	9.22
91		styrene	1.390	1.359	2.2	82	0.00	9.23

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3B7672-CC7639
Lab FileID: 3B170461.D

92	butyl acrylate	0.995	0.904	9.1	73	0.00	9.05
93	n-amyl acetate	0.341	0.327	4.1	77	0.01	9.18
94	isopropylbenzene	2.378	2.342	1.5	77	0.00	9.45
95	bromoform	0.384	0.360	6.3	76	0.00	9.41
96	cis-1,4-dichloro-2-butene	0.204	0.170	16.7	68	0.01	9.46
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	10.43
98 S	4-bromofluorobenzene (s)	0.779	0.705	9.5	73	0.00	9.60
99	1,1,2,2-tetrachloroethane	0.990	0.924	6.7	85	0.00	9.62
100	trans-1,4-dichloro-2-bute	0.232	0.226	2.6	91	0.00	9.63
101	1,2,3-trichloropropane	0.257	0.243	5.4	76	0.00	9.69
102	bromobenzene	0.950	0.854	10.1	76	0.00	9.74
103	n-propylbenzene	4.390	4.132	5.9	80	0.00	9.73
104	2-chlorotoluene	0.918	0.993	-8.2	92	0.00	9.84
105	4-chlorotoluene	2.514	2.380	5.3	79	0.00	9.92
106	1,3,5-trimethylbenzene	3.252	2.958	9.0	77	0.00	9.82
107	tert-butylbenzene	2.756	2.423	12.1	75	0.00	10.08
108	1,2,4-trimethylbenzene	3.372	3.159	6.3	77	0.00	10.11
109	sec-butylbenzene	4.489	4.075	9.2	80	0.00	10.23
110	p-isopropyltoluene	3.851	3.348	13.1	74	0.00	10.32
111	1,2,3-trimethylbenzene	3.611	3.509	2.8	81	0.00	10.43
112	1,3-dichlorobenzene	1.767	1.716	2.9	82	0.00	10.39
113	1,4-dichlorobenzene	1.836	1.773	3.4	86	0.00	10.46
114	1,2-dichlorobenzene	1.874	1.809	3.5	82	0.00	10.75
115	benzyl chloride	1.711	1.702	0.5	87	0.00	10.51
116	n-butylbenzene	1.949	1.624	16.7	72	0.01	10.64
----- True Calc. % Drift -----							
117	hexachloroethane	20.000	21.186	-5.9	101	0.00	11.01
----- AvgRF CCRF % Dev -----							
118	1,2-dibromo-3-chloropropa	0.261	0.230	11.9	78	0.01	11.39
119	1,3,5-trichlorobenzene	2.015	1.889	6.3	83	0.00	11.56
120	1,2,4-trichlorobenzene	1.826	1.521	16.7	72	0.00	12.18
121	hexachlorobutadiene	0.992	0.930	6.2	79	0.00	12.27
122	naphthalene	3.521	2.563	27.2#	62	0.00	12.50
123	1,2,3-trichlorobenzene	1.631	1.402	14.0	75	0.00	12.73
124	2-methylnaphthalene	1.799	0.682	62.1#	37#	0.01	13.91

(#) = Out of Range
 3B169482.D M3B7639.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 31 14:44:59 2022

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7673-CC7629
 Lab FileID: 3C174395.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...25\v3c7673\3c174395.d Vial: 1
 Acq On : 24 Mar 2022 10:35 am Operator: PrashanS
 Sample : cc7629-50 Inst : MS3C
 Misc : MS57633,V3C7673,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3C7629.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi624 20m x 0.18mm x 1.0um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	71	0.00	2.51
2	ethanol	0.203	0.261	-28.6#	90	0.00	1.94
3	tertiary butyl alcohol	1.151	1.313	-14.1	78	0.00	2.57
4	1,4-dioxane	0.125	0.174	-39.2#	91	0.00	5.19
5 I	pentafluorobenzene	1.000	1.000	0.0	88	0.00	3.94
6	dichlorodifluoromethane	0.370	0.443	-19.7	100	0.00	1.05
7	chloromethane	0.489	0.538	-10.0	98	0.00	1.21
8	1,3-butadiene	0.311	0.324	-4.2	88	0.00	1.28
9	vinyl chloride	0.365	0.391	-7.1	89	0.00	1.27
10	bromomethane	0.232	0.201	13.4	80	0.00	1.50
11	chloroethane	0.229	0.238	-3.9	88	0.00	1.57
12	trichlorofluoromethane	0.530	0.561	-5.8	88	0.00	1.73
13	ethyl ether	0.176	0.203	-15.3	94	0.00	1.94
14	acrolein	0.049	0.055	-12.2	101	0.00	2.08
15	freon 113	0.276	0.264	4.3	81	0.00	2.08
16	1,1-dichloroethene	0.296	0.315	-6.4	90	0.00	2.10
17	acetone	0.096	0.106	-10.4	112	0.00	2.19
18	acetonitrile	0.039	0.041	-5.1	94	0.00	2.44
19	iodomethane	50.000	56.547	-13.1	106	0.00	2.23
20	carbon disulfide	1.028	0.993	3.4	87	0.00	2.26
21	methylene chloride	0.363	0.356	1.9	93	0.00	2.50
22	methyl acetate	0.245	0.247	-0.8	96	0.00	2.40
23	methyl tert butyl ether	0.878	0.981	-11.7	95	0.00	2.64
24	trans-1,2-dichloroethene	0.330	0.372	-12.7	93	0.00	2.66
25	hexane	0.673	0.644	4.3	86	0.00	2.80
26	di-isopropyl ether	1.151	1.236	-7.4	92	0.00	3.00
27	ethyl tert-butyl ether	1.105	1.183	-7.1	88	0.00	3.28
28	2-butanone	0.031	0.036	-16.1	93	0.00	3.51
29	1,1-dichloroethane	0.618	0.673	-8.9	91	0.00	3.02
30	chloroprene	0.564	0.611	-8.3	89	0.00	3.06
31	acrylonitrile	0.094	0.123	-30.9#	114	0.00	2.73
32	vinyl acetate	0.074	0.078	-5.4	87	0.00	3.04
33	ethyl acetate	0.055	0.052	5.5	85	0.00	3.52
34	2,2-dichloropropane	0.509	0.496	2.6	81	0.00	3.46
35	cis-1,2-dichloroethene	0.356	0.398	-11.8	92	0.00	3.49
36	propionitrile	0.042	0.047	-11.9	93	0.00	3.62
37	bromochloromethane	0.218	0.241	-10.6	94	0.00	3.70

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7673-CC7629
Lab FileID: 3C174395.D

38	tetrahydrofuran	0.107	0.103	3.7	89	0.00	3.69
39	chloroform	0.639	0.640	-0.2	92	0.00	3.76
40	tert-butyl formate	0.303	0.168	44.6#	45#	0.00	3.76
41	isobutyl alcohol	0.059	0.045	23.7#	68	0.00	4.17
42 S	dibromofluoromethane (s)	0.383	0.424	-10.7	97	0.00	3.90
43	methacrylonitrile	0.118	0.129	-9.3	92	0.00	3.72
44	1,1,1-trichloroethane	0.540	0.600	-11.1	90	0.00	3.87
45	cyclohexane	0.532	0.511	3.9	81	0.00	3.85
46	1,1-dichloropropene	0.174	0.185	-6.3	90	0.00	4.01
47	tert-amyl alcohol	0.033	0.028	15.2	76	0.00	4.23
48	carbon tetrachloride	0.472	0.530	-12.3	91	0.00	3.98
49 I	1,4-difluorobenzene	1.000	1.000	0.0	90	0.00	4.59
50 S	1,2-dichloroethane-d4 (s)	0.301	0.313	-4.0	91	0.00	4.22
51	2,2,4-trimethylpentane	1.121	0.960	14.4	73	0.00	4.17
52	tert-amyl methyl ether	0.241	0.251	-4.1	91	0.00	4.27
53	n-butyl alcohol	0.007	0.007	0.0	78	0.00	4.80
54	benzene	0.936	0.991	-5.9	91	0.00	4.19
55	heptane	0.232	0.198	14.7	74	0.00	4.36
56	isopropyl acetate	0.241	0.251	-4.1	91	0.00	4.27
57	1,2-dichloroethane	0.339	0.342	-0.9	87	0.00	4.28
58	trichloroethene	0.256	0.274	-7.0	91	0.00	4.81
59	ethyl acrylate	0.317	0.348	-9.8	90	0.00	4.93
60	2-nitropropane	0.103	0.086	16.5	77	0.00	5.64
61	2-chloroethyl vinyl ether	0.147	0.154	-4.8	86	0.00	5.67
62	methyl methacrylate	0.065	0.071	-9.2	94	0.00	5.17
63	1,2-dichloropropane	0.246	0.259	-5.3	89	0.00	5.07
64	methylcyclohexane	0.445	0.382	14.2	75	0.00	4.91
65	dibromomethane	0.138	0.145	-5.1	89	0.00	5.19
66	bromodichloromethane	0.307	0.341	-11.1	93	0.00	5.35
67	epichlorohydrin	0.023	0.023	0.0	88	0.00	5.74
68	cis-1,3-dichloropropene	0.383	0.418	-9.1	88	0.00	5.80
69	4-methyl-2-pentanone	0.038	0.042	-10.5	92	0.00	5.93
70	3-methyl-1-butanol	0.011	0.009	18.2	69	0.00	6.02
71 I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	7.31
72 S	toluene-d8 (s)	1.256	1.282	-2.1	92	0.00	5.99
73	toluene	0.799	0.753	5.8	88	0.00	6.05
74	trans-1,3-dichloropropene	0.398	0.406	-2.0	83	0.00	6.35
75	ethyl methacrylate	0.344	0.346	-0.6	85	0.00	6.38
76	1,1,2-trichloroethane	0.196	0.196	0.0	86	0.00	6.51
77	2-hexanone	0.100	0.099	1.0	84	0.00	6.71
78	tetrachloroethene	0.334	0.352	-5.4	92	0.00	6.53
79	1,3-dichloropropane	0.404	0.408	-1.0	87	0.00	6.66
80	butyl acetate	0.183	0.171	6.6	83	0.00	6.81
81	dibromochloromethane	0.281	0.305	-8.5	91	0.00	6.83
82	1,2-dibromoethane	0.242	0.243	-0.4	85	0.00	6.93
83	n-butyl ether	1.341	1.307	2.5	83	0.00	7.39
84	chlorobenzene	0.831	0.807	2.9	86	0.00	7.33
85	1,1,1,2-tetrachloroethane	0.285	0.304	-6.7	87	0.00	7.42
86	ethylbenzene	1.394	1.389	0.4	87	0.00	7.41
87	m,p-xylene	0.554	0.540	2.5	86	0.00	7.51
88	o-xylene	1.122	1.121	0.1	88	0.00	7.85
89	styrene	0.896	0.908	-1.3	85	0.00	7.87
90	bromoform	0.180	0.202	-12.2	95	0.00	8.05
91	butyl acrylate	0.526	0.488	7.2	76	0.00	7.84
92	isopropylbenzene	1.376	1.381	-0.4	86	0.00	8.14
93	cis-1,4-dichloro-2-butene	0.114	0.101	11.4	76	0.00	8.28
94 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	9.25

6.9.13

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7673-CC7629
Lab FileID: 3C174395.D

95	S	4-bromofluorobenzene (s)	0.937	0.901	3.8	89	0.00	8.32
96		bromobenzene	0.705	0.684	3.0	85	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.540	7.8	80	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.098	3.0	79	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.188	2.6	86	0.00	8.51
100		n-propylbenzene	3.213	3.121	2.9	84	0.00	8.48
101		2-chlorotoluene	0.692	0.659	4.8	83	0.00	8.58
102		4-chlorotoluene	0.716	0.682	4.7	82	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.356	0.4	87	0.00	8.64
104		tert-butylbenzene	2.082	2.101	-0.9	87	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.402	0.5	87	0.00	8.94
106		sec-butylbenzene	3.008	2.943	2.2	83	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.331	5.2	85	0.00	9.19
108		p-isopropyltoluene	2.654	2.687	-1.2	86	0.00	9.18
109		1,4-dichlorobenzene	1.428	1.377	3.6	87	0.00	9.26
110		1,2,3-trimethylbenzene	2.391	2.460	-2.9	90	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.241	6.1	83	0.00	9.56
112		n-butylbenzene	1.319	1.277	3.2	83	0.00	9.51
113		1,2-dibromo-3-chloropropa	0.149	0.153	-2.7	88	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.192	-9.3	93	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	1.073	-11.3	96	0.00	10.81
116		hexachlorobutadiene	0.549	0.655	-19.3	103	0.00	10.90
117		naphthalene	2.262	2.324	-2.7	86	0.00	10.99
118		1,2,3-trichlorobenzene	0.930	0.992	-6.7	91	0.00	11.19
119		hexachloroethane	0.368	0.400	-8.7	90	0.00	9.72
120		benzyl chloride	1.089	0.991	9.0	75	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene(a)	1.000	1.000	0.0	97	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
 3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 25 03:44:27 2022

6.9.13
 6

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7674-CC7629
Lab FileID: 3C174425.D

38	tetrahydrofuran	0.107	0.101	5.6	83	0.00	3.69
39	chloroform	0.639	0.670	-4.9	91	0.00	3.76
40	tert-butyl formate	0.303	0.192	36.6#	49#	0.00	3.76
41	isobutyl alcohol	0.059	0.049	16.9	71	0.00	4.17
42 S	dibromofluoromethane (s)	0.383	0.428	-11.7	93	0.00	3.90
43	methacrylonitrile	0.118	0.131	-11.0	89	0.00	3.72
44	1,1,1-trichloroethane	0.540	0.648	-20.0	93	0.00	3.87
45	cyclohexane	0.532	0.539	-1.3	81	0.00	3.86
46	1,1-dichloropropene	0.174	0.198	-13.8	91	0.00	4.01
47	tert-amyl alcohol	0.033	0.026	21.2#	68	0.00	4.24
48	carbon tetrachloride	0.472	0.562	-19.1	92	0.00	3.98
49 I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00	4.59
50 S	1,2-dichloroethane-d4 (s)	0.301	0.316	-5.0	90	0.00	4.22
51	2,2,4-trimethylpentane	1.121	1.039	7.3	78	0.00	4.17
52	tert-amyl methyl ether	0.241	0.254	-5.4	90	0.00	4.27
53	n-butyl alcohol	0.007	0.006	14.3	74	0.00	4.80
54	benzene	0.936	1.011	-8.0	90	0.00	4.19
55	heptane	0.232	0.210	9.5	76	0.00	4.36
56	isopropyl acetate	0.241	0.254	-5.4	90	0.00	4.27
57	1,2-dichloroethane	0.339	0.345	-1.8	85	0.00	4.28
58	trichloroethene	0.256	0.287	-12.1	93	0.00	4.81
59	ethyl acrylate	0.317	0.342	-7.9	86	0.00	4.93
60	2-nitropropane	0.103	0.086	16.5	75	0.00	5.64
61	2-chloroethyl vinyl ether	0.147	0.158	-7.5	86	0.00	5.67
62	methyl methacrylate	0.065	0.072	-10.8	93	0.00	5.17
63	1,2-dichloropropane	0.246	0.265	-7.7	89	0.00	5.06
64	methylcyclohexane	0.445	0.389	12.6	75	0.00	4.91
65	dibromomethane	0.138	0.143	-3.6	86	0.00	5.19
66	bromodichloromethane	0.307	0.344	-12.1	92	0.00	5.35
67	epichlorohydrin	0.023	0.024	-4.3	88	0.00	5.75
68	cis-1,3-dichloropropene	0.383	0.425	-11.0	88	0.00	5.80
69	4-methyl-2-pentanone	0.038	0.041	-7.9	86	0.00	5.93
70	3-methyl-1-butanol	0.011	0.008	27.3#	67	0.00	6.02
71 I	chlorobenzene-d5	1.000	1.000	0.0	88	0.00	7.31
72 S	toluene-d8 (s)	1.256	1.288	-2.5	90	0.00	5.99
73	toluene	0.799	0.773	3.3	88	0.00	6.05
74	trans-1,3-dichloropropene	0.398	0.416	-4.5	82	0.00	6.35
75	ethyl methacrylate	0.344	0.342	0.6	81	0.00	6.38
76	1,1,2-trichloroethane	0.196	0.202	-3.1	85	0.00	6.51
77	2-hexanone	0.100	0.097	3.0	80	0.00	6.71
78	tetrachloroethene	0.334	0.363	-8.7	92	0.00	6.53
79	1,3-dichloropropane	0.404	0.409	-1.2	84	0.00	6.66
80	butyl acetate	0.183	0.173	5.5	81	0.00	6.80
81	dibromochloromethane	0.281	0.314	-11.7	90	0.00	6.83
82	1,2-dibromoethane	0.242	0.244	-0.8	82	0.00	6.93
83	n-butyl ether	1.341	1.339	0.1	83	0.00	7.39
84	chlorobenzene	0.831	0.834	-0.4	86	0.00	7.34
85	1,1,1,2-tetrachloroethane	0.285	0.310	-8.8	86	0.00	7.42
86	ethylbenzene	1.394	1.417	-1.6	86	0.00	7.41
87	m,p-xylene	0.554	0.554	0.0	85	0.00	7.51
88	o-xylene	1.122	1.138	-1.4	87	0.00	7.85
89	styrene	0.896	0.927	-3.5	84	0.00	7.87
90	bromoform	0.180	0.201	-11.7	91	0.00	8.06
91	butyl acrylate	0.526	0.490	6.8	74	0.00	7.84
92	isopropylbenzene	1.376	1.411	-2.5	85	0.00	8.14
93	cis-1,4-dichloro-2-butene	0.114	0.105	7.9	76	0.00	8.28
94 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	9.25

6.9.14

6

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7674-CC7629
Lab FileID: 3C174425.D

95	S	4-bromofluorobenzene (s)	0.937	0.913	2.6	88	0.00	8.32
96		bromobenzene	0.705	0.690	2.1	84	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.547	6.7	79	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.098	3.0	77	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.181	6.2	81	0.00	8.51
100		n-propylbenzene	3.213	3.172	1.3	83	0.00	8.48
101		2-chlorotoluene	0.692	0.657	5.1	81	0.00	8.58
102		4-chlorotoluene	0.716	0.690	3.6	81	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.405	-1.7	87	0.00	8.64
104		tert-butylbenzene	2.082	2.115	-1.6	85	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.443	-1.2	86	0.00	8.94
106		sec-butylbenzene	3.008	2.970	1.3	82	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.344	4.3	84	0.00	9.18
108		p-isopropyltoluene	2.654	2.714	-2.3	84	0.00	9.18
109		1,4-dichlorobenzene	1.428	1.383	3.2	85	0.00	9.26
110		1,2,3-trimethylbenzene	2.391	2.504	-4.7	89	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.258	4.8	82	0.00	9.56
112		n-butylbenzene	1.319	1.297	1.7	82	0.00	9.51
113		1,2-dibromo-3-chloropropa	0.149	0.151	-1.3	85	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.249	-14.5	95	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	1.086	-12.7	95	0.00	10.81
116		hexachlorobutadiene	0.549	0.665	-21.1#	102	0.00	10.90
117		naphthalene	2.262	2.320	-2.6	84	0.00	11.00
118		1,2,3-trichlorobenzene	0.930	1.014	-9.0	91	0.00	11.19
119		hexachloroethane	0.368	0.405	-10.1	89	0.00	9.72
120		benzyl chloride	1.089	1.061	2.6	79	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene(a)	1.000	1.000	0.0	93	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
 3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
 Mon Mar 28 03:57:30 2022

6.9.14
 6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: VY8548-CC8522
 Lab FileID: Y195056.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...2022\vy8548\y195056.d Vial: 4
 Acq On : 25 Mar 2022 7:10 am Operator: THIENN
 Sample : cc8522-50 Inst : MSY
 Misc : MS57602,VY8548,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MY8522.M (RTE Integrator)
 Title : Method SW846 8260C/D, ZB624 60m x 0.25mm x 1.4um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	59	-0.02	7.45
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.647	1.662	-0.9	62	0.03	7.59
4	1,4-dioxane	0.117	0.142	-21.4#	69	0.00	11.30
5 I	pentafluorobenzene	1.000	1.000	0.0	65	0.00	9.73
6	chlorodifluoromethane	0.792	0.981	-23.9#	85	0.00	4.25
7	dichlorodifluoromethane	0.718	0.933	-29.9#	84	-0.01	4.22
8	chloromethane	0.994	1.318	-32.6#	89	0.00	4.50
9	vinyl chloride	0.857	1.023	-19.4	74	0.00	4.76
10	1,3-butadiene	0.653	0.744	-13.9	74	0.00	4.80
11	bromomethane	0.584	0.696	-19.2	76	0.00	5.38
12	chloroethane	0.403	0.490	-21.6#	73	0.00	5.57
13	trichlorofluoromethane	0.939	1.026	-9.3	68	0.00	6.00
14	ethyl ether	0.150	0.165	-10.0	68	0.00	6.39
15	acrolein	0.045	0.047	-4.4	68	0.00	6.63
16	freon 113	0.532	0.530	0.4	63	0.00	6.85
17	1,1-dichloroethene	0.713	0.797	-11.8	70	0.00	6.83
18	acetone	0.019	0.020	-5.3	65	-0.01	6.81
19	acetonitrile	0.036	0.048	-33.3#	87	-0.01	7.23
20	iodomethane	0.950	0.981	-3.3	65	-0.01	7.08
21	carbon disulfide	1.769	1.859	-5.1	67	-0.02	7.23
22	methylene chloride	0.503	0.487	3.2	68	-0.01	7.52
23	methyl acetate	0.033	0.034	-3.0	60	0.00	7.27
24	methyl tert butyl ether	0.996	1.064	-6.8	67	0.00	7.89
25	trans-1,2-dichloroethene	0.641	0.728	-13.6	73	0.00	7.92
26	hexane	0.738	0.688	6.8	62	-0.01	8.27
27	di-isopropyl ether	1.450	1.871	-29.0#	80	0.00	8.48
28	ethyl tert-butyl ether	1.281	1.454	-13.5	70	0.00	8.94
29	2-butanone	0.023	0.024	-4.3	73	0.00	9.12
30	1,1-dichloroethane	0.757	0.884	-16.8	73	0.00	8.49
31	chloroprene	0.662	0.773	-16.8	73	0.00	8.59
32	acrylonitrile	0.085	0.106	-24.7#	76	0.00	7.80
33	vinyl acetate	0.046	0.055	-19.6	65	0.00	8.41
34	ethyl acetate	0.036	0.046	-27.8#	83	0.00	9.15
35	2,2-dichloropropane	0.806	0.867	-7.6	70	0.00	9.23
36	cis-1,2-dichloroethene	0.500	0.538	-7.6	71	0.00	9.19
37	propionitrile	0.034	0.036	-5.9	68	0.00	9.19
38	bromochloromethane	0.275	0.299	-8.7	68	0.00	9.49
39	tetrahydrofuran	0.028	0.027	3.6	61	-0.01	9.51
40	chloroform	0.796	0.847	-6.4	72	0.00	9.57
41	tert-butyl formate	0.242	0.278	-14.9	70	0.00	9.62

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VY8548-CC8522
Lab FileID: Y195056.D

42		isobutyl alcohol	0.122	0.145	-18.9	78	0.00	9.95
43	S	dibromofluoromethane (s)	0.376	0.380	-1.1	65	0.00	9.76
44		methacrylonitrile	0.092	0.093	-1.1	64	0.00	9.39
45		1,1,1-trichloroethane	0.893	1.036	-16.0	75	0.00	9.85
46		cyclohexane	0.869	1.029	-18.4	72	0.00	9.97
47		1,1-dichloropropene	0.586	0.666	-13.7	74	0.00	10.01
48		tert-amyl alcohol	0.012	0.012	0.0	66	0.00	10.12
49		carbon tetrachloride	0.821	0.944	-15.0	73	0.00	10.05
50	I	1,4-difluorobenzene	1.000	1.000	0.0	69	0.00	10.66
51	S	1,2-dichloroethane-d4 (s)	0.230	0.224	2.6	63	0.00	10.18
52		2,2,4-trimethylpentane	1.382	1.162	15.9	56	0.00	10.36
53		tert-amyl methyl ether	0.778	0.814	-4.6	69	0.00	10.34
54		n-butyl alcohol	0.005	0.005	0.0	68	0.00	10.70
55		benzene	1.230	1.309	-6.4	74	0.00	10.26
56		heptane	0.266	0.220	17.3	56	0.00	10.52
57		isopropyl acetate	0.038	0.038	0.0	66	0.00	10.15
58		1,2-dichloroethane	0.345	0.344	0.3	69	0.00	10.27
59		trichloroethene	0.388	0.409	-5.4	73	0.00	10.98
60		ethyl acrylate	0.228	0.244	-7.0	71	0.00	10.95
61		2-nitropropane	0.050	0.046	8.0	71	0.00	11.71
62		2-chloroethyl vinyl ether	0.110	0.115	-4.5	67	0.00	11.75
63		methyl methacrylate	0.048	0.048	0.0	66	0.00	11.22
64		1,2-dichloropropane	0.297	0.332	-11.8	75	0.00	11.26
65		methylcyclohexane	0.624	0.602	3.5	65	0.00	11.28
66		dibromomethane	0.166	0.165	0.6	68	0.00	11.37
67		bromodichloromethane	0.413	0.432	-4.6	72	0.00	11.51
68		epichlorohydrin	0.017	0.017	0.0	69	0.00	11.83
69		cis-1,3-dichloropropene	0.449	0.501	-11.6	75	0.00	11.97
70		4-methyl-2-pentanone	0.075	0.079	-5.3	70	0.00	12.07
71		3-methyl-1-butanol	0.005	0.005	0.0	62	0.00	12.06
72	I	chlorobenzene-d5	1.000	1.000	0.0	75	0.00	13.77
73	S	toluene-d8 (s)	1.164	1.158	0.5	74	0.00	12.28
74		toluene	0.937	0.915	2.3	78	0.00	12.35
75		trans-1,3-dichloropropene	0.433	0.432	0.2	75	0.00	12.53
76		ethyl methacrylate	0.290	0.284	2.1	71	0.00	12.52
77		1,1,2-trichloroethane	0.194	0.197	-1.5	75	0.00	12.74
78		2-hexanone	0.075	0.073	2.7	71	0.00	12.91
79		tetrachloroethene	0.458	0.459	-0.2	75	0.00	12.91
80		1,3-dichloropropane	0.370	0.376	-1.6	78	0.00	12.93
81		butyl acetate	0.153	0.144	5.9	74	0.00	12.99
82		dibromochloromethane	0.354	0.345	2.5	71	0.00	13.17
83		1,2-dibromoethane	0.252	0.247	2.0	72	0.00	13.32
84		n-butyl ether	1.743	1.891	-8.5	80	0.00	13.76
85		chlorobenzene	1.075	1.118	-4.0	79	0.00	13.80
86		1,1,1,2-tetrachloroethane	0.419	0.421	-0.5	71	0.00	13.86
87		ethylbenzene	1.827	1.942	-6.3	80	0.00	13.86
88		m,p-xylene	0.735	0.770	-4.8	78	0.00	13.98
89		o-xylene	1.541	1.620	-5.1	77	0.00	14.38
90		styrene	1.184	1.211	-2.3	74	0.00	14.39
91		bromoform	0.237	0.236	0.4	69	0.00	14.61
92		butyl acrylate	0.532	0.519	2.4	65	0.00	14.21
93		isopropylbenzene	2.013	2.146	-6.6	77	0.00	14.73
94		cis-1,4-dichloro-2-butene	0.114	0.109	4.4	66	0.00	14.75
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	66	0.00	16.08
96	S	4-bromofluorobenzene (s)	0.934	0.917	1.8	69	0.00	14.92
97		bromobenzene	0.982	0.993	-1.1	72	0.00	15.10
98		1,1,2,2-tetrachloroethane	0.630	0.656	-4.1	71	0.00	14.99

6.9.18

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VY8548-CC8522
Lab FileID: Y195056.D

99	trans-1,4-dichloro-2-bute	0.155	0.155	0.0	63	0.00	15.02
100	1,2,3-trichloropropane	0.165	0.164	0.6	69	0.00	15.08
101	n-propylbenzene	4.625	5.059	-9.4	78	0.00	15.13
102	2-chlorotoluene	0.994	1.052	-5.8	74	0.00	15.26
103	4-chlorotoluene	2.766	2.843	-2.8	74	0.00	15.37
104	1,3,5-trimethylbenzene	3.195	3.501	-9.6	75	0.00	15.29
105	tert-butylbenzene	2.758	3.003	-8.9	73	0.00	15.63
106	1,2,4-trimethylbenzene	3.261	3.485	-6.9	73	0.00	15.68
107	sec-butylbenzene	4.305	4.749	-10.3	74	0.00	15.84
108	1,3-dichlorobenzene	1.956	1.922	1.7	70	0.00	16.01
109	p-isopropyltoluene	3.607	3.971	-10.1	73	0.00	15.98
110	1,2,3-trimethylbenzene	2.984	3.338	-11.9	75	0.00	16.10
111	1,4-dichlorobenzene	1.896	1.857	2.1	70	0.00	16.11
112	1,2-dichlorobenzene	1.678	1.691	-0.8	69	0.00	16.47
113	n-butylbenzene	1.762	1.888	-7.2	68	0.00	16.38
114	1,2-dibromo-3-chloropropa	0.106	0.103	2.8	58	0.00	17.23
115	1,3,5-trichlorobenzene	1.157	1.281	-10.7	72	0.00	17.43
116	1,2,4-trichlorobenzene	0.533	0.633	-18.8	69	0.00	18.07
117	hexachlorobutadiene	0.555	0.620	-11.7	71	0.00	18.19
118	naphthalene	0.688	0.747	-8.6	56	0.00	18.36
119	1,2,3-trichlorobenzene	0.231	0.349	-51.1#	78	0.00	18.60
120	hexachloroethane	0.625	0.725	-16.0	74	0.00	16.77
121	benzyl chloride	0.979	0.967	1.2	58	0.00	16.20
122	2-methylnaphthalene			-----NA-----			
123	pentafluorobenzene(a)	1.000	1.000	0.0	61	0.00	9.73
124	vinyl bromide			-----NA-----			

(#) = Out of Range
Y194588.D MY8522.M

SPCC's out = 0 CCC's out = 0
Mon Mar 28 01:34:27 2022

6.9.18
6

Blank Spike Summary

Page 1 of 2

Job Number: JD41808**Account:** SESINJPB SESI Consulting Engineers**Project:** 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY8548-BS	Y195057.D	1	03/25/22	TDN	n/a	n/a	VY8548

The QC reported here applies to the following samples:**Method:** SW846 8260D

JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	227	114	52-156
71-43-2	Benzene	50	51.7	103	82-119
74-97-5	Bromochloromethane	50	54.0	108	82-123
75-27-4	Bromodichloromethane	50	52.1	104	83-121
75-25-2	Bromoform	50	52.7	105	74-138
74-83-9	Bromomethane	50	63.2	126	56-150
78-93-3	2-Butanone (MEK)	200	215	108	72-138
75-15-0	Carbon disulfide	50	50.7	101	67-131
56-23-5	Carbon tetrachloride	50	56.0	112	72-130
108-90-7	Chlorobenzene	50	51.6	103	83-114
75-00-3	Chloroethane	50	59.6	119	67-141
67-66-3	Chloroform	50	51.8	104	76-115
74-87-3	Chloromethane	50	68.1	136	57-141
110-82-7	Cyclohexane	50	57.4	115	69-130
96-12-8	1,2-Dibromo-3-chloropropane	50	59.1	118	72-131
124-48-1	Dibromochloromethane	50	49.7	99	80-128
106-93-4	1,2-Dibromoethane	50	50.6	101	58-145
95-50-1	1,2-Dichlorobenzene	50	53.0	106	83-117
541-73-1	1,3-Dichlorobenzene	50	49.1	98	82-114
106-46-7	1,4-Dichlorobenzene	50	49.5	99	79-114
75-71-8	Dichlorodifluoromethane	50	73.9	148* a	49-146
75-34-3	1,1-Dichloroethane	50	55.7	111	76-126
107-06-2	1,2-Dichloroethane	50	51.1	102	76-118
75-35-4	1,1-Dichloroethene	50	52.8	106	72-125
156-59-2	cis-1,2-Dichloroethene	50	51.2	102	80-118
156-60-5	trans-1,2-Dichloroethene	50	52.6	105	76-122
78-87-5	1,2-Dichloropropane	50	56.2	112	82-123
10061-01-5	cis-1,3-Dichloropropene	50	54.5	109	83-123
10061-02-6	trans-1,3-Dichloropropene	50	49.6	99	83-123
100-41-4	Ethylbenzene	50	51.9	104	83-115
76-13-1	Freon 113	50	50.6	101	65-132
591-78-6	2-Hexanone	200	211	106	73-138
98-82-8	Isopropylbenzene	50	53.6	107	81-122
79-20-9	Methyl Acetate	50	55.7	111	63-142
108-87-2	Methylcyclohexane	50	47.8	96	73-126
1634-04-4	Methyl Tert Butyl Ether	50	59.5	119	75-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY8548-BS	Y195057.D	1	03/25/22	TDN	n/a	n/a	VY8548

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	227	114	71-138
75-09-2	Methylene chloride	50	48.6	97	73-122
100-42-5	Styrene	50	52.2	104	84-122
79-34-5	1,1,2,2-Tetrachloroethane	50	50.8	102	75-127
127-18-4	Tetrachloroethene	50	47.7	95	73-125
108-88-3	Toluene	50	46.6	93	82-118
87-61-6	1,2,3-Trichlorobenzene	50	117	234* a	68-132
120-82-1	1,2,4-Trichlorobenzene	50	78.3	157* a	72-133
71-55-6	1,1,1-Trichloroethane	50	56.8	114	77-124
79-00-5	1,1,2-Trichloroethane	50	50.1	100	83-122
79-01-6	Trichloroethene	50	50.5	101	80-122
75-69-4	Trichlorofluoromethane	50	53.8	108	69-132
75-01-4	Vinyl chloride	50	61.6	123	60-144
	m,p-Xylene	100	103	103	82-119
95-47-6	o-Xylene	50	53.0	106	84-120
1330-20-7	Xylene (total)	150	156	104	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	80-124%
17060-07-0	1,2-Dichloroethane-D4	101%	75-133%
2037-26-5	Toluene-D8	97%	79-125%
460-00-4	4-Bromofluorobenzene	91%	58-148%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD41792-5MS	2A215779.D	10	03/30/22	NW	n/a	n/a	V2A9387
JD41792-5MSD	2A215780.D	10	03/30/22	NW	n/a	n/a	V2A9387
JD41792-5 ^a	2A215774.D	10	03/30/22	NW	n/a	n/a	V2A9387

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41808-21, JD41808-22, JD41808-24, JD41808-25

CAS No.	Compound	JD41792-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2000	1320	66	2000	1360	68	3	22-134/19
71-43-2	Benzene	1360		500	1480	24* ^b	500	1500	28* ^b	1	49-137/12
74-97-5	Bromochloromethane	ND		500	443	89	500	442	88	0	78-122/12
75-27-4	Bromodichloromethane	ND		500	389	78	500	395	79	2	76-121/12
75-25-2	Bromoform	ND		500	325	65* ^c	500	338	68* ^c	4	70-133/13
74-83-9	Bromomethane	ND		500	403	81	500	409	82	1	27-164/38
78-93-3	2-Butanone (MEK)	ND		2000	1500	75	2000	1550	78	3	52-137/17
75-15-0	Carbon disulfide	ND		500	345	69	500	352	70	2	54-136/16
56-23-5	Carbon tetrachloride	ND		500	414	83	500	422	84	2	70-132/13
108-90-7	Chlorobenzene	ND		500	449	90	500	458	92	2	68-123/12
75-00-3	Chloroethane	ND		500	367	73	500	375	75	2	48-152/17
67-66-3	Chloroform	5.9	J	500	390	77	500	395	78	1	68-120/13
74-87-3	Chloromethane	ND		500	343	69	500	342	68	0	35-156/18
110-82-7	Cyclohexane	68.7		500	430	72	500	439	74	2	53-146/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	438	88	500	444	89	1	63-134/16
124-48-1	Dibromochloromethane	ND		500	366	73* ^c	500	372	74* ^c	2	75-122/12
106-93-4	1,2-Dibromoethane	ND		500	437	87	500	443	89	1	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		500	441	88	500	448	90	2	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		500	432	86	500	440	88	2	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		500	442	88	500	447	89	1	72-117/12
75-71-8	Dichlorodifluoromethane	ND		500	327	65	500	326	65	0	34-163/16
75-34-3	1,1-Dichloroethane	ND		500	388	78	500	394	79	2	68-129/13
107-06-2	1,2-Dichloroethane	ND		500	415	83	500	418	84	1	66-120/13
75-35-4	1,1-Dichloroethene	ND		500	375	75	500	384	77	2	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		500	396	79	500	401	80	1	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		500	381	76	500	391	78	3	70-125/13
78-87-5	1,2-Dichloropropane	ND		500	415	83	500	422	84	2	73-124/12
10061-01-5	cis-1,3-Dichloropropene	ND		500	430	86	500	439	88	2	75-125/13
10061-02-6	trans-1,3-Dichloropropene	ND		500	430	86	500	445	89	3	75-122/12
100-41-4	Ethylbenzene	93.2		500	490	79	500	496	81	1	37-144/12
76-13-1	Freon 113	ND		500	442	88	500	467	93	6	61-142/14
591-78-6	2-Hexanone	ND		2000	1580	79	2000	1600	80	1	56-132/16
98-82-8	Isopropylbenzene	16.1		500	437	84	500	447	86	2	71-126/13
79-20-9	Methyl Acetate	ND		500	341	68	500	349	70	2	51-139/18
108-87-2	Methylcyclohexane	28.2	J	500	427	80	500	434	81	2	59-137/16
1634-04-4	Methyl Tert Butyl Ether	ND		500	386	77	500	391	78	1	66-124/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD41792-5MS	2A215779.D	10	03/30/22	NW	n/a	n/a	V2A9387
JD41792-5MSD	2A215780.D	10	03/30/22	NW	n/a	n/a	V2A9387
JD41792-5 ^a	2A215774.D	10	03/30/22	NW	n/a	n/a	V2A9387

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41808-21, JD41808-22, JD41808-24, JD41808-25

CAS No.	Compound	JD41792-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2000	1560	78	2000	1590	80	2	65-135/14
75-09-2	Methylene chloride	ND	500	383	77	500	389	78	2	66-125/14
100-42-5	Styrene	ND	500	411	82	500	420	84	2	71-133/12
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	412	82	500	413	83	0	68-127/14
127-18-4	Tetrachloroethene	ND	500	493	99	500	500	100	1	58-132/13
108-88-3	Toluene	31.3	500	454	85	500	460	86	1	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND	500	438	88	500	453	91	3	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND	500	454	91	500	462	92	2	61-137/16
71-55-6	1,1,1-Trichloroethane	ND	500	403	81	500	410	82	2	67-132/13
79-00-5	1,1,2-Trichloroethane	ND	500	425	85	500	432	86	2	75-120/12
79-01-6	Trichloroethene	ND	500	434	87	500	440	88	1	56-136/12
75-69-4	Trichlorofluoromethane	ND	500	386	77	500	388	78	1	61-145/16
75-01-4	Vinyl chloride	ND	500	356	71	500	357	71	0	41-156/16
	m,p-Xylene	233	1000	1080	85	1000	1090	86	1	32-151/12
95-47-6	o-Xylene	20.2	500	429	82	500	439	84	2	50-139/12
1330-20-7	Xylene (total)	253	1500	1500	83	1500	1530	85	2	38-147/12

CAS No.	Surrogate Recoveries	MS	MSD	JD41792-5	Limits
1868-53-7	Dibromofluoromethane	96%	97%	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	91%	91%	96%	80-120%
2037-26-5	Toluene-D8	98%	98%	95%	80-120%
460-00-4	4-Bromofluorobenzene	91%	91%	90%	82-114%

(a) Dilution required due to high concentration of target compound.

(b) Outside control limits due to high level in sample relative to spike amount.

(c) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Initial Calibration Summary

Page 1 of 3

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2M5502-ICC5502
 Lab FileID: 2M122474.D

Response Factor Report MS2M

Method : C:\MSDCHEM\1\METHODS\M2M5502.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rxi 5sil ms 30m .25mm .25um
 Last Update : Fri Mar 11 13:30:03 2022
 Response via : Initial Calibration

Calibration Files

2 =2m122473.D 5 =2m122475.D 25 =2m122476.D 80 =2m122472.D
 100 =2m122470.D 50 =2m122474.D 1 =2m122471.D 10 =2m122477.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD

1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.452	0.434	0.442	0.475	0.464	0.468	0.465	0.457	0.457	3.01
3) Pyridine	1.078	1.206	1.089	1.256	1.242	1.239	1.165	1.166	1.180	5.81
4) N-Nitrosodim	0.604	0.667	0.644	0.725	0.711	0.688	0.609	0.683	0.666	6.69
5) 2-Fluorophen	1.174	1.125	1.163	1.270	1.256	1.219	1.060	1.198	1.183	5.82
6) Indene	2.297	2.174	2.108	2.467	2.499	2.214	2.351	2.233	2.293	6.05
7) Cumene	2.999	2.815	2.817	3.140	3.072	2.879	2.928	2.915	2.946	3.98
8) Phenol-d5	1.510	1.485	1.416	1.510	1.488	1.482	1.443	1.485	1.478	2.19
9) Phenol	1.705	1.498	1.498	1.546	1.599	1.538	1.482	1.536	1.550	4.67
10) Aniline	1.911	1.873	1.832	1.905	1.859	1.883	1.766	1.916	1.868	2.68
11) bis(2-Chloro	1.246	1.184	1.128	1.205	1.211	1.183	1.206	1.207	1.196	2.82
12) 2-Chlorophen	1.302	1.274	1.265	1.350	1.343	1.330	1.279	1.293	1.304	2.50
13) Decane	2.084	1.979	1.832	1.892	1.881	1.821	2.073	1.983	1.943	5.26
14) 1,3-Dichloro	1.595	1.514	1.479	1.677	1.672	1.527	1.502	1.533	1.562	4.91
15) 1,4-Dichloro	1.654	1.521	1.508	1.740	1.697	1.580	1.607	1.554	1.608	5.19
16) Benzyl alcoh	0.693	0.759	0.784	0.840	0.840	0.816	0.681	0.774	0.773	7.88
17) 1,2-Dichloro	1.542	1.478	1.417	1.643	1.636	1.502	1.494	1.487	1.525	5.17
18) Acetophenone	1.823	1.756	1.656	1.791	1.773	1.747	1.694	1.718	1.745	3.09
19) 2-Methylphen	1.169	1.197	1.115	1.167	1.183	1.125	1.192	1.135	1.160	2.69
20) 2,2'-oxybis(	2.406	2.292	2.169	2.177	2.169	2.141	2.528	2.277	2.270	6.03
21) 3&4-Methylph	1.211	1.186	1.150	1.338	1.336	1.252	1.232	1.197	1.238	5.52
22) n-Nitroso-di	0.817	0.831	0.817	0.833	0.838	0.816	0.830	0.820	0.825	1.04
23) Hexachloroet	0.571	0.531	0.541	0.677	0.695	0.587	0.578	0.558	0.592	10.29
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.334	0.331	0.321	0.335	0.333	0.317	0.319	0.329	0.327	2.21
26) Nitrobenzene	0.346	0.340	0.328	0.341	0.340	0.325	0.306	0.334	0.333	3.83
27) Quinoline	0.676	0.654	0.614	0.676	0.677	0.632	0.634	0.631	0.649	3.80
28) Isophorone	0.635	0.610	0.581	0.623	0.618	0.585	0.624	0.615	0.611	3.11
29) 2-Nitropheno	0.174	0.179	0.179	0.220	0.207	0.193	0.158	0.182	0.186	10.55
30) 2,4-Dimethyl	0.326	0.321	0.308	0.354	0.353	0.312	0.328	0.321	0.328	5.22
31) Benzoic acid		0.124	0.147	0.194	0.201	0.171		0.131	0.162	20.13
---- Quadratic regression ---- Coefficient = 0.9996										
Response Ratio = -0.00301 + 0.13992 *A + 0.02606 *A^2										
32) bis(2-Chloro	0.404	0.391	0.376	0.393	0.387	0.369	0.388	0.386	0.387	2.69
33) 2,4-Dichloro	0.290	0.288	0.283	0.321	0.320	0.284	0.273	0.286	0.293	5.97
34) 2,6-Dichloro	0.295	0.290	0.283	0.339	0.330	0.298	0.293	0.287	0.302	6.94
35) 1,3,5-Trichl	0.345	0.353	0.333	0.401	0.395	0.370	0.372	0.344	0.364	6.82
36) 1,2,4-Trichl	0.349	0.330	0.324	0.362	0.369	0.325	0.341	0.334	0.342	4.95
37) 1,2,3-Trichl	0.320	0.315	0.309	0.349	0.354	0.312	0.318	0.318	0.324	5.29
38) Naphthalene	1.061	1.042	0.998	1.164	1.150	1.018	1.052	1.014	1.062	5.84
39) 4-Chloroanil	0.401	0.413	0.396	0.477	0.449	0.424	0.392	0.416	0.421	6.90
40) 2,3-Dichloro	0.346	0.359	0.342	0.387	0.393	0.345	0.341	0.348	0.358	5.85
41) Hydroquinone	0.296	0.284	0.293	0.323	0.317	0.298	0.259	0.285	0.294	6.80
42) Hexachlorobu	0.202	0.207	0.199	0.240	0.241	0.204	0.206	0.196	0.212	8.45

Initial Calibration Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2M5502-ICC5502
Lab FileID: 2M122474.D

43)	4-Chloro-3-m	0.279	0.265	0.264	0.288	0.288	0.267	0.273	0.262	0.273	3.86
44)	2-Methylnaph	0.632	0.631	0.597	0.716	0.696	0.624	0.612	0.616	0.641	6.61
45)	1-Methylnaph	0.612	0.609	0.567	0.666	0.651	0.585	0.606	0.587	0.610	5.47
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.260	0.352	0.500	0.508	0.421		0.316	0.393		25.57
	---- Quadratic regression ----	Coefficient = 0.9989									
	Response Ratio =	-0.02460 + 0.34336 *A + 0.03592 *A^2									
48)	1,2,4,5-Tetr	0.650	0.591	0.585	0.710	0.725	0.611	0.593	0.608	0.634	8.73
49)	2,4,6-Trichl	0.393	0.373	0.387	0.438	0.456	0.395	0.351	0.387	0.397	8.57
50)	2,4,5-Trichl	0.350	0.394	0.397	0.435	0.450	0.407	0.349	0.398	0.398	8.89
51)	2-Fluorobiph	1.381	1.381	1.336	1.559	1.574	1.370	1.375	1.393	1.421	6.42
52)	2-Chloronaph	1.234	1.227	1.173	1.418	1.407	1.276	1.248	1.216	1.275	7.06
53)	Biphenyl	1.583	1.568	1.541	1.906	1.890	1.719	1.614	1.586	1.676	8.76
54)	2-Nitroanili	0.311	0.322	0.319	0.345	0.346	0.322	0.310	0.321	0.325	4.21
55)	Dimethylphth	1.285	1.321	1.262	1.403	1.394	1.300	1.325	1.313	1.325	3.73
56)	Acenaphthyle	1.711	1.703	1.692	1.884	1.885	1.736	1.697	1.735	1.755	4.65
57)	2,6-Dinitrot	0.221	0.257	0.263	0.294	0.293	0.280	0.248	0.263	0.265	9.17
58)	3-Nitroanili	0.319	0.318	0.320	0.344	0.342	0.325	0.274	0.326	0.321	6.70
59)	Acenaphthene	1.282	1.211	1.219	1.400	1.419	1.250	1.228	1.267	1.284	6.31
60)	2,4-Dinitrop	0.057	0.088	0.139	0.184	0.187	0.161		0.113	0.133	37.10
	---- Quadratic regression ----	Coefficient = 0.9992									
	Response Ratio =	-0.00957 + 0.13422 *A + 0.01168 *A^2									
61)	4-Nitropheno	0.089	0.139	0.182	0.178	0.159		0.124	0.145		24.51
	---- Quadratic regression ----	Coefficient = 0.9987									
	Response Ratio =	-0.00768 + 0.14741 *A + 0.01529 *A^2									
62)	Dibenzofuran	1.720	1.692	1.685	1.897	1.926	1.699	1.703	1.719	1.755	5.55
63)	2,4-Dinitrot	0.310	0.340	0.364	0.398	0.395	0.380	0.294	0.363	0.355	10.78
64)	2,3,4,6-Tetr	0.282	0.289	0.302	0.356	0.354	0.325	0.267	0.289	0.308	10.89
65)	Diethylphtha	1.269	1.314	1.314	1.465	1.460	1.354	1.282	1.349	1.351	5.54
66)	Fluorene	1.330	1.342	1.307	1.558	1.542	1.362	1.320	1.367	1.391	7.21
67)	4-Chlorophen	0.662	0.629	0.612	0.701	0.699	0.620	0.624	0.637	0.648	5.46
68)	4-Nitroanili	0.253	0.285	0.302	0.329	0.324	0.311	0.246	0.297	0.294	10.41
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.079	0.093	0.112	0.109	0.098		0.090	0.097		12.81
71)	n-Nitrosodip	0.578	0.570	0.564	0.628	0.628	0.567	0.559	0.581	0.584	4.79
72)	Pentachloron	0.034	0.033	0.037	0.045	0.046	0.042	0.032	0.036	0.038#	14.80
73)	1,2-Diphenyl	0.638	0.624	0.612	0.631	0.622	0.600	0.639	0.632	0.625	2.11
74)	2,4,6-Tribo	0.077	0.076	0.079	0.091	0.092	0.082	0.071	0.082	0.081	9.00
75)	4-Bromopheny	0.197	0.198	0.199	0.216	0.219	0.197	0.206	0.203	0.204	4.33
76)	Hexachlorobe	0.215	0.215	0.210	0.238	0.235	0.209	0.220	0.210	0.219	5.22
77)	Pentachlorop	0.066	0.084	0.108	0.160	0.163	0.130		0.094	0.115	32.54
	---- Quadratic regression ----	Coefficient = 0.9988									
	Response Ratio =	-0.00376 + 0.09688 *A + 0.01424 *A^2									
78)	Phenanthrene	1.076	1.038	1.006	1.247	1.218	1.085	1.134	1.037	1.105	7.96
79)	Anthracene	1.008	1.024	1.001	1.155	1.172	1.002	1.091	1.025	1.060	6.62
80)	Carbazole	0.912	0.935	0.920	1.036	1.027	0.919	0.899	0.914	0.945	5.72
81)	Di-n-butylph	1.005	1.058	1.124	1.256	1.277	1.145	0.997	1.094	1.119	9.35
82)	Fluoranthene	1.051	1.073	1.072	1.268	1.279	1.105	1.107	1.072	1.128	8.11
83)	Octadecane	0.498	0.501	0.483	0.534	0.517	0.480	0.516	0.511	0.505	3.62
84)	I Chrysene-d12	-----ISTD-----									
85)	Pyrene	1.304	1.303	1.271	1.492	1.448	1.275	1.341	1.312	1.343	6.10
86)	Benzidine	0.664	0.654	0.721	0.813	0.769	0.729	0.476	0.678	0.688	14.73
87)	Terphenyl-d1	0.888	0.884	0.856	1.010	0.996	0.881	0.918	0.890	0.915	6.19

