

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5 Groundwater Monitoring Event: Third Quarter 2025



Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: ELLE, Lancaster, PA											
Cobalt	5W8B	1	U	U		5	1	5	1	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	1	U	U		5	1	5	1	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	7.7		7.7		5	1	5	1	ug/L	No action taken.
	5WC21	14		14		5	1	5	1	ug/L	No action taken.
	5WC22	4.9	J	4.9	J	5	1	5	1	ug/L	Result < QL.
	5WC23	1	U	U		5	1	5	1	ug/L	Analyte not detected at or above the permit DL or QL.
	5WDUP	14		14		5	1	5	1	ug/L	No action taken. Blind field duplicate of 5WC21. RPD <1.0
	5W12A	1	U	U		5	1	5	1	ug/L	Analyte not detected at or above the permit DL or QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia



Facility: HWMU-5 Groundwater Monitoring Event: Third Quarter 2025

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260D											
Laboratory: ELLE, Lancaster, PA											
1,1-Dichloroethene	5W8B	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC21	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC22	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC23	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5WDUP	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL. Blind field duplicate of 5WC21.
	5W12A	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
cis-1,2-Dichloroethene	Trip Blank 1	0.2	U	U		1	0.2	1	0.44	ug/L	Analyte not detected at or above the permit DL or QL.
	5W8B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL. Blind field duplicate of 5WC21.
trans-1,2-Dichloroethene	5W12A	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/L	Analyte not detected at or above the permit DL or QL.
	5W8B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC21	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC22	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC23	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	5WDUP	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL. Blind field duplicate of 5WC21.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5 Groundwater Monitoring Event: Third Quarter 2025



Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260D											
Laboratory: ELLE, Lancaster, PA											
trans-1,2-Dichloroethene	5W12A	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
	Trip Blank 1	0.8	U	U		1	0.8	1	0.8	ug/L	Analyte not detected at or above the permit DL or QL.
Trichloroethene	5W8B	0.3	U	U		1	0.3	1	0.3	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	0.3	U	U		1	0.3	1	0.3	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	0.3	U	U		1	0.3	1	0.3	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC21	1.3		1.3		1	0.3	1	0.3	ug/L	No action taken.
	5WC22	1.5		1.5		1	0.3	1	0.3	ug/L	No action taken.
	5WC23	2.6		2.6		1	0.3	1	0.3	ug/L	No action taken.
	5WDUP	1.4		1.4		1	0.3	1	0.3	ug/L	No action taken. Blind field duplicate of 5WC21. RPD 7.4
	5W12A	0.3	U	U		1	0.3	1	0.3	ug/L	Analyte not detected at or above the permit DL or QL.
Vinyl chloride	Trip Blank 1	0.3	U	U		1	0.3	1	0.3	ug/L	Analyte not detected at or above the permit DL or QL.
	5W8B	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5W5B	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5W7B	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC21	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC22	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5WC23	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	5WDUP	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL. Blind field duplicate of 5WC21.
	5W12A	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.
	Trip Blank 1	0.2	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the permit DL or QL.

Comprehensive Data Validation Report

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5 Groundwater Monitoring Event: Third Quarter 2025



Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Definitions: QL Denotes quantitation limit. DL Denotes detection limit Q Denotes data qualifier. U Denotes analyte not detected at or above Detection Limit (DL) or Quantitation Limit (QL). UA Denotes analyte not detected at or above adjusted sample DL or QL. J Denotes analyte reported at or above the DL and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above DL and QL and DL and QL are estimated. When used with "UA" (i.e., "UAJ"), denotes analyte not detected at or above adjusted DL and QL and adjusted DL and QL are estimated. R Denotes result rejected. Laboratory Data Qualifiers, "U" and "<", denote not detected at or above the DL or QL.											



Data Validation Summary

Third Quarter 2025

Semiannual Compliance Groundwater Monitoring Event for Corrective Action Semiannual Groundwater Monitoring Event for HWMU 5

Post Closure Care Permit Hazardous Waste Management Unit 5 & 16

Radford Army Ammunition Plant, Radford, Virginia

EPA ID# VA1210020730

TRC Engineers, Inc. (TRC) (formerly Draper Aden Associates), performed data validation of the analytical results for the Third Quarter 2025 semiannual groundwater monitoring event at Hazardous Waste Management Units (HWMUs) 5 and 16 located at the Radford Army Ammunition Plant (RFAAP), in Radford, Virginia.

During Third Quarter 2025, on behalf of BAE Systems, Ordnance Systems Inc. (BAE), TRC completed groundwater monitoring at HWMUs 5 and 16 in accordance with the Final Hazardous Waste Post-Closure Care Permit for HWMUs 5 and 16 (reissued August 16, 2014), with subsequent permit modifications. The Third Quarter 2025 event served as the semiannual Corrective Action (CA) groundwater monitoring event for HWMU-5 and the semiannual compliance monitoring event for HWMU-16. The Third Quarter 2025 groundwater monitoring event also served as the annual monitoring event under 40 CFR 264 Appendix IX for HWMU-16.

The Third Quarter 2025 groundwater monitoring event was conducted using revised detection limits (DLs) and quantitation limits (QLs), where applicable, as specified in the Class 1 Permit Modification approved by the Virginia Department of Environmental Quality (VDEQ) in electronic correspondence dated May 5, 2021. Total silver was added to the HWMU-16 Compliance Monitoring List as directed by VDEQ in correspondence dated May 8, 2024. Additionally, HWMU-16 total cobalt data were evaluated using the revised alternate source demonstration (ASD) for total cobalt in groundwater at HWMU-16, approved by the VDEQ in electronic correspondence dated September 13, 2021.

The following information summarizes the findings of the Third Quarter 2025 semiannual event for HWMU-5 only. Information for HWMU-16 is provided under a separate document.

Sample Collection/Analytical Services

TRC collected the groundwater samples from monitoring wells 5W8B, 5W5B, 5W7B, 5WC21, 5WC22, 5WC23 and 5W12A. Groundwater sample 5WDUP was submitted to the laboratory as a blind sample duplicate for 5WC21.

For this event, all wells in the corrective action groundwater monitoring network were sampled for the constituents listed in Appendix J to Permit Attachment 2 (Groundwater Corrective Action Targeted Constituents - GPS and Semiannual Monitoring List for HWMU-5). The CA groundwater monitoring network for HWMU-5 consists of upgradient well 5W8B, point of compliance (POC) wells 5W5B, 5W7B, 5WC21, 5WC22, and 5WC23, and plume monitoring well 5W12A. During Third Quarter 2025, groundwater samples collected from all of the wells in the corrective action groundwater monitoring network were analyzed for the corrective action Targeted Constituents: trichloroethene (TCE) and its daughter products 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and vinyl chloride (VC). Additionally, samples collected from all of the wells in the corrective action groundwater monitoring network were analyzed for total cobalt, which was added to the list of corrective action Targeted Constituents as directed by the VDEQ on May 4, 2011.

TRC of Blacksburg, Virginia, collected groundwater samples July 28, 2025.

Samples were submitted for laboratory analysis via overnight courier to Eurofins Lancaster Laboratories Environmental, (ELLE), of Lancaster, Pennsylvania. The laboratory is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the analytes, methods, and matrix as listed on each certificate of analysis, except if noted below.

Receipt of Monitoring Event Data

On behalf of BAE Systems, Ordnance Systems, Inc., ELLE submitted results to TRC in a final certificate of analysis which included analytical results as well as relevant documentation to verify and validate the results as discussed below. The final certificate of analysis for this event, which included HWMU-16, was received on September 19, 2025.

Verification Events

No verification event was required.

Summary of Monitoring Event Data by Analytical Method

The certificate of analysis (COA) was received from the laboratory in the following sample delivery group (SDG): 410-234463-1 dated August 13, 2025.

The final certificate of analysis was complete in its presentation and the data were of acceptable quality. Chain of custody (COC) and permit required target analyte lists are provided in the SDG.

Data Analysis and Validation

Samples were analyzed by *SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*. Data, except where noted below, were evaluated in accordance with:

- *Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*

- *USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020, where applicable.
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review*, November 2020, where applicable.

TRC of Blacksburg, Virginia, performed data validation as detailed in the attached data validation reports. Data validation reports and a summary table of data validation results are provided as an attachment.

Reporting of Results

Results were reported to at or above the permit detection limit for the target analytes (constituents) (i.e., five volatile organics and cobalt, total) listed in Appendix J to Permit Attachment 2 of Module VI-Groundwater Corrective Action & Monitoring Program. Results reported between the detection limit and quantitation limit should be considered estimated concentrations. The laboratory QLs and DLs met the Permit required QL and DL. All QLs were at or below the groundwater protection standard (GPS).

Summary of Data Validation Results

The data validation results are summarized below and on the attached report and table. The certificate of analysis was complete in its presentation and the data were of acceptable quality. The chain of custody documentation was complete, except where noted below. The laboratory received the samples on ice and in good condition, with custody seals intact. Technical holding time and preservation criteria were met. The data set demonstrated the laboratory's ability to achieve the permit QL or DL, unless noted. Sample results for each method analysis, where applicable, were recalculated to confirm reported results. A minimum of 10% of QC data was performed for each analysis method.

SW-846 Method 8260D/5030C-Volatile Organic Analytes- 25 ml purge volume

Instrument calibration, blank, surrogate, matrix spike/matrix spike duplicate (MS/MSD), laboratory control standards (LCS), internal standards, sample/blind field sample duplicate results, and target analyte identification and quantitation were met, unless noted below. The MS/MSD samples were analyzed on project samples as noted on the chain of custody (5W7B). A trip blank was analyzed for each day of sample collection. A blind field duplicate was collected and analyzed for the required target analytes. Target analytes detected in the sample/field duplicate sample are noted below. No deviations from specific QA/QC criteria were identified during the data review process.

Sample/Blind Field Sample Duplicate results - 5WC21/5WDUP - Trichloroethene was reported at or above the QL in both the sample and blind field duplicate (1.3/1.4 µg/l). The relative percent difference (RPD) criteria were met (<20 RPD).

SW-846 Method 6020B/3005A-Inorganics-total

Calibration, blank, interference check sample, MS/MSD/duplicate (DUP), LCS, internal standards, serial dilution, sample/field sample duplicate results, and target analyte quantitation were met, unless noted below.

MS/MSD analyses were performed on project sample 5W7B as requested on the chain of custody. Target analytes detected in the sample/field duplicate sample are noted below. No deviations from specific QA/QC criteria were identified during the data review process.

- Sample/Blind Field Sample Duplicate results – 5WC21/5WDUP – Cobalt was reported above the QL in both the sample and blind field duplicate (14/14 µg/l). The relative percent difference (RPD) criteria were met (<20 RPD).

DATA VALIDATION REVIEW ITEMS-SAMPLE PAPERWORK

A. QC DELIVERABLES PACKAGE – SAMPLE PAPERWORK:

1.	Was the chain of custody included in the data deliverable package?	☒ YES ☐ NO
2.	Was custody transfer between different parties dated and signed?	☒ YES ☐ NO
3.	Did the chain of custody document sampler signature, sample locations, date and time of sampling and analyses requested?	☒ YES ☐ NO
4.	Were the sample results included for each sample location?	☒ YES ☐ NO
5.	Did the laboratory report the required target analytes?	☒ YES ☐ NO

End of page

DATA EVALUATION FOR SW-846 METHOD 8260D (GC/MS) VOLATILE ORGANICS

A. QC DELIVERABLES PACKAGE:

- ☒ VELAP accredited (matrix, method and analyte)

B. TECHNICAL HOLDING TIME AND PRESERVATION REVIEW CRITERIA:

- ☒ Samples received at $\leq 6^{\circ}\text{C}$, zero headspace
- ☒ 14-day sample holding time, pH < 2
- ☒ Preparation Method 5030C, 25 ml purge volume

C. GC/MS INSTRUMENT PERFORMANCE CHECK REVIEW CRITERIA:

Instrument performance check solution was analyzed at the beginning of each 12-hour period of standard and/or sample analysis. (Not a requirement for Method 8260D)

D. INITIAL GC/MS CALIBRATION REVIEW CRITERIA:

- ☒ Instrument performance check solution was analyzed at the beginning of each initial calibration
- ☒ Target analytes included in the ICAL
- ☒ ICAL consisted of 5 calibration standards (or more, as needed)
- ☒ Lowest concentration calibration standard at or below the associated MCL, regulatory compliance, action limit, or required QL
- ☒ No calibration standards were removed from curve that would negatively impact the data integrity
- ☒ Each target analyte %RSD $\leq 20\%$
- ☒ Correlation coefficient or coefficient of determination > 0.99 for target analytes with $\geq 20\%$ RSD
- ☒ Initial calibration verification analytes have % Difference/Drift within $\pm 30.0\%$

E. CALIBRATION VERIFICATION REVIEW CRITERIA:

- ☒ Calibration verification standard analyzed at the beginning of each 12-hour period and prior to the method blank and sample analysis
- ☒ % Difference/Drift of target analytes within $\pm 20\%$

F. BLANK REVIEW CRITERIA:

- ☒ Method/extraction blank analyzed on each GC/MS system used for sample analysis
- ☒ Trip Blank-one per day of collection.

G. SURROGATE REVIEW CRITERIA:

- ☒ The following surrogates (or others as allowed) were used and within the specified range
 - dibromofluoromethane (80-120%), 4-bromofluorobenzene (80-120%)
 - toluene- d_8 (80-120%), 1,2-dichloroethane- d_4 (80-120%)

H. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) REVIEW CRITERIA:

- ☒ MS/MSD and LCS analyzed; MS/MSD and LCS within range
- ☒ Project specific analytes -%R 70-130%, RPD ≤ 20
- ☒ Independent source (confirmed via email from B. Weyandt, ELLE to K. Olsen 1/9/2015)

I. INTERNAL STANDARDS REVIEW CRITERIA:

- ☒ The following internal standards (or others as allowed) were used
 - t-butyl alcohol- d_{10} , fluorobenzene, chlorobenzene- d_5 , 1,4-dichlorobenzene- d_4
- ☒ Internal standard areas within $\pm 50\%$ of last calibration verification
- ☒ Internal standard retention times within ± 30 seconds of last calibration verification

DATA EVALUATION FOR SW-846 METHOD 8260D (GC/MS) VOLATILE ORGANICS (Con't.)

J. TARGET ANALYTE IDENTIFICATION REVIEW CRITERIA:

- ☒ Results were consistent with historical data. New detections evaluated as follows:
- ☒ RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT
- ☒ Sample spectra versus laboratory standard spectra criteria were evaluated:
 - Characteristic ions maximized in the same scan or within one scan of each other
 - Characteristic ions present in the standard spectra were present in the sample spectra for analytes detected above the QL
 - Relative intensities of the ions between the standard and sample spectra were within $\pm 30\%$.

K. TARGET ANALYTE QUANTITATION REVIEW CRITERIA:

- ☒ Results are consistent with historical data. New detections evaluated as follows:
 - If analyte %RSD was 20% or less, use average relative response factor for quantitation.
 - If analyte %RSD was greater than 20%, use first or higher order regression fit of five calibration points (6 calibration points for 2nd order)
- ☒ Results that exceed the initial calibration range were reanalyzed at a higher dilution
- ☒ Analyte concentrations recorded on the sample quantitation reports were accurately transferred to the sample summary sheets (laboratory report)

L. REPORTING:

- ☒ Detected analytes or results requiring validation are presented on the attached data validation report
- ☒ Results reported at or above permit QL (HWMU16)- NA
- ☒ Results reported at or above permit DL and permit QL (HWMU5)
- ☒ Results reported within instrument calibration range
- ☒ Sample/blind field duplicate RPD <20, where applicable

DATA EVALUATION FOR INORGANICS BY SW-846 METHOD 6020B (ICP/MS)

A. QC DELIVERABLES PACKAGE:

- ☒ Sample results included for sample locations
- ☒ Target analyte QLs reported at permit QL
- ☒ Sample digestion method: 3005A
- ☒ Electronic data file reviewed
- ☒ VELAP accredited (matrix, method, target analyte)

B. TECHNICAL HOLDING TIMES / PRESERVATION REVIEW CRITERIA:

- ☒ 6 month holding time, pH<2 with Nitric Acid (HNO₃)

C. INSTRUMENT CALIBRATION/TUNE CRITERIA:

- ☒ Target analytes, 1 calibration blank and at least 1 standard or according to instrument manufacturer's procedure
- ☒ Instrument calibrated for every analytical sequence, $r > 0.998$
- ☒ Instrument tuned prior to analysis:
 - (%RSD < 5%),
 - Resolution < 0.9 amu full width at 10% peak height (or lower)
 - Mass calibration ≤ 0.1 amu difference from true value

D. INSTRUMENT CALIBRATION CRITERIA:

- ☒ Standard analyzed at or below the QL (LLQC), digested, analyzed after MDL determination and as needed
- ☒ QL standard recovery 70-130%
- ☒ 10 sample frequency
- ☒ Use of calibration blank and check standard
- ☒ Recovery within 90-110% (ICV/CCV)
- ☒ LLICV prior to analysis and at a concentration at or below LOQ/QL
- ☒ LLCCV within 70-130% recovery

E. BLANK CRITERIA:

- N/A Trip Blank (check only if analyzed)
- N/A Equipment Blank
- ☒ Method/Other Lab Blanks (check only if analyzed)
- ☒ Interference free
- ☒ CCB 10 sample frequency

F. INTERFERENCE CHECK SAMPLES (ICS) CRITERIA:

- ☒ At beginning of analytical run (80-120%)

G. MATRIX SPIKE DUPLICATE (MSD) CRITERIA:

- ☒ One MSD or sample duplicate per batch of 20 samples
- ☒ $RPD \leq 20$ between MS and MSD results or sample and duplicate results
- ☒ Control limit is $\pm$ QL when sample values are less than 5 times QL (sample duplicate).

H. MATRIX SPIKE (MS) CRITERIA:

- ☒ 75-125% recovery, all analytes
- ☒ All analytes, spiked prior to digestion
- ☒ One matrix spike per analytical batch
- ☒ No more than 20 samples per analytical batch

I. BLIND FIELD SAMPLE DUPLICATE CRITERIA:

- ☒ 20% RPD for concentrations > QL

J. SAMPLE RESULTS CRITERIA:

- ☒ Results reported within instrument linear range

DATA EVALUATION FOR INORGANICS BY SW-846 METHOD 6020B (ICP/MS) (Con't.)

K. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

- ☒ All target analytes, 1 LCS per 20 samples, (80-120% Recovery)

L. INTERNAL STANDARDS (IS) CRITERIA:

- ☒ IS intensities; 70-125% RI

M. SERIAL DILUTION CRITERIA:

- ☒ Similar matrix
- ☒ If concentration >10 times QL, %Difference must be within 20%

N. REPORTING:

- ☒ Detected analytes or results requiring validation are presented on the attached data validation report
- ☒ Results reported at or above permit QL (HWMU16)-NA
- ☒ Results reported at or above permit DL and QL (HWMU5)

LIMITATIONS:

TRC Engineers Inc. (TRC) prepared this document (which may include drawings, specifications, reports, studies and attachments) in accordance with the agreement between TRC and the client.

The standard of care for all professional engineering, environmental and surveying and related services performed or furnished by TRC under this Agreement are the care and skill ordinarily used by members of these professions practicing under similar circumstances at the same time and in the same locality. TRC makes no warranties, express or implied, under this Agreement in connection with TRC's services.

Conclusions presented are based upon a review of available information, the results of our field studies, and/or professional judgment. To the best of our knowledge, information provided by others is true and accurate, unless otherwise noted. TRC's liability, hereunder, shall be limited to amounts due TRC Engineers for services actually rendered, or reimbursable expenses actually incurred.

Any reuse or modification of any of the aforementioned documents (whether hard copies or electronic transmittals) prepared by TRC without written verification or adaptation by TRC will be at the sole risk of the individual or entity utilizing said documents and such use is without the authorization of TRC. TRC shall have no legal liability resulting from any and all claims, damages, losses, and expenses, including attorney's fees arising out of the unauthorized reuse or modification of these documents. Client shall indemnify TRC Engineers from any claims arising out of unauthorized use or modification of the documents whether hard copy or electronic.



This Report has been prepared by:

Kim Altizer _____ 8/25/2025 _____
Kim Altizer, Project Environmental Scientist III Date:
2200 South Main Street, Suite A, Blacksburg, Virginia 24060
540-552-0444, kaltizer@trccompanies.com, www.trccompanies.com

This Report has been subjected to technical and quality review by:

Kathy Olsen _____ 10/13/2025 _____
Kathy Olsen, Project Environmental Scientist III Date:
2200 South Main Street, Suite A, Blacksburg, Virginia 24060
540-552-0444, koslen@trccompanies.com, www.trccompanies.com

Comprehensive Data Validation Report

Sample/Blind Field Duplicate Results Greater Than the Quantitation Limit

Radford Army Ammunition Plant (RFAAP), Radford, Virginia

Facility: HWMU-5

Monitoring Event: Third Quarter 2025



Analyte	Sample ID	Laboratory Result (ug/L) Q	Validated Result (ug/L) Q	QL (ug/L)	Validation Notes
Method: 6020B					
Laboratory: ELLE, Lancaster, PA					
Cobalt	5WC21	14	14	5	No action taken.
	5WDUP	14	14	5	No action taken. Blind field duplicate of 5WC21. RPD <1.0
Method: 8260D					
Laboratory: ELLE, Lancaster, PA					
Trichloroethene	5WC21	1.3	1.3	1	No action taken.
	5WDUP	1.4	1.4	1	No action taken. Blind field duplicate of 5WC21. RPD 7.4

Definitions:

Data Validation Qualifiers:

QL Denotes permit quantitation limit. Q Denotes data qualifier.

J Denotes analyte reported at or above quantitation limit and associated result is estimated.



ANALYTICAL REPORT

PREPARED FOR

Attn: Janet Frazier
TRC, Engineers, Inc.
2200 South Main Street
Suite A
Blacksburg VA 24060

Generated 08/12/2025

JOB DESCRIPTION

3Q 2025 GWCorrective Action Monitoring Event-HWMU5

JOB NUMBER

410-234463-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
08/12/2025

Authorized for release by
Barbara Weyandt, Project Manager
Barbara.Weyandt@et.eurofinsus.com
Designee for
Barbara A Weyandt, Project Manager
Barbara.Weyandt@et.eurofinsus.com
717 556-7264

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Barb Weyandt

Table of Contents

Cover Page	1
Data Summaries	6
Definitions	6
Case Narrative	7
Detection Summary	8
Client Sample Results	9
Default Detection Limits	13
Surrogate Summary	14
QC Sample Results	15
QC Association	18
Chronicle	19
Certification Summary	21
Method Summary	22
Sample Summary	23
Manual Integration Summary	24
Reagent Traceability	31
COAs	43
Sample Container Check	120
Organic Sample Data	122
GC/MS VOA	122
Method 8260D Low Level	122
Method 8260D Low Level QC Summary	123
Method 8260D Low Level Sample Data	135
Standards Data	179
Method 8260D Low Level ICAL Data	179
Method 8260D Low Level CCAL Data	425
Raw QC Data	444
Method 8260D Low Level Tune Data	444
Method 8260D Low Level Blank Data	452
Method 8260D Low Level LCS/LCSD Data	459
Method 8260D Low Level MS/MSD Data	471
Method 8260D Low Level Run Logs	483
Method 8260D Low Level Prep Data	485
Inorganic Sample Data	490
Metals Data	490
Met Cover Page	491
Met Sample Data	492
Met QC Data	500
Met ICV/CCV	500
Met CRQL	502
Met Blanks	503

Table of Contents

Met ICSA/ICSAB	506
Met MS/MSD/PDS	510
Met Dup/Trip	512
Met LCS/LCSD	513
Met MDL	515
Met Linear Ranges	517
Met Preparation Log	518
Met Analysis Run Log	519
Met ICP/MS Tune	523
Met Internal Standards	524
Met Prep Data	528
Met Raw Data	529
Shipping and Receiving Documents	1239
Client Chain of Custody	1240
Sample Receipt Checklist	1242

Definitions/Glossary

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Qualifiers

Metals

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

Glossary

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

**Job Narrative
410-234463-1**

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 7/29/2025 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

Receipt Exceptions

The container count for the following sample did not match what was listed on the Chain-of-Custody (COC): 5W7B (410-234463-3), 5W7B (410-234463-3[DU]), 5W7B (410-234463-3[MS]) and 5W7B (410-234463-3[MSD]). The laboratory received 12 total containers, while the COC lists 10 total containers.

GC/MS VOA

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

Metals

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

Detection Summary

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Client Sample ID: 5W8B

Lab Sample ID: 410-234463-1

No Detections.

Client Sample ID: 5W5B

Lab Sample ID: 410-234463-2

No Detections.

Client Sample ID: 5W7B

Lab Sample ID: 410-234463-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	7.7		5.0	1.0	ug/L	1		6020B	Total Recoverable

Client Sample ID: 5WC21

Lab Sample ID: 410-234463-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.3		1.0	0.30	ug/L	1		8260D	Total/NA
Cobalt	14		5.0	1.0	ug/L	1		6020B	Total Recoverable

Client Sample ID: 5WDUP

Lab Sample ID: 410-234463-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.4		1.0	0.30	ug/L	1		8260D	Total/NA
Cobalt	14		5.0	1.0	ug/L	1		6020B	Total Recoverable

Client Sample ID: 5WC22

Lab Sample ID: 410-234463-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.5		1.0	0.30	ug/L	1		8260D	Total/NA
Cobalt	4.9	J	5.0	1.0	ug/L	1		6020B	Total Recoverable

Client Sample ID: 5WC23

Lab Sample ID: 410-234463-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.6		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: 5W12A

Lab Sample ID: 410-234463-8

No Detections.

Client Sample ID: Trip Blank 1

Lab Sample ID: 410-234463-9

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Client Sample ID: 5W8B

Lab Sample ID: 410-234463-1

Date Collected: 07/28/25 10:30

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 18:15	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 18:15	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 18:15	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 18:15	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		08/01/25 18:15	1
4-Bromofluorobenzene (Surr)	98		80 - 120		08/01/25 18:15	1
Dibromofluoromethane (Surr)	104		80 - 120		08/01/25 18:15	1
Toluene-d8 (Surr)	94		80 - 120		08/01/25 18:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:07	1

Client Sample ID: 5W5B

Lab Sample ID: 410-234463-2

Date Collected: 07/28/25 12:50

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 18:35	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 18:35	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 18:35	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 18:35	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		08/01/25 18:35	1
4-Bromofluorobenzene (Surr)	100		80 - 120		08/01/25 18:35	1
Dibromofluoromethane (Surr)	104		80 - 120		08/01/25 18:35	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 18:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:08	1

Client Sample ID: 5W7B

Lab Sample ID: 410-234463-3

Date Collected: 07/28/25 12:00

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 17:13	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 17:13	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 17:13	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 17:13	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 17:13	1

Client Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Client Sample ID: 5W7B

Lab Sample ID: 410-234463-3

Date Collected: 07/28/25 12:00

Matrix: Water

Date Received: 07/29/25 09:35

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		08/01/25 17:13	1
4-Bromofluorobenzene (Surr)	96		80 - 120		08/01/25 17:13	1
Dibromofluoromethane (Surr)	105		80 - 120		08/01/25 17:13	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 17:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.7		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 19:52	1

Client Sample ID: 5WC21

Lab Sample ID: 410-234463-4

Date Collected: 07/28/25 14:45

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 18:56	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 18:56	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 18:56	1
Trichloroethene	1.3		1.0	0.30	ug/L			08/01/25 18:56	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		08/01/25 18:56	1
4-Bromofluorobenzene (Surr)	97		80 - 120		08/01/25 18:56	1
Dibromofluoromethane (Surr)	103		80 - 120		08/01/25 18:56	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 18:56	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	14		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:10	1

Client Sample ID: 5WDUP

Lab Sample ID: 410-234463-5

Date Collected: 07/28/25 10:40

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 19:17	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 19:17	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 19:17	1
Trichloroethene	1.4		1.0	0.30	ug/L			08/01/25 19:17	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		08/01/25 19:17	1
4-Bromofluorobenzene (Surr)	97		80 - 120		08/01/25 19:17	1
Dibromofluoromethane (Surr)	104		80 - 120		08/01/25 19:17	1
Toluene-d8 (Surr)	94		80 - 120		08/01/25 19:17	1

Client Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Client Sample ID: 5WDUP

Lab Sample ID: 410-234463-5

Date Collected: 07/28/25 10:40

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	14		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:13	1

Client Sample ID: 5WC22

Lab Sample ID: 410-234463-6

Date Collected: 07/28/25 13:35

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 19:37	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 19:37	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 19:37	1
Trichloroethene	1.5		1.0	0.30	ug/L			08/01/25 19:37	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		08/01/25 19:37	1
4-Bromofluorobenzene (Surr)	98		80 - 120		08/01/25 19:37	1
Dibromofluoromethane (Surr)	104		80 - 120		08/01/25 19:37	1
Toluene-d8 (Surr)	94		80 - 120		08/01/25 19:37	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	4.9	J	5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:14	1

Client Sample ID: 5WC23

Lab Sample ID: 410-234463-7

Date Collected: 07/28/25 14:10

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 19:58	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 19:58	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 19:58	1
Trichloroethene	2.6		1.0	0.30	ug/L			08/01/25 19:58	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		08/01/25 19:58	1
4-Bromofluorobenzene (Surr)	97		80 - 120		08/01/25 19:58	1
Dibromofluoromethane (Surr)	103		80 - 120		08/01/25 19:58	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 19:58	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:16	1

Client Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Client Sample ID: 5W12A

Lab Sample ID: 410-234463-8

Date Collected: 07/28/25 11:20

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 20:18	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 20:18	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 20:18	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 20:18	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		08/01/25 20:18	1
4-Bromofluorobenzene (Surr)	98		80 - 120		08/01/25 20:18	1
Dibromofluoromethane (Surr)	105		80 - 120		08/01/25 20:18	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 20:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 20:11	1

Client Sample ID: Trip Blank 1

Lab Sample ID: 410-234463-9

Date Collected: 07/28/25 00:00

Matrix: Water

Date Received: 07/29/25 09:35

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 14:07	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 14:07	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 14:07	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 14:07	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		08/01/25 14:07	1
4-Bromofluorobenzene (Surr)	98		80 - 120		08/01/25 14:07	1
Dibromofluoromethane (Surr)	102		80 - 120		08/01/25 14:07	1
Toluene-d8 (Surr)	94		80 - 120		08/01/25 14:07	1

Default Detection Limits

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring Event-HWMU5

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

Analyte	RL	MDL
1,1-Dichloroethene	1.0 ug/L	0.20 ug/L
cis-1,2-Dichloroethene	1.0 ug/L	0.10 ug/L
trans-1,2-Dichloroethene	1.0 ug/L	0.80 ug/L
Trichloroethene	1.0 ug/L	0.30 ug/L
Vinyl chloride	1.0 ug/L	0.20 ug/L