Initial Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2M5502-ICC5502
Lab FileID: 2M122474.D

88)	Butylbenzylp	0.461	0.505	0.541	0.587	0.582	0.540	0.453	0.524	0.524	9.46
89)	Benzo[a]anth	1.246	1.179	1.164	1.301	1.291	1.165	1.286	1.169	1.225	5.06
90)	3,3'-Dichlor	0.401	0.427	0.444	0.587	0.565	0.508	0.387	0.442	0.470	15.89
91)	Chrysene	1.162	1.119	1.118	1.389	1.340	1.209	1.178	1.141	1.207	8.50
92)	bis(2-Ethylh	0.647	0.721	0.739	0.799	0.774	0.738	0.625	0.737	0.722	8.19
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.178	1.276	1.393	1.670	1.661	1.500	1.098	1.335	1.389	15.14
95)	Benzo[b]fluo	1.177	1.195	1.227	1.632	1.682	1.344	1.228	1.259	1.343	14.95
96)	Benzo[k]fluo	1.063	1.110	1.110	1.291	1.311	1.155	1.042	1.060	1.143	9.11
97)	Benzo[a]pyre	1.077	1.079	1.101	1.330	1.314	1.175	1.041	1.102	1.152	9.68
98)	Indeno[1,2,3	0.907	0.895	0.925	1.085	1.090	0.977	0.902	0.905	0.961	8.58
99)	Dibenz(a,h)a	0.782	0.808	0.836	1.002	1.025	0.899	0.769	0.832	0.869	11.23
100)	Dibenz[a,h]a	0.924	0.915	0.942	1.157	1.176	1.022	0.961	0.944	1.005	10.43
101)	7,12-Dimethy		0.462	0.526	0.725	0.744	0.588		0.484	0.588	20.65
---- Quadratic regression ---- Coefficient = 0.9989											
Response Ratio = -0.00129 + 0.45514 *A + 0.12131 *A^2											
102)	Benzo[g,h,i]	0.983	0.985	0.978	1.138	1.130	1.039	1.035	0.997	1.036	6.26

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2M5501.M

Fri Mar 11 13:47:15 2022

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EF9058-CC8913
 Lab FileID: F206105.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF9058\F206105.D Vial: 2
 Acq On : 29 Mar 2022 10:00 am Operator: kristis
 Sample : cc8913-50 Inst : GCMSF
 Misc : op37906,ef9058,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Tue Mar 29 11:45:03 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	4.51
2 t	1,4-Dioxane	0.569	0.563	1.1	115	0.00	2.01
3 t	Pyridine	1.474	1.521	-3.2	110	0.00	2.36
4 t	N-Nitrosodimethylamine	0.785	0.750	4.5	106	0.00	2.33
5 S	2-Fluorophenol	1.256	1.296	-3.2	112	0.00	3.53
6 t	Indene	2.292	2.530	-10.4	123	0.00	4.69
7 t	Cumene	3.249	3.647	-12.2	124	0.00	3.91
8 S	Phenol-d5	1.698	1.863	-9.7	117	0.00	4.26
9 t	Phenol	1.686	2.005	-18.9	128	0.00	4.27
10 t	Aniline	2.110	2.352	-11.5	122	0.00	4.27
11 t	bis(2-Chloroethyl)ether	1.253	1.407	-12.3	126	0.00	4.33
12 t	2-Chlorophenol	1.328	1.419	-6.9	117	0.00	4.36
13 t	Decane	1.326	1.329	-0.2	118	0.00	4.38
14 t	1,3-Dichlorobenzene	1.524	1.585	-4.0	115	0.00	4.46
15 t	1,4-Dichlorobenzene	1.532	1.635	-6.7	119	0.00	4.52
16 t	Benzyl alcohol	0.852	0.976	-14.6	121	0.00	4.62
17 t	1,2-Dichlorobenzene	1.434	1.543	-7.6	118	0.00	4.63
18 t	Acetophenone	1.855	2.045	-10.2	120	0.00	4.81
19 t	2-Methylphenol	1.219	1.310	-7.5	116	0.00	4.70
20 t	2,2'-oxybis(1-Chloropropa	0.367	0.444	-21.0#	136	0.00	4.71
21 t	3&4-Methylphenol	1.287	1.398	-8.6	117	0.00	4.82
22	n-Nitroso-di-n-propylamin	1.029	1.121	-8.9	120	0.00	4.81
23 t	Hexachloroethane	0.545	0.534	2.0	108	0.00	4.88
24 I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	5.43
25 S	Nitrobenzene-d5	0.399	0.429	-7.5	119	0.00	4.92
26 t	Nitrobenzene	0.411	0.483	-17.5	133	0.00	4.93
27 t	Quinoline	0.655	0.728	-11.1	122	0.00	5.69
28 t	Isophorone	0.735	0.808	-9.9	120	0.00	5.11
29 t	2-Nitrophenol	0.168	0.198	-17.9	124	0.00	5.16
30 t	2,4-Dimethylphenol	0.387	0.405	-4.7	119	0.00	5.20
	----- True		Calc.	% Drift	-----		
31 t	Benzoic acid	50.000	48.715	2.6	106	0.00	5.30
	----- AvgRF		CCRF	% Dev	-----		
32 t	bis(2-Chloroethoxy)methan	0.403	0.438	-8.7	122	0.00	5.26
33 t	2,4-Dichlorophenol	0.290	0.303	-4.5	115	0.00	5.34
34	2,6-Dichlorophenol	0.290	0.301	-3.8	115	0.00	5.50
35	1,3,5-Trichlorobenzene	0.347	0.344	0.9	113	0.00	5.16
36 t	1,2,4-Trichlorobenzene	0.333	0.330	0.9	113	0.00	5.39
37	1,2,3-Trichlorobenzene	0.316	0.310	1.9	112	0.00	5.55

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EF9058-CC8913
Lab FileID: F206105.D

38 t	Naphthalene	1.035	1.081	-4.4	118	0.00	5.45
39 t	4-Chloroaniline	0.426	0.450	-5.6	118	0.00	5.49
40 t	2,3-Dichloroaniline	0.363	0.373	-2.8	112	0.00	6.15
41 t	Hydroquinone	0.318	0.307	3.5	101	0.00	5.74
42 t	Hexachlorobutadiene	0.208	0.197	5.3	107	0.00	5.53
43 t	4-Chloro-3-methylphenol	0.313	0.350	-11.8	122	0.00	5.84
44 t	2-Methylnaphthalene	0.606	0.656	-8.3	122	0.00	5.94
45 t	1-Methylnaphthalene	0.646	0.708	-9.6	121	0.00	6.01
46 I	Acenaphthene-d10	1.000	1.000	0.0	112	0.00	6.79
47 t	Hexachlorocyclopentadiene	0.356	0.324	9.0	94	0.00	6.05
48 t	1,2,4,5-tetrachlorobenzen	0.598	0.587	1.8	110	0.00	6.06
49 t	2,4,6-Trichlorophenol	0.389	0.393	-1.0	111	0.00	6.15
50 t	2,4,5-Trichlorophenol	0.406	0.426	-4.9	112	0.00	6.18
51 S	2-Fluorobiphenyl	1.343	1.420	-5.7	115	0.00	6.22
52 t	2-Chloronaphthalene	1.116	1.195	-7.1	116	0.00	6.31
53 t	Biphenyl	1.446	1.596	-10.4	121	0.00	6.29
54 t	2-Nitroaniline	0.345	0.423	-22.6#	122	0.00	6.40
55 t	Dimethylphthalate	1.264	1.405	-11.2	120	0.00	6.55
56 t	Acenaphthylene	1.580	1.757	-11.2	121	0.00	6.67
----- True Calc. % Drift -----							
57 t	2,6-Dinitrotoluene	50.000	56.399	-12.8	124	0.00	6.61
----- AvgRF CCRF % Dev -----							
58 t	3-Nitroaniline	0.293	0.346	-18.1	122	0.00	6.77
59 t	Acenaphthene	1.136	1.234	-8.6	118	0.00	6.83
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	114.232	-14.2	127	0.00	6.87
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.188	0.203	-8.0	112	0.00	6.95
62 t	Dibenzofuran	1.602	1.761	-9.9	121	0.00	7.00
----- True Calc. % Drift -----							
63 t	2,4-Dinitrotoluene	50.000	56.307	-12.6	124	0.00	7.00
----- AvgRF CCRF % Dev -----							
64	2,3,4,6-Tetrachlorophenol	0.340	0.355	-4.4	107	0.00	7.13
65 t	Diethylphthalate	1.243	1.428	-14.9	122	0.00	7.25
66 t	Fluorene	1.301	1.461	-12.3	121	0.00	7.37
67 t	4-Chlorophenyl-phenylethe	0.657	0.693	-5.5	116	0.00	7.37
68 t	4-Nitroaniline	0.311	0.337	-8.4	114	0.00	7.42
69 I	Phenanthrene-d10	1.000	1.000	0.0	114	0.00	8.61
----- True Calc. % Drift -----							
70 t	4,6-Dinitro-2-methylpheno	50.000	55.887	-11.8	127	0.00	7.45
----- AvgRF CCRF % Dev -----							
71 t	n-Nitrosodiphenylamine	0.634	0.677	-6.8	120	0.00	7.51
72 t	1,2-Diphenylhydrazine	0.764	0.814	-6.5	120	0.00	7.56
73 S	2,4,6-Tribromophenol	0.115	0.116	-0.9	106	0.00	7.65
74 t	4-Bromophenyl-phenylether	0.232	0.233	-0.4	111	0.00	7.98
75 t	Hexachlorobenzene	0.251	0.242	3.6	108	0.00	8.04
76 t	Pentachlorophenol	0.162	0.149	8.0	97	0.00	8.34
77 t	Phenanthrene	1.030	1.098	-6.6	119	0.00	8.65
78 t	Anthracene	1.056	1.121	-6.2	118	0.00	8.73
79 t	Carbazole	0.951	1.026	-7.9	119	0.00	9.01

8.8.18

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EF9058-CC8913
Lab FileID: F206105.D

80 t	Di-n-butylphthalate	1.136	1.288	-13.4	121	0.00	9.70
81 t	Fluoranthene	1.163	1.251	-7.6	117	0.00	10.75
82 t	Octadecane	0.400	0.469	-17.2	131	0.00	8.51
83 I	Chrysene-d12	1.000	1.000	0.0	109	0.00	13.83
		----- True	Calc.	% Drift	-----		
84 t	Benzidine	50.000	48.699	2.6	105	0.00	11.12
		----- AvgRF	CCRF	% Dev	-----		
85 t	Pyrene	1.247	1.345	-7.9	116	0.00	11.19
86 S	Terphenyl-d14	0.975	1.070	-9.7	115	0.00	11.62
87 t	Butylbenzylphthalate	0.486	0.591	-21.6#	121	0.00	12.80
88 t	Benzo[a]anthracene	1.186	1.309	-10.4	116	0.00	13.81
89 t	3,3'-Dichlorobenzidine	0.422	0.474	-12.3	111	0.00	13.86
90 t	Chrysene	1.164	1.242	-6.7	112	0.00	13.88
91 t	bis(2-Ethylhexyl)phthalat	0.650	0.807	-24.2#	120	0.00	14.21
92 I	Perylene-d12	1.000	1.000	0.0	108	0.00	16.86
		----- True	Calc.	% Drift	-----		
93 t	Di-n-octylphthalate	50.000	59.594	-19.2	129	0.00	15.67
		----- AvgRF	CCRF	% Dev	-----		
94 t	Benzo[b]fluoranthene	1.142	1.346	-17.9	117	0.00	16.12
95 t	Benzo[k]fluoranthene	1.141	1.203	-5.4	108	0.00	16.18
96 t	Benzo[a]pyrene	1.056	1.217	-15.2	114	0.00	16.76
		----- True	Calc.	% Drift	-----		
97 t	Indeno[1,2,3-cd]pyrene	50.000	57.928	-15.9	125	0.00	18.82
98 t	Dibenz(a,h)acridine	50.000	56.400	-12.8	122	0.00	18.46
99 t	Dibenz[a,h]anthracene	50.000	56.034	-12.1	122	0.00	18.88
		----- AvgRF	CCRF	% Dev	-----		
100 t	7,12-Dimethylbenz(a)anthr	0.532	0.598	-12.4	111	0.00	16.13
101 t	Benzo[g,h,i]perylene	1.046	1.207	-15.4	114	0.00	19.25

(#) = Out of Range
F206105.D MF8913.M

SPCC's out = 0 CCC's out = 0
Tue Mar 29 11:46:21 2022

8.8.18
8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EF9058-CC8914
 Lab FileID: F206106.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF9058\F206106.D Vial: 3
 Acq On : 29 Mar 2022 10:25 am Operator: kristis
 Sample : cc8914-50 Inst : GCMSF
 Misc : op37906,ef9058,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MF8913.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Tue Mar 29 11:45:03 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.

102 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	113	0.00	4.51
103	Benzaldehyde	1.091	1.159	-6.2	119	0.00	4.19
104 I	Phenanthrene-d10b	1.000	1.000	0.0	117	0.00	8.60
105	Atrazine	0.185	0.217	-17.3	125	0.00	8.24
106 I	Naphthalene-d8b	1.000	1.000	0.0	117	0.00	5.43
107	Caprolactam	0.116	0.129	-11.2	115	0.00	5.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 F206105.D MF8913.M Tue Mar 29 11:46:23 2022

8.8.19

8

Continuing Calibration Summary

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EP6840-CC6741
 Lab FileID: P148173.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP6840\p148173.D Vial: 2
 Acq On : 29 Mar 2022 10:42 am Operator: kristis
 Sample : cc6741-25 Inst : MSVOAMSP
 Misc : op36737,ep6840,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Thu Mar 24 09:03:46 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	88	0.01	4.26
2 t	1,4-Dioxane	0.520	0.551	-6.0	93	0.04	1.66
3 t	Pyridine	1.336	1.378	-3.1	87	0.04	1.97
4 t	N-Nitrosodimethylamine	0.521	0.528	-1.3	86	0.04	1.96
5 S	2-Fluorophenol	1.266	1.341	-5.9	90	0.01	3.25
6 t	Indene	2.247	2.462	-9.6	92	0.00	4.45
7 t	Cumene	3.119	3.367	-8.0	91	0.01	3.63
8 S	Phenol-d5	1.644	1.662	-1.1	85	0.00	4.02
9 t	Phenol	1.781	1.875	-5.3	89	0.00	4.03
10 t	Aniline	2.024	2.103	-3.9	88	0.00	4.01
11 t	bis(2-Chloroethyl)ether	1.190	1.212	-1.8	87	0.00	4.07
12 t	2-Chlorophenol	1.338	1.395	-4.3	89	0.00	4.10
13 t	Decane	0.876	1.012	-15.5	98	0.00	4.14
14 t	1,3-Dichlorobenzene	1.514	1.598	-5.5	90	0.00	4.21
15 t	1,4-Dichlorobenzene	1.513	1.561	-3.2	88	0.00	4.27
16 t	Benzyl alcohol	0.870	0.897	-3.1	86	0.01	4.38
17 t	1,2-Dichlorobenzene	1.436	1.518	-5.7	90	0.00	4.38
18 t	Acetophenone	1.809	1.917	-6.0	91	0.00	4.57
19 t	2-Methylphenol	1.178	1.199	-1.8	85	0.01	4.48
20 t	2,2'-oxybis(1-Chloropropa	0.364	0.380	-4.4	89	0.00	4.47
21 t	3&4-Methylphenol	1.240	1.288	-3.9	88	0.00	4.60
22	n-Nitroso-di-n-propylamin	0.845	0.839	0.7	88	0.00	4.57
23 t	Hexachloroethane	0.543	0.544	-0.2	87	0.00	4.63
24 I	Naphthalene-d8	1.000	1.000	0.0	86	0.00	5.20
25 S	Nitrobenzene-d5	0.345	0.336	2.6	81	0.00	4.68
26 t	Nitrobenzene	0.351	0.345	1.7	81	0.00	4.69
27 t	Quinoline	0.665	0.714	-7.4	90	0.00	5.47
28 t	Isophorone	0.643	0.643	0.0	83	0.01	4.87
29 t	2-Nitrophenol	0.181	0.200	-10.5	93	0.00	4.93
30 t	2,4-Dimethylphenol	0.359	0.364	-1.4	86	0.00	4.98
	----- True		Calc.	% Drift		-----	
31 t	Benzoic acid	25.000	23.294	6.8	84	0.02	5.09
	----- AvgRF		CCRF	% Dev		-----	
32 t	bis(2-Chloroethoxy)methan	0.372	0.377	-1.3	85	0.00	5.03
33 t	2,4-Dichlorophenol	0.287	0.300	-4.5	88	0.00	5.11
34	2,6-Dichlorophenol	0.278	0.288	-3.6	87	0.00	5.27
35	1,3,5-Trichlorobenzene	0.332	0.346	-4.2	89	0.00	4.93
36 t	1,2,4-Trichlorobenzene	0.325	0.333	-2.5	88	0.00	5.16
37	1,2,3-Trichlorobenzene	0.310	0.321	-3.5	89	0.00	5.32

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EP6840-CC6741
Lab FileID: P148173.D

38 t	Naphthalene	0.974	1.039	-6.7	90	0.00	5.22
39 t	4-Chloroaniline	0.403	0.414	-2.7	84	0.01	5.27
40 t	2,3-Dichloroaniline	0.341	0.365	-7.0	89	0.00	5.93
41 t	Hydroquinone	0.305	0.324	-6.2	90	0.01	5.54
42 t	Hexachlorobutadiene	0.196	0.200	-2.0	88	0.00	5.30
43 t	4-Chloro-3-methylphenol	0.308	0.320	-3.9	86	0.01	5.63
44 t	2-Methylnaphthalene	0.589	0.655	-11.2	93	0.00	5.72
45 t	1-Methylnaphthalene	0.645	0.713	-10.5	94	0.00	5.79
46 I	Acenaphthene-d10	1.000	1.000	0.0	86	0.01	6.54
47 t	Hexachlorocyclopentadiene	0.321	0.313	2.5	79	0.00	5.83
48	1,2,4,5-Tetrachlorobenzen	0.543	0.572	-5.3	90	0.00	5.84
49 t	2,4,6-Trichlorophenol	0.363	0.390	-7.4	89	0.01	5.93
50 t	2,4,5-Trichlorophenol	0.391	0.426	-9.0	90	0.00	5.96
51 S	2-Fluorobiphenyl	1.302	1.375	-5.6	88	0.00	5.99
52 t	2-Chloronaphthalene	1.108	1.189	-7.3	92	0.00	6.08
53 t	Biphenyl	1.440	1.595	-10.8	94	0.00	6.06
54 t	2-Nitroaniline	0.290	0.331	-14.1	91	0.00	6.17
55 t	Dimethylphthalate	1.314	1.428	-8.7	91	0.00	6.31
56 t	Acenaphthylene	1.568	1.749	-11.5	93	0.01	6.41
----- True Calc. % Drift -----							
57 t	2,6-Dinitrotoluene	25.000	27.773	-11.1	96	0.01	6.37
----- AvgRF CCRF % Dev -----							
58 t	3-Nitroaniline	0.309	0.324	-4.9	82	0.01	6.52
59 t	Acenaphthene	1.105	1.200	-8.6	91	0.01	6.57
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	56.068	-12.1	97	0.01	6.62
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.201	0.186	7.5	76	0.02	6.71
62 t	Dibenzofuran	1.629	1.743	-7.0	90	0.01	6.73
63 t	2,4-Dinitrotoluene	0.368	0.425	-15.5	89	0.01	6.73
64	2,3,4,6-Tetrachlorophenol	0.323	0.334	-3.4	84	0.01	6.86
65 t	Diethylphthalate	1.319	1.380	-4.6	87	0.01	6.98
66 t	Fluorene	1.258	1.401	-11.4	92	0.01	7.08
67 t	4-Chlorophenyl-phenylethe	0.621	0.668	-7.6	91	0.01	7.09
68 t	4-Nitroaniline	0.315	0.306	2.9	75	0.02	7.13
69 I	Phenanthrene-d10	1.000	1.000	0.0	88	0.02	8.27
70 t	4,6-Dinitro-2-methylpheno	0.122	0.129	-5.7	93	0.02	7.16
71 t	n-Nitrosodiphenylamine	0.592	0.630	-6.4	91	0.02	7.22
72 t	1,2-Diphenylhydrazine	0.677	0.680	-0.4	85	0.01	7.26
73 S	2,4,6-Tribromophenol	0.114	0.136	-19.3	99	0.01	7.35
74 t	4-Bromophenyl-phenylether	0.213	0.234	-9.9	94	0.01	7.66
75 t	Hexachlorobenzene	0.243	0.261	-7.4	94	0.02	7.72
76 t	Pentachlorophenol	0.153	0.141	7.8	78	0.02	8.01
77 t	Phenanthrene	1.026	1.058	-3.1	89	0.02	8.30
78 t	Anthracene	1.021	1.105	-8.2	91	0.02	8.37
79 t	Carbazole	0.970	1.012	-4.3	89	0.02	8.66
80 t	Di-n-butylphthalate	1.145	1.272	-11.1	89	0.02	9.33
81 t	Fluoranthene	1.115	1.223	-9.7	90	0.02	10.34
82 t	Octadecane	0.295	0.355	-20.3#	98	0.01	8.19
83 I	Chrysene-d12	1.000	1.000	0.0	87	0.03	13.40
----- True Calc. % Drift -----							
84 t	Benzidine	25.000	13.834	44.7#	45	0.02	10.72

Continuing Calibration Summary

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Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EP6840-CC6741
Lab FileID: P148173.D

		AvgRF	CCRF	% Dev			
85 t	Pyrene	1.228	1.312	-6.8	89	0.02	10.77
86 S	Terphenyl-d14	0.947	1.027	-8.4	91	0.02	11.22
87 t	Butylbenzylphthalate	0.527	0.602	-14.2	92	0.02	12.40
88 t	Benzo[a]anthracene	1.153	1.239	-7.5	91	0.03	13.37
89 t	3,3'-Dichlorobenzidine	0.427	0.443	-3.7	85	0.02	13.44
90 t	Chrysene	1.138	1.146	-0.7	86	0.03	13.45
		True	Calc.	% Drift			
91 t	bis(2-Ethylhexyl)phthalat	25.000	27.068	-8.3	95	0.02	13.82
		AvgRF	CCRF	% Dev			
92 I	Perylene-d12	1.000	1.000	0.0	92	0.04	16.44
		True	Calc.	% Drift			
93 t	Di-n-octylphthalate	25.000	27.210	-8.8	100	0.02	15.28
		AvgRF	CCRF	% Dev			
94 t	Benzo[b]fluoranthene	1.192	1.288	-8.1	92	0.02	15.68
95 t	Benzo[k]fluoranthene	1.130	1.163	-2.9	87	0.03	15.75
		True	Calc.	% Drift			
96 t	Benzo[a]pyrene	25.000	24.952	0.2	91	0.02	16.31
97 t	Indeno[1,2,3-cd]pyrene	25.000	27.529	-10.1	102	0.02	18.38
		AvgRF	CCRF	% Dev			
98 t	Dibenz(a,h)acridine	0.910	1.031	-13.3	101	0.02	18.03
		True	Calc.	% Drift			
99 t	Dibenz[a,h]anthracene	25.000	26.343	-5.4	96	0.02	18.45
100 t	7,12-Dimethylbenz(a)anthr	25.000	30.035	-20.1#	125	0.03	15.70
		AvgRF	CCRF	% Dev			
101 t	Benzo[g,h,i]perylene	1.041	1.143	-9.8	92	0.02	18.81

(#) = Out of Range
p148055.D MP6741.M

SPCC's out = 0 CCC's out = 0
Tue Mar 29 13:34:57 2022 ACLIMS

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Method Blank Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-MB1	P148118.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples: Method: SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	

8.1.1
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Method Blank Summary

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Job Number: JD41808**Account:** SESINJPB SESI Consulting Engineers**Project:** 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-MB1	P148118.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples:**Method:** SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.3	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

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Method Blank Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-MB1	P148118.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples: Method: SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	39% 10-90%
4165-62-2	Phenol-d5	29% 10-101%
118-79-6	2,4,6-Tribromophenol	92% 23-155%
4165-60-0	Nitrobenzene-d5	74% 25-141%
321-60-8	2-Fluorobiphenyl	78% 35-126%
1718-51-0	Terphenyl-d14	68% 15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Alkane	12.87	5.4	ug/l	J
	Alkane	13.64	5.1	ug/l	J
	Unknown	14.14	4.8	ug/l	J
	Alkane	14.39	6.1	ug/l	J
	Alkane	15.13	6	ug/l	J
	Alkane	15.85	4.4	ug/l	J
	Alkane	17.86	5.9	ug/l	J
	Total TIC, Semi-Volatile		37.7	ug/l	J

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Blank Spike/Blank Spike Duplicate Summary

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Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-BS1	P148125.D	1	03/26/22	CS	03/25/22	OP38807	EP6838
OP38807-BSD	P148126.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	33.1	66	26.2	52	23	52-114/34
59-50-7	4-Chloro-3-methyl phenol	50	39.0	78	32.4	65	18	56-122/28
120-83-2	2,4-Dichlorophenol	50	37.9	76	30.7	61	21	58-121/31
105-67-9	2,4-Dimethylphenol	50	23.1	46* a	22.6	45* a	2	58-119/28
51-28-5	2,4-Dinitrophenol	100	80.0	80	63.7	64	23	33-151/38
534-52-1	4,6-Dinitro-o-cresol	50	42.4	85	37.2	74	13	37-152/37
95-48-7	2-Methylphenol	50	32.4	65	25.7	51	23	48-107/28
	3&4-Methylphenol	100	62.7	63	48.0	48	27	10-148/29
88-75-5	2-Nitrophenol	50	39.3	79	33.9	68	15	50-136/34
100-02-7	4-Nitrophenol	50	20.8	42	15.8	32	27	10-107/44
87-86-5	Pentachlorophenol	100	68.0	68	64.4	64	5	12-168/36
108-95-2	Phenol	50	17.6	35	13.5	27	26	10-94/32
58-90-2	2,3,4,6-Tetrachlorophenol	50	37.8	76	35.3	71	7	52-134/36
95-95-4	2,4,5-Trichlorophenol	50	39.1	78	35.7	71	9	56-128/35
88-06-2	2,4,6-Trichlorophenol	50	38.4	77	34.2	68	12	56-126/35
83-32-9	Acenaphthene	50	40.5	81	40.6	81	0	57-115/27
208-96-8	Acenaphthylene	50	31.6	63	31.5	63	0	51-114/26
98-86-2	Acetophenone	50	37.6	75	37.5	75	0	54-118/30
120-12-7	Anthracene	50	40.6	81	41.6	83	2	60-123/27
1912-24-9	Atrazine	50	44.4	89	45.3	91	2	66-134/30
100-52-7	Benzaldehyde	50	37.8	76	38.3	77	1	48-128/38
56-55-3	Benzo(a)anthracene	50	41.4	83	42.2	84	2	64-119/25
50-32-8	Benzo(a)pyrene	50	36.8	74	36.3	73	1	63-124/27
205-99-2	Benzo(b)fluoranthene	50	42.1	84	40.8	82	3	64-123/27
191-24-2	Benzo(g,h,i)perylene	50	43.3	87	43.4	87	0	59-124/30
207-08-9	Benzo(k)fluoranthene	50	38.7	77	38.9	78	1	58-122/28
101-55-3	4-Bromophenyl phenyl ether	50	42.3	85	42.9	86	1	56-126/28
85-68-7	Butyl benzyl phthalate	50	42.8	86	43.7	87	2	55-134/28
92-52-4	1,1'-Biphenyl	50	39.4	79	39.2	78	1	55-114/28
91-58-7	2-Chloronaphthalene	50	37.7	75	37.4	75	1	55-114/27
106-47-8	4-Chloroaniline	50	23.9	48	28.9	58	19	14-99/50
86-74-8	Carbazole	50	41.3	83	42.9	86	4	62-122/26
105-60-2	Caprolactam	50	15.1	30	15.7	31	4	10-106/27
218-01-9	Chrysene	50	39.1	78	39.5	79	1	60-120/25
111-91-1	bis(2-Chloroethoxy)methane	50	37.8	76	36.0	72	5	52-119/28
111-44-4	bis(2-Chloroethyl)ether	50	35.2	70	35.5	71	1	52-116/34

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

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Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-BS1	P148125.D	1	03/26/22	CS	03/25/22	OP38807	EP6838
OP38807-BSD	P148126.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	50	37.4	75	35.3	71	6	50-121/34
7005-72-3	4-Chlorophenyl phenyl ether	50	40.8	82	41.7	83	2	54-120/28
121-14-2	2,4-Dinitrotoluene	50	46.3	93	45.8	92	1	56-133/26
606-20-2	2,6-Dinitrotoluene	50	42.2	84	43.4	87	3	59-130/26
91-94-1	3,3'-Dichlorobenzidine	50	37.7	76	40.0	80	6	13-118/50
123-91-1	1,4-Dioxane	50	13.4	27	14.5	29	8	13-86/42
53-70-3	Dibenzo(a,h)anthracene	50	40.0	80	40.9	82	2	58-126/28
132-64-9	Dibenzofuran	50	40.3	81	40.7	81	1	60-116/26
84-74-2	Di-n-butyl phthalate	50	44.0	88	45.0	90	2	57-129/29
117-84-0	Di-n-octyl phthalate	50	39.8	80	38.5	77	3	53-136/29
84-66-2	Diethyl phthalate	50	40.7	81	41.4	83	2	56-121/28
131-11-3	Dimethyl phthalate	50	41.2	82	40.6	81	1	57-119/27
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.8	80	39.7	79	0	57-133/26
206-44-0	Fluoranthene	50	43.5	87	44.5	89	2	64-123/28
86-73-7	Fluorene	50	42.7	85	43.3	87	1	62-117/29
118-74-1	Hexachlorobenzene	50	40.1	80	41.3	83	3	56-127/27
87-68-3	Hexachlorobutadiene	50	31.7	63	29.4	59	8	34-121/35
77-47-4	Hexachlorocyclopentadiene	100	29.6	30	26.0	26* a	13	29-116/36
67-72-1	Hexachloroethane	50	27.2	54	28.7	57	5	36-111/41
193-39-5	Indeno(1,2,3-cd)pyrene	50	41.0	82	41.1	82	0	55-128/30
78-59-1	Isophorone	50	37.6	75	37.7	75	0	55-123/28
91-57-6	2-Methylnaphthalene	50	38.6	77	38.6	77	0	56-118/30
88-74-4	2-Nitroaniline	50	46.7	93	46.3	93	1	52-137/27
99-09-2	3-Nitroaniline	50	35.1	70	38.0	76	8	31-112/44
100-01-6	4-Nitroaniline	50	41.0	82	40.3	81	2	52-124/28
91-20-3	Naphthalene	50	36.9	74	36.3	73	2	57-111/29
98-95-3	Nitrobenzene	50	36.3	73	37.7	75	4	53-123/30
621-64-7	N-Nitroso-di-n-propylamine	50	39.6	79	39.3	79	1	48-122/28
86-30-6	N-Nitrosodiphenylamine	50	40.9	82	40.6	81	1	56-133/30
85-01-8	Phenanthrene	50	39.7	79	40.4	81	2	62-120/27
129-00-0	Pyrene	50	39.4	79	40.3	81	2	59-126/29
95-94-3	1,2,4,5-Tetrachlorobenzene	50	36.3	73	35.1	70	3	49-119/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38807-BS1	P148125.D	1	03/26/22	CS	03/25/22	OP38807	EP6838
OP38807-BSD	P148126.D	1	03/26/22	CS	03/25/22	OP38807	EP6838

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	37%	10-90%
4165-62-2	Phenol-d5	36%	28%	10-101%
118-79-6	2,4,6-Tribromophenol	92%	82%	23-155%
4165-60-0	Nitrobenzene-d5	76%	73%	25-141%
321-60-8	2-Fluorobiphenyl	81%	78%	35-126%
1718-51-0	Terphenyl-d14	85%	81%	15-139%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41808
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G1G6070-CC6061
 Lab FileID: 1G175639.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...0\1g175639.d\ECD1A.CH Vial: 2
 Signal #2 : C:\msdchem\1\data\chrisc2\1g6070\1g175639.d\ECD2B.CH
 Acq On : 31 Mar 2022 4:00 am Operator: rebeccak
 Sample : cc6061-25 Inst : HP G1530A
 Misc : op38832,g1g6070,15.3,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1pst6061.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Thu Mar 31 02:26:13 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.61-	1.67
2 SAB	Tetrachloro-m-xylene	0.897	0.916	-2.1	123	0.00	2.11-	2.17
3	Hexachlorobenzene	1.441	1.422	1.3	123	0.00	2.41-	2.47
4 A	alpha-BHC	1.371	1.484	-8.2	126	0.00	2.54-	2.60
5 MA	gamma-BHC	1.235	1.349	-9.2	127	0.00	2.82-	2.88
6 MA	Heptachlor	1.176	1.259	-7.1	126	0.00	3.31-	3.37
7 B	beta-BHC	0.538	0.577	-7.2	124	0.00	2.89-	2.95
8 B	delta-BHC	1.261	1.323	-4.9	125	0.00	3.07-	3.13
9 MB	Aldrin	1.154	1.243	-7.7	128	0.00	3.64-	3.70
10	Alachlor	0.118	0.143	-21.2#	132	0.00	3.79-	3.85
11 B	Heptachlor Epoxide	1.064	1.153	-8.4	126	0.00	4.37-	4.43
12 B	gamma-Chlordane	1.131	1.172	-3.6	125	0.00	4.53-	4.59
13 B	alpha-Chlordane	1.066	1.133	-6.3	125	0.00	4.71-	4.77
14 A	Endosulfan I	1.031	1.096	-6.3	127	0.00	4.90-	4.96
15 B	4,4'-DDE	1.105	1.168	-5.7	126	0.00	4.82-	4.88
16 MA	Dieldrin	1.115	1.205	-8.1	129	0.00	5.24-	5.30
17 MA	Endrin	1.043	1.057	-1.3	115	0.00	5.58-	5.64
18 A	4,4'-DDD	0.886	0.990	-11.7	131	0.00	5.69-	5.76
19 B	Endosulfan II	0.912	0.940	-3.1	126	0.00	5.92-	5.98
20 MA	4,4'-DDT	0.868	0.815	6.1	114	0.00	6.14-	6.20
21 B	Endrin Aldehyde	0.767	0.844	-10.0	136	0.00	6.59-	6.65
22 B	Endosulfan Sulfate	0.841	0.961	-14.3	130	0.00	7.32-	7.38
23 A	Methoxychlor	0.456	0.414	9.2	109	0.00	6.97-	7.03
24	Mirex	0.714	0.760	-6.4	127	0.00	7.14-	7.20
25 B	Endrin Ketone	0.946	1.035	-9.4	129	0.00	7.79-	7.85
26 SA	Decachlorobiphenyl	0.737	0.861	-16.8	130	0.00	9.68-	9.74
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.54-	1.74
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.54-	1.74
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.11 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G1G6070-CC6061
Lab FileID: 1G175639.D

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.81-	1.87
2 SAB	Tetrachloro-m-xylene	0.598	0.593	0.8	120	0.00	2.54-	2.60
3	Hexachlorobenzene	1.490	1.293	13.2	111	0.00	3.03-	3.09
4 A	alpha-BHC	1.353	1.389	-2.7	122	0.00	3.17-	3.23
5 MA	gamma-BHC	1.264	1.270	-0.5	122	0.00	3.60-	3.66
6 MA	Heptachlor	1.174	1.177	-0.3	120	0.00	4.18-	4.24
7 B	beta-BHC	0.514	0.490	4.7	119	0.00	3.68-	3.74
8 B	delta-BHC	1.278	1.272	0.5	120	0.00	4.08-	4.14
9 MB	Aldrin	1.183	1.189	-0.5	122	0.00	4.65-	4.71
10	Alachlor	0.114	0.121	-6.1	118	0.00	4.44-	4.50
11 B	Heptachlor Epoxide	1.104	1.087	1.5	120	0.00	5.50-	5.56
12 B	gamma-Chlordane	1.056	1.053	0.3	122	0.00	5.79-	5.85
13 B	alpha-Chlordane	1.035	1.035	0.0	121	0.00	6.03-	6.09
14 A	Endosulfan I	1.049	1.033	1.5	120	0.00	6.14-	6.20
15 B	4,4'-DDE	1.010	1.020	-1.0	119	0.00	6.31-	6.37
16 MA	Dieldrin	1.146	1.141	0.4	121	0.00	6.60-	6.66
17 MA	Endrin	1.009	0.963	4.6	108	0.00	7.13-	7.19
18 A	4,4'-DDD	0.792	0.826	-4.3	120	0.00	7.32-	7.38
19 B	Endosulfan II	0.890	0.873	1.9	119	0.00	7.51-	7.57
20 MA	4,4'-DDT	0.672	0.606	9.8	102	0.00	7.89-	7.95
21 B	Endrin Aldehyde	0.765	0.716	6.4	115	0.00	8.12-	8.18
22 B	Endosulfan Sulfate	0.871	0.846	2.9	115	0.00	8.63-	8.69
23 A	Methoxychlor	0.350	0.320	8.6	106	0.00	9.23-	9.29
24	Mirex	0.579	0.581	-0.3	115	0.00	9.57-	9.63
25 B	Endrin Ketone	0.928	0.926	0.2	118	0.00	9.63-	9.69
26 SA	Decachlorobiphenyl	0.715	0.671	6.2	108	0.00	11.47-	11.53
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.74-	1.94
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.74-	1.94
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

(#) = Out of Range
 1g175383.D 1pst6061.m

SPCC's out = 0 CCC's out = 0
 Thu Mar 31 22:23:42 2022

10.10.11
 10

Method Blank Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38810-MB1	1G175528.D	1	03/27/22	TL	03/25/22	OP38810	G1G6066

The QC reported here applies to the following samples: Method: SW846 8081B

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	2.7	0.0080	0.0042	ug/l	E
319-85-7	beta-BHC	0.19	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	0.048	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	0.24	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	0.61	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	0.40	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	31.9	0.0080	0.0055	ug/l	E
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	83% 10-190%
877-09-8	Tetrachloro-m-xylene	83% 10-190%
2051-24-3	Decachlorobiphenyl	98% 10-156%
2051-24-3	Decachlorobiphenyl	63% 10-156%

10.1.1
10

Method Blank Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38832-MB1 ^a	1G175620.D	1	03/30/22	RK	03/28/22	OP38832	G1G6070

The QC reported here applies to the following samples: Method: SW846 8081B

JD41808-1, JD41808-2, JD41808-3, JD41808-4, JD41808-5, JD41808-6, JD41808-7, JD41808-8, JD41808-9, JD41808-10, JD41808-11, JD41808-12, JD41808-13, JD41808-14, JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	0.71	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	1.0	0.67	0.58	ug/kg	
50-29-3	4,4'-DDT	28.2	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	86% 14-145%
877-09-8	Tetrachloro-m-xylene	82% 14-145%
2051-24-3	Decachlorobiphenyl	99% 10-197%
2051-24-3	Decachlorobiphenyl	85% 10-197%

(a) Detections due to lab contamination.

10.1.2
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Surrogate Recovery Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Method: SW846 8081B	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
JD41808-21	1G175535.D	46	38	37	27
JD41808-22	1G175696.D	0* ^c	0* ^c	0* ^c	0* ^c
JD41808-22	1G175536.D	63	59	76	35
JD41808-23	1G175537.D	40	31	60	33
JD41808-24	1G175695.D	0* ^c	0* ^c	0* ^c	0* ^c
JD41808-24	1G175538.D	71	68	54	38
OP38810-BS1	1G175533.D	52	46	72	39
OP38810-BSD	1G175534.D	49	44	57	42
OP38810-MB1	1G175528.D	83	83	98	63

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-190%
S2 = Decachlorobiphenyl	10-156%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2
- (c) Outside control limits due to dilution.

Blank Spike Summary

Job Number: JD41808
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38832-BS1	1G175621.D	1	03/30/22	RK	03/28/22	OP38832	G1G6070

The QC reported here applies to the following samples: Method: SW846 8081B

JD41808-1, JD41808-2, JD41808-3, JD41808-4, JD41808-5, JD41808-6, JD41808-7, JD41808-8, JD41808-9, JD41808-10, JD41808-11, JD41808-12, JD41808-13, JD41808-14, JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	11.8	71	41-146
319-84-6	alpha-BHC	16.7	13.6	82	39-138
319-85-7	beta-BHC	16.7	10.3	62	44-134
319-86-8	delta-BHC	16.7	10.4	62	10-147
58-89-9	gamma-BHC (Lindane)	16.7	10.1	61	42-133
5103-71-9	alpha-Chlordane	16.7	10.4	62	43-140
5103-74-2	gamma-Chlordane	16.7	10.6	64	45-135
60-57-1	Dieldrin	16.7	10.2	61	40-151
72-54-8	4,4' -DDD	16.7	11.8	71	42-133
72-55-9	4,4' -DDE	16.7	12.3	74	43-139
50-29-3	4,4' -DDT	16.7	89.9	539* a	44-150
72-20-8	Endrin	16.7	11.3	68	43-145
1031-07-8	Endosulfan sulfate	16.7	9.7	58	27-131
7421-93-4	Endrin aldehyde	16.7	8.1	49	34-139
959-98-8	Endosulfan-I	16.7	11.1	67	41-137
33213-65-9	Endosulfan-II	16.7	11.3	68	35-143
76-44-8	Heptachlor	16.7	10.8	65	44-136
1024-57-3	Heptachlor epoxide	16.7	10.4	62	45-138
72-43-5	Methoxychlor	16.7	10.8	65	39-149
53494-70-5	Endrin ketone	16.7	10.9	65	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	67%	14-145%
877-09-8	Tetrachloro-m-xylene	63%	14-145%
2051-24-3	Decachlorobiphenyl	87%	10-197%
2051-24-3	Decachlorobiphenyl	66%	10-197%

(a) Outside of in house control limits due to lab contamination.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38810-BS1	1G175533.D	1	03/27/22	TL	03/25/22	OP38810	G1G6066
OP38810-BSD	1G175534.D	1	03/27/22	TL	03/25/22	OP38810	G1G6066

The QC reported here applies to the following samples:

Method: SW846 8081B

JD41808-21, JD41808-22, JD41808-23, JD41808-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.15	75	0.15	75	0	54-152/36
319-84-6	alpha-BHC	0.2	0.55	275* a	0.58	290* b	7	50-161/35
319-85-7	beta-BHC	0.2	0.19	95	0.17	85	11	56-150/36
319-86-8	delta-BHC	0.2	0.18	90	0.16	80	12	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.18	90	0.17	85	6	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.16	80	0.16	80	0	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.14	70	0.16	80	13	55-153/37
60-57-1	Dieldrin	0.2	0.14	70	0.15	75	7	56-163/36
72-54-8	4,4'-DDD	0.2	0.28	140	0.27	135	4	50-154/37
72-55-9	4,4'-DDE	0.2	0.22	110	0.24	120	9	47-157/43
50-29-3	4,4'-DDT	0.2	9.9	4950* a	8.5	4250* b	15	52-167/42
72-20-8	Endrin	0.2	0.18	90	0.16	80	12	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.17	85	0.15	75	13	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.12	60	0.12	60	0	33-163/41
53494-70-5	Endrin ketone	0.2	0.19	95	0.17	85	11	42-178/38
959-98-8	Endosulfan-I	0.2	0.17	85	0.15	75	13	57-154/37
33213-65-9	Endosulfan-II	0.2	0.18	90	0.17	85	6	54-160/38
76-44-8	Heptachlor	0.2	0.15	75	0.14	70	7	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.15	75	0.15	75	0	58-157/36
72-43-5	Methoxychlor	0.2	0.20	100	0.17	85	55* c	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	52%	49%	10-190%
877-09-8	Tetrachloro-m-xylene	46%	44%	10-190%
2051-24-3	Decachlorobiphenyl	72%	57%	10-156%
2051-24-3	Decachlorobiphenyl	39%	42%	10-156%

(a) Outside of control limits due to lab contamination.

(b) Outside of in house control limits due to lab contamination.

(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JD41808

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38832-MS	1G175628.D	1	03/31/22	RK	03/28/22	OP38832	G1G6070
OP38832-MSD	1G175629.D	1	03/31/22	RK	03/28/22	OP38832	G1G6070
JD41808-6 ^a	1G175627.D	1	03/31/22	RK	03/28/22	OP38832	G1G6070

The QC reported here applies to the following samples:

Method: SW846 8081B

JD41808-1, JD41808-2, JD41808-3, JD41808-4, JD41808-5, JD41808-6, JD41808-7, JD41808-8, JD41808-9, JD41808-10, JD41808-11, JD41808-12, JD41808-13, JD41808-14, JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

CAS No.	Compound	JD41808-6 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
309-00-2	Aldrin	ND		18.6	20.3	109	19.2	16.9	18	23-156/72	
319-84-6	alpha-BHC	0.87	B	18.6	21.6	112	19.2	17.5	21	15-162/63	
319-85-7	beta-BHC	ND		18.6	17.9	96	19.2	13.4	29	17-148/79	
319-86-8	delta-BHC	ND		18.6	19.5	105	19.2	14.4	30	10-159/81	
58-89-9	gamma-BHC (Lindane)	ND		18.6	20.0	108	19.2	16.4	20	30-139/67	
5103-71-9	alpha-Chlordane	ND		18.6	18.5	100	19.2	15.4	18	12-167/63	
5103-74-2	gamma-Chlordane	ND		18.6	16.8	90	19.2	11.9	34	10-184/65	
60-57-1	Dieldrin	ND		18.6	22.3	120	19.2	29.9	29	10-266/78	
72-54-8	4,4'-DDD	0.99	B	18.6	19.8	101	19.2	15.1	27	24-143/82	
72-55-9	4,4'-DDE	1.7	B	18.6	17.1	83	19.2	12.5	31	10-172/71	
50-29-3	4,4'-DDT	27.0	B	18.6	100	393* ^b	19.2	96.9	364* ^b	3	10-191/84
72-20-8	Endrin	ND		18.6	20.1	108	19.2	15.9	23	10-200/74	
1031-07-8	Endosulfan sulfate	ND		18.6	16.0	86	19.2	15.3	4	10-149/69	
7421-93-4	Endrin aldehyde	ND		18.6	20.0	108	19.2	23.5	16	10-165/81	
959-98-8	Endosulfan-I	ND		18.6	22.1	119	19.2	19.2	14	10-171/75	
33213-65-9	Endosulfan-II	ND		18.6	18.9	102	19.2	15.8	18	10-153/76	
76-44-8	Heptachlor	ND		18.6	20.4	110	19.2	14.7	32	15-162/77	
1024-57-3	Heptachlor epoxide	ND		18.6	21.1	113	19.2	15.5	31	26-151/66	
72-43-5	Methoxychlor	ND		18.6	17.8	96	19.2	9.3	63	10-172/85	
53494-70-5	Endrin ketone	ND		18.6	25.9	139	19.2	26.4	2	10-182/72	
8001-35-2	Toxaphene	ND			ND		ND		nc	50-150/30	

CAS No.	Surrogate Recoveries	MS	MSD	JD41808-6	Limits
877-09-8	Tetrachloro-m-xylene	92%	74%	62%	14-145%
877-09-8	Tetrachloro-m-xylene	89%	72%	60%	14-145%
2051-24-3	Decachlorobiphenyl	113%	82%	78%	10-197%
2051-24-3	Decachlorobiphenyl	161%	185%	124%	10-197%

(a) Detections could be due to lab contamination.

(b) Outside of control limits due to lab contamination.

* = Outside of Control Limits.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41808
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31903
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/24/22

Metal	JD41808-3 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	37100	37600	2830	17.7 (a)	75-125
Antimony	0.0	113	226	49.9N(b)	75-125
Arsenic	1.8	213	226	93.3	75-125
Barium	110	281	226	76.8	75-125
Beryllium	1.8	207	226	90.6	75-125
Bismuth					
Boron					
Cadmium	0.30	204	226	89.9	75-125
Calcium	17900	18100	2830	7.1 (a)	75-125
Chromium	47.8	239	226	86.0	75-125
Cobalt	11.9	215	226	89.7	75-125
Copper	40.6	255	226	94.7	75-125
Iron	26100	28300	2830	77.7	75-125
Lead	11.9	227	226	95.0	75-125
Lithium					
Magnesium	6160	8140	2830	83.4	75-125
Manganese	250	491	226	106.4	75-125
Molybdenum					
Nickel	82.5	262	226	79.3	75-125
Phosphorus					
Potassium	1980	4960	2830	105.3	75-125
Selenium	0.81	207	226	91.0	75-125
Silicon					
Silver	0.85	29.0	28.3	99.4	75-125
Sodium	2390	4700	2830	81.6	75-125
Strontium					
Sulfur					
Thallium	0.0	222	226	98.0	75-125
Tin					
Titanium					
Tungsten					
Vanadium	41.8	240	226	87.5	75-125
Zinc	47.9	244	226	86.6	75-125

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41808
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31903
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/24/22

Metal	JD41808-3 Original MS	Spike lot MPSPK2	% Rec	QC Limits

Zirconium

Associated samples MP31903: JD41808-1, JD41808-2, JD41808-3, JD41808-4, JD41808-5, JD41808-6, JD41808-7, JD41808-8, JD41808-9, JD41808-10, JD41808-11, JD41808-12, JD41808-13, JD41808-14, JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

12.6.2
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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41808
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31903
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/24/22

Metal	JD41808-3 Original	MSD	Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	37100	33900	2800	-114.2(a)	10.3	20
Antimony	0.0	110	224	49.1N(b)	2.7	20
Arsenic	1.8	213	224	94.2	0.0	20
Barium	110	312	224	91.4	10.5	20
Beryllium	1.8	208	224	92.0	0.5	20
Bismuth						
Boron						
Cadmium	0.30	205	224	91.3	0.5	20
Calcium	17900	15900	2800	-71.4(a)	12.9	20
Chromium	47.8	239	224	86.8	0.0	20
Cobalt	11.9	217	224	91.5	0.9	20
Copper	40.6	255	224	95.6	0.0	20
Iron	26100	27200	2800	39.2 (a)	4.0	20
Lead	11.9	229	224	96.8	0.9	20
Lithium						
Magnesium	6160	8150	2800	84.6	0.1	20
Manganese	250	486	224	105.3	1.0	20
Molybdenum						
Nickel	82.5	272	224	84.5	3.7	20
Phosphorus						
Potassium	1980	5350	2800	120.2	7.6	20
Selenium	0.81	206	224	91.5	0.5	20
Silicon						
Silver	0.85	29.0	28	100.4	0.0	20
Sodium	2390	4450	2800	73.5N(b)	5.5	20
Strontium						
Sulfur						
Thallium	0.0	222	224	99.0	0.0	20
Tin						
Titanium						
Tungsten						
Vanadium	41.8	236	224	86.6	1.7	20
Zinc	47.9	243	224	87.0	0.4	20

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41808
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31903
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/24/22

Metal	JD41808-3 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit

Zirconium

Associated samples MP31903: JD41808-1, JD41808-2, JD41808-3, JD41808-4, JD41808-5, JD41808-6, JD41808-7, JD41808-8, JD41808-9, JD41808-10, JD41808-11, JD41808-12, JD41808-13, JD41808-14, JD41808-15, JD41808-16, JD41808-17, JD41808-18, JD41808-19, JD41808-20

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD41808
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31898
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 03/24/22

Metal	JD41761-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	313	545	74.1 (a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	1.90	0.00	100.0(a)	0-10
Barium	36.9	37.7	2.2	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium	71700	72600	1.3	0-10
Cerium				
Chromium	1.90	5.80	205.3(a)	0-10
Cobalt	0.900	0.00	100.0(a)	0-10
Copper	0.00	0.00	NC	0-10
Iron	491	566	15.2 (a)	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium	15100	15300	1.7	0-10
Manganese	366	371	1.5	0-10
Molybdenum				
Nickel	0.500	1.60	220.0(a)	0-10
Phosphorus				
Potassium	4080	3490	14.5*(b)	0-10
Selenium	4.60	0.00	100.0(a)	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	14500	14300	0.9	0-10
Strontium				
Sulfur				
Thallium	4.80	0.00	100.0(a)	0-10
Tin				
Titanium				
Tungsten				
Vanadium	2.20	0.00	100.0(a)	0-10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD41808
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31898
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 03/24/22

Metal	JD41761-1 Original	SDL 1:5	%DIF	QC Limits

Zinc 3.90 127 3159.0(a 0-10

Zirconium

Associated samples MP31898: JD41808-21, JD41808-22, JD41808-23, JD41808-24

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

12.5.4
12

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

Date: June 19th, 2022

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD41819**

Client Project ID: 12123:6 – 23-34 Pearl Street, Port Chester, NY

Dear Mr. Noonan,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD41819 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-12123:6 – 23-34 Pearl Street, Port Chester, NY- JD41819

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 23-34 Pearl Street, Port Chester, NY

SGS North America Inc.

Laboratory (SDG) # JD41819

Project No. 12123:6

Prepared for:

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.
Data Validation and Forensic Geochemistry Expert

On

June 19th, 2022

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- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTrDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS *(Used in the QA/QC Reviews for USEPA Region II)*

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs - Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008
SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008

6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD41819

NYS DEC Data Usability Summary Report

SDG # JD41819

Site Location	12123:6 – 23-34 Pearl Street, Port Chester, NY
Data Validation for Analytical Methods	Volatile Organic Compounds in Air by GC/MS EPA TO15 Method
Number of Samples & Matrix	7 Soil Vapor Samples & 1 Ambient Air Sample
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41819 (1-2-3-4-5-6-7-8)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **SAMPLE HANDLING AND MANAGEMENT:** As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on 03/22/2022 using the proper containers (Summa Canisters) in accordance with the Sample Integrity and Preservation section of USEPA TO15 method and received by the laboratory on 03/23/2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
RI-SV-1	JD41819-1
RI-SV-DUP	JD41819-2
RI-SV-2	JD41819-3
RI-SV-3	JD41819-4
RI-SV-4	JD41819-5
RI-SV-5	JD41819-6
RI-SV-6	JD41819-7
RI-AA-1	JD41819-8

- **DATA VALIDATION REFERENCES:** The volatile organic compounds in air data validation is conducted in accordance with the guidelines in the USEPA Hazardous Waste Support Section-SOP NO. HW-31, Revision 6 Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method T0-15 and the method and QC Criteria specified in NYSDEC ASP Documents.
- **LABORATORY DATA PACKAGES:** The laboratory data packages received from the Laboratory for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance

with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS:** A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.
- **DATA USABILITY ASSESSMENT SUMMARY:** The overall data package assessment provided by the Laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds in Air by GC/MS-EPA TO15 Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Chlorodifluoromethane, Bromoform, 1,2-Dichlorobenzene, Hexachloroethane, Hexachlorobutadiene, in the associated samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, RI-SV-2/JD41819-3, RI-SV-3/JD41819-4, RI-SV-4/JD41819-5, RI-SV-5/JD41819-6, RI-SV-6/JD41819-7, RI-AA-1/JD41819-8, should be qualified Estimated (J).	CCV
2	-Detected results of Bromoform, o-Dichlorobenzene, p-Dichlorobenzene, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, in the associated samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, RI-SV-2/JD41819-3, RI-SV-3/JD41819-4, RI-SV-4/JD41819-5, RI-SV-5/JD41819-6, RI-SV-6/JD41819-7, RI-AA-1/JD41819-8, must be qualified Estimated-Bias High (J+).	LCS
3	-Detected results of Acetone (2-Propanone), Benzene, Carbon disulfide, Cyclohexane, 1,4-Dioxane, Ethanol, Ethylbenzene, Ethyl Acetate, Heptane, Hexane, Isopropyl Alcohol, Methyl ethyl ketone, 2,2,4-Trimethylpentane, Tertiary Butyl Alcohol, Tetrachloroethylene, Toluene, Trichloroethylene, m,p-Xylene, o-Xylene, Xylenes (total), in samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, should be qualified Estimated (J).	DUP

Data Validation Assessment

SDG # JD41819

Data Validation for Analytical Method	Volatile Organic Compounds in Air by GC/MS EPA TO15 Method
Number of Samples & Matrix	7 Soil Vapor Samples & 1 Ambient Air Sample
Sampled On	03/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41819 (1-2-3-4-5-6-7-8)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The BFB tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for the Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSD): (Average RRF > 0.010 for poor response volatile target compounds and > 0.050 for all other volatile target compounds. %RSD must be < 30% as the allowable maximum). This evaluation displays the following:
-The initial calibration (V5W1969-ICC1969 on 02/01/2022) met the required criteria for the Average Response Factor (RRFs) and %RSD Compliance (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %RSD < 30% as the allowable maximum).

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

A second source calibration standard (V5W1969-ICV1969) was analyzed on 02/01/2022 and confirmed initial calibration full compliance with the method criteria. %Ds were below the allowable maximum (%Ds <30%).

Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (V5W2042-CC1969 on 04/20/2022) met the required criteria for the Response Factor (RRFs) and %D (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %D < 30% as the allowable maximum), EXCEPT: %Ds for Bromoform, 1,2-Dichlorobenzene, Hexachloroethane, Hexachlorobutadiene, were above the allowable maximum.

-The continuing calibration (V5W2043-CC1969 on 04/21/2022) met the required criteria for the Response Factor (RRFs) and %D (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %D < 30% as the allowable maximum), EXCEPT: %Ds for Chlorodifluoromethane, Bromoform, 1,2-Dichlorobenzene, Hexachloroethane, Hexachlorobutadiene, were above the allowable maximum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Chlorodifluoromethane, Bromoform, 1,2-Dichlorobenzene, Hexachloroethane, Hexachlorobutadiene, in the associated samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, RI-SV-2/JD41819-3, RI-SV-3/JD41819-4, RI-SV-4/JD41819-5, RI-SV-5/JD41819-6, RI-SV-6/JD41819-7, RI-AA-1/JD41819-8, should be qualified Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in V5W2042-MB.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

-Internal Standards for all samples and QCs were within method control limits.

Quality Judgement: No actions are required.

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- **Surrogate Recoveries (SR):** An evaluation of the surrogate standard behavior in the SDG data set concluded that the surrogate recoveries were within method control limits ($65\% < \text{SURR} < 128\%$).

-The Surrogate summary report was included in the data package.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control sample in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-The percent Recoveries (%Rs) for target TO15 analysis in LCS (V5W2042-BS) were within the method control limits (70-130%), EXCEPT:

%Rs for Bromoform, o-Dichlorobenzene, p-Dichlorobenzene, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, were above control limits.

-The percent Recoveries (%Rs) for target TO15 analysis in LCSDUP (V5W2042-BSD) were within the method control limits (70-130%), EXCEPT:

%Rs for Bromoform, o-Dichlorobenzene, Hexachlorobutadiene, were above control limits. %RPDs were below the allowable maximum.

Note: Other LCS & LCSDUP summary data were included in this QA data Package. However, The Listed above LCS and LCSDUP are essential for the sequence evaluation.

Quality Judgement:

-Detected results of Bromoform, o-Dichlorobenzene, p-Dichlorobenzene, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, in the associated samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, RI-SV-2/JD41819-3, RI-SV-3/JD41819-4, RI-SV-4/JD41819-5, RI-SV-5/JD41819-6, RI-SV-6/JD41819-7, RI-AA-1/JD41819-8, must be qualified Estimated-Bias High (J+).

- **Laboratory and Field Duplicates (DUP):** As required by the method quality assurance/quality control criteria, the laboratory duplicate sample in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-The Sample JD41818-1DUP, was analyzed as a selected laboratory duplicate from sample RI-SV-1/JD41819-1. The Relative Percent Difference (%RPDs) for all detected target compounds in sample RI-SV-1/JD41819-1 and its laboratory duplicate JD41818-1DUP, were below the allowable maximums of 25%.

-A blind Field Duplicate Sample was collected in this samples set. According to SESI's project manager, the sample RI-SV-DUP/JD41819-2 is originated from sample RI-SV-1/JD41819-1.

The following summarizes the relative percent differences (%RPDs) for the detected target compounds above the RL in both duplicate and its associated sample source:

Detected Target Compounds >RL	RI-SV-DUP/JD41819-2 (ppbv)	RI-SV-1/JD41819-1 (ppbv)	%RPDs
Acetone (2-Propanone)	60.8	143	80.7
Benzene	1.9	5.8	101
Carbon disulfide	2.4	8.1	109
Cyclohexane	0.55J	1.8	106
1,4-Dioxane	4.3	11.5	91.1
Ethanol	644	970	40.4
Ethylbenzene	0.56J	1.3	79.6
Ethyl Acetate	3.9	2.7	36.4
Heptane	ND	1.2	NC
Hexane	0.74J	1.6	73.5
Isopropyl Alcohol	23	57.4	85.6
Methyl ethyl ketone	2.1	8.0	117
2,2,4-Trimethylpentane	0.43J	1.4	106
Tertiary Butyl Alcohol	1.1	4.4	120
Tetrachloroethylene	8.6	12.8	39.3
Toluene	7.4	25.3	109
Trichloroethylene	1.0	ND	NC
m,p-Xylene	2.1	4.2	66.7
o-Xylene	0.89	1.7	62.5
Xylenes (total)	3.0	5.9	65.2

-%RPDs for Acetone (2-Propanone), Benzene, Carbon disulfide, Cyclohexane, 1,4-Dioxane, Ethanol, Ethylbenzene, Ethyl Acetate, Heptane, Hexane, Isopropyl Alcohol, Methyl ethyl ketone, 2,2,4-Trimethylpentane, Tertiary Butyl Alcohol, Tetrachloroethylene, Toluene, Trichloroethylene, m,p-Xylene, o-Xylene, Xylenes (total), in samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, were above the allowable maximum.

Quality Judgement:

-Detected results of Acetone (2-Propanone), Benzene, Carbon disulfide, Cyclohexane, 1,4-Dioxane, Ethanol, Ethylbenzene, Ethyl Acetate, Heptane, Hexane, Isopropyl Alcohol, Methyl ethyl ketone, 2,2,4-Trimethylpentane, Tertiary Butyl Alcohol, Tetrachloroethylene, Toluene, Trichloroethylene, m,p-Xylene, o-Xylene, Xylenes (total), in samples RI-SV-1/JD41819-1, RI-SV-DUP/JD41819-2, should be qualified Estimated (J).

- **Canister Integrity:** According to the chain of custody record for this set of samples, the canisters were received in the laboratory and displayed a residual vacuum below zero as required by EPA TO15 method. Additionally, a full review of the Summa Cleaning Certification, has been performed and confirmed full compliance with the EPA TO15 method cleaning criteria.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

ATTACHMENT

**(All Associated Quality Control Forms, Tables,
Chromatograms, Raw Data)**

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41819
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2042-CC1969
 Lab FileID: 5W49369.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\5w49369.D
 Acq On : 20 Apr 2022 8:24 am
 Sample : cc1969-10
 Misc : ms58144,v5w2042,,,,,1
 MS Integration Params: Rteint.p

Vial: 2
 Operator: thomash
 Inst : Air5w
 Multiplr: 1.00

Method : C:\msdchem\1\methods\m5w1969.M (RTE Integrator)
 Title : TO-15 Full Scan Mode
 Last Update : Tue Feb 01 13:47:06 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I Bromochloromethane	1.000	1.000	0.0	93	-0.09	11.26
2	Freon 152A	0.662	0.717	-8.3	103	-0.01	4.37
3	Chlorodifluoromethane	0.360	0.461	-28.1	124	-0.01	4.43
4	Propene	0.829	1.010	-21.8	119	0.00	4.28
5	Chlorotrifluoroethene	1.614	1.612	0.1	95	0.00	4.33
6	Dichlorodifluoromethane	3.935	4.862	-23.6	120	-0.01	4.37
7	1-Chloro-1,1-difluoroetha	2.734	3.403	-24.5	119	-0.02	4.76
8	Chloromethane	1.059	1.058	0.1	102	-0.02	4.76
9	Dichlorotetrafluoroethane	3.331	3.934	-18.1	113	-0.02	4.67
10	Vinyl Chloride	1.083	1.149	-6.1	100	-0.02	4.97
11	1,3-Butadiene	0.761	0.768	-0.9	98	-0.02	5.03
12	n-Butane	0.155	0.171	-10.3	98	-0.01	4.87
13	Bromomethane	0.877	1.089	-24.2	130	-0.04	5.67
14	Chloroethane	0.482	0.471	2.3	96	-0.04	5.96
15	Dichlorofluoromethane	2.651	2.921	-10.2	108	-0.06	6.40
16	Acetonitrile	0.859	0.968	-12.7	115	-0.10	9.33
17	Freon 123	2.481	2.636	-6.2	103	-0.07	7.48
18	Freon 123A	1.335	1.286	3.7	92	-0.06	7.36
19	Bromoethene	1.087	1.081	0.6	96	-0.05	6.21
20	Acrolein	0.454	0.382	15.9	83	-0.07	7.98
21	Trichlorofluoromethane	3.257	3.835	-17.7	113	-0.05	6.30
22	Acetone	0.435	0.435	0.0	94	-0.09	8.53
23	Pentane	0.283	0.248	12.4	87	-0.04	6.32
24	Iodomethane	3.175	3.332	-4.9	101	-0.06	7.63
25	Isopropyl Alcohol	0.373	0.459	-23.1	116	-0.07	8.36
26	1,1-Dichloroethene	1.926	2.052	-6.5	102	-0.06	7.36
27	Freon 113	2.528	2.701	-6.8	103	-0.06	7.48
28	Methylene Chloride	1.037	0.978	5.7	92	-0.08	8.48
29	Carbon Disulfide	3.338	3.444	-3.2	99	-0.06	7.42
30	Ethanol	0.410	0.435	-6.1	106	-0.06	7.25
31	Acrylonitrile	0.759	0.718	5.4	91	-0.10	9.94
32	3-Chloropropene	0.490	0.483	1.4	92	-0.07	8.29
33	trans-1,2-Dichloroethene	1.752	1.776	-1.4	95	-0.07	8.83
34	tert-Butyl Alcohol	2.466	2.244	9.0	89	-0.07	9.21
35	Methyl tert-Butyl Ether	3.298	3.140	4.8	92	-0.07	9.07
36	Vinyl Acetate	2.816	3.147	-11.8	107	-0.09	10.39
37	1,1-Dichloroethane	2.069	2.089	-1.0	96	-0.09	9.94
38	2-Butanone	0.453	0.467	-3.1	91	-0.09	11.87
39	Hexane	0.970	0.817	15.8	83	-0.06	9.05
40	cis-1,2-Dichloroethene	1.661	1.654	0.4	95	-0.08	10.91
41	Di-isopropyl Ether	0.850	0.763	10.2	82	-0.08	9.79
42	Ethyl Acetate	0.323	0.334	-3.4	90	-0.09	11.57

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41819
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2042-CC1969
Lab FileID: 5W49369.D

43	Methyl Acrylate	1.840	1.758	4.5	89	-0.09	11.59
44	Chloroform	2.862	2.977	-4.0	100	-0.09	11.39
45	2,4-Dimethylpentane	2.097	1.773	15.5	86	-0.07	10.11
46	Tetrahydrofuran	0.491	0.529	-7.7	96	-0.09	11.68
47	1,1,1-Trichloroethane	2.890	2.980	-3.1	100	-0.09	11.78
48	1,2-Dichloroethane	1.778	1.869	-5.1	99	-0.10	12.72
49	Benzene	3.544	3.183	10.2	91	-0.09	12.41
50	Carbon Tetrachloride	2.976	3.275	-10.0	100	-0.08	11.69
51	Cyclohexane	1.726	1.434	16.9	82	-0.08	11.35
52	2,3-Dimethylpentane	0.771	0.692	10.2	89	-0.07	11.52
53 I	1,4-Difluorobenzene	1.000	1.000	0.0	94	-0.09	13.45
54	2,2,4-Trimethylpentane	1.448	1.277	11.8	88	-0.07	12.24
55	Heptane	0.289	0.266	8.0	90	-0.07	12.42
56	Trichloroethene	0.298	0.291	2.3	96	-0.08	13.44
57	1,2-Dichloropropane	0.345	0.344	0.3	95	-0.09	14.30
58	Dibromomethane	0.440	0.483	-9.8	109	-0.09	14.13
59	Ethyl Acrylate	0.682	0.651	4.5	88	-0.09	14.30
60	Methyl Methacrylate	0.320	0.312	2.5	90	-0.09	14.66
61	1,4-Dioxane	0.233	0.183	21.5	84	-0.10	14.73
62	Bromodichloromethane	0.802	0.861	-7.4	103	-0.09	14.41
63	cis-1,3-Dichloropropene	0.623	0.546	12.4	87	-0.09	15.51
64	4-Methyl-2-pentanone	0.275	0.259	5.8	85	-0.10	16.57
65	trans-1,3-Dichloropropene	0.588	0.533	9.4	93	-0.09	16.66
66	Toluene	1.138	0.968	14.9	82	-0.09	15.97
67	1,1,2-Trichloroethane	0.410	0.398	2.9	93	-0.10	16.96
68	1,3-Dichloropropane	0.542	0.527	2.8	95	-0.10	17.45
69	2-Hexanone	0.757	0.795	-5.0	110	-0.10	18.10
70	Ethyl Methacrylate	0.533	0.546	-2.4	93	-0.09	16.95
71	Dibromochloromethane	0.822	0.877	-6.7	99	-0.09	17.31
72	Tetrachloroethene	0.618	0.689	-11.5	105	-0.09	16.71
73	1,2-Dibromoethane	0.658	0.639	2.9	92	-0.10	17.75
74	Octane	0.687	0.771	-12.2	100	-0.07	15.69
75	1,1,1,2-Tetrachloroethane	0.539	0.502	6.9	89	-0.09	18.85
76 I	Chlorobenzene-d5	1.000	1.000	0.0	94	-0.09	18.71
77	Chlorobenzene	1.829	1.601	12.5	86	-0.09	18.74
78	Ethylbenzene	2.967	2.669	10.0	88	-0.09	18.80
79	m,p-Xylene	2.225	2.211	0.6	96	-0.09	19.06
80	Styrene	1.564	1.447	7.5	83	-0.07	19.86
81	Nonane	1.531	1.630	-6.5	104	-0.07	18.66
82	o-Xylene	2.363	2.120	10.3	87	-0.08	19.78
83	Bromoform	1.511	2.117	-40.1#	131	-0.08	19.91
84	1,1,2,2-Tetrachloroethane	1.721	1.886	-9.6	106	-0.07	20.98
85	1,2,3-Trichloropropane	1.340	1.491	-11.3	105	-0.07	21.17
86	Isopropylbenzene	3.161	2.879	8.9	87	-0.07	20.29
87	Bromobenzene	1.039	1.114	-7.2	101	-0.07	20.87
88	2-Chlorotoluene	0.761	0.731	3.9	91	-0.07	21.14
89	n-Propylbenzene	0.769	0.739	3.9	86	-0.07	20.92
90 S	4-Bromofluorobenzene	1.264	1.273	-0.7	92	-0.07	20.71
91	4-Ethyltoluene	2.820	2.835	-0.5	90	-0.06	21.07
92	1,3,5-Trimethylbenzene	2.349	2.471	-5.2	95	-0.06	21.19
93	alpha-Methylstyrene	1.126	1.151	-2.2	86	-0.07	21.53
94	tert-Butylbenzene	0.523	0.476	9.0	89	-0.06	21.64
95	1,2,4-Trimethylbenzene	2.308	2.401	-4.0	92	-0.06	21.73
96	1,3-Dichlorobenzene	1.443	1.737	-20.4	102	-0.06	22.17
97	1,2,3-trimethylbenzene	2.203	2.406	-9.2	97	-0.06	22.30
98	Benzyl Chloride	0.374	0.431	-15.2	92	-0.06	22.57
99	1,4-Dichlorobenzene	1.374	1.771	-28.9	108	-0.06	22.28
100	sec-Butylbenzene	0.640	0.621	3.0	91	-0.05	21.88

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41819
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2042-CC1969
Lab FileID: 5W49369.D

101	p-Isopropyltoluene	0.723	0.684	5.4	90	-0.06	22.07
102	1,2-Dichlorobenzene	1.254	1.971	-57.2#	131	-0.06	22.81
103	n-Butylbenzene	0.586	0.593	-1.2	92	-0.05	22.60
104	Hexachloroethane	0.877	1.411	-60.9#	154#	-0.05	22.81
105	1,2,4-Trichlorobenzene	0.607	0.710	-17.0	102	-0.06	24.60
106	Naphthalene	1.594	1.241	22.1	81	-0.07	25.01
107	Hexachlorobutadiene	0.906	1.404	-55.0#	146#	-0.06	24.57
108 I	Bromochloromethane (A)	1.000	1.000	0.0	93	-0.09	11.26
109	TVHC as equiv Pentane	11.759	15.347	-30.5#	117	-0.05	6.31

(#) = Out of Range
 5w47671.D m5w1969.M

SPCC's out = 0 CCC's out = 0
 Wed Apr 20 15:08:01 2022

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41819
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2043-CC1969
 Lab FileID: 5W49399.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\5w49399.D
 Acq On : 21 Apr 2022 9:18 am
 Sample : cc1969-10
 Misc : ms57619,v5w2043,,,,,1
 MS Integration Params: Rteint.p

Vial: 2
 Operator: thomash
 Inst : Air5w
 Multiplr: 1.00

Method : C:\msdchem\1\methods\m5w1969.M (RTE Integrator)
 Title : TO-15 Full Scan Mode
 Last Update : Tue Feb 01 13:47:06 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Bromochloromethane	1.000	1.000	0.0	89	-0.09	11.25
2	Freon 152A	0.662	0.738	-11.5	101	0.00	4.37
3	Chlorodifluoromethane	0.360	0.468	-30.0#	121	0.00	4.44
4	Propene	0.829	1.013	-22.2	114	0.00	4.28
5	Chlorotrifluoroethene	1.614	1.608	0.4	91	0.00	4.33
6	Dichlorodifluoromethane	3.935	4.901	-24.5	116	0.00	4.37
7	1-Chloro-1,1-difluoroetha	2.734	3.407	-24.6	114	-0.02	4.76
8	Chloromethane	1.059	1.057	0.2	97	-0.01	4.77
9	Dichlorotetrafluoroethane	3.331	3.975	-19.3	109	-0.01	4.67
10	Vinyl Chloride	1.083	1.157	-6.8	97	-0.02	4.98
11	1,3-Butadiene	0.761	0.770	-1.2	93	-0.02	5.03
12	n-Butane	0.155	0.167	-7.7	92	0.00	4.88
13	Bromomethane	0.877	1.045	-19.2	119	-0.03	5.68
14	Chloroethane	0.482	0.494	-2.5	96	-0.05	5.96
15	Dichlorofluoromethane	2.651	2.967	-11.9	105	-0.06	6.40
16	Acetonitrile	0.859	1.023	-19.1	116	-0.10	9.33
17	Freon 123	2.481	2.643	-6.5	99	-0.07	7.48
18	Freon 123A	1.335	1.300	2.6	89	-0.06	7.36
19	Bromoethene	1.087	1.107	-1.8	94	-0.04	6.22
20	Acrolein	0.454	0.375	17.4	78	-0.08	7.97
21	Trichlorofluoromethane	3.257	3.812	-17.0	107	-0.05	6.30
22	Acetone	0.435	0.434	0.2	90	-0.09	8.53
23	Pentane	0.283	0.249	12.0	83	-0.04	6.32
24	Iodomethane	3.175	3.278	-3.2	95	-0.06	7.63
25	Isopropyl Alcohol	0.373	0.472	-26.5	114	-0.07	8.36
26	1,1-Dichloroethene	1.926	2.029	-5.3	96	-0.06	7.36
27	Freon 113	2.528	2.712	-7.3	98	-0.06	7.48
28	Methylene Chloride	1.037	1.007	2.9	91	-0.07	8.49
29	Carbon Disulfide	3.338	3.423	-2.5	94	-0.06	7.42
30	Ethanol	0.410	0.433	-5.6	101	-0.07	7.25
31	Acrylonitrile	0.759	0.718	5.4	87	-0.10	9.94
32	3-Chloropropene	0.490	0.473	3.5	86	-0.07	8.29
33	trans-1,2-Dichloroethene	1.752	1.778	-1.5	91	-0.07	8.83
34	tert-Butyl Alcohol	2.466	2.226	9.7	84	-0.09	9.19
35	Methyl tert-Butyl Ether	3.298	3.152	4.4	89	-0.07	9.07
36	Vinyl Acetate	2.816	3.136	-11.4	102	-0.09	10.39
37	1,1-Dichloroethane	2.069	2.071	-0.1	91	-0.09	9.94
38	2-Butanone	0.453	0.467	-3.1	87	-0.10	11.86
39	Hexane	0.970	0.828	14.6	80	-0.06	9.05
40	cis-1,2-Dichloroethene	1.661	1.633	1.7	89	-0.09	10.91
41	Di-isopropyl Ether	0.850	0.749	11.9	77	-0.08	9.79
42	Ethyl Acetate	0.323	0.347	-7.4	89	-0.09	11.58

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41819
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2043-CC1969
Lab FileID: 5W49399.D

43	Methyl Acrylate	1.840	1.772	3.7	86	-0.09	11.59
44	Chloroform	2.862	2.939	-2.7	95	-0.09	11.39
45	2,4-Dimethylpentane	2.097	1.758	16.2	82	-0.07	10.11
46	Tetrahydrofuran	0.491	0.518	-5.5	89	-0.09	11.68
47	1,1,1-Trichloroethane	2.890	2.956	-2.3	95	-0.09	11.78
48	1,2-Dichloroethane	1.778	1.825	-2.6	93	-0.10	12.71
49	Benzene	3.544	3.191	10.0	87	-0.09	12.41
50	Carbon Tetrachloride	2.976	3.239	-8.8	95	-0.08	11.69
51	Cyclohexane	1.726	1.453	15.8	79	-0.08	11.35
52	2,3-Dimethylpentane	0.771	0.668	13.4	82	-0.08	11.52
53 I	1,4-Difluorobenzene	1.000	1.000	0.0	90	-0.09	13.44
54	2,2,4-Trimethylpentane	1.448	1.259	13.1	83	-0.07	12.24
55	Heptane	0.289	0.265	8.3	86	-0.07	12.42
56	Trichloroethene	0.298	0.292	2.0	93	-0.09	13.43
57	1,2-Dichloropropane	0.345	0.344	0.3	91	-0.10	14.29
58	Dibromomethane	0.440	0.471	-7.0	102	-0.09	14.13
59	Ethyl Acrylate	0.682	0.644	5.6	84	-0.09	14.30
60	Methyl Methacrylate	0.320	0.303	5.3	84	-0.09	14.66
61	1,4-Dioxane	0.233	0.176	24.5	77	-0.10	14.73
62	Bromodichloromethane	0.802	0.846	-5.5	97	-0.09	14.41
63	cis-1,3-Dichloropropene	0.623	0.536	14.0	82	-0.09	15.51
64	4-Methyl-2-pentanone	0.275	0.249	9.5	79	-0.10	16.57
65	trans-1,3-Dichloropropene	0.588	0.521	11.4	87	-0.10	16.66
66	Toluene	1.138	0.948	16.7	77	-0.09	15.97
67	1,1,2-Trichloroethane	0.410	0.395	3.7	88	-0.10	16.95
68	1,3-Dichloropropane	0.542	0.509	6.1	88	-0.10	17.45
69	2-Hexanone	0.757	0.786	-3.8	104	-0.10	18.10
70	Ethyl Methacrylate	0.533	0.541	-1.5	89	-0.09	16.94
71	Dibromochloromethane	0.822	0.860	-4.6	93	-0.09	17.31
72	Tetrachloroethene	0.618	0.680	-10.0	99	-0.09	16.70
73	1,2-Dibromoethane	0.658	0.624	5.2	86	-0.10	17.75
74	Octane	0.687	0.763	-11.1	94	-0.07	15.69
75	1,1,1,2-Tetrachloroethane	0.539	0.503	6.7	85	-0.09	18.85
76 I	Chlorobenzene-d5	1.000	1.000	0.0	89	-0.10	18.71
77	Chlorobenzene	1.829	1.566	14.4	80	-0.09	18.74
78	Ethylbenzene	2.967	2.652	10.6	83	-0.09	18.79
79	m,p-Xylene	2.225	2.219	0.3	91	-0.09	19.06
80	Styrene	1.564	1.450	7.3	79	-0.08	19.86
81	Nonane	1.531	1.605	-4.8	97	-0.08	18.65
82	o-Xylene	2.363	2.101	11.1	82	-0.08	19.78
83	Bromoform	1.511	2.111	-39.7#	124	-0.08	19.91
84	1,1,2,2-Tetrachloroethane	1.721	1.873	-8.8	100	-0.07	20.97
85	1,2,3-Trichloropropane	1.340	1.508	-12.5	101	-0.07	21.17
86	Isopropylbenzene	3.161	2.895	8.4	83	-0.07	20.29
87	Bromobenzene	1.039	1.112	-7.0	96	-0.07	20.87
88	2-Chlorotoluene	0.761	0.710	6.7	84	-0.07	21.14
89	n-Propylbenzene	0.769	0.715	7.0	79	-0.07	20.92
90 S	4-Bromofluorobenzene	1.264	1.265	-0.1	87	-0.07	20.71
91	4-Ethyltoluene	2.820	2.805	0.5	85	-0.07	21.07
92	1,3,5-Trimethylbenzene	2.349	2.424	-3.2	89	-0.07	21.18
93	alpha-Methylstyrene	1.126	1.152	-2.3	82	-0.07	21.53
94	tert-Butylbenzene	0.523	0.466	10.9	83	-0.06	21.64
95	1,2,4-Trimethylbenzene	2.308	2.342	-1.5	85	-0.06	21.73
96	1,3-Dichlorobenzene	1.443	1.680	-16.4	94	-0.06	22.17
97	1,2,3-trimethylbenzene	2.203	2.344	-6.4	89	-0.06	22.30
98	Benzyl Chloride	0.374	0.465	-24.3	95	-0.06	22.57
99	1,4-Dichlorobenzene	1.374	1.717	-25.0	99	-0.06	22.28
100	sec-Butylbenzene	0.640	0.594	7.2	83	-0.06	21.88

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41819
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V5W2043-CC1969
Lab FileID: 5W49399.D

101	p-Isopropyltoluene	0.723	0.649	10.2	81	-0.06	22.06
102	1,2-Dichlorobenzene	1.254	2.089	-66.6#	132	-0.06	22.81
103	n-Butylbenzene	0.586	0.617	-5.3	91	-0.06	22.60
104	Hexachloroethane	0.877	1.469	-67.5#	152#	-0.06	22.81
105	1,2,4-Trichlorobenzene	0.607	0.800	-31.8#	109	-0.07	24.60
106	Naphthalene	1.594	1.362	14.6	85	-0.07	25.01
107	Hexachlorobutadiene	0.906	1.437	-58.6#	142#	-0.06	24.57
108 I	Bromochloromethane (A)	1.000	1.000	0.0	89	-0.09	11.25
109	TVHC as equiv Pentane	11.759	15.229	-29.5	111	-0.04	6.31

(#) = Out of Range
 5w47671.D m5w1969.M

SPCC's out = 0 CCC's out = 0
 Thu Apr 21 14:11:30 2022

6.9.8
 6

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JD41819

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W2042-BS	5W49370.D	1	04/20/22	TCH	n/a	n/a	V5W2042
V5W2042-BSD	5W49371.D	1	04/20/22	TCH	n/a	n/a	V5W2042

The QC reported here applies to the following samples:

Method: TO-15

JD41819-1, JD41819-2, JD41819-3, JD41819-4, JD41819-5, JD41819-6, JD41819-7, JD41819-8

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone (2-Propanone)	10	9.7	97	9.4	94	3	70-130/30
106-99-0	1,3-Butadiene	10	8.4	84	7.4	74	13	70-130/30
71-43-2	Benzene	10	9.1	91	8.7	87	4	70-130/30
75-27-4	Bromodichloromethane	10	10.8	108	10.7	107	1	70-130/30
75-25-2	Bromoform	10	14.6	146* a	14.2	142* a	3	70-130/30
74-83-9	Bromomethane	10	11.0	110	9.2	92	18	70-130/30
593-60-2	Bromoethene	10	10.2	102	10.3	103	1	70-130/30
100-44-7	Benzyl Chloride	10	11.7	117	11.5	115	2	70-130/30
75-15-0	Carbon disulfide	10	10	100	10.0	100	0	70-130/30
108-90-7	Chlorobenzene	10	8.8	88	8.8	88	0	70-130/30
75-00-3	Chloroethane	10	9.2	92	8.4	84	9	70-130/30
67-66-3	Chloroform	10	10.3	103	10.1	101	2	70-130/30
74-87-3	Chloromethane	10	8.4	84	7.5	75	11	70-130/30
107-05-1	3-Chloropropene	10	9.8	98	9.6	96	2	70-130/30
95-49-8	2-Chlorotoluene	10	9.6	96	9.5	95	1	70-130/30
56-23-5	Carbon tetrachloride	10	11.1	111	10.8	108	3	70-130/30
110-82-7	Cyclohexane	10	8.0	80	7.8	78	3	70-130/30
75-34-3	1,1-Dichloroethane	10	9.5	95	9.5	95	0	70-130/30
75-35-4	1,1-Dichloroethylene	10	10.1	101	9.6	96	5	70-130/30
106-93-4	1,2-Dibromoethane (EDB)	10	9.9	99	9.8	98	1	70-130/30
107-06-2	1,2-Dichloroethane	10	10.4	104	9.6	96	8	70-130/30
78-87-5	1,2-Dichloropropane	10	9.7	97	9.3	93	4	70-130/30
123-91-1	1,4-Dioxane	10	7.9	79	7.7	77	3	70-130/30
75-71-8	Dichlorodifluoromethane	10	11.4	114	11.2	112	2	70-130/30
124-48-1	Dibromochloromethane	10	10.8	108	10.8	108	0	70-130/30
156-60-5	trans-1,2-Dichloroethylene	10	9.5	95	9.4	94	1	70-130/30
156-59-2	cis-1,2-Dichloroethylene	10	9.4	94	9.1	91	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	10	8.7	87	8.6	86	1	70-130/30
541-73-1	m-Dichlorobenzene	10	12.3	123	12.1	121	2	70-130/30
95-50-1	o-Dichlorobenzene	10	15.8	158* a	15.0	150* a	5	70-130/30
106-46-7	p-Dichlorobenzene	10	13.2	132* b	12.9	129	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	10	9.1	91	9.0	90	1	70-130/30
64-17-5	Ethanol	10	10	100	9.6	96	4	70-130/30
100-41-4	Ethylbenzene	10	9.1	91	9.0	90	1	70-130/30
141-78-6	Ethyl Acetate	10	10.1	101	9.9	99	2	70-130/30
622-96-8	4-Ethyltoluene	10	10.2	102	10	100	2	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JD41819

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W2042-BS	5W49370.D	1	04/20/22	TCH	n/a	n/a	V5W2042
V5W2042-BSD	5W49371.D	1	04/20/22	TCH	n/a	n/a	V5W2042

The QC reported here applies to the following samples:

Method: TO-15

JD41819-1, JD41819-2, JD41819-3, JD41819-4, JD41819-5, JD41819-6, JD41819-7, JD41819-8

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
76-13-1	Freon 113	10	10.6	106	10.4	104	2	70-130/30
76-14-2	Freon 114	10	11.3	113	11.0	110	3	70-130/30
142-82-5	Heptane	10	9.2	92	8.9	89	3	70-130/30
87-68-3	Hexachlorobutadiene	10	16.6	166* a	14.9	149* a	11	70-130/30
110-54-3	Hexane	10	8.0	80	7.9	79	1	70-130/30
591-78-6	2-Hexanone	10	10.3	103	9.5	95	8	70-130/30
67-63-0	Isopropyl Alcohol	10	11.9	119	10.8	108	10	70-130/30
75-09-2	Methylene chloride	10	9.6	96	9.6	96	0	70-130/30
78-93-3	Methyl ethyl ketone	10	10	100	9.8	98	2	70-130/30
108-10-1	Methyl Isobutyl Ketone	10	9.1	91	8.9	89	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	10	9.4	94	9.3	93	1	70-130/30
80-62-6	Methylmethacrylate	10	9.7	97	9.7	97	0	70-130/30
115-07-1	Propylene	10	9.9	99	8.4	84	16	70-130/30
100-42-5	Styrene	10	9.6	96	9.4	94	2	70-130/30
71-55-6	1,1,1-Trichloroethane	10	10.5	105	10.3	103	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	10	10.9	109	10.4	104	5	70-130/30
79-00-5	1,1,2-Trichloroethane	10	9.7	97	9.5	95	2	70-130/30
120-82-1	1,2,4-Trichlorobenzene	10	13.9	139* a	13.0	130	7	70-130/30
95-63-6	1,2,4-Trimethylbenzene	10	10.5	105	10.1	101	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	10	10.5	105	10.1	101	4	70-130/30
540-84-1	2,2,4-Trimethylpentane	10	8.4	84	8.3	83	1	70-130/30
75-65-0	Tertiary Butyl Alcohol	10	8.6	86	8.6	86	0	70-130/30
127-18-4	Tetrachloroethylene	10	11.7	117	11.4	114	3	70-130/30
109-99-9	Tetrahydrofuran	10	10.3	103	9.8	98	5	70-130/30
108-88-3	Toluene	10	8.7	87	8.6	86	1	70-130/30
79-01-6	Trichloroethylene	10	9.9	99	9.9	99	0	70-130/30
75-69-4	Trichlorofluoromethane	10	11.4	114	11.1	111	3	70-130/30
75-01-4	Vinyl chloride	10	9.6	96	8.9	89	8	70-130/30
108-05-4	Vinyl Acetate	10	10.7	107	9.9	99	8	70-130/30
	m,p-Xylene	20	19.7	99	19.5	98	1	70-130/30
95-47-6	o-Xylene	10	9.2	92	9.1	91	1	70-130/30
1330-20-7	Xylenes (total)	30	28.9	96	28.6	95	1	70-130/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: JD41819

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W2042-BS	5W49370.D	1	04/20/22	TCH	n/a	n/a	V5W2042
V5W2042-BSD	5W49371.D	1	04/20/22	TCH	n/a	n/a	V5W2042

The QC reported here applies to the following samples:

Method: TO-15

JD41819-1, JD41819-2, JD41819-3, JD41819-4, JD41819-5, JD41819-6, JD41819-7, JD41819-8

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	102%	99%	65-128%

- (a) High percent recovery and no associated positive reported in the QC batch.
(b) Outside in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD41819
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5W2043-BS	5W49400.D	1	04/21/22	TCH	n/a	n/a	V5W2043
V5W2043-BSD	5W49401.D	1	04/21/22	TCH	n/a	n/a	V5W2043

The QC reported here applies to the following samples: Method: TO-15

JD41819-1

CAS No.	Compound	Spike ppbv	BSP ppbv	BSP %	BSD ppbv	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone (2-Propanone)	10	9.3	93	8.9	89	4	70-130/30
64-17-5	Ethanol	10	9.8	98	8.9	89	10	70-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	99%	101%	65-128%

* = Outside of Control Limits.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

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Client Sample ID:	RI-SV-1	Date Sampled:	03/22/22
Lab Sample ID:	JD41819-1	Date Received:	03/23/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A679	Percent Solids:	n/a
Method:	TO-15		
Project:	23-34 Pearl Street, Port Chester, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W49386.D	1	04/20/22 22:31	TCH	n/a	n/a	V5W2042
Run #2	5W49404.D	1	04/21/22 13:51	TCH	n/a	n/a	V5W2043

	Initial Volume
Run #1	100 ml
Run #2	20.0 ml

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	143 ^a	4.0	2.9	ppbv		340 ^a	9.5	6.9	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	5.8	0.80	0.25	ppbv		19	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.40	0.12	ppbv		ND	2.7	0.80	ug/m3
75-25-2	252.8	Bromoform ^b	ND	0.16	0.28	ppbv		ND	1.7	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	8.1	0.80	0.18	ppbv		25	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	ND	0.80	0.36	ppbv		ND	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.16	0.16	ppbv		ND	1.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	1.8	0.80	0.44	ppbv		6.2	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.16	0.24	ppbv		ND	0.63	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.40	0.39	ppbv		ND	3.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	11.5	0.80	0.47	ppbv		41.4	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.59	0.80	0.13	ppbv	J	2.9	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.40	0.21	ppbv		ND	3.4	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.16	0.31	ppbv		ND	0.63	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.40	0.16	ppbv		ND	2.4	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene ^c	ND	0.16	0.62	ppbv		ND	0.96	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene ^d	ND	0.40	0.76	ppbv		ND	2.4	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RI-SV-1
Lab Sample ID: JD41819-1
Matrix: AIR - Soil Vapor Comp. Summa ID: A679
Method: TO-15
Project: 23-34 Pearl Street, Port Chester, NY

Date Sampled: 03/22/22
Date Received: 03/23/22
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	970 ^a	10	7.9	ppbv		1830 ^a	19	15	ug/m3
100-41-4	106.2	Ethylbenzene	1.3	0.80	0.24	ppbv		5.6	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	2.7	0.80	0.42	ppbv		9.7	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.40	0.12	ppbv		ND	3.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.40	0.20	ppbv		ND	2.8	1.4	ug/m3
142-82-5	100.2	Heptane	1.2	0.80	0.37	ppbv		4.9	3.3	1.5	ug/m3
87-68-3	260.8	Hexachlorobutadiene ^c	ND	0.36	0.25	ppbv		ND	3.8	2.7	ug/m3
110-54-3	86.18	Hexane	1.6	0.80	0.45	ppbv		5.6	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	57.4	0.80	0.56	ppbv		141	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.22	ppbv		ND	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	8.0	0.80	0.44	ppbv		24	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	ND	2.0	0.57	ppbv		ND	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.40	0.15	ppbv		ND	2.2	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.40	0.19	ppbv		ND	2.7	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.40	0.15	ppbv		ND	2.2	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene ^d	ND	0.40	0.48	ppbv		ND	3.0	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	1.4	0.80	0.38	ppbv		6.5	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	4.4	0.80	0.37	ppbv		13	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	12.8	0.16	0.056	ppbv		86.8	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	25.3	0.80	0.23	ppbv		95.3	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.076	ppbv		ND	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.40	0.14	ppbv		ND	2.2	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.16	0.28	ppbv		ND	0.41	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	4.2	0.80	0.56	ppbv		18	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	1.7	0.80	0.31	ppbv		7.4	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	5.9	0.80	0.31	ppbv		26	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%	86%	65-128%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SV-1	Date Sampled:	03/22/22
Lab Sample ID:	JD41819-1	Date Received:	03/23/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A679	Percent Solids:	n/a
Method:	TO-15		
Project:	23-34 Pearl Street, Port Chester, NY		

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

- (a) Result is from Run# 2
- (b) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (c) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (d) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

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Client Sample ID:	RI-SV-DUP	Date Sampled:	03/22/22
Lab Sample ID:	JD41819-2	Date Received:	03/23/22
Matrix:	AIR - Soil Vapor Comp. Summa ID: A698	Percent Solids:	n/a
Method:	TO-15		
Project:	23-34 Pearl Street, Port Chester, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5W49387.D	1	04/20/22 23:17	TCH	n/a	n/a	V5W2042
Run #2							

Run #	Initial Volume
Run #1	100 ml
Run #2	

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
67-64-1	58.08	Acetone (2-Propanone)	60.8	0.80	0.58	ppbv		144	1.9	1.4	ug/m3
106-99-0	54.09	1,3-Butadiene	ND	0.80	0.34	ppbv		ND	1.8	0.75	ug/m3
71-43-2	78.11	Benzene	1.9	0.80	0.25	ppbv		6.1	2.6	0.80	ug/m3
75-27-4	163.8	Bromodichloromethane	ND	0.40	0.12	ppbv		ND	2.7	0.80	ug/m3
75-25-2	252.8	Bromoform ^a	ND	0.16	0.28	ppbv		ND	1.7	2.9	ug/m3
74-83-9	94.94	Bromomethane	ND	0.80	0.28	ppbv		ND	3.1	1.1	ug/m3
593-60-2	106.9	Bromoethene	ND	0.80	0.24	ppbv		ND	3.5	1.0	ug/m3
100-44-7	126	Benzyl Chloride	ND	0.80	0.50	ppbv		ND	4.1	2.6	ug/m3
75-15-0	76.14	Carbon disulfide	2.4	0.80	0.18	ppbv		7.5	2.5	0.56	ug/m3
108-90-7	112.6	Chlorobenzene	ND	0.80	0.30	ppbv		ND	3.7	1.4	ug/m3
75-00-3	64.52	Chloroethane	ND	0.80	0.27	ppbv		ND	2.1	0.71	ug/m3
67-66-3	119.4	Chloroform	ND	0.80	0.15	ppbv		ND	3.9	0.73	ug/m3
74-87-3	50.49	Chloromethane	0.49	0.80	0.36	ppbv	J	1.0	1.7	0.74	ug/m3
107-05-1	76.53	3-Chloropropene	ND	0.80	0.33	ppbv		ND	2.5	1.0	ug/m3
95-49-8	126.6	2-Chlorotoluene	ND	0.80	0.29	ppbv		ND	4.1	1.5	ug/m3
56-23-5	153.8	Carbon tetrachloride	ND	0.16	0.16	ppbv		ND	1.0	1.0	ug/m3
110-82-7	84.16	Cyclohexane	0.55	0.80	0.44	ppbv	J	1.9	2.8	1.5	ug/m3
75-34-3	98.96	1,1-Dichloroethane	ND	0.80	0.23	ppbv		ND	3.2	0.93	ug/m3
75-35-4	96.94	1,1-Dichloroethylene	ND	0.16	0.24	ppbv		ND	0.63	0.95	ug/m3
106-93-4	187.9	1,2-Dibromoethane (EDB)	ND	0.40	0.39	ppbv		ND	3.1	3.0	ug/m3
107-06-2	98.96	1,2-Dichloroethane	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
78-87-5	113	1,2-Dichloropropane	ND	0.80	0.25	ppbv		ND	3.7	1.2	ug/m3
123-91-1	88.12	1,4-Dioxane	4.3	0.80	0.47	ppbv		15	2.9	1.7	ug/m3
75-71-8	120.9	Dichlorodifluoromethane	0.57	0.80	0.13	ppbv	J	2.8	4.0	0.64	ug/m3
124-48-1	208.3	Dibromochloromethane	ND	0.40	0.21	ppbv		ND	3.4	1.8	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.28	ppbv		ND	3.2	1.1	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.16	0.31	ppbv		ND	0.63	1.2	ug/m3
10061-01-5	111	cis-1,3-Dichloropropene	ND	0.80	0.25	ppbv		ND	3.6	1.1	ug/m3
541-73-1	147	m-Dichlorobenzene	ND	0.40	0.16	ppbv		ND	2.4	0.96	ug/m3
95-50-1	147	o-Dichlorobenzene ^b	ND	0.16	0.62	ppbv		ND	0.96	3.7	ug/m3
106-46-7	147	p-Dichlorobenzene ^c	ND	0.40	0.76	ppbv		ND	2.4	4.6	ug/m3
10061-02-6	111	trans-1,3-Dichloropropene	ND	0.80	0.40	ppbv		ND	3.6	1.8	ug/m3

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RI-SV-DUP
Lab Sample ID: JD41819-2
Matrix: AIR - Soil Vapor Comp. Summa ID: A698
Method: TO-15
Project: 23-34 Pearl Street, Port Chester, NY

Date Sampled: 03/22/22
Date Received: 03/23/22
Percent Solids: n/a

VOA TO15 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
64-17-5	46.07	Ethanol	644	2.0	1.6	ppbv	E	1210	3.8	3.0	ug/m3
100-41-4	106.2	Ethylbenzene	0.56	0.80	0.24	ppbv	J	2.4	3.5	1.0	ug/m3
141-78-6	88	Ethyl Acetate	3.9	0.80	0.42	ppbv		14	2.9	1.5	ug/m3
622-96-8	120.19	4-Ethyltoluene	ND	0.80	0.38	ppbv		ND	3.9	1.9	ug/m3
76-13-1	187.4	Freon 113	ND	0.40	0.12	ppbv		ND	3.1	0.92	ug/m3
76-14-2	170.9	Freon 114	ND	0.40	0.20	ppbv		ND	2.8	1.4	ug/m3
142-82-5	100.8	Heptane	ND	0.80	0.37	ppbv		ND	3.3	1.5	ug/m3
87-68-3	260.2	Hexachlorobutadiene ^b	ND	0.36	0.25	ppbv		ND	3.8	2.7	ug/m3
110-54-3	86.18	Hexane	0.74	0.80	0.45	ppbv	J	2.6	2.8	1.6	ug/m3
591-78-6	100	2-Hexanone	ND	0.80	0.58	ppbv		ND	3.3	2.4	ug/m3
67-63-0	60.1	Isopropyl Alcohol	23.0	0.80	0.56	ppbv		56.5	2.0	1.4	ug/m3
75-09-2	84.94	Methylene chloride	ND	0.80	0.22	ppbv		ND	2.8	0.76	ug/m3
78-93-3	72.11	Methyl ethyl ketone	2.1	0.80	0.44	ppbv		6.2	2.4	1.3	ug/m3
108-10-1	100.2	Methyl Isobutyl Ketone	ND	0.80	0.29	ppbv		ND	3.3	1.2	ug/m3
1634-04-4	88.15	Methyl Tert Butyl Ether	ND	0.80	0.32	ppbv		ND	2.9	1.2	ug/m3
80-62-6	100.12	Methylmethacrylate	ND	0.80	0.28	ppbv		ND	3.3	1.1	ug/m3
115-07-1	42	Propylene	ND	2.0	0.57	ppbv		ND	3.4	0.98	ug/m3
100-42-5	104.1	Styrene	ND	0.80	0.47	ppbv		ND	3.4	2.0	ug/m3
71-55-6	133.4	1,1,1-Trichloroethane	ND	0.40	0.15	ppbv		ND	2.2	0.82	ug/m3
79-34-5	167.85	1,1,2,2-Tetrachloroethane	ND	0.40	0.19	ppbv		ND	2.7	1.3	ug/m3
79-00-5	133.4	1,1,2-Trichloroethane	ND	0.40	0.15	ppbv		ND	2.2	0.82	ug/m3
120-82-1	181.5	1,2,4-Trichlorobenzene ^c	ND	0.40	0.48	ppbv		ND	3.0	3.6	ug/m3
95-63-6	120.19	1,2,4-Trimethylbenzene	ND	0.80	0.35	ppbv		ND	3.9	1.7	ug/m3
108-67-8	120.19	1,3,5-Trimethylbenzene	ND	0.80	0.32	ppbv		ND	3.9	1.6	ug/m3
540-84-1	114.2	2,2,4-Trimethylpentane	0.43	0.80	0.38	ppbv	J	2.0	3.7	1.8	ug/m3
75-65-0	74.12	Tertiary Butyl Alcohol	1.1	0.80	0.37	ppbv		3.3	2.4	1.1	ug/m3
127-18-4	165.8	Tetrachloroethylene	8.6	0.16	0.056	ppbv		58	1.1	0.38	ug/m3
109-99-9	72.11	Tetrahydrofuran	ND	0.80	0.36	ppbv		ND	2.4	1.1	ug/m3
108-88-3	92.14	Toluene	7.4	0.80	0.23	ppbv		28	3.0	0.87	ug/m3
79-01-6	131.4	Trichloroethylene	1.0	0.16	0.076	ppbv		5.4	0.86	0.41	ug/m3
75-69-4	137.4	Trichlorofluoromethane	ND	0.40	0.14	ppbv		ND	2.2	0.79	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.16	0.28	ppbv		ND	0.41	0.72	ug/m3
108-05-4	86	Vinyl Acetate	ND	0.80	0.45	ppbv		ND	2.8	1.6	ug/m3
	106.2	m,p-Xylene	2.1	0.80	0.56	ppbv		9.1	3.5	2.4	ug/m3
95-47-6	106.2	o-Xylene	0.89	0.80	0.31	ppbv		3.9	3.5	1.3	ug/m3
1330-20-7	106.2	Xylenes (total)	3.0	0.80	0.31	ppbv		13	3.5	1.3	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		65-128%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SV-DUP		
Lab Sample ID:	JD41819-2	Date Sampled:	03/22/22
Matrix:	AIR - Soil Vapor Comp.	Date Received:	03/23/22
Method:	TO-15	Percent Solids:	n/a
Project:	23-34 Pearl Street, Port Chester, NY		

VOA T015 List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units

- Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

Date: June 19th, 2022

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD41894**

Client Project ID: 12123:6 – 23-34 Pearl Street, Port Chester, NY

Dear Mr. Noonan,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD41894 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-12123:6 – 23-34 Pearl Street, Port Chester, NY- JD41894

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 23-34 Pearl Street, Port Chester, NY

SGS North America Inc.