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Prep: 3005A

Analyte	RL	MDL
Cobalt	5.0 ug/L	1.0 ug/L

Surrogate Summary

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-234463-1	5W8B	103	98	104	94
410-234463-2	5W5B	105	100	104	95
410-234463-3	5W7B	105	96	105	95
410-234463-3 MS	5W7B	108	99	105	97
410-234463-3 MSD	5W7B	107	99	105	96
410-234463-4	5WC21	102	97	103	95
410-234463-5	5WDUP	104	97	104	94
410-234463-6	5WC22	107	98	104	94
410-234463-7	5WC23	105	97	103	95
410-234463-8	5W12A	106	98	105	95
410-234463-9	Trip Blank 1	105	98	102	94
LCS 410-679324/4	Lab Control Sample	105	99	104	95
LCSD 410-679324/5	Lab Control Sample Dup	107	100	103	95
MB 410-679324/7	Method Blank	105	99	103	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

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

Lab Sample ID: MB 410-679324/7

Matrix: Water

Analysis Batch: 679324

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.20	ug/L			08/01/25 12:32	1
cis-1,2-Dichloroethene	ND		1.0	0.10	ug/L			08/01/25 12:32	1
trans-1,2-Dichloroethene	ND		1.0	0.80	ug/L			08/01/25 12:32	1
Trichloroethene	ND		1.0	0.30	ug/L			08/01/25 12:32	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/01/25 12:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		08/01/25 12:32	1
4-Bromofluorobenzene (Surr)	99		80 - 120		08/01/25 12:32	1
Dibromofluoromethane (Surr)	103		80 - 120		08/01/25 12:32	1
Toluene-d8 (Surr)	95		80 - 120		08/01/25 12:32	1

Lab Sample ID: LCS 410-679324/4

Matrix: Water

Analysis Batch: 679324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	5.00	5.26		ug/L		105	80 - 131
cis-1,2-Dichloroethene	5.00	5.10		ug/L		102	80 - 122
trans-1,2-Dichloroethene	5.00	5.16		ug/L		103	80 - 122
Trichloroethene	5.00	4.93		ug/L		99	80 - 120
Vinyl chloride	5.00	4.37		ug/L		87	60 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: LCSD 410-679324/5

Matrix: Water

Analysis Batch: 679324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	5.00	5.20		ug/L		104	80 - 131	1	30
cis-1,2-Dichloroethene	5.00	5.14		ug/L		103	80 - 122	1	30
trans-1,2-Dichloroethene	5.00	5.07		ug/L		101	80 - 122	2	30
Trichloroethene	5.00	4.89		ug/L		98	80 - 120	1	30
Vinyl chloride	5.00	4.25		ug/L		85	60 - 125	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	95		80 - 120

QC Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

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

Lab Sample ID: 410-234463-3 MS

Matrix: Water

Analysis Batch: 679324

Client Sample ID: 5W7B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		5.00	5.87		ug/L		117	80 - 131
cis-1,2-Dichloroethene	ND		5.00	5.41		ug/L		108	80 - 122
trans-1,2-Dichloroethene	ND		5.00	5.52		ug/L		110	80 - 122
Trichloroethene	ND		5.00	5.48		ug/L		110	80 - 120
Vinyl chloride	ND		5.00	4.51		ug/L		90	60 - 125
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
1,2-Dichloroethane-d4 (Surr)	108		80 - 120						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	105		80 - 120						
Toluene-d8 (Surr)	97		80 - 120						

Lab Sample ID: 410-234463-3 MSD

Matrix: Water

Analysis Batch: 679324

Client Sample ID: 5W7B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		5.00	5.62		ug/L		112	80 - 131	4	30
cis-1,2-Dichloroethene	ND		5.00	5.23		ug/L		105	80 - 122	3	30
trans-1,2-Dichloroethene	ND		5.00	5.28		ug/L		105	80 - 122	5	30
Trichloroethene	ND		5.00	5.29		ug/L		106	80 - 120	4	30
Vinyl chloride	ND		5.00	4.96		ug/L		99	60 - 125	10	30
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
1,2-Dichloroethane-d4 (Surr)	107		80 - 120								
4-Bromofluorobenzene (Surr)	99		80 - 120								
Dibromofluoromethane (Surr)	105		80 - 120								
Toluene-d8 (Surr)	96		80 - 120								

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-681215/1-A

Matrix: Water

Analysis Batch: 684021

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 681215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		5.0	1.0	ug/L		08/07/25 22:00	08/11/25 18:19	1

Lab Sample ID: LCS 410-681215/2-A

Matrix: Water

Analysis Batch: 684021

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 681215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	500	484		ug/L		97	85 - 112

QC Sample Results

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-234463-3 MS

Matrix: Water

Analysis Batch: 684021

Client Sample ID: 5W7B

Prep Type: Total Recoverable

Prep Batch: 681215

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	7.7		500	482		ug/L		95	80 - 125

Lab Sample ID: 410-234463-3 MSD

Matrix: Water

Analysis Batch: 684021

Client Sample ID: 5W7B

Prep Type: Total Recoverable

Prep Batch: 681215

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	7.7		500	481		ug/L		95	80 - 125	0	20

Lab Sample ID: 410-234463-3 DU

Matrix: Water

Analysis Batch: 684021

Client Sample ID: 5W7B

Prep Type: Total Recoverable

Prep Batch: 681215

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cobalt	7.7		7.84		ug/L		2	20

QC Association Summary

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

GC/MS VOA

Analysis Batch: 679324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-234463-1	5W8B	Total/NA	Water	8260D	
410-234463-2	5W5B	Total/NA	Water	8260D	
410-234463-3	5W7B	Total/NA	Water	8260D	
410-234463-4	5WC21	Total/NA	Water	8260D	
410-234463-5	5WDUP	Total/NA	Water	8260D	
410-234463-6	5WC22	Total/NA	Water	8260D	
410-234463-7	5WC23	Total/NA	Water	8260D	
410-234463-8	5W12A	Total/NA	Water	8260D	
410-234463-9	Trip Blank 1	Total/NA	Water	8260D	
MB 410-679324/7	Method Blank	Total/NA	Water	8260D	
LCS 410-679324/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-679324/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-234463-3 MS	5W7B	Total/NA	Water	8260D	
410-234463-3 MSD	5W7B	Total/NA	Water	8260D	

Metals

Prep Batch: 681215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-234463-1	5W8B	Total Recoverable	Water	3005A	
410-234463-2	5W5B	Total Recoverable	Water	3005A	
410-234463-3	5W7B	Total Recoverable	Water	3005A	
410-234463-4	5WC21	Total Recoverable	Water	3005A	
410-234463-5	5WDUP	Total Recoverable	Water	3005A	
410-234463-6	5WC22	Total Recoverable	Water	3005A	
410-234463-7	5WC23	Total Recoverable	Water	3005A	
410-234463-8	5W12A	Total Recoverable	Water	3005A	
MB 410-681215/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-681215/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
410-234463-3 MS	5W7B	Total Recoverable	Water	3005A	
410-234463-3 MSD	5W7B	Total Recoverable	Water	3005A	
410-234463-3 DU	5W7B	Total Recoverable	Water	3005A	

Analysis Batch: 684021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-234463-1	5W8B	Total Recoverable	Water	6020B	681215
410-234463-2	5W5B	Total Recoverable	Water	6020B	681215
410-234463-3	5W7B	Total Recoverable	Water	6020B	681215
410-234463-4	5WC21	Total Recoverable	Water	6020B	681215
410-234463-5	5WDUP	Total Recoverable	Water	6020B	681215
410-234463-6	5WC22	Total Recoverable	Water	6020B	681215
410-234463-7	5WC23	Total Recoverable	Water	6020B	681215
410-234463-8	5W12A	Total Recoverable	Water	6020B	681215
MB 410-681215/1-A	Method Blank	Total Recoverable	Water	6020B	681215
LCS 410-681215/2-A	Lab Control Sample	Total Recoverable	Water	6020B	681215
410-234463-3 MS	5W7B	Total Recoverable	Water	6020B	681215
410-234463-3 MSD	5W7B	Total Recoverable	Water	6020B	681215
410-234463-3 DU	5W7B	Total Recoverable	Water	6020B	681215

Lab Chronicle

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Client Sample ID: 5W8B

Date Collected: 07/28/25 10:30

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 18:15
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:07

Client Sample ID: 5W5B

Date Collected: 07/28/25 12:50

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 18:35
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:08

Client Sample ID: 5W7B

Date Collected: 07/28/25 12:00

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 17:13
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 19:52

Client Sample ID: 5WC21

Date Collected: 07/28/25 14:45

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 18:56
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:10

Client Sample ID: 5WDUP

Date Collected: 07/28/25 10:40

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 19:17
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:13

Lab Chronicle

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Client Sample ID: 5WC22

Date Collected: 07/28/25 13:35

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 19:37
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:14

Client Sample ID: 5WC23

Date Collected: 07/28/25 14:10

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 19:58
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:16

Client Sample ID: 5W12A

Date Collected: 07/28/25 11:20

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 20:18
Total Recoverable	Prep	3005A			681215	UAMX	ELLE	08/07/25 22:00
Total Recoverable	Analysis	6020B		1	684021	I9IN	ELLE	08/11/25 20:11

Client Sample ID: Trip Blank 1

Date Collected: 07/28/25 00:00

Date Received: 07/29/25 09:35

Lab Sample ID: 410-234463-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	679324	N7YK	ELLE	08/01/25 14:07

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: TRC, Engineers, Inc.

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Job ID: 410-234463-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460182	06-14-26

Method Summary

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

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

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
410-234463-1	5W8B	Water	07/28/25 10:30	07/29/25 09:35	Virginia
410-234463-2	5W5B	Water	07/28/25 12:50	07/29/25 09:35	Virginia
410-234463-3	5W7B	Water	07/28/25 12:00	07/29/25 09:35	Virginia
410-234463-4	5WC21	Water	07/28/25 14:45	07/29/25 09:35	Virginia
410-234463-5	5WDUP	Water	07/28/25 10:40	07/29/25 09:35	Virginia
410-234463-6	5WC22	Water	07/28/25 13:35	07/29/25 09:35	Virginia
410-234463-7	5WC23	Water	07/28/25 14:10	07/29/25 09:35	Virginia
410-234463-8	5W12A	Water	07/28/25 11:20	07/29/25 09:35	Virginia
410-234463-9	Trip Blank 1	Water	07/28/25 00:00	07/29/25 09:35	Virginia

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: IC 410-668589/13

Client Sample ID:

Date Analyzed: 07/09/25 04:17

Lab File ID: HL08X12.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.39	Incomplete Integration	JS6E	07/11/25 01:09
Trichlorofluoromethane	2.68	Incomplete Integration	JS6E	07/11/25 01:09
Acrolein	3.22	Incomplete Integration	JS6E	07/11/25 01:10
Freon 113	3.28	Incomplete Integration	JS6E	07/11/25 01:10
Ethyl bromide	3.45	Incomplete Integration	JS6E	07/11/25 01:10
Carbon disulfide	3.54	Incomplete Integration	JS6E	07/11/25 01:10
Bromodichloromethane	8.54	Incomplete Integration	JS6E	07/11/25 01:11
2-Nitropropane	8.81	Incomplete Integration	JS6E	07/11/25 01:12
cis-1,3-Dichloropropene	9.12	Incomplete Integration	JS6E	07/11/25 01:12
4-Methyl-2-pentanone	9.31	Incomplete Integration	JS6E	07/11/25 01:12
2-Butanone		Invalid Compound ID	JS6E	07/11/25 01:10
Ethyl methacrylate		Invalid Compound ID	JS6E	07/11/25 01:12
Methyl acetate		Invalid Compound ID	JS6E	07/11/25 01:11
trans-1,3-Dichloropropene		Invalid Compound ID	JS6E	07/11/25 01:12
2-Hexanone	10.27	Incomplete Integration	JS6E	07/11/25 01:13
1-Chlorohexane	10.96	Incomplete Integration	JS6E	07/11/25 01:13
Styrene	11.56	Incomplete Integration	JS6E	07/11/25 01:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: IC 410-668589/14

Client Sample ID:

Date Analyzed: 07/09/25 04:37

Lab File ID: HL08X13.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.39	Incomplete Integration	JS6E	07/11/25 01:14
Acrolein	3.18	Incomplete Integration	JS6E	07/11/25 01:14
Acetone	3.38	Incomplete Integration	JS6E	07/11/25 01:14
Carbon disulfide	3.53	Incomplete Integration	JS6E	07/11/25 01:14
Methyl acetate	3.76	Incomplete Integration	JS6E	07/11/25 01:15
Methacrylonitrile	6.09	Incomplete Integration	JS6E	07/11/25 01:15
Isobutyl alcohol	6.90	Incomplete Integration	JS6E	07/11/25 01:15
Trichloroethene	7.85	Incomplete Integration	JS6E	07/11/25 01:15
Dibromomethane	8.31	Incomplete Integration	JS6E	07/11/25 01:15
2-Nitropropane	8.81	Incomplete Integration	JS6E	07/11/25 01:15
1-Bromo-2-chloroethane	8.95	Incomplete Integration	JS6E	07/11/25 01:16
cis-1,3-Dichloropropene	9.12	Incomplete Integration	JS6E	07/11/25 01:16
4-Methyl-2-pentanone	9.30	Incomplete Integration	JS6E	07/11/25 01:16
trans-1,3-Dichloropropene	9.82	Incomplete Integration	JS6E	07/11/25 01:16
Ethyl methacrylate	9.90	Incomplete Integration	JS6E	07/11/25 01:16
2-Hexanone	10.26	Incomplete Integration	JS6E	07/11/25 01:16
Styrene	11.55	Incomplete Integration	JS6E	07/11/25 01:16
1,1,2,2-Tetrachloroethane	12.08	Incomplete Integration	JS6E	07/11/25 01:16
1,3,5-Trimethylbenzene	12.30	Incomplete Integration	JS6E	07/11/25 01:17
Benzyl chloride	12.96	Incomplete Integration	JS6E	07/11/25 01:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: IC 410-668589/15

Client Sample ID:

Date Analyzed: 07/09/25 04:58

Lab File ID: HL08X14.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.15	Incomplete Integration	JS6E	07/11/25 01:17
Methyl acetate	3.73	Incomplete Integration	JS6E	07/11/25 01:18
t-Butyl alcohol	3.97	Incomplete Integration	JS6E	07/11/25 01:18
2-Chloro-1,3-butadiene	5.01	Incomplete Integration	JS6E	07/11/25 01:18
2-Butanone	5.78	Incomplete Integration	JS6E	07/11/25 01:19
Propionitrile	6.01	Incomplete Integration	JS6E	07/11/25 01:19
Methacrylonitrile	6.03	Incomplete Integration	JS6E	07/11/25 01:19
Isobutyl alcohol	6.88	Incomplete Integration	JS6E	07/11/25 01:20
Trichloroethene	7.84	Incomplete Integration	JS6E	07/11/25 01:20
n-Butanol	7.95	Incomplete Integration	JS6E	07/11/25 01:20
Dibromomethane	8.29	Incomplete Integration	JS6E	07/11/25 01:20
Methyl methacrylate	8.30	Incomplete Integration	JS6E	07/11/25 01:20
2-Nitropropane	8.79	Incomplete Integration	JS6E	07/11/25 01:20
cis-1,3-Dichloropropene	9.11	Incomplete Integration	JS6E	07/11/25 01:21
trans-1,3-Dichloropropene	9.81	Incomplete Integration	JS6E	07/11/25 01:21
Ethyl methacrylate	9.88	Incomplete Integration	JS6E	07/11/25 01:21
1,1,2,2-Tetrachloroethane	12.08	Incomplete Integration	JS6E	07/11/25 01:21

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: IC 410-668589/16

Client Sample ID:

Date Analyzed: 07/09/25 05:18

Lab File ID: HL08X15.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.40	Incomplete Integration	JS6E	07/11/25 01:22
Methyl acetate	3.70	Incomplete Integration	JS6E	07/11/25 01:22
t-Butyl alcohol	3.98	Incomplete Integration	JS6E	07/11/25 01:23
Acrylonitrile	4.34	Incomplete Integration	JS6E	07/11/25 01:23
2-Butanone	5.76	Incomplete Integration	JS6E	07/11/25 01:24
Propionitrile	6.01	Incomplete Integration	JS6E	07/11/25 01:24
Isobutyl alcohol	6.86	Incomplete Integration	JS6E	07/11/25 01:25
n-Butanol	7.84	Incomplete Integration	JS6E	07/11/25 01:25
Dibromomethane	8.29	Incomplete Integration	JS6E	07/11/25 01:25
Methyl methacrylate	8.30	Incomplete Integration	JS6E	07/11/25 01:25
1-Bromo-2-chloroethane	8.94	Incomplete Integration	JS6E	07/11/25 01:25
1,1,2-Trichloroethane	10.00	Incomplete Integration	JS6E	07/11/25 01:26
1,2-Dibromoethane	10.51	Incomplete Integration	JS6E	07/11/25 01:26

Lab Sample ID: IC 410-668589/17

Client Sample ID:

Date Analyzed: 07/09/25 05:39

Lab File ID: HL08X16.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.40	Incomplete Integration	JS6E	07/11/25 01:27
Methyl acetate	3.70	Incomplete Integration	JS6E	07/11/25 01:27
Acrylonitrile	4.27	Incomplete Integration	JS6E	07/11/25 01:27
2-Butanone	5.73	Incomplete Integration	JS6E	07/11/25 01:28
Propionitrile	5.86	Incomplete Integration	JS6E	07/11/25 01:30
Isobutyl alcohol	6.85	Incomplete Integration	JS6E	07/11/25 01:29
n-Butanol	7.84	Incomplete Integration	JS6E	07/11/25 01:30
1,4-Dioxane	8.31	Incomplete Integration	JS6E	07/11/25 01:31
1-Bromo-2-chloroethane	8.94	Incomplete Integration	JS6E	07/11/25 01:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: IC 410-668589/18

Client Sample ID:

Date Analyzed: 07/09/25 06:00

Lab File ID: HL08X17.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.39	Incomplete Integration	JS6E	07/11/25 01:32
Methyl acetate	3.69	Incomplete Integration	JS6E	07/11/25 01:46
Acrylonitrile	4.24	Incomplete Integration	JS6E	07/11/25 01:32

Lab Sample ID: IC 410-668589/19

Client Sample ID:

Date Analyzed: 07/09/25 06:21

Lab File ID: HL08X18.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.28	Incomplete Integration	JS6E	07/11/25 01:34
Methyl acetate	3.66	Incomplete Integration	JS6E	07/11/25 01:34

Lab Sample ID: ICIS 410-668589/20

Client Sample ID:

Date Analyzed: 07/09/25 06:41

Lab File ID: HL08X19.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.39	Incomplete Integration	JS6E	07/11/25 01:03
Methyl acetate	3.66	Incomplete Integration	JS6E	07/11/25 01:04

Lab Sample ID: IC 410-668589/21

Client Sample ID:

Date Analyzed: 07/09/25 07:02

Lab File ID: HL08X20.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.42	Incomplete Integration	JS6E	07/11/25 01:35
Methyl acetate	3.65	Incomplete Integration	JS6E	07/11/25 01:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 668589

Lab Sample ID: ICV 410-668589/23

Client Sample ID:

Date Analyzed: 07/09/25 07:43

Lab File ID: HL08X22.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.40	Incomplete Integration	JS6E	07/11/25 02:10
Methyl acetate	3.67	Incomplete Integration	JS6E	07/11/25 02:10
Acrylonitrile	4.20	Incomplete Integration	JS6E	07/11/25 02:10
Propionitrile	5.80	Incomplete Integration	JS6E	07/11/25 02:11
2-Nitropropane	8.81	Incomplete Integration	JS6E	07/11/25 02:11

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Analysis Batch Number: 679324

Lab Sample ID: 410-234463-8

Client Sample ID: 5W12A

Date Analyzed: 08/01/25 20:18

Lab File ID: HG01X27.D

GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.86	Incomplete Integration	FQ4L	08/04/25 09:53

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MP_1:1HCl_00053	01/24/26	07/24/25	DI Water, Lot DI07242025	20000 mL	MT_HCL_VWR_00002	10000 mL	Hydrogen Chloride	185000 ug/mL
.MT_HCL_VWR_00002	11/19/27		VWR, Lot 4124090		(Purchased Reagent)		Hydrogen Chloride	37 %
MP_1:1HNO3_00088	01/29/26	07/29/25	DI Water, Lot DI07142025	20000 mL	MT_HNO3_FI_00021	10000 mL	Nitric acid	347500 ug/mL
.MT_HNO3_FI_00021	06/12/30		ThermoFisher Scientific, Lot 251192		(Purchased Reagent)		Nitric acid	69.5 %
MSV_LCS_VOC#1_00227	08/06/25	07/07/25	Methanol, Lot EH471	25 mL	MSV_M_MIX1SEC_00273	1 mL	1,1-Dichloroethene	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							Trichloroethene	40 ug/mL
.MSV_M_MIX1SEC_00273	12/31/27		Restek, Lot A0225025		(Purchased Reagent)		1,1-Dichloroethene	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							Trichloroethene	1000 ug/mL
MSV_LCS_VOC#1_00231	08/27/25	07/28/25	Methanol, Lot EH471	25 mL	MSV_M_MIX1SEC_00281	1 mL	1,1-Dichloroethene	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							Trichloroethene	40 ug/mL
.MSV_M_MIX1SEC_00281	12/31/27		Restek, Lot A0225025		(Purchased Reagent)		1,1-Dichloroethene	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							Trichloroethene	1000 ug/mL
MSV_LL_#1_826_00171	08/06/25	07/08/25	Methanol, Lot EJ274	1 mL	MSV_CCV_VOC#1_00243	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Acrylonitrile	125 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	2500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl acetate	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							n-Butanol	4375 ug/mL
							n-Heptane	50 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
							Tetrahydrofuran	250 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_CCV_VOC#3_00245	200 uL	Acrolein	2439.7 ug/mL
							2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
					MSV_V_VOA2_00297	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	4375 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
.MSV_CCV_VOC#1_00243	08/06/25	07/07/25	Methanol, Lot EH471	5 mL	MSV_MegaMIX#1_00240	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chlorobromomethane	1000 ug/mL
							Chlorodibromomethane	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Dichlorobromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Ethylene Dibromide	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00249	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-Chloro-1,3-butadiene	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Cyclohexane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Iodomethane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_MegaMIX#1_00240	08/06/25	Restek, Lot A0211483			(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chlorobromomethane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorodibromomethane	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Dichlorobromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Ethylene Dibromide	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
..MSV_MegaMix#2_00249	08/06/25	Restek, Lot A0226118			(Purchased Reagent)		Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00245	08/06/25	07/07/25	Methanol, Lot EH471	5 mL	MSV_CCV_ACR_00028	0.5 mL	Acrolein	12198.5 ug/mL
					MSV_V_Ketones_00175	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00028	08/18/25	06/19/25	Methanol, Lot EH471	10 mL	MSV_VACR_STK_00048	9.042 mL	Acrolein	121985 ug/mL
...MSV_VACR_STK_00048	08/18/25	06/19/25	Methanol, Lot EH471	10 mL	MSV_ACROLEIN_00041	1.4522 g	Acrolein	134909 ug/mL
...MSV_ACROLEIN_00041	08/31/25		Chem Service, Lot 15807600		(Purchased Reagent)		Acrolein	0.929 g/g
..MSV_V_Ketones_00175	01/31/26		Restek, Lot A0193494		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00297	08/06/25	07/07/25	Methanol, Lot EH471	5 mL	MSV_V#2B_00437	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00437	05/31/26		Restek, Lot A0211456		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_LL_#1_826_00172	08/18/25	07/28/25	Methanol, Lot EJ274	1 mL	MSV_CCV_VOC#1_00246	50 uL	1,1-Dichloroethene	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							Trichloroethene	50 ug/mL
.MSV_CCV_VOC#1_00246	08/27/25	07/28/25	Methanol, Lot EH471	5 mL	MSV_MegaMIX#1_00245	1 mL	1,1-Dichloroethene	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							Trichloroethene	1000 ug/mL
..MSV_MegaMIX#1_00245	08/27/25		Restek, Lot A0224890		(Purchased Reagent)		1,1-Dichloroethene	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							Trichloroethene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LL_#2_826_00185	07/23/25	07/08/25	Methanol, Lot EJ274	1 mL	CCV_ETBR_00009	50 uL	Ethyl bromide	49.9488 ug/mL
					MSV_BCE_00081	25 uL	1-Bromo-2-chloroethane	50 ug/mL
					MSV_CCV_EE_00009	50 uL	Ethyl ether	50.0166 ug/mL
					MSV_V_PentaCL_00053	10 uL	Pentachloroethane	50 ug/mL
.CCV_ETBR_00009	11/06/25	05/06/25	Methanol, Lot EH471	10 mL	MSV_VETBR_STK_00018	0.344 mL	Ethyl bromide	998.976 ug/mL
..MSV_VETBR_STK_00018	11/06/25	05/06/25	Methanol, Lot EH471	10 mL	MSV_EtBr_00012	0.2904 g	Ethyl bromide	29040 ug/mL
...MSV_EtBr_00012	10/31/27	Chem Service, Lot 15732400			(Purchased Reagent)		Ethyl bromide	1 g/g
.MSV_BCE_00081	07/30/25	Restek, Lot A0201612			(Purchased Reagent)		1-Bromo-2-chloroethane	2000 ug/mL
.MSV_CCV_EE_00009	11/03/25	05/03/25	Methanol, Lot EH471	50 mL	MSV_EE_MISCSK_00016	1.502 mL	Ethyl ether	1000.33 ug/mL
..MSV_EE_MISCSK_00016	11/03/25	05/03/25	Methanol, Lot EH471	10 mL	MSV_EE_Neat_00013	0.333 g	Ethyl ether	33300 ug/mL
...MSV_EE_Neat_00013	06/30/27	Chem Service, Lot 15507600			(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_PentaCL_00053	07/23/25	Restek, Lot A0197490			(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00279	07/14/25	07/07/25	Methanol, Lot EJ274	1 mL	MSV_CCV_GASES_01070	25 uL	1,2-Dichloro-1,1,2-trifluoroet hane	50 ug/mL
							Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroet hane	2000 ug/mL
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
Chloromethane	2000 ug/mL							
Dichlorodifluoromethane	2000 ug/mL							
Dichlorofluoromethane	2000 ug/mL							
Trichlorofluoromethane	2000 ug/mL							
Vinyl chloride	2000 ug/mL							
.MSV_CCV_GASES_01070	07/14/25	Restek, Lot A0212054			(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroet hane	2000 ug/mL
MSV_LL_GAS826_00282	08/04/25	07/28/25	Methanol, Lot EJ274	1 mL	MSV_CCV_GASES_01088	25 uL	Vinyl chloride	50 ug/mL
	.MSV_CCV_GASES_01088	08/04/25	Restek, Lot A0225685			(Purchased Reagent)		Vinyl chloride
MSV_LLcentISS_00016	09/12/25	03/12/25	Methanol, Lot EJ274	50 mL	MSV_8260_SS_01410	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00674	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
							1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
.MSV_8260_SS_01410	09/30/29	Restek, Lot A0216253			(Purchased Reagent)		4-Bromofluorobenzene (Surr)	2500 ug/mL
						Dibromofluoromethane (Surr)	2500 ug/mL	
						Toluene-d8 (Surr)	2500 ug/mL	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_Cus826_IS_00674	10/31/26		Restek, Lot A0203141		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00017	11/22/25	05/22/25	Methanol, Lot EJ274	50 mL	MSV_Cus826_IS_00739	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_Cus826_IS_00739	10/31/26		Restek, Lot A0203141		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00017	11/22/25	05/22/25	Methanol, Lot EJ274	50 mL	MSV_8260_SS_01455	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.MSV_8260_SS_01455	10/31/29		Restek, Lot A0217887		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_QC_Gas826_00268	07/14/25	07/07/25	Methanol, Lot EJ274	1 mL	MSV_QC_2K_GAS_00310	20 uL	Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00310	07/14/25		Restek, Lot A0211460		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00272	08/04/25	07/31/25	Methanol, Lot EJ274	1 mL	MSV_QC_2K_GAS_00312	20 uL	Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00312	08/04/25		Restek, Lot A0211460		(Purchased Reagent)		Vinyl chloride	2000 ug/mL
MSV_V_BFB_00019							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
.MSV_VBFB_STK_00014	11/22/25	05/22/25	Methanol, Lot EH471	10 mL	MSV_VBFB_STK_00014	0.246 mL	BFB	49.9183 ug/mL
.MSV_4BFB_NEAT_00013	06/30/29		Chem Service, Lot 16054300		MSV_4BFB_NEAT_00013	0.5073 g	BFB	50730 ug/mL
					(Purchased Reagent)		BFB	1 g/g
MT_LCS-SPK-A_00055	04/01/26		Inorganic Ventures, Lot V2-MEB751664		(Purchased Reagent)		Ag	12.5 mg/L
							Al	1250 mg/L
							As	125 mg/L
							B	125 mg/L
							Ba	125 mg/L
							Be	12.5 mg/L
							Ca	1250 mg/L
							Cd	12.5 mg/L
							Cobalt	125 mg/L
							Cr	125 mg/L
							Cu	125 mg/L
							Fe	1250 mg/L
							K	1250 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Li	125 mg/L
							Mg	1250 mg/L
							Mn	125 mg/L
							Na	1250 mg/L
							Ni	125 mg/L
							P	125 mg/L
							Pb	12.5 mg/L
							Se	25 mg/L
							Sr	12.5 mg/L
							Sulfur	1250 mg/L
							Th	125 mg/L
							Tl	25 mg/L
							U	12.5 mg/L
							V	125 mg/L
							Zn	125 mg/L
MT_LCS-SPK-B_00055	04/01/26		Inorganic Ventures, Lot V2-MEB751665		(Purchased Reagent)		Mo	12.5 mg/L
							Sb	25 mg/L
							Si	1250 mg/L
							Sn	25 mg/L
							Ti	125 mg/L
							W	125 mg/L
							Zr	125 mg/L
MT_MJ_CCV_00231	09/05/25	08/05/25	DI Water, Lot DI06242024	5 L	MT_S_MSSPK-A_00006	2.5 mL	Cobalt	250.1 ppb
.MT_S MSSPK-A_00006	07/07/26		Inorganic Ventures, Lot U2-MEB728823		(Purchased Reagent)		Cobalt	500.2 ug/mL
MT_MJ_CRI-V_00220	09/05/25	08/05/25	J, Lot 7996167	1 L	MT_S_MWLLC_SC_00009	1 mL	Cobalt	0.504 ug/L
.MT_S MWLLC_SC_00009	12/09/25		Inorganic Ventures, Lot V2-MEB748176		(Purchased Reagent)		Cobalt	0.504 ug/mL
MT_MJ_ICSA_00143	09/04/25	08/04/25	J, Lot 7345515	500 mL	MT_S_ICS2A_IV_00019	50 mL	Ag	0.0002 ug/mL
							Al	100 ug/mL
							As	0.0085 ug/mL
							Ba	0.00039 ug/mL
							Be	0.00002 ug/mL
							Ca	300 ug/mL
							Cd	0.00048 ug/mL
							Cobalt	0.00022 ug/mL
							Cr	0.0032 ug/mL
							Cu	0.00086 ug/mL
							Fe	250.1 ug/mL
							K	100 ug/mL
							Mg	100 ug/mL
							Mn	0.0005 ug/mL
							Mo	2.001 ug/mL
							Na	250.1 ug/mL
							Ni	0.0012 ug/mL
							Pb	0.00012 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MT_S_ICS2A_IV_00019	10/28/25		Inorganic Ventures, Lot U2-MEB731104				Sb	0.00014 ug/mL
							Se	0.00058 ug/mL
							Sn	0.00006 ug/mL
							Sr	0.0017 ug/mL
							Ti	2.001 ug/mL
							Tl	0.00001 ug/mL
							U	0.00012 ug/mL
							V	0.00046 ug/mL
							Zn	0.00045 ug/mL
							Ag	0.002 ug/mL
.MT_S_ICS2A_IV_00019	10/28/25		Inorganic Ventures, Lot U2-MEB731104		(Purchased Reagent)		Al	1000 ug/mL
							As	0.085 ug/mL
							Ba	0.0039 ug/mL
							Be	0.0002 ug/mL
							Ca	3000 ug/mL
							Cd	0.0048 ug/mL
							Cobalt	0.0022 ug/mL
							Cr	0.032 ug/mL
							Cu	0.0086 ug/mL
							Fe	2501 ug/mL
							K	1000 ug/mL
							Mg	1000 ug/mL
							Mn	0.005 ug/mL
							Mo	20.01 ug/mL
							Na	2501 ug/mL
							Ni	0.012 ug/mL
							Pb	0.0012 ug/mL
							Sb	0.0014 ug/mL
							Se	0.0058 ug/mL
							Sn	0.0006 ug/mL
							Sr	0.017 ug/mL
MT_MJ_IC SAB_00125	08/11/25	07/11/25	J, Lot 7345515	500 mL	MT_S_ICS2A_IV_00024	50 mL	Ti	20.01 ug/mL
							Tl	0.0001 ug/mL
							U	0.0012 ug/mL
							V	0.0046 ug/mL
							Zn	0.0045 ug/mL
							Al	100 ug/mL
							Ca	300 ug/mL
							Fe	250 ug/mL
							K	100 ug/mL
							Mg	100 ug/mL
MT_MJ_IC SAB_00125	08/11/25	07/11/25	J, Lot 7345515	500 mL	MT_S_ICS2A_IV_00024	50 mL	Mo	2 ug/mL
							Na	250 ug/mL
							Sr	0.0028 ug/mL
							Ti	2 ug/mL
							Ag	0.05002 ug/mL
MT_MJ_IC SAB_00125	08/11/25	07/11/25	J, Lot 7345515	500 mL	MT_S_ICS2B_IV_00007	5 mL	Ag	0.05002 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							As	0.1 ug/mL
							Cd	0.1 ug/mL
							Cobalt	0.2001 ug/mL
							Cr	0.2001 ug/mL
							Cu	0.2001 ug/mL
							Mn	0.2001 ug/mL
							Ni	0.2001 ug/mL
							Se	0.1 ug/mL
							V	0.2001 ug/mL
							Zn	0.1 ug/mL
.MT_S_ICS2A_IV_00024	02/05/29	Inorganic Ventures, Lot U2-MEB741286			(Purchased Reagent)		Al	1000 ug/mL
							Ca	3000 ug/mL
							Fe	2500 ug/mL
							K	1000 ug/mL
							Mg	1000 ug/mL
							Mo	20 ug/mL
							Na	2500 ug/mL
							Sr	0.028 ug/mL
							Ti	20 ug/mL
.MT_S_ICS2B_IV_00007	10/11/25	Inorganic Ventures, Lot S2-MEB711470			(Purchased Reagent)		Ag	5.002 ug/mL
							As	10 ug/mL
							Cd	10 ug/mL
							Cobalt	20.01 ug/mL
							Cr	20.01 ug/mL
							Cu	20.01 ug/mL
							Mn	20.01 ug/mL
							Ni	20.01 ug/mL
							Se	10 ug/mL
							V	20.01 ug/mL
							Zn	10 ug/mL
MT_MJ_ICV_00142	09/01/25	08/01/25	J, Lot 7726600	1 L	MT_S_ICVSPK-A_00007	1 mL	Cobalt	250 ppb
.MT_S_ICVSPK-A_00007	10/25/25	High-Purity Standards, Lot U2-MEB728821			(Purchased Reagent)		Cobalt	250 ug/mL
MT_MJ_LRC_00129	08/15/25	07/30/25	J, Lot 7726600	0.5 L	MT_I_CCVSPK-A_00007	10 mL	Cobalt	2000 ppb
.MT_I_CCVSPK-A_00007	08/15/25	Inorganic Ventures, Lot V2-MEB742653			(Purchased Reagent)		Cobalt	100 mg/L
MT_MJ_S1_00164	09/08/25	08/08/25	J, Lot 6433706	500 mL/100g	MT_S_MSSPK-A_00006	0.5 mL	Cobalt	0.05002 ppb
.MT_S_MSSPK-A_00006	07/07/26	Inorganic Ventures, Lot U2-MEB728823			(Purchased Reagent)		Cobalt	500.2 ug/mL

Reagent

MSV_8260_SS_01410



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30240 **Lot No.:** A0216253

Description : 8260A Surrogate Mix
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2029 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dibromofluoromethane	1868-53-7	022013	99%	2,509.0 µg/mL	+/- 140.9447
2	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	2,506.3 µg/mL	+/- 140.7903
3	Toluene-d8	2037-26-5	PR-34141	99%	2,514.3 µg/mL	+/- 141.2397
4	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	2,510.5 µg/mL	+/- 141.0290

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

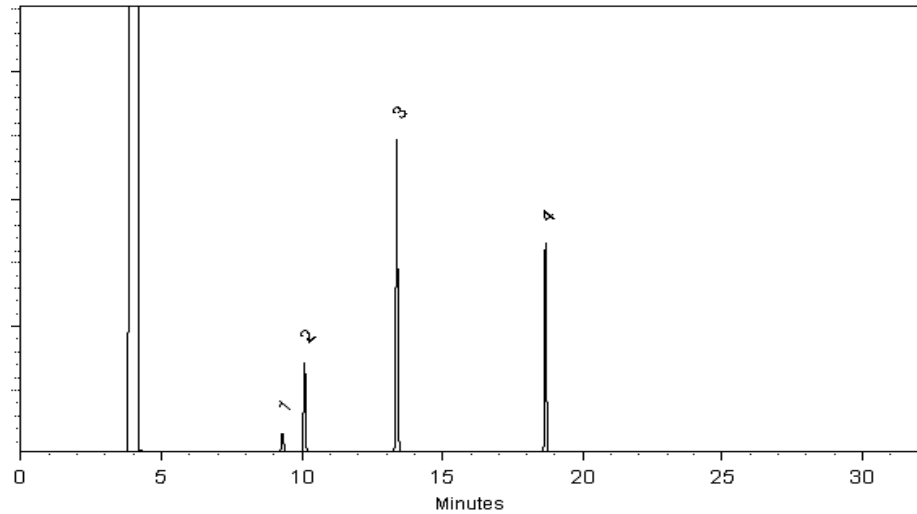
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Scott McNeil - Operations Tech I

Date Mixed: 09-Sep-2024

Balance Serial # 1127510105


Brittany Federinko - Operations Tech I

Date Passed: 12-Sep-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_8260_SS_01455



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30240 **Lot No.:** A0217887
Description : 8260A Surrogate Mix
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2029 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dibromofluoromethane	1868-53-7	022013	99%	2,515.3 µg/mL	+/- 141.2958
2	1,2-Dichloroethane-d4	17060-07-0	PR-33313	99%	2,504.3 µg/mL	+/- 140.6779
3	Toluene-d8	2037-26-5	PR-34141	99%	2,513.8 µg/mL	+/- 141.2116
4	1-Bromo-4-fluorobenzene (BFB)	460-00-4	0000268853	99%	2,517.3 µg/mL	+/- 141.4082

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

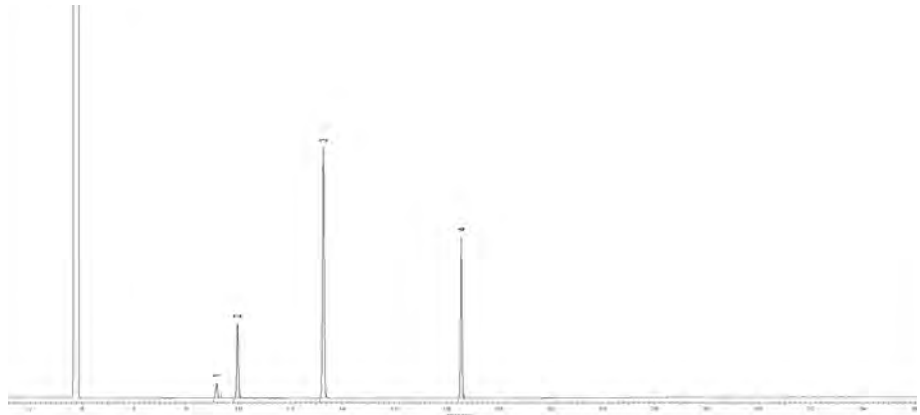
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

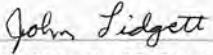


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Richard Zimmerman - Operations Tech I

Date Mixed: 15-Oct-2024

Balance Serial # B251644995


John Lidgett - AD Chemist

Date Passed: 23-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_BCE_00081



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30469 **Lot No.:** A0201612
Description : 1-Bromo-2-chloroethane Standard
1-Bromo-2-Chloroethane Std, 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2028 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-2-chloroethane	107-04-0	BCCC1146	99%	2,004.0 µg/mL	+/- 112.6024

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

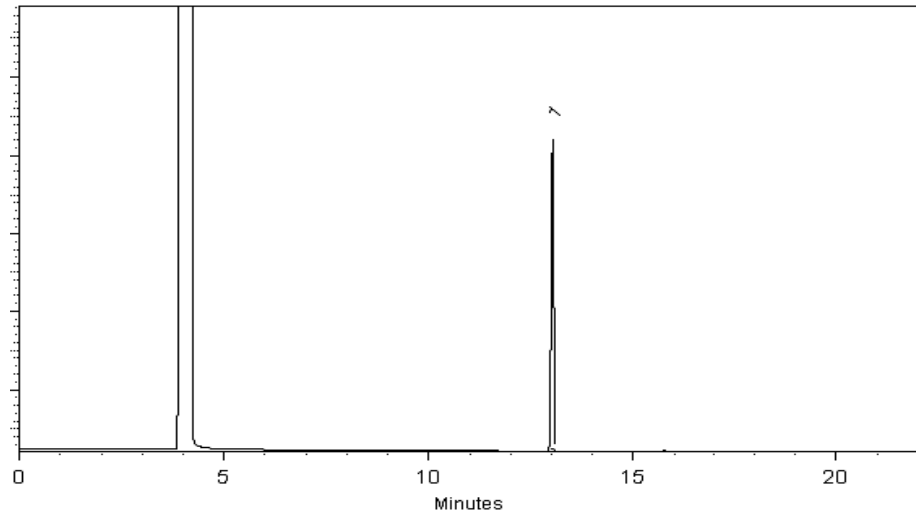
FID

Split Vent:

40 ml/min

Inj. Vol

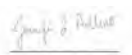
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 31-Aug-2023 Balance Serial # 1128342314


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-Sep-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Cus826_IS_00674



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558267 **Lot No.:** A0203141

Description : Custom 8260A IS Mix
Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Methyl-2-propanol-d10	53001-22-2	PR-29961	99%	12,504.0 µg/mL	+/- 155.5359
2	Fluorobenzene	462-06-6	BCBZ5549	99%	2,503.5 µg/mL	+/- 31.1565
3	Chlorobenzene-d5	3114-55-4	PR-29571	99%	2,502.0 µg/mL	+/- 31.1378
4	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,504.5 µg/mL	+/- 31.1689

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

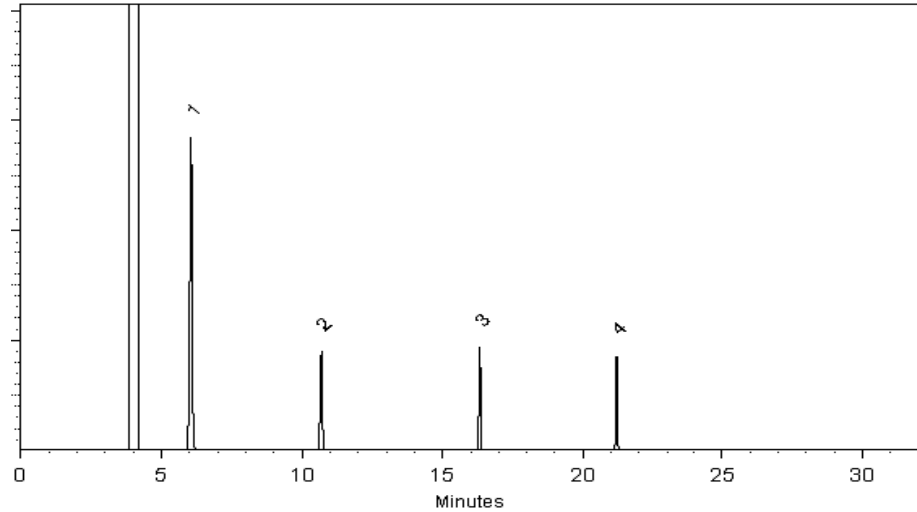
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

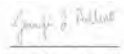


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 13-Oct-2023

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 18-Oct-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_Cus826_IS_00739



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 558267 **Lot No.:** A0203141

Description : Custom 8260A IS Mix
Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Methyl-2-propanol-d10	53001-22-2	PR-29961	99%	12,504.0 µg/mL	+/- 155.5359
2	Fluorobenzene	462-06-6	BCBZ5549	99%	2,503.5 µg/mL	+/- 31.1565
3	Chlorobenzene-d5	3114-55-4	PR-29571	99%	2,502.0 µg/mL	+/- 31.1378
4	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,504.5 µg/mL	+/- 31.1689

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

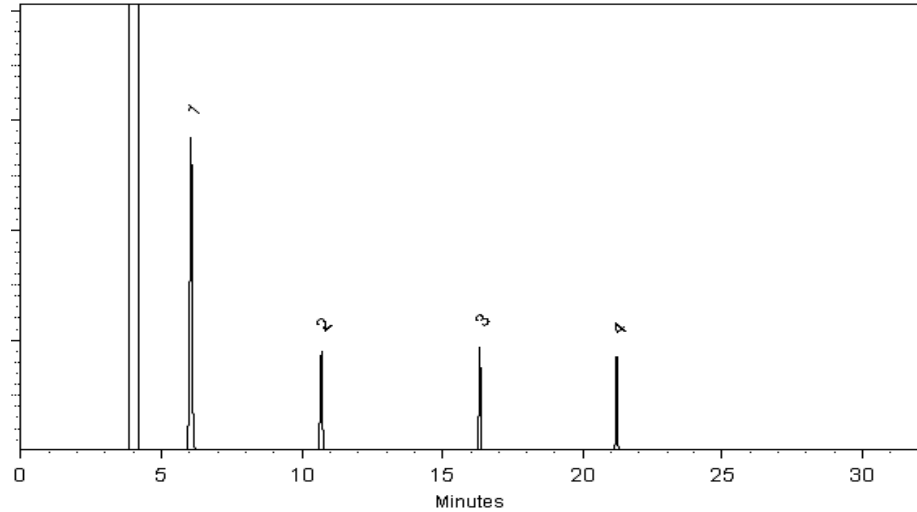
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

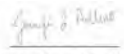


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 13-Oct-2023

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 18-Oct-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_QC_2K_GAS_00310



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577488.SEC **Lot No.:** A0211460

Description : Custom Gases.SEC Standard
Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8.SEC	28888	99%	2,002.3 µg/mL	+/- 116.3467
2	Chloromethane (methyl chloride)	74-87-3.SEC	00022694	99%	2,014.2 µg/mL	+/- 117.1824
3	Vinyl chloride	75-01-4 *	00015559	99%	2,009.3 µg/mL	+/- 117.9630
4	1,3-Butadiene	106-99-0.SEC	28539	99%	2,030.2 µg/mL	+/- 117.6986
5	Bromomethane (methyl bromide)	74-83-9 *	00017022	99%	2,017.1 µg/mL	+/- 136.9230
6	Chloroethane (ethyl chloride)	75-00-3.SEC	00021903	99%	2,005.3 µg/mL	+/- 122.7081
7	Dichlorofluoromethane (CFC-21)	75-43-4 *	14485600	90%	2,016.0 µg/mL	+/- 113.2616
8	Trichlorofluoromethane (CFC-11)	75-69-4.SEC	00010739	99%	2,020.0 µg/mL	+/- 113.4863
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	354-23-4 *	877500	99%	2,005.1 µg/mL	+/- 115.4133

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

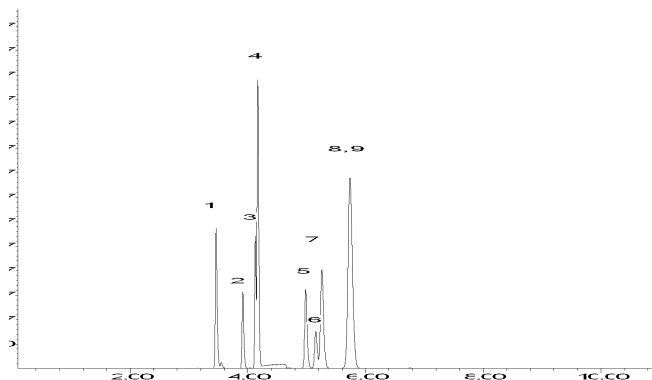
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl

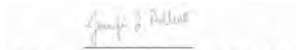


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Matt Fragassi - Mix Technician

Date Mixed: 15-May-2024

Balance Serial # 1127510105


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 22-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_QC_2K_GAS_00312



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577488.SEC **Lot No.:** A0211460

Description : Custom Gases.SEC Standard
Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8.SEC	28888	99%	2,002.3 µg/mL	+/- 116.3467
2	Chloromethane (methyl chloride)	74-87-3.SEC	00022694	99%	2,014.2 µg/mL	+/- 117.1824
3	Vinyl chloride	75-01-4 *	00015559	99%	2,009.3 µg/mL	+/- 117.9630
4	1,3-Butadiene	106-99-0.SEC	28539	99%	2,030.2 µg/mL	+/- 117.6986
5	Bromomethane (methyl bromide)	74-83-9 *	00017022	99%	2,017.1 µg/mL	+/- 136.9230
6	Chloroethane (ethyl chloride)	75-00-3.SEC	00021903	99%	2,005.3 µg/mL	+/- 122.7081
7	Dichlorofluoromethane (CFC-21)	75-43-4 *	14485600	90%	2,016.0 µg/mL	+/- 113.2616
8	Trichlorofluoromethane (CFC-11)	75-69-4.SEC	00010739	99%	2,020.0 µg/mL	+/- 113.4863
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	354-23-4 *	877500	99%	2,005.1 µg/mL	+/- 115.4133

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

* Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

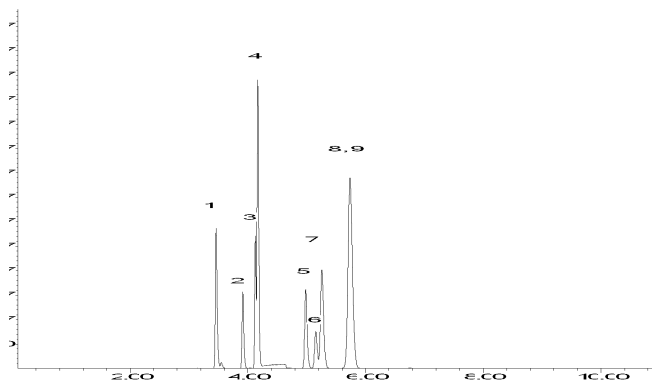
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl

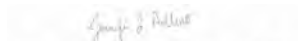


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Matt Fragassi - Mix Technician

Date Mixed: 15-May-2024

Balance Serial # 1127510105


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 22-May-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Ketones_00175



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0193494

Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	12,581.8 µg/mL	+/- 434.7671
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	12,578.5 µg/mL	+/- 434.6548
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	12,602.3 µg/mL	+/- 435.4755
4	2-Hexanone	591-78-6	MKCQ6663	99%	12,587.5 µg/mL	+/- 434.9658

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

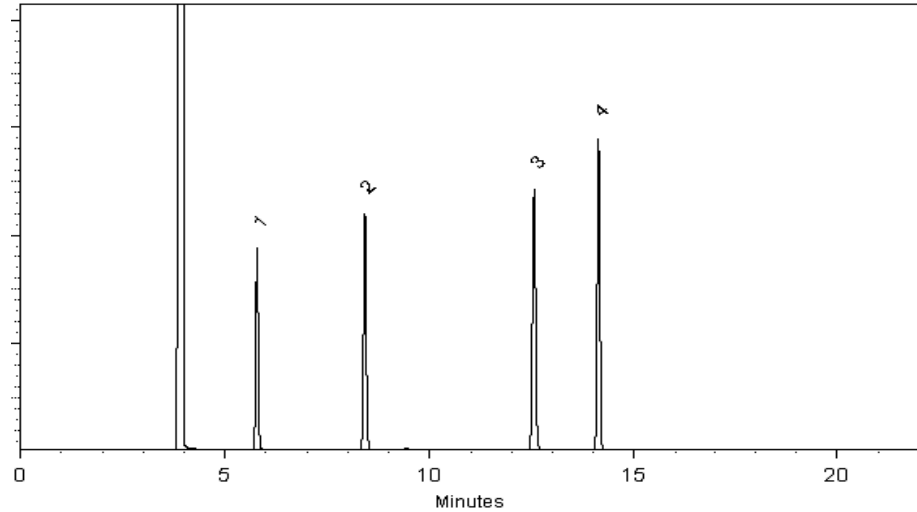
FID

Split Vent:

40 ml/min

Inj. Vol

0.2µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bethany Lowery
Bethany Lowery - Operations Tech I

Date Mixed: 12-Jan-2023

Balance Serial # B251644995

Christie Mills
Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_PentaCL_00053



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 577491 **Lot No.:** A0197490

Description : Custom Pentachloroethane Standard

Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachloroethane	76-01-7	13550700	97%	5,011.0 µg/mL	+/- 281.5258

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:

250°C

Det. Temp:

340°C

Det. Type:

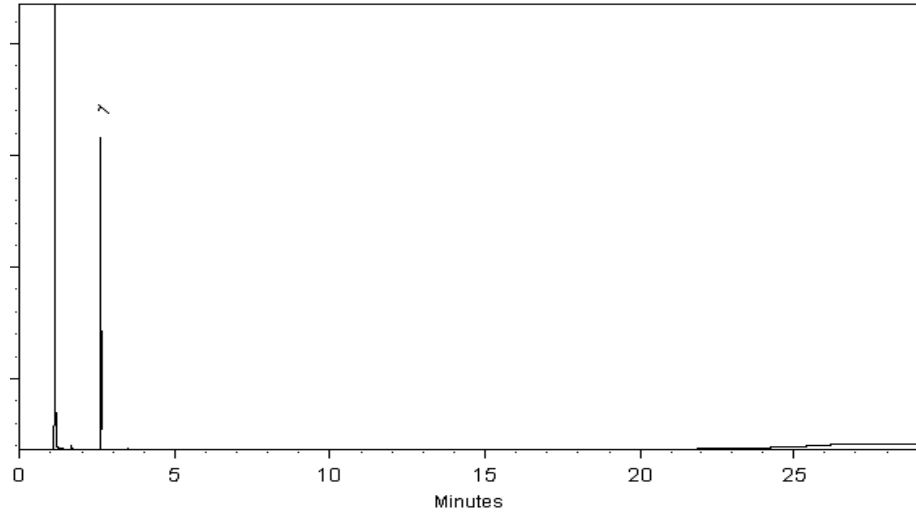
FID

Split Vent:

100 mL/min.

Inj. Vol

1µL



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Nick Yaw
Nick Yaw - Operations Tech I

Date Mixed: 26-Apr-2023

Balance Serial # B251644995

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 02-May-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MT_HCL_VWR_00002

Material Number: 87003-251 | 87003-253
Material Description: Hydrochloric Acid
Grade: BDH Aristar® Plus
Lot Number: 4124090
Date of Manufacture: 2024-Nov-19
Use By: 2027-Nov-19
CAS Number: 7647-01-0
Molecular Weight: 36.46 g/mol
Molecular Formula: HCl

Analyte	Maximum Specification	Actual Value
Assay (HCl)	34 - 37 % w/w	35% w/w
Color	10 APHA	< 7 APHA
Aluminum (Al)	1 ppb	< 0.2 ppb
Antimony (Sb)	0.5 ppb	< 0.1 ppb
Arsenic (As)	0.5 ppb	< 0.1 ppb
Barium (Ba)	0.1 ppb	< 0.1 ppb
Beryllium (Be)	0.1 ppb	< 0.1 ppb
Bismuth (Bi)	0.1 ppb	< 0.1 ppb
Boron (B)	1 ppb	< 0.1 ppb
Cadmium (Cd)	0.1 ppb	< 0.1 ppb
Calcium (Ca)	1 ppb	< 0.1 ppb
Cerium (Ce)	0.1 ppb	< 0.1 ppb
Cesium (Cs)	0.1 ppb	< 0.1 ppb
Chromium (Cr)	0.5 ppb	< 0.1 ppb
Cobalt (Co)	0.1 ppb	< 0.1 ppb
Copper (Cu)	0.5 ppb	< 0.1 ppb
Dysprosium (Dy)	0.1 ppb	< 0.1 ppb
Erbium (Er)	0.1 ppb	< 0.1 ppb
Europium (Eu)	0.1 ppb	< 0.1 ppb
Gadolinium (Gd)	0.1 ppb	< 0.1 ppb
Gallium (Ga)	0.1 ppb	< 0.1 ppb
Gold (Au)	0.5 ppb	< 0.1 ppb
Hafnium (Hf)	0.1 ppb	< 0.1 ppb
Holmium (Ho)	0.1 ppb	< 0.1 ppb
Indium (In)	0.1 ppb	< 0.1 ppb
Iron (Fe)	1 ppb	< 0.5 ppb
Lanthanum (La)	0.1 ppb	< 0.1 ppb
Lead (Pb)	0.1 ppb	< 0.1 ppb
Lithium (Li)	0.1 ppb	< 0.1 ppb
Lutetium (Lu)	0.1 ppb	< 0.1 ppb
Magnesium (Mg)	0.5 ppb	< 0.1 ppb
Manganese (Mn)	0.1 ppb	< 0.1 ppb
Mercury (Hg)	0.1 ppb	< 0.02 ppb
Molybdenum (Mo)	0.1 ppb	< 0.1 ppb
Neodymium (Nd)	0.1 ppb	< 0.1 ppb
Nickel (Ni)	0.5 ppb	< 0.2 ppb

Material Number: 87003-251 | 87003-253
Material Description: Hydrochloric Acid
Grade: BDH Aristar® Plus
Lot Number: 4124090
Date of Manufacture: 2024-Nov-19
Use By: 2027-Nov-19
CAS Number: 7647-01-0
Molecular Weight: 36.46 g/mol
Molecular Formula: HCl

Analyte	Maximum Specification	Actual Value
Niobium (Nb)	0.1 ppb	< 0.1 ppb
Palladium (Pd)	Information Only	< 0.5 ppb
Platinum (Pt)	Information Only	< 0.5 ppb
Potassium (K)	1 ppb	< 0.1 ppb
Praseodymium (Pr)	0.1 ppb	< 0.1 ppb
Rhenium (Re)	0.1 ppb	< 0.1 ppb
Rhodium (Rh)	0.1 ppb	< 0.1 ppb
Rubidium (Rb)	0.1 ppb	< 0.1 ppb
Ruthenium (Ru)	0.1 ppb	< 0.1 ppb
Samarium (Sm)	0.1 ppb	< 0.1 ppb
Scandium (Sc)	0.1 ppb	< 0.1 ppb
Selenium (Se)	1 ppb	< 0.1 ppb
Silver (Ag)	1 ppb	< 0.1 ppb
Sodium (Na)	1 ppb	< 0.1 ppb
Strontium (Sr)	0.1 ppb	< 0.1 ppb
Tantalum (Ta)	Information Only	< 1 ppb
Tellurium (Te)	0.1 ppb	< 0.1 ppb
Terbium (Tb)	0.1 ppb	< 0.1 ppb
Thallium (Tl)	0.1 ppb	< 0.1 ppb
Thorium (Th)	0.1 ppb	< 0.1 ppb
Thulium (Tm)	0.1 ppb	< 0.1 ppb
Tin (Sn)	0.5 ppb	< 0.1 ppb
Titanium (Ti)	0.5 ppb	< 0.1 ppb
Tungsten (W)	0.1 ppb	< 0.1 ppb
Uranium (U)	0.1 ppb	< 0.1 ppb
Vanadium (V)	0.5 ppb	< 0.1 ppb
Ytterbium (Yb)	0.1 ppb	< 0.1 ppb
Yttrium (Y)	0.1 ppb	< 0.1 ppb
Zinc (Zn)	1 ppb	< 0.1 ppb
Zirconium (Zr)	0.1 ppb	< 0.1 ppb
Bromide (Br ⁻)	10 ppm	< 10 ppm
Free Chlorine (Cl ₂)	0.5 ppm	< 0.5 ppm
Total Phosphorus (P)	0.01 ppm	< 0.01 ppm
Total Sulfur (S)	0.3 ppm	< 0.3 ppm


 Greg Henson
 QA & RA Manager

Reagent

MT_I_CCVSPK-A_00007

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	35-TSPEURF-CCV-A	
Lot Number:	V2-MEB742653	
Matrix:	5% (v/v) HNO ₃	
Value / Analyte(s):	5 000 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	Sulfur,	
	100 µg/mL ea:	
	Selenium,	Strontium,
	Thorium,	Thallium,
	Vanadium,	Zinc,
	Silver,	Nickel,
	Phosphorus,	Lead,
	Manganese,	Lithium,
	Cadmium,	Cobalt,
	Chromium,	Copper,
	Arsenic,	Boron,
	Barium,	Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 18 µg/mL	Arsenic, As	100.0 ± 0.8 µg/mL
Barium, Ba	100.0 ± 0.4 µg/mL	Beryllium, Be	100.0 ± 0.6 µg/mL
Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	100.0 ± 0.4 µg/mL
Calcium, Ca	5 000 ± 16 µg/mL	Chromium, Cr	100.0 ± 0.6 µg/mL
Cobalt, Co	100.0 ± 0.6 µg/mL	Copper, Cu	100.0 ± 0.5 µg/mL
Iron, Fe	5 000 ± 22 µg/mL	Lead, Pb	100.0 ± 0.5 µg/mL
Lithium, Li	100.0 ± 0.4 µg/mL	Magnesium, Mg	5 000 ± 22 µg/mL
Manganese, Mn	100.0 ± 0.5 µg/mL	Nickel, Ni	100.0 ± 0.6 µg/mL
Phosphorus, P	100.0 ± 0.5 µg/mL	Potassium, K	5 000 ± 22 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Silver, Ag	100.0 ± 0.4 µg/mL
Sodium, Na	5 000 ± 22 µg/mL	Strontium, Sr	100.0 ± 0.5 µg/mL
Sulfur, S	5 000 ± 23 µg/mL	Thallium, Tl	100.0 ± 0.5 µg/mL
Thorium, Th	100.0 ± 0.5 µg/mL	Vanadium, V	100.0 ± 0.5 µg/mL
Zinc, Zn	100.0 ± 0.5 µg/mL		

Density: 1.124 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
S	Acidimetric	84L	84L
S	ICP Assay	Traceable to 3154	T2-S727797
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Th	EDTA	928	928
Tl	ICP Assay	3158	151215
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale), <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 01, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 01, 2029