Laboratory (SDG) # JD41894

Project No. 12123:6

Prepared for:

Mr. Joseph R. Noonan, Staff Engineer
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.
Data Validation and Forensic Geochemistry Expert

On

June 19th, 2022

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 5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
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- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification

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IDL	Instrument Detection Limit
IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008

6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD41894

NYS DEC Data Usability Summary Report

SDG # JD41894

Site Location	12123:6 – 23-34 Pearl Street, Port Chester, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank, 1 Trip Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41894 (1-1A-2-2A-3-3A-4-4A-5-5A-6-6A-7-7A-8-8A-9-9A-10-10A-11-11A-12-12A-13-13A-14-14A-15-15A-16-16A-17-17A-18-18A-19-19A-20-20A-21-21A-22-22A-23-23A-24-24A)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

• SAMPLE HANDLING AND MANAGEMENT

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on 03/23/2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on 03/24/2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification (organics/Inorganics)	Laboratory Sample Identification (PFAS)
RI-SB2(0.5-1)	JD41894-1	JD41894-1A
RI-SB2(4.5-5)	JD41894-2	JD41894-2A
RI-SB2(9.5-10.0)	JD41894-3	JD41894-3A
RI-SB2(13-13.5)	JD41894-4	JD41894-4A
RI-SB4(0.5-1)	JD41894-5	JD41894-5A
RI-SB4(4.5-5)	JD41894-6	JD41894-6A
RI-SB4(9.5-10)	JD41894-7	JD41894-7A
RI-SB3(0.5-1)	JD41894-8	JD41894-8A
RI-SB3(4.5-5)	JD41894-9	JD41894-9A
RI-SB3(9.5-10)	JD41894-10	JD41894-10A
RI-SB8(0.5-1)	JD41894-11	JD41894-11A

RI-SB8(4.5-5)	JD41894-12	JD41894-12A
RI-SB8(7-7.5)	JD41894-13	JD41894-13A
RI-SB5(0.5-1)	JD41894-14	JD41894-14A
RI-SB5(4.5-5)	JD41894-15	JD41894-15A
RI-SB5(9-9.5)	JD41894-16	JD41894-16A
RI-SS1	JD41894-17	JD41894-17A
RI-SS2	JD41894-18	JD41894-18A
RI-SS3	JD41894-19	JD41894-19A
DUP3	JD41894-20	JD41894-20A
MW-1	JD41894-21	JD41894-21A
MW-3	JD41894-22	JD41894-22A
FB	JD41894-23	JD41894-23A
TB	JD41894-24	JD41894-24A

- **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

• **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of 1,3-butadiene, Hexane, t-Butyl Formate, Iso-Butyl alcohol, n-Butyl alcohol, Iodomethane, in the associated samples, RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SS1/JD41894-17, should be qualified estimated (J). -Detected results of Tetrahydrofuran, in the associated samples, MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, TB/JD41894-24, should be qualified estimated (J). -Detected results of Chlorodifluoromethane, 1,3-butadiene, in the associated sample, RI-SB8(7-7.5)/JD41894-13, should be qualified estimated (J).	ICV
2	-Detected results of Ethanol, 1,4-Dioxane, 1,3-Butadiene, Acrolein, Iodomethane, Acrylonitrile, tert Amyl alcohol, n-Butyl alcohol, 3-Methyl-1-butanol, in the associated samples, RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SS1/JD41894-17, should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Acrolein, Acetone, Hexane, Naphthalene, 2-Methylnaphthalene, n-Butyl alcohol, 3-Methyl-1-butanol, in the associated samples, MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, TB/JD41894-24, should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, tert-Butyl Formate, Isobutyl alcohol, tert-Amyl alcohol, 2-Nitropropane, 3-Methyl-1-butanol, Hexachlorobutadiene, in the associated samples, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-	CCV

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	SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified estimated (J). -Detected results of Chloromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, 2-Butanone, 2,2,4-Trimethylpentane, 2-Nitropropane, Butyl acetate, Butyl acrylate, n-Amyl acetate, Naphthalene, 1,2,3-Trichlorobenzene, in the associated sample, RI-SB8(7-7.5)/JD41894-13, should be qualified estimated (J).	
3	-Detected results of target VOCs compounds in sample RI-SB8(7-7.5)/JD41894-13, should be qualified Estimated Bias High (J+).	SR
4	-Detected results of Trichlorofluoromethane, in samples RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, must be qualified estimated-Bias High (J+). -Detected results of 1,2,3-Trichlorobenzene, in sample RI-SB8(7-7.5)/JD41894-13, must be qualified estimated-Bias High (J+).	LCS

✓ Semi-Volatile Organic Compounds – SW846 8270E Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Pentachloronitrobenzene, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SS1/JD41894-17, RI-SS2/JD41894-18, should be considered Estimated (J).	ICV
2	-Detected results of Pentachloronitrobenzene, Hexachlorocyclopentadiene, 4-Nitrophenol, Pentachlorophenol, Benzidine, Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Benzo[g,h,i]perylene, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SS1/JD41894-17, RI-SS2/JD41894-18, should be qualified Estimated (J). -Detected results of Benzoic acid, 2,4-Dinitrophenol, Benzidine, in samples RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (J).	CCV

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3	-Detected results of 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated Bias Low (J-). -Non-Detected results of 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated (UJ). -Detected results of 4-Nitrophenol, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated (J).	LCS
4	-Detected results of Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, bis(2-Ethylhexyl)phthalate, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, in samples RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (J).	DUP
5	-Detected results of Acetophenone, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-). -Non-Detected results of Acetophenone, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, in sample RI-SS1/JD41894-17, should be qualified Estimated (UJ).	MS/MSD

✓ Pesticides - SW846 8081B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of alpha-BHC (1.1 ug/kg), 4,4'-DDE (1.32 ug/kg), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be reported Not Detected (U). -Detected results of 4,4'-DDT (22.6 ug/kg), that are less than the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-	Blank

	1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be qualified Unusable (R). -Detected results of 4,4'-DDT (45.2 ug/kg), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be Reported Not Detected (U). -Detected results of 4,4'-DDD (1.4 ug/kg), 4,4'-DDE (1.28 ug/kg), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be reported Not Detected (U). -Detected results of 4,4'-DDT (23.9 ug/kg), that are less than the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Unusable (R). -Detected results of 4,4'-DDT (47.8 ug/kg), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be Reported Not Detected (U). -Detected results of alpha-BHC (0.78 ug/L), beta-BHC (0.134 ug/L), delta-BHC (0.04 ug/L), gamma-BHC (Lindane 0.114 ug/L), 4,4'-DDD (0.26 ug/L), 4,4'-DDE (0.26 ug/L), that are less than 2X the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be reported Not Detected (U). -Detected results of 4,4'-DDT (5.6 ug/L), that are less than the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Unusable (R). -Detected results of 4,4'-DDT (11.2 ug/L), that are less than 2X the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be Reported Not Detected (U).	
2	-Detected results of 4,4'-DDT, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-	LCS

	5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias-High (J+). -Detected results of Endrin aldehyde, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias-Low (J-). -Non-Detected results of Endrin aldehyde, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (UJ). -Detected results of alpha-BHC, beta-BHC, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated Bias-High (J+).	
3	-Detected results of 4,4'-DDT, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias-High (J+).	MS/MSD

✓ **Polychlorinated Biphenyls (PCBs) – SW846 8082A Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Aroclor 1254, Aroclor 1260, in sample DUP3/JD41894-20, should be qualified Estimated Bias-High (J+). -Non-Detected results of Aroclor 1254, Aroclor 1260, in sample RI-SS3/JD41894-19, should be qualified Estimated (UJ).	DUP

✓ **PFAS-NYSDEC Target List - EPA 537M Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	Data Group was in compliance with the method requirements.	ALL

✓ TAL Metals - SW846 6010D, 7471B Methods

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Antimony, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias Low (J-). -Non-Detected results of Antimony, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20,, should be qualified Estimated (UJ). -Detected results of Magnesium, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias High (J+). -Detected results of Calcium, Iron, Manganese, Potassium, in samples RI-SB4(4.5-5)/JD41894-6, should be qualified Estimated Bias High (J+). -Detected results of Target Metals, in sample RI-SB4(4.5-5)/JD41894-6, should be qualified Estimated (J). -Detected results of Manganese, Potassium, Zinc, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-). -Non-Detected results of Manganese, Zinc, in sample RI-SS1/JD41894-17, should be qualified Estimated (UJ).	SSR

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	-Non-Detected results of Potassium, in sample RI-SS1/JD41894-17, should be qualified Unusable (R).	

✓ Cyanide - SW846 9012B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-). -Non-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SS1/JD41894-17, should be qualified Estimated (UJ).	MS/MSD
2	-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, should be qualified Estimated (J).	DUP

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank, 1 Trip Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41894 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V1C7993-ICC7993 analyzed on 01/11/2022, the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*Mean RRFs for 1,3-butadiene, Hexane, t-Butyl Formate, Iso-Butyl alcohol, n-Butyl alcohol, were below the allowable minimum. Iodomethane, failed Initial Calibration Criteria for %RSDs, where %RSDs was above the allowable maximum.

-In the initial calibration reference sample: V2B8596-ICC8596 analyzed on 03/03/2022, the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*Mean RRFs for Tetrahydrofuran, were below the allowable minimum.

-In the initial calibration reference sample: V3C7629-ICC7629 analyzed on 02/04/2022, the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria.

-In the initial calibration reference sample: VD11224-ICC11224 analyzed on 11/09/2021, the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

*Mean RRFs for Chlorodifluoromethane, 1,3-butadiene, were below the allowable minimum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of 1,3-butadiene, Hexane, t-Butyl Formate, Iso-Butyl alcohol, n-Butyl alcohol, Iodomethane, in the associated samples, RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SS1/JD41894-17, should be qualified estimated (J).

-Detected results of Tetrahydrofuran, in the associated samples, MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, TB/JD41894-24, should be qualified estimated (J).

-Detected results of Chlorodifluoromethane, 1,3-butadiene, in the associated sample, RI-SB8(7-7.5)/JD41894-13, should be qualified estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:
 - The continuing calibration reference sample: V1C8048-CC7993, analyzed on 03/26/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, 1,3-Butadiene, Acrolein, Iodomethane, Acrylonitrile, Where %Ds were above the method allowable maximums. RRFs for tert Amyl alcohol, n-Butyl alcohol, 3-Methyl-1-butanol, were below the allowable minimum.
 - The continuing calibration reference sample: V2B8642-CC8596, analyzed on 03/29/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Acrolein,

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Acetone, Hexane, Naphthalene, 2-Methylnaphthalene, Where %Ds were above the method allowable maximums. RRFS for n-Butyl alcohol, 3-Methyl-1-butanol, were below the allowable minimum.

-The continuing calibration reference sample: V3C7677-CC7629, analyzed on 03/28/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, tert-Butyl Formate, Isobutyl alcohol, tert-Amyl alcohol, 2-Nitropropane, 3-Methyl-1-butanol, Hexachlorobutadiene, Where %Ds were above the method allowable maximums.

-The continuing calibration reference sample: VD11380-CC11224, analyzed on 03/29/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Chloromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, 2-Butanone, 2,2,4-Trimethylpentane, 2-Nitropropane, Butyl acetate, Butyl acrylate, n-Amyl acetate, Naphthalene, 1,2,3-Trichlorobenzene, Where %Ds were above the method allowable maximums.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Ethanol, 1,4-Dioxane, 1,3-Butadiene, Acrolein, Iodomethane, Acrylonitrile, tert Amyl alcohol, n-Butyl alcohol, 3-Methyl-1-butanol, in the associated samples, RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SS1/JD41894-17, should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Acrolein, Acetone, Hexane, Naphthalene, 2-Methylnaphthalene, n-Butyl alcohol, 3-Methyl-1-butanol, in the associated samples, MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, TB/JD41894-24, should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, tert-Butyl Formate, Isobutyl alcohol, tert-Amyl alcohol, 2-Nitropropane, 3-Methyl-1-butanol, Hexachlorobutadiene, in the associated samples, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified estimated (J).

-Detected results of Chloromethane, 1,3-Butadiene, Trichlorofluoromethane, Hexane, 2-Butanone, 2,2,4-Trimethylpentane, 2-Nitropropane, Butyl acetate, Butyl acrylate, n-Amyl acetate, Naphthalene, 1,2,3-Trichlorobenzene, in the associated sample, RI-SB8(7-7.5)/JD41894-13, should be qualified estimated (J).

- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample

reference: V1C8048-MB, on 03/26/2022, V3C7677-MB, on 03/28/2022, V2B8642-MB, VD11380-MB, on 03/30/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples, EXCEPT:
 - In sample RI-SB8(7-7.5)/JD41894-13, %Rs of Surrogate standard 4-Bromofluorobenzene, was above control limits.

Quality Judgement:

-Detected results of target VOCs compounds in sample RI-SB8(7-7.5)/JD41894-13, should be qualified Estimated Bias High (J+).

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:
 - In LCS IDs# V3C7677-BS, on 03/28/2022, %Rs for all target compounds were within method control limits, EXCEPT:
 - *%Rs of Trichlorofluoromethane, was above control limit.
 - In LCS IDs# V2B8642-BS, on 03/29/2022, %Rs for all target compounds were within method control limits.
 - In LCS IDs# VD11380-BS, on 03/29/2022, %Rs for all target compounds were within method control limits, EXCEPT:
 - *%Rs of 1,2,3-Trichlorobenzene, was above control limit.
 - In LCS IDs# V1C8048-BS, LCS DUP# V1C8048-BSD on 03/26/2022, %Rs for all target compounds were within method control limits. %RPDS were below the allowable maximum.

Quality Judgement:

-Detected results of Trichlorofluoromethane, in samples RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, must be qualified estimated-Bias High (J+).
-Detected results of 1,2,3-Trichlorobenzene, in sample RI-SB8(7-7.5)/JD41894-13, must be qualified estimated-Bias High (J+).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, both a laboratory duplicate analyzes and a Field Duplicate sample were analyzed in this samples group. The following summarizes this evaluation:

Laboratory Duplicate:

-Sample RI-SB4(9.5-10)/JD41894-7, was analyzed for laboratory duplicate (JD41894-7DUP): %RPDs of all target compounds were not calculated due to no detection of target VOCs compounds that was reported in such sample.

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of all target VOCs compounds were not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
 - Sample RI-SB4(4.5-5)/JD41894-6, was analyzed for matrix spike (JD41894-6MS): %Rs of all target compounds were within method control limits.
 - Sample RI-SS1/JD41894-17, was analyzed for matrix spike and matrix spike duplicate (JD41894-17MS, JD41894-17MSD): %Rs of all target compounds were within method control limits. %RPDS were below the allowable maximum.

NOTE: The laboratory analyzed additional Matrix Spike processes using few samples that are out of this samples set:

*In JD41985-1MS, JD41985-1MSD, %Rs were within method control limits. %RPDs were below the allowable maximum.

*In JD41837-1MS, JD41837-1MSD, %Rs were within method control limits. %RPDs were below the allowable maximum, EXCEPT:

%Rs for Chlorobenzene, was below control limit. %Rs for other target analytes were within control limits as required by the ASP B rules. %RPDs were below the allowable maximum as required by ASP B rules.

Quality Judgement: No Actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of E2P4763-ICC4763 on 02/28/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for

Pentachloronitrobenzene, where Mean RRF was below the allowable minimum. %RSDs were below the allowable maximum. The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EF8913-ICC8913, on 11/10/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EM7725-ICC7725, on 03/22/2022, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SS1/JD41894-17, RI-SS2/JD41894-18, should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:
 - The continuing calibration (Sample: E2P4801-CC4763, E2P4801-CC4764, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, where RRFs was below the allowable minimum. %Ds were below the allowable maximums, EXCEPT for Hexachlorocyclopentadiene, 4-Nitrophenol, Pentachlorophenol, Benzidine, Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Benzo[g,h,i]perylene, where %Ds were above the allowable maximum.
 - The continuing calibration (Sample: EF9059-CC8913, EF9059-CC8914, on 03/30/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds, were below the allowable maximums.
 - The continuing calibration (Sample: EM7733-CC7725, EM7733-CC7726, on 03/29/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums, EXCEPT for Benzoic acid, 2,4-Dinitrophenol, Benzidine, where %Ds were above the allowable maximum.
 - The continuing calibration (Sample: EM7735-CC7725, EM7735-CC7726, on 03/31/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums, EXCEPT for Benzoic acid, 2,4-Dinitrophenol, Benzidine, where %Ds were above the allowable maximum.

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No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, Hexachlorocyclopentadiene, 4-Nitrophenol, Pentachlorophenol, Benzidine, Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Benzo[g,h,i]perylene, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SS1/JD41894-17, RI-SS2/JD41894-18, should be qualified Estimated (J).

-Detected results of Benzoic acid, 2,4-Dinitrophenol, Benzidine, in samples RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, in OP38845-MB1, OP38845-MB1, on 03/29/2022, OP38821-MB1, on 03/30/2022, OP38821-MB1, on 03/31/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP38845-BS1, on 03/29/2022, Percent recoveries (%Rs) for all target compounds were within method control limits.

-In LCS OP38821-BS1, on 03/30/2022, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT:

%Rs for 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, were below method control limits.

-In LCSDUP OP38821-BSD, on 03/30/2022, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT:

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%Rs for 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, were below method control limits. %RPDs for 2,4-Dimethylphenol, 4-Nitrophenol, were above the allowable maximum.

Quality Judgement:

-Detected results of 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated Bias Low (J-).
-Non-Detected results of 2-Chlorophenol, 4-Chloro-3-methyl phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Methylphenol, 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Hexachlorocyclopentadiene, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated (UJ).
-Detected results of 4-Nitrophenol, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated (J).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.

A Field Duplicate sample was analyzed in this samples group. The following summarizes this evaluation:

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of all target compounds above the reporting limits (RL), are calculated below:

Detected Target SVOCs Compound > RL	DUP3 JD41894-20 (ug/kg)	RI-SS3 JD41894-19 (ug/kg)	%RPDs
Acenaphthene	<38	66.9	NC
Acenaphthylene	<38	55.4	NC
Anthracene	25.6J	180	150
Benzo(a)anthracene	79.6	319	120
Benzo(a)pyrene	87.5	315	113
Benzo(b)fluoranthene	138	413	99.8
Benzo(g,h,i)perylene	80.9	210	88.8
Benzo(k)fluoranthene	54.7	164	100
Chrysene	108	359	108
Dibenzo(a,h)anthracene	22.6J	64.7	96
bis(2-Ethylhexyl)phthalate	412	35.0J	169
Fluoranthene	180	703	118
Fluorene	<38	69.3	NC
Indeno(1,2,3-cd)pyrene	94.5	261	94
Phenanthrene	123	741	143
Pyrene	151	567	116

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%RPDs for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, bis(2-Ethylhexyl)phthalate, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, were above the allowable maximum.

Quality Judgement:

-Detected results of Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, bis(2-Ethylhexyl)phthalate, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene, in samples RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (J).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
 - A Matrix spike/Matrix spike duplicate were performed in sample RI-SS1/JD41894-17.
 - * In MS OP38845-MS, % Rs for target compounds were within control limits, EXCEPT for 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, where %Rs were below control limits.
 - * In MSDUP OP38845-MSD, % Rs for target compounds were within control limits, EXCEPT for Acetophenone, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, where %Rs were below control limits. %RPDS for Acetophenone, 3,3'-Dichlorobenzidine, were above the allowable maximum.

Quality Judgement:

-Detected results of Acetophenone, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Acetophenone, 3,3'-Dichlorobenzidine, Hexachlorocyclopentadiene, in sample RI-SS1/JD41894-17, should be qualified Estimated (UJ).

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: G4G3719-ICC3719, on 03/23/2022, %RSDs for pesticides target compounds, were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G4G3726-CC3719, G4G3727-CC3719, on 03/31/2022, G4G3730-CC3719, on 04/03/2022), Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G4G3729-CC3719, on 04/01/2022, %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT: %Ds for Heptachlor Epoxide (Column 1), was above the allowable maximum.

-In continuing calibration (G4G3729-CC3719, on 04/01/2022, %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT: %Ds for Alachlor (Column 1), was above the allowable maximum.

-In continuing calibration (G4G3731-CC3719, on 04/03/2022, %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT: %Ds for delta-BHC, Heptachlor Epoxide, gamma-Chlordane (Column 1), was above the allowable maximum.

-In continuing calibration (G4G3732-CC3719, on 04/05/2022, %Ds for all pesticides target compounds were below the allowable maximums. %Areas for 75% of target Pesticides compounds (Column 1), were above the allowable maximum.

-In continuing calibration (G4G3733-CC3719, on 04/05/2022, %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT: %Ds for Heptachlor Epoxide, (Column 1), was above the allowable maximum.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds, EXCEPT:
 - *In Blank OP38834-MB1, on 03/31/2022, a detection of alpha-BHC (0.55J ug/kg), 4,4'-DDE (0.66J ug/kg), 4,4'-DDT (22.6 ug/kg), has been reported.
 - *In Blank OP38834-MB1, on 04/01/2022, a detection of 4,4'-DDD (0.70 ug/kg), 4,4'-DDE (0.64J ug/kg), 4,4'-DDT (23.9 ug/kg), has been reported.
 - *In Blank OP38850-MB1, on 04/03/2022, a detection of alpha-BHC (0.39 ug/L), beta-BHC (0.067 ug/L), delta-BHC (0.02 ug/L), gamma-BHC (Lindane 0.057 ug/L), 4,4'-DDD (0.13 ug/L), 4,4'-DDE (0.13 ug/L), 4,4'-DDT (5.6 ug/L), has been reported.

Quality Judgement:

-Detected results of alpha-BHC (1.1 ug/kg), 4,4'-DDE (1.32 ug/kg), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be reported Not Detected (U).

-Detected results of 4,4'-DDT (22.6 ug/kg), that are less than the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-

SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be qualified Unusable (R). -Detected results of 4,4'-DDT (**45.2 ug/kg**), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, should be Reported Not Detected (U).

-Detected results of 4,4'-DDD (**1.4 ug/kg**), 4,4'-DDE (**1.28 ug/kg**), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be reported Not Detected (U).

-Detected results of 4,4'-DDT (**23.9 ug/kg**), that are less than the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Unusable (R).

-Detected results of 4,4'-DDT (**47.8 ug/kg**), that are less than 2X the blank concentration as indicated in Bold, in samples RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be Reported Not Detected (U).

-Detected results of alpha-BHC (**0.78 ug/L**), beta-BHC (**0.134 ug/L**), delta-BHC (**0.04 ug/L**), gamma-BHC (Lindane **0.114 ug/L**), 4,4'-DDD (**0.26 ug/L**), 4,4'-DDE (**0.26 ug/L**), that are less than 2X the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be reported Not Detected (U).

-Detected results of 4,4'-DDT (**5.6 ug/L**), that are less than the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Unusable (R).

-Detected results of 4,4'-DDT (**11.2 ug/L**), that are less than 2X the blank concentration as indicated in Bold, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be Reported Not Detected (U).

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
-In LCS (OP38834-BS1, on 03/31/2022), %Rs for 4,4'-DDT, was above the method control limits.

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-In LCS (OP38834-BS1, on 04/01/2022), %Rs for 4,4'-DDT, was above method control limits. %Rs for Endrin aldehyde, was below control limit.

-In LCS (OP38850-BS1, on 04/03/2022), %Rs for alpha-BHC, beta-BHC, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, were above method control limits.

Quality Judgement:

-Detected results of 4,4'-DDT, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias-High (J+).

-Detected results of Endrin aldehyde, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Endrin aldehyde, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated (UJ).

-Detected results of alpha-BHC, beta-BHC, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, in samples MW-1/JD41894-21, MW-3/JD41894-22, FB/JD41894-23, should be qualified Estimated Bias-High (J+).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SS1/JD41894-17. The following summarizes MS/MSD evaluation:

-In MS sample OP38834-MS, %Rs for 4,4'-DDT, was above control limits.

-In MSD sample OP38834-MSD, %Rs for were within control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of 4,4'-DDT, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias-High (J+).

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- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.

A Field Duplicate sample was analyzed in this samples group. The following summarizes this evaluation:

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of all target compounds above the reporting limits (RL), are not calculated due to severe blank contamination.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of G2G5613-ICC5613, on 03/17/2022, %RSDs for all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: G2G5630-CC5613, on 04/01/2022, G2G5631-CC5613, on 04/03/2022 and 04/04/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38848-MB1, on 04/01/2022, OP38835-MB1 analyzed on 04/03/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
-In LCS (OP38835-BS1 on 04/03/2022), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
-In LCS (OP38848-BS1 on 04/01/2022), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, no laboratory duplicate was analyzed in this samples group.
A Field Duplicate sample was analyzed in this samples group. The following summarizes this evaluation:

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of all target compounds above the reporting limits (RL), are calculated below:

Detected Target PCBs Compound > RL	DUP3 JD41894-20 (ug/kg)	RI-SS3 JD41894-19 (ug/kg)	%RPDs
Aroclor 1254	205	<37	NC
Aroclor 1260	55.6	<37	NC

%RPDs for Aroclor 1254, Aroclor 1260, were not calculated due to Non detection of PCBs compounds in the original sample.

Quality Judgement:

-Detected results of Aroclor 1254, Aroclor 1260, in sample DUP3/JD41894-20, should be qualified Estimated Bias-High (J+).

-Non-Detected results of Aroclor 1254, Aroclor 1260, in sample RI-SS3/JD41894-19, should be qualified Estimated (UJ).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SS1/JD41894-17. The following summarizes MS/MSD evaluation:
-%Rs for target aroclor compounds in OP38835-MS, OP38835-MSD, were within method control limits. %RPDs were below the allowable maximum.
Quality Judgement: No actions are required.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank, 1 Trip Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1A-2A-3A-4A-5A-6A-7A-8A-9A-10A-11A-12A-13A-14A-15A-16A-17A-18A-19A-20A-21A-22A-23A-24A)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
 -The initial calibration methods used in this data set, sample reference ID: S3Q784-ICC784 on 03/28/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:
-In continuing calibration laboratory reference IDs: S3Q786-CC784, S3Q788-CC784, analyzed on 03/28/2022, %Ds for target PFAS compounds below the allowable maximum.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S3Q786-IBLK, OP90452-MB, OP90438-MB, on 03/31/2022, S3Q788-IBLK, OP90553-MB, on 04/04/2022.
Quality Judgement: No actions are required.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
- Isotope Dilution Standard Recoveries (%Rs) of 18 spiked surrogate standards in all samples of this set, were within the method control limits.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
-In LCS OP90438-BS analyzed on 03/31/2022, OP90452-BS, on 03/31/2022, OP90553-BS, on 04/04/2022, %Rs of all target PFAS compounds were within the method control limits.
Quality Judgement: No actions are required.
- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).
-No forms or data were provided.
Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a sample MW-1/JD41894-21A was analyzed as a laboratory duplicate (OP90452-DUP): %RPDs of PFAS target compounds were below the allowable maximum.

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A Field Duplicate sample was analyzed in this samples group. The following summarizes this evaluation:

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20A that is originated from RI-SS3/JD41894-19A, %RPDs of all target PFAS that displayed detection above the reporting limits, are calculated as indicated below:

Detected PFAS Compound > RL	DUP3 JD41894-20A (ug/kg)	RI-SS3 JD41894-19A (ug/kg)	%RPDs
Perfluorooctanesulfonic acid	1.8	1.6	11.8

%RPDs for Perfluorooctanesulfonic acid, was below the allowable maximum (<30%).

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** A Matrix spike/Matrix spike duplicate were performed in sample RI-SS1/JD41894-17A. The following summarizes MS/MSD evaluation:
 - In OP90438-MS, %Rs for target PFAS compounds were within method control limits.
 - In OP90438-MSD, %Rs for target PFAS compounds were within method control limits.%RPDs were below the allowable maximum.

Note: Laboratory analyzed another matrix spike from out of samples set source. %Rs of target PFAS compounds in OP90452-MS, were within method control limits.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SD032522M1.ICP, analyzed on 03/25/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC032822M1.ICP, analyzed on 03/28/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SF032922M1.ICP, analyzed on 03/29/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SD033022M1.ICP, analyzed on 03/30/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC033122M1.ICP, analyzed on 03/31/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SE040122M1.ICP, analyzed on 04/01/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.

Quality Judgement: No actions are required.

- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD032522M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/25/2022, %Rs for total target metals in (CR1A CR1D CR12 CR1D1), were within method control limits (70-130%).

-In File ID: SC032822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/28/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).

-In File ID: SF032922M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/29/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).

-In File ID: SD033022M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/30/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).

-In File ID: SC033122M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 03/31/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).

-In File ID: SE040122M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), analyzed on 04/01/2022, %Rs for total target metals in (CRIA CRID CRI2 CRID1), were within method control limits (70-130%).

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SD032522M1.ICP, on 03/25/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SC032822M1.ICP, on 03/28/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SF032922M1.ICP, on 03/29/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SD033022M1.ICP, on 03/30/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SC033122M1.ICP, on 03/31/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SE040122M1.ICP, on 04/01/2022, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - In File ID: SD032522M1.ICP, analyzed on 03/25/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.
 - In File ID: SC032822M1.ICP, analyzed on 03/28/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.
 - In File ID: SF032922M1.ICP, analyzed on 03/29/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.
 - In File ID: SD033022M1.ICP, analyzed on 03/30/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.

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-In File ID: SC033122M1.ICP, analyzed on 03/31/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.

-In File ID: SE040122M1.ICP, analyzed on 04/01/2022, %Rs for target metals (EPA 6010D), in (ICSA ICSAB ICSA1 ICSAB1), were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:

-In LCS QC Batch ID: MP31929, on 03/24/2022, (EPA 6010D) for total metals, %Rs for target Metals, were within the method control limits.

-In LCS QC Batch ID: MP31934, on 03/26/2022, (EPA 6010D) for total metals, %Rs for target Metals, were within the method control limits.

Quality Judgement: No actions are required.

- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:

-In QC Batch ID: MP31929, sample RI-SB4(4.5-5)/JD41894-6, was analyzed for matrix spike and matrix spike duplicate evaluation:

*In MS sample, %Rs for Antimony, was below control limits. %Rs for Iron, Magnesium, Manganese, were above control limits.

*In MSD sample, %Rs for Antimony, was below control limits. %Rs for Calcium, Iron, Magnesium, Manganese, Potassium, were above control limits. %RPDs for all target metals were above the allowable maximum.

-In QC Batch ID: MP31929, sample RI-SS1/JD41894-17, was analyzed for matrix spike and matrix spike duplicate evaluation:

*In MS sample, %Rs for Antimony, Manganese, Potassium, Zinc, were below control limits. %Rs for Magnesium, was above control limits.

*In MSD sample, %Rs for Antimony, Manganese, were below control limits. %Rs for Magnesium, was above control limits. %RPDs for all target metals were below the allowable maximum. %Rs for Potassium was below control limit and <30%.

In QC Batch ID: MP31934, out of group Aqueous sample JD41762-16F, was analyzed for matrix spike and matrix spike duplicate evaluation:

*In MS sample, MSD, samples, %Rs for target metals were within method control limits. %RPDs for all target metals were below the allowable maximum.

Quality Judgement:

-Detected results of Antimony, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-

1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Antimony, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20,, should be qualified Estimated (UJ).

-Detected results of Magnesium, in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SB2(9.5-10.0)/JD41894-3, RI-SB2(13-13.5)/JD41894-4, RI-SB4(0.5-1)/JD41894-5, RI-SB4(4.5-5)/JD41894-6, RI-SB4(9.5-10)/JD41894-7, RI-SB3(0.5-1)/JD41894-8, RI-SB3(4.5-5)/JD41894-9, RI-SB3(9.5-10)/JD41894-10, RI-SB8(0.5-1)/JD41894-11, RI-SB8(4.5-5)/JD41894-12, RI-SB8(7-7.5)/JD41894-13, RI-SB5(0.5-1)/JD41894-14, RI-SB5(4.5-5)/JD41894-15, RI-SB5(9-9.5)/JD41894-16, RI-SS1/JD41894-17, RI-SS2/JD41894-18, RI-SS3/JD41894-19, DUP3/JD41894-20, should be qualified Estimated Bias High (J+).

-Detected results of Calcium, Iron, Manganese, Potassium, in samples RI-SB4(4.5-5)/JD41894-6, should be qualified Estimated Bias High (J+).

-Detected results of Target Metals, in sample RI-SB4(4.5-5)/JD41894-6, should be qualified Estimated (J).

-Detected results of Manganese, Potassium, Zinc, in sample RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Manganese, Zinc, in sample RI-SS1/JD41894-17, should be qualified Estimated (UJ).

-Non-Detected results of Potassium, in sample RI-SS1/JD41894-17, should be qualified Unusable (R).

- **Laboratory Duplicate (DUP):** Target metals for Field Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):

Field Duplicate:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of all target Metals that displayed detection above the reporting limits, are calculated as indicated below:

Detected TAL Compound > RL	DUP3 JD41894-20 (mg/kg)	RI-SS3 JD41894-19 (mg/kg)	%RPDs
Aluminum	18300	16000	13.4
Arsenic	8.5	7.6	11.2
Barium	156	144	8

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Beryllium	0.95	0.76	22.2
Cadmium	0.69	0.66	4.4
Calcium	2930	3770	25.1
Chromium	31.6	25.6	21
Cobalt	9.9	11.0	10.5
Copper	42.6	45.3	6.1
Iron	20600	21600	4.7
Lead	411	380	7.8
Magnesium	3970	4490	12.3
Manganese	481	418	14
Mercury	0.57	0.62	8.4
Nickel	27.5	24.3	12.4
Potassium	1490	1330	11.3
Silver	1.0	0.99	1.0
Vanadium	36.3	41.5	13.4
Zinc	243	223	8.6

%RPDS for all detected target metals were below the allowable maximum.

Quality Judgement: No actions are required.

- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
 - In QC Batch ID: MP31929, samples RI-SB4(4.5-5)/JD41894-6, RI-SS1/JD41894-17, were analyzed for Serial Dilution evaluation. %Ds for the target metals with concentrations > 50x the MDL, were below the allowable maximum.
 - In QC Batch ID: MP31934/Out of samples group, sample JD41762-16F, was analyzed for ICP Serial Dilution Evaluation, on 03/26/2022. %Ds of target metals (EPA 6010D) were below the allowable maximum.Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.

Quality Judgement: No actions are required.

- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, in QC Batch ID: MP31979, QC Batch ID: MP31986, analyzed on 03/29/2022, were in compliance with method quality control criteria.

Quality Judgement: No actions are required.

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- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD41894

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	19 Soil Samples, 1 Soil Duplicate, 2 Ground Water Samples, 1 Field Blank
Sampled On	03/23/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD41808 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	June 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria (90%<%Rs<110%):
-File ID: D032822W3.CN, on 03/28/2022, D032922W1.CN, on 03/29/2022, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package in batch ID # GP39179/GN27664, GP39182/GN27674, GP39183/GN27674, reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits-80-120%). The following summarizes this evaluation:
-In Batch IDs# GP39179/GN27664, GP39182/GN27674, GP39183/GN27674, for Cyanide LCS evaluation, %Rs were within the method control limits.
Quality Judgement: No actions are required.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits).

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-In batch ID: GP39182/GN27674, sample RI-SB2(0.5-1)/JD41894-1, was analyzed for Matrix Spike process. %Rs for Cyanide Matrix spike standard was below the method control limits (75-125%).

-In batch ID: GP39182/GN27674, sample RI-SB2(4.5-5)/JD41894-2, was analyzed for Matrix Spike process. %Rs for Cyanide Matrix spike standard was below the method control limits (75-125%).

-In batch ID: GP39183/GN27674, sample RI-SS1/JD41894-17, was analyzed for Matrix Spike process. %Rs for Cyanide Matrix spike standard was below the method control limits (75-125%).

-Quality Judgement:

-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SS1/JD41894-17, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, RI-SB2(4.5-5)/JD41894-2, RI-SS1/JD41894-17, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):

-Sample RI-SB2(0.5-1)/JD41894-1, was analyzed for laboratory duplicate analysis. %RPDs for laboratory duplicate in batch ID# GP39182/GN27674-JD41894-1, was above the allowable maximum.

-Sample RI-SS1/JD41894-17, was analyzed for laboratory duplicate analysis. %RPDs for laboratory duplicate in batch ID# GP39183/GN27674-JD41894-17, was below the allowable maximum.

Field Duplicate Evaluation:

-In field duplicate ID# DUP3/JD41894-20 that is originated from RI-SS3/JD41894-19, %RPDs of Cyanide was not calculated due to no detection of target compounds above the reporting limits.

Quality Judgement:

-Detected results of Cyanide in samples RI-SB2(0.5-1)/JD41894-1, should be qualified Estimated (J).

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

Response Factor Report GCMS1C

Method : C:\MSDCHEM\1\METHODS\M1CS7993.M (RTE Integrator)
Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Jan 11 14:50:44 2022
Response via : Initial Calibration

Calibration Files

1 =1C183570.D 0.5 =1C183569.D 100 =1C183576.D 50 =1C183575.D
20 =1C183574.D 200 =1C183577.D 4 =1C183572.D 2 =1C183571.D
8 =1C183573.D 0.2 =1C183568.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD

1) tert butyl alcohol-d9	-----ISTD-----											
2) tertiary butyl alcohol	1.041	1.186	1.159	1.142	1.147	1.180	1.278	1.150		1.160	5.62	
3) ethanol		0.144	0.139	0.118	0.112	0.125	0.112	0.117		0.124	10.42	
4) 1,4-dioxane		0.129	0.125	0.122	0.120	0.121	0.116	0.121		0.122	3.42	
5) I pentafluorobenzene	-----ISTD-----											
6) dichlorodifluoromethane	0.497	0.584	0.548	0.547	0.524	0.504	0.490	0.540	0.517	0.686	0.544	10.55
7) chlorodifluoromethane	0.466	0.456	0.452	0.469	0.448	0.407	0.446	0.476	0.466	0.593	0.468	10.25
8) chloromethane	0.656	0.549	0.579	0.569	0.492	0.562	0.634	0.569		0.576	8.78	
9) vinyl chloride	0.454	0.501	0.475	0.482	0.471	0.435	0.432	0.486	0.463	0.468	0.466	4.62
10) 1,3-butadiene	*This compound fails Initial Calibration criteria*											
	0.277	0.276	0.274	0.290	0.283	0.250	0.272	0.299	0.288	0.320	0.283	6.51
11) bromomethane		0.313	0.317	0.337	0.285	0.386		0.367		0.334	11.19	
12) chloroethane	0.202	0.228	0.227	0.227	0.218	0.214	0.200	0.222	0.216	0.243	0.220	5.91
13) trichlorofluoromethane	0.589	0.643	0.604	0.603	0.586	0.558	0.535	0.596	0.583	0.668	0.596	6.36
14) ethyl ether	0.108	0.145	0.142	0.133	0.139	0.130	0.132	0.129		0.132	8.72	
15) acrolein		0.042	0.039	0.034	0.040			0.032		0.037	11.28	
16) freon 113	0.301	0.239	0.285	0.292	0.277	0.268	0.278	0.286	0.284	0.291	0.280	6.06
17) 1,1-dichloroethene	0.365	0.307	0.317	0.314	0.288	0.333	0.341	0.329		0.324	7.21	
18) acetone	0.069	0.084	0.072	0.069	0.064	0.064	0.076	0.070	0.067	0.071	8.96	
19) acetonitrile	0.032	0.035	0.035	0.035	0.033	0.031	0.033	0.035	0.033	0.034	4.13	
20) iodomethane	*This compound fails Initial Calibration criteria*											
	0.478	0.417	0.291	0.467	0.146		0.197		0.333	42.79		
21) carbon disulfide	1.056	1.188	0.963	0.986	0.947	0.909	0.968	1.032	0.970	1.002	8.20	
22) methylene chloride	0.381	0.318	0.319	0.309	0.304	0.340	0.383	0.332		0.336	9.24	
23) methyl acetate												

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

	0.195	0.214	0.210	0.195	0.197	0.213	0.191	0.190	0.201	4.98
24)	methyl tert butyl ether									
	0.615	0.593	0.724	0.701	0.646	0.681	0.665	0.664	0.646	5.88
25)	trans-1,2-dichloroethene									
	0.417	0.345	0.353	0.343	0.325	0.357	0.399	0.373	0.364	8.45
26)	di-isopropyl ether									
	0.999	0.968	1.155	1.137	1.067	1.070	1.094	1.114	1.058	5.37
27)	2-butanone									
	0.025	0.025	0.022	0.023	0.020	0.017	0.021		0.022	12.53
28)	1,1-dichloroethane									
	0.540	0.508	0.541	0.554	0.539	0.495	0.555	0.570	0.553	4.33
29)	chloroprene									
	0.431	0.415	0.501	0.508	0.480	0.464	0.466	0.481	0.494	7.42
30)	acrylonitrile									
	0.095	0.091	0.084	0.087	0.070		0.075		0.084	11.24
31)	hexane *This compound fails Initial Calibration criteria*									
	0.552	0.581	0.533	0.540	0.512	0.500	0.506	0.531	0.526	4.72
32)	vinyl acetate									
	0.049	0.049	0.041	0.046			0.040		0.045	9.63
33)	ethyl tert-butyl ether									
	0.772	0.736	0.972	0.952	0.866	0.920	0.880	0.900	0.857	9.06
34)	ethyl acetate									
	0.041	0.040	0.037	0.037	0.034		0.040		0.038	7.34
35)	2,2-dichloropropane									
	0.470	0.465	0.472	0.480	0.463	0.438	0.475	0.485	0.482	3.85
36)	cis-1,2-dichloroethene									
	0.400	0.447	0.367	0.376	0.364	0.341	0.394	0.400	0.380	7.43
37)	methyl acrylate									
	0.039	0.036	0.032	0.036	0.027		0.032		0.034	11.76
38)	propionitrile									
	0.028	0.036	0.035	0.033	0.033	0.034	0.034	0.034		7.11
39)	bromochloromethane									
	0.158	0.131	0.181	0.173	0.167	0.179	0.179	0.176		9.54
40)	tetrahydrofuran									
	0.091	0.091	0.088	0.081	0.103	0.117	0.093		0.095	12.58
41)	chloroform									
	0.449	0.374	0.377	0.367	0.349	0.404	0.428	0.384	0.392	8.49
42)	t-butyl formate *This compound fails Initial Calibration criteria*									
	0.186	0.236	0.226	0.202	0.223	0.202	0.197	0.195	0.209	8.50
43)	dibromofluoromethane (s)									
	0.409	0.402	0.417	0.418	0.413	0.428	0.415	0.410	0.414	1.92
44)	methacrylonitrile									
	0.096	0.092	0.084	0.092	0.082	0.076	0.079		0.086	8.62
45)	1,1,1-trichloroethane									
	0.516	0.493	0.546	0.551	0.522	0.519	0.532	0.545	0.536	8.65
46)	cyclohexane									
	0.445	0.530	0.472	0.471	0.459	0.438	0.426	0.490	0.455	6.66
47)	1,1-dichloropropene									
	0.388	0.355	0.420	0.422	0.403	0.392	0.411	0.433	0.415	6.14
48)	iso-butyl alcohol									
	0.010	0.011	0.010	0.009	0.010	0.010	0.009	0.009	0.010#	8.53
49)	carbon tetrachloride									
	0.479	0.479	0.501	0.509	0.496	0.466	0.501	0.508	0.510	3.52
50)	tert amyl alcohol									
	0.011	0.010	0.009	0.009	0.010	0.009	0.010		0.010#	4.89
51)	I 1,4-difluorobenzene -----ISTD-----									
52)	1,2-dichloroethane-d4 (s)									
	0.252	0.250	0.243	0.245	0.248	0.235	0.255	0.255	0.253	2.47
53)	n-butyl alcohol									

Initial Calibration Summary

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Job Number: JD41894

Sample: V1C7993-ICC7993

Account: SESINJPB SESI Consulting Engineers

Lab FileID: 1C183575.D

Project: 23-34 Pearl Street, Port Chester, NY

	0.006	0.005	0.005	0.005	0.004	0.004	0.004	0.005#	14.34
54)	2,2,4-trimethylpentane								
	0.958	1.039	0.895	0.926	0.919	0.804	0.939	0.978	0.962
								0.935	6.86
55)	benzene								
	0.821	0.862	0.814	0.841	0.821	0.753	0.848	0.900	0.849
								0.938	0.845
									5.94
56)	tert-amyl methyl ether								
	0.126	0.093	0.131	0.129	0.122	0.122	0.130	0.132	0.126
								0.124	9.62
57)	heptane								
	0.172	0.196	0.179	0.183	0.178	0.164	0.179	0.186	0.190
								0.196	0.182
									5.59
58)	isopropyl acetate								
	0.037	0.036	0.032	0.034	0.033	0.023	0.033	0.033	14.31
59)	1,2-dichloroethane								
	0.280	0.300	0.248	0.254	0.246	0.224	0.279	0.281	0.261
								0.264	8.82
60)	trichloroethene								
	0.249	0.274	0.281	0.289	0.281	0.258	0.274	0.293	0.285
								0.315	0.280
									6.54
61)	ethyl acrylate								
	0.179	0.225	0.221	0.206	0.200	0.213	0.215	0.208	0.208
									6.92
62)	2-nitropropane								
	0.004	0.004	0.004	0.003			0.002	0.004#	24.01
	----- Quadratic regression -----								
	Coefficient = 0.9999								
	Response Ratio = -0.00044 + 0.00497 *A + -0.00035 *A^2								
63)	2-chloroethyl vinyl ether								
	0.100	0.104	0.118	0.119	0.110	0.103	0.114	0.115	0.110
								0.093	0.108
									7.63
64)	methyl methacrylate								
	0.046	0.044	0.042	0.042	0.039	0.039	0.038	0.041	7.06
65)	1,2-dichloropropane								
	0.201	0.187	0.211	0.216	0.209	0.195	0.223	0.214	0.209
								0.214	0.208
									5.10
66)	dibromomethane								
	0.128	0.116	0.133	0.131	0.126	0.122	0.136	0.146	0.128
								0.130	6.67
67)	methylcyclohexane								
	0.386	0.426	0.392	0.399	0.388	0.359	0.388	0.413	0.393
								0.394	4.77
68)	bromodichloromethane								
	0.285	0.273	0.305	0.305	0.291	0.284	0.305	0.316	0.298
								0.250	0.291
									6.61
69)	epichlorohydrin								
	0.014	0.019	0.018	0.017	0.017	0.017	0.017	0.017	0.017
									9.20
70)	cis-1,3-dichloropropene								
	0.319	0.302	0.350	0.351	0.329	0.324	0.342	0.344	0.329
								0.316	0.331
									4.79
71)	4-methyl-2-pentanone								
	0.058	0.047	0.063	0.064	0.060	0.056	0.063	0.063	0.061
								0.059	9.25
72)	3-methyl-1-butanol								
	0.006	0.008	0.008	0.007	0.007	0.007	0.006	0.007	0.007#
									11.21
73)	I chlorobenzene-d5 -----ISTD-----								
74)	toluene-d8 (s)								
	1.272	1.265	1.286	1.275	1.258	1.306	1.257	1.270	1.261
								1.259	1.271
									1.20
75)	toluene								
	0.692	0.706	0.701	0.700	0.665	0.664	0.707	0.696	0.685
								0.847	0.706
									7.31
76)	trans-1,3-dichloropropene								
	0.316	0.277	0.379	0.370	0.338	0.355	0.346	0.351	0.330
								0.369	0.343
									8.82
77)	ethyl methacrylate								
	0.205	0.273	0.260	0.231	0.252	0.236	0.234	0.222	0.239
									9.09
78)	1,1,2-trichloroethane								
	0.163	0.153	0.201	0.192	0.176	0.188	0.177	0.192	0.181
								0.160	0.178
									8.79
79)	tetrachloroethene								
	0.285	0.300	0.285	0.289	0.275	0.263	0.275	0.288	0.282
									3.70
80)	1,3-dichloropropane								
	0.324	0.303	0.327	0.328	0.308	0.304	0.328	0.330	0.311
								0.287	0.315
									4.60
81)	2-hexanone								
	0.063	0.057	0.078	0.078	0.072	0.068	0.072	0.070	0.070
									9.65

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Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