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Reagent

MT_S_ICS2A_IV_00019

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020ICS-9A
Lot Number: U2-MEB731104
Matrix: 2% (v/v) HNO₃
Value / Analyte(s):
21 215 µg/mL ea:
Chloride,
3 000 µg/mL ea:
Calcium,
2 500 µg/mL ea:
Iron, Sodium,
2 000 µg/mL ea:
Carbon,
1 000 µg/mL ea:
Aluminum, Phosphorus,
Sulfur, Potassium,
Magnesium,
20 µg/mL ea:
Molybdenum, Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 3 µg/mL	Calcium, Ca	3 001 ± 13 µg/mL
Carbon, C	2 001 ± 4 µg/mL	Chloride, Cl	21 230.0 ± 100.0 µg/mL
Iron, Fe	2 501 ± 11 µg/mL	Magnesium, Mg	1 000 ± 4 µg/mL
Molybdenum, Mo	20.01 ± 0.11 µg/mL	Phosphorus, P	1 000 ± 4 µg/mL
Potassium, K	1 000 ± 4 µg/mL	Sodium, Na	2 501 ± 11 µg/mL
Sulfur, S	1 001 ± 4 µg/mL	Titanium, Ti	20.01 ± 0.15 µg/mL

Density: 1.052 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Er	<	0.000100	M	Mn		0.005000	s	S	<		O	V	<	0.004600
s	Al	<		M	Eu	<	0.000100	s	Mo	<		M	Sb		0.001400	M	W		0.002300
O	As	<	0.085000	s	Fe	<		s	Na	<		M	Sc	<	0.000700	M	Y	<	0.000400
M	Au	<	0.002200	M	Ga		0.015000	M	Nb	<	0.000100	M	Se	<	0.005800	M	Yb	<	0.000100
M	B	<	0.003300	M	Gd	<	0.000100	M	Nd	<	0.000200	O	Si		0.044000	M	Zn		0.004500
M	Ba		0.003900	M	Ge	<	0.002400	M	Ni		0.012000	M	Sm	<	0.000100	M	Zr		0.001600
M	Be	<	0.000200	M	Hf	<	0.000100	M	Os	<	0.003900	M	Sn	<	0.000600				
M	Bi	<	0.001800	M	Hg	<	0.000200	s	P	<		M	Sr		0.017000				
s	Ca	<		M	Ho	<	0.000100	M	Pb	<	0.001200	M	Ta	<	0.000400				
O	Cd		0.004800	M	In	<	0.000100	M	Pd	<	0.000200	M	Tb	<	0.000100				
M	Ce	<	0.000600	M	Ir	<	0.000100	M	Pr	<	0.000100	M	Te	<	0.000600				
M	Co		0.002200	s	K	<		M	Pt	<	0.000100	M	Th	<	0.000100				
M	Cr		0.032000	M	La	<	0.000800	M	Rb		0.026000	s	Ti	<					
M	Cs		0.001900	O	Li		0.001400	M	Re	<	0.001000	M	Tl	<	0.000100				
M	Cu	<	0.008600	M	Lu	<	0.000100	M	Rh	<	0.000100	M	Tm	<	0.000100				
M	Dy	<	0.000100	s	Mg	<		M	Ru	<	0.000100	M	U	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 20, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 20, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Reagent

MT_S_ICS2B_IV_00007

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020ICS-9B
Lot Number: S2-MEB711470
Matrix: 3% (v/v) HNO₃
Value / Analyte(s):
20 µg/mL ea:
Cobalt, Chromium,
Copper, Manganese,
Nickel, Vanadium,
10 µg/mL ea:
Zinc, Arsenic,
Cadmium, Selenium,
5 µg/mL ea:
Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	10.00 ± 0.06 µg/mL	Cadmium, Cd	10.00 ± 0.04 µg/mL
Chromium, Cr	20.01 ± 0.10 µg/mL	Cobalt, Co	20.01 ± 0.09 µg/mL
Copper, Cu	20.01 ± 0.09 µg/mL	Manganese, Mn	20.01 ± 0.09 µg/mL
Nickel, Ni	20.01 ± 0.09 µg/mL	Selenium, Se	10.00 ± 0.07 µg/mL
Silver, Ag	5.002 ± 0.034 µg/mL	Vanadium, V	20.01 ± 0.09 µg/mL
Zinc, Zn	10.00 ± 0.04 µg/mL		

Density: 1.015 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i})^2 / (\sum (1/(u_{\text{char } i})^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i})^2]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 02, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Reagent

MT_S_ICVSPK-A_00007

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution		
Catalog Number:	IV-69496		
Lot Number:	U2-MEB728821		
Matrix:	5% (v/v) HNO ₃		
Value / Analyte(s):	2 500 µg/mL ea:	Calcium,	
	Aluminum,	Potassium,	
	Iron,	Sodium,	
	Magnesium,		
	250 µg/mL ea:	Manganese,	
	Nickel,	Chromium,	
	Cobalt,	Arsenic,	
	Copper,	Vanadium,	
	Barium,		
	Zinc,		
	25 µg/mL ea:	Beryllium,	
	Silver,	Lead,	
	Cadmium,	Strontium,	
	Selenium,	Uranium	
	Thallium,		

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 500 ± 9 µg/mL	Arsenic, As	250.0 ± 2.1 µg/mL
Barium, Ba	250.0 ± 1.2 µg/mL	Beryllium, Be	25.00 ± 0.16 µg/mL
Cadmium, Cd	25.00 ± 0.10 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium, Cr	250.0 ± 1.8 µg/mL	Cobalt, Co	250.0 ± 1.2 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	2 500 ± 10 µg/mL
Lead, Pb	25.00 ± 0.11 µg/mL	Magnesium, Mg	2 500 ± 11 µg/mL
Manganese, Mn	250.0 ± 1.0 µg/mL	Nickel, Ni	250.0 ± 1.1 µg/mL
Potassium, K	2 500 ± 11 µg/mL	Selenium, Se	24.99 ± 0.20 µg/mL
Silver, Ag	25.00 ± 0.13 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	25.01 ± 0.10 µg/mL	Thallium, Tl	25.00 ± 0.13 µg/mL
Uranium, U	25.01 ± 0.15 µg/mL	Vanadium, V	250.0 ± 1.1 µg/mL
Zinc, Zn	250.0 ± 1.1 µg/mL		

Density: 1.074 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	EDTA	928	928
Co	ICP Assay	traceable to 3113	M2-CO661665
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Ti	ICP Assay	3158	151215
U	ICP Assay	3164	891509
U	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.6 ± 0.1
Uranium 235U	0.42 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

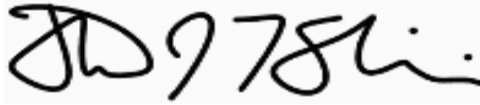
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

A handwritten signature in black ink, appearing to read 'TK 7/8/21'.

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

A handwritten signature in black ink, appearing to read 'Paul R. Gaines'.

Reagent

MT_S_MSSPK-A_00006

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	IV-66048-A	
Lot Number:	U2-MEB728823	
Matrix:	5% (v/v) HNO ₃	
Value / Analyte(s):	5 000 µg/mL ea:	
	Aluminum,	Calcium,
	Iron,	Potassium,
	Magnesium,	Sodium,
	500 µg/mL ea:	
	Nickel,	Manganese,
	Cobalt,	Chromium,
	Copper,	Arsenic,
	Barium,	Vanadium,
	Zinc,	
	50 µg/mL ea:	
	Silver,	Beryllium,
	Cadmium,	Lead,
	Selenium,	Strontium,
	Thallium,	Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 008 ± 18 µg/mL	Arsenic, As	500.8 ± 3.7 µg/mL
Barium, Ba	500.8 ± 2.3 µg/mL	Beryllium, Be	50.07 ± 0.33 µg/mL
Cadmium, Cd	50.07 ± 0.23 µg/mL	Calcium, Ca	5 008 ± 22 µg/mL
Chromium, Cr	500.8 ± 2.9 µg/mL	Cobalt, Co	500.8 ± 2.4 µg/mL
Copper, Cu	500.8 ± 2.0 µg/mL	Iron, Fe	5 008 ± 21 µg/mL
Lead, Pb	50.08 ± 0.22 µg/mL	Magnesium, Mg	5 008 ± 22 µg/mL
Manganese, Mn	500.8 ± 2.0 µg/mL	Nickel, Ni	500.8 ± 2.2 µg/mL
Potassium, K	5 008 ± 22 µg/mL	Selenium, Se	50.09 ± 0.32 µg/mL
Silver, Ag	50.07 ± 0.22 µg/mL	Sodium, Na	5 008 ± 22 µg/mL
Strontium, Sr	50.07 ± 0.19 µg/mL	Thallium, Tl	50.07 ± 0.36 µg/mL
Uranium, U	50.08 ± 0.27 µg/mL	Vanadium, V	500.8 ± 2.2 µg/mL
Zinc, Zn	500.8 ± 2.2 µg/mL		

Density: 1.130 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Tl	ICP Assay	3158	151215
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
U	X_U_CRM		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 26, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 26, 2028**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

A handwritten signature in black ink, appearing to read 'TK 7/8/21'.

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

A handwritten signature in black ink, appearing to read 'Paul R. Gaines'.

Reagent

MT_S_MWLLC_SC_00009

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution	
Catalog Number:	IV-76463	
Lot Number:	V2-MEB748176	
Matrix:	2% (v/v) HNO ₃ tr. HF	
Value / Analyte(s):	200 µg/mL ea: Potassium,	Sodium,
	100 µg/mL ea: Calcium,	
	50 µg/mL ea: Iron,	Magnesium,
	25 µg/mL ea: Aluminum,	
	10 µg/mL ea: Titanium,	Zinc,
	2 µg/mL ea: Tin,	Arsenic,
	Barium,	Chromium,
	Manganese,	
	1 µg/mL ea: Nickel,	Copper,
	Strontium,	Antimony,
	Selenium,	Uranium,
	0.5 µg/mL ea: Vanadium,	Thallium,
	Cadmium,	Cobalt,
	Beryllium,	Lead,
	Silver,	Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	24.98 ± 0.09 µg/mL	Antimony, Sb	1.001 ± 0.006 µg/mL
Arsenic, As	1.999 ± 0.012 µg/mL	Barium, Ba	2.001 ± 0.012 µg/mL
Beryllium, Be	0.5001 ± 0.0026 µg/mL	Cadmium, Cd	0.5001 ± 0.0030 µg/mL
Calcium, Ca	100.0 ± 0.3 µg/mL	Chromium, Cr	1.999 ± 0.012 µg/mL
Cobalt, Co	0.4997 ± 0.0022 µg/mL	Copper, Cu	1.001 ± 0.006 µg/mL
Iron, Fe	50.02 ± 0.22 µg/mL	Lead, Pb	0.4996 ± 0.0022 µg/mL
Magnesium, Mg	50.02 ± 0.22 µg/mL	Manganese, Mn	2.000 ± 0.010 µg/mL
Molybdenum, Mo	0.5004 ± 0.0034 µg/mL	Nickel, Ni	1.000 ± 0.006 µg/mL
Potassium, K	200.1 ± 0.9 µg/mL	Selenium, Se	1.000 ± 0.005 µg/mL
Silver, Ag	0.4998 ± 0.0034 µg/mL	Sodium, Na	200.1 ± 0.9 µg/mL
Strontium, Sr	1.000 ± 0.004 µg/mL	Thallium, Tl	0.4993 ± 0.0026 µg/mL
Tin, Sn	2.000 ± 0.014 µg/mL	Titanium, Ti	9.98 ± 0.06 µg/mL
Uranium, U	1.000 ± 0.005 µg/mL	Vanadium, V	0.5001 ± 0.0026 µg/mL
Zinc, Zn	10.01 ± 0.05 µg/mL		

Density: 1.011 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	120618
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	140917

Sn	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Sr	Calculated		See Sec. 4.2
Ti	ICP Assay	traceable to 3162a	T2-TI725816
Ti	ICP Assay	3158	151215
Ti	Calculated		See Sec. 4.2
U	ICP Assay	traceable to 3164	R2-U689597
U	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
V	Calculated		See Sec. 4.2
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

<u>Isotope</u>	<u>Atom %</u>
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information (<https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver>)

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 31, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 31, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

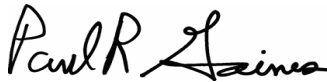
Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Sample Container Check Report

Client: TRC, Engineers, Inc.
Project/Site: 3Q 2025 GWCorrective Action Monitoring
Event-HWMU5

Job ID: 410-234463-1

Sample Container Checks and Verifications

Lab Sample ID: 410-234463-1

Client Sample ID: 5W8B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:37	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-2

Client Sample ID: 5W5B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:38	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-3

Client Sample ID: 5W7B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:39	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-3 MS

Client Sample ID: 5W7B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:40	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-3 MSD

Client Sample ID: 5W7B

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:43	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-4

Client Sample ID: 5WC21

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:41	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-5

Client Sample ID: 5WDUP

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:44	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-6

Client Sample ID: 5WC22

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:42	<2	<2	N/A	N/A	N/A	N/A	N/A

Sample Container Check Report

Client: TRC, Engineers, Inc.

Job ID: 410-234463-1

Project/Site: 3Q 2025 GWCorrective Action Monitoring

Event-HWMU5

Sample Container Checks and Verifications (Continued)

Lab Sample ID: 410-234463-7

Client Sample ID: 5WC23

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:44	<2	<2	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-234463-8

Client Sample ID: 5W12A

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
D	pH Check, 24hr Adjustment Confirmation Required	K9VH	07/31/2025 14:42	<2	<2	N/A	N/A	N/A	N/A	N/A

Method 8260D Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260D Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Matrix: Water

Level: Low

GC Column (1): R-624SilMS 3 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
5W8B	410-234463-1	104	103	94	98
5W5B	410-234463-2	104	105	95	100
5W7B	410-234463-3	105	105	95	96
5WC21	410-234463-4	103	102	95	97
5WDUP	410-234463-5	104	104	94	97
5WC22	410-234463-6	104	107	94	98
5WC23	410-234463-7	103	105	95	97
5W12A	410-234463-8	105	106	95	98
Trip Blank 1	410-234463-9	102	105	94	98
	MB 410-679324/7	103	105	95	99
	LCS 410-679324/4	104	105	95	99
	LCSD 410-679324/5	103	107	95	100
5W7B MS	410-234463-3 MS	105	108	97	99
5W7B MSD	410-234463-3 MSD	105	107	96	99

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

QC LIMITS
80-120
80-120
80-120
80-120

Column to be used to flag recovery values

FORM II 8260D

Lab Name:

Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.:

410-234463-1

SDG No.:

Matrix:

Water

Level:

Low

Lab File ID:

HG01X03.D

Lab ID:

LCS 410-679324/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	5.00	5.26	105	80-131	
cis-1,2-Dichloroethene	5.00	5.10	102	80-122	
trans-1,2-Dichloroethene	5.00	5.16	103	80-122	
Trichloroethene	5.00	4.93	99	80-120	
Vinyl chloride	5.00	4.37	87	60-125	

08/12/2025

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Matrix: WaterLevel: Low

Lab File ID: HG01X04.D

Lab ID: LCSD 410-679324/5

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1-Dichloroethene	5.00	5.20	104	1	30	80-131	
cis-1,2-Dichloroethene	5.00	5.14	103	1	30	80-122	
trans-1,2-Dichloroethene	5.00	5.07	101	2	30	80-122	
Trichloroethene	5.00	4.89	98	1	30	80-120	
Vinyl chloride	5.00	4.25	85	3	30	60-125	

08/12/2025

Lab Name:

Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.:

410-234463-1

SDG No.:

Matrix:

Water

Level:

Low

Lab File ID:

HG01X19.D

Lab ID:

410-234463-3 MS

Client ID:

5W7B MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	5.00	ND	5.87	117	80-131	
cis-1,2-Dichloroethene	5.00	ND	5.41	108	80-122	
trans-1,2-Dichloroethene	5.00	ND	5.52	110	80-122	
Trichloroethene	5.00	ND	5.48	110	80-120	
Vinyl chloride	5.00	ND	4.51	90	60-125	

08/12/2025

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Matrix: WaterLevel: Low

Lab File ID: HG01X20.D

Lab ID: 410-234463-3 MSD

Client ID: 5W7B MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1-Dichloroethene	5.00	5.62	112	4	30	80-131	
cis-1,2-Dichloroethene	5.00	5.23	105	3	30	80-122	
trans-1,2-Dichloroethene	5.00	5.28	105	5	30	80-122	
Trichloroethene	5.00	5.29	106	4	30	80-120	
Vinyl chloride	5.00	4.96	99	10	30	60-125	

08/12/2025

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab File ID: HG01X06.D

Lab Sample ID: MB 410-679324/7

Matrix: Water

Heated Purge: (Y/N) N

Instrument ID: 19094

Date Analyzed: 08/01/2025 12:32

GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-679324/4	HG01X03.D	08/01/2025 11:30
	LCSD 410-679324/5	HG01X04.D	08/01/2025 11:51
Trip Blank 1	410-234463-9	HG01X09.D	08/01/2025 14:07
5W7B	410-234463-3	HG01X18.D	08/01/2025 17:13
5W7B MS	410-234463-3 MS	HG01X19.D	08/01/2025 17:33
5W7B MSD	410-234463-3 MSD	HG01X20.D	08/01/2025 17:54
5W8B	410-234463-1	HG01X21.D	08/01/2025 18:15
5W5B	410-234463-2	HG01X22.D	08/01/2025 18:35
5WC21	410-234463-4	HG01X23.D	08/01/2025 18:56
5WDUP	410-234463-5	HG01X24.D	08/01/2025 19:17
5WC22	410-234463-6	HG01X25.D	08/01/2025 19:37
5WC23	410-234463-7	HG01X26.D	08/01/2025 19:58
5W12A	410-234463-8	HG01X27.D	08/01/2025 20:18

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab File ID: HL08T01.D

BFB Injection Date: 07/09/2025

Instrument ID: 19094

BFB Injection Time: 03:43

Analysis Batch No.: 668589

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.8
75	30.0 - 60.0 % of mass 95	47.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	Greater than 50% of mass 95	78.2
175	5.0 - 9.0 % of mass 174	5.9 (7.6) 1
176	95.0 - 101.0 % of mass 174	76.3 (97.6) 1
177	5.0 - 9.0 % of mass 176	5.3 (7.0) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-668589/13	HL08X12.D	07/09/2025	4:17
	IC 410-668589/14	HL08X13.D	07/09/2025	4:37
	IC 410-668589/15	HL08X14.D	07/09/2025	4:58
	IC 410-668589/16	HL08X15.D	07/09/2025	5:18
	IC 410-668589/17	HL08X16.D	07/09/2025	5:39
	IC 410-668589/18	HL08X17.D	07/09/2025	6:00
	IC 410-668589/19	HL08X18.D	07/09/2025	6:21
	ICIS 410-668589/20	HL08X19.D	07/09/2025	6:41
	IC 410-668589/21	HL08X20.D	07/09/2025	7:02
	ICV 410-668589/23	HL08X22.D	07/09/2025	7:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab File ID: HG01T01.D

BFB Injection Date: 08/01/2025

Instrument ID: 19094

BFB Injection Time: 10:34

Analysis Batch No.: 679324

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.9
75	30.0 - 60.0 % of mass 95	47.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	Greater than 50% of mass 95	81.0
175	5.0 - 9.0 % of mass 174	6.1 (7.5) 1
176	95.0 - 101.0 % of mass 174	78.9 (97.4) 1
177	5.0 - 9.0 % of mass 176	5.1 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-679324/3	HG01X02.D	08/01/2025	11:09
	LCS 410-679324/4	HG01X03.D	08/01/2025	11:30
	LCSD 410-679324/5	HG01X04.D	08/01/2025	11:51
	MB 410-679324/7	HG01X06.D	08/01/2025	12:32
Trip Blank 1	410-234463-9	HG01X09.D	08/01/2025	14:07
5W7B	410-234463-3	HG01X18.D	08/01/2025	17:13
5W7B MS	410-234463-3 MS	HG01X19.D	08/01/2025	17:33
5W7B MSD	410-234463-3 MSD	HG01X20.D	08/01/2025	17:54
5W8B	410-234463-1	HG01X21.D	08/01/2025	18:15
5W5B	410-234463-2	HG01X22.D	08/01/2025	18:35
5WC21	410-234463-4	HG01X23.D	08/01/2025	18:56
5WDUP	410-234463-5	HG01X24.D	08/01/2025	19:17
5WC22	410-234463-6	HG01X25.D	08/01/2025	19:37
5WC23	410-234463-7	HG01X26.D	08/01/2025	19:58
5W12A	410-234463-8	HG01X27.D	08/01/2025	20:18

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
 Environment Testing, LLC

SDG No.: _____

Sample No.: ICIS 410-668589/20 Date Analyzed: 07/09/2025 06:41

Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HL08X19.D Heated Purge: (Y/N) N

Calibration ID: 74555

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		775184	12.87				
UPPER LIMIT		1550368	13.37				
LOWER LIMIT		387592	12.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-668589/23		744969	12.87				
CCVIS 410-679324/3		534342	12.87				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.: _____

Sample No.: CCVIS 410-679324/3 Date Analyzed: 08/01/2025 11:09

Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HG01X02.D Heated Purge: (Y/N) N

Calibration ID: 74558

	TBA _d 10		FB		CBZ _d 5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	70494	3.87	1160877	7.35	928479	10.95
UPPER LIMIT	140988	4.37	2321754	7.85	1856958	11.45
LOWER LIMIT	35247	3.37	580439	6.85	464240	10.45
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-679324/4		67581	3.85	1177718	7.35	938889 10.95
LCSD 410-679324/5		71534	3.86	1196336	7.35	947878 10.95
MB 410-679324/7		69793	3.87	1184505	7.35	936555 10.95
410-234463-9	Trip Blank 1	68861	3.85	1251330	7.35	1004903 10.95
410-234463-3	5W7B	67935	3.86	1220222	7.35	979658 10.95
410-234463-3 MS	5W7B MS	64739	3.87	1267610	7.35	1004882 10.95
410-234463-3 MSD	5W7B MSD	72126	3.86	1265988	7.35	1009409 10.95
410-234463-1	5W8B	66818	3.86	1222620	7.35	973450 10.95
410-234463-2	5W5B	64782	3.86	1237457	7.35	974453 10.95
410-234463-4	5WC21	67762	3.86	1233890	7.34	976103 10.95
410-234463-5	5WDUP	67327	3.86	1233616	7.35	985631 10.95
410-234463-6	5WC22	65424	3.86	1232689	7.35	992513 10.95
410-234463-7	5WC23	66633	3.86	1249900	7.35	991978 10.95
410-234463-8	5W12A	63025	3.87	1239997	7.35	994725 10.95

TBA_d10 = t-Butyl alcohol-d₁₀ (IS)

TBA_d10 = t-Butyl alcohol-d₁₀ (IS)

FB = Fluorobenzene (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII

Job No.: 410-234463-1

Sample No.: CCVIS 410-679324/3

Date Analyzed: 08/01/2025 11:09

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration ID: 74558

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		534342	12.87				
UPPER LIMIT		1068684	13.37				
LOWER LIMIT		267171	12.37				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-679324/4		529984	12.87				
LCSD 410-679324/5		532314	12.87				
MB 410-679324/7		525710	12.87				
410-234463-9	Trip Blank 1	559961	12.87				
410-234463-3	5W7B	543915	12.87				
410-234463-3 MS	5W7B MS	570424	12.87				
410-234463-3 MSD	5W7B MSD	569559	12.87				
410-234463-1	5W8B	546813	12.87				
410-234463-2	5W5B	550349	12.87				
410-234463-4	5WC21	545668	12.87				
410-234463-5	5WDUP	548009	12.87				
410-234463-6	5WC22	549787	12.87				
410-234463-7	5WC23	557562	12.87				
410-234463-8	5W12A	559565	12.87				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = $\pm$ 0.5 minutes of internal standard RT

```
# Column used to flag values outside QC limits
```

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5W8B

Lab Sample ID: 410-234463-1

Matrix: Water

Lab File ID: HG01X21.D

Analysis Method: 8260D

Date Collected: 07/28/2025 10:30

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 18:15

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X21.D
 Lims ID: 410-234463-B-1
 Client ID: 5W8B
 Sample Type: Client
 Inject. Date: 01-Aug-2025 18:15:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-022
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:50:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	97	66818	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.440	0.006	94	295831	10.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.909	6.903	0.006	46	53254	10.3	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1222620	10.0	
68 Trichloroethene	95		7.842				ND	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1275358	9.42	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	973450	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	479585	9.81	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	546813	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:50:47

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X21.D

Injection Date: 01-Aug-2025 18:15:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-B-1

Lab Sample ID: 410-234463-1

Worklist Smp#: 22

Client ID: 5W8B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

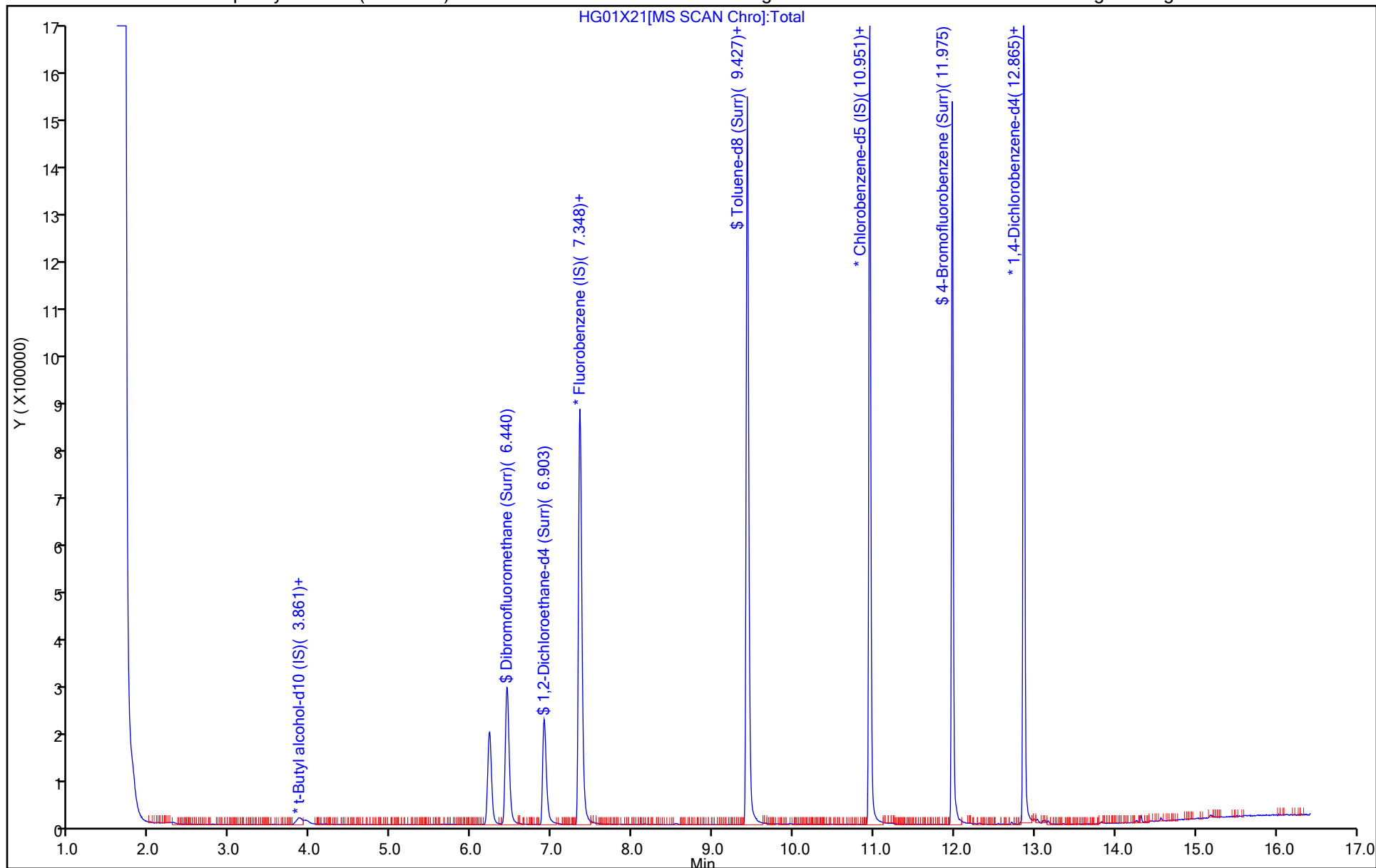
ALS Bottle#: 21

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X21.D
Lims ID: 410-234463-B-1
Client ID: 5W8B
Sample Type: Client
Inject. Date: 01-Aug-2025 18:15:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-022
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:50:46

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.4	104.25
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.49
\$ 83 Toluene-d8 (Surr)	10.0	9.42	94.18
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.81	98.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5W5B

Lab Sample ID: 410-234463-2

Matrix: Water

Lab File ID: HG01X22.D

Analysis Method: 8260D

Date Collected: 07/28/2025 12:50

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 18:35

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X22.D
 Lims ID: 410-234463-A-2
 Client ID: 5W5B
 Sample Type: Client
 Inject. Date: 01-Aug-2025 18:35:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-023
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.867	-0.006	96	64782	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	93	298442	10.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.909	6.903	0.006	46	54459	10.5	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1237457	10.0	
68 Trichloroethene	95		7.842				ND	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	93	1289906	9.52	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	974453	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	488936	9.99	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	550349	10.0	

QC Flag Legend

Processing Flags

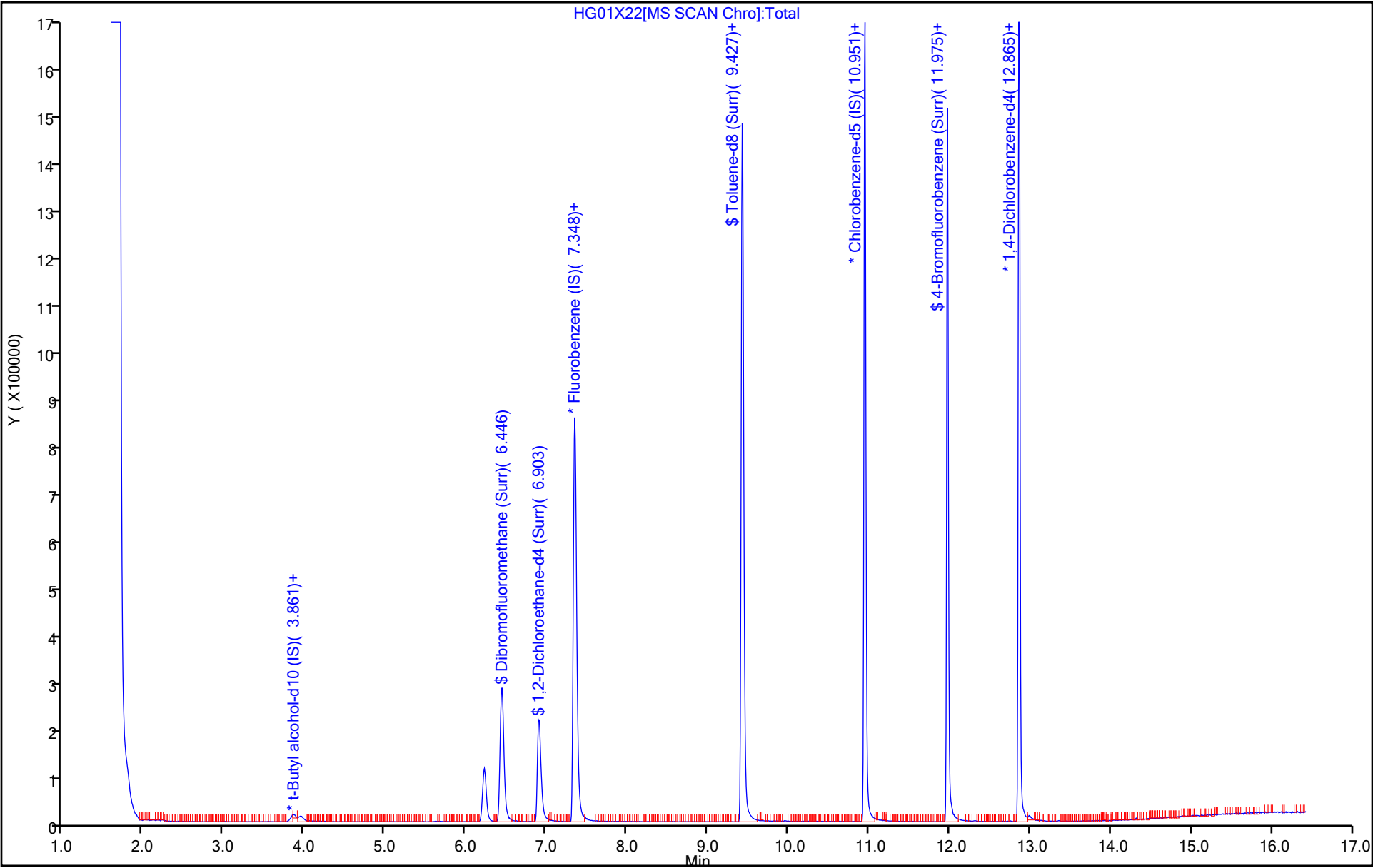
Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X22.D
Lims ID: 410-234463-A-2
Client ID: 5W5B
Sample Type: Client
Inject. Date: 01-Aug-2025 18:35:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-023
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.4	103.91
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.57
\$ 83 Toluene-d8 (Surr)	10.0	9.52	95.15
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.99	99.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG No.:	
Client Sample ID: 5W7B	Lab Sample ID: 410-234463-3
Matrix: Water	Lab File ID: HG01X18.D
Analysis Method: 8260D	Date Collected: 07/28/2025 12:00
Sample wt/vol: 25 (mL)	Date Analyzed: 08/01/2025 17:13
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: R-624SilMS 30m ID: 0.25 (mm)
Purge Volume: 25.0 (mL)	Heated Purge: (Y/N) N pH:
% Moisture: % Solids:	Level: (low/med) Low
Analysis Batch No.: 679324	Units: ug/L
Preparation Batch No.:	Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X18.D
 Lims ID: 410-234463-B-3
 Client ID: 5W7B
 Sample Type: Client
 Inject. Date: 01-Aug-2025 17:13:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-019
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:46:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.782				ND	
2 Dichlorodifluoromethane	85		1.825				ND	
3 Chlorodifluoromethane	51		1.837				ND	
4 Dimethyl ether	45		1.892				ND	
5 Chloromethane	50	2.007	2.014	-0.007	95	3450	0.0660	
7 Butadiene	39		2.099				ND	7
6 Vinyl chloride	62		2.117				ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.160				ND	
9 Bromomethane	94		2.392				ND	
10 Chloroethane	64		2.471				ND	
11 Dichlorofluoromethane	67		2.684				ND	
12 Trichlorofluoromethane	101		2.696				ND	
14 Ethyl ether	59	2.971	2.971	0.000	91	8416	0.4045	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.032				ND	
13 Ethanol	45	3.056	3.111	-0.055	1	109	NC	
16 Acrolein	56		3.123				ND	
17 1,1-Dichloroethene	96		3.251				ND	
19 Acetone	43		3.282				ND	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.288				ND	
21 Iodomethane	142		3.422				ND	
T 18 Ethanol TIC	45		3.440				ND	7
22 Ethyl bromide	108		3.452				ND	
23 Carbon disulfide	76		3.532				ND	7
24 Methyl acetate	43		3.666				ND	
26 3-Chloro-1-propene	41		3.678				ND	
25 Acetonitrile	41		3.696				ND	U
27 Methylene Chloride	84		3.849				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.867	-0.006	97	67935	50.0	
29 2-Methyl-2-propanol	59		3.970				ND	
31 Acrylonitrile	53		4.184				ND	
T 30 Acetonitrile TIC	41	4.001	4.214	-0.213	13	292	0.002393	7
32 Methyl tert-butyl ether	73		4.214				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		4.233				ND	
34 Hexane	57		4.647				ND	
35 Vinyl acetate	43		4.885				ND	
36 1,1-Dichloroethane	63		4.885				ND	
37 Isopropyl ether	45		4.946				ND	
38 2-Chloro-1,3-butadiene	53		4.995				ND	
40 Tert-butyl ethyl ether	59		5.488				ND	
T 39 Vinyl acetate (TIC)	43		5.537				ND	
41 2-Butanone (MEK)	43		5.696				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
43 2,2-Dichloropropane	77		5.738				ND	
44 Propionitrile	54		5.787				ND	
45 Ethyl acetate	43		5.793				ND	
47 Methacrylonitrile	67		5.994				ND	
48 Chlorobromomethane	128		6.068				ND	
49 Tetrahydrofuran	71		6.080				ND	
S 46 1,2-Dichloroethene, Total	100		6.155				ND	7
50 Chloroform	83	6.226	6.226	0.000	94	45666	0.7413	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	296684	10.5	
53 1,1,1-Trichloroethane	97		6.458				ND	
51 Methyl acrylate	55		6.482				ND	
54 Cyclohexane	56		6.555				ND	
55 1,1-Dichloropropene	75		6.677				ND	
56 Carbon tetrachloride	117		6.677				ND	
57 Isobutyl alcohol	41		6.830				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.903	-0.006	47	54139	10.5	
59 Benzene	78		6.933				ND	7
60 1,2-Dichloroethane	62		7.006				ND	
61 Isopropyl acetate	43		7.031				ND	
63 Tert-amyl methyl ether	73		7.135				ND	
62 1-Chlorobutane	56	7.342	7.250	0.092	32	6508	NC	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1220222	10.0	
65 n-Heptane	43		7.372				ND	
67 n-Butanol	56		7.738				ND	
66 t-Amyl alcohol	73		7.842				ND	
68 Trichloroethene	95	7.860	7.842	0.018	96	9060	0.2288	
69 Methylcyclohexane	83		8.159				ND	
70 1,2-Dichloropropane	63		8.171				ND	
71 2-ethoxy-2-methyl butane	87		8.195				ND	
72 Methyl methacrylate	69		8.281				ND	
73 1,4-Dioxane	88		8.281				ND	
74 Dibromomethane	93		8.287				ND	
75 n-Propyl acetate	61		8.366				ND	
76 Dichlorobromomethane	83		8.531				ND	
77 2-Nitropropane	41		8.799				ND	
78 2-Chloroethyl vinyl ether	63		8.908				ND	
79 1-Bromo-2-chloroethane	63		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.098				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.280				ND	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1288239	9.45	
81 Chloroacetonitrile	75		9.427				ND	
84 Toluene	92		9.512				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75		9.786				ND	
104 Ethyl methacrylate	69		9.860				ND	
106 1,1,2-Trichloroethane	97		10.000				ND	
T 97 2,3-Dibromopropene TIC	119	10.951	10.000	0.951	1	307277	2.52	
T 98 2-Chloroethanol TIC	44		10.000				ND	
T 99 Isopropyl alcohol TIC	45	9.427	10.000	-0.573	15	1188	0.009736	7
T 86 Decamethylcyclotetrasiloxane TIC	78	9.421	10.000	-0.579	1	334	0.002737	7
T 101 Vinyl bromide TIC	106	11.219	10.000	1.219	1	210	0.001721	7
T 102 Epichlorohydrin TIC	57		10.000				ND	
T 103 2-Bromoethanol TIC	45		10.000				ND	
T 95 Chloroacetaldehyde TIC	50	9.524	10.000	-0.476	1	215	0.001762	7
T 96 Monochloroacetic acid TIC	50		10.000				ND	
T 93 Methyl acrylate TIC	55	9.427	10.000	-0.573	12	4755	0.0390	
T 94 Hexachloroethane TIC	117		10.000				ND	
T 91 Octamethylcyclotetrasiloxane TIC	281	10.219	10.000	0.219	1	94	0.000770	7
T 90 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
T 89 Epibromohydrin TIC	57	9.427	10.000	-0.573	1	718	0.005884	7
T 88 2-Bromo-3-chloropropene TIC	75	10.945	10.000	0.945	1	15264	0.1251	7
T 87 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 100 Ethylene oxide TIC	44	9.951	10.000	-0.049	21	320	0.002622	7
T 92 Nitrobenzene TIC	77	9.427	10.000	-0.573	1	507	0.004155	7
S 105 1,3-Dichloropropene, Total	100		10.060				ND	7
107 Tetrachloroethene	166		10.091				ND	
108 1,3-Dichloropropane	76		10.164				ND	
109 2-Hexanone	43		10.225				ND	
110 n-Butyl acetate	43		10.359				ND	
111 Chlorodibromomethane	129		10.390				ND	
112 Ethylene Dibromide	107		10.506				ND	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	979658	10.0	
114 1-Chlorohexane	91		10.963				ND	7
115 Chlorobenzene	112		10.975				ND	
116 1,1,1,2-Tetrachloroethane	131		11.061				ND	
117 Ethylbenzene	91		11.067				ND	7
119 m-Xylene & p-Xylene	106		11.189				ND	7
S 118 Xylenes, Total	106		11.245				ND	7
120 o-Xylene	106		11.524				ND	
121 Styrene	104		11.536				ND	
122 Bromoform	173		11.695				ND	
123 Isopropylbenzene	105		11.829				ND	
124 cis-1,4-Dichloro-2-butene	88		11.871				ND	
125 Cyclohexanone	55		11.902				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	471350	9.58	
127 1,1,2,2-Tetrachloroethane	83		12.073				ND	
128 Bromobenzene	156		12.091				ND	
129 trans-1,4-Dichloro-2-butene	53		12.103				ND	
130 1,2,3-Trichloropropane	110		12.121				ND	
131 N-Propylbenzene	91		12.164				ND	
132 2-Chlorotoluene	126		12.237				ND	
133 1,3,5-Trimethylbenzene	105		12.304				ND	
134 4-Chlorotoluene	126		12.329				ND	
135 tert-Butylbenzene	134		12.542				ND	
136 Pentachloroethane	167		12.572				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
137 1,2,4-Trimethylbenzene	105		12.585				ND	7
138 sec-Butylbenzene	105		12.707				ND	7
139 1,3-Dichlorobenzene	146		12.804				ND	7
140 4-Isopropyltoluene	119		12.816				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	543915	10.0	
142 1,4-Dichlorobenzene	146		12.883				ND	7
143 1,2,3-Trimethylbenzene	120		12.889				ND	7
144 Benzyl chloride	126		12.957				ND	
145 p-Diethylbenzene	119		13.091				ND	
146 n-Butylbenzene	92		13.115				ND	
147 1,2-Dichlorobenzene	146		13.139				ND	
148 Hexachloroethane	201		13.682				ND	
149 1,2-Dibromo-3-Chloropropane	155		13.688				ND	
150 1,3,5-Trichlorobenzene	180		13.816				ND	
151 1,2,4-Trichlorobenzene	180		14.237				ND	
152 Hexachlorobutadiene	225		14.322				ND	
153 Naphthalene	128		14.414				ND	
154 1,2,3-Trichlorobenzene	180		14.554				ND	
155 tert-Butyl Formate	1		0.000				ND	
156 Dodecane	57		0.000				ND	
157 Pentane	43		0.000				ND	
158 1,1-Dichloroacetone	1		0.000				ND	
159 n-Decane	57		0.000				ND	
160 1-Bromo-3-Chloropropane	1		0.000				ND	
161 1-Chloropropane	1		0.000				ND	
162 Propene oxide	1		0.000				ND	
163 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
164 Methylal	1		0.000				ND	
165 2-Bromo-1-chloropropane	1		0.000				ND	
209 1,1-Dichloro-1-fluoroethane TICl			0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:46:34

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X18.D

Injection Date: 01-Aug-2025 17:13:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-B-3

Lab Sample ID: 410-234463-3

Worklist Smp#: 19

Client ID: 5W7B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

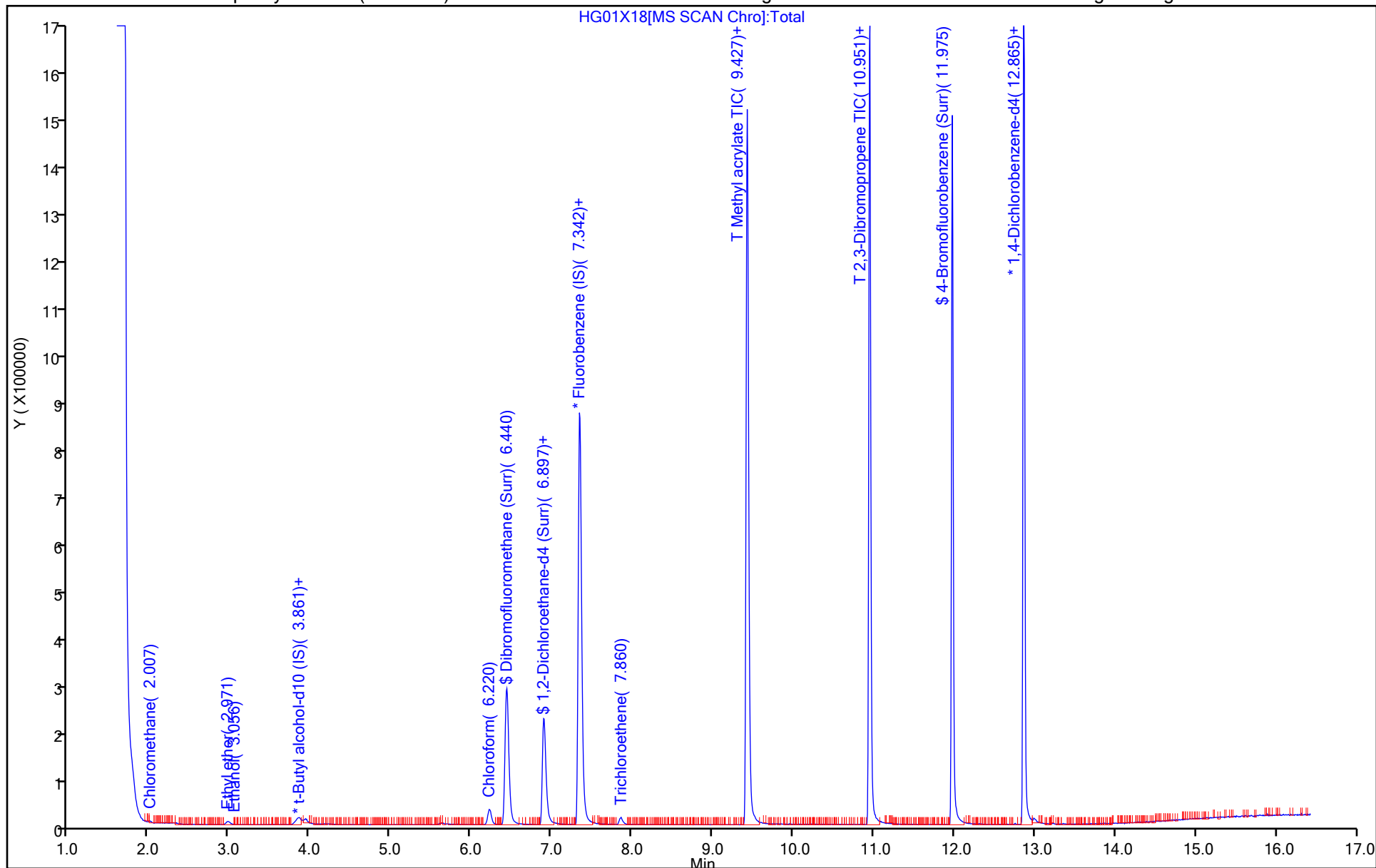
ALS Bottle#: 18

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X18.D
Lims ID: 410-234463-B-3
Client ID: 5W7B
Sample Type: Client
Inject. Date: 01-Aug-2025 17:13:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-019
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:46:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.5	104.75
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.42
\$ 83 Toluene-d8 (Surr)	10.0	9.45	94.52
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.58	95.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG No.:	
Client Sample ID: 5WC21	Lab Sample ID: 410-234463-4
Matrix: Water	Lab File ID: HG01X23.D
Analysis Method: 8260D	Date Collected: 07/28/2025 14:45
Sample wt/vol: 25 (mL)	Date Analyzed: 08/01/2025 18:56
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: R-624SilMS 30m ID: 0.25 (mm)
Purge Volume: 25.0 (mL)	Heated Purge: (Y/N) N pH:
% Moisture: % Solids:	Level: (low/med) Low
Analysis Batch No.: 679324	Units: ug/L
Preparation Batch No.:	Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	1.3		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X23.D
 Lims ID: 410-234463-B-4
 Client ID: 5WC21
 Sample Type: Client
 Inject. Date: 01-Aug-2025 18:56:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-024
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	96	67762	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	295806	10.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.903	-0.006	47	53228	10.2	
* 64 Fluorobenzene (IS)	96	7.342	7.348	-0.006	98	1233890	10.0	
68 Trichloroethene	95	7.848	7.842	0.006	97	52480	1.31	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	93	1292692	9.52	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	976103	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	477484	9.74	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	545668	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:51:39

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X23.D

Injection Date: 01-Aug-2025 18:56:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-B-4

Lab Sample ID: 410-234463-4

Worklist Smp#: 24

Client ID: 5WC21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

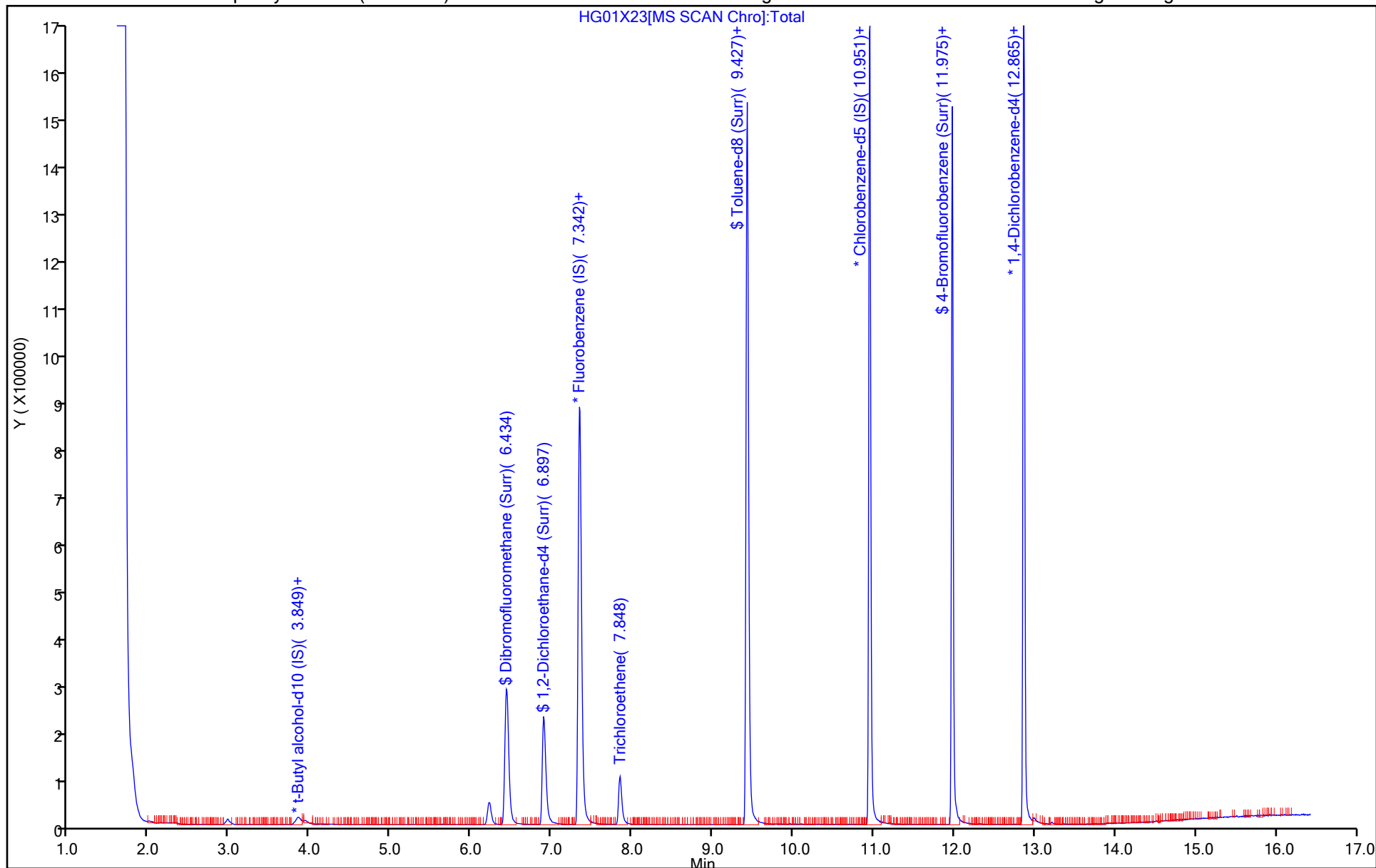
ALS Bottle#: 23

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X23.D
Lims ID: 410-234463-B-4
Client ID: 5WC21
Sample Type: Client
Inject. Date: 01-Aug-2025 18:56:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-024
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.29
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.50
\$ 83 Toluene-d8 (Surr)	10.0	9.52	95.20
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.74	97.38

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X23.D

Injection Date: 01-Aug-2025 18:56:30

Instrument ID: 19094

Lims ID: 410-234463-B-4

Lab Sample ID: 410-234463-4

Client ID: 5WC21

Operator ID: ecr105096

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

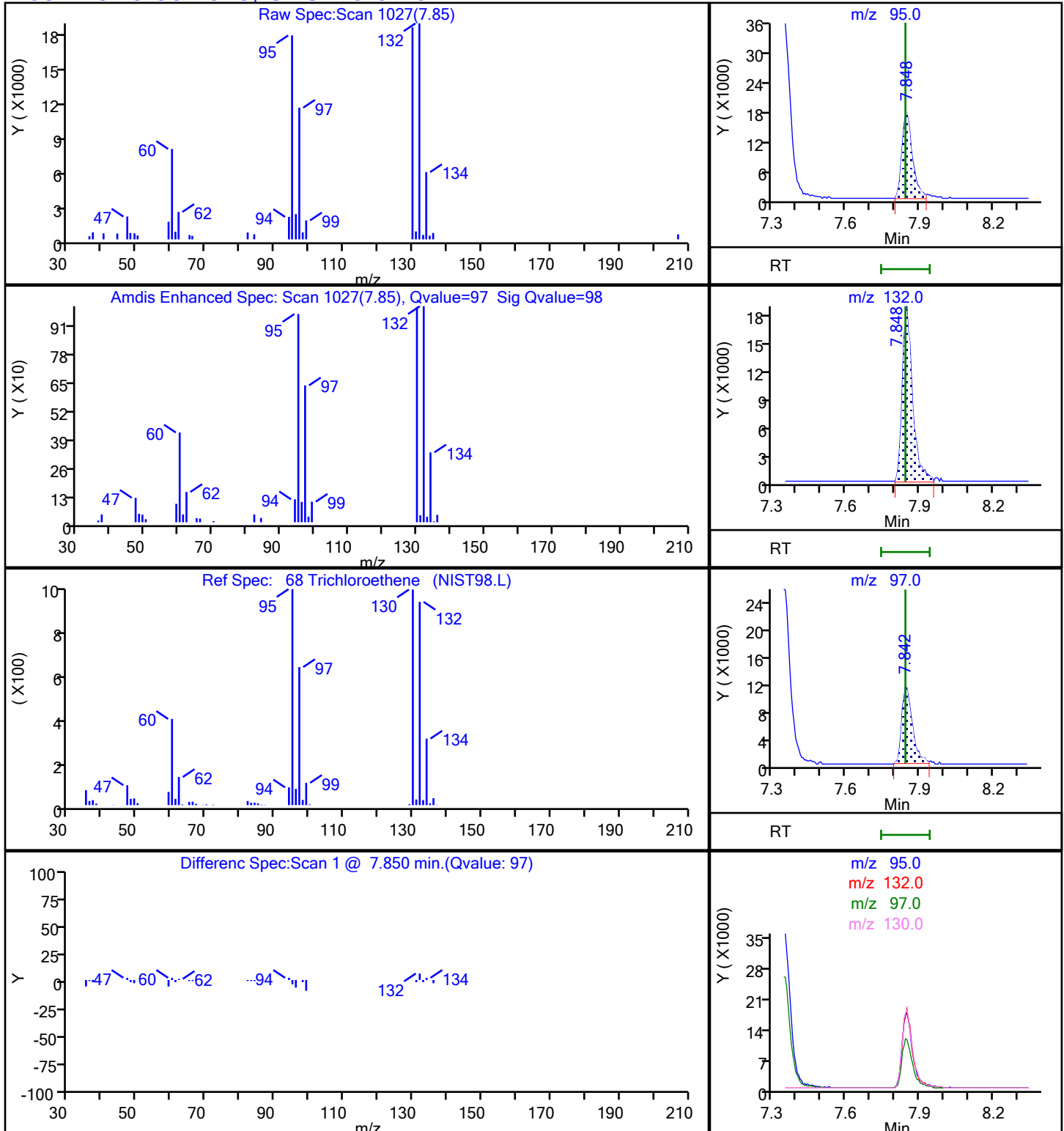
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5WDUP

Lab Sample ID: 410-234463-5

Matrix: Water

Lab File ID: HG01X24.D

Analysis Method: 8260D

Date Collected: 07/28/2025 10:40

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 19:17

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	1.4		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X24.D
 Lims ID: 410-234463-A-5
 Client ID: 5WDUP
 Sample Type: Client
 Inject. Date: 01-Aug-2025 19:17:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-025
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	96	67327	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.440	0.006	94	298463	10.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	47	54019	10.4	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1233616	10.0	
68 Trichloroethene	95	7.848	7.842	0.006	98	54359	1.36	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1293840	9.44	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	985631	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	481527	9.73	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	548009	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:51:59

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X24.D

Injection Date: 01-Aug-2025 19:17:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-A-5

Lab Sample ID: 410-234463-5

Worklist Smp#: 25

Client ID: 5WDUP

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

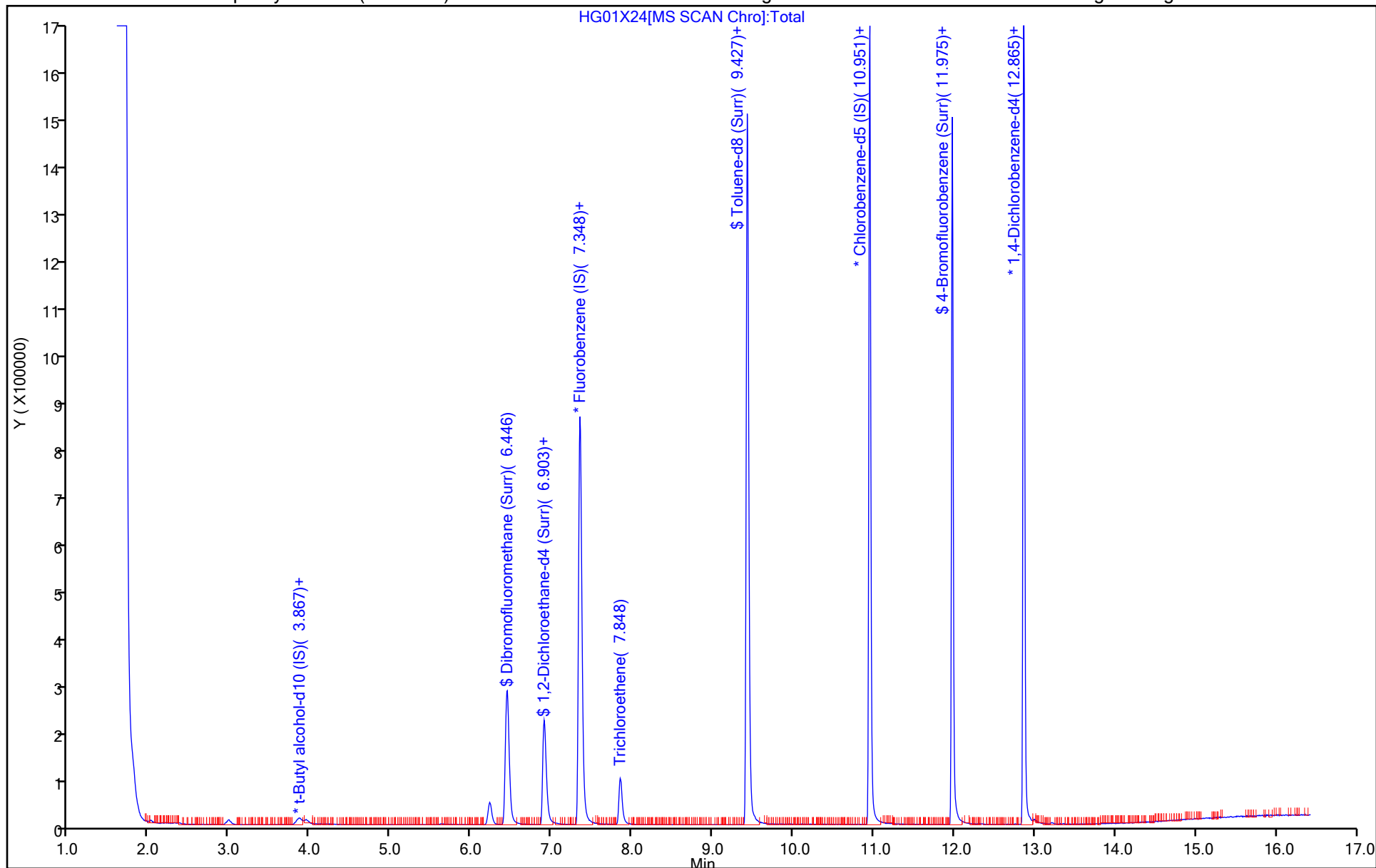
ALS Bottle#: 24

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X24.D
Lims ID: 410-234463-A-5
Client ID: 5WDUP
Sample Type: Client
Inject. Date: 01-Aug-2025 19:17:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-025
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:51:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.4	104.24
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.04
\$ 83 Toluene-d8 (Surr)	10.0	9.44	94.36
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.73	97.25