82)	butyl acetate	0.118	0.152	0.149	0.138	0.139	0.141	0.140	0.140	0.140	7.41
83)	dibromochloromethane	0.298	0.284	0.348	0.333	0.301	0.331	0.308	0.318	0.296	7.06
84)	1,2-dibromoethane	0.219	0.213	0.269	0.256	0.230	0.253	0.234	0.246	0.233	7.66
85)	n-butyl ether	1.164	1.080	1.227	1.234	1.152	1.105	1.166	1.182	1.170	4.10
86)	chlorobenzene	0.793	0.795	0.795	0.801	0.762	0.737	0.799	0.837	0.786	6.41
87)	1,1,1,2-tetrachloroethane	0.275	0.263	0.294	0.290	0.274	0.273	0.283	0.293	0.281	4.73
88)	ethylbenzene	1.303	1.352	1.259	1.302	1.250	1.138	1.298	1.360	1.302	10.55
89)	m,p-xylene	0.533	0.520	0.507	0.516	0.505	0.455	0.516	0.546	0.523	8.64
90)	o-xylene	0.494	0.517	0.517	0.523	0.501	0.469	0.514	0.547	0.518	6.27
91)	styrene	0.822	0.786	0.830	0.850	0.818	0.744	0.835	0.884	0.841	6.81
92)	bromoform	0.173	0.228	0.213	0.188	0.213	0.193	0.196	0.185	0.199	9.11
93)	butyl acrylate	0.386	0.346	0.479	0.457	0.408	0.429	0.413	0.416	0.406	8.70
94)	isopropylbenzene	1.322	1.385	1.315	1.351	1.299	1.181	1.299	1.394	1.331	9.07
95)	cis-1,4-dichloro-2-butene	0.071	0.099	0.094	0.080	0.092	0.086	0.086	0.081	0.086	10.22
96)	I 1,4-dichlorobenzene-d -----ISTD-----										
97)	4-bromofluorobenzene (s)	0.870	0.869	0.886	0.874	0.866	0.945	0.865	0.864	0.863	2.82
98)	bromobenzene	0.703	0.673	0.684	0.699	0.682	0.662	0.718	0.752	0.695	6.97
99)	1,1,1,2-tetrachloroethane	0.470	0.468	0.550	0.527	0.485	0.534	0.507	0.517	0.486	6.28
100)	trans-1,4-dichloro-2-butene	0.132	0.111	0.159	0.153	0.141	0.149	0.155	0.144	0.143	10.14
101)	1,2,3-trichloropropane	0.110	0.137	0.134	0.128	0.128	0.146	0.124	0.129	0.129	8.04
102)	n-propylbenzene	3.048	3.060	2.850	2.993	2.973	2.670	3.035	3.211	3.092	5.17
103)	2-chlorotoluene	0.645	0.612	0.613	0.643	0.629	0.586	0.659	0.655	0.651	5.41
104)	4-chlorotoluene	1.807	1.797	1.749	1.796	1.750	1.696	1.817	1.875	1.798	2.82
105)	1,3,5-trimethylbenzene	2.084	2.049	2.018	2.106	2.043	1.890	2.116	2.147	2.102	3.68
106)	tert-butylbenzene	0.417	0.385	0.421	0.427	0.413	0.398	0.403	0.411	0.409	4.46
107)	1,2,4-trimethylbenzene	2.174	2.174	2.066	2.158	2.061	1.941	2.106	2.212	2.140	3.91
108)	sec-butylbenzene	2.829	2.918	2.811	2.894	2.799	2.574	2.795	2.925	2.874	3.77
109)	1,3-dichlorobenzene	1.357	1.424	1.304	1.332	1.278	1.224	1.334	1.408	1.328	4.61
110)	p-isopropyltoluene	2.319	2.566	2.411	2.482	2.409	2.194	2.327	2.449	2.463	4.54
111)	1,2,3-trimethylbenzene	1.998	2.038	1.963	1.998	1.924	1.789	2.013	2.132	1.983	4.65

Initial Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C7993-ICC7993
Lab FileID: 1C183575.D

112)	1,4-dichlorobenzene	1.321	1.364	1.224	1.272	1.204	1.115	1.301	1.329	1.275	1.267	6.00	
113)	benzyl chloride	0.942	0.994	1.086	1.054	0.969	1.037	0.965	1.014	0.947	1.278	1.029	9.70
114)	1,2-dichlorobenzene	1.232	1.215	1.252	1.269	1.196	1.171	1.245	1.291	1.222	1.658	1.275	10.90
115)	n-butylbenzene	1.197	1.242	1.190	1.243	1.183	1.101	1.174	1.190	1.218	1.193	3.56	
116)	1,2-dibromo-3-chloropropane	0.070	0.099	0.095	0.087	0.094	0.092	0.093	0.089	0.090	9.98		
117)	1,3,5-trichlorobenzene	0.995	1.168	1.018	1.064	1.007	0.941	1.046	1.085	1.008	1.037	6.22	
118)	1,2,4-trichlorobenzene	0.825	0.874	0.809	0.856	0.805	0.750	0.808	0.842	0.816	0.821	4.33	
119)	hexachlorobutadiene	0.547	0.649	0.487	0.533	0.529	0.446	0.523	0.578	0.552	0.538	10.54	
120)	naphthalene	1.522	1.509	1.631	1.629	1.539	1.497	1.521	1.574	1.474	1.544	3.63	
121)	1,2,3-trichlorobenzene	0.742	0.837	0.746	0.758	0.723	0.692	0.716	0.755	0.702	0.741	5.77	
122)	hexachloroethane	0.405	0.420	0.495	0.479	0.433	0.470	0.420	0.429	0.419	0.432	0.440	6.83
123)	2-methylnaphthalene	1.034	0.995	0.828	0.983	0.801	0.928	11.40					

(#) = Out of Range ### Number of calibration levels exceeded format ###

M1CS7993.M

Thu Jan 13 12:55:45 2022

6.10.1
6

Initial Calibration Summary

Page 1 of 5

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8596-ICC8596
Lab FileID: 2B189332.D

Response Factor Report GCMS2B

Method : C:\MSDCHEM\1\METHODS\M2B8596.M (RTE Integrator)
Title : SW846 8260C/D, DB-624.1 60 mx0.25mmx1.4um
Last Update : Thu Mar 03 14:10:28 2022
Response via : Initial Calibration

Calibration Files

1 =2B189327.D 0.5 =2B189326.D 100 =2B189333.D 50 =2B189332.D
20 =2B189331.D 200 =2B189334.D 4 =2B189329.D 2 =2B189328.D
8 =2B189330.D 0.2 =2B189325.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol												
			1.362	1.331	1.152	1.374	0.894	1.011	1.157		1.183	15.62
3) ethanol												
	0.065		0.133	0.117	0.102	0.130	0.109	0.087	0.117		0.107	21.06
---- Linear regression ---- Coefficient = 0.9967												
Response Ratio = -0.01712 + 0.12842 *A												
4) 1,4-dioxane												
			0.143	0.140	0.120	0.143	0.090		0.120		0.126	16.33
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane												
	0.737	0.687	0.842	0.848	0.804	0.765	0.806	0.755	0.806		0.783	6.63
7) dichlorodifluoromethane												
	0.797		1.033	1.038	0.997	0.978	0.891	0.848	0.954		0.942	9.37
8) chloromethane												
	0.724	0.661	0.847	0.847	0.812	0.804	0.763	0.762	0.791		0.779	7.66
9) vinyl chloride												
	0.678	0.568	0.804	0.810	0.769	0.766	0.729	0.708	0.767		0.733	10.26
10) 1,3-butadiene												
	0.521		0.571	0.573	0.565	0.520	0.543	0.544	0.581		0.552	4.30
11) bromomethane												
	0.493		0.519	0.529	0.515	0.484	0.501	0.526	0.538		0.513	3.61
12) chloroethane												
	0.379		0.388	0.388	0.387	0.367	0.367	0.357	0.390		0.378	3.30
13) trichlorofluoromethane												
	0.918		0.991	0.999	0.984	0.974	0.909	0.904	0.994		0.959	4.30
14) ethyl ether												
	0.233		0.275	0.272	0.263	0.263	0.260	0.215	0.273		0.257	8.28
15) acrolein												
			0.093	0.090	0.087	0.090	0.070		0.077		0.085	10.80
16) freon 113												
	0.470		0.520	0.517	0.512	0.499	0.511	0.474	0.525		0.504	4.11
17) 1,1-dichloroethene												
	0.487	0.458	0.472	0.482	0.471	0.449	0.476	0.485	0.479		0.473	2.64
18) acetone												
	0.150	0.146	0.156	0.153	0.158	0.144	0.150	0.149	0.143	0.161	0.151	4.07
19) acetonitrile												
	0.054		0.069	0.068	0.069	0.064	0.075	0.062	0.070		0.066	9.29
20) iodomethane												
	0.865	0.811	0.970	0.966	0.947	0.945	0.916	0.902	0.964		0.921	5.83
21) carbon disulfide												
	1.545	1.501	1.616	1.637	1.647	1.527	1.635	1.555	1.653	1.416	1.573	4.96

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8596-ICC8596
Lab FileID: 2B189332.D

22)	methylene chloride	0.567	0.583	0.549	0.552	0.541	0.524	0.536	0.567	0.561	0.553	3.30	
23)	methyl acetate	0.270	0.359	0.361	0.385	0.339	0.349	0.342	0.383	0.348	10.39		
24)	methyl tert butyl ether	1.446	1.402	1.516	1.524	1.509	1.386	1.562	1.477	1.555	1.340	1.472	5.13
25)	trans-1,2-dichloroethene	0.468	0.457	0.500	0.511	0.504	0.481	0.521	0.491	0.506	0.493	4.25	
26)	di-isopropyl ether	1.666	1.499	1.625	1.686	1.679	1.507	1.709	1.643	1.759	1.436	1.621	6.48
27)	2-butanone	0.026	0.055	0.053	0.052	0.053	0.051	0.040	0.049	0.047	20.45		
	---- Linear regression ----	Coefficient = 0.9995											
	Response Ratio =	-0.00202 + 0.05351 *A											
28)	1,1-dichloroethane	0.869	0.807	0.875	0.888	0.875	0.824	0.895	0.831	0.893	0.862	3.79	
29)	chloroprene	0.676	0.534	0.661	0.664	0.673	0.619	0.646	0.642	0.705	0.647	7.52	
30)	acrylonitrile	0.140	0.136	0.133	0.137	0.094	0.110	0.125	14.84				
31)	hexane	0.440	0.440	0.431	0.420	0.437	0.396	0.444	0.430	3.91			
32)	vinyl acetate	0.096	0.095	0.089	0.090	0.072	0.078	0.087	11.13				
33)	ethyl tert-butyl ether	1.538	1.565	1.676	1.688	1.648	1.556	1.649	1.606	1.674	1.622	3.54	
34)	ethyl acetate	0.058	0.060	0.062	0.054	0.052	0.064	0.059	7.60				
35)	2,2-dichloropropane	0.799	0.677	0.798	0.806	0.797	0.745	0.830	0.741	0.822	0.779	6.29	
36)	cis-1,2-dichloroethene	0.570	0.504	0.535	0.546	0.530	0.507	0.544	0.521	0.557	0.535	4.11	
37)	methyl acrylate	0.391	0.392	0.395	0.374	0.382	0.377	0.385	2.23				
38)	propionitrile	0.064	0.063	0.065	0.058	0.068	0.055	0.064	0.062	6.94			
39)	bromochloromethane	0.263	0.291	0.293	0.281	0.288	0.292	0.262	0.290	0.282	4.56		
40)	tetrahydrofuran	*This compound fails EPA 624.1 Initial Calibration criteria*											
		0.064	0.063	0.061	0.061	0.055	0.063	0.061	5.41				
41)	chloroform	0.627	0.724	0.588	0.594	0.581	0.566	0.617	0.636	0.605	0.615	7.55	
42)	t-butyl formate	0.331	0.450	0.414	0.388	0.429	0.356	0.312	0.380	0.383	12.52		
43)	dibromofluoromethane (s)	0.492	0.491	0.484	0.490	0.497	0.478	0.490	0.486	0.500	0.490	1.26	
44)	methacrylonitrile	0.199	0.198	0.194	0.194	0.158	0.187	0.188	8.17				
45)	1,1,1-trichloroethane	0.785	0.689	0.930	0.912	0.872	0.890	0.845	0.824	0.879	0.810	0.844	8.41
46)	cyclohexane	0.726	0.634	0.780	0.785	0.767	0.765	0.762	0.752	0.792	0.751	6.40	
47)	1,1-dichloropropene	0.587	0.586	0.629	0.631	0.617	0.604	0.639	0.642	0.639	0.619	3.55	
48)	iso-butyl alcohol	0.025	0.020	0.019	0.023	0.026	0.018	0.020	0.022	13.80			
49)	carbon tetrachloride	0.783	0.717	0.809	0.811	0.784	0.776	0.768	0.727	0.805	0.633	0.761	7.28
50)	tert amyl alcohol												

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8596-ICC8596
Lab FileID: 2B189332.D

		0.019	0.018	0.018	0.018	0.017	0.015	0.017		0.017	7.84
51) I	1,4-difluorobenzene	-----ISTD-----									
52)	1,2-dichloroethane-d4 (s)	0.344	0.345	0.322	0.331	0.337	0.310	0.351	0.345	0.337	3.69
53)	n-butyl alcohol	0.010	0.009	0.009	0.009	0.008	0.006	0.009		0.008#	13.27
54)	2,2,4-trimethylpentane	1.194	1.191	1.207	1.214	1.183	1.149	1.199	1.135	1.210	7.29
55)	benzene	1.246	1.206	1.235	1.242	1.217	1.181	1.278	1.272	1.281	4.46
56)	tert-amyl methyl ether	0.213	0.210	0.251	0.248	0.247	0.236	0.237	0.236	0.238	6.23
57)	heptane	0.249	0.215	0.270	0.263	0.251	0.264	0.266	0.260	0.262	6.52
58)	isopropyl acetate	0.072	0.070	0.067	0.070	0.055	0.052	0.065		0.065	12.12
59)	1,2-dichloroethane	0.409	0.405	0.431	0.427	0.422	0.409	0.451	0.438	0.424	4.17
60)	trichloroethene	0.332	0.336	0.387	0.375	0.352	0.384	0.365	0.360	0.363	5.33
61)	ethyl acrylate	0.480	0.446	0.453	0.456	0.450	0.415	0.465	0.453	0.468	4.04
62)	2-nitropropane	0.084	0.083	0.081	0.080	0.090	0.077	0.081		0.082	4.91
63)	2-chloroethyl vinyl ether	0.071	0.173	0.158	0.141	0.162	0.120	0.084	0.131		28.35
	---- Linear regression ----	Coefficient = 0.9977									
	Response Ratio =	-0.01409 + 0.16451 *A									
64)	methyl methacrylate	0.087	0.085	0.078	0.081	0.068		0.076		0.079	8.65
65)	1,2-dichloropropane	0.322	0.314	0.352	0.342	0.329	0.337	0.339	0.319	0.333	3.61
66)	dibromomethane	0.184	0.216	0.213	0.211	0.208	0.225	0.210	0.219		5.77
67)	methylcyclohexane	0.559	0.588	0.620	0.618	0.598	0.585	0.587	0.572	0.617	3.64
68)	bromodichloromethane	0.442	0.405	0.487	0.484	0.454	0.475	0.475	0.473	0.476	5.66
69)	epichlorohydrin	0.034	0.034	0.033	0.032	0.033	0.027	0.032		0.032	7.10
70)	cis-1,3-dichloropropene	0.496	0.460	0.592	0.591	0.549	0.572	0.560	0.535	0.559	7.97
71)	4-methyl-2-pentanone	0.112	0.096	0.127	0.127	0.127	0.116	0.134	0.122	0.127	9.33
72)	3-methyl-1-butanol	0.010	0.009	0.009	0.009	0.008	0.007	0.009		0.009#	11.98
73) I	chlorobenzene-d5	-----ISTD-----									
74)	toluene-d8 (s)	1.196	1.211	1.114	1.150	1.181	1.110	1.202	1.177	1.191	3.07
75)	toluene	0.803	0.751	0.782	0.797	0.771	0.756	0.827	0.797	0.809	4.69
76)	trans-1,3-dichloropropene	0.450	0.435	0.515	0.508	0.495	0.487	0.500	0.482	0.497	5.50
77)	ethyl methacrylate	0.435	0.428	0.412	0.410	0.391	0.331	0.416		0.403	8.62
78)	1,1,2-trichloroethane	0.233	0.202	0.264	0.268	0.261	0.251	0.274	0.251	0.272	9.03

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8596-ICC8596
Lab FileID: 2B189332.D

79)	tetrachloroethene	0.298	0.242	0.293	0.297	0.299	0.280	0.320	0.305	0.321	0.243	0.290	9.54
80)	1,3-dichloropropane	0.501	0.406	0.510	0.513	0.500	0.482	0.531	0.501	0.526		0.497	7.46
81)	2-hexanone	0.098		0.120	0.120	0.123	0.109	0.131	0.109	0.125		0.117	9.05
82)	butyl acetate		0.207	0.202	0.210	0.197	0.208	0.181	0.212			0.202	5.24
83)	dibromochloromethane	0.389	0.365	0.417	0.413	0.403	0.408	0.426	0.402	0.415		0.404	4.50
84)	1,2-dibromoethane	0.304	0.290	0.354	0.345	0.336	0.341	0.367	0.327	0.343		0.334	7.22
85)	n-butyl ether	1.318	1.200	1.396	1.415	1.423	1.289	1.430	1.365	1.436		1.363	5.88
86)	chlorobenzene	0.944	0.909	0.964	0.975	0.959	0.912	1.012	0.988	0.984	0.764	0.941	7.44
87)	1,1,1,2-tetrachloroethane	0.352	0.343	0.396	0.392	0.385	0.385	0.415	0.381	0.405		0.384	6.07
88)	ethylbenzene	1.563	1.626	1.515	1.560	1.570	1.424	1.662	1.597	1.646	1.609	1.577	4.41
89)	m,p-xylene	0.625	0.601	0.614	0.615	0.624	0.592	0.655	0.626	0.653	0.481	0.608	8.07
90)	o-xylene	0.685	0.599	0.663	0.668	0.667	0.632	0.692	0.650	0.679	0.495	0.643	9.13
91)	styrene	0.955	0.791	1.090	1.083	1.065	1.030	1.063	0.979	1.082		1.015	9.53
92)	n-amyl acetate		0.258	0.248	0.248	0.254	0.224	0.181	0.246			0.237	11.42
93)	bromoform	0.281	0.222	0.330	0.307	0.298	0.325	0.302	0.296	0.305		0.296	10.66
94)	butyl acrylate		0.704	0.668	0.641	0.683	0.597	0.521	0.611			0.632	9.84
95)	isopropylbenzene	1.788	1.740	1.764	1.765	1.727	1.679	1.799	1.723	1.832	1.490	1.731	5.49
96)	cis-1,4-dichloro-2-butene		0.169	0.162	0.157	0.160	0.149	0.121	0.149			0.152	10.20
97)	I 1,4-dichlorobenzene-d -----ISTD-----												
98)	4-bromofluorobenzene (s)	0.902	0.899	0.849	0.841	0.842	0.856	0.891	0.900	0.857	0.908	0.875	3.16
99)	bromobenzene	0.839	0.798	0.890	0.885	0.848	0.854	0.885	0.918	0.888	0.609	0.841	10.52
100)	1,1,2,2-tetrachloroethane	0.823	0.826	0.872	0.845	0.817	0.828	0.909	0.869	0.852	0.604	0.824	10.01
101)	trans-1,4-dichloro-2-butene		0.209	0.198	0.187	0.197	0.164	0.146	0.189			0.184	11.78
102)	1,2,3-trichloropropane	0.182		0.233	0.226	0.225	0.221	0.242	0.210	0.230		0.221	8.32
103)	n-propylbenzene	3.650	3.765	3.548	3.614	3.602	3.351	3.843	3.825	3.860	3.574	3.663	4.38
104)	2-chlorotoluene	0.796	0.736	0.830	0.813	0.792	0.811	0.877	0.830	0.837		0.814	4.73
105)	4-chlorotoluene	2.337	2.239	2.188	2.173	2.156	2.099	2.345	2.275	2.261	1.970	2.204	5.16
106)	1,3,5-trimethylbenzene	2.789	2.567	2.613	2.635	2.630	2.443	2.781	2.747	2.814	2.278	2.630	6.44
107)	tert-butylbenzene	0.564	0.512	0.601	0.594	0.567	0.584	0.595	0.550	0.587		0.573	4.93
108)	1,2,4-trimethylbenzene	2.730	2.788	2.747	2.792	2.747	2.537	2.911	2.850	2.913	2.563	2.758	4.61

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8596-ICC8596
Lab FileID: 2B189332.D

109)	sec-butylbenzene	3.655	3.445	3.629	3.621	3.576	3.357	3.714	3.592	3.741	3.391	3.572	3.70
110)	1,3-dichlorobenzene	1.618	1.597	1.641	1.640	1.618	1.554	1.719	1.700	1.684	1.640	1.641	3.01
111)	p-isopropyltoluene	2.908	2.808	3.133	3.122	3.060	2.892	3.108	2.996	3.138	2.582	2.975	6.06
112)	1,4-dichlorobenzene	1.650	1.645	1.683	1.661	1.589	1.622	1.667	1.658	1.648	1.449	1.627	4.16
113)	benzyl chloride	1.285	1.184	1.841	1.732	1.628	1.732	1.522	1.417	1.569		1.545	14.11
114)	1,2,3-trimethylbenzene	2.881	2.790	2.795	2.832	2.788	2.559	2.944	2.906	2.926	2.466	2.789	5.66
115)	1,2-dichlorobenzene	1.554	1.399	1.741	1.737	1.681	1.614	1.680	1.641	1.702		1.639	6.57
116)	n-butylbenzene	1.248	1.165	1.547	1.524	1.409	1.406	1.362	1.265	1.411		1.371	9.20
117)	hexachloroethane	0.526	0.500	0.607	0.582	0.549	0.579	0.540	0.514	0.549		0.550	6.27
118)	1,2-dibromo-3-chloropropane	0.242	0.230	0.218	0.226	0.185	0.149	0.202				0.207	15.39
119)	1,3,5-trichlorobenzene	1.027		1.459	1.531	1.406	1.286	1.276	1.211	1.347		1.318	11.91
120)	1,2,4-trichlorobenzene	0.743		1.178	1.219	1.098	1.052	0.897	0.835	1.007		1.004	16.66
121)	hexachlorobutadiene	0.525	0.487	0.564	0.610	0.584	0.500	0.552	0.532	0.575		0.548	7.37
122)	naphthalene		2.654	2.669	2.444	2.420	2.047	1.866	2.194			2.328	13.06
123)	1,2,3-trichlorobenzene	0.657		1.021	1.036	0.938	0.944	0.802	0.768	0.863		0.879	14.92
124)	2-methylnaphthalene		1.060	0.926	0.697	1.118			0.502			0.861	29.97
---- Linear regression ---- Coefficient = 0.9974													
Response Ratio = -0.06309 + 1.12564 *A													
125)	pentafluorobenzene(a)	-----ISTD-----											
126)	Freon 142B		0.938	0.840	0.900	0.915	0.729		0.810		0.855		9.15
127)	vinyl bromide	0.487		0.562	0.538	0.564	0.542	0.519	0.439	0.536		0.523	7.99
128)	allyl chloride	0.231		0.307	0.278	0.287	0.303	0.259	0.236	0.254		0.269	10.79

 (#) = Out of Range ### Number of calibration levels exceeded format ###

M2B8596.M

Thu Mar 03 14:10:43 2022

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11224-ICC11224
Lab FileID: D278268.D

Response Factor Report MSD											
Method : C:\MSDCHEM\1\METHODS\MD11224.M (RTE Integrator)											
Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um											
Last Update : Tue Nov 09 15:38:15 2021											
Response via : Initial Calibration											
Calibration Files											
1	=D278263.D	4	=D278265.D	100	=D278269.D	50	=D278268.D				
20	=D278267.D	200	=D278270.D	8	=D278266.D	0.5	=D278262.D				
2	=D278264.D	0.2	=D278261.D	=			=				
Compound											
	1	4	100	50	20	200	8	0.5	2	0.2	Avg %RSD

1) I tert butyl alcohol-d9 -----ISTD-----											
2) ethanol											
										0.000	-1.00
3) tertiary butyl alcohol											
	1.311	1.466	1.413	1.323	1.408	1.340		1.484		1.392	4.96
4) 1,4-dioxane											
	0.140	0.149	0.143	0.135	0.146	0.128				0.140	5.34
5) I pentafluorobenzene -----ISTD-----											
6) chlorodifluoromethane *This compound fails the initial calibration criteria.*											
	0.717	0.803	0.775	0.760	0.750	0.676	0.705	0.694	0.779	0.740	5.90
7) dichlorodifluoromethane											
	1.052	1.261	1.213	1.212	1.142	1.057	1.107	0.995	1.270	1.145	8.66
8) chloromethane											
	0.992	1.104	1.052	1.042	0.980	0.919	0.956	0.982	1.193	1.024	8.20
9) 1,3-butadiene *This compound fails the initial calibration criteria.*											
	0.667	0.746	0.742	0.721	0.699	0.646	0.661	0.724	0.694	0.700	5.17
10) vinyl chloride											
	0.932	1.008	1.043	1.018	0.965	0.909	0.922	0.854	1.079	1.194	0.992 9.91
11) bromomethane											
	0.702	0.744	0.752	0.737	0.701	0.651	0.678	0.621	0.749	0.796	0.713 7.40
12) chloroethane											
	0.544	0.574	0.604	0.587	0.543	0.520	0.548	0.472	0.595	0.554	7.50
13) trichlorofluoromethane											
	1.075	1.185	1.238	1.200	1.137	1.097	1.102	0.990	1.205	1.137	6.91
14) ethyl ether											
	0.162	0.213	0.227	0.216	0.208	0.201	0.201		0.204	0.204	9.43
15) acrolein											
	0.050	0.061	0.059	0.054	0.053	0.049				0.054	8.59
16) freon 113											
	0.517	0.618	0.620	0.598	0.579	0.545	0.559	0.519	0.559	0.568	6.77
17) 1,1-dichloroethene											
	0.424	0.510	0.514	0.479	0.474	0.443	0.456	0.435	0.504	0.471	7.16
18) acetone											
	0.021	0.027	0.024	0.021	0.026	0.020		0.013		0.022	20.61
----- Linear regression ----- Coefficient = 0.9972											
Response Ratio = -0.00238 + 0.02586 *A											
19) acetonitrile											
	0.052	0.051	0.049	0.048	0.044	0.048		0.051		0.049	5.73
20) iodomethane											
	0.967	1.107	1.129	1.069	1.056	0.984	1.010	0.942	1.059	0.971	1.029 6.16
21) carbon disulfide											
	1.555	1.791	1.819	1.747	1.690	1.574	1.623	1.548	1.687	1.670	6.09

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11224-ICC11224
Lab FileID: D278268.D

22)	methylene chloride	0.518	0.566	0.546	0.530	0.523	0.473	0.510	0.461	0.530	0.517	0.517	5.99
23)	methyl acetate	0.034	0.054	0.051	0.049	0.049	0.044				0.047		15.30
24)	methyl tert butyl ether	1.388	1.473	1.534	1.459	1.385	1.351	1.320	1.454	1.457	1.745	1.457	8.23
25)	trans-1,2-dichloroethene	0.566	0.583	0.551	0.532	0.518	0.485	0.513	0.589	0.555	0.635	0.553	7.86
26)	hexane	0.336	0.364	0.370	0.352	0.347	0.349	0.336	0.336	0.359		0.350	3.57
27)	di-isopropyl ether	1.750	1.963	2.104	1.978	1.887	1.915	1.802	1.695	1.885	1.804	1.878	6.42
28)	2-butanone	0.020	0.027	0.025	0.024	0.026	0.022		0.020		0.023		11.48
29)	1,1-dichloroethane	0.782	0.898	0.921	0.873	0.854	0.840	0.836	0.784	0.899	0.818	0.851	5.63
30)	chloroprene	0.730	0.785	0.850	0.810	0.767	0.805	0.759	0.701	0.776		0.776	5.72
31)	acrylonitrile	0.108	0.142	0.136	0.132	0.126	0.127				0.128		9.02
32)	vinyl acetate	0.043	0.073	0.072	0.065	0.077	0.062				0.065		18.47
33)	ethyl tert-butyl ether	1.557	1.813	2.048	1.889	1.792	1.840	1.681	1.631	1.821	1.546	1.762	8.94
34)	ethyl acetate	0.028	0.051	0.047	0.041	0.048	0.037				0.042		19.84
35)	2,2-dichloropropane	0.879	1.046	1.040	0.992	0.971	0.930	0.926	0.978	0.988	1.087	0.984	6.36
36)	cis-1,2-dichloroethene	0.564	0.594	0.589	0.572	0.548	0.543	0.551	0.617	0.596	0.435	0.561	8.99
37)	propionitrile	0.030	0.039	0.044	0.042	0.040	0.042	0.040		0.039		0.040	10.63
38)	methyl acrylate	0.019	0.045	0.040	0.033	0.047	0.029					0.036	29.86
	----- Linear regression -----	Coefficient = 0.9969											
	Response Ratio = -0.00284 + 0.04647 *A												
39)	methacrylonitrile	0.089	0.116	0.109	0.096	0.116	0.101				0.104		10.49
40)	bromochloromethane	0.275	0.286	0.293	0.288	0.276	0.272	0.278	0.245	0.306		0.280	6.07
41)	tetrahydrofuran	0.037	0.041	0.040	0.035	0.039	0.031				0.037		9.85
42)	chloroform	0.940	0.903	0.926	0.886	0.851	0.868	0.884	0.980	0.975		0.913	5.01
43)	tert-butyl formate	0.395	0.406	0.429	0.406	0.386	0.406	0.388	0.265	0.377		0.384	12.30
44)	dibromofluoromethane (s)	0.493	0.487	0.486	0.489	0.485	0.476	0.492	0.490	0.491	0.487	0.488	0.98
45)	1,1,1-trichloroethane	0.946	1.079	1.098	1.040	1.015	0.999	0.964	0.921	1.043	0.975	1.008	5.72
46)	cyclohexane	0.981	1.075	1.183	1.119	1.033	1.071	1.001	0.931	1.123	0.847	1.036	9.64
47)	isobutyl alcohol	0.006	0.004	0.004	0.004	0.004	0.005				0.005		11.43
48)	1,1-dichloropropene	0.598	0.626	0.666	0.624	0.597	0.682	0.631	0.594	0.644	0.596	0.626	4.98
49)	carbon tetrachloride	0.923	0.984	1.022	0.960	0.918	0.929	0.883	0.786	0.922	0.881	0.921	6.97
50)	tert-amyl alcohol												

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11224-ICC11224
Lab FileID: D278268.D

	0.015	0.017	0.015	0.015	0.016	0.012				0.015	11.43
51) isopropyl acetate	0.059	0.087	0.077	0.069	0.084	0.069	0.054			0.071	17.40
52) I 1,4-difluorobenzene	-----ISTD-----										
53) 1,2-dichloroethane-d4 (s)	0.342	0.321	0.305	0.309	0.313	0.302	0.332	0.342	0.333	0.345	5.07
54) n-butyl alcohol	0.003	0.005	0.004	0.004	0.004	0.004				0.004	10.69
55) 2,2,4-trimethylpentane	1.144	1.374	1.677	1.531	1.395	1.441	1.288	1.146	1.317	1.283	12.08
56) benzene	1.202	1.304	1.361	1.322	1.263	1.265	1.280	1.227	1.318	1.134	5.22
57) tert-amyl methyl ether	1.115	1.171	1.267	1.203	1.120	1.054	1.039	1.250	1.228	1.494	11.01
58) heptane	0.175	0.226	0.226	0.214	0.208	0.210	0.203	0.191	0.233	0.210	8.69
59) 1,2-dichloroethane	0.452	0.468	0.443	0.434	0.416	0.428	0.436	0.477	0.464	0.446	4.54
60) ethyl acrylate	0.246	0.276	0.242	0.245	0.239	0.232	0.230			0.244	6.26
61) trichloroethene	0.313	0.348	0.359	0.346	0.326	0.352	0.332	0.292	0.365	0.252	10.58
62) 2-chloroethyl vinyl ether	0.106	0.127	0.151	0.135	0.131	0.128	0.124	0.100	0.123	0.125	12.04
63) methyl methacrylate	0.046	0.070	0.063	0.057	0.062	0.054	0.047			0.057	15.25
64) methylcyclohexane	0.660	0.745	0.792	0.762	0.723	0.660	0.682	0.577	0.687	0.634	9.34
65) 1,2-dichloropropane	0.289	0.308	0.337	0.322	0.299	0.316	0.308	0.282	0.337	0.311	6.24
66) dibromomethane	0.160	0.177	0.189	0.181	0.173	0.176	0.176	0.168	0.201	0.178	6.57
67) bromodichloromethane	0.393	0.428	0.447	0.424	0.413	0.427	0.418	0.395	0.446	0.421	4.49
68) 2-nitropropane	0.071	0.061	0.055	0.052	0.055	0.063				0.059	11.49
69) epichlorohydrin	0.024	0.025	0.023	0.022	0.021	0.021	0.025			0.023	8.05
70) cis-1,3-dichloropropene	0.467	0.505	0.549	0.511	0.497	0.499	0.487	0.464	0.505	0.423	6.85
71) 4-methyl-2-pentanone	0.052	0.078	0.096	0.087	0.082	0.086	0.075	0.079		0.079	16.44
72) isoamyl alcohol	0.005	0.007	0.007	0.006	0.006	0.005				0.006	15.51
73) I chlorobenzene-d5	-----ISTD-----										
74) toluene-d8 (s)	1.132	1.142	1.171	1.170	1.116	1.244	1.138	1.123	1.110	1.127	3.47
75) toluene	0.761	0.829	0.858	0.825	0.750	0.896	0.780	0.745	0.830	0.882	6.65
76) trans-1,3-dichloropropene	0.379	0.418	0.463	0.432	0.404	0.448	0.414	0.352	0.433	0.355	9.16
77) 1,1,2-trichloroethane	0.178	0.178	0.199	0.188	0.175	0.195	0.184	0.151	0.183	0.181	7.64
78) tetrachloroethene	0.295	0.312	0.349	0.325	0.300	0.365	0.306	0.290	0.305	0.287	8.18
79) 2-hexanone	0.049	0.065	0.082	0.076	0.073	0.079	0.071	0.063		0.070	15.45
80) 1,3-dichloropropane											

Initial Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11224-ICC11224
Lab FileID: D278268.D

	0.366	0.404	0.434	0.406	0.379	0.423	0.385	0.308	0.393	0.327	0.382	10.41
81) butyl acetate	0.139	0.179	0.166	0.154	0.175	0.146					0.160	10.01
82) dibromochloromethane	0.316	0.322	0.361	0.344	0.319	0.358	0.321	0.319	0.328	0.262	0.325	8.50
83) 1,2-dibromoethane	0.242	0.260	0.275	0.260	0.245	0.260	0.255	0.206	0.256		0.251	7.78
84) n-butyl ether	1.441	1.622	1.766	1.691	1.596	1.625	1.565	1.401	1.600		1.590	7.12
85) chlorobenzene	1.020	1.093	1.157	1.098	1.038	1.122	1.050	0.975	1.108	0.996	1.066	5.53
86) 1,1,1,2-tetrachloroethane	0.415	0.448	0.514	0.493	0.438	0.518	0.427	0.373	0.444	0.427	0.450	10.23
87) ethylbenzene	1.676	1.794	1.913	1.819	1.701	1.787	1.741	1.595	1.785	1.495	1.731	6.92
88) m,p-xylene	0.637	0.710	0.763	0.722	0.681	0.748	0.695	0.600	0.712	0.571	0.684	9.15
89) o-xylene	1.434	1.627	1.767	1.692	1.540	1.658	1.579	1.342	1.639	1.406	1.568	8.71
90) styrene	1.006	1.219	1.408	1.332	1.257	1.351	1.207	1.032	1.226	0.916	1.195	13.48
91) butyl acrylate	0.522	0.721	0.645	0.571	0.730	0.534		0.493			0.602	16.07
92) n-amyl acetate	0.188	0.295	0.253	0.221	0.303	0.202					0.244	19.81
93) isopropylbenzene	1.796	2.031	2.249	2.178	1.950	2.021	1.971	1.743	1.940	1.854	1.973	8.00
94) bromoform	0.217	0.237	0.283	0.263	0.251	0.276	0.241	0.216	0.252		0.248	9.48
95) cis-1,4-dichloro-2-butene	0.111	0.116	0.155	0.142	0.132	0.152	0.123		0.124		0.132	12.47
96) I 1,4-dichlorobenzene-d -----ISTD-----												
97) 4-bromofluorobenzene (s)	0.879	0.852	0.772	0.766	0.820	0.798	0.869	0.898	0.887	0.855	0.840	5.68
98) 1,1,1,2-tetrachloroethane	0.452	0.480	0.462	0.436	0.442	0.448	0.475	0.503	0.505		0.467	5.45
99) trans-1,4-dichloro-2-butene	0.124	0.148	0.176	0.161	0.152	0.176	0.148		0.158		0.155	10.79
100) 1,2,3-trichloropropane	0.146	0.160	0.151	0.142	0.146	0.149	0.152	0.166	0.161		0.153	5.19
101) bromobenzene	0.820	0.841	0.816	0.771	0.805	0.829	0.838	0.813	0.928	0.807	0.827	4.91
102) n-propylbenzene	3.335	3.485	3.329	3.215	3.268	2.971	3.412	3.207	3.582	3.189	3.299	5.20
103) 2-chlorotoluene	0.755	0.792	0.782	0.733	0.743	0.792	0.771	0.675	0.856	0.716	0.762	6.50
104) 4-chlorotoluene	2.135	2.336	2.216	2.106	2.165	2.152	2.208	2.216	2.467	2.125	2.213	5.02
105) 1,3,5-trimethylbenzene	2.471	2.652	2.727	2.589	2.500	2.514	2.630	2.531	2.713	2.467	2.579	3.77
106) tert-butylbenzene	2.046	2.080	2.248	2.132	1.951	2.186	2.068	1.938	2.086	1.623	2.036	8.50
107) 1,2,4-trimethylbenzene	2.609	2.765	2.866	2.717	2.682	2.581	2.771	2.557	2.875	2.527	2.695	4.64
108) sec-butylbenzene	2.982	3.318	3.321	3.169	3.054	2.899	3.181	2.963	3.266	2.712	3.086	6.48
109) p-isopropyltoluene	2.756	3.059	3.190	3.055	2.916	2.754	3.023	2.633	3.162	2.702	2.925	6.87
110) 1,3-dichlorobenzene												

Initial Calibration Summary

Page 5 of 5

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11224-ICC11224
Lab FileID: D278268.D

	1.570	1.710	1.787	1.712	1.642	1.695	1.661	1.519	1.685	1.563	1.655	4.97
111)	1,2,3-trimethylbenzene											
	2.922	2.960	2.985	2.892	2.777	2.594	2.919		3.105		2.894	5.25
112)	1,4-dichlorobenzene											
	1.703	1.794	1.835	1.745	1.684	1.714	1.717	1.697	1.855	2.021	1.776	5.89
113)	1,2-dichlorobenzene											
	1.464	1.599	1.629	1.568	1.489	1.516	1.526	1.340	1.580	1.481	1.519	5.46
114)	benzyl chloride											
	1.056	1.079	1.266	1.186	1.090	1.175	1.037	1.034	1.041		1.107	7.45
115)	n-butylbenzene											
	1.152	1.362	1.508	1.425	1.337	1.414	1.362	1.093	1.353	1.226	1.323	9.71
116)	2-ethylhexyl acrylate											
											0.000	-1.00
117)	hexachloroethane											
	0.374	0.443	0.487	0.454	0.416	0.492	0.430	0.376	0.437	0.377	0.429	10.14
118)	1,2-dibromo-3-chloropropane											
	0.078	0.084	0.081	0.072	0.077	0.072		0.075		0.077		5.77
119)	1,3,5-trichlorobenzene											
	1.042	1.158	1.252	1.229	1.114	1.183	1.120	0.932	1.104	0.963	1.110	9.51
120)	1,2,4-trichlorobenzene											
	0.517	0.598	0.829	0.777	0.655	0.808	0.604		0.570		0.670	17.75
121)	hexachlorobutadiene											
	0.472	0.507	0.497	0.490	0.454	0.477	0.470	0.499	0.495	0.467	0.483	3.52
122)	naphthalene											
	0.721	1.108	1.025	0.828	1.077	0.744					0.917	18.88
123)	1,2,3-trichlorobenzene											
	0.276	0.356	0.476	0.452	0.382	0.455	0.346		0.338		0.385	18.16
124)	2-methylnaphthalene											
	0.144	0.115	0.078	0.143	0.053						0.107	37.55
----- Linear regression ----- Coefficient = 0.9953												
Response Ratio = -0.00953 + 0.14665 *A												

(#) = Out of Range ### Number of calibration levels exceeded format ###

MD11224.M

Tue Nov 09 15:44:14 2021 RPT1

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8048-CC7993
 Lab FileID: 1C184943.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\da...22\v1c8048\1c184943.d Vial: 1
 Acq On : 26 Mar 2022 11:59 am Operator: PrashanS
 Sample : CC7993-50 Inst : GCMS1C
 Misc : MS57702,V1C8048,5.0,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M1CS7993.M (RTE Integrator)
 Title : SW846 8260C/D, DB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Tue Jan 11 14:50:44 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	61	-0.02	7.20
2 M	tertiary butyl alcohol	1.160	1.295	-11.6	68	0.00	7.32
3	ethanol	0.124	0.176	-41.9#	77	-0.03	5.96
4 M	1,4-dioxane	0.122	0.148	-21.3#	72	0.00	11.09
5 I	pentafluorobenzene	1.000	1.000	0.0	73	0.00	9.44
6 M	dichlorodifluoromethane	0.544	0.601	-10.5	80	0.00	3.76
7	chlorodifluoromethane	0.468	0.506	-8.1	78	0.00	3.80
8 M	chloromethane	0.576	0.674	-17.0	84	0.00	4.17
9 M	vinyl chloride	0.466	0.532	-14.2	80	0.00	4.39
10	1,3-butadiene	0.283	0.438	-54.8#	110	0.00	4.47
11 M	bromomethane	0.334	0.326	2.4	75	0.00	5.06
12 M	chloroethane	0.220	0.223	-1.4	71	0.00	5.23
13 M	trichlorofluoromethane	0.596	0.627	-5.2	76	0.00	5.67
14 M	ethyl ether	0.132	0.142	-7.6	72	0.00	6.11
15 M	acrolein	0.037	0.045	-21.6#	84	0.00	6.37
16	freon 113	0.280	0.303	-8.2	75	0.00	6.47
17 M	1,1-dichloroethene	0.324	0.293	9.6	67	0.00	6.52
18 M	acetone	0.071	0.075	-5.6	79	0.00	6.59
19 M	acetonitrile	0.034	0.037	-8.8	78	-0.01	7.03
20 M	iodomethane	0.333	0.474	-42.3#	83	0.00	6.80
21 M	carbon disulfide	1.002	0.905	9.7	67	0.00	6.92
22 M	methylene chloride	0.336	0.322	4.2	73	0.00	7.25
23 M	methyl acetate	0.201	0.210	-4.5	73	0.00	7.05
24 M	methyl tert butyl ether	0.662	0.693	-4.7	72	0.00	7.55
25 M	trans-1,2-dichloroethene	0.364	0.335	8.0	69	0.00	7.62
26 M	di-isopropyl ether	1.072	1.226	-14.4	78	0.00	8.15
27 M	2-butanone	0.022	0.023	-4.5	69	0.00	8.89
28 M	1,1-dichloroethane	0.542	0.562	-3.7	74	0.00	8.19
29 M	chloroprene	0.465	0.509	-9.5	73	0.00	8.29
30 M	acrylonitrile	0.084	0.103	-22.6#	82	0.00	7.59
31	hexane	0.531	0.622	-17.1	84	0.00	7.91
32 M	vinyl acetate	0.045	0.046	-2.2	69	0.00	8.18
33 M	ethyl tert-butyl ether	0.864	0.972	-12.5	74	0.00	8.61
34 M	ethyl acetate	0.038	0.043	-13.2	78	0.00	8.90
35 M	2,2-dichloropropane	0.474	0.487	-2.7	74	0.00	8.92
36 M	cis-1,2-dichloroethene	0.387	0.370	4.4	72	0.00	8.93
37	methyl acrylate	0.034	0.036	-5.9	74	0.00	8.99
38 M	propionitrile	0.033	0.035	-6.1	72	-0.01	9.01
39 M	bromochloromethane	0.169	0.190	-12.4	76	0.00	9.24
40 M	tetrahydrofuran	0.095	0.095	0.0	75	0.00	9.28
41 M	chloroform	0.392	0.395	-0.8	76	0.00	9.30

6.10.4

6

Continuing Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8048-CC7993
Lab FileID: 1C184943.D

42	M	t-butyl formate	0.209	0.225	-7.7	72	0.00	9.31
43	S	dibromofluoromethane (s)	0.413	0.452	-9.4	79	0.00	9.50
44	M	methacrylonitrile	0.086	0.088	-2.3	70	0.00	9.18
45	M	1,1,1-trichloroethane	0.516	0.559	-8.3	74	0.00	9.54
46		cyclohexane	0.465	0.458	1.5	71	0.00	9.60
47		1,1-dichloropropene	0.408	0.414	-1.5	71	0.00	9.72
48		iso-butyl alcohol	0.010	0.011	-10.0	75	0.00	9.74
49		carbon tetrachloride	0.492	0.526	-6.9	75	0.00	9.74
50		tert amyl alcohol	0.010	0.009#	10.0	65	0.00	9.86
51	I	1,4-difluorobenzene	1.000	1.000	0.0	73	0.00	10.36
52	S	1,2-dichloroethane-d4 (s)	0.248	0.267	-7.7	80	-0.01	9.92
53	M	n-butyl alcohol	0.005	0.005#	0.0	67	0.00	10.49
54		2,2,4-trimethylpentane	0.935	0.907	3.0	72	0.00	9.96
55	M	benzene	0.845	0.826	2.2	72	0.00	9.98
56	M	tert-amyl methyl ether	0.124	0.125	-0.8	71	0.00	10.00
57	M	heptane	0.182	0.175	3.8	70	0.00	10.14
58	M	isopropyl acetate	0.033	0.033	0.0	68	0.00	9.91
59	M	1,2-dichloroethane	0.264	0.276	-4.5	79	0.00	10.01
60	M	trichloroethene	0.280	0.286	-2.1	72	0.00	10.70
61		ethyl acrylate	0.208	0.220	-5.8	73	0.00	10.71
----- True Calc. % Drift -----								
62	M	2-nitropropane	50.000	66.961	-33.9#	98	-0.01	11.48
----- AvgRF CCRF % Dev -----								
63	M	2-chloroethyl vinyl ether	0.108	0.123	-13.9	76	0.00	11.50
64	M	methyl methacrylate	0.041	0.041	0.0	68	0.00	10.97
65	M	1,2-dichloropropane	0.208	0.224	-7.7	76	0.00	10.97
66	M	dibromomethane	0.130	0.139	-6.9	77	0.00	11.13
67	M	methylcyclohexane	0.394	0.365	7.4	67	0.00	10.90
68	M	bromodichloromethane	0.291	0.325	-11.7	78	0.00	11.27
69		epichlorohydrin	0.017	0.018	-5.9	74	0.00	11.63
70	M	cis-1,3-dichloropropene	0.331	0.370	-11.8	77	0.00	11.71
71	M	4-methyl-2-pentanone	0.059	0.066	-11.9	76	0.00	11.80
72	M	3-methyl-1-butanol	0.007	0.008#	-14.3	72	0.00	11.83
73	I	chlorobenzene-d5	1.000	1.000	0.0	79	0.00	13.51
74	S	toluene-d8 (s)	1.271	1.277	-0.5	79	0.00	12.00
75		toluene	0.706	0.643	8.9	72	0.00	12.07
76		trans-1,3-dichloropropene	0.343	0.367	-7.0	78	0.00	12.28
77		ethyl methacrylate	0.239	0.236	1.3	71	0.00	12.26
78		1,1,2-trichloroethane	0.178	0.188	-5.6	77	0.00	12.49
79	M	tetrachloroethene	0.282	0.266	5.7	72	0.00	12.66
80	M	1,3-dichloropropane	0.315	0.317	-0.6	76	0.00	12.68
81		2-hexanone	0.070	0.075	-7.1	76	0.00	12.66
82	M	butyl acetate	0.140	0.135	3.6	71	0.00	12.72
83	M	dibromochloromethane	0.310	0.318	-2.6	75	0.00	12.94
84	M	1,2-dibromoethane	0.239	0.243	-1.7	75	0.00	13.09
85		n-butyl ether	1.167	1.222	-4.7	78	0.00	13.44
86	M	chlorobenzene	0.803	0.760	5.4	75	0.00	13.55
87	M	1,1,1,2-tetrachloroethane	0.278	0.286	-2.9	78	0.00	13.60
88	M	ethylbenzene	1.325	1.235	6.8	75	0.00	13.59
89	M	m,p-xylene	0.526	0.484	8.0	74	0.00	13.70
90	M	o-xylene	0.519	0.490	5.6	74	0.00	14.12
91	M	styrene	0.837	0.809	3.3	75	0.00	14.13
92	M	bromoform	0.199	0.198	0.5	73	0.00	14.40
93		butyl acrylate	0.416	0.451	-8.4	78	0.00	13.94
94		isopropylbenzene	1.354	1.263	6.7	74	0.00	14.45
95		cis-1,4-dichloro-2-butene	0.086	0.100	-16.3	84	0.00	14.54

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V1C8048-CC7993
Lab FileID: 1C184943.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	79	0.00	15.83
97	S	4-bromofluorobenzene (s)	0.878	0.853	2.8	77	0.00	14.66
98	M	bromobenzene	0.710	0.655	7.7	74	0.00	14.86
99	M	1,1,2,2-tetrachloroethane	0.500	0.523	-4.6	78	0.00	14.77
100	M	trans-1,4-dichloro-2-bute	0.143	0.164	-14.7	84	0.00	14.82
101	M	1,2,3-trichloropropane	0.129	0.135	-4.7	79	0.00	14.85
102	M	n-propylbenzene	2.992	2.944	1.6	78	0.00	14.86
103	M	2-chlorotoluene	0.641	0.609	5.0	75	0.00	15.02
104	M	4-chlorotoluene	1.788	1.683	5.9	74	0.00	15.11
105	M	1,3,5-trimethylbenzene	2.062	1.997	3.2	75	0.00	15.01
106	M	tert-butylbenzene	0.414	0.376	9.2	69	0.00	15.36
107	M	1,2,4-trimethylbenzene	2.114	1.990	5.9	73	0.00	15.41
108	M	sec-butylbenzene	2.824	2.643	6.4	72	0.00	15.57
109	M	1,3-dichlorobenzene	1.332	1.220	8.4	72	0.00	15.77
110	M	p-isopropyltoluene	2.402	2.226	7.3	71	0.00	15.70
111	M	1,2,3-trimethylbenzene	1.982	2.001	-1.0	79	0.00	15.86
112	M	1,4-dichlorobenzene	1.267	1.210	4.5	75	0.00	15.86
113	M	benzyl chloride	1.029	1.061	-3.1	79	0.00	15.98
114	M	1,2-dichlorobenzene	1.275	1.167	8.5	73	0.00	16.26
115	M	n-butylbenzene	1.193	1.160	2.8	74	0.00	16.11
116	M	1,2-dibromo-3-chloropropa	0.090	0.097	-7.8	81	0.00	17.05
117	M	1,3,5-trichlorobenzene	1.037	0.973	6.2	72	0.00	17.22
118	M	1,2,4-trichlorobenzene	0.821	0.795	3.2	73	0.00	17.80
119	M	hexachlorobutadiene	0.538	0.452	16.0	67	0.00	17.89
120	M	naphthalene	1.544	1.560	-1.0	76	0.00	18.04
121	M	1,2,3-trichlorobenzene	0.741	0.718	3.1	75	0.00	18.25
122	m	hexachloroethane	0.440	0.411	6.6	68	0.00	16.52
123		2-methylnaphthalene	0.928	0.978	-5.4	78	0.00	19.01