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X24.D

Injection Date: 01-Aug-2025 19:17:30

Instrument ID: 19094

Lims ID: 410-234463-A-5

Lab Sample ID: 410-234463-5

Client ID: 5WDUP

Operator ID: ecr105096

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

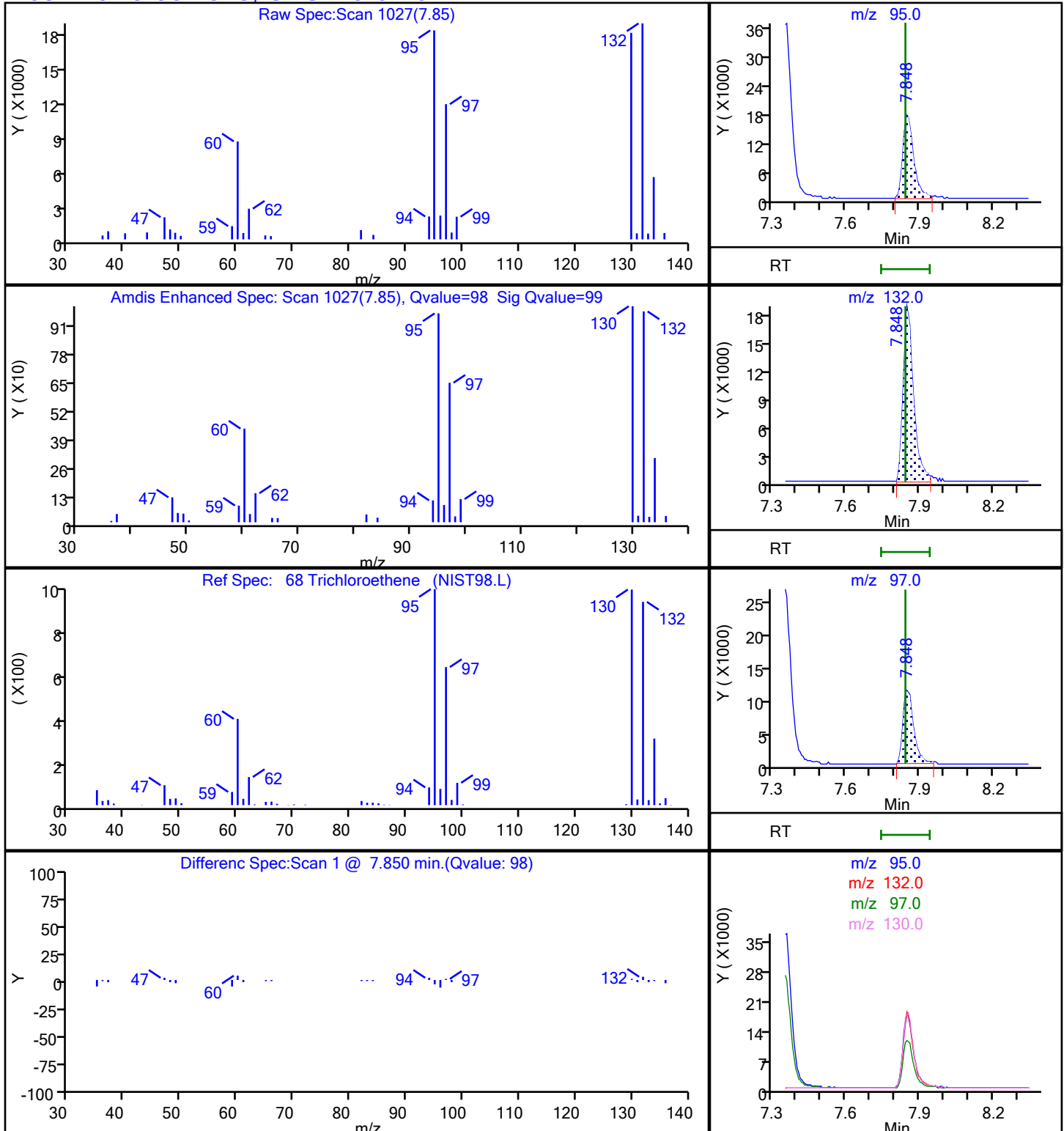
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5WC22

Lab Sample ID: 410-234463-6

Matrix: Water

Lab File ID: HG01X25.D

Analysis Method: 8260D

Date Collected: 07/28/2025 13:35

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 19:37

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	1.5		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X25.D
 Lims ID: 410-234463-B-6
 Client ID: 5WC22
 Sample Type: Client
 Inject. Date: 01-Aug-2025 19:37:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-026
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:52:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.867	-0.006	96	65424	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.440	0.006	94	297438	10.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	47	55478	10.7	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1232689	10.0	
68 Trichloroethene	95	7.848	7.842	0.006	98	61659	1.54	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1293998	9.37	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	992513	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	490173	9.83	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	549787	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:52:26

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X25.D

Injection Date: 01-Aug-2025 19:37:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-B-6

Lab Sample ID: 410-234463-6

Worklist Smp#: 26

Client ID: 5WC22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

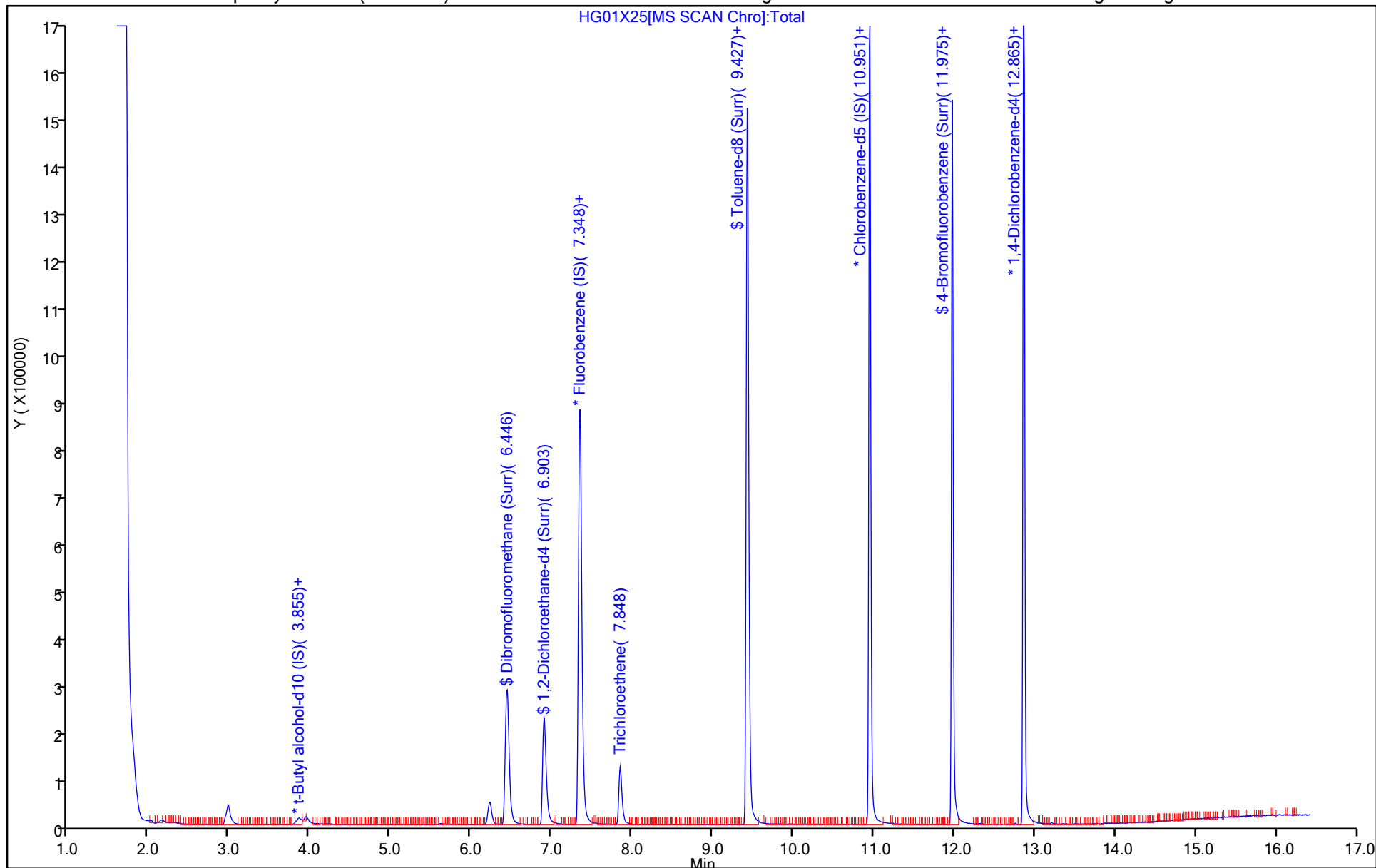
ALS Bottle#: 25

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X25.D
Lims ID: 410-234463-B-6
Client ID: 5WC22
Sample Type: Client
Inject. Date: 01-Aug-2025 19:37:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-026
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:52:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.4	103.96
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.93
\$ 83 Toluene-d8 (Surr)	10.0	9.37	93.72
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.83	98.31

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X25.D

Injection Date: 01-Aug-2025 19:37:30

Instrument ID: 19094

Lims ID: 410-234463-B-6

Lab Sample ID: 410-234463-6

Client ID: 5WC22

Operator ID: ecr105096

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

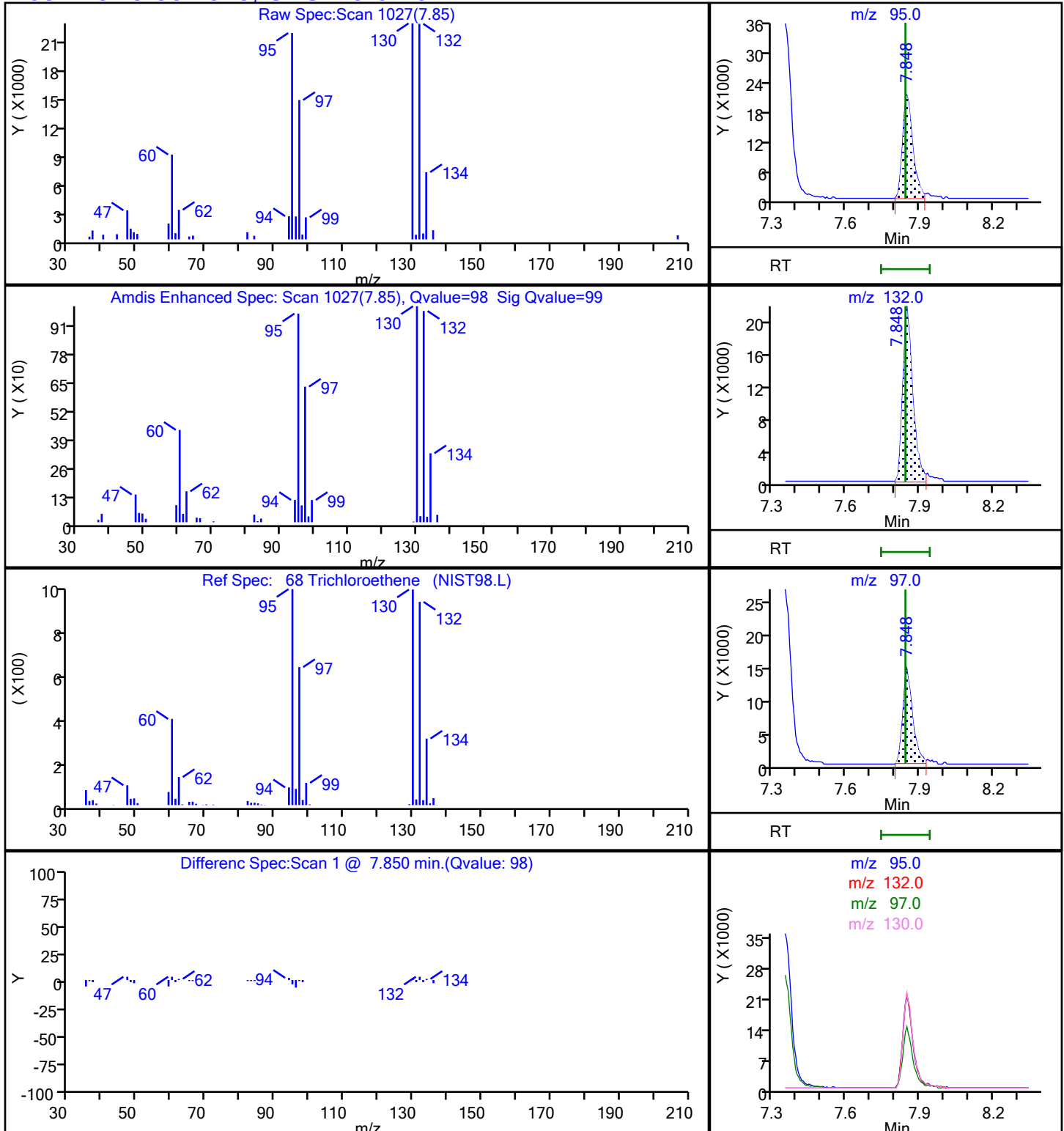
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5WC23

Lab Sample ID: 410-234463-7

Matrix: Water

Lab File ID: HG01X26.D

Analysis Method: 8260D

Date Collected: 07/28/2025 14:10

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 19:58

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	2.6		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X26.D
 Lims ID: 410-234463-A-7
 Client ID: 5WC23
 Sample Type: Client
 Inject. Date: 01-Aug-2025 19:58:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-027
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:52:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	97	66633	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	300028	10.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	47	55477	10.5	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1249900	10.0	
68 Trichloroethene	95	7.842	7.842	0.000	98	106465	2.63	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1316016	9.54	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	991978	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	483504	9.70	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	557562	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:52:49

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X26.D

Injection Date: 01-Aug-2025 19:58:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-A-7

Lab Sample ID: 410-234463-7

Worklist Smp#: 27

Client ID: 5WC23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

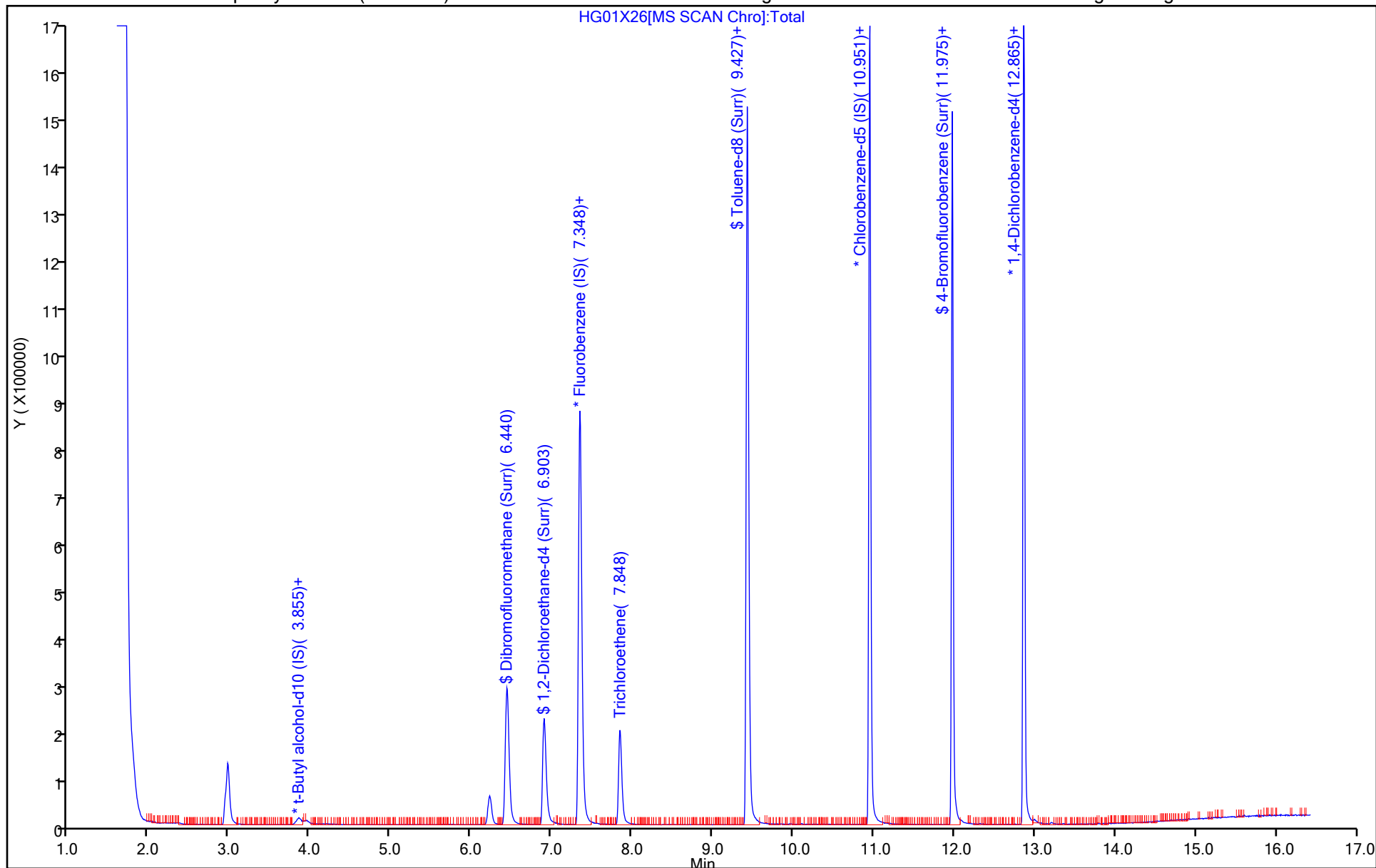
ALS Bottle#: 26

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X26.D
Lims ID: 410-234463-A-7
Client ID: 5WC23
Sample Type: Client
Inject. Date: 01-Aug-2025 19:58:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-027
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:52:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.42
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.46
\$ 83 Toluene-d8 (Surr)	10.0	9.54	95.36
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.70	97.02

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X26.D

Injection Date: 01-Aug-2025 19:58:30

Instrument ID: 19094

Lims ID: 410-234463-A-7

Lab Sample ID: 410-234463-7

Client ID: 5WC23

Operator ID: ecr105096

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

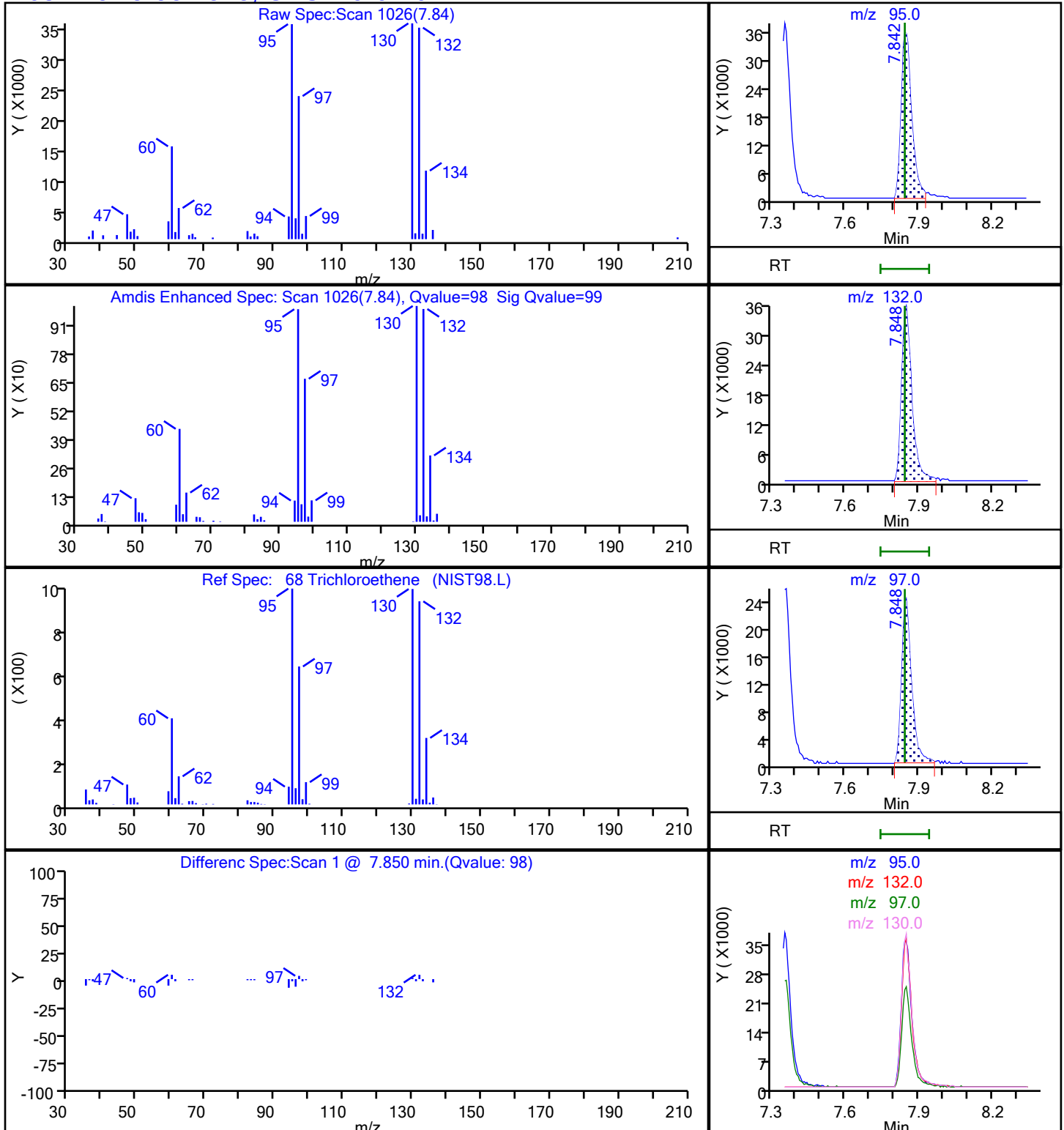
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

68 Trichloroethene, CAS: 79-01-6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: 5W12A Lab Sample ID: 410-234463-8

Matrix: Water Lab File ID: HG01X27.D

Analysis Method: 8260D Date Collected: 07/28/2025 11:20

Sample wt/vol: 25 (mL) Date Analyzed: 08/01/2025 20:18

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH: _____

% Moisture: _____ % Solids: _____ Level: (low/med) Low

Analysis Batch No.: 679324 Units: ug/L

Preparation Batch No.: _____ Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X27.D
 Lims ID: 410-234463-B-8
 Client ID: 5W12A
 Sample Type: Client
 Inject. Date: 01-Aug-2025 20:18:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-028
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:53:25 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:53:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.873	3.867	0.006	94	63025	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.440	0.006	93	301835	10.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	46	55189	10.6	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1239997	10.0	
68 Trichloroethene	95	7.860	7.842	0.018	90	4595	0.1142	M
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1318156	9.53	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	994725	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	92	491772	9.84	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	559565	10.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:53:26

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X27.D

Injection Date: 01-Aug-2025 20:18:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-B-8

Lab Sample ID: 410-234463-8

Worklist Smp#: 28

Client ID: 5W12A

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

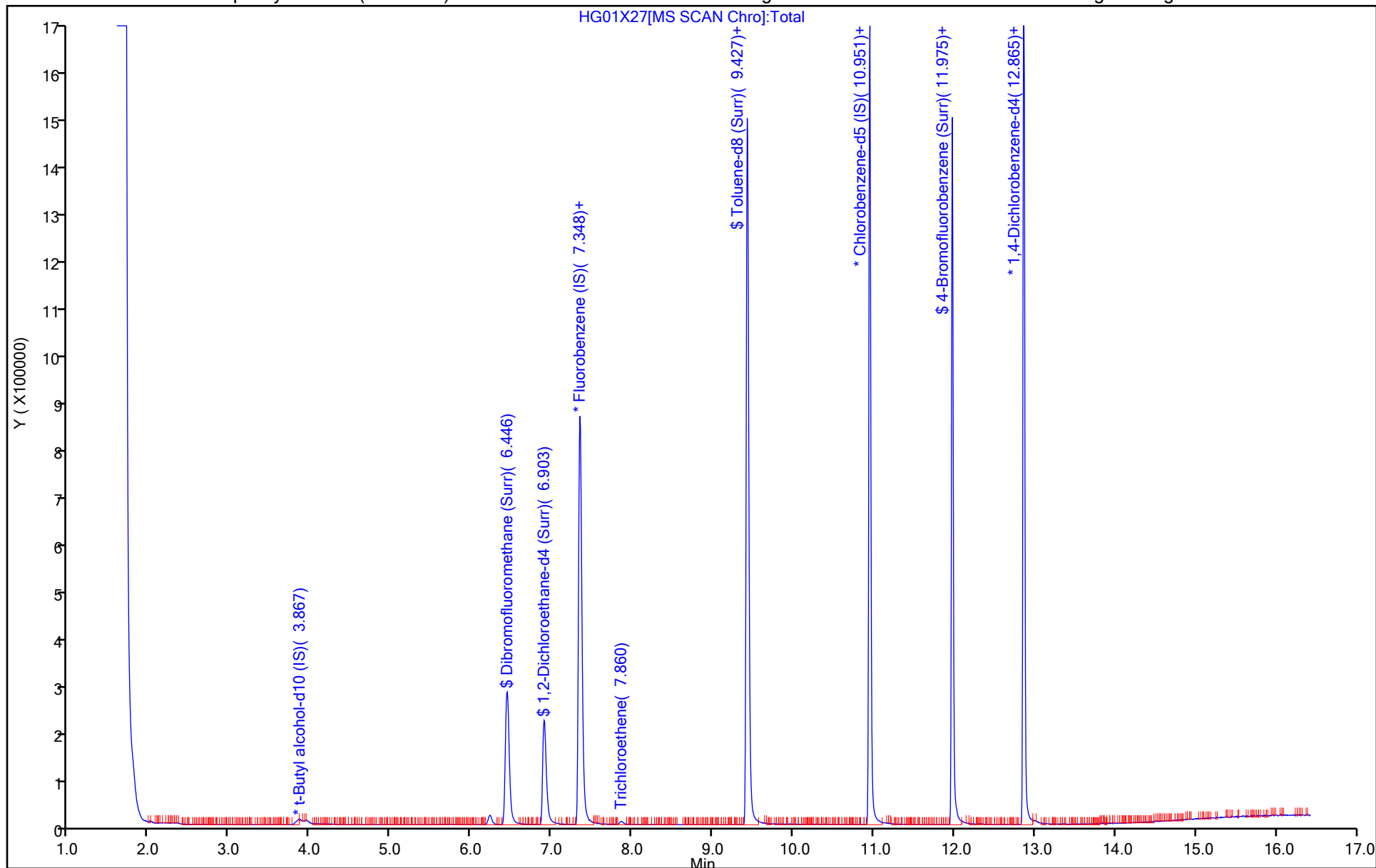
ALS Bottle#: 27

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X27.D
Lims ID: 410-234463-B-8
Client ID: 5W12A
Sample Type: Client
Inject. Date: 01-Aug-2025 20:18:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-028
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:53:25 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:53:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.5	104.87
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.75
\$ 83 Toluene-d8 (Surr)	10.0	9.53	95.25
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.84	98.41

Eurofins Lancaster Laboratories Environment Testing, LLC

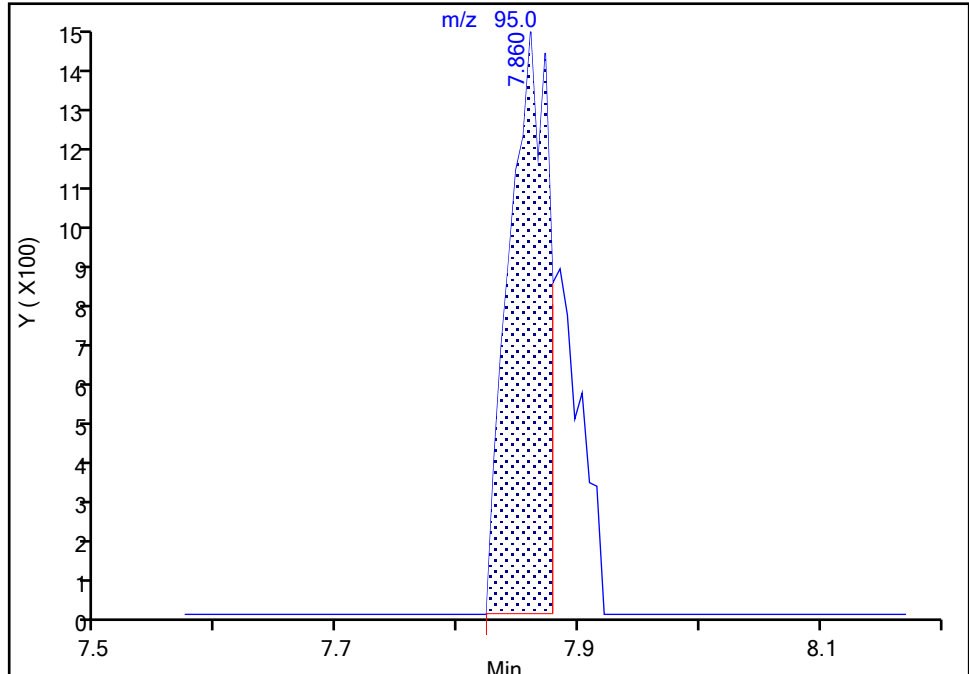
Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X27.D
Injection Date: 01-Aug-2025 20:18:30 Instrument ID: 19094
Lims ID: 410-234463-B-8 Lab Sample ID: 410-234463-8
Client ID: 5W12A
Operator ID: ecr105096 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

68 Trichloroethene, CAS: 79-01-6

Signal: 1

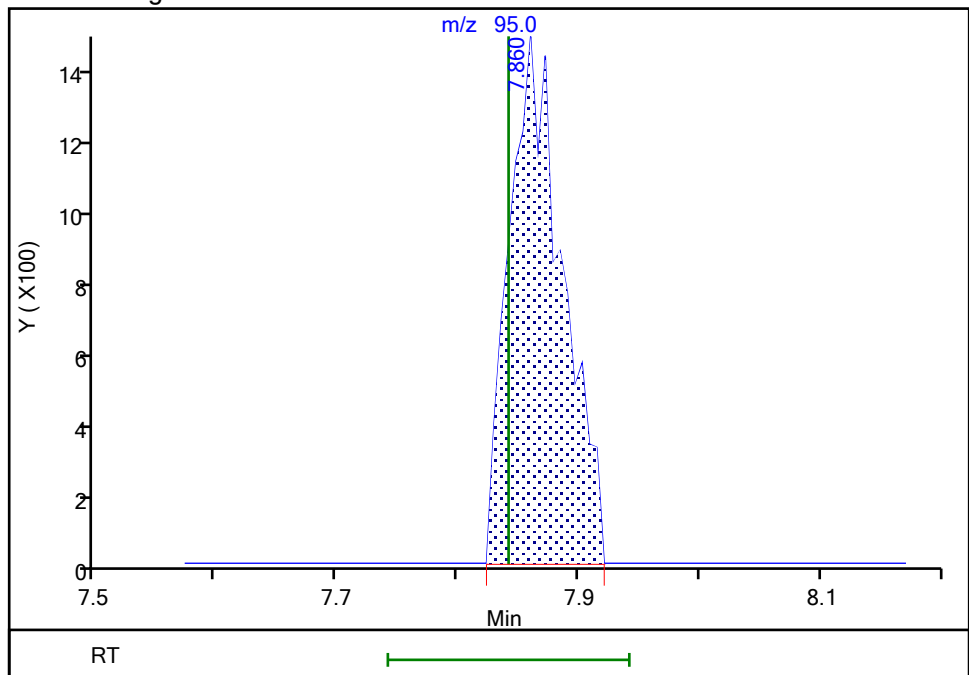
RT: 7.86
Area: 3366
Amount: 0.083665
Amount Units: ug/l

Processing Integration Results



RT: 7.86
Area: 4595
Amount: 0.114213
Amount Units: ug/l

Manual Integration Results



Reviewer: FQ4L, 04-Aug-2025 09:53:15 07:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: Trip Blank 1 Lab Sample ID: 410-234463-9

Matrix: Water Lab File ID: HG01X09.D

Analysis Method: 8260D Date Collected: 07/28/2025 00:00

Sample wt/vol: 25 (mL) Date Analyzed: 08/01/2025 14:07

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH: _____

% Moisture: _____ % Solids: _____ Level: (low/med) Low

Analysis Batch No.: 679324 Units: ug/L

Preparation Batch No.: _____ Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X09.D
 Lims ID: 410-234463-A-9
 Client ID: Trip Blank 1
 Sample Type: Client
 Inject. Date: 01-Aug-2025 14:07:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-010
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Aug-2025 19:02:24 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:29:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Vinyl chloride	62		2.117				ND	
17 1,1-Dichloroethene	96		3.251				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.848	3.867	-0.019	96	68861	50.0	
33 trans-1,2-Dichloroethene	96		4.233				ND	
42 cis-1,2-Dichloroethene	96		5.732				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.439	6.440	-0.001	94	295995	10.2	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	47	55408	10.5	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1251330	10.0	
68 Trichloroethene	95		7.842				ND	
\$ 83 Toluene-d8 (Surr)	98	9.433	9.427	0.006	94	1316589	9.42	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	1004903	10.0	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	494860	9.80	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	559961	10.0	

QC Flag Legend

Processing Flags

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:29:59

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X09.D

Injection Date: 01-Aug-2025 14:07:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-A-9

Lab Sample ID: 410-234463-9

Worklist Smp#: 10

Client ID: Trip Blank 1

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

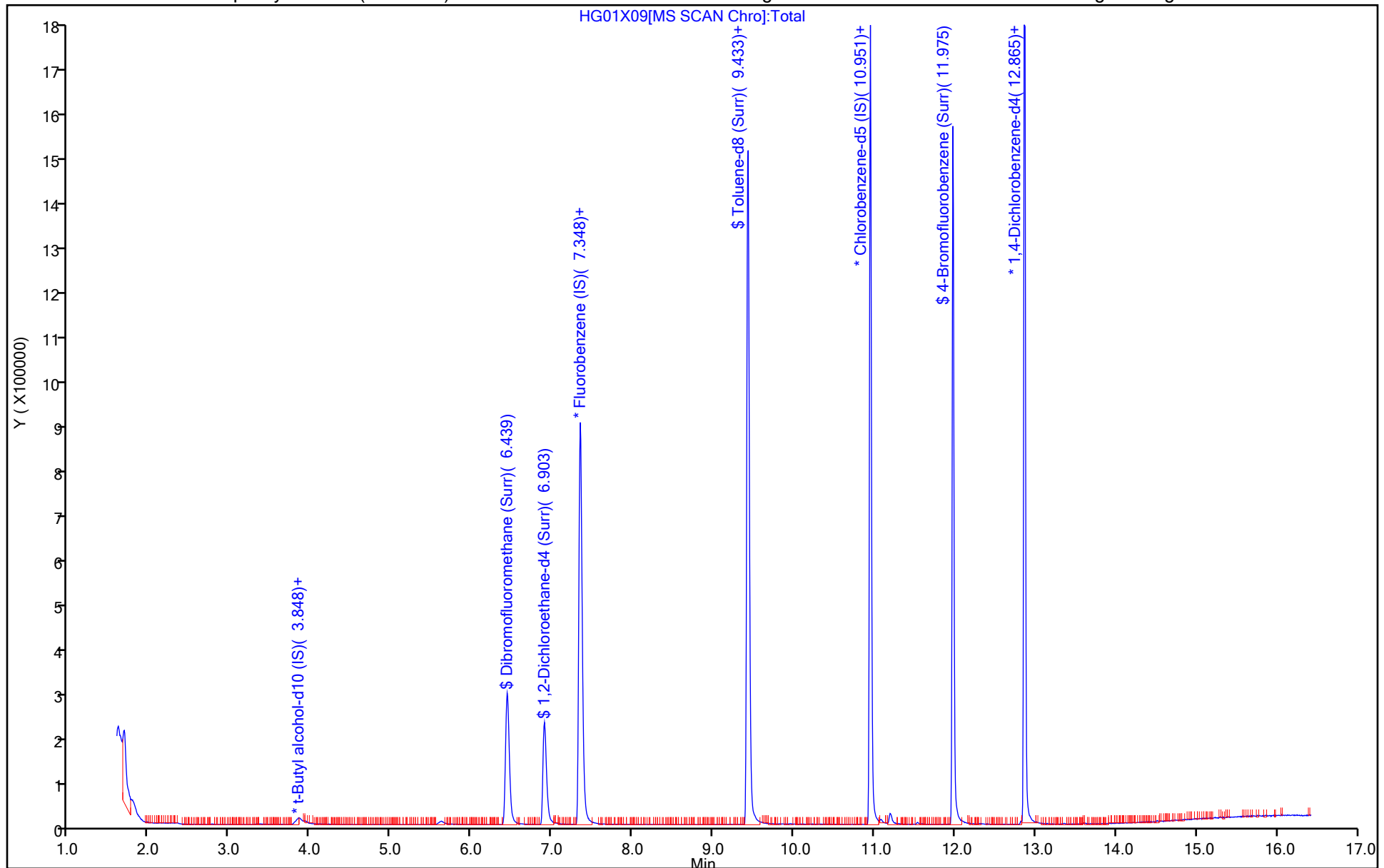
ALS Bottle#: 9

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X09.D
Lims ID: 410-234463-A-9
Client ID: Trip Blank 1
Sample Type: Client
Inject. Date: 01-Aug-2025 14:07:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-010
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Aug-2025 19:02:24 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:29:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.2	101.91
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.21
\$ 83 Toluene-d8 (Surr)	10.0	9.42	94.18
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.80	98.03

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-668589/13	HL08X12.D
Level 2	IC 410-668589/14	HL08X13.D
Level 3	IC 410-668589/15	HL08X14.D
Level 4	IC 410-668589/16	HL08X15.D
Level 5	IC 410-668589/17	HL08X16.D
Level 6	IC 410-668589/18	HL08X17.D
Level 7	IC 410-668589/19	HL08X18.D
Level 8	ICIS 410-668589/20	HL08X19.D
Level 9	IC 410-668589/21	HL08X20.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.3570 0.3038	0.3473 0.3124	0.2945 0.3183	0.3596 0.3038	0.3231	Ave		0.324 4			0.1000	7.5		20.0			
Chloromethane	++++ 0.3904	0.5601 0.3912	0.4411 0.3660	0.4450 0.3689	0.4651	Ave		0.428 5			0.1000	15.1		20.0			
1,3-Butadiene	++++ 0.3824	0.4671 0.3986	0.3819 0.3891	0.4935 0.3656	0.4167	Ave		0.411 9				11.0		20.0			
Vinyl chloride	++++ 0.3619	0.4273 0.3681	0.3796 0.3654	0.4250 0.3470	0.4253	Ave		0.387 4			0.1000	8.5		20.0			
Bromomethane	++++ 0.2582	0.2961 0.2607	0.2880 0.2545	0.2868 0.2504	0.3067	Ave		0.275 2			0.1000	7.8		20.0			
Chloroethane	++++ 0.2265	0.2520 0.2284	0.2630 0.2255	0.2604 0.2245	0.2660	Ave		0.243 3			0.1000	7.7		20.0			
Dichlorofluoromethane	++++ 0.6084	0.7194 0.6212	0.6634 0.6129	0.6912 0.6044	0.6865	Ave		0.650 9			0.1000	6.9		20.0			
Trichlorofluoromethane	0.6586 0.4621	0.5172 0.4741	0.4471 0.4784	0.5363 0.4582	0.4918	Ave		0.502 6			0.1000	12.9		20.0			
Ethyl ether	++++ 0.1790	0.1206 0.1881	0.1539 0.1877	0.1775 0.1859	0.1713	Ave		0.170 5				13.5		20.0			
Freon 123a	++++ 0.3522	0.4062 0.3587	0.3854 0.3628	0.3987 0.3571	0.3775	Ave		0.374 8				5.4		20.0			
Acrolein	2.6388 2.6704	2.3629 3.5298	2.6066 3.3314	2.7272 2.9059	3.2815	Ave		2.895 0				13.7		20.0			
1,1-Dichloroethene	++++ 0.2467	0.2486 0.2618	0.2669 0.2544	0.2345 0.2470	0.2713	Ave		0.253 9			0.1000	4.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
 Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Freon 113	0.1662 0.2642	0.2234 0.2867	0.2506 0.2835	0.2456 0.2700	0.2522	Ave		0.249 2			0.1000	14.8		20.0			
Acetone	++++ 3.1392	4.2856 3.5543	3.9982 3.3334	3.5784 2.9758	3.5516	Ave		3.552 1			0.1000	12.1		20.0			
Methyl iodide	++++ 0.4812	0.4581 0.5103	0.4955 0.4890	0.4621 0.4720	0.5266	Ave		0.486 8				4.8		20.0			
Ethyl bromide	0.1497 0.2184	0.2032 0.2300	0.2366 0.2260	0.2327 0.2248	0.2093	Ave		0.214 5				12.4		20.0			
Carbon disulfide	++++ 0.7292	0.8456 0.7846	0.8099 0.7551	0.7261 0.7460	0.8317	Ave		0.778 5			0.1000	6.0		20.0			
Methyl acetate	++++ 6.4072	++++ 9.3364	++++ 9.2494	8.1555 9.3765	8.4165	Ave		8.490 2			0.1000	13.5		20.0			
Allyl chloride	++++ 0.4780	0.5331 0.5062	0.5568 0.4858	0.4326 0.4804	0.5375	Ave		0.501 3				8.0		20.0			
Methylene Chloride	++++ 0.2607	0.2692 0.2754	0.2779 0.2627	0.2510 0.2577	0.2759	Ave		0.266 3			0.1000	3.7		20.0			
t-Butyl alcohol	++++ 1.1297	++++ 1.1694	1.1139 1.1088	1.0468 1.0910	0.9548	Ave		1.087 8				6.4		20.0			
Methyl tertiary butyl ether	0.6490 0.5811	0.5601 0.6123	0.5947 0.5926	0.5380 0.5744	0.5502	Ave		0.583 6			0.1000	5.8		20.0			
Acrylonitrile	++++ 3.3071	++++ 4.7969	++++ 4.6705	1.0645 4.4415	2.8622	Lin	-2.07 5	4.522 2							0.9980		0.9900
trans-1,2-Dichloroethene	++++ 0.2758	0.2486 0.2971	0.2944 0.2825	0.2680 0.2781	0.3057	Ave		0.281 3			0.1000	6.4		20.0			
n-Hexane	0.4097 0.4218	0.4278 0.4618	0.4092 0.4630	0.3964 0.4431	0.4090	Ave		0.426 9				5.7		20.0			
1,1-Dichloroethane	++++ 0.5402	0.4936 0.5780	0.5448 0.5539	0.5116 0.5428	0.5835	Ave		0.543 5			0.2000	5.6		20.0			
di-Isopropyl ether	++++ 0.9153	0.8824 0.9699	0.9615 0.9382	0.8495 0.9218	0.9020	Ave		0.917 6				4.4		20.0			
2-Chloro-1,3-butadiene	++++ 0.4681	0.3926 0.5048	0.4838 0.4894	0.4333 0.4860	0.5039	Ave		0.470 2				8.2		20.0			
Ethyl t-butyl ether	++++ 0.7997	0.7513 0.8502	0.8143 0.8216	0.7561 0.7988	0.7731	Ave		0.795 6				4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Butanone	+++++ 5.1838	+++++ 7.2493	5.2128 6.8251	5.6799 5.9080	6.5223	Ave		6.083 0			0.1000	13.2		20.0			
cis-1,2-Dichloroethene	+++++ 0.3112	0.2548 0.3300	0.3209 0.3154	0.2821 0.3092	0.3251	Ave		0.306 1			0.1000	8.3		20.0			
2,2-Dichloropropane	+++++ 0.4606	0.4613 0.4890	0.5093 0.4726	0.4404 0.4613	0.5081	Ave		0.475 3				5.2		20.0			
Propionitrile	+++++ 1.4350	+++++ 1.7216	+++++ 1.8051	1.1071 1.5413	1.4865	Ave		1.516 1				16.2		20.0			
Methacrylonitrile	+++++ 5.6924	4.6741 7.6904	5.0093 7.1793	5.6344 6.4014	6.6820	Ave		6.120 4				17.2		20.0			
Bromochloromethane	+++++ 0.1165	+++++ 0.1248	0.1107 0.1209	0.1106 0.1165	0.1108	Ave		0.115 8				4.8		20.0			
Tetrahydrofuran	+++++ 1.5829	+++++ 1.9560	+++++ 1.9007	1.4712 1.6379	1.7100	Ave		1.709 8				11.0		20.0			
Chloroform	+++++ 0.5026	0.4737 0.5297	0.5298 0.5110	0.4680 0.4991	0.5252	Ave		0.504 9			0.2000	4.8		20.0			
1,1,1-Trichloroethane	+++++ 0.4530	0.4843 0.4874	0.4846 0.4722	0.4430 0.4615	0.4907	Ave		0.472 1			0.1000	3.8		20.0			
Cyclohexane	0.7565 0.5488	0.5876 0.5823	0.5445 0.5842	0.5155 0.5623	0.5394	Ave		0.580 1			0.1000	12.1		20.0			
Carbon tetrachloride	+++++ 0.3930	0.3678 0.4254	0.3997 0.4167	0.3637 0.4109	0.4135	Ave		0.398 8			0.1000	5.7		20.0			
1,1-Dichloropropene	+++++ 0.4274	0.4168 0.4600	0.4235 0.4490	0.4092 0.4445	0.4550	Ave		0.435 7				4.3		20.0			
Isobutyl alcohol	+++++ 0.3660	+++++ 0.4165	0.5732 0.4225	0.4454 0.4077	0.3427	Ave		0.424 9				17.5		20.0			
Benzene	+++++ 1.2111	1.2784 1.2795	1.2598 1.2384	1.0941 1.2180	1.3339	Ave		1.239 1			0.5000	5.7		20.0			
1,2-Dichloroethane	+++++ 0.2757	0.3179 0.2939	0.2758 0.2762	0.2595 0.2630	0.2640	Ave		0.278 3			0.1000	7.0		20.0			
t-Amyl methyl ether	0.9650 0.6644	0.6060 0.7032	0.6539 0.6807	0.6138 0.6760	0.6335	Ave		0.688 5				15.8		20.0			
n-Heptane	+++++ 0.4103	0.5906 0.4614	0.4584 0.4612	0.3828 0.4468	0.3998	Ave		0.451 4				14.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
n-Butanol	+++++ 0.2909	+++++ 0.3371	+++++ 0.3660	0.1923 0.3699	0.1717	Lin	-13.6 7	0.376 5							1.0000		0.9900
Trichloroethene	+++++ 0.3125	0.3297 0.3357	0.3394 0.3236	0.2937 0.3194	0.3416	Ave		0.324 5			0.2000	4.9		20.0			
Methylcyclohexane	0.6989 0.5312	0.5655 0.5840	0.5264 0.5841	0.5116 0.5666	0.5151	Ave		0.564 8			0.1000	10.2		20.0			
1,2-Dichloropropane	+++++ 0.3003	0.2636 0.3226	0.2854 0.3121	0.2858 0.3087	0.3039	Ave		0.297 8			0.1000	6.3		20.0			
Methyl methacrylate	+++++ 10.823	+++++ 14.922	9.5423 14.434	10.934 13.493	13.214	Ave		12.48 0				16.4		20.0			
Dibromomethane	+++++ 0.1165	0.0678 0.1222	0.1154 0.1216	0.1086 0.1199	0.1106	Ave		0.110 3				16.2		20.0			
1,4-Dioxane	+++++ 0.0677	+++++ 0.0598	+++++ 0.0639	0.0104 0.0754	0.0302	Lin1	-1.75 4	0.073 7			0.0050				0.9930		0.9900
Bromodichloromethane	+++++ 0.3345	0.3127 0.3522	0.3342 0.3469	0.3036 0.3420	0.3314	Ave		0.332 2			0.2000	5.0		20.0			
2-Nitropropane	+++++ 3.2097	+++++ 4.3672	4.4435 4.1103	3.3994 3.6471	3.8922	Ave		3.867 1				12.2		20.0			
1-Bromo-2-chloroethane	0.2568 0.2621	0.2870 0.2670	0.2756 0.2667	0.2697 0.2660	0.2410	Ave		0.265 8				4.7		20.0			
cis-1,3-Dichloropropene	+++++ 0.4107	0.3572 0.4477	0.3987 0.4402	0.3684 0.4366	0.3931	Ave		0.406 6			0.2000	8.2		20.0			
4-Methyl-2-pentanone	22.804 15.187	15.439 19.350	14.451 18.245	16.053 16.198	18.250	Ave		17.33 1			0.1000	15.1		20.0			
Toluene	+++++ 1.0638	1.0603 1.1340	1.0725 1.0907	0.9815 1.0757	1.1456	Ave		1.078 0			0.4000	4.7		20.0			
trans-1,3-Dichloropropene	+++++ 0.4372	0.3548 0.4835	0.4288 0.4757	0.3662 0.4766	0.3932	Ave		0.427 0			0.1000	11.9		20.0			
Ethyl methacrylate	+++++ 0.3254	0.2094 0.3517	0.3021 0.3439	0.2681 0.3410	0.2731	Ave		0.301 8				16.3		20.0			
1,1,2-Trichloroethane	0.3050 0.2298	0.2227 0.2452	0.2399 0.2379	0.2217 0.2358	0.2163	Ave		0.239 4			0.1000	11.0		20.0			
Tetrachloroethene	+++++ 0.4909	0.4895 0.5351	0.5215 0.5195	0.4666 0.5067	0.5442	Ave		0.509 2			0.2000	5.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
 Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,3-Dichloropropane	0.4811 0.4175	0.3493 0.4505	0.3937 0.4362	0.3853 0.4302	0.4050	Ave		0.416 5				9.3		20.0			
2-Hexanone	++++ 9.9850	11.780 13.193	9.0472 12.510	9.1102 11.300	11.668	Ave		11.07 4			0.1000	13.9		20.0			
Dibromochloromethane	0.3613 0.3004	0.2203 0.3173	0.2799 0.3165	0.2731 0.3133	0.2788	Ave		0.295 7				13.2		20.0			
1,2-Dibromoethane	0.1953 0.2182	0.1837 0.2311	0.1874 0.2290	0.1974 0.2259	0.2013	Ave		0.207 7			0.1000	8.9		20.0			
1-Chlorohexane	++++ 0.5967	0.9860 0.6535	0.6961 0.6350	0.6104 0.6202	0.6319	Ave		0.678 7				18.8		20.0			
Chlorobenzene	++++ 1.1272	1.0777 1.1966	1.1878 1.1554	1.0498 1.1358	1.1932	Ave		1.140 4			0.5000	4.8		20.0			
1,1,1,2-Tetrachloroethane	++++ 0.3775	0.3431 0.4048	0.3610 0.3975	0.3568 0.3870	0.3760	Ave		0.375 5				5.6		20.0			
Ethylbenzene	++++ 2.0753	1.9671 2.2569	2.1873 2.1853	1.9605 2.1508	2.2386	Ave		2.127 7			0.1000	5.4		20.0			
m&p-Xylene	++++ 0.7926	0.7260 0.8667	0.8194 0.8378	0.7471 0.8259	0.8559	Ave		0.808 9			0.1000	6.2		20.0			
o-Xylene	++++ 0.7661	0.7044 0.8310	0.7396 0.8052	0.7029 0.7927	0.7900	Ave		0.766 5			0.3000	6.1		20.0			
Styrene	1.4054 1.2243	1.0934 1.3207	1.1468 1.2935	1.0910 1.2722	1.2263	Ave		1.230 4			0.3000	8.6		20.0			
Bromoform	++++ 0.1606	0.1043 0.1780	0.1364 0.1776	0.1429 0.1772	0.1458	Ave		0.152 8			0.1000	16.9		20.0			
Isopropylbenzene	++++ 1.8322	1.7439 2.0062	1.8844 1.9362	1.7148 1.9068	1.9652	Ave		1.873 7			0.1000	5.5		20.0			
1,1,2,2-Tetrachloroethane	++++ 0.4962	0.4859 0.5283	0.4846 0.5126	0.4718 0.5005	0.4627	Ave		0.492 8			0.3000	4.3		20.0			
Bromobenzene	++++ 0.8002	0.7616 0.8544	0.8093 0.8289	0.7412 0.8136	0.7903	Ave		0.799 9				4.5		20.0			
trans-1,4-Dichloro-2-butene	6.3293 5.8108	4.9867 7.7147	5.2940 7.3105	6.1660 6.7548	7.2650	Ave		6.403 5				14.7		20.0			
1,2,3-Trichloropropane	++++ 0.1302	0.0965 0.1355	0.1248 0.1336	0.1171 0.1299	0.1207	Ave		0.123 5				10.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
N-Propylbenzene	++++ 4.2964	4.2995 4.7186	4.2862 4.6081	4.0558 4.5642	4.7674	Ave		4.449 5				5.6		20.0			
2-Chlorotoluene	++++ 0.8533	0.7589 0.9152	0.8360 0.8896	0.7667 0.8749	0.9010	Ave		0.849 5				7.0		20.0			
1,3,5-Trimethylbenzene	++++ 3.0304	2.8437 3.3486	3.1253 3.2522	2.8095 3.2181	3.2822	Ave		3.113 8				6.5		20.0			
4-Chlorotoluene	++++ 0.8671	0.7406 0.9308	0.8357 0.8888	0.8071 0.8971	0.8784	Ave		0.855 7				7.0		20.0			
tert-Butylbenzene	++++ 0.6985	0.5948 0.7275	0.6678 0.7377	0.6401 0.7300	0.7029	Ave		0.687 4				7.3		20.0			
Pentachloroethane	0.3085 0.4856	0.3513 0.5209	0.4397 0.5305	0.4588 0.5457	0.4359	Ave		0.453 0				17.8		20.0			
1,2,4-Trimethylbenzene	++++ 3.1195	2.8692 3.3972	3.1139 3.3039	2.8200 3.3176	3.3461	Ave		3.160 9				7.0		20.0			
sec-Butylbenzene	++++ 3.8600	3.8542 4.2901	3.9608 4.2078	3.6203 4.1555	4.1549	Ave		4.012 9				5.7		20.0			
1,3-Dichlorobenzene	++++ 1.6051	1.4073 1.7293	1.6214 1.7003	1.4351 1.6854	1.6171	Ave		1.600 1			0.6000	7.4		20.0			
p-Isopropyltoluene	++++ 3.3281	3.1776 3.7157	3.3909 3.6480	3.0831 3.6080	3.5570	Ave		3.438 5				6.7		20.0			
1,4-Dichlorobenzene	++++ 1.6171	1.6192 1.7257	1.7240 1.6769	1.4936 1.6704	1.6585	Ave		1.648 2			0.5000	4.5		20.0			
1,2,3-Trimethylbenzene	++++ 1.3237	1.2051 1.4313	1.3426 1.3806	1.2223 1.3734	1.3816	Ave		1.332 6				6.0		20.0			
Benzyl chloride	++++ 0.1994	0.1470 0.2238	0.1939 0.2207	0.1719 0.2211	0.1767	Ave		0.194 3				14.2		20.0			
n-Butylbenzene	++++ 1.5637	1.4287 1.7900	1.5250 1.7736	1.4185 1.7819	1.6851	Ave		1.620 8				9.7		20.0			
1,2-Dichlorobenzene	++++ 1.4240	1.2330 1.5242	1.4052 1.4773	1.2662 1.4603	1.3752	Ave		1.395 7			0.4000	7.3		20.0			
1,2-Dibromo-3-Chloropropane	++++ 0.0674	++++ 0.0726	0.0592 0.0717	0.0550 0.0720	0.0600	Ave		0.065 4			0.0500	11.1		20.0			
1,3,5-Trichlorobenzene	++++ 1.1463	1.0285 1.2867	1.1382 1.2560	1.0519 1.2622	1.2299	Ave		1.175 0				8.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	+++++ 0.9352	0.8621 1.0427	0.9029 1.0186	0.8299 1.0200	0.9135	Ave		0.940 6			0.2000	8.4		20.0			
Hexachlorobutadiene	+++++ 0.4338	0.4572 0.5078	0.4547 0.5019	0.4072 0.5055	0.4516	Ave		0.465 n				7.9		20.0			
Naphthalene	1.8710 1.5324	1.4359 1.6415	1.4197 1.6285	1.3167 1.6256	1.3788	Ave		1.538 q				11.2		20.0			
1,2,3-Trichlorobenzene	+++++ 0.7812	0.6980 0.8525	0.7267 0.8415	0.6899 0.8494	0.7419	Ave		0.772 7				8.8		20.0			
Dibromofluoromethane (Surr)	0.2339 0.2319	0.2317 0.2323	0.2332 0.2332	0.2309 0.2310	0.2309	Ave		0.232 1				0.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0420 0.0426	0.0425 0.0413	0.0424 0.0418	0.0426 0.0421	0.0416	Ave		0.042 1				1.1		20.0			
Toluene-d8 (Surr)	1.3883 1.4013	1.3796 1.3960	1.3906 1.3986	1.3914 1.3952	1.3793	Ave		1.391 2				0.6		20.0			
4-Bromofluorobenzene (Surr)	0.5026 0.5006	0.5001 0.5053	0.5029 0.5006	0.5085 0.4987	0.5018	Ave		0.502 4				0.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-668589/13	HL08X12.D
Level 2	IC 410-668589/14	HL08X13.D
Level 3	IC 410-668589/15	HL08X14.D
Level 4	IC 410-668589/16	HL08X15.D
Level 5	IC 410-668589/17	HL08X16.D
Level 6	IC 410-668589/18	HL08X17.D
Level 7	IC 410-668589/19	HL08X18.D
Level 8	ICIS 410-668589/20	HL08X19.D
Level 9	IC 410-668589/21	HL08X20.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	1308 116582	3816 302265	10896 624423	33444 1507706	61195	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Chloromethane	FB	Ave	++++ 149825	6154 378525	16319 718011	41386 1830828	88097	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,3-Butadiene	FB	Ave	++++ 146745	5132 385703	14128 763286	45900 1814391	78930	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Vinyl chloride	FB	Ave	++++ 138881	4695 356177	14044 716713	39531 1721907	80555	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Bromomethane	FB	Ave	++++ 99105	3254 252303	10656 499257	26674 1242644	58080	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Chloroethane	FB	Ave	++++ 86920	2769 220980	9729 442356	24216 1113888	50372	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Dichlorofluoromethane	FB	Ave	++++ 233473	7904 601105	24545 1202204	64284 2999151	130016	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Trichlorofluoromethane	FB	Ave	2413 177329	5683 458755	16541 938347	49879 2273664	93150	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Ethyl ether	FB	Ave	++++ 68731	1326 182078	5694 368397	16510 922980	32457	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Freon 123a	FB	Ave	++++ 135158	4463 347126	14258 711711	37083 1771846	71506	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Acrolein	TBA d10	Ave	3792 455724	11100 1239479	42306 2465164	96203 5850045	207595	0.976 97.6	2.93 244	9.76 488	24.4 1220	48.8
1,1-Dichloroethene	FB	Ave	++++ 94688	2731 253325	9876 499068	21810 1225652	51386	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Freon 113	FB	Ave	609 101399	2455 277462	9271 556026	22840 1339738	47770	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Analy Batch No.: 668589

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Acetone	TBA01	Ave	++++ 109794	4126 255788	13299 505514	25870 1227790	46047	++++ 20.0	0.600 50.0	2.00 100	5.00 250	10.0
Methyl iodide	FB	Ave	++++ 184654	5034 493850	18331 959180	42979 2342180	99728	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Ethyl bromide	FB	Ave	548 83748	2230 222380	8744 442823	21619 1114461	39608	0.0200 2.00	0.0599 4.99	0.200 9.99	0.499 25.0	0.999
Carbon disulfide	FB	Ave	++++ 279844	9291 759245	29965 1481226	67533 3702011	157512	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Methyl acetate	TBA01	Ave	++++ 22409	++++ 67190	++++ 140269	5896 386860	10912	++++ 2.00	++++ 5.00	++++ 10.0	0.500 25.0	1.00
Allyl chloride	FB	Ave	++++ 183449	5857 489873	20600 952934	40231 2383763	101799	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Methylene Chloride	FB	Ave	++++ 100038	2958 266520	10281 515378	23348 1278663	52255	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
t-Butyl alcohol	TBA01	Ave	++++ 79019	++++ 168309	7410 336309	15135 900300	24757	++++ 40.0	++++ 100	4.00 200	10.0 500	20.0
Methyl tertiary butyl ether	FB	Ave	2378 222996	6154 592543	22002 1162506	50040 2850495	104199	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Acrylonitrile	TBA01	Lin	++++ 28916	++++ 86303	++++ 177072	1924 458127	9277	++++ 5.00	++++ 12.5	++++ 25.0	1.25 62.5	2.50
trans-1,2-Dichloroethene	FB	Ave	++++ 105838	2732 287503	10891 554106	24928 1379887	57900	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
n-Hexane	FB	Ave	1501 161870	4700 446874	15138 908221	36866 2198846	77464	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1-Dichloroethane	FB	Ave	++++ 207303	5424 559328	20154 1086565	47580 2693367	110510	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
di-Isopropyl ether	FB	Ave	++++ 351264	9696 938599	35572 1840317	79012 4574470	170834	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
2-Chloro-1,3-butadiene	FB	Ave	++++ 179644	4314 488508	17900 959967	40301 2411612	95438	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Ethyl t-butyl ether	FB	Ave	++++ 306907	8255 822765	30125 1611520	70319 3963662	146425	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
2-Butanone	TBA01	Ave	++++ 181301	++++ 521705	17339 1035047	41063 2437557	84562	++++ 20.0	++++ 50.0	2.00 100	5.00 250	10.0
cis-1,2-Dichloroethene	FB	Ave	++++ 119416	2800 319304	11873 618692	26237 1534308	61566	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Analy Batch No.: 668589