(#) = Out of Range
 1C183575.D M1CS7993.M

SPCC's out = 0 CCC's out = 0
 Mon Mar 28 10:16:00 2022

6.10.4
 6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8642-CC8596
 Lab FileID: 2B190360.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ki...22\v2b8642\2b190360.d Vial: 2
 Acq On : 29 Mar 2022 10:16 pm Operator: brittink
 Sample : cc8596-50 Inst : GCMS2B
 Misc : MS57642,V2B8642,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B8596.M (RTE Integrator)
 Title : SW846 8260C/D, DB-624.1 60 mx0.25mmx1.4um
 Last Update : Wed Mar 02 11:47:13 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	58	0.00	7.76
2 M	tertiary butyl alcohol	1.183	1.377	-16.4	60	0.00	7.89
----- True Calc. % Drift -----							
3	ethanol	5000.000	6027.527	-20.6#	76	0.00	6.34
----- AvgRF CCRF % Dev -----							
4 M	1,4-dioxane	0.126	0.152	-20.6#	64	0.00	11.92
5 I	pentafluorobenzene	1.000	1.000	0.0	74	0.00	10.25
6 M	chlorodifluoromethane	0.783	0.718	8.3	62	0.00	4.15
7 M	dichlorodifluoromethane	0.942	0.679	27.9#	48#	0.00	4.14
8 M	chloromethane	0.779	0.711	8.7	62	0.00	4.56
9 M	vinyl chloride	0.733	0.636	13.2	58	0.00	4.80
10	1,3-butadiene	0.552	0.500	9.4	64	0.00	4.85
11 M	bromomethane	0.513	0.532	-3.7	74	0.03	5.48
12 M	chloroethane	0.378	0.367	2.9	70	0.01	5.64
13 M	trichlorofluoromethane	0.959	0.832	13.2	61	0.00	6.16
14 M	ethyl ether	0.257	0.239	7.0	65	0.00	6.61
15 M	acrolein	0.085	0.059	30.6#	48#	0.02	6.80
16	freon 113	0.504	0.496	1.6	71	0.01	7.08
17 M	1,1-dichloroethene	0.473	0.476	-0.6	73	0.00	7.04
18 M	acetone	0.151	0.113	25.2#	54	0.00	7.03
19 M	acetonitrile	0.066	0.057	13.6	62	0.02	7.46
20 M	iodomethane	0.921	1.002	-8.8	76	0.00	7.30
21 M	carbon disulfide	1.573	1.637	-4.1	74	0.00	7.46
22 M	methylene chloride	0.553	0.537	2.9	72	0.00	7.78
23 M	methyl acetate	0.348	0.294	15.5	60	0.01	7.60
24 M	methyl tert butyl ether	1.472	1.364	7.3	66	0.00	8.24
25 M	trans-1,2-dichloroethene	0.493	0.504	-2.2	73	0.00	8.24
26 M	di-isopropyl ether	1.621	1.453	10.4	63	0.00	8.92
----- True Calc. % Drift -----							
27 M	2-butanone	200.000	175.212	12.4	65	0.00	9.59
----- AvgRF CCRF % Dev -----							
28 M	1,1-dichloroethane	0.862	0.824	4.4	68	0.00	8.84
29 M	chloroprene	0.647	0.596	7.9	66	0.00	8.99
30 M	acrylonitrile	0.125	0.104	16.8	56	0.03	8.12
31	hexane	0.430	0.315	26.7#	53	0.00	8.67
32 M	vinyl acetate	0.087	0.085	2.3	66	0.00	8.86
33 M	ethyl tert-butyl ether	1.622	1.504	7.3	66	0.00	9.43

Continuing Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8642-CC8596
Lab FileID: 2B190360.D

34	M	ethyl acetate	0.059	0.051	13.6	62	0.00	9.67
35	M	2,2-dichloropropane	0.779	0.712	8.6	65	0.00	9.66
36	M	cis-1,2-dichloroethene	0.535	0.542	-1.3	73	0.00	9.63
37		methyl acrylate	0.385	0.331	14.0	62	0.01	9.74
38	M	propionitrile	0.062	0.054	12.9	63	0.00	9.63
39	M	bromochloromethane	0.282	0.310	-9.9	78	0.00	9.95
40	M	tetrahydrofuran	0.061	0.053	13.1	62	0.00	10.03
41	M	chloroform	0.615	0.599	2.6	74	0.00	10.02
42	M	t-butyl formate	0.383	0.393	-2.6	70	0.00	10.11
43	S	dibromofluoromethane (s)	0.490	0.499	-1.8	75	0.00	10.22
44	M	methacrylonitrile	0.188	0.173	8.0	64	0.00	9.87
45	M	1,1,1-trichloroethane	0.844	0.889	-5.3	72	0.00	10.34
46		cyclohexane	0.751	0.722	3.9	68	0.00	10.46
47		1,1-dichloropropene	0.619	0.597	3.6	70	0.00	10.53
48		iso-butyl alcohol	0.022	0.018	18.2	64	0.00	10.50
49		carbon tetrachloride	0.761	0.788	-3.5	72	0.00	10.58
50		tert amyl alcohol	0.017	0.015	11.8	61	0.00	10.65
51	I	1,4-difluorobenzene	1.000	1.000	0.0	72	0.00	11.19
52	S	1,2-dichloroethane-d4 (s)	0.336	0.300	10.7	65	0.00	10.66
53	M	n-butyl alcohol	0.008	0.008#	0.0	63	0.00	11.29
54		2,2,4-trimethylpentane	1.161	1.057	9.0	63	0.00	10.90
55	M	benzene	1.226	1.246	-1.6	72	0.00	10.79
56	M	tert-amyl methyl ether	0.235	0.232	1.3	68	0.00	10.89
57	M	heptane	0.256	0.236	7.8	64	0.00	11.08
58	M	isopropyl acetate	0.065	0.062	4.6	64	0.00	10.75
59	M	1,2-dichloroethane	0.428	0.415	3.0	70	0.00	10.76
60	M	trichloroethene	0.362	0.416	-14.9	80	0.00	11.56
61		ethyl acrylate	0.452	0.396	12.4	62	0.00	11.84
62	M	2-nitropropane	0.082	0.071	13.4	61	0.00	12.29
			----- True	Calc.	% Drift	-----		
63	M	2-chloroethyl vinyl ether	250.000	234.428	6.2	69	0.00	12.37
			----- AvgRF	CCRF	% Dev	-----		
64	M	methyl methacrylate	0.079	0.073	7.6	62	0.00	11.85
65	M	1,2-dichloropropane	0.332	0.337	-1.5	71	0.00	11.79
66	M	dibromomethane	0.211	0.220	-4.3	74	0.00	11.94
67	M	methylcyclohexane	0.594	0.589	0.8	69	0.00	11.84
68	M	bromodichloromethane	0.463	0.519	-12.1	77	0.00	12.09
69		epichlorohydrin	0.032	0.029	9.4	62	0.00	12.46
70	M	cis-1,3-dichloropropene	0.546	0.587	-7.5	71	0.00	12.59
71	M	4-methyl-2-pentanone	0.121	0.116	4.1	65	0.00	12.71
72	M	3-methyl-1-butanol	0.009	0.009#	0.0	67	0.00	12.73
73	I	chlorobenzene-d5	1.000	1.000	0.0	80	0.00	14.54
74	S	toluene-d8 (s)	1.172	1.073	8.4	74	0.00	12.94
75		toluene	0.779	0.765	1.8	76	0.00	13.01
76		trans-1,3-dichloropropene	0.486	0.466	4.1	73	0.00	13.18
77		ethyl methacrylate	0.403	0.364	9.7	68	0.00	13.24
78		1,1,2-trichloroethane	0.253	0.257	-1.6	76	0.00	13.40
79	M	tetrachloroethene	0.290	0.315	-8.6	84	0.00	13.66
80	M	1,3-dichloropropane	0.497	0.481	3.2	74	0.00	13.60
81		2-hexanone	0.117	0.100	14.5	66	0.00	13.62
82	M	butyl acetate	0.202	0.172	14.9	68	0.00	13.74
83	M	dibromochloromethane	0.404	0.432	-6.9	83	0.00	13.88
84	M	1,2-dibromoethane	0.334	0.340	-1.8	79	0.00	14.04
85		n-butyl ether	1.363	1.279	6.2	72	0.00	14.57
86	M	chlorobenzene	0.941	1.004	-6.7	82	0.00	14.57
87	M	1,1,1,2-tetrachloroethane	0.384	0.391	-1.8	79	0.00	14.63

Continuing Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V2B8642-CC8596
Lab FileID: 2B190360.D

88	M	ethylbenzene	1.577	1.524	3.4	78	0.00	14.66
89	M	m,p-xylene	0.608	0.630	-3.6	81	0.00	14.78
90	M	o-xylene	0.643	0.702	-9.2	84	0.00	15.22
91	M	styrene	1.015	1.114	-9.8	82	0.00	15.22
92		n-amyl acetate	0.237	0.227	4.2	73	0.00	15.27
93	M	bromoform	0.296	0.318	-7.4	82	0.00	15.45
94		butyl acrylate	0.632	0.572	9.5	68	0.00	15.04
95		isopropylbenzene	1.731	1.836	-6.1	83	0.00	15.60
96		cis-1,4-dichloro-2-butene	0.152	0.149	2.0	73	0.00	15.61
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	88	0.00	17.02
98	S	4-bromofluorobenzene (s)	0.875	0.705	19.4	74	0.00	15.78
99	M	bromobenzene	0.841	0.857	-1.9	85	0.00	15.98
100	M	1,1,2,2-tetrachloroethane	0.824	0.733	11.0	76	0.00	15.85
101	M	trans-1,4-dichloro-2-bute	0.184	0.156	15.2	69	0.00	15.90
102	M	1,2,3-trichloropropane	0.221	0.199	10.0	77	0.00	15.93
103	M	n-propylbenzene	3.663	3.427	6.4	83	0.00	16.03
104	M	2-chlorotoluene	0.814	0.799	1.8	86	0.00	16.16
105	M	4-chlorotoluene	2.204	2.025	8.1	82	0.00	16.27
106	M	1,3,5-trimethylbenzene	2.630	2.496	5.1	83	0.00	16.20
107	M	tert-butylbenzene	0.573	0.588	-2.6	87	0.00	16.57
108	M	1,2,4-trimethylbenzene	2.758	2.642	4.2	83	0.00	16.61
109	M	sec-butylbenzene	3.572	3.586	-0.4	87	0.00	16.80
110	M	1,3-dichlorobenzene	1.641	1.643	-0.1	88	0.00	16.96
111	M	p-isopropyltoluene	2.975	3.029	-1.8	85	0.00	16.93
112	M	1,4-dichlorobenzene	1.627	1.660	-2.0	88	0.00	17.05
113		benzyl chloride	1.545	1.434	7.2	73	0.00	17.16
114		1,2,3-trimethylbenzene	2.789	2.756	1.2	85	0.00	17.08
115	M	1,2-dichlorobenzene	1.639	1.781	-8.7	90	0.00	17.47
116	M	n-butylbenzene	1.371	1.521	-10.9	88	0.00	17.37
117		hexachloroethane	0.550	0.621	-12.9	94	0.00	17.78
118	M	1,2-dibromo-3-chloropropa	0.207	0.185	10.6	71	0.00	18.26
119		1,3,5-trichlorobenzene	1.318	1.421	-7.8	81	0.00	18.52
120	M	1,2,4-trichlorobenzene	1.004	1.034	-3.0	74	0.00	19.20
121	M	hexachlorobutadiene	0.548	0.450	17.9	65	0.00	19.36
122	M	naphthalene	2.328	1.715	26.3#	56	0.00	19.49
123	M	1,2,3-trichlorobenzene	0.879	0.770	12.4	65	0.00	19.75

		True	Calc.	% Drift			

124		2-methylnaphthalene	25.000	13.457	46.2#	45	0.00 20.73
125		pentafluorobenzene(a)	N/A	50.00	-100.0#	182	-10.48# 10.25
126		Freon 142B	N/A	0.00	100.0#	0	0.00 0.00
127		vinyl bromide	N/A	0.00	100.0#	0	0.00 0.00
128		allyl chloride	N/A	0.00	100.0#	0	0.00 0.00

(#) = Out of Range
 2B189332.D M2B8596.M

SPCC's out = 0 CCC's out = 0
 Wed Mar 30 11:34:59 2022

Continuing Calibration Summary

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Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7677-CC7629
 Lab FileID: 3C174491.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...22\v3c7677\3c174491.d Vial: 4
 Acq On : 28 Mar 2022 12:40 pm Operator: PrashanS
 Sample : cc7629-50 Inst : MS3C
 Misc : MS57711,V3C7677,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3C7629.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi624 20m x 0.18mm x 1.0um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	62	0.00	2.51
2	ethanol	0.203	0.261	-28.6#	78	0.00	1.94
3	tertiary butyl alcohol	1.151	1.312	-14.0	68	0.00	2.57
4	1,4-dioxane	0.125	0.180	-44.0#	82	0.00	5.18
5 I	pentafluorobenzene	1.000	1.000	0.0	88	0.00	3.94
6	dichlorodifluoromethane	0.370	0.509	-37.6#	114	0.00	1.05
7	chloromethane	0.489	0.552	-12.9	99	-0.01	1.20
8	1,3-butadiene	0.311	0.170	45.3#	46#	0.00	1.28
9	vinyl chloride	0.365	0.421	-15.3	95	0.00	1.26
10	bromomethane	0.232	0.221	4.7	88	0.00	1.50
11	chloroethane	0.229	0.270	-17.9	99	0.00	1.57
12	trichlorofluoromethane	0.530	0.711	-34.2#	111	0.00	1.73
13	ethyl ether	0.176	0.185	-5.1	85	0.00	1.94
14	acrolein	0.049	0.051	-4.1	93	0.00	2.08
15	freon 113	0.276	0.258	6.5	78	0.00	2.08
16	1,1-dichloroethene	0.296	0.285	3.7	81	0.00	2.10
17	acetone	0.096	0.090	6.3	95	0.00	2.18
18	acetonitrile	0.039	0.036	7.7	81	0.00	2.44
19	iodomethane	50.000	63.900	-27.8#	121	0.00	2.23
		AvgRF	CCRF	% Dev			
20	carbon disulfide	1.028	0.888	13.6	77	0.00	2.25
21	methylene chloride	0.363	0.339	6.6	88	0.00	2.50
22	methyl acetate	0.245	0.209	14.7	81	0.00	2.40
23	methyl tert butyl ether	0.878	0.925	-5.4	89	0.00	2.64
24	trans-1,2-dichloroethene	0.330	0.357	-8.2	89	0.00	2.66
25	hexane	0.673	0.506	24.8#	67	0.00	2.80
26	di-isopropyl ether	1.151	1.184	-2.9	87	0.00	2.99
27	ethyl tert-butyl ether	1.105	1.156	-4.6	85	0.00	3.28
28	2-butanone	0.031	0.031	0.0	80	0.00	3.51
29	1,1-dichloroethane	0.618	0.652	-5.5	88	0.00	3.01
30	chloroprene	0.564	0.588	-4.3	85	0.00	3.06
31	acrylonitrile	0.094	0.103	-9.6	95	0.00	2.73
32	vinyl acetate	0.074	0.074	0.0	83	0.00	3.04
33	ethyl acetate	0.055	0.049	10.9	80	0.00	3.52
34	2,2-dichloropropane	0.509	0.510	-0.2	83	0.00	3.46
35	cis-1,2-dichloroethene	0.356	0.389	-9.3	89	0.00	3.49
36	propionitrile	0.042	0.041	2.4	81	0.00	3.62
37	bromochloromethane	0.218	0.240	-10.1	93	0.00	3.70

Continuing Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7677-CC7629
Lab FileID: 3C174491.D

38	tetrahydrofuran	0.107	0.086	19.6	74	0.00	3.69
39	chloroform	0.639	0.642	-0.5	91	0.00	3.76
40	tert-butyl formate	0.303	0.186	38.6#	49#	0.00	3.76
41	isobutyl alcohol	0.059	0.044	25.4#	67	0.00	4.17
42 S	dibromofluoromethane (s)	0.383	0.417	-8.9	95	0.00	3.90
43	methacrylonitrile	0.118	0.116	1.7	82	0.00	3.72
44	1,1,1-trichloroethane	0.540	0.602	-11.5	90	0.00	3.87
45	cyclohexane	0.532	0.504	5.3	79	0.00	3.85
46	1,1-dichloropropene	0.174	0.183	-5.2	88	0.00	4.01
47	tert-amyl alcohol	0.033	0.022	33.3#	61	0.00	4.23
48	carbon tetrachloride	0.472	0.542	-14.8	92	0.00	3.98
49 I	1,4-difluorobenzene	1.000	1.000	0.0	89	0.00	4.59
50 S	1,2-dichloroethane-d4 (s)	0.301	0.319	-6.0	91	0.00	4.22
51	2,2,4-trimethylpentane	1.121	0.958	14.5	72	0.00	4.17
52	tert-amyl methyl ether	0.241	0.244	-1.2	87	0.00	4.26
53	n-butyl alcohol	0.007	0.006	14.3	69	0.00	4.80
54	benzene	0.936	0.992	-6.0	90	0.00	4.19
55	heptane	0.232	0.196	15.5	72	0.00	4.36
56	isopropyl acetate	0.241	0.244	-1.2	87	0.00	4.26
57	1,2-dichloroethane	0.339	0.342	-0.9	85	0.00	4.28
58	trichloroethene	0.256	0.277	-8.2	91	0.00	4.80
59	ethyl acrylate	0.317	0.307	3.2	78	0.00	4.93
60	2-nitropropane	0.103	0.082	20.4#	73	0.00	5.65
61	2-chloroethyl vinyl ether	0.147	0.149	-1.4	82	0.00	5.67
62	methyl methacrylate	0.065	0.066	-1.5	87	0.00	5.16
63	1,2-dichloropropane	0.246	0.259	-5.3	87	0.00	5.06
64	methylcyclohexane	0.445	0.378	15.1	73	0.00	4.91
65	dibromomethane	0.138	0.140	-1.4	85	0.00	5.19
66	bromodichloromethane	0.307	0.343	-11.7	92	0.00	5.35
67	epichlorohydrin	0.023	0.022	4.3	82	0.00	5.75
68	cis-1,3-dichloropropene	0.383	0.424	-10.7	88	0.00	5.80
69	4-methyl-2-pentanone	0.038	0.038	0.0	81	0.00	5.93
70	3-methyl-1-butanol	0.011	0.008	27.3#	64	0.00	6.02
71 I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	7.31
72 S	toluene-d8 (s)	1.256	1.284	-2.2	93	0.00	5.99
73	toluene	0.799	0.752	5.9	88	0.00	6.05
74	trans-1,3-dichloropropene	0.398	0.410	-3.0	84	0.00	6.35
75	ethyl methacrylate	0.344	0.326	5.2	80	0.00	6.38
76	1,1,2-trichloroethane	0.196	0.193	1.5	84	0.00	6.51
77	2-hexanone	0.100	0.086	14.0	73	0.00	6.71
78	tetrachloroethene	0.334	0.358	-7.2	94	0.00	6.53
79	1,3-dichloropropane	0.404	0.399	1.2	85	0.00	6.66
80	butyl acetate	0.183	0.157	14.2	76	0.00	6.80
81	dibromochloromethane	0.281	0.313	-11.4	93	0.00	6.83
82	1,2-dibromoethane	0.242	0.238	1.7	83	0.00	6.93
83	n-butyl ether	1.341	1.305	2.7	83	0.00	7.39
84	chlorobenzene	0.831	0.823	1.0	87	0.00	7.33
85	1,1,1,2-tetrachloroethane	0.285	0.310	-8.8	89	0.00	7.42
86	ethylbenzene	1.394	1.403	-0.6	88	0.00	7.41
87	m,p-xylene	0.554	0.551	0.5	87	0.00	7.51
88	o-xylene	1.122	1.135	-1.2	89	0.00	7.85
89	styrene	0.896	0.926	-3.3	86	0.00	7.87
90	bromoform	0.180	0.200	-11.1	94	0.00	8.05
91	butyl acrylate	0.526	0.458	12.9	72	0.00	7.84
92	isopropylbenzene	1.376	1.415	-2.8	88	0.00	8.14
93	cis-1,4-dichloro-2-butene	0.114	0.098	14.0	74	0.00	8.28
94 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	9.25

Continuing Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: V3C7677-CC7629
Lab FileID: 3C174491.D

95	S	4-bromofluorobenzene (s)	0.937	0.901	3.8	88	0.00	8.32
96		bromobenzene	0.705	0.703	0.3	87	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.517	11.8	76	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.095	5.9	76	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.179	7.3	82	0.00	8.51
100		n-propylbenzene	3.213	3.208	0.2	86	0.00	8.48
101		2-chlorotoluene	0.692	0.678	2.0	85	0.00	8.57
102		4-chlorotoluene	0.716	0.701	2.1	84	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.425	-2.5	89	0.00	8.64
104		tert-butylbenzene	2.082	2.131	-2.4	88	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.461	-2.0	89	0.00	8.94
106		sec-butylbenzene	3.008	3.006	0.1	85	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.371	2.4	88	0.00	9.19
108		p-isopropyltoluene	2.654	2.763	-4.1	88	0.00	9.19
109		1,4-dichlorobenzene	1.428	1.416	0.8	89	0.00	9.26
110		1,2,3-trimethylbenzene	2.391	2.545	-6.4	92	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.284	2.8	86	0.00	9.56
112		n-butylbenzene	1.319	1.311	0.6	85	0.00	9.51
113		1,2-dibromo-3-chloropropa	0.149	0.138	7.4	80	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.254	-14.9	97	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	1.087	-12.8	97	0.00	10.81
116		hexachlorobutadiene	0.549	0.666	-21.3#	105	0.00	10.90
117		naphthalene	2.262	2.256	0.3	83	0.00	11.00
118		1,2,3-trichlorobenzene	0.930	1.008	-8.4	92	0.00	11.19
119		hexachloroethane	0.368	0.424	-15.2	95	0.00	9.72
120		benzyl chloride	1.089	1.013	7.0	77	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene(a)	1.000	1.000	0.0	97	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
 3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
 Tue Mar 29 22:29:04 2022

6.10.12
 6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11380-CC11224
 Lab FileID: D281939.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...022\vd11380\d281939.d Vial: 33
 Acq On : 29 Mar 2022 10:04 pm Operator: THIENN
 Sample : cc11224-50 Inst : MSD
 Misc : MS57133,VD11380,5,,100,5,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MD11224.M (RTE Integrator)
 Title : SW846 8260C, Rxi-624 MS 60m x 0.25mm x 1.4um
 Last Update : Tue Nov 09 15:38:15 2021
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	117	0.05	7.25
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.392	1.327	4.7	110	0.00	7.32
4	1,4-dioxane	0.140	0.145	-3.6	119	-0.01	11.07
5 I	pentafluorobenzene	1.000	1.000	0.0	132	0.00	9.45
6	chlorodifluoromethane	0.740	0.719	2.8	125	0.00	4.34
7	dichlorodifluoromethane	1.145	1.209	-5.6	132	0.00	4.33
8	chloromethane	1.024	0.739	27.8#	94	0.00	4.66
9	1,3-butadiene	0.700	0.506	27.7#	93	0.00	4.89
10	vinyl chloride	0.992	0.694	30.0#	90	0.00	4.86
11	bromomethane	0.713	0.675	5.3	121	0.00	5.40
12	chloroethane	0.554	0.525	5.2	118	-0.01	5.54
13	trichlorofluoromethane	1.137	1.457	-28.1#	161	0.00	5.98
14	ethyl ether	0.204	0.188	7.8	115	0.00	6.25
15	acrolein	0.054	0.055	-1.9	125	0.00	6.42
16	freon 113	0.568	0.598	-5.3	132	-0.01	6.71
17	1,1-dichloroethene	0.471	0.468	0.6	129	0.00	6.65
----- True Calc. % Drift -----							
18	acetone	200.000	171.561	14.2	120	0.00	6.59
----- AvgRF CCRF % Dev -----							
19	acetonitrile	0.049	0.041	16.3	112	0.01	6.94
20	iodomethane	1.029	1.114	-8.3	138	0.00	6.88
21	carbon disulfide	1.670	1.587	5.0	120	0.00	7.05
22	methylene chloride	0.517	0.494	4.4	124	0.00	7.27
23	methyl acetate	0.047	0.051	-8.5	131	0.00	7.05
24	methyl tert butyl ether	1.457	1.353	7.1	123	0.00	7.66
25	trans-1,2-dichloroethene	0.553	0.503	9.0	125	0.00	7.68
26	hexane	0.350	0.266	24.0#	100	0.00	8.05
27	di-isopropyl ether	1.878	1.553	17.3	104	0.00	8.24
28	2-butanone	0.023	0.028	-21.7#	151	0.00	8.82
29	1,1-dichloroethane	0.851	0.775	8.9	117	0.00	8.21
30	chloroprene	0.776	0.673	13.3	110	0.00	8.33
31	acrylonitrile	0.128	0.125	2.3	121	0.00	7.51
32	vinyl acetate	0.065	0.075	-15.4	139	0.00	8.15
33	ethyl tert-butyl ether	1.762	1.548	12.1	109	0.00	8.70
34	ethyl acetate	0.042	0.044	-4.8	126	0.00	8.87
35	2,2-dichloropropane	0.984	0.869	11.7	116	-0.01	8.97
36	cis-1,2-dichloroethene	0.561	0.523	6.8	121	-0.01	8.91
37	propionitrile	0.040	0.035	12.5	110	-0.01	8.84

Continuing Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11380-CC11224
Lab FileID: D281939.D

		True	Calc.	% Drift			
38	methyl acrylate	50.000	47.366	5.3	136	0.00	8.96
		AvgRF	CCRF	% Dev			
39	methacrylonitrile	0.104	0.103	1.0	125	0.00	9.07
40	bromochloromethane	0.280	0.285	-1.8	131	0.00	9.20
41	tetrahydrofuran	0.037	0.038	-2.7	126	0.00	9.26
42	chloroform	0.913	0.870	4.7	130	0.00	9.28
43	tert-butyl formate	0.384	0.460	-19.8	150	0.00	9.34
44 S	dibromofluoromethane (s)	0.488	0.497	-1.8	135	0.00	9.47
45	1,1,1-trichloroethane	1.008	1.067	-5.9	136	-0.01	9.59
46	cyclohexane	1.036	0.975	5.9	115	0.00	9.74
47	isobutyl alcohol	0.005	0.005	0.0	148	0.00	9.76
48	1,1-dichloropropene	0.626	0.559	10.7	119	0.00	9.75
49	carbon tetrachloride	0.921	1.013	-10.0	140	0.00	9.81
50	tert-amyl alcohol	0.015	0.014	6.7	123	0.00	9.85
51	isopropyl acetate	0.071	0.076	-7.0	130	0.00	9.89
52 I	1,4-difluorobenzene	1.000	1.000	0.0	134	0.00	10.40
53 S	1,2-dichloroethane-d4 (s)	0.324	0.314	3.1	137	0.00	9.89
54	n-butyl alcohol	0.004	0.004	0.0	114	0.00	10.42
55	2,2,4-trimethylpentane	1.360	1.046	23.1#	92	0.00	10.14
56	benzene	1.267	1.202	5.1	122	0.00	9.99
57	tert-amyl methyl ether	1.194	1.017	14.8	114	0.00	10.10
58	heptane	0.210	0.171	18.6	108	0.00	10.30
59	1,2-dichloroethane	0.446	0.418	6.3	130	0.00	9.98
60	ethyl acrylate	0.244	0.227	7.0	126	0.00	10.71
61	trichloroethene	0.328	0.348	-6.1	135	0.00	10.74
62	2-chloroethyl vinyl ether	0.125	0.122	2.4	122	0.00	11.53
63	methyl methacrylate	0.057	0.063	-10.5	133	0.00	10.99
64	methylcyclohexane	0.692	0.573	17.2	101	-0.01	11.09
65	1,2-dichloropropane	0.311	0.298	4.2	125	0.00	11.01
66	dibromomethane	0.178	0.203	-14.0	151	0.00	11.12
67	bromodichloromethane	0.421	0.464	-10.2	147	0.00	11.28
68	2-nitropropane	0.059	0.072	-22.0#	176	0.00	11.44
69	epichlorohydrin	0.023	0.021	8.7	127	-0.01	11.59
70	cis-1,3-dichloropropene	0.491	0.490	0.2	129	0.00	11.78
71	4-methyl-2-pentanone	0.079	0.079	0.0	122	0.00	11.87
72	isoamyl alcohol	0.006	0.006	0.0	114	0.00	11.88
73 I	chlorobenzene-d5	1.000	1.000	0.0	140	0.00	13.81
74 S	toluene-d8 (s)	1.147	1.096	4.4	131	0.00	12.13
75	toluene	0.816	0.740	9.3	125	0.00	12.22
76	trans-1,3-dichloropropene	0.410	0.427	-4.1	138	0.00	12.38
77	1,1,2-trichloroethane	0.181	0.191	-5.5	142	0.00	12.62
78	tetrachloroethene	0.313	0.318	-1.6	137	0.00	12.85
79	2-hexanone	0.070	0.066	5.7	121	0.00	12.81
80	1,3-dichloropropane	0.382	0.379	0.8	130	0.00	12.82
81	butyl acetate	0.160	0.118	26.3#	100	-0.01	12.93
82	dibromochloromethane	0.325	0.389	-19.7	158	-0.01	13.11
83	1,2-dibromoethane	0.251	0.265	-5.6	142	0.00	13.28
84	n-butyl ether	1.590	1.353	14.9	112	0.00	13.84
85	chlorobenzene	1.066	0.994	6.8	127	0.00	13.84
86	1,1,1,2-tetrachloroethane	0.450	0.464	-3.1	132	-0.01	13.91
87	ethylbenzene	1.731	1.609	7.0	124	0.00	13.93
88	m,p-xylene	0.684	0.649	5.1	126	-0.01	14.06
89	o-xylene	1.568	1.444	7.9	119	-0.01	14.51
90	styrene	1.195	1.132	5.3	119	0.00	14.52
91	butyl acrylate	0.602	0.466	22.6#	101	0.00	14.32

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: VD11380-CC11224
Lab FileID: D281939.D

92	n-amyl acetate	0.244	0.191	21.7#	105	0.00	14.56
93	isopropylbenzene	1.973	1.877	4.9	120	-0.01	14.92
94	bromoform	0.248	0.269	-8.5	143	0.00	14.76
95	cis-1,4-dichloro-2-butene	0.132	0.137	-3.8	135	0.00	14.91
96 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	-0.01	16.45
97 S	4-bromofluorobenzene (s)	0.840	0.776	7.6	115	0.00	15.13
98	1,1,2,2-tetrachloroethane	0.467	0.507	-8.6	132	-0.01	15.18
99	trans-1,4-dichloro-2-bute	0.155	0.144	7.1	102	0.00	15.22
100	1,2,3-trichloropropane	0.153	0.181	-18.3	144	0.00	15.28
101	bromobenzene	0.827	0.821	0.7	121	-0.01	15.33
102	n-propylbenzene	3.299	3.285	0.4	116	-0.01	15.39
103	2-chlorotoluene	0.762	0.788	-3.4	122	-0.01	15.53
104	4-chlorotoluene	2.213	1.970	11.0	106	0.00	15.65
105	1,3,5-trimethylbenzene	2.579	2.599	-0.8	114	-0.01	15.57
106	tert-butylbenzene	2.036	2.164	-6.3	115	-0.01	15.95
107	1,2,4-trimethylbenzene	2.695	2.690	0.2	112	0.00	16.01
108	sec-butylbenzene	3.086	3.194	-3.5	114	0.00	16.20
109	p-isopropyltoluene	2.925	2.949	-0.8	109	-0.01	16.35
110	1,3-dichlorobenzene	1.655	1.637	1.1	108	0.00	16.38
111	1,2,3-trimethylbenzene	2.894	2.876	0.6	113	0.00	16.48
112	1,4-dichlorobenzene	1.776	1.643	7.5	107	-0.01	16.48
113	1,2-dichlorobenzene	1.519	1.562	-2.8	113	-0.01	16.89
114	benzyl chloride	1.107	0.945	14.6	90	-0.01	16.57
115	n-butylbenzene	1.323	1.258	4.9	100	-0.01	16.81
116	2-ethylhexyl acrylate	0.000	0.162	0.0	0#	0.00	18.70
117	hexachloroethane	0.429	0.487	-13.5	122	0.00	17.26
118	1,2-dibromo-3-chloropropa	0.077	0.086	-11.7	119	-0.01	17.72
119	1,3,5-trichlorobenzene	1.110	1.184	-6.7	109	0.00	17.98
120	1,2,4-trichlorobenzene	0.670	0.730	-9.0	107	-0.01	18.68
121	hexachlorobutadiene	0.483	0.470	2.7	109	-0.01	18.83
122	naphthalene	0.917	1.208	-31.7#	134	0.00	19.01
123	1,2,3-trichlorobenzene	0.385	0.565	-46.8#	142	-0.01	19.27

	----- True	Calc.	% Drift	-----			
124	2-methylnaphthalene	25.000	42.393	-69.6#	226	-0.01	20.43

(#) = Out of Range
D278268.D MD11224.M

SPCC's out = 0 CCC's out = 0
Thu Mar 31 04:38:13 2022

6.10.17
6

Surrogate Recovery Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Method: SW846 8260D	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD41894-21	2B190376.D	102	100	103	90
JD41894-22	2B190377.D	103	96	102	97
JD41894-23	2B190368.D	102	97	102	88
JD41894-24	2B190369.D	101	99	110	92
JD41837-1MS	2B190372.D	98	91	97	95
JD41837-1MSD	2B190373.D	100	90	110	90
V2B8642-BS	2B190362.D	99	89	93	81* a
V2B8642-MB	2B190364.D	103	96	99	109

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	80-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

Surrogate Recovery Summary

Page 1 of 2

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Method: SW846 8260D

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD41894-1	1C184950.D	116	114	104	100
JD41894-2	1C184951.D	116	115	105	100
JD41894-3	1C184952.D	116	113	105	99
JD41894-4	1C184953.D	118	114	104	97
JD41894-5	1C184954.D	118	117	106	100
JD41894-6	3C174495.D	110	106	97	97
JD41894-7	3C174496.D	112	106	98	95
JD41894-8	3C174497.D	110	107	99	97
JD41894-9	3C174498.D	112	107	99	96
JD41894-10	3C174499.D	110	107	99	96
JD41894-11	3C174500.D	112	107	99	97
JD41894-12	3C174501.D	112	108	104	101
JD41894-13	D281950.D	105	104	87	266*
JD41894-13	D281949.D	102	102	96	104
JD41894-14	3C174505.D	111	105	99	98
JD41894-15	3C174506.D	114	105	98	95
JD41894-16	3C174507.D	114	107	98	94
JD41894-17	1C184949.D	115	114	107	101
JD41894-18	3C174508.D	112	105	100	97
JD41894-19	3C174509.D	111	108	100	97
JD41894-20	3C174510.D	111	108	98	96
JD41894-17MS	1C184955.D	117	111	103	101
JD41894-17MSD	1C184956.D	116	110	101	100
JD41894-6MS	3C174502.D	114	106	102	97
JD41894-7DUP	3C174504.D	109	104	99	95
JD41985-1MS	D281946.D	100	98	98	91
JD41985-1MSD	D281947.D	104	97	94	93
V1C8048-BS	1C184944.D	109	106	102	95
V1C8048-BSD	1C184945.D	109	106	101	98
V1C8048-MB	1C184947.D	109	105	103	99
V3C7677-BS	3C174492.D	110	104	102	95
V3C7677-MB	3C174494.D	108	102	99	96
VD11380-BS	D281942.D	102	96	95	92
VD11380-MB	D281944.D	104	96	96	118

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

80-124%

S2 = 1,2-Dichloroethane-D4

75-133%

6.9.2

6

Surrogate Recovery Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Method: SW846 8260D	Matrix: SO

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S3 = Toluene-D8	79-125%
S4 = 4-Bromofluorobenzene	58-148%

6.9.2
6

Blank Spike Summary

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C7677-BS	3C174492.D	1	03/28/22	PS	n/a	n/a	V3C7677

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-14, JD41894-15, JD41894-16, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	191	96	52-156
71-43-2	Benzene	50	53.6	107	82-119
74-97-5	Bromochloromethane	50	56.6	113	82-123
75-27-4	Bromodichloromethane	50	58.9	118	83-121
75-25-2	Bromoform	50	56.4	113	74-138
74-83-9	Bromomethane	50	48.1	96	56-150
78-93-3	2-Butanone (MEK)	200	200	100	72-138
75-15-0	Carbon disulfide	50	44.4	89	67-131
56-23-5	Carbon tetrachloride	50	58.6	117	72-130
108-90-7	Chlorobenzene	50	51.5	103	83-114
75-00-3	Chloroethane	50	60.3	121	67-141
67-66-3	Chloroform	50	52.1	104	76-115
74-87-3	Chloromethane	50	57.6	115	57-141
110-82-7	Cyclohexane	50	48.8	98	69-130
96-12-8	1,2-Dibromo-3-chloropropane	50	46.1	92	72-131
124-48-1	Dibromochloromethane	50	57.8	116	80-128
106-93-4	1,2-Dibromoethane	50	51.1	102	58-145
95-50-1	1,2-Dichlorobenzene	50	50.6	101	83-117
541-73-1	1,3-Dichlorobenzene	50	50.1	100	82-114
106-46-7	1,4-Dichlorobenzene	50	51.0	102	79-114
75-71-8	Dichlorodifluoromethane	50	69.3	139	49-146
75-34-3	1,1-Dichloroethane	50	53.7	107	76-126
107-06-2	1,2-Dichloroethane	50	52.3	105	76-118
75-35-4	1,1-Dichloroethene	50	49.3	99	72-125
156-59-2	cis-1,2-Dichloroethene	50	56.9	114	80-118
156-60-5	trans-1,2-Dichloroethene	50	56.1	112	76-122
78-87-5	1,2-Dichloropropane	50	54.0	108	82-123
10061-01-5	cis-1,3-Dichloropropene	50	57.5	115	83-123
10061-02-6	trans-1,3-Dichloropropene	50	53.3	107	83-123
100-41-4	Ethylbenzene	50	52.2	104	83-115
76-13-1	Freon 113	50	48.4	97	65-132
591-78-6	2-Hexanone	200	174	87	73-138
98-82-8	Isopropylbenzene	50	53.7	107	81-122
79-20-9	Methyl Acetate	50	42.3	85	63-142
108-87-2	Methylcyclohexane	50	43.9	88	73-126
1634-04-4	Methyl Tert Butyl Ether	50	54.4	109	75-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3C7677-BS	3C174492.D	1	03/28/22	PS	n/a	n/a	V3C7677

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-14, JD41894-15, JD41894-16, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	199	100	71-138
75-09-2	Methylene chloride	50	48.9	98	73-122
100-42-5	Styrene	50	53.8	108	84-122
79-34-5	1,1,2,2-Tetrachloroethane	50	45.0	90	75-127
127-18-4	Tetrachloroethene	50	55.3	111	73-125
108-88-3	Toluene	50	48.0	96	82-118
87-61-6	1,2,3-Trichlorobenzene	50	55.6	111	68-132
120-82-1	1,2,4-Trichlorobenzene	50	57.3	115	72-133
71-55-6	1,1,1-Trichloroethane	50	58.8	118	77-124
79-00-5	1,1,2-Trichloroethane	50	50.9	102	83-122
79-01-6	Trichloroethene	50	56.2	112	80-122
75-69-4	Trichlorofluoromethane	50	69.4	139* a	69-132
75-01-4	Vinyl chloride	50	58.8	118	60-144
	m,p-Xylene	100	103	103	82-119
95-47-6	o-Xylene	50	52.4	105	84-120
1330-20-7	Xylene (total)	150	155	103	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	110%	80-124%
17060-07-0	1,2-Dichloroethane-D4	104%	75-133%
2037-26-5	Toluene-D8	102%	79-125%
460-00-4	4-Bromofluorobenzene	95%	58-148%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD41894**Account:** SESINJPB SESI Consulting Engineers**Project:** 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8642-BS	2B190362.D	1	03/29/22	BK	n/a	n/a	V2B8642

The QC reported here applies to the following samples:**Method:** SW846 8260D

JD41894-21, JD41894-22, JD41894-23, JD41894-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	159	80	27-175
71-43-2	Benzene	50	50.9	102	80-115
74-97-5	Bromochloromethane	50	55.1	110	83-122
75-27-4	Bromodichloromethane	50	55.7	111	82-119
75-25-2	Bromoform	50	55.1	110	77-135
74-83-9	Bromomethane	50	53.4	107	40-162
78-93-3	2-Butanone (MEK)	200	182	91	61-150
75-15-0	Carbon disulfide	50	52.8	106	64-130
56-23-5	Carbon tetrachloride	50	51.9	104	75-127
108-90-7	Chlorobenzene	50	54.0	108	80-115
75-00-3	Chloroethane	50	51.0	102	56-144
67-66-3	Chloroform	50	48.8	98	75-116
74-87-3	Chloromethane	50	47.4	95	41-153
110-82-7	Cyclohexane	50	47.6	95	66-129
96-12-8	1,2-Dibromo-3-chloropropane	50	50.5	101	69-134
124-48-1	Dibromochloromethane	50	53.8	108	81-123
106-93-4	1,2-Dibromoethane	50	53.3	107	67-138
95-50-1	1,2-Dichlorobenzene	50	55.3	111	81-117
541-73-1	1,3-Dichlorobenzene	50	51.8	104	81-115
106-46-7	1,4-Dichlorobenzene	50	51.7	103	80-114
75-71-8	Dichlorodifluoromethane	50	38.1	76	43-152
75-34-3	1,1-Dichloroethane	50	48.3	97	75-125
107-06-2	1,2-Dichloroethane	50	48.2	96	73-117
75-35-4	1,1-Dichloroethene	50	49.9	100	70-124
156-59-2	cis-1,2-Dichloroethene	50	51.2	102	80-120
156-60-5	trans-1,2-Dichloroethene	50	52.2	104	77-121
78-87-5	1,2-Dichloropropane	50	51.8	104	79-121
10061-01-5	cis-1,3-Dichloropropene	50	54.1	108	83-123
10061-02-6	trans-1,3-Dichloropropene	50	48.7	97	83-122
100-41-4	Ethylbenzene	50	48.1	96	78-116
76-13-1	Freon 113	50	48.2	96	68-134
591-78-6	2-Hexanone	200	183	92	66-136
98-82-8	Isopropylbenzene	50	52.8	106	78-121
79-20-9	Methyl Acetate	50	43.5	87	60-143
108-87-2	Methylcyclohexane	50	48.2	96	71-123
1634-04-4	Methyl Tert Butyl Ether	50	47.0	94	76-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B8642-BS	2B190362.D	1	03/29/22	BK	n/a	n/a	V2B8642

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41894-21, JD41894-22, JD41894-23, JD41894-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	202	101	73-134
75-09-2	Methylene chloride	50	48.9	98	73-123
100-42-5	Styrene	50	55.8	112	81-125
79-34-5	1,1,2,2-Tetrachloroethane	50	47.1	94	73-126
127-18-4	Tetrachloroethene	50	53.8	108	73-119
108-88-3	Toluene	50	49.4	99	79-116
87-61-6	1,2,3-Trichlorobenzene	50	57.7	115	63-137
120-82-1	1,2,4-Trichlorobenzene	50	60.6	121	68-135
71-55-6	1,1,1-Trichloroethane	50	53.1	106	76-124
79-00-5	1,1,2-Trichloroethane	50	52.4	105	83-117
79-01-6	Trichloroethene	50	57.5	115	80-118
75-69-4	Trichlorofluoromethane	50	44.3	89	67-134
75-01-4	Vinyl chloride	50	45.7	91	52-146
	m,p-Xylene	100	105	105	79-119
95-47-6	o-Xylene	50	55.2	110	81-119
1330-20-7	Xylene (total)	150	161	107	80-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	89%	80-120%
2037-26-5	Toluene-D8	93%	80-120%
460-00-4	4-Bromofluorobenzene	81%* ^a	82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD11380-BS	D281942.D	1	03/29/22	TDN	n/a	n/a	VD11380

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41894-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	8800	88	52-156
71-43-2	Benzene	2500	2350	94	82-119
74-97-5	Bromochloromethane	2500	2520	101	82-123
75-27-4	Bromodichloromethane	2500	2770	111	83-121
75-25-2	Bromoform	2500	2690	108	74-138
74-83-9	Bromomethane	2500	2350	94	56-150
78-93-3	2-Butanone (MEK)	10000	12100	121	72-138
75-15-0	Carbon disulfide	2500	2390	96	67-131
56-23-5	Carbon tetrachloride	2500	2750	110	72-130
108-90-7	Chlorobenzene	2500	2380	95	83-114
75-00-3	Chloroethane	2500	2370	95	67-141
67-66-3	Chloroform	2500	2370	95	76-115
74-87-3	Chloromethane	2500	1830	73	57-141
110-82-7	Cyclohexane	2500	2360	94	69-130
96-12-8	1,2-Dibromo-3-chloropropane	2500	2630	105	72-131
124-48-1	Dibromochloromethane	2500	3010	120	80-128
106-93-4	1,2-Dibromoethane	2500	2670	107	58-145
95-50-1	1,2-Dichlorobenzene	2500	2580	103	83-117
541-73-1	1,3-Dichlorobenzene	2500	2490	100	82-114
106-46-7	1,4-Dichlorobenzene	2500	2340	94	79-114
75-71-8	Dichlorodifluoromethane	2500	2610	104	49-146
75-34-3	1,1-Dichloroethane	2500	2280	91	76-126
107-06-2	1,2-Dichloroethane	2500	2380	95	76-118
75-35-4	1,1-Dichloroethene	2500	2490	100	72-125
156-59-2	cis-1,2-Dichloroethene	2500	2330	93	80-118
156-60-5	trans-1,2-Dichloroethene	2500	2280	91	76-122
78-87-5	1,2-Dichloropropane	2500	2390	96	82-123
10061-01-5	cis-1,3-Dichloropropene	2500	2520	101	83-123
10061-02-6	trans-1,3-Dichloropropene	2500	2610	104	83-123
100-41-4	Ethylbenzene	2500	2360	94	83-115
76-13-1	Freon 113	2500	2660	106	65-132
591-78-6	2-Hexanone	10000	9480	95	73-138
98-82-8	Isopropylbenzene	2500	2370	95	81-122
79-20-9	Methyl Acetate	2500	2840	114	63-142
108-87-2	Methylcyclohexane	2500	1980	79	73-126
1634-04-4	Methyl Tert Butyl Ether	2500	2300	92	75-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VD11380-BS	D281942.D	1	03/29/22	TDN	n/a	n/a	VD11380

The QC reported here applies to the following samples:

Method: SW846 8260D

JD41894-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	9710	97	71-138
75-09-2	Methylene chloride	2500	2380	95	73-122
100-42-5	Styrene	2500	2370	95	84-122
79-34-5	1,1,2,2-Tetrachloroethane	2500	2720	109	75-127
127-18-4	Tetrachloroethene	2500	2630	105	73-125
108-88-3	Toluene	2500	2320	93	82-118
87-61-6	1,2,3-Trichlorobenzene	2500	3550	142* a	68-132
120-82-1	1,2,4-Trichlorobenzene	2500	2640	106	72-133
71-55-6	1,1,1-Trichloroethane	2500	2640	106	77-124
79-00-5	1,1,2-Trichloroethane	2500	2680	107	83-122
79-01-6	Trichloroethene	2500	2690	108	80-122
75-69-4	Trichlorofluoromethane	2500	3270	131	69-132
75-01-4	Vinyl chloride	2500	1720	69	60-144
	m,p-Xylene	5000	4810	96	82-119
95-47-6	o-Xylene	2500	2300	92	84-120
1330-20-7	Xylene (total)	7500	7110	95	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	80-124%
17060-07-0	1,2-Dichloroethane-D4	96%	75-133%
2037-26-5	Toluene-D8	95%	79-125%
460-00-4	4-Bromofluorobenzene	92%	58-148%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Initial Calibration Summary

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Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4763-ICC4763
 Lab FileID: 2P105764.D

Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P4763.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Mon Feb 28 10:47:58 2022
 Response via : Initial Calibration

Calibration Files

2 =2p105763.D 5 =2p105765.D 25 =2p105766.D 80 =2p105762.D
 100 =2p105760.D 50 =2p105764.D 1 =2p105761.D 10 =2p105767.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.367	0.399	0.414	0.464	0.477	0.440	0.403	0.393	0.420	8.97
3) Pyridine	1.002	1.065	1.110	1.256	1.291	1.179	1.008	1.050	1.120	9.88
4) N-Nitrosodim	0.564	0.569	0.600	0.690	0.725	0.637	0.526	0.568	0.610	11.24
5) 2-Fluorophen	1.103	1.119	1.217	1.366	1.381	1.276	1.062	1.140	1.208	10.11
6) Indene	1.982	2.031	2.135	2.298	2.296	2.188	1.998	2.034	2.120	6.08
7) Cumene	2.560	2.597	2.822	3.116	3.100	2.942	2.532	2.660	2.791	8.57
8) Phenol-d5	1.302	1.377	1.494	1.655	1.655	1.540	1.318	1.377	1.465	9.73
9) Phenol	1.342	1.348	1.495	1.776	1.789	1.573	1.316	1.365	1.501	12.98
10) Aniline	1.604	1.683	1.788	1.926	1.947	1.845	1.632	1.672	1.762	7.59
11) bis(2-Chloro	1.011	1.052	1.114	1.178	1.184	1.135	0.974	1.036	1.085	7.21
12) 2-Chlorophen	1.221	1.282	1.376	1.434	1.437	1.386	1.212	1.277	1.328	6.87
13) Decane	0.937	0.968	1.041	1.133	1.141	1.061	0.980	0.987	1.031	7.42
14) 1,3-Dichloro	1.368	1.419	1.481	1.575	1.567	1.501	1.407	1.411	1.466	5.28
15) 1,4-Dichloro	1.389	1.409	1.499	1.562	1.573	1.529	1.387	1.405	1.469	5.44
16) Benzyl alcoh	0.720	0.751	0.803	0.857	0.878	0.832	0.728	0.764	0.791	7.56
17) 1,2-Dichloro	1.300	1.335	1.389	1.484	1.503	1.423	1.281	1.321	1.379	6.11
18) Acetophenone	1.589	1.614	1.705	1.826	1.785	1.763	1.555	1.579	1.677	6.30
19) 2-Methylphen	1.052	1.037	1.097	1.183	1.206	1.137	0.999	1.039	1.094	6.85
20) 2,2'-oxybis(	0.351	0.358	0.363	0.378	0.377	0.366	0.346	0.342	0.360	3.68
21) 3&4-Methylph	1.096	1.103	1.189	1.294	1.275	1.250	1.049	1.114	1.171	7.97
22) n-Nitroso-di	0.708	0.722	0.754	0.764	0.776	0.747	0.702	0.707	0.735	3.90
23) Hexachloroet	0.468	0.480	0.494	0.526	0.528	0.508	0.461	0.474	0.492	5.29
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.285	0.297	0.310	0.324	0.318	0.313	0.285	0.294	0.303	4.95
26) Nitrobenzene	0.282	0.287	0.300	0.316	0.306	0.307	0.285	0.286	0.296	4.24
27) Quinoline	0.624	0.622	0.668	0.715	0.714	0.684	0.605	0.637	0.659	6.51
28) Isophorone	0.544	0.545	0.585	0.613	0.602	0.592	0.535	0.549	0.571	5.35
29) 2-Nitropheno	0.168	0.182	0.196	0.218	0.217	0.204	0.168	0.181	0.192	10.51
30) 2,4-Dimethyl	0.309	0.318	0.329	0.344	0.333	0.334	0.302	0.315	0.323	4.43
31) Benzoic acid		0.161	0.255	0.290	0.287	0.273		0.198	0.244	21.74
---- Quadratic regression ---- Coefficient = 0.9995										
Response Ratio = -0.01626 + 0.27576 *A + 0.00848 *A^2										
32) bis(2-Chloro	0.328	0.331	0.355	0.377	0.374	0.360	0.328	0.331	0.348	6.07
33) 2,4-Dichloro	0.265	0.274	0.289	0.303	0.309	0.293	0.258	0.273	0.283	6.51
34) 2,6-Dichloro	0.258	0.264	0.286	0.307	0.307	0.292	0.257	0.270	0.280	7.43
35) 1,3,5-Trichl	0.310	0.311	0.332	0.360	0.351	0.341	0.301	0.325	0.329	6.42
36) 1,2,4-Trichl	0.298	0.303	0.322	0.340	0.335	0.325	0.293	0.304	0.315	5.66
37) 1,2,3-Trichl	0.274	0.285	0.299	0.320	0.317	0.308	0.270	0.289	0.295	6.39
38) Naphthalene	0.929	0.946	0.984	1.048	1.024	1.007	0.926	0.944	0.976	4.77
39) 4-Chloroanil	0.384	0.404	0.436	0.484	0.481	0.453	0.389	0.413	0.431	9.14
40) 2,3-Dichloro	0.328	0.320	0.358	0.396	0.394	0.373	0.322	0.334	0.353	8.95
41) Hydroquinone		0.186	0.266	0.303	0.311	0.280		0.223	0.261	18.56
42) Hexachlorobu	0.157	0.160	0.169	0.182	0.179	0.172	0.151	0.165	0.167	6.42

Initial Calibration Summary

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Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4763-ICC4763
Lab FileID: 2P105764.D

43)	4-Chloro-3-m	0.249	0.261	0.277	0.302	0.299	0.285	0.252	0.253	0.272	7.90
44)	2-Methylnaph	0.544	0.562	0.603	0.675	0.660	0.632	0.551	0.563	0.599	8.59
45)	1-Methylnaph	0.521	0.533	0.575	0.629	0.625	0.597	0.532	0.545	0.569	7.61
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.267	0.330	0.363	0.374	0.351		0.301	0.331		12.26
48)	1,2,4,5-Tetr	0.508	0.519	0.548	0.588	0.590	0.571	0.477	0.525	0.541	7.48
49)	2,4,6-Trichl	0.348	0.354	0.389	0.421	0.422	0.399	0.335	0.367	0.380	8.80
50)	2,4,5-Trichl	0.372	0.372	0.399	0.417	0.418	0.410	0.374	0.374	0.392	5.42
51)	2-Fluorobiph	1.185	1.218	1.260	1.320	1.333	1.279	1.166	1.225	1.248	4.86
52)	2-Chloronaph	1.053	1.075	1.121	1.165	1.176	1.136	1.049	1.074	1.106	4.53
53)	Biphenyl	1.340	1.381	1.447	1.560	1.566	1.494	1.356	1.369	1.439	6.37
54)	2-Nitroanili	0.246	0.270	0.281	0.302	0.298	0.291	0.249	0.264	0.275	7.83
55)	Dimethylphth	1.189	1.193	1.278	1.356	1.350	1.299	1.184	1.200	1.256	5.85
56)	Acenaphthyle	1.493	1.535	1.598	1.691	1.691	1.641	1.455	1.553	1.582	5.58
57)	2,6-Dinitrot	0.233	0.263	0.296	0.315	0.316	0.302	0.204	0.277	0.276	14.67
58)	3-Nitroanili	0.289	0.307	0.337	0.361	0.361	0.347	0.277	0.316	0.324	9.90
59)	Acenaphthene	1.059	1.068	1.136	1.227	1.231	1.173	1.039	1.081	1.127	6.81
60)	2,4-Dinitrop	0.083	0.117	0.192	0.228	0.234	0.208		0.150	0.173	33.45
---- Quadratic regression ---- Coefficient = 0.9994											
Response Ratio = -0.01294 + 0.18462 *A + 0.01084 *A^2											
61)	4-Nitropheno	0.132	0.143	0.157	0.172	0.171	0.167	0.133	0.142	0.152	10.98
62)	Dibenzofuran	1.525	1.486	1.600	1.713	1.720	1.652	1.491	1.511	1.587	6.17
63)	2,4-Dinitrot	0.332	0.356	0.405	0.437	0.431	0.425	0.304	0.375	0.383	12.84
64)	2,3,4,6-Tetr	0.294	0.292	0.324	0.351	0.357	0.338	0.284	0.300	0.318	9.01
65)	Diethylphtha	1.201	1.204	1.291	1.381	1.385	1.330	1.213	1.220	1.278	6.20
66)	Fluorene	1.153	1.218	1.294	1.410	1.430	1.345	1.149	1.230	1.279	8.55
67)	4-Chlorophen	0.557	0.575	0.603	0.637	0.649	0.619	0.585	0.571	0.600	5.50
68)	4-Nitroanili	0.288	0.321	0.333	0.344	0.344	0.342	0.284	0.322	0.322	7.47
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.098	0.128	0.146	0.145	0.135		0.112	0.127		14.81
71)	n-Nitrosodip	0.571	0.603	0.633	0.663	0.662	0.622	0.580	0.598	0.616	5.63
72)	Pentachloron	0.030	0.034	0.039	0.044	0.044	0.041	0.028	0.035	0.037#	17.10
73)	1,2-Diphenyl	0.572	0.593	0.609	0.659	0.646	0.623	0.558	0.585	0.605	5.84
74)	2,4,6-Tribo	0.093	0.101	0.110	0.124	0.127	0.114	0.089	0.102	0.108	12.88
75)	4-Bromopheny	0.171	0.180	0.194	0.220	0.221	0.202	0.175	0.181	0.193	10.20
76)	Hexachlorobe	0.200	0.206	0.219	0.245	0.243	0.228	0.201	0.210	0.219	8.23
77)	Pentachloror	0.134	0.148	0.168	0.194	0.193	0.179	0.133	0.154	0.163	14.99
78)	Phenanthrene	0.970	1.005	1.049	1.119	1.110	1.063	0.986	0.998	1.038	5.47
79)	Anthracene	0.973	1.025	1.075	1.157	1.143	1.096	0.969	1.012	1.056	6.87
80)	Carbazole	0.921	0.964	1.002	1.080	1.081	1.045	0.909	0.943	0.993	7.01
81)	Di-n-butylph	1.151	1.219	1.308	1.437	1.411	1.354	1.127	1.139	1.268	9.90
82)	Fluoranthene	1.029	1.101	1.202	1.316	1.308	1.264	1.038	1.095	1.169	10.13
83)	Octadecane	0.246	0.254	0.258	0.297	0.293	0.273	0.252	0.245	0.265	7.82
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.529	0.616	0.755	0.840	0.727		0.523	0.665		19.44
86)	Pyrene	1.236	1.245	1.295	1.316	1.317	1.302	1.258	1.261	1.279	2.53
87)	Terphenyl-d1	0.907	0.911	0.951	0.996	1.008	0.985	0.918	0.935	0.951	4.25
88)	Butylbenzylp	0.564	0.576	0.606	0.659	0.663	0.608	0.551	0.573	0.600	7.04
89)	Benzo[a]anth	1.189	1.162	1.231	1.279	1.274	1.259	1.238	1.178	1.226	3.68
90)	3,3'-Dichlor	0.391	0.425	0.456	0.493	0.489	0.477	0.394	0.420	0.443	9.32
91)	Chrysene	1.070	1.110	1.136	1.113	1.096	1.152	1.055	1.119	1.106	2.89
92)	bis(2-Ethylh	0.764	0.816	0.870	0.867	0.881	0.854	0.747	0.823	0.828	6.03
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.249	1.340	1.606	1.927	1.977	1.588	1.195	1.464	1.543	18.92
95)	Benzo[b]fluo	1.114	1.128	1.281	1.609	1.638	1.378	1.122	1.184	1.307	16.47

8.8.1
8

Initial Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4763-ICC4763
Lab FileID: 2P105764.D

96)	Benzo[k]fluo	1.068	1.090	1.117	1.116	1.052	1.113	1.040	1.092	1.086	2.74
97)	Benzo[a]pyre	0.998	1.007	1.130	1.263	1.261	1.188	0.943	1.065	1.107	11.11
98)	Indeno[1,2,3	0.722	0.753	0.900	1.077	1.112	0.938	0.722	0.782	0.876	17.89
99)	Dibenz(a,h)a	0.711	0.757	0.876	1.014	1.022	0.923	0.720	0.785	0.851	14.82
100)	Dibenz[a,h]a	0.795	0.843	1.023	1.152	1.144	1.044	0.742	0.926	0.959	16.32
101)	7,12-Dimethy	0.454	0.483	0.568	0.693	0.689	0.608	0.448	0.514	0.557	17.75
102)	Benzo[g,h,i]	0.867	0.937	1.014	1.140	1.134	0.996	0.924	0.936	0.994	10.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2P4763.M

Mon Feb 28 10:50:15 2022

RPT1

8.8.1

8

Continuing Calibration Summary

Page 1 of 3

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4801-CC4763
 Lab FileID: 2P106584.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4801\2p106584.D Vial: 2
 Acq On : 29 Mar 2022 9:03 am Operator: jackleey
 Sample : cc4763-25 Inst : MS2P
 Misc : op35710,e2p4801,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4763.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Tue Mar 29 10:57:41 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.63
2 t	1,4-Dioxane	0.420	0.488	-16.2	109	0.00	2.16
3 t	Pyridine	1.120	1.193	-6.5	99	0.00	2.51
4 t	N-Nitrosodimethylamine	0.610	0.667	-9.3	103	0.00	2.49
5 S	2-Fluorophenol	1.208	1.252	-3.6	95	0.00	3.69
6 t	Indene	2.120	2.227	-5.0	96	0.00	4.81
7 t	Cumene	2.791	2.905	-4.1	95	0.00	4.04
8 S	Phenol-d5	1.465	1.529	-4.4	94	0.00	4.40
9 t	Phenol	1.501	1.597	-6.4	99	0.00	4.41
10	Aniline	1.762	1.851	-5.1	96	0.00	4.39
11 t	bis(2-Chloroethyl)ether	1.085	1.119	-3.1	93	0.00	4.44
12 t	2-Chlorophenol	1.328	1.411	-6.2	95	0.00	4.49
13 t	Decane	1.031	1.016	1.5	90	0.00	4.51
14 t	1,3-Dichlorobenzene	1.466	1.541	-5.1	96	0.00	4.58
15 t	1,4-Dichlorobenzene	1.469	1.529	-4.1	94	0.00	4.64
16 t	Benzyl alcohol	0.791	0.826	-4.4	95	0.00	4.74
17 t	1,2-Dichlorobenzene	1.379	1.474	-6.9	98	0.00	4.74
18 t	Acetophenone	1.677	1.610	4.0	87	0.00	4.93
19 t	2-Methylphenol	1.094	1.091	0.3	92	0.00	4.83
20 t	2,2'-oxybis(1-Chloropropa	0.360	0.350	2.8	89	0.00	4.83
21 t	3&4-Methylphenol	1.171	1.159	1.0	90	0.00	4.95
22 t	n-Nitroso-di-n-propylamin	0.735	0.727	1.1	89	0.00	4.93
23 t	Hexachloroethane	0.492	0.465	5.5	87	0.00	5.00
24 I	Naphthalene-d8	1.000	1.000	0.0	90	0.00	5.66
25 S	Nitrobenzene-d5	0.303	0.299	1.3	86	0.00	5.05
26 t	Nitrobenzene	0.296	0.301	-1.7	90	0.00	5.06
27 t	Quinoline	0.659	0.662	-0.5	89	0.00	6.02
28 t	Isophorone	0.571	0.549	3.9	84	0.00	5.26
29 t	2-Nitrophenol	0.192	0.202	-5.2	92	0.00	5.33
30 t	2,4-Dimethylphenol	0.323	0.319	1.2	87	0.00	5.37
	----- Amount	Calc.	%Drift	-----			
31 t	Benzoic acid	25.000	20.580	17.7	72	0.00	5.50
	----- AvgRF	CCRF	%Dev	-----			
32 t	bis(2-Chloroethoxy)methan	0.348	0.351	-0.9	88	0.00	5.44
33 t	2,4-Dichlorophenol	0.283	0.292	-3.2	91	0.00	5.55
34 t	2,6-Dichlorophenol	0.280	0.287	-2.5	90	0.00	5.75
35	1,3,5-Trichlorobenzene	0.329	0.331	-0.6	89	0.00	5.33
36 t	1,2,4-Trichlorobenzene	0.315	0.317	-0.6	88	0.00	5.61
37	1,2,3-Trichlorobenzene	0.295	0.300	-1.7	90	0.00	5.82

Continuing Calibration Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4801-CC4763
Lab FileID: 2P106584.D

38 t	Naphthalene	0.976	1.042	-6.8	95	0.00	5.68
39 t	4-Chloroaniline	0.431	0.429	0.5	88	0.00	5.74
40 t	2,3-Dichloroaniline	0.353	0.352	0.3	88	0.00	6.73
41 t	Hydroquinone	0.261	0.283	-8.4	96	0.00	6.11
42 t	Hexachlorobutadiene	0.167	0.155	7.2	82	0.00	5.80
43 t	4-Chloro-3-methylphenol	0.272	0.265	2.6	86	0.00	6.26
44 t	2-Methylnaphthalene	0.599	0.626	-4.5	93	0.00	6.40
45 t	1-Methylnaphthalene	0.569	0.600	-5.4	93	0.00	6.51
46 I	Acenaphthene-d10	1.000	1.000	0.0	83	0.00	7.69
47 t	Hexachlorocyclopentadiene	0.331	0.236	28.7#	60	0.00	6.57
48 t	1,2,4,5-Tetrachlorobenzen	0.541	0.529	2.2	81	0.00	6.59
49 t	2,4,6-Trichlorophenol	0.380	0.358	5.8	77	0.00	6.74
50 t	2,4,5-Trichlorophenol	0.392	0.376	4.1	79	0.00	6.79
51 S	2-Fluorobiphenyl	1.248	1.310	-5.0	87	0.00	6.83
52 t	2-Chloronaphthalene	1.106	1.181	-6.8	88	0.00	6.97
53 t	Biphenyl	1.439	1.557	-8.2	90	0.00	6.95
54 t	2-Nitroaniline	0.275	0.262	4.7	78	0.00	7.12
55 t	Dimethylphthalate	1.256	1.257	-0.1	82	0.00	7.36
56 t	Acenaphthylene	1.582	1.752	-10.7	91	0.00	7.50
57 t	2,6-Dinitrotoluene	0.276	0.296	-7.2	84	0.00	7.44
58 t	3-Nitroaniline	0.324	0.307	5.2	76	0.00	7.66
59 t	Acenaphthene	1.127	1.207	-7.1	89	0.00	7.73
----- Amount Calc. %Drift -----							
60 t	2,4-Dinitrophenol	50.000	40.542	18.9	65	0.00	7.82
----- AvgRF CCRF %Dev -----							
61 t	4-Nitrophenol	0.152	0.109	28.3#	58	0.00	7.98
62 t	Dibenzofuran	1.587	1.681	-5.9	88	0.00	7.97
63 t	2,4-Dinitrotoluene	0.383	0.380	0.8	78	0.00	8.00
64	2,3,4,6-Tetrachlorophenol	0.318	0.259	18.6	67	0.00	8.17
65 t	Diethylphthalate	1.278	1.238	3.1	80	0.00	8.36
66 t	Fluorene	1.279	1.347	-5.3	87	0.00	8.46
67 t	4-Chlorophenyl-phenylethe	0.600	0.588	2.0	81	0.00	8.48
68 t	4-Nitroaniline	0.322	0.300	6.8	75	0.00	8.53
69 I	Phenanthrene-d10	1.000	1.000	0.0	78	0.00	9.86
70 t	4,6-Dinitro-2-methylpheno	0.127	0.109	14.2	66	0.00	8.59
71 t	n-Nitrosodiphenylamine	0.616	0.637	-3.4	78	0.00	8.67
72 t	Pentachloronitrobenzene	0.037	0.039#	-5.4	78	0.00	9.60
73 t	1,2-Diphenylhydrazine	0.605	0.618	-2.1	79	0.00	8.72
74 S	2,4,6-Tribromophenol	0.108	0.106	1.9	75	0.00	8.82
75 t	4-Bromophenyl-phenylether	0.193	0.197	-2.1	79	0.00	9.20
76 t	Hexachlorobenzene	0.219	0.220	-0.5	78	0.00	9.26
77 t	Pentachlorophenol	0.163	0.101	38.0#	47#	0.00	9.60
78 t	Phenanthrene	1.038	1.094	-5.4	81	0.00	9.89
79 t	Anthracene	1.056	1.116	-5.7	81	0.00	9.97
80 t	Carbazole	0.993	1.035	-4.2	80	0.00	10.25
81 t	Di-n-butylphthalate	1.268	1.253	1.2	74	0.00	10.89
82 t	Fluoranthene	1.169	1.095	6.3	71	0.00	11.74
83 t	Octadecane	0.265	0.251	5.3	76	0.00	9.83
84 I	Chrysene-d12	1.000	1.000	0.0	60	0.00	14.03
85 t	Benzidine	0.665	0.496	25.4#	48#	0.00	12.02
86 t	Pyrene	1.279	1.513	-18.3	70	0.00	12.09
87 S	Terphenyl-d14	0.951	1.024	-7.7	64	0.00	12.42
88 t	Butylbenzylphthalate	0.600	0.700	-16.7	69	0.00	13.26
89 t	Benzo[a]anthracene	1.226	1.227	-0.1	60	0.00	14.02
90 t	3,3'-Dichlorobenzidine	0.443	0.451	-1.8	59	0.00	14.03

Continuing Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: E2P4801-CC4763
Lab FileID: 2P106584.D

91 t	Chrysene	1.106	1.164	-5.2	61	0.00	14.08
92 t	bis(2-Ethylhexyl)phthalat	0.828	0.972	-17.4	67	0.00	14.24
93 I	Perylene-d12	1.000	1.000	0.0	62	0.00	16.14
94 t	Di-n-octylphthalate	1.543	1.656	-7.3	64	0.00	15.23
95 t	Benzo[b]fluoranthene	1.307	1.249	4.4	61	0.00	15.62
96 t	Benzo[k]fluoranthene	1.086	1.152	-6.1	64	0.00	15.67
97 t	Benzo[a]pyrene	1.107	1.152	-4.1	64	0.00	16.06
98 t	Indeno[1,2,3-cd]pyrene	0.876	1.126	-28.5#	78	0.00	17.59
99 t	Dibenz(a,h)acridine	0.851	0.991	-16.5	71	0.00	17.27
100 t	Dibenz[a,h]anthracene	0.959	1.160	-21.0#	71	0.00	17.63
101 t	7,12-Dimethylbenz(a)anthr	0.557	0.533	4.3	58	0.00	15.62
102 t	Benzo[g,h,i]perylene	0.994	1.198	-20.5#	74	0.00	17.99

(#) = Out of Range
 2p106584.D M2P4763.M

SPCC's out = 0 CCC's out = 0
 Tue Mar 29 11:05:20 2022 RPT1

6.8.8

8

Continuing Calibration Summary

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7733-CC7725
 Lab FileID: M179249.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM7733\m179249.D Vial: 2
 Acq On : 29 Mar 2022 9:07 am Operator: jackleey
 Sample : cc7725-50 Inst : MSM
 Misc : op37014,em7733,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Mon Mar 28 16:48:42 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	66	0.00	4.54
2 t	1,4-Dioxane	0.731	0.678	7.3	60	0.00	2.02
3 t	Pyridine	1.757	2.049	-16.6	78	-0.01	2.36
4 t	N-Nitrosodimethylamine	0.690	0.824	-19.4	77	0.00	2.33
5 S	2-Fluorophenol	1.562	1.700	-8.8	71	0.00	3.54
6 t	Indene	2.368	2.457	-3.8	75	0.00	4.74
7 t	Cumene	3.486	3.622	-3.9	72	0.00	3.94
8 S	Phenol-d5	1.975	2.222	-12.5	74	0.00	4.28
9 t	Phenol	2.025	2.208	-9.0	78	0.00	4.29
10 t	Aniline	2.272	2.374	-4.5	76	0.00	4.30
11 t	bis(2-Chloroethyl)ether	1.408	1.460	-3.7	74	0.00	4.35
12 t	2-Chlorophenol	1.467	1.475	-0.5	72	0.00	4.39
13 t	Decane	1.190	1.146	3.7	74	0.00	4.43
14 t	1,3-Dichlorobenzene	1.612	1.513	6.1	67	0.00	4.50
15 t	1,4-Dichlorobenzene	1.405	1.409	-0.3	69	0.00	4.56
16 t	Benzyl alcohol	0.992	1.112	-12.1	75	0.00	4.65
17 t	1,2-Dichlorobenzene	1.444	1.410	2.4	71	0.00	4.67
18 t	Acetophenone	1.842	1.971	-7.0	80	0.00	4.86
19 t	2-Methylphenol	1.286	1.267	1.5	70	0.00	4.74
20 t	2,2'-oxybis(1-Chloropropa	0.374	0.362	3.2	70	0.00	4.76
21 t	3&4-Methylphenol	1.314	1.341	-2.1	72	0.00	4.87
22 t	n-Nitroso-di-n-propylamin	0.861	0.947	-10.0	84	0.00	4.86
23 t	Hexachloroethane	0.505	0.460	8.9	63	0.00	4.94
24 I	Naphthalene-d8	1.000	1.000	0.0	70	0.00	5.65
25 S	Nitrobenzene-d5	0.380	0.371	2.4	74	0.00	4.99
26 t	Nitrobenzene	0.381	0.362	5.0	75	0.00	5.00
27 t	Quinoline	0.848	0.924	-9.0	79	0.00	6.04
28 t	Isophorone	0.801	0.846	-5.6	79	0.00	5.22
29 t	2-Nitrophenol	0.222	0.220	0.9	71	0.00	5.28
30 t	2,4-Dimethylphenol	0.371	0.353	4.9	75	0.00	5.32
	----- True Calc. % Drift -----						
31 t	Benzoic acid	50.000	63.250	-26.5#	87	0.03	5.42
	----- AvgRF CCRF % Dev -----						
32 t	bis(2-Chloroethoxy)methan	0.470	0.446	5.1	78	0.00	5.41
33 t	2,4-Dichlorophenol	0.323	0.309	4.3	72	0.00	5.51
34 t	2,6-Dichlorophenol	0.282	0.271	3.9	73	0.00	5.74
35 t	1,3,5-Trichlorobenzene	0.337	0.293	13.1	69	0.00	5.29
36 t	1,2,4-Trichlorobenzene	0.341	0.305	10.6	68	0.00	5.60
37 t	1,2,3-Trichlorobenzene	0.305	0.278	8.9	72	0.00	5.83

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7733-CC7725
Lab FileID: M179249.D

38 t	Naphthalene	1.024	1.014	1.0	74	0.00	5.68
39 t	4-Chloroaniline	0.476	0.485	-1.9	75	0.00	5.73
40 t	2,3-Dichloroaniline	0.403	0.412	-2.2	76	0.00	6.84
41 t	Hydroquinone	0.439	0.462	-5.2	80	0.00	6.10
42 t	Hexachlorobutadiene	0.176	0.157	10.8	67	-0.01	5.80
43 t	4-Chloro-3-methylphenol	0.362	0.386	-6.6	78	0.00	6.28
44 t	2-Methylnaphthalene	0.707	0.688	2.7	75	0.00	6.47
45 t	1-Methylnaphthalene	0.777	0.766	1.4	75	0.00	6.59
46 I	Acenaphthene-d10	1.000	1.000	0.0	71	0.00	7.96
47 t	Hexachlorocyclopentadiene	0.262	0.287	-9.5	78	0.00	6.67
48	1,2,4,5-Tetrachlorobenzen	0.517	0.464	10.3	73	0.00	6.69
49 t	2,4,6-Trichlorophenol	0.402	0.369	8.2	73	0.00	6.85
50 t	2,4,5-Trichlorophenol	0.429	0.394	8.2	75	0.00	6.89
51 S	2-Fluorobiphenyl	1.404	1.287	8.3	74	0.00	6.97
52 t	2-Chloronaphthalene	1.140	1.049	8.0	76	0.00	7.12
53 t	Biphenyl	1.596	1.479	7.3	76	0.00	7.11
54 t	2-Nitroaniline	0.393	0.433	-10.2	86	0.00	7.28
55 t	Dimethylphthalate	1.546	1.588	-2.7	79	0.00	7.59
56 t	Acenaphthylene	1.905	1.804	5.3	78	0.00	7.74
57 t	2,6-Dinitrotoluene	0.322	0.364	-13.0	83	0.00	7.67
58 t	3-Nitroaniline	0.400	0.461	-15.3	84	0.00	7.92
59 t	Acenaphthene	1.164	1.151	1.1	78	0.00	8.02
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	135.049	-35.0#	104	0.00	8.10
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.187	0.203	-8.6	73	0.00	8.24
62 t	Dibenzofuran	1.786	1.735	2.9	78	0.00	8.30
63 t	2,4-Dinitrotoluene	0.396	0.439	-10.9	85	0.00	8.32
64 t	2,3,4,6-Tetrachlorophenol	0.349	0.379	-8.6	79	0.00	8.52
65 t	Diethylphthalate	1.588	1.648	-3.8	81	0.00	8.79
66 t	Fluorene	1.538	1.495	2.8	79	0.00	8.89
67 t	4-Chlorophenyl-phenylethe	0.651	0.628	3.5	79	0.00	8.93
68 t	4-Nitroaniline	0.355	0.409	-15.2	92	0.01	8.95
69 I	Phenanthrene-d10	1.000	1.000	0.0	79	0.00	10.57
----- True Calc. % Drift -----							
70 t	4,6-Dinitro-2-methylpheno	50.000	55.868	-11.7	89	0.00	9.01
----- AvgRF CCRF % Dev -----							
71 t	n-Nitrosodiphenylamine	0.680	0.606	10.9	81	0.00	9.15
72	Pentachloronitrobenzene	0.040	0.037#	7.5	83	0.00	10.27
73 t	1,2-Diphenylhydrazine	0.796	0.662	16.8	83	0.00	9.21
74 S	2,4,6-Tribromophenol	0.117	0.110	6.0	81	0.00	9.31
75 t	4-Bromophenyl-phenylether	0.239	0.216	9.6	78	0.00	9.80
76 t	Hexachlorobenzene	0.245	0.220	10.2	82	0.00	9.85
77 t	Pentachlorophenol	0.131	0.157	-19.8	87	0.00	10.25
78 t	Phenanthrene	0.969	0.905	6.6	84	0.00	10.62
79 t	Anthracene	1.079	1.001	7.2	82	0.00	10.71
80 t	Carbazole	1.177	1.122	4.7	84	0.00	11.07
81 t	Di-n-butylphthalate	1.517	1.438	5.2	84	0.00	11.91
82 t	Fluoranthene	1.286	1.255	2.4	85	0.00	12.90
83 t	Octadecane	0.369	0.344	6.8	85	0.00	10.62
84 I	Chrysene-d12	1.000	1.000	0.0	82	0.00	15.75
85	Benzidine	0.830	1.021	-23.0#	93	-0.01	13.27
86 t	Pyrene	1.475	1.308	11.3	85	0.00	13.33

8.8.29

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7733-CC7725
Lab FileID: M179249.D

87	S	Terphenyl-d14	1.157	1.108	4.2	85	0.00	13.77
88	t	Butylbenzylphthalate	0.795	0.782	1.6	85	0.00	14.85
89	t	Benzo[a]anthracene	1.381	1.360	1.5	86	0.00	15.72
90	t	3,3'-Dichlorobenzidine	0.451	0.499	-10.6	93	0.00	15.77
91	t	Chrysene	1.160	1.134	2.2	88	0.00	15.79
92	t	bis(2-Ethylhexyl)phthalat	1.057	1.035	2.1	84	0.00	16.09
93	I	Perylene-d12	1.000	1.000	0.0	86	0.00	18.35
94	t	Di-n-octylphthalate	1.747	1.514	13.3	82	0.00	17.33
95	t	Benzo[b]fluoranthene	1.308	1.179	9.9	87	0.00	17.72
96	t	Benzo[k]fluoranthene	1.196	1.037	13.3	89	0.01	17.78
97	t	Benzo[a]pyrene	1.240	1.160	6.5	87	0.00	18.26
98	t	Indeno[1,2,3-cd]pyrene	0.959	1.048	-9.3	100	0.00	20.04
99	t	Dibenz(a,h)acridine	0.942	1.008	-7.0	97	0.00	19.70
100	t	Dibenz[a,h]anthracene	1.032	1.141	-10.6	101	0.00	20.10
101	t	7,12-Dimethylbenz(a)anthr	0.573	0.508	11.3	88	0.00	17.74
102	t	Benzo[g,h,i]perylene	1.129	1.160	-2.7	94	0.01	20.47

(#) = Out of Range
 m179094a.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Tue Mar 29 10:51:22 2022

8.8.29

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Continuing Calibration Summary

Page 1 of 3

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7735-CC7725
 Lab FileID: M179293.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM7735\m179293.D Vial: 2
 Acq On : 31 Mar 2022 10:45 am Operator: jackleey
 Sample : cc7725-50 Inst : MSM
 Misc : op37014,em7735,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7725.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Thu Mar 31 15:13:10 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	4.55
2 t	1,4-Dioxane	0.731	0.782	-7.0	109	0.00	2.02
3 t	Pyridine	1.757	1.864	-6.1	112	0.00	2.37
4 t	N-Nitrosodimethylamine	0.690	0.815	-18.1	120	0.00	2.33
5 S	2-Fluorophenol	1.562	1.634	-4.6	107	0.00	3.55
6 t	Indene	2.368	2.412	-1.9	116	0.00	4.74
7 t	Cumene	3.486	3.448	1.1	107	0.00	3.94
8 S	Phenol-d5	1.975	2.106	-6.6	110	0.00	4.28
9 t	Phenol	2.025	2.035	-0.5	113	0.00	4.29
10 t	Aniline	2.272	2.219	2.3	112	0.00	4.29
11 t	bis(2-Chloroethyl)ether	1.408	1.389	1.3	111	0.00	4.35
12 t	2-Chlorophenol	1.467	1.437	2.0	110	0.00	4.39
13 t	Decane	1.190	1.151	3.3	117	0.00	4.43
14 t	1,3-Dichlorobenzene	1.612	1.539	4.5	108	0.00	4.50
15 t	1,4-Dichlorobenzene	1.405	1.412	-0.5	109	0.00	4.56
16 t	Benzyl alcohol	0.992	1.043	-5.1	111	0.00	4.65
17 t	1,2-Dichlorobenzene	1.444	1.377	4.6	109	0.00	4.67
18 t	Acetophenone	1.842	1.876	-1.8	120	0.00	4.86
19 t	2-Methylphenol	1.286	1.183	8.0	103	0.00	4.74
20 t	2,2'-oxybis(1-Chloropropa	0.374	0.356	4.8	109	0.00	4.76
21 t	3&4-Methylphenol	1.314	1.253	4.6	106	0.00	4.87
22 t	n-Nitroso-di-n-propylamin	0.861	0.891	-3.5	124	0.00	4.86
23 t	Hexachloroethane	0.505	0.498	1.4	107	0.00	4.94
24 I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	5.65
25 S	Nitrobenzene-d5	0.380	0.381	-0.3	114	0.00	4.98
26 t	Nitrobenzene	0.381	0.366	3.9	113	0.00	5.00
27 t	Quinoline	0.848	0.868	-2.4	111	0.00	6.04
28 t	Isophorone	0.801	0.811	-1.2	112	0.00	5.21
29 t	2-Nitrophenol	0.222	0.224	-0.9	108	0.00	5.28
30 t	2,4-Dimethylphenol	0.371	0.351	5.4	112	0.00	5.33
	----- True		Calc.	% Drift			
31 t	Benzoic acid	50.000	57.971	-15.9	118	0.00	5.44
	----- AvgRF		CCRF	% Dev			
32 t	bis(2-Chloroethoxy)methan	0.470	0.457	2.8	119	0.00	5.42
33 t	2,4-Dichlorophenol	0.323	0.314	2.8	110	0.00	5.51
34 t	2,6-Dichlorophenol	0.282	0.277	1.8	112	0.00	5.74
35 t	1,3,5-Trichlorobenzene	0.337	0.310	8.0	109	0.00	5.29
36 t	1,2,4-Trichlorobenzene	0.341	0.325	4.7	108	0.00	5.59
37 t	1,2,3-Trichlorobenzene	0.305	0.288	5.6	111	0.00	5.83

Continuing Calibration Summary

Page 2 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7735-CC7725
Lab FileID: M179293.D

38 t	Naphthalene	1.024	1.004	2.0	109	0.00	5.67
39 t	4-Chloroaniline	0.476	0.479	-0.6	111	0.00	5.73
40 t	2,3-Dichloroaniline	0.403	0.400	0.7	110	0.00	6.84
41 t	Hydroquinone	0.439	0.386	12.1	100	0.00	6.10
42 t	Hexachlorobutadiene	0.176	0.172	2.3	109	0.00	5.81
43 t	4-Chloro-3-methylphenol	0.362	0.367	-1.4	110	0.00	6.29
44 t	2-Methylnaphthalene	0.707	0.683	3.4	111	0.00	6.47
45 t	1-Methylnaphthalene	0.777	0.755	2.8	111	0.00	6.59
46 I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	7.96
47 t	Hexachlorocyclopentadiene	0.262	0.306	-16.8	119	0.00	6.67
48	1,2,4,5-Tetrachlorobenzen	0.517	0.481	7.0	109	0.00	6.69
49 t	2,4,6-Trichlorophenol	0.402	0.373	7.2	106	0.00	6.84
50 t	2,4,5-Trichlorophenol	0.429	0.409	4.7	111	0.00	6.89
51 S	2-Fluorobiphenyl	1.404	1.333	5.1	110	0.00	6.97
52 t	2-Chloronaphthalene	1.140	1.070	6.1	111	0.00	7.12
53 t	Biphenyl	1.596	1.526	4.4	111	0.00	7.10
54 t	2-Nitroaniline	0.393	0.409	-4.1	116	0.00	7.28
55 t	Dimethylphthalate	1.546	1.541	0.3	110	0.00	7.59
56 t	Acenaphthylene	1.905	1.774	6.9	109	0.00	7.74
57 t	2,6-Dinitrotoluene	0.322	0.349	-8.4	113	0.00	7.67
58 t	3-Nitroaniline	0.400	0.425	-6.2	111	0.00	7.92
59 t	Acenaphthene	1.164	1.144	1.7	110	0.00	8.02
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	125.386	-25.4#	133	0.00	8.11
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.187	0.178	4.8	92	0.00	8.25
62 t	Dibenzofuran	1.786	1.725	3.4	110	0.00	8.31
63 t	2,4-Dinitrotoluene	0.396	0.409	-3.3	113	0.00	8.33
64 t	2,3,4,6-Tetrachlorophenol	0.349	0.368	-5.4	109	0.00	8.53
65 t	Diethylphthalate	1.588	1.559	1.8	109	0.00	8.79
66 t	Fluorene	1.538	1.428	7.2	108	0.00	8.88
67 t	4-Chlorophenyl-phenylethe	0.651	0.618	5.1	111	0.00	8.93
68 t	4-Nitroaniline	0.355	0.353	0.6	113	0.00	8.95
69 I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.58
----- True Calc. % Drift -----							
70 t	4,6-Dinitro-2-methylpheno	50.000	56.772	-13.5	117	0.00	9.02
----- AvgRF CCRF % Dev -----							
71 t	n-Nitrosodiphenylamine	0.680	0.621	8.7	108	0.00	9.15
72	Pentachloronitrobenzene	0.040	0.036#	10.0	105	0.00	10.27
73 t	1,2-Diphenylhydrazine	0.796	0.693	12.9	112	0.00	9.21
74 S	2,4,6-Tribromophenol	0.117	0.113	3.4	108	0.00	9.31
75 t	4-Bromophenyl-phenylether	0.239	0.228	4.6	107	0.00	9.80
76 t	Hexachlorobenzene	0.245	0.228	6.9	111	0.00	9.86
77 t	Pentachlorophenol	0.131	0.152	-16.0	109	0.00	10.25
78 t	Phenanthrene	0.969	0.881	9.1	106	0.00	10.63
79 t	Anthracene	1.079	1.000	7.3	106	0.00	10.72
80 t	Carbazole	1.177	1.079	8.3	105	0.00	11.07
81 t	Di-n-butylphthalate	1.517	1.376	9.3	105	0.00	11.91
82 t	Fluoranthene	1.286	1.167	9.3	103	0.00	12.91
83 t	Octadecane	0.369	0.380	-3.0	122	0.00	10.61
84 I	Chrysene-d12	1.000	1.000	0.0	90	0.00	15.75
85	Benzidine	0.830	1.027	-23.7#	102	0.00	13.28
86 t	Pyrene	1.475	1.451	1.6	103	0.00	13.33

8.831
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Continuing Calibration Summary

Page 3 of 3

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: EM7735-CC7725
Lab FileID: M179293.D

87	S	Terphenyl-d14	1.157	1.210	-4.6	102	0.00	13.77
88	t	Butylbenzylphthalate	0.795	0.800	-0.6	95	0.00	14.86
89	t	Benzo[a]anthracene	1.381	1.344	2.7	93	0.00	15.74
90	t	3,3'-Dichlorobenzidine	0.451	0.516	-14.4	105	0.00	15.78
91	t	Chrysene	1.160	1.221	-5.3	103	0.00	15.80
92	t	bis(2-Ethylhexyl)phthalat	1.057	1.070	-1.2	95	0.00	16.09
93	I	Perylene-d12	1.000	1.000	0.0	90	0.00	18.37
94	t	Di-n-octylphthalate	1.747	1.551	11.2	88	0.00	17.33
95	t	Benzo[b]fluoranthene	1.308	1.197	8.5	93	0.00	17.73
96	t	Benzo[k]fluoranthene	1.196	1.095	8.4	99	0.00	17.78
97	t	Benzo[a]pyrene	1.240	1.153	7.0	92	0.00	18.27
98	t	Indeno[1,2,3-cd]pyrene	0.959	1.057	-10.2	106	0.00	20.05
99	t	Dibenz(a,h)acridine	0.942	1.021	-8.4	104	0.00	19.71
100	t	Dibenz[a,h]anthracene	1.032	1.176	-14.0	110	0.00	20.11
101	t	7,12-Dimethylbenz(a)anthr	0.573	0.523	8.7	96	0.00	17.75
102	t	Benzo[g,h,i]perylene	1.129	1.185	-5.0	101	0.00	20.48

(#) = Out of Range
 m179293.D MM7725.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 31 15:25:44 2022

8.831
 8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38821-BS1	F206130.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059
OP38821-BS2	F206131.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-21, JD41894-22, JD41894-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	19.5	39* a	22.1	44* a	13	52-114/34
59-50-7	4-Chloro-3-methyl phenol	50	22.8	46* a	27.0	54* a	17	56-122/28
120-83-2	2,4-Dichlorophenol	50	21.3	43* a	24.8	50* a	15	58-121/31
105-67-9	2,4-Dimethylphenol	50	11.5	23* a	16.3	33* a	35* b	58-119/28
51-28-5	2,4-Dinitrophenol	100	50.1	50	62.9	63	23	33-151/38
534-52-1	4,6-Dinitro-o-cresol	50	27.8	56	34.0	68	20	37-152/37
95-48-7	2-Methylphenol	50	17.9	36* a	20.8	42* a	15	48-107/28
	3&4-Methylphenol	100	33.5	34	38.6	39	14	10-148/29
88-75-5	2-Nitrophenol	50	25.1	50	29.6	59	16	50-136/34
100-02-7	4-Nitrophenol	50	8.2	16	14.4	29	55* b	10-107/44
87-86-5	Pentachlorophenol	100	44.9	45	53.0	53	17	12-168/36
108-95-2	Phenol	50	11.4	23	12.9	26	12	10-94/32
58-90-2	2,3,4,6-Tetrachlorophenol	50	23.3	47* a	29.8	60	24	52-134/36
95-95-4	2,4,5-Trichlorophenol	50	23.2	46* a	29.2	58	23	56-128/35
88-06-2	2,4,6-Trichlorophenol	50	22.0	44* a	27.3	55* a	22	56-126/35
83-32-9	Acenaphthene	50	36.2	72	40.0	80	10	57-115/27
208-96-8	Acenaphthylene	50	27.8	56	30.5	61	9	51-114/26
98-86-2	Acetophenone	50	36.0	72	38.4	77	6	54-118/30
120-12-7	Anthracene	50	37.2	74	41.9	84	12	60-123/27
1912-24-9	Atrazine	50	42.7	85	50.9	102	18	66-134/30
100-52-7	Benzaldehyde	50	34.4	69	36.5	73	6	48-128/38
56-55-3	Benzo(a)anthracene	50	37.1	74	43.5	87	16	64-119/25
50-32-8	Benzo(a)pyrene	50	36.3	73	41.3	83	13	63-124/27
205-99-2	Benzo(b)fluoranthene	50	39.3	79	45.7	91	15	64-123/27
191-24-2	Benzo(g,h,i)perylene	50	39.0	78	45.2	90	15	59-124/30
207-08-9	Benzo(k)fluoranthene	50	37.1	74	42.0	84	12	58-122/28
101-55-3	4-Bromophenyl phenyl ether	50	34.4	69	38.5	77	11	56-126/28
85-68-7	Butyl benzyl phthalate	50	42.9	86	49.4	99	14	55-134/28
92-52-4	1,1'-Biphenyl	50	36.0	72	39.4	79	9	55-114/28
91-58-7	2-Chloronaphthalene	50	35.2	70	38.4	77	9	55-114/27
106-47-8	4-Chloroaniline	50	17.8	36	20.8	42	16	14-99/50
86-74-8	Carbazole	50	38.9	78	44.5	89	13	62-122/26
105-60-2	Caprolactam	50	10.9	22	12.3	25	12	10-106/27
218-01-9	Chrysene	50	36.8	74	42.9	86	15	60-120/25
111-91-1	bis(2-Chloroethoxy)methane	50	35.4	71	37.6	75	6	52-119/28
111-44-4	bis(2-Chloroethyl)ether	50	35.0	70	37.3	75	6	52-116/34

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38821-BS1	F206130.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059
OP38821-BSD	F206131.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-21, JD41894-22, JD41894-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	50	37.7	75	40.5	81	7	50-121/34
7005-72-3	4-Chlorophenyl phenyl ether	50	36.9	74	40.9	82	10	54-120/28
121-14-2	2,4-Dinitrotoluene	50	39.7	79	46.2	92	15	56-133/26
606-20-2	2,6-Dinitrotoluene	50	40.7	81	46.1	92	12	59-130/26
91-94-1	3,3'-Dichlorobenzidine	50	26.3	52	31.8	64	19	13-118/50
123-91-1	1,4-Dioxane	50	15.0	30	14.6	29	3	13-86/42
53-70-3	Dibenzo(a,h)anthracene	50	39.7	79	45.6	91	14	58-126/28
132-64-9	Dibenzofuran	50	37.0	74	40.8	82	10	60-116/26
84-74-2	Di-n-butyl phthalate	50	40.4	81	46.3	93	14	57-129/29
117-84-0	Di-n-octyl phthalate	50	42.8	86	49.1	98	14	53-136/29
84-66-2	Diethyl phthalate	50	36.6	73	44.5	89	19	56-121/28
131-11-3	Dimethyl phthalate	50	31.0	62	38.8	78	22	57-119/27
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.5	85	50.0	100	16	57-133/26
206-44-0	Fluoranthene	50	39.0	78	44.4	89	13	64-123/28
86-73-7	Fluorene	50	38.9	78	43.4	87	11	62-117/29
118-74-1	Hexachlorobenzene	50	33.4	67	37.6	75	12	56-127/27
87-68-3	Hexachlorobutadiene	50	24.2	48	26.8	54	10	34-121/35
77-47-4	Hexachlorocyclopentadiene	100	16.4	16* a	18.7	19* a	13	29-116/36
67-72-1	Hexachloroethane	50	24.6	49	27.5	55	11	36-111/41
193-39-5	Indeno(1,2,3-cd)pyrene	50	39.2	78	45.3	91	14	55-128/30
78-59-1	Isophorone	50	35.3	71	37.5	75	6	55-123/28
91-57-6	2-Methylnaphthalene	50	33.7	67	35.9	72	6	56-118/30
88-74-4	2-Nitroaniline	50	40.4	81	47.6	95	16	52-137/27
99-09-2	3-Nitroaniline	50	30.1	60	36.3	73	19	31-112/44
100-01-6	4-Nitroaniline	50	33.3	67	40.3	81	19	52-124/28
91-20-3	Naphthalene	50	32.4	65	34.3	69	6	57-111/29
98-95-3	Nitrobenzene	50	33.7	67	37.4	75	10	53-123/30
621-64-7	N-Nitroso-di-n-propylamine	50	35.7	71	38.8	78	8	48-122/28
86-30-6	N-Nitrosodiphenylamine	50	35.6	71	42.0	84	16	56-133/30
85-01-8	Phenanthrene	50	38.5	77	43.1	86	11	62-120/27
129-00-0	Pyrene	50	37.6	75	43.7	87	15	59-126/29
95-94-3	1,2,4,5-Tetrachlorobenzene	50	29.6	59	33.3	67	12	49-119/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38821-BS1	F206130.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059
OP38821-BSD	F206131.D	1	03/30/22	KLS	03/29/22	OP38821	EF9059

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-21, JD41894-22, JD41894-23

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	26%	30%	10-90%
4165-62-2	Phenol-d5	21%	24%	10-101%
118-79-6	2,4,6-Tribromophenol	46%	62%	23-155%
4165-60-0	Nitrobenzene-d5	70%	78%	25-141%
321-60-8	2-Fluorobiphenyl	72%	81%	35-126%
1718-51-0	Terphenyl-d14	70%	85%	15-139%

(a) Outside of in house control limits.

(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38845-MS	2P106599.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
OP38845-MSD	2P106600.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
JD41894-17	2P106597.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	JD41894-17 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
95-57-8	2-Chlorophenol	ND		1990	756	38	1950	885	45	16	10-148/50
59-50-7	4-Chloro-3-methyl phenol	ND		1990	681	34	1950	818	42	18	10-157/50
120-83-2	2,4-Dichlorophenol	ND		1990	737	37	1950	873	45	17	10-153/50
105-67-9	2,4-Dimethylphenol	ND		1990	617	31	1950	789	40	24	10-163/50
51-28-5	2,4-Dinitrophenol	ND		3980	560	14	3900	599	15	7	10-107/50
534-52-1	4,6-Dinitro-o-cresol	ND		1990	375	19	1950	426	22	13	10-156/50
95-48-7	2-Methylphenol	ND		1990	704	35	1950	845	43	18	10-150/50
	3&4-Methylphenol	ND		3980	1370	35	3900	1650	43	19	10-199/50
88-75-5	2-Nitrophenol	ND		1990	771	39	1950	898	46	15	10-161/50
100-02-7	4-Nitrophenol	ND		1990	519	26	1950	642	33	21	10-159/50
87-86-5	Pentachlorophenol	ND		3980	898	23	3900	1190	31	28	10-171/50
108-95-2	Phenol	ND		1990	715	36	1950	882	45	21	10-120/50
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1990	583	29	1950	715	37	20	10-165/50
95-95-4	2,4,5-Trichlorophenol	ND		1990	692	35	1950	864	44	22	10-158/50
88-06-2	2,4,6-Trichlorophenol	ND		1990	686	35	1950	842	43	20	10-166/50
83-32-9	Acenaphthene	ND		1990	782	39	1950	954	49	20	10-166/50
208-96-8	Acenaphthylene	ND		1990	610	31	1950	738	38	19	10-174/50
98-86-2	Acetophenone	ND		1990	720	36	1950	19.8	1* a	189* b	10-126/50
120-12-7	Anthracene	ND		1990	760	38	1950	925	47	20	10-174/50
1912-24-9	Atrazine	ND		1990	746	38	1950	875	45	16	10-169/50
56-55-3	Benzo(a)anthracene	101		1990	765	33	1950	944	43	21	10-175/50
50-32-8	Benzo(a)pyrene	113		1990	751	32	1950	962	44	25	10-175/50
205-99-2	Benzo(b)fluoranthene	171		1990	710	27	1950	909	38	25	10-172/50
191-24-2	Benzo(g,h,i)perylene	142		1990	872	37	1950	1110	50	24	10-178/50
207-08-9	Benzo(k)fluoranthene	60.3		1990	735	34	1950	950	46	26	10-158/50
101-55-3	4-Bromophenyl phenyl ether	ND		1990	772	39	1950	970	50	23	10-187/50
85-68-7	Butyl benzyl phthalate	54.2	J	1990	927	44	1950	1070	52	14	10-173/50
92-52-4	1,1'-Biphenyl	ND		1990	804	40	1950	992	51	21	10-154/50
100-52-7	Benzaldehyde	33.1	J	1990	718	34	1950	848	42	17	10-160/50
91-58-7	2-Chloronaphthalene	ND		1990	784	39	1950	959	49	20	10-155/50
106-47-8	4-Chloroaniline	ND		1990	260	13	1950	240	12	8	10-113/50
86-74-8	Carbazole	7.3	J	1990	730	36	1950	900	46	21	10-173/50
105-60-2	Caprolactam	ND		1990	723	36	1950	849	44	16	10-169/50
218-01-9	Chrysene	128		1990	808	34	1950	987	44	20	10-173/50
111-91-1	bis(2-Chloroethoxy)methane	ND		1990	733	37	1950	867	44	17	10-143/50
111-44-4	bis(2-Chloroethyl)ether	ND		1990	728	37	1950	832	43	13	10-136/50

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38845-MS	2P106599.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
OP38845-MSD	2P106600.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
JD41894-17	2P106597.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	JD41894-17 ug/kg	Spike Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	ND		1990	699	35	1950	813	42	15	10-146/50
7005-72-3	4-Chlorophenyl phenyl ether	ND		1990	707	36	1950	855	44	19	10-173/50
121-14-2	2,4-Dinitrotoluene	ND		1990	717	36	1950	866	44	19	10-187/50
606-20-2	2,6-Dinitrotoluene	ND		1990	797	40	1950	968	50	19	10-192/50
91-94-1	3,3'-Dichlorobenzidine	ND		1990	104	6* a	1950	49.1	2* a	72* b	10-116/50
123-91-1	1,4-Dioxane	ND		1990	491	25	1950	532	27	8	10-103/50
53-70-3	Dibenzo(a,h)anthracene	31.3	J	1990	842	41	1950	1080	54	25	10-167/50
132-64-9	Dibenzofuran	ND		1990	763	38	1950	929	48	20	10-159/50
84-74-2	Di-n-butyl phthalate	ND		1990	768	39	1950	924	47	18	10-170/50
117-84-0	Di-n-octyl phthalate	ND		1990	689	35	1950	879	45	24	10-179/50
84-66-2	Diethyl phthalate	ND		1990	736	37	1950	885	45	18	10-167/50
131-11-3	Dimethyl phthalate	ND		1990	769	39	1950	937	48	20	10-156/50
117-81-7	bis(2-Ethylhexyl)phthalate	71.5	J	1990	897	42	1950	1080	52	19	10-145/50
206-44-0	Fluoranthene	151		1990	714	28	1950	893	38	22	10-195/50
86-73-7	Fluorene	ND		1990	752	38	1950	913	47	19	10-166/50
118-74-1	Hexachlorobenzene	ND		1990	765	38	1950	951	49	22	10-159/50
87-68-3	Hexachlorobutadiene	ND		1990	651	33	1950	772	40	17	10-148/50
77-47-4	Hexachlorocyclopentadiene	ND		3980	229	6* a	3900	216	6* a	6	10-143/50
67-72-1	Hexachloroethane	ND		1990	582	29	1950	634	33	9	10-142/50
193-39-5	Indeno(1,2,3-cd)pyrene	148		1990	932	39	1950	1190	53	24	10-186/50
78-59-1	Isophorone	ND		1990	694	35	1950	825	42	17	10-148/50
91-57-6	2-Methylnaphthalene	21.5	J	1990	784	38	1950	945	47	19	10-160/50
88-74-4	2-Nitroaniline	ND		1990	706	36	1950	843	43	18	10-170/50
99-09-2	3-Nitroaniline	ND		1990	474	24	1950	442	23	7	10-144/50
100-01-6	4-Nitroaniline	ND		1990	480	24	1950	387	20	21	10-143/50
91-20-3	Naphthalene	15.6	J	1990	766	38	1950	901	45	16	10-174/50
98-95-3	Nitrobenzene	ND		1990	738	37	1950	852	44	14	10-152/50
621-64-7	N-Nitroso-di-n-propylamine	ND		1990	748	38	1950	846	43	12	10-154/50
86-30-6	N-Nitrosodiphenylamine	ND		1990	837	42	1950	1030	53	21	10-184/50
85-01-8	Phenanthrene	53.5		1990	784	37	1950	961	47	20	10-192/50
129-00-0	Pyrene	175		1990	1020	43	1950	1140	49	11	10-197/50
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1990	730	37	1950	887	45	19	10-150/50

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38845-MS	2P106599.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
OP38845-MSD	2P106600.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801
JD41894-17	2P106597.D	1	03/29/22	JY	03/26/22	OP38845	E2P4801

The QC reported here applies to the following samples:

Method: SW846 8270E

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Surrogate Recoveries	MS	MSD	JD41894-17	Limits
367-12-4	2-Fluorophenol	45%	52%	45%	10-109%
4165-62-2	Phenol-d5	43%	51%	44%	10-105%
118-79-6	2,4,6-Tribromophenol	47%	55%	48%	10-135%
4165-60-0	Nitrobenzene-d5	43%	49%	45%	10-119%
321-60-8	2-Fluorobiphenyl	47%	57%	52%	18-112%
1718-51-0	Terphenyl-d14	55%	62%	56%	18-125%

(a) Outside control limits due to matrix interference.

(b) Outside of in house control limits.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3726-CC3719
 Lab FileID: 4G9724417.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9724417.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\chrisc...3726\4g9724417.d\ECD2B.ch
 Acq On : 31 Mar 2022 2:46 am Operator: christp
 Sample : cc3719-25 Inst : GC4G
 Misc : op38890,g4g3726,30,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Thu Mar 31 23:02:26 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.846	-0.2	86	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	0.956	14.9	82	0.00	2.71-	2.77
4 A	alpha-BHC	1.462	1.382	5.5	83	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.239	5.2	83	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.283	5.5	83	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.526	7.7	83	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.125	13.5	80	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.197	9.1	82	0.00	4.10-	4.16
10	alachlor	0.123	0.126	-2.4	83	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.070	9.3	81	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.094	8.1	80	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.073	9.0	81	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.042	8.9	81	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.110	8.3	81	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.153	10.6	80	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.090	6.8	82	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.913	10.3	80	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.863	11.0	80	0.00	6.42-	6.48
20 MA	4,4'-DDT	0.968	0.868	10.3	80	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.737	12.2	79	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.761	19.6	71	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.430	11.3	78	0.00	7.43-	7.49
24	Mirex	0.785	0.650	17.2	75	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.830	14.6	73	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.568	34.3#	61	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.22 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3726-CC3719
Lab FileID: 4G9724417.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.45-	2.45
2	SAB	Tetrachloro-m-xylene	0.833	0.836	-0.4	96	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.972	11.0	91	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.281	1.4	94	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.195	1.2	95	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.207	-2.2	96	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.532	0.6	96	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.096	3.1	93	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.122	0.8	95	0.00	5.08-	5.14
10		alachlor	0.132	0.140	-6.1	101	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.044	1.0	95	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.048	0.6	94	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.009	2.2	94	0.00	6.47-	6.53
14	A	Endosulfan I	0.972	0.963	0.9	95	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.038	0.3	96	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.046	3.1	92	0.00	7.01-	7.07
17	MA	Endrin	1.003	1.056	-5.3	98	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.834	4.8	92	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.813	4.1	92	0.00	7.89-	7.95
20	MA	4,4'-DDT	0.785	0.764	2.7	93	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.710	2.9	91	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.759	5.6	88	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.390	0.0	92	0.00	9.50-	9.56
24		Mirex	0.690	0.603	12.6	88	0.00	9.86-	9.92
25	B	Endrin Ketone	0.967	0.847	12.4	86	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.610	10.8	84	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724288.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Fri Apr 01 01:14:40 2022

10.10.22 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3727-CC3719
 Lab FileID: 4G9724448.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9724448.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\chrisc...3727\4g9724448.d\ECD2B.ch
 Acq On : 31 Mar 2022 3:25 pm Operator: thomasl
 Sample : cc3719-25 Inst : GC4G
 Misc : op38834,g4g3727,15.5,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Fri Apr 01 01:32:16 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.842	0.2	105	0.00	2.35-	2.41
3	hexachlorobenzene	1.123	1.050	6.5	112	0.00	2.72-	2.78
4 A	alpha-BHC	1.462	1.521	-4.0	113	0.00	2.88-	2.94
5 MA	gamma-BHC	1.307	1.373	-5.0	114	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.395	-2.8	112	0.00	3.74-	3.80
7 B	beta-BHC	0.570	0.591	-3.7	116	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.285	1.2	113	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.326	-0.7	112	0.00	4.10-	4.16
10	alachlor	0.123	0.135	-9.8	110	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.200	-1.7	112	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.243	-4.4	112	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.240	-5.2	116	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.159	-1.3	112	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.239	-2.4	112	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.326	-2.9	114	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.216	-3.9	113	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	1.023	-0.5	111	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.986	-1.6	113	0.00	6.42-	6.48
20 MA	4,4'-DDT	0.968	1.034	-6.8	118	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.907	-8.1	120	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	1.002	-5.8	115	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.526	-8.5	118	0.00	7.43-	7.49
24	Mirex	0.785	0.799	-1.8	113	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	1.102	-13.4	119	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.867	-0.3	114	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.23 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3727-CC3719
Lab FileID: 4G9724448.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.45-	2.45
2	SAB	Tetrachloro-m-xylene	0.833	0.814	2.3	101	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.967	11.4	98	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.311	-0.9	104	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.212	-0.2	104	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.211	-2.5	104	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.530	0.9	103	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.157	-2.3	106	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.140	-0.8	104	0.00	5.08-	5.14
10		alachlor	0.132	0.137	-3.8	107	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.066	-1.0	105	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.072	-1.7	104	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.043	-1.1	105	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.988	-1.6	105	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.029	1.2	103	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.100	-1.9	104	0.00	7.01-	7.07
17	MA	Endrin	1.003	1.017	-1.4	102	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.859	1.9	102	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.842	0.7	103	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.794	-1.1	105	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.715	2.2	99	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.845	-5.1	105	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.443	-13.6	113	0.00	9.50-	9.56
24		Mirex	0.690	0.671	2.8	106	0.00	9.85-	9.91
25	B	Endrin Ketone	0.967	0.949	1.9	104	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.669	2.2	99	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724288.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Fri Apr 01 02:23:22 2022

10.10.23
10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3729-CC3719
 Lab FileID: 4G9724511.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...\4g9724511.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\trude...\3729\4g9724511.d\ECD2B.ch
 Acq On : 1 Apr 2022 8:28 pm Operator: rebeccak
 Sample : cc3719-50 Inst : GC4G
 Misc : op38854,g4g3729,30,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Mon Apr 04 06:10:23 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.845	-0.1	101	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	0.956	14.9	93	0.00	2.71-	2.77
4 A	alpha-BHC	1.462	1.406	3.8	97	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.251	4.3	97	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.252	7.7	95	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.508	10.9	94	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.063	18.3	87	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.211	8.0	95	0.00	4.09-	4.15
10	alachlor	0.123	0.126	-2.4	107	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	0.942	20.2#	83	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	0.991	16.8	83	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.006	14.7	88	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.023	10.6	93	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.085	10.3	91	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.152	10.6	93	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.089	6.9	96	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.913	10.3	93	0.00	6.19-	6.25
19 B	Endosulfan II	0.970	0.866	10.7	93	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.884	8.7	93	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.782	6.8	98	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.854	9.8	92	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.467	3.7	100	0.00	7.43-	7.49
24	Mirex	0.785	0.699	11.0	93	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.867	10.8	88	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.706	18.3	89	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.24 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3729-CC3719
Lab FileID: 4G9724511.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.45-	2.45
2	SAB	Tetrachloro-m-xylene	0.833	0.849	-1.9	100	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.996	8.8	97	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.364	-5.0	99	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.241	-2.6	98	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.257	-6.4	101	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.527	1.5	99	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.117	1.2	94	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.178	-4.2	100	0.00	5.08-	5.14
10		alachlor	0.132	0.137	-3.8	104	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.078	-2.2	99	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.091	-3.5	98	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.051	-1.8	98	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.999	-2.8	99	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.071	-2.9	99	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.125	-4.2	98	0.00	7.01-	7.07
17	MA	Endrin	1.003	1.051	-4.8	100	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.884	-0.9	98	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.853	-0.6	98	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.786	-0.1	95	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.731	0.0	96	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.802	0.2	94	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.416	-6.7	98	0.00	9.50-	9.56
24		Mirex	0.690	0.641	7.1	97	0.00	9.85-	9.91
25	B	Endrin Ketone	0.967	0.845	12.6	87	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.624	8.8	90	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.45-	2.45
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.45-	2.45
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724511.d 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Mon Apr 04 06:13:32 2022

10.10.24
 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3729-CC3719
 Lab FileID: 4G9724517.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...\4g9724517.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\trude...\3729\4g9724517.d\ECD2B.ch
 Acq On : 1 Apr 2022 10:05 pm Operator: rebeccak
 Sample : cc3719-25 Inst : GC4G
 Misc : op38834,g4g3729,15.0,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Mon Apr 04 06:10:23 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.01	1.21-	2.21
2 SAB	Tetrachloro-m-xylene	0.844	0.864	-2.4	112	0.01	2.36-	2.42
3	hexachlorobenzene	1.123	1.039	7.5	115	0.02	2.73-	2.79
4 A	alpha-BHC	1.462	1.491	-2.0	115	0.02	2.89-	2.95
5 MA	gamma-BHC	1.307	1.355	-3.7	117	0.02	3.21-	3.27
6 MA	Heptachlor	1.357	1.385	-2.1	115	0.02	3.75-	3.81
7 B	beta-BHC	0.570	0.583	-2.3	119	0.02	3.30-	3.36
8 B	delta-BHC	1.301	1.226	5.8	112	0.02	3.50-	3.56
9 MB	Aldrin	1.317	1.333	-1.2	117	0.02	4.11-	4.17
10	alachlor	0.123	0.161	-30.9#	136	0.02	4.27-	4.33
11 B	Heptachlor Epoxide	1.180	1.128	4.4	109	0.02	4.87-	4.93
12 B	gamma-Chlordane	1.191	1.173	1.5	110	0.02	5.04-	5.10
13 B	alpha-Chlordane	1.179	1.150	2.5	112	0.02	5.22-	5.28
14 A	Endosulfan I	1.144	1.144	0.0	115	0.02	5.42-	5.48
15 B	4,4'-DDE	1.210	1.211	-0.1	114	0.02	5.34-	5.40
16 MA	Dieldrin	1.289	1.318	-2.2	118	0.02	5.76-	5.82
17 MA	Endrin	1.170	1.192	-1.9	116	0.02	6.10-	6.16
18 A	4,4'-DDD	1.018	1.027	-0.9	115	0.02	6.21-	6.27
19 B	Endosulfan II	0.970	0.983	-1.3	117	0.02	6.43-	6.49
20 MA	4,4'-DDT	0.968	0.973	-0.5	115	0.02	6.65-	6.71
21 B	Endrin Aldehyde	0.839	0.854	-1.8	118	0.02	7.08-	7.14
22 B	Endosulfan Sulfate	0.947	0.968	-2.2	115	0.02	7.79-	7.85
23 A	Methoxychlor	0.485	0.498	-2.7	117	0.02	7.44-	7.50
24	Mirex	0.785	0.803	-2.3	118	0.02	7.62-	7.68
25 B	Endrin Ketone	0.972	0.961	1.1	108	0.02	8.24-	8.30
26 SA	Decachlorobiphenyl	0.864	0.780	9.7	107	0.01	10.04-	10.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.01	1.21-	2.21
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.01	1.21-	2.21
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.25 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3729-CC3719
Lab FileID: 4G9724517.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.45-	2.45
2	SAB	Tetrachloro-m-xylene	0.833	0.821	1.4	109	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.985	9.8	107	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.292	0.5	109	0.00	3.54-	3.60
5	MA	gamma-BHC	1.209	1.190	1.6	109	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.182	-0.1	109	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.532	0.6	111	0.00	4.09-	4.15
8	B	delta-BHC	1.131	1.076	4.9	105	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.122	0.8	110	0.00	5.08-	5.14
10		alachlor	0.132	0.142	-7.6	119	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	1.053	0.2	111	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.051	0.3	109	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	1.031	0.1	111	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.975	-0.3	111	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	1.026	1.4	110	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.080	0.0	110	0.00	7.01-	7.07
17	MA	Endrin	1.003	0.978	2.5	105	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.845	3.5	107	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.835	1.5	109	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.721	8.2	102	0.00	8.25-	8.31
21	B	Endrin Aldehyde	0.731	0.727	0.5	108	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.764	5.0	102	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.402	-3.1	110	0.00	9.50-	9.56
24		Mirex	0.690	0.641	7.1	108	0.00	9.86-	9.92
25	B	Endrin Ketone	0.967	0.803	17.0	95	0.00	9.92-	9.98
26	SA	Decachlorobiphenyl	0.684	0.618	9.6	98	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724288.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Mon Apr 04 06:19:50 2022

10.10.25 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3730-CC3719
 Lab FileID: 4G9724538.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9724538.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\chrisc...3730\4g9724538.d\ECD2B.ch
 Acq On : 3 Apr 2022 4:41 pm Operator: thomasl
 Sample : cc3719-50 Inst : GC4G
 Misc : op38834,g4g3730,15.8,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Mon Apr 04 05:41:35 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.827	2.0	109	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	0.956	14.9	103	0.00	2.71-	2.77
4 A	alpha-BHC	1.462	1.440	1.5	110	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.292	1.1	110	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.302	4.1	109	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.537	5.8	110	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.211	6.9	109	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.250	5.1	108	0.00	4.09-	4.15
10	alachlor	0.123	0.125	-1.6	118	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.051	10.9	102	0.00	4.85-	4.91
12 B	gamma-Chlordane	1.191	1.097	7.9	102	0.00	5.02-	5.08
13 B	alpha-Chlordane	1.179	1.075	8.8	104	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.068	6.6	107	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.127	6.9	105	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.219	5.4	109	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.142	2.4	111	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.959	5.8	107	0.00	6.19-	6.25
19 B	Endosulfan II	0.970	0.917	5.5	109	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.973	-0.5	113	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.829	1.2	114	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.951	-0.4	113	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.500	-3.1	118	0.00	7.43-	7.49
24	Mirex	0.785	0.745	5.1	110	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.986	-1.4	111	0.00	8.22-	8.28
26 SA	Decachlorobiphenyl	0.864	0.776	10.2	107	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.26 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3730-CC3719
Lab FileID: 4G9724538.D

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.45-	2.45
2 SAB	Tetrachloro-m-xylene	0.833	0.838	-0.6	103	0.00	2.83-	2.89
3	hexachlorobenzene	1.092	0.978	10.4	100	0.00	3.38-	3.44
4 A	alpha-BHC	1.299	1.381	-6.3	105	0.00	3.54-	3.60
5 MA	gamma-BHC	1.209	1.260	-4.2	104	0.00	4.00-	4.06
6 MA	Heptachlor	1.181	1.257	-6.4	106	0.00	4.61-	4.67
7 B	beta-BHC	0.535	0.535	0.0	105	0.00	4.09-	4.15
8 B	delta-BHC	1.131	1.222	-8.0	107	0.00	4.51-	4.57
9 MB	Aldrin	1.131	1.196	-5.7	106	0.00	5.08-	5.14
10	alachlor	0.132	0.138	-4.5	109	0.00	4.87-	4.93
11 B	Heptachlor Epoxide	1.055	1.091	-3.4	104	0.00	5.93-	5.99
12 B	gamma-Chlordane	1.054	1.106	-4.9	104	0.00	6.23-	6.29
13 B	alpha-Chlordane	1.032	1.071	-3.8	104	0.00	6.46-	6.52
14 A	Endosulfan I	0.972	1.015	-4.4	105	0.00	6.56-	6.62
15 B	4,4'-DDE	1.041	1.078	-3.6	104	0.00	6.73-	6.79
16 MA	Dieldrin	1.080	1.146	-6.1	105	0.00	7.01-	7.07
17 MA	Endrin	1.003	1.056	-5.3	105	0.00	7.52-	7.58
18 A	4,4'-DDD	0.876	0.893	-1.9	104	0.00	7.70-	7.76
19 B	Endosulfan II	0.848	0.872	-2.8	105	0.00	7.88-	7.94
20 MA	4,4'-DDT	0.785	0.822	-4.7	104	0.00	8.24-	8.30
21 B	Endrin Aldehyde	0.731	0.743	-1.6	102	0.00	8.46-	8.52
22 B	Endosulfan Sulfate	0.804	0.863	-7.3	106	0.00	8.94-	9.00
23 A	Methoxychlor	0.390	0.442	-13.3	109	0.00	9.50-	9.56
24	Mirex	0.690	0.664	3.8	105	0.00	9.85-	9.91
25 B	Endrin Ketone	0.967	0.929	3.9	100	0.00	9.91-	9.97
26 SA	Decachlorobiphenyl	0.684	0.637	6.9	96	0.00	12.00-	12.06
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.45-	2.45
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.45-	2.45
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724538.d 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Mon Apr 04 06:41:07 2022

10.10.26 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3731-CC3719
 Lab FileID: 4G9724559.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...\4g9724559.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\syrap\4g3731\4g9724559.d\ECD2B.ch
 Acq On : 3 Apr 2022 11:46 pm Operator: christp
 Sample : cc3719-25 Inst : GC4G
 Misc : op38934,g4g3731,1040,,,5,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4PST3719.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Mon Apr 04 22:52:49 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.21-	2.21
2 SAB	Tetrachloro-m-xylene	0.844	0.882	-4.5	114	0.00	2.35-	2.41
3	hexachlorobenzene	1.123	0.999	11.0	110	0.00	2.72-	2.78
4 A	alpha-BHC	1.462	1.428	2.3	110	0.00	2.88-	2.94
5 MA	gamma-BHC	1.307	1.269	2.9	109	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.211	10.8	100	0.00	3.74-	3.80
7 B	beta-BHC	0.570	0.525	7.9	107	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.007	22.6#	92	0.00	3.49-	3.55
9 MB	Aldrin	1.317	1.181	10.3	103	0.00	4.10-	4.16
10	alachlor	0.123	0.135	-9.8	114	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	0.908	23.1#	88	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	0.934	21.6#	87	0.00	5.03-	5.09
13 A	alpha-Chlordane	1.179	0.973	17.5	94	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	0.999	12.7	100	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.051	13.1	98	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.127	12.6	100	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.072	8.4	104	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.896	12.0	100	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.860	11.3	102	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.847	12.5	100	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.785	6.4	108	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.849	10.3	101	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.448	7.6	105	0.00	7.43-	7.49
24	Mirex	0.785	0.706	10.1	104	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.855	12.0	96	0.00	8.22-	8.28
26 SA	Decachlorobiphenyl	0.864	0.790	8.6	108	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.21-	2.21
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.21-	2.21
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.27 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3731-CC3719
Lab FileID: 4G9724559.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.46-	2.46
2	SAB	Tetrachloro-m-xylene	0.833	0.822	1.3	112	0.00	2.83-	2.89
3		hexachlorobenzene	1.092	0.972	11.0	108	0.00	3.38-	3.44
4	A	alpha-BHC	1.299	1.254	3.5	109	0.00	3.55-	3.61
5	MA	gamma-BHC	1.209	1.134	6.2	107	0.00	4.00-	4.06
6	MA	Heptachlor	1.181	1.154	2.3	109	0.00	4.61-	4.67
7	B	beta-BHC	0.535	0.502	6.2	108	0.00	4.09-	4.15
8	B	delta-BHC	1.131	0.993	12.2	100	0.00	4.51-	4.57
9	MB	Aldrin	1.131	1.070	5.4	108	0.00	5.08-	5.14
10		alachlor	0.132	0.137	-3.8	118	0.00	4.88-	4.94
11	B	Heptachlor Epoxide	1.055	0.992	6.0	107	0.00	5.94-	6.00
12	B	gamma-Chlordane	1.054	1.006	4.6	107	0.00	6.23-	6.29
13	B	alpha-Chlordane	1.032	0.976	5.4	108	0.00	6.46-	6.52
14	A	Endosulfan I	0.972	0.919	5.5	108	0.00	6.56-	6.62
15	B	4,4'-DDE	1.041	0.975	6.3	107	0.00	6.73-	6.79
16	MA	Dieldrin	1.080	1.026	5.0	107	0.00	7.01-	7.07
17	MA	Endrin	1.003	0.967	3.6	107	0.00	7.53-	7.59
18	A	4,4'-DDD	0.876	0.816	6.8	107	0.00	7.70-	7.76
19	B	Endosulfan II	0.848	0.801	5.5	108	0.00	7.88-	7.94
20	MA	4,4'-DDT	0.785	0.693	11.7	100	0.00	8.24-	8.30
21	B	Endrin Aldehyde	0.731	0.700	4.2	107	0.00	8.47-	8.53
22	B	Endosulfan Sulfate	0.804	0.757	5.8	104	0.00	8.94-	9.00
23	A	Methoxychlor	0.390	0.398	-2.1	112	0.00	9.50-	9.56
24		Mirex	0.690	0.645	6.5	112	0.00	9.85-	9.91
25	B	Endrin Ketone	0.967	0.784	18.9	95	0.00	9.91-	9.97
26	SA	Decachlorobiphenyl	0.684	0.676	1.2	110	0.00	12.00-	12.06
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.46-	2.46
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.46-	2.46
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724325.d 4PST3719.M

SPCC's out = 0 CCC's out = 0
 Mon Apr 04 22:53:56 2022

10.10.27
 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3732-CC3719
 Lab FileID: 4G9724602.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...\4g9724602.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\chrisc...3732\4g9724602.d\ECD2B.ch
 Acq On : 5 Apr 2022 3:34 am Operator: rebeccak
 Sample : cc3719-25 Inst : GC4G
 Misc : op37941,g4g3732,300,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4pst3719.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Tue Apr 05 22:12:47 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	142	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.859	-1.8	146	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	1.040	7.4	151#	0.00	2.71-	2.77
4 A	alpha-BHC	1.462	1.479	-1.2	150#	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.340	-2.5	151#	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.305	3.8	142	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.566	0.7	151#	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.298	0.2	156#	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.301	1.2	150	0.00	4.09-	4.15
10	alachlor	0.123	0.144	-17.1	160#	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	1.209	-2.5	154#	0.00	4.86-	4.92
12 B	gamma-Chlordane	1.191	1.253	-5.2	154#	0.00	5.03-	5.09
13 B	alpha-Chlordane	1.179	1.202	-2.0	154#	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	1.149	-0.4	151#	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.213	-0.2	149	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.297	-0.6	152#	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.115	4.7	142	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	1.039	-2.1	153#	0.00	6.20-	6.26
19 B	Endosulfan II	0.970	0.979	-0.9	153#	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.908	6.2	141	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.922	-9.9	167#	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	1.070	-13.0	168#	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.467	3.7	144	0.00	7.43-	7.49
24	Mirex	0.785	0.814	-3.7	157#	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	1.130	-16.3	167#	0.00	8.23-	8.29
26 SA	Decachlorobiphenyl	0.864	0.938	-8.6	169#	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.28 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3732-CC3719
Lab FileID: 4G9724602.D

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	128	0.00	1.45-	2.45
2 SAB	Tetrachloro-m-xylene	0.833	0.827	0.7	128	0.00	2.83-	2.89
3	hexachlorobenzene	1.092	1.021	6.5	130	0.00	3.38-	3.44
4 A	alpha-BHC	1.299	1.327	-2.2	132	0.00	3.54-	3.60
5 MA	gamma-BHC	1.209	1.218	-0.7	131	0.00	4.00-	4.06
6 MA	Heptachlor	1.181	1.126	4.7	121	0.00	4.61-	4.67
7 B	beta-BHC	0.535	0.530	0.9	130	0.00	4.09-	4.15
8 B	delta-BHC	1.131	1.188	-5.0	137	0.00	4.50-	4.56
9 MB	Aldrin	1.131	1.144	-1.1	132	0.00	5.08-	5.14
10	alachlor	0.132	0.144	-9.1	142	0.00	4.87-	4.93
11 B	Heptachlor Epoxide	1.055	1.070	-1.4	132	0.00	5.93-	5.99
12 B	gamma-Chlordane	1.054	1.082	-2.7	132	0.00	6.23-	6.29
13 B	alpha-Chlordane	1.032	1.060	-2.7	134	0.00	6.46-	6.52
14 A	Endosulfan I	0.972	0.993	-2.2	133	0.00	6.56-	6.62
15 B	4,4'-DDE	1.041	1.036	0.5	130	0.00	6.73-	6.79
16 MA	Dieldrin	1.080	1.104	-2.2	132	0.00	7.01-	7.07
17 MA	Endrin	1.003	0.941	6.2	119	0.00	7.52-	7.58
18 A	4,4'-DDD	0.876	0.880	-0.5	131	0.00	7.70-	7.76
19 B	Endosulfan II	0.848	0.862	-1.7	133	0.00	7.88-	7.94
20 MA	4,4'-DDT	0.785	0.704	10.3	117	0.00	8.24-	8.30
21 B	Endrin Aldehyde	0.731	0.752	-2.9	131	0.00	8.46-	8.52
22 B	Endosulfan Sulfate	0.804	0.888	-10.4	139	0.00	8.94-	9.00
23 A	Methoxychlor	0.390	0.387	0.8	124	0.00	9.50-	9.56
24	Mirex	0.690	0.685	0.7	136	0.00	9.85-	9.91
25 B	Endrin Ketone	0.967	0.991	-2.5	137	0.00	9.91-	9.97
26 SA	Decachlorobiphenyl	0.684	0.767	-12.1	143	0.00	12.00-	12.06
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.45-	2.45
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724288.D 4pst3719.m

SPCC's out = 0 CCC's out = 0
 Wed Apr 06 00:45:35 2022

10.10.28
 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD41894
 Account: SESINJPB SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3733-CC3719
 Lab FileID: 4G9724612.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sar...\4g9724612.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\sarah\4g3733\4g9724612.d\ECD2B.ch
 Acq On : 5 Apr 2022 8:26 pm Operator: rebeccak
 Sample : cc3719-50 Inst : GC4G
 Misc : op38834,g4g3733,15.5,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\4PST3719.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Thu Mar 31 00:26:16 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.20-	2.20
2 SAB	Tetrachloro-m-xylene	0.844	0.851	-0.8	115	0.00	2.34-	2.40
3	hexachlorobenzene	1.123	0.950	15.4	104	0.00	2.71-	2.77
4 A	alpha-BHC	1.462	1.420	2.9	111	0.00	2.87-	2.93
5 MA	gamma-BHC	1.307	1.267	3.1	111	0.00	3.20-	3.26
6 MA	Heptachlor	1.357	1.243	8.4	106	0.00	3.73-	3.79
7 B	beta-BHC	0.570	0.519	8.9	109	0.00	3.28-	3.34
8 B	delta-BHC	1.301	1.121	13.8	103	0.00	3.48-	3.54
9 MB	Aldrin	1.317	1.203	8.7	107	0.00	4.09-	4.15
10	alachlor	0.123	0.126	-2.4	121	0.00	4.25-	4.31
11 B	Heptachlor Epoxide	1.180	0.925	21.6#	92	0.00	4.85-	4.91
12 B	gamma-Chlordane	1.191	0.977	18.0	93	0.00	5.02-	5.08
13 B	alpha-Chlordane	1.179	0.982	16.7	97	0.00	5.21-	5.27
14 A	Endosulfan I	1.144	0.995	13.0	102	0.00	5.40-	5.46
15 B	4,4'-DDE	1.210	1.051	13.1	100	0.00	5.32-	5.38
16 MA	Dieldrin	1.289	1.133	12.1	104	0.00	5.74-	5.80
17 MA	Endrin	1.170	1.074	8.2	107	0.00	6.08-	6.14
18 A	4,4'-DDD	1.018	0.900	11.6	103	0.00	6.19-	6.25
19 B	Endosulfan II	0.970	0.863	11.0	105	0.00	6.41-	6.47
20 MA	4,4'-DDT	0.968	0.906	6.4	108	0.00	6.63-	6.69
21 B	Endrin Aldehyde	0.839	0.783	6.7	111	0.00	7.07-	7.13
22 B	Endosulfan Sulfate	0.947	0.901	4.9	109	0.00	7.78-	7.84
23 A	Methoxychlor	0.485	0.474	2.3	115	0.00	7.43-	7.49
24	Mirex	0.785	0.709	9.7	107	0.00	7.60-	7.66
25 B	Endrin Ketone	0.972	0.909	6.5	104	0.00	8.22-	8.28
26 SA	Decachlorobiphenyl	0.864	0.770	10.9	109	0.00	10.03-	10.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.20-	2.20
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	0.00	1.20-	2.20
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

10.10.29 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample: G4G3733-CC3719
Lab FileID: 4G9724612.D

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.45-	2.45
2 SAB	Tetrachloro-m-xylene	0.833	0.844	-1.3	107	0.00	2.83-	2.89
3	hexachlorobenzene	1.092	0.987	9.6	103	0.00	3.38-	3.44
4 A	alpha-BHC	1.299	1.350	-3.9	105	0.00	3.54-	3.60
5 MA	gamma-BHC	1.209	1.227	-1.5	104	0.00	4.00-	4.06
6 MA	Heptachlor	1.181	1.205	-2.0	104	0.00	4.61-	4.67
7 B	beta-BHC	0.535	0.521	2.6	105	0.00	4.09-	4.15
8 B	delta-BHC	1.131	1.154	-2.0	104	0.00	4.50-	4.56
9 MB	Aldrin	1.131	1.149	-1.6	105	0.00	5.08-	5.14
10	alachlor	0.132	0.135	-2.3	110	0.00	4.87-	4.93
11 B	Heptachlor Epoxide	1.055	1.047	0.8	103	0.00	5.93-	5.99
12 B	gamma-Chlordane	1.054	1.059	-0.5	103	0.00	6.23-	6.29
13 B	alpha-Chlordane	1.032	1.025	0.7	103	0.00	6.46-	6.52
14 A	Endosulfan I	0.972	0.969	0.3	103	0.00	6.56-	6.62
15 B	4,4'-DDE	1.041	1.035	0.6	103	0.00	6.73-	6.79
16 MA	Dieldrin	1.080	1.090	-0.9	103	0.00	7.01-	7.07
17 MA	Endrin	1.003	1.035	-3.2	106	0.00	7.52-	7.58
18 A	4,4'-DDD	0.876	0.860	1.8	103	0.00	7.70-	7.76
19 B	Endosulfan II	0.848	0.837	1.3	104	0.00	7.88-	7.94
20 MA	4,4'-DDT	0.785	0.793	-1.0	103	0.00	8.24-	8.30
21 B	Endrin Aldehyde	0.731	0.724	1.0	102	0.00	8.46-	8.52
22 B	Endosulfan Sulfate	0.804	0.830	-3.2	105	0.00	8.94-	9.00
23 A	Methoxychlor	0.390	0.420	-7.7	106	0.00	9.50-	9.56
24	Mirex	0.690	0.647	6.2	105	0.00	9.85-	9.91
25 B	Endrin Ketone	0.967	0.896	7.3	99	0.00	9.91-	9.97
26 SA	Decachlorobiphenyl	0.684	0.697	-1.9	108	0.00	12.00-	12.06
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.45-	2.45
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.45-	2.45
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

(#) = Out of Range
 4g9724401.d 4PST3719.M

SPCC's out = 0 CCC's out = 0
 Tue Apr 05 21:58:21 2022

10.10.29 10

Method Blank Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38834-MB1 ^a	4G9724419.D	1	03/31/22	CP	03/29/22	OP38834	G4G3726

The QC reported here applies to the following samples: Method: SW846 8081B

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	0.55	0.67	0.54	ug/kg	J
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	ND	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	0.66	0.67	0.58	ug/kg	J
50-29-3	4,4'-DDT	22.6	0.67	0.59	ug/kg	J
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	91% 14-145%
877-09-8	Tetrachloro-m-xylene	91% 14-145%
2051-24-3	Decachlorobiphenyl	56% 10-197%
2051-24-3	Decachlorobiphenyl	79% 10-197%

(a) Detections due to lab contamination.

10.1.1
10

Method Blank Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38834-MB1	4G9724515.D	1	04/01/22	RK	03/29/22	OP38834	G4G3729

The QC reported here applies to the following samples: Method: SW846 8081B

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4'-DDD	0.70	0.67	0.61	ug/kg	
72-55-9	4,4'-DDE	0.64	0.67	0.58	ug/kg	J
50-29-3	4,4'-DDT	23.9	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	96% 14-145%
877-09-8	Tetrachloro-m-xylene	93% 14-145%
2051-24-3	Decachlorobiphenyl	75% 10-197%
2051-24-3	Decachlorobiphenyl	85% 10-197%

10.1.2
10

Method Blank Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38850-MB1 ^a	4G9724540.D	1	04/03/22	TL	03/30/22	OP38850	G4G3730

The QC reported here applies to the following samples: Method: SW846 8081B

JD41894-21, JD41894-22, JD41894-23

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	0.39	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	0.067	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	0.020	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	0.057	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	0.13	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	0.13	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	5.6	0.0080	0.0055	ug/l	E
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	95% 10-190%
877-09-8	Tetrachloro-m-xylene	90% 10-190%
2051-24-3	Decachlorobiphenyl	40% 10-156%
2051-24-3	Decachlorobiphenyl	39% 10-156%

(a) Detections due to lab contamination.

Blank Spike Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38834-BS1 ^a	4G9724420.D	1	03/31/22	CP	03/29/22	OP38834	G4G3726

The QC reported here applies to the following samples: Method: SW846 8081B

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	33.4	25.6	77	41-146
319-84-6	alpha-BHC	33.4	27.7	83	39-138
319-85-7	beta-BHC	33.4	25.8	78	44-134
319-86-8	delta-BHC	33.4	24.0	72	10-147
58-89-9	gamma-BHC (Lindane)	33.4	25.6	77	42-133
5103-71-9	alpha-Chlordane	33.4	24.1	73	43-140
5103-74-2	gamma-Chlordane	33.4	26.8	81	45-135
60-57-1	Dieldrin	33.4	26.7	80	40-151
72-54-8	4,4' -DDD	33.4	26.2	79	42-133
72-55-9	4,4' -DDE	33.4	27.8	84	43-139
50-29-3	4,4' -DDT	33.4	63.9	192* ^b	44-150
72-20-8	Endrin	33.4	26.6	80	43-145
1031-07-8	Endosulfan sulfate	33.4	20.1	61	27-131
7421-93-4	Endrin aldehyde	33.4	23.3	70	34-139
959-98-8	Endosulfan-I	33.4	25.5	77	41-137
33213-65-9	Endosulfan-II	33.4	28.4	85	35-143
76-44-8	Heptachlor	33.4	26.2	79	44-136
1024-57-3	Heptachlor epoxide	33.4	25.9	78	45-138
72-43-5	Methoxychlor	33.4	19.7	59	39-149
53494-70-5	Endrin ketone	33.4	23.9	72	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	83%	14-145%
877-09-8	Tetrachloro-m-xylene	83%	14-145%
2051-24-3	Decachlorobiphenyl	54%	10-197%
2051-24-3	Decachlorobiphenyl	72%	10-197%

(a) Surrogate and targets double spiked. The recovery re-calculated based on the spike amount.
(b) Outside of control limits due to lab contamination.

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38834-BS1 ^a	4G9724516.D	1	04/01/22	RK	03/29/22	OP38834	G4G3729

The QC reported here applies to the following samples:

Method: SW846 8081B

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	33.4	28.7	86	41-146
319-84-6	alpha-BHC	33.4	29.1	88	39-138
319-85-7	beta-BHC	33.4	27.1	82	44-134
319-86-8	delta-BHC	33.4	27.6	83	10-147
58-89-9	gamma-BHC (Lindane)	33.4	27.5	83	42-133
5103-71-9	alpha-Chlordane	33.4	25.4	76	43-140
5103-74-2	gamma-Chlordane	33.4	28.6	86	45-135
60-57-1	Dieldrin	33.4	29.3	88	40-151
72-54-8	4,4'-DDD	33.4	29.1	88	42-133
72-55-9	4,4'-DDE	33.4	30.0	90	43-139
50-29-3	4,4'-DDT	33.4	71.0	213* ^b	44-150
72-20-8	Endrin	33.4	29.5	89	43-145
1031-07-8	Endosulfan sulfate	33.4	17.3	52	27-131
7421-93-4	Endrin aldehyde	33.4	9.3	28* ^c	34-139
959-98-8	Endosulfan-I	33.4	28.2	85	41-137
33213-65-9	Endosulfan-II	33.4	31.2	94	35-143
76-44-8	Heptachlor	33.4	28.1	85	44-136
1024-57-3	Heptachlor epoxide	33.4	29.2	88 ^d	45-138
72-43-5	Methoxychlor	33.4	19.8	60	39-149
53494-70-5	Endrin ketone	33.4	24.6	148	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	88%	14-145%
877-09-8	Tetrachloro-m-xylene	87%	14-145%
2051-24-3	Decachlorobiphenyl	74%	10-197%
2051-24-3	Decachlorobiphenyl	83%	10-197%

(a) Had TBA cleanup. Targets and surrogate double spiked. The recovery re-calculated based on the spike amount.

(b) Outside of in house control limits due to lab contamination.

(c) Outside in house control limits due to degradation from TBA cleanup.

(d) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD41894
Account: SESINJPB SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38850-BS1	4G9724541.D	1	04/03/22	TL	03/30/22	OP38850	G4G3730
OP38850-BSD ^a	4G9724542.D	1	04/03/22	TL	03/30/22	OP38850	G4G3730

The QC reported here applies to the following samples: Method: SW846 8081B

JD41894-21, JD41894-22, JD41894-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.19	95	0.18	90	5	54-152/36
319-84-6	alpha-BHC	0.2	1.1	550* ^b	0.92	460* ^b	18	50-161/35
319-85-7	beta-BHC	0.2	0.34	170* ^b	0.29	145	16	56-150/36
319-86-8	delta-BHC	0.2	0.25	125	0.26	130	11	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.31	155	0.28	140	10	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.20	100	0.19	95	5	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.20	100	0.20	100	0	55-153/37
60-57-1	Dieldrin	0.2	0.19	95	0.18	90	5	56-163/36
72-54-8	4,4'-DDD	0.2	0.46	230* ^b	0.41	205* ^b	11	50-154/37
72-55-9	4,4'-DDE	0.2	0.39	195* ^b	0.38	190* ^b	10	47-157/43
50-29-3	4,4'-DDT	0.2	10.2	5100* ^b	8.0	4000* ^b	24	52-167/42
72-20-8	Endrin	0.2	0.20	100	0.19	95	5	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.19	95	0.18	90	5	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.11	55	0.12	60	9	33-163/41
53494-70-5	Endrin ketone	0.2	0.18	90	0.18	90	0	42-178/38
959-98-8	Endosulfan-I	0.2	0.20	100	0.19	95	5	57-154/37
33213-65-9	Endosulfan-II	0.2	0.21	105	0.20	100	5	54-160/38
76-44-8	Heptachlor	0.2	0.19	95	0.17	85	11	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.19	95	0.19	95	0	58-157/36
72-43-5	Methoxychlor	0.2	0.23	115	0.22	110	4	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	69%	92%	10-190%
877-09-8	Tetrachloro-m-xylene	84%	81%	10-190%
2051-24-3	Decachlorobiphenyl	78%	40%	10-156%
2051-24-3	Decachlorobiphenyl	36%	38%	10-156%

(a) Detections could be due to lab contamination.
(b) Outside of in house control limits due to lab contamination.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: JD41894

Account: SESINJPB SESI Consulting Engineers

Project: 23-34 Pearl Street, Port Chester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38834-MS ^a	4G9724530.D	1	04/02/22	RK	03/29/22	OP38834	G4G3729
OP38834-MSD ^a	4G9724531.D	1	04/02/22	RK	03/29/22	OP38834	G4G3729
JD41894-17 ^a	4G9724529.D	1	04/02/22	RK	03/29/22	OP38834	G4G3729

The QC reported here applies to the following samples:

Method: SW846 8081B

JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

CAS No.	Compound	JD41894-17 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
309-00-2	Aldrin	ND		18.5	12.7	69	18.8	11.4	61	11	23-156/72
319-84-6	alpha-BHC	ND		18.5	12.3	66	18.8	10.1	54	20	15-162/63
319-85-7	beta-BHC	ND		18.5	11.6	63	18.8	10.3	55	12	17-148/79
319-86-8	delta-BHC	ND		18.5	11.0	59	18.8	10.9	58	1	10-159/81
58-89-9	gamma-BHC (Lindane)	ND		18.5	11.9	64	18.8	10.3	55	14	30-139/67
5103-71-9	alpha-Chlordane	6.1		18.5	18.9	69	18.8	17.2	59	9	12-167/63
5103-74-2	gamma-Chlordane	5.1		18.5	18.0	70	18.8	20.2	80	12	10-184/65
60-57-1	Dieldrin	ND		18.5	16.3	88	18.8	16.2	86	1	10-266/78
72-54-8	4,4'-DDD	2.2	B	18.5	13.4	61	18.8	10.1	42	28	24-143/82
72-55-9	4,4'-DDE	46.0	B	18.5	75.9	162	18.8	59.4	71	24	10-172/71
50-29-3	4,4'-DDT	71.7	B	18.5	180	585* ^b	18.8	80.1	45	77	10-191/84
72-20-8	Endrin	ND		18.5	12.1	65	18.8	9.8	52	21	10-200/74
1031-07-8	Endosulfan sulfate	ND		18.5	7.0	38	18.8	6.4	34	9	10-149/69
7421-93-4	Endrin aldehyde	ND		18.5	13.5	73	18.8	13.6	72	1	10-165/81
959-98-8	Endosulfan-I	ND		18.5	14.5	78	18.8	12.3	65	16	10-171/75
33213-65-9	Endosulfan-II	ND		18.5	12.9	70	18.8	11.9	63	8	10-153/76
76-44-8	Heptachlor	ND		18.5	12.5	68	18.8	10.0	53	22	15-162/77
1024-57-3	Heptachlor epoxide	1.2		18.5	12.6	62	18.8	11.7	56	7	26-151/66
72-43-5	Methoxychlor	ND		18.5	14.4	78	18.8	9.3	49	43	10-172/85
53494-70-5	Endrin ketone	ND		18.5	11.0	59	18.8	9.4	50	16	10-182/72
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JD41894-17	Limits
877-09-8	Tetrachloro-m-xylene	66%	53%	48%	14-145%
877-09-8	Tetrachloro-m-xylene	65%	52%	47%	14-145%
2051-24-3	Decachlorobiphenyl	51%	42%	42%	10-197%
2051-24-3	Decachlorobiphenyl	77%	65%	57%	10-197%

(a) Had TBA cleanup. Detections could be due to lab contamination.

(b) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41894
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31929
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 03/30/22

Metal	JD41894-17 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	14700	20100	3010	66.4 (a)	75-125
Antimony	2.7	125	241	50.8N(b)	75-125
Arsenic	13.7	241	241	94.4	75-125
Barium	174	381	241	75.1	75-125
Beryllium	1.2	219	241	90.6	75-125
Bismuth					
Boron					
Cadmium	1.4	217	241	89.5	75-125
Calcium	13000	34800	3010	730.6(a)	75-125
Chromium	29.6	240	241	83.8	75-125
Cobalt	8.9	225	241	88.2	75-125
Copper	62.3	285	241	92.5	75-125
Iron	27200	24400	3010	-93.0(a)	75-125
Lead	481	746	241	110.0	75-125
Lithium					
Magnesium	8420	21200	3010	434.7N(b)	75-125
Manganese	431	602	241	40.3N(b)	75-125
Molybdenum					
Nickel	27.1	234	241	81.4	75-125
Phosphorus					
Potassium	2330	6030	3010	42.2N(b)	75-125
Selenium	1.6	229	241	94.5	75-125
Silicon					
Silver	1.2	31.8	30.1	101.6	75-125
Sodium	111	3060	3010	96.4	75-125
Strontium					
Sulfur					
Thallium	0.0	234	241	97.1	75-125
Tin					
Titanium					
Tungsten					
Vanadium	33.9	250	241	84.8	75-125
Zinc	396	565	241	70.2N(b)	75-125

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41894
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31929
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/30/22

Metal	JD41894-17 Original MS	Spike lot MPSPK2	% Rec	QC Limits

Zirconium

Associated samples MP31929: JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

12.10.2
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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41894
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31929
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 03/30/22

Metal	JD41894-17 Original	MSD	Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	14000	21000	3070	94.4	4.4	20
Antimony	2.7	121	246	48.1N(a)	3.3	20
Arsenic	13.7	239	246	91.7	0.8	20
Barium	174	442	246	98.5	14.8	20
Beryllium	0.85	228	246	92.5	4.0	20
Bismuth						
Boron						
Cadmium	0.68	225	246	91.0	3.6	20
Calcium	12800	19700	3070	428.8N(a)	48.8 (b)	20
Chromium	29.6	252	246	87.0	4.9	20
Cobalt	8.9	233	246	89.7	3.5	20
Copper	64.8	292	246	93.5	2.4	20
Iron	27200	32200	3070	162.8(c)	27.6 (b)	20
Lead	481	786	246	124.1	5.2	20
Lithium						
Magnesium	8420	13700	3070	182.0N(a)	43.0 (b)	20
Manganese	413	664	246	64.7N(a)	9.8	20
Molybdenum						
Nickel	25.8	242	246	83.1	3.4	20
Phosphorus						
Potassium	2450	5630	3070	28.3N(a)	6.9	20
Selenium	1.6	233	246	94.3	1.7	20
Silicon						
Silver	1.2	31.5	30.7	98.7	0.9	20
Sodium	171	3110	3070	96.2	1.6	20
Strontium						
Sulfur						
Thallium	0.84	239	246	97.3	2.1	20
Tin						
Titanium						
Tungsten						
Vanadium	33.9	260	246	87.2	3.9	20
Zinc	403	666	246	109.9	16.4	20

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD41894
 Account: SESINJPB - SESI Consulting Engineers
 Project: 23-34 Pearl Street, Port Chester, NY

QC Batch ID: MP31929
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 03/30/22

Metal	JD41894-17 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit

Zirconium

Associated samples MP31929: JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) High rpd due to possible sample nonhomogeneity.

(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

12.10.2
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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD41894
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP39179/GN27664	JD41871-1	mg/l	0.017	0.0833	0.054	44.4N(a)	90-110%
Cyanide	GP39182/GN27674	JD41894-1	mg/kg	0.20	2.91	2.1	65.3N(b)	75-125%
Cyanide	GP39182/GN27674	JD41894-2	mg/kg	0.0	2.9	2.0	68.9N(b)	75-125%
Cyanide	GP39183/GN27674	JD41894-17	mg/kg	0.0	2.92	1.8	61.6N(b)	75-125%

Associated Samples:

Batch GP39179: JD41894-21, JD41894-22, JD41894-23

Batch GP39182: JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-18, JD41894-19, JD41894-20

Batch GP39183: JD41894-17

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) Spike recovery indicates possible matrix interference.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD41894
Account: SESINJPB - SESI Consulting Engineers
Project: 23-34 Pearl Street, Port Chester, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide	GP39179/GN27664	JD41871-1	mg/l	0.017	0.018	5.7	0-32%
Cyanide	GP39182/GN27674	JD41894-1	mg/kg	0.20	0.0	200.0(a)	0-49%
Cyanide	GP39183/GN27674	JD41894-17	mg/kg	0.0	0.0	0.0	0-49%
Solids, Percent	GN27618	JD41894-17	%	81.4	81	0.5	0-5%

Associated Samples:

Batch GN27618: JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-17, JD41894-18, JD41894-19, JD41894-20
Batch GP39179: JD41894-21, JD41894-22, JD41894-23

Batch GP39182: JD41894-1, JD41894-2, JD41894-3, JD41894-4, JD41894-5, JD41894-6, JD41894-7, JD41894-8, JD41894-9, JD41894-10, JD41894-11, JD41894-12, JD41894-13, JD41894-14, JD41894-15, JD41894-16, JD41894-18, JD41894-19, JD41894-20

Batch GP39183: JD41894-17

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.