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2,2-Dichloropropane	FB	Ave	++++ 176775	5069 473211	18843 927098	40962 2289186	96232	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Propionitrile	TBAd1 0	Ave	++++ 100378	++++ 247792	++++ 547505	16007 1271828	38545	++++ 40.0	++++ 100	++++ 200	10.0 500	20.0
Methacrylonitrile	TBAd1 0	Ave	++++ 199089	4500 553450	16662 1088759	40734 2641135	86632	++++ 20.0	0.600 50.0	2.00 100	5.00 250	10.0
Bromochloromethane	FB	Ave	++++ 44691	++++ 120719	4094 237208	10286 578086	20976	++++ 2.00	++++ 5.00	0.200 10.0	0.500 25.0	1.00
Tetrahydrofuran	TBAd1 0	Ave	++++ 27680	++++ 70382	++++ 144123	5318 337883	11085	++++ 10.0	++++ 25.0	++++ 50.0	2.50 125	5.00
Chloroform	FB	Ave	++++ 192868	5205 512582	19601 1002345	43528 2476585	99467	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1,1-Trichloroethane	FB	Ave	++++ 173849	5321 471646	17929 926264	41202 2290094	92932	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Cyclohexane	FB	Ave	2772 210628	6456 563474	20145 1145978	47946 2790308	102163	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Carbon tetrachloride	FB	Ave	++++ 150816	4041 411604	14786 817391	33826 2038956	78314	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1-Dichloropropene	FB	Ave	++++ 164035	4580 445120	15668 880653	38060 2205717	86167	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Isobutyl alcohol	TBAd1 0	Ave	++++ 64006	++++ 149869	9533 320353	16101 840990	22218	++++ 100	++++ 250	10.0 500	25.0 1250	50.0
Benzene	FB	Ave	++++ 464773	14047 1238147	46610 2429128	101760 6043873	252625	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2-Dichloroethane	FB	Ave	++++ 105824	3493 284381	10204 541725	24134 1305181	50003	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
t-Amyl methyl ether	FB	Ave	3536 254992	6658 680442	24191 1335257	57087 3354384	119976	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
n-Heptane	FB	Ave	++++ 157443	6489 446501	16959 904590	35600 2217129	75711	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
n-Butanol	TBAd1 0	Lin	++++ 89011	++++ 212286	++++ 485627	12166 1335228	19477	++++ 175	++++ 438	++++ 875	43.8 2188	87.5
Trichloroethene	FB	Ave	++++ 119909	3623 324806	12557 634809	27316 1585054	64703	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Methylcyclohexane	FB	Ave	2561 203873	6213 565122	19474 1145666	47579 2811804	97556	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Analy Batch No.: 668589

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2-Dichloropropane	FB	Ave	++++ 115250	2896 312143	10560 612112	26586 1531863	57558	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Methyl methacrylate	TBAd1 0	Ave	++++ 37852	++++ 107390	3174 218897	7905 556682	17132	++++ 2.00	++++ 5.00	0.200 10.0	0.500 25.0	1.00
Dibromomethane	FB	Ave	++++ 44722	745 118264	4269 238541	10103 594857	20939	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,4-Dioxane	TBAd1 0	Lin1	++++ 11842	++++ 21502	++++ 48472	375 155644	1959	++++ 100	++++ 250	++++ 500	25.0 1250	50.0
Bromodichloromethane	FB	Ave	++++ 128359	3436 340773	12364 680527	28240 1697281	62768	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
2-Nitropropane	TBAd1 0	Ave	++++ 56130	++++ 157146	7390 311668	12288 752379	25231	++++ 10.0	++++ 25.0	1.00 50.0	2.50 125	5.00
1-Bromo-2-chloroethane	FB	Ave	941 100571	3153 258324	10197 523216	25080 1319994	45636	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
cis-1,3-Dichloropropene	FB	Ave	++++ 157614	3925 433233	14751 863378	34260 2166367	74455	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
4-Methyl-2-pentanone	TBAd1 0	Ave	6716 531151	14864 1392531	48068 2766816	116055 6682936	236617	0.200 20.0	0.600 50.0	2.00 100	5.00 250	10.0
Toluene	CBZd5	Ave	++++ 292117	8467 782001	28809 1523359	65671 3811666	155904	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
trans-1,3-Dichloropropene	CBZd5	Ave	++++ 120041	2833 333398	11519 664468	24503 1688774	53505	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Ethyl methacrylate	CBZd5	Ave	++++ 89339	1672 242524	8114 480377	17938 1208466	37170	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1,2-Trichloroethane	CBZd5	Ave	812 63106	1778 169067	6443 332280	14835 835586	29430	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Tetrachloroethene	CBZd5	Ave	++++ 134794	3909 369012	14008 725515	31216 1795563	74060	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,3-Dichloropropane	CBZd5	Ave	1281 114638	2789 310635	10576 609210	25777 1524489	55118	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
2-Hexanone	TBAd1 0	Ave	++++ 349222	11341 949481	30093 1897130	65862 4662358	151274	++++ 20.0	0.600 50.0	2.00 100	5.00 250	10.0
Dibromochloromethane	CBZd5	Ave	962 82477	1759 218816	7519 442033	18274 1110083	37944	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2-Dibromoethane	CBZd5	Ave	520 59928	1467 159363	5033 319837	13209 800536	27393	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Analy Batch No.: 668589

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Chlorohexane	CBZd5	Ave	++++ 163848	7873 450650	18699 886843	40837 2197487	85990	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Chlorobenzene	CBZd5	Ave	++++ 309505	8606 825184	31907 1613732	70237 4024592	162377	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1,1,2-Tetrachloroethane	CBZd5	Ave	++++ 103655	2740 279129	9697 555115	23870 1371335	51167	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Ethylbenzene	CBZd5	Ave	++++ 569846	15708 1556361	58754 3052167	131172 7621052	304640	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
m&p-Xylene	CBZd5	Ave	++++ 435268	11594 1195288	44021 2340303	99969 5852696	232944	++++ 4.00	0.120 10.0	0.400 20.0	1.00 50.0	2.00
o-Xylene	CBZd5	Ave	++++ 210355	5625 573083	19867 1124598	47027 2808980	107510	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Styrene	CBZd5	Ave	3742 336167	8731 910777	30805 1806603	72995 4508023	166885	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Bromoform	CBZd5	Ave	++++ 44093	833 122749	3664 248060	9558 627770	19846	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Isopropylbenzene	CBZd5	Ave	++++ 503108	13925 1383452	50618 2704279	114730 6756743	267430	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,1,2,2-Tetrachloroethane	DCBd4	Ave	++++ 75701	2155 202504	7205 397340	17617 985125	34943	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Bromobenzene	DCBd4	Ave	++++ 122079	3378 327504	12032 642588	27678 1601513	59684	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
trans-1,4-Dichloro-2-butene	TBA d1 0	Ave	1864 203233	4801 555194	17609 1108654	44577 2786924	94191	0.200 20.0	0.600 50.0	2.00 100	5.00 250	10.0
1,2,3-Trichloropropane	DCBd4	Ave	++++ 19860	428 51950	1856 103598	4374 255677	9112	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
N-Propylbenzene	DCBd4	Ave	++++ 655502	19070 1808682	63725 3572093	151451 8983978	360035	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
2-Chlorotoluene	DCBd4	Ave	++++ 130193	3366 350817	12429 689581	28630 1722075	68043	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,3,5-Trimethylbenzene	DCBd4	Ave	++++ 462350	12613 1283556	46466 2521045	104912 6334320	247870	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
4-Chlorotoluene	DCBd4	Ave	++++ 132295	3285 356779	12425 688971	30138 1765816	66335	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
tert-Butylbenzene	DCBd4	Ave	++++ 106575	2638 278845	9928 571835	23903 1436811	53085	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Pentachloroethane	DCBd4	Ave	454 74092	1558 199649	6538 411223	17133 1074097	32920	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2,4-Trimethylbenzene	DCBd4	Ave	++++	12726	46296	105302	252696	++++	0.0600	0.200	0.500	1.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
			475939	1302169	2561134	6530111		2.00	5.00	10.0	25.0	
sec-Butylbenzene	DCBd4	Ave	++++ 588910	17095 1644421	58887 3261820	135188 8179372	313774	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,3-Dichlorobenzene	DCBd4	Ave	++++ 244888	6242 662850	24106 1318028	53587 3317384	122123	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
p-Isopropyltoluene	DCBd4	Ave	++++ 507767	14094 1424244	50415 2827837	115129 7101704	268626	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,4-Dichlorobenzene	DCBd4	Ave	++++ 246726	7182 661485	25632 1299870	55773 3287920	125248	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2,3-Trimethylbenzene	DCBd4	Ave	++++ 201953	5345 548633	19961 1070213	45642 2703402	104340	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Benzyl chloride	DCBd4	Ave	++++ 30421	652 85767	2883 171072	6418 435250	13343	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
n-Butylbenzene	DCBd4	Ave	++++ 238574	6337 686136	22673 1374829	52968 3507357	127261	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2-Dichlorobenzene	DCBd4	Ave	++++ 217259	5469 584222	20892 1145202	47281 2874314	103857	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	++++ 10280	++++ 27817	880 55579	2053 141763	4528	++++ 2.00	++++ 5.00	0.200 10.0	0.500 25.0	1.00
1,3,5-Trichlorobenzene	DCBd4	Ave	++++ 174896	4562 493194	16922 973645	39280 2484502	92882	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2,4-Trichlorobenzene	DCBd4	Ave	++++ 142676	3824 399683	13424 789615	30990 2007740	68985	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Hexachlorobutadiene	DCBd4	Ave	++++ 66184	2028 194652	6760 389062	15207 995050	34103	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Naphthalene	DCBd4	Ave	2753 233797	6369 629216	21107 1262412	49166 3199809	104127	0.0200 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
1,2,3-Trichlorobenzene	DCBd4	Ave	++++ 119192	3096 326758	10805 652335	25762 1671921	56030	++++ 2.00	0.0600 5.00	0.200 10.0	0.500 25.0	1.00
Dibromofluoromethane (Surr)	FB	Ave	428541 444972	424242 449518	431324 457348	429583 458587	437313	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	76858 81800	77896 79921	78343 82019	79218 83477	78724	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0
Toluene-d8 (Surr)	CBZd5	Ave	1848290 1923949	1836061 1925363	1867719 1953391	1861945 1977484	1877074	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	669168 687274	665620 696910	675483 699215	680449 706803	682936	10.0 10.0	10.0 10.0	10.0 10.0	10.0 10.0	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Analy Batch No.: 668589

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-668589/13	HL08X12.D
Level 2	IC 410-668589/14	HL08X13.D
Level 3	IC 410-668589/15	HL08X14.D
Level 4	IC 410-668589/16	HL08X15.D
Level 5	IC 410-668589/17	HL08X16.D
Level 6	IC 410-668589/18	HL08X17.D
Level 7	IC 410-668589/19	HL08X18.D
Level 8	ICIS 410-668589/20	HL08X19.D
Level 9	IC 410-668589/21	HL08X20.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #	LVL 9 #				LVL 7	LVL 8	LVL 9			
Dichlorodifluoromethane	10.0 -3.7	7.1 -1.9	-9.2 -6.3	10.8	-0.4	-6.4	50 30	30 30	30 30	30	30	30
Chloromethane	++++ -8.7	30.7 -14.6	2.9 -13.9	3.8	8.6	-8.9	30	50 30	30 30	30	30	30
1,3-Butadiene	++++ -3.2	13.4 -5.5	-7.3 -11.2	19.8	1.2	-7.2	30	50 30	30 30	30	30	30
Vinyl chloride	++++ -5.0	10.3 -5.7	-2.0 -10.4	9.7	9.8	-6.6	30	50 30	30 30	30	30	30
Bromomethane	++++ -5.3	7.6 -7.5	4.7 -9.0	4.2	11.4	-6.2	30	50 30	30 30	30	30	30
Chloroethane	++++ -6.1	3.6 -7.3	8.1 -7.7	7.0	9.3	-6.9	30	50 30	30 30	30	30	30
Dichlorofluoromethane	++++ -4.6	10.5 -5.8	1.9 -7.1	6.2	5.5	-6.5	30	50 30	30 30	30	30	30
Trichlorofluoromethane	31.0 -5.7	2.9 -4.8	-11.0 -8.8	6.7	-2.1	-8.1	50 30	30 30	30 30	30	30	30
Ethyl ether	++++ 10.3	-29.2 10.1	-9.8 9.0	4.1	0.5	5.0	30	50 30	30 30	30	30	30
Freon 123a	++++ -4.3	8.4 -3.2	2.8 -4.7	6.4	0.7	-6.0	30	50 30	30 30	30	30	30
Acrolein	-8.8 21.9	-18.4 15.1	-10.0 0.4	-5.8	13.4	-7.8	50 30	30 30	30 30	30	30	30
1,1-Dichloroethene	++++ 3.1	-2.1 0.2	5.1 -2.7	-7.6	6.9	-2.8	30	50 30	30 30	30	30	30
Freon 113	-33.3 15.1	-10.3 13.8	0.6 8.4	-1.4	1.2	6.0	50 30	30 30	30 30	30	30	30
Acetone	++++ 0.1	20.7 -6.2	12.6 -16.2	0.7	0.0	-11.6	30	50 30	30 30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4	LVL 5	LVL 6
Methyl iodide	++++ 4.8	-5.9 0.4	1.8 -3.1	-5.1	8.2	-1.2	30	50 30	30 30	30	30	30
Ethyl bromide	-30.2 7.2	-5.3 5.3	10.3 4.8	8.5	-2.4	1.8	50 30	30 30	30 30	30	30	30
Carbon disulfide	++++ 0.8	8.6 -3.0	4.0 -4.2	-6.7	6.8	-6.3	30	50 30	30 30	30	30	30
Methyl acetate	++++ 10.0	++++ 8.9	++++ 10.4	-3.9	-0.9	-24.5	30	30	30	50	30	30
Allyl chloride	++++ 1.0	6.3 -3.1	11.1 -4.2	-13.7	7.2	-4.6	30	50 30	30 30	30	30	30
Methylene Chloride	++++ 3.4	1.1 -1.3	4.3 -3.2	-5.7	3.6	-2.1	30	50 30	30 30	30	30	30
t-Butyl alcohol	++++ 7.5	++++ 1.9	2.4 0.3	-3.8	-12.2	3.9	30	30	50 30	30	30	30
Methyl tertiary butyl ether	11.2 4.9	-4.0 1.5	1.9 -1.6	-7.8	-5.7	-0.4	50 30	30 30	30 30	30	30	30
Acrylonitrile	++++ 9.7	++++ 5.1	++++ -1.0	-39.8	-18.4	-17.7	30	30	30	50	30	30
trans-1,2-Dichloroethene	++++ 5.6	-11.6 0.4	4.7 -1.1	-4.7	8.7	-2.0	30	50 30	30 30	30	30	30
n-Hexane	-4.0 8.2	0.2 8.5	-4.1 3.8	-7.1	-4.2	-1.2	50 30	30 30	30 30	30	30	30
1,1-Dichloroethane	++++ 6.3	-9.2 1.9	0.2 -0.1	-5.9	7.3	-0.6	30	50 30	30 30	30	30	30
di-Isopropyl ether	++++ 5.7	-3.8 2.2	4.8 0.5	-7.4	-1.7	-0.2	30	50 30	30 30	30	30	30
2-Chloro-1,3-butadiene	++++ 7.4	-16.5 4.1	2.9 3.3	-7.9	7.2	-0.5	30	50 30	30 30	30	30	30
Ethyl t-butyl ether	++++ 6.9	-5.6 3.3	2.3 0.4	-5.0	-2.8	0.5	30	50 30	30 30	30	30	30
2-Butanone	++++ 19.2	++++ 12.2	-14.3 -2.9	-6.6	7.2	-14.8	30	30	50 30	30	30	30
cis-1,2-Dichloroethene	++++ 7.8	-16.7 3.0	4.8 1.0	-7.8	6.2	1.7	30	50 30	30 30	30	30	30
2,2-Dichloropropane	++++ 2.9	-2.9 -0.6	7.1 -3.0	-7.3	6.9	-3.1	30	50 30	30 30	30	30	30
Propionitrile	++++ 13.6	++++ 19.1	++++ 1.7	-27.0	-2.0	-5.3	30	30	30	50	30	30
Methacrylonitrile	++++ 25.7	-23.6 17.3	-18.2 4.6	-7.9	9.2	-7.0	30	50 30	30 30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4	LVL 5	LVL 6
Bromochloromethane	++++ 7.7	++++ 4.4	-4.4 0.6	-4.5	-4.4	0.6	30	30	50 30	30	30	30
Tetrahydrofuran	++++ 14.4	++++ 11.2	++++ -4.2	-14.0	0.0	-7.4	30	30	30	50	30	30
Chloroform	++++ 4.9	-6.2 1.2	4.9 -1.1	-7.3	4.0	-0.5	30	50 30	30 30	30	30	30
1,1,1-Trichloroethane	++++ 3.2	2.6 0.0	2.7 -2.2	-6.2	3.9	-4.0	30	50 30	30 30	30	30	30
Cyclohexane	30.4 0.4	1.3 0.7	-6.1 -3.1	-11.1	-7.0	-5.4	50 30	30 30	30 30	30	30	30
Carbon tetrachloride	++++ 6.7	-7.8 4.5	0.2 3.0	-8.8	3.7	-1.5	30	50 30	30 30	30	30	30
1,1-Dichloropropene	++++ 5.6	-4.3 3.0	-2.8 2.0	-6.1	4.4	-1.9	30	50 30	30 30	30	30	30
Isobutyl alcohol	++++ -2.0	++++ -0.6	34.9 -4.0	4.8	-19.3	-13.9	30	30	50 30	30	30	30
Benzene	++++ 3.3	3.2 -0.1	1.7 -1.7	-11.7	7.6	-2.3	30	50 30	30 30	30	30	30
1,2-Dichloroethane	++++ 5.6	14.2 -0.7	-0.9 -5.5	-6.7	-5.1	-0.9	30	50 30	30 30	30	30	30
t-Amyl methyl ether	40.2 2.1	-12.0 -1.1	-5.0 -1.8	-10.8	-8.0	-3.5	50 30	30 30	30 30	30	30	30
n-Heptane	++++ 2.2	30.8 2.2	1.6 -1.0	-15.2	-11.4	-9.1	30	50 30	30 30	30	30	30
n-Butanol	++++ -2.2	++++ 1.3	++++ -0.1	34.0	-12.9	-2.0	30	30	30	50	30	30
Trichloroethene	++++ 3.5	1.6 -0.3	4.6 -1.6	-9.5	5.3	-3.7	30	50 30	30 30	30	30	30
Methylcyclohexane	23.7 3.4	0.1 3.4	-6.8 0.3	-9.4	-8.8	-5.9	50 30	30 30	30 30	30	30	30
1,2-Dichloropropane	++++ 8.3	-11.5 4.8	-4.2 3.7	-4.0	2.1	0.8	30	50 30	30 30	30	30	30
Methyl methacrylate	++++ 19.6	++++ 15.7	-23.5 8.1	-12.4	5.9	-13.3	30	30	50 30	30	30	30
Dibromomethane	++++ 10.8	-38.5 10.2	4.6 8.7	-1.5	0.2	5.6	30	50 30	30 30	30	30	30
1,4-Dioxane	++++ -9.4	++++ -8.5	++++ 4.3	9.3	-11.4	15.7	30	30	30	50	30	30
Bromodichloromethane	++++ 6.0	-5.9 4.4	0.6 3.0	-8.6	-0.2	0.7	30	50 30	30 30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4	LVL 5	LVL 6
2-Nitropropane	++++ 12.9	++++ 6.3	14.9 -5.7	-12.1	0.6	-17.0	30	30	50 30	30	30	30
1-Bromo-2-chloroethane	-3.4 0.5	8.0 0.4	3.7 0.1	1.5	-9.3	-1.4	50 30	30 30	30 30	30	30	30
cis-1,3-Dichloropropene	++++ 10.1	-12.1 8.3	-1.9 7.4	-9.4	-3.3	1.0	30	50 30	30 30	30	30	30
4-Methyl-2-pentanone	31.6 11.7	-10.9 5.3	-16.6 -6.5	-7.4	5.3	-12.4	50 30	30 30	30 30	30	30	30
Toluene	++++ 5.2	-1.6 1.2	-0.5 -0.2	-9.0	6.3	-1.3	30	50 30	30 30	30	30	30
trans-1,3-Dichloropropene	++++ 13.2	-16.9 11.4	0.4 11.6	-14.2	-7.9	2.4	30	50 30	30 30	30	30	30
Ethyl methacrylate	++++ 16.5	-30.6 13.9	0.1 13.0	-11.2	-9.5	7.8	30	50 30	30 30	30	30	30
1,1,2-Trichloroethane	27.4 2.4	-7.0 -0.6	0.2 -1.5	-7.4	-9.6	-4.0	50 30	30 30	30 30	30	30	30
Tetrachloroethene	++++ 5.1	-3.9 2.0	2.4 -0.5	-8.4	6.9	-3.6	30	50 30	30 30	30	30	30
1,3-Dichloropropane	15.5 8.1	-16.1 4.7	-5.5 3.3	-7.5	-2.8	0.2	50 30	30 30	30 30	30	30	30
2-Hexanone	++++ 19.1	6.4 13.0	-18.3 2.0	-17.7	5.4	-9.8	30	50 30	30 30	30	30	30
Dibromochloromethane	22.2 7.3	-25.5 7.0	-5.3 6.0	-7.6	-5.7	1.6	50 30	30 30	30 30	30	30	30
1,2-Dibromoethane	-6.0 11.3	-11.6 10.3	-9.8 8.8	-5.0	-3.1	5.1	50 30	30 30	30 30	30	30	30
1-Chlorohexane	++++ -3.7	45.3 -6.4	2.6 -8.6	-10.1	-6.9	-12.1	30	50 30	30 30	30	30	30
Chlorobenzene	++++ 4.9	-5.5 1.3	4.2 -0.4	-8.0	4.6	-1.2	30	50 30	30 30	30	30	30
1,1,1,2-Tetrachloroethane	++++ 7.8	-8.6 5.9	-3.8 3.1	-5.0	0.1	0.5	30	50 30	30 30	30	30	30
Ethylbenzene	++++ 6.1	-7.5 2.7	2.8 1.1	-7.9	5.2	-2.5	30	50 30	30 30	30	30	30
m&p-Xylene	++++ 7.1	-10.3 3.6	1.3 2.1	-7.6	5.8	-2.0	30	50 30	30 30	30	30	30
o-Xylene	++++ 8.4	-8.1 5.0	-3.5 3.4	-8.3	3.1	-0.1	30	50 30	30 30	30	30	30
Styrene	14.2 7.3	-11.1 5.1	-6.8 3.4	-11.3	-0.3	-0.5	50 30	30 30	30 30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4	LVL 5	LVL 6
Bromoform	++++ 16.5	-31.7 16.2	-10.8 15.9	-6.5	-4.6	5.1	30	50 30	30 30	30	30	30
Isopropylbenzene	++++ 7.1	-6.9 3.3	0.6 1.8	-8.5	4.9	-2.2	30	50 30	30 30	30	30	30
1,1,2,2-Tetrachloroethane	++++ 7.2	-1.4 4.0	-1.7 1.6	-4.3	-6.1	0.7	30	50 30	30 30	30	30	30
Bromobenzene	++++ 6.8	-4.8 3.6	1.2 1.7	-7.3	-1.2	0.0	30	50 30	30 30	30	30	30
trans-1,4-Dichloro-2-butene	-1.2 20.5	-22.1 14.2	-17.3 5.5	-3.7	13.5	-9.3	50 30	30 30	30 30	30	30	30
1,2,3-Trichloropropane	++++ 9.7	-21.9 8.2	1.0 5.1	-5.2	-2.3	5.4	30	50 30	30 30	30	30	30
N-Propylbenzene	++++ 6.0	-3.4 3.6	-3.7 2.6	-8.8	7.1	-3.4	30	50 30	30 30	30	30	30
2-Chlorotoluene	++++ 7.7	-10.7 4.7	-1.6 3.0	-9.7	6.1	0.5	30	50 30	30 30	30	30	30
1,3,5-Trimethylbenzene	++++ 7.5	-8.7 4.4	0.4 3.4	-9.8	5.4	-2.7	30	50 30	30 30	30	30	30
4-Chlorotoluene	++++ 8.8	-13.4 3.9	-2.3 4.8	-5.7	2.7	1.3	30	50 30	30 30	30	30	30
tert-Butylbenzene	++++ 5.8	-13.5 7.3	-2.9 6.2	-6.9	2.3	1.6	30	50 30	30 30	30	30	30
Pentachloroethane	-31.9 15.0	-22.5 17.1	-2.9 20.5	1.3	-3.8	7.2	50 30	30 30	30 30	30	30	30
1,2,4-Trimethylbenzene	++++ 7.5	-9.2 4.5	-1.5 5.0	-10.8	5.9	-1.3	30	50 30	30 30	30	30	30
sec-Butylbenzene	++++ 6.9	-4.0 4.9	-1.3 3.6	-9.8	3.5	-3.8	30	50 30	30 30	30	30	30
1,3-Dichlorobenzene	++++ 8.1	-12.0 6.3	1.3 5.3	-10.3	1.1	0.3	30	50 30	30 30	30	30	30
p-Isopropyltoluene	++++ 8.1	-7.6 6.1	-1.4 4.9	-10.3	3.4	-3.2	30	50 30	30 30	30	30	30
1,4-Dichlorobenzene	++++ 4.7	-1.8 1.7	4.6 1.3	-9.4	0.6	-1.9	30	50 30	30 30	30	30	30
1,2,3-Trimethylbenzene	++++ 7.4	-9.6 3.6	0.8 3.1	-8.3	3.7	-0.7	30	50 30	30 30	30	30	30
Benzyl chloride	++++ 15.2	-24.3 13.6	-0.2 13.8	-11.5	-9.1	2.6	30	50 30	30 30	30	30	30
n-Butylbenzene	++++ 10.4	-11.9 9.4	-5.9 9.9	-12.5	4.0	-3.5	30	50 30	30 30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1 Analy Batch No.: 668589
Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2025 04:17 Calibration End Date: 07/09/2025 07:02 Calibration ID: 74555

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4	LVL 5	LVL 6
1,2-Dichlorobenzene	++++ 9.2	-11.7 5.9	0.7 4.6	-9.3	-1.5	2.0	30	50 30	30 30	30	30	30
1,2-Dibromo-3-Chloropropane	++++ 11.0	++++ 9.6	-9.5 10.1	-15.9	-8.3	3.0	30	30 30	50 30	30	30	30
1,3,5-Trichlorobenzene	++++ 9.5	-12.5 6.9	-3.1 7.4	-10.5	4.7	-2.4	30	50 30	30 30	30	30	30
1,2,4-Trichlorobenzene	++++ 10.9	-8.3 8.3	-4.0 8.4	-11.8	-2.9	-0.6	30	50 30	30 30	30	30	30
Hexachlorobutadiene	++++ 9.2	-1.7 7.9	-2.2 8.7	-12.4	-2.9	-6.7	30	50 30	30 30	30	30	30
Naphthalene	21.6 6.7	-6.7 5.8	-7.7 5.6	-14.4	-10.4	-0.4	50 30	30 30	30 30	30	30	30
1,2,3-Trichlorobenzene	++++ 10.3	-9.7 8.9	-5.9 9.9	-10.7	-4.0	1.1	30	50 30	30 30	30	30	30
Dibromofluoromethane (Surr)	0.8 0.1	-0.2 0.5	0.5 -0.5	-0.5	-0.5	-0.1	50 30	30 30	30 30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-0.3 -1.9	1.1 -0.7	0.6 -0.1	1.2	-1.2	1.3	50 30	30 30	30 30	30	30	30
Toluene-d8 (Surr)	-0.2 0.3	-0.8 0.5	0.0 0.3	0.0	-0.9	0.7	50 30	30 30	30 30	30	30	30
4-Bromofluorobenzene (Surr)	0.1 0.6	-0.4 -0.3	0.1 -0.7	1.2	-0.1	-0.4	50 30	30 30	30 30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
 Lims ID: IC std1 0.02
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 09-Jul-2025 04:17:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-013
 Misc. Info.: IC STD1 0.02
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:04:43 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:13:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.806	1.831	-0.025	30	1308	0.0200	0.0220	
5 Chloromethane	50	2.001	2.013	-0.012	95	5977	0.0200	0.0761	
7 Butadiene	39	2.093	2.105	-0.012	85	2674	0.0200	0.0354	
6 Vinyl chloride	62	2.105	2.123	-0.018	96	3765	0.0200	0.0530	
9 Bromomethane	94	2.385	2.391	-0.006	1	3181	0.0200	0.0631	M
10 Chloroethane	64	2.465	2.477	-0.012	1	2691	0.0200	0.0604	
11 Dichlorofluoromethane	67	2.678	2.690	-0.012	94	7614	0.0200	0.0638	
12 Trichlorofluoromethane	101	2.678	2.788	-0.110	1	2413	0.0200	0.0262	M
14 Ethyl ether	59		2.971				ND	ND	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.038	3.050	-0.012	1	2955	0.0200	0.0430	
16 Acrolein	56	3.221	3.117	0.104	23	3792	0.9759	0.8895	M
17 1,1-Dichloroethene	96	3.239	3.251	-0.012	93	2423	0.0200	0.0521	
19 Acetone	43		3.275				0.2000	ND	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.275	3.294	-0.019	1	609	0.0200	0.0133	M
21 Iodomethane	142	3.422	3.434	-0.012	97	5897	0.0200	0.0661	
22 Ethyl bromide	108	3.452	3.458	-0.006	24	548	0.0200	0.0139	M
23 Carbon disulfide	76	3.538	3.531	0.007	99	10099	0.0200	0.0708	M
24 Methyl acetate	43		3.660				ND	ND	U
26 3-Chloro-1-propene	41	3.696	3.684	0.012	86	8700	0.0200	0.0947	
27 Methylene Chloride	84	3.849	3.855	-0.006	77	2803	0.0200	0.0574	
* 28 t-Butyl alcohol-d10 (IS)	65	3.849	3.891	-0.042	97	73626	50.0	50.0	
29 2-Methyl-2-propanol	59		3.995				ND	ND	
31 Acrylonitrile	53		4.184				ND	ND	
32 Methyl tert-butyl ether	73	4.196	4.214	-0.018	56	2378	0.0200	0.0222	
33 trans-1,2-Dichloroethene	96	4.245	4.239	0.006	97	3142	0.0200	0.0610	
34 Hexane	57	4.647	4.659	-0.012	10	1501	0.0200	0.0192	
36 1,1-Dichloroethane	63	4.891	4.891	0.000	89	6159	0.0200	0.0619	
37 Isopropyl ether	45	4.952	4.952	0.000	76	7059	0.0200	0.0420	
38 2-Chloro-1,3-butadiene	53	5.013	5.001	0.012	7	3992	0.0200	0.0463	
40 Tert-butyl ethyl ether	59	5.495	5.495	0.001	86	4990	0.0200	0.0342	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43		5.690				ND	ND	U
42 cis-1,2-Dichloroethene	96	5.757	5.732	0.025	79	3089	0.0200	0.0551	
43 2,2-Dichloropropane	77	5.744	5.744	0.000	73	4741	0.0200	0.0544	
44 Propionitrile	54		5.775				ND	ND	
47 Methacrylonitrile	67		5.988				0.2000	ND	
48 Chlorobromomethane	128		6.068				ND	ND	
49 Tetrahydrofuran	71		6.080				ND	ND	
S 46 1,2-Dichloroethene, Total	100				0			0.1161	
50 Chloroform	83	6.214	6.226	-0.012	88	5660	0.0200	0.0612	
\$ 52 Dibromofluoromethane (Surr)	113	6.433	6.446	-0.013	94	428541	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	84	4664	0.0200	0.0539	
54 Cyclohexane	56	6.555	6.561	-0.006	74	2772	0.0200	0.0261	
56 Carbon tetrachloride	117	6.665	6.677	-0.012	80	3019	0.0200	0.0413	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	87	3734	0.0200	0.0468	
57 Isobutyl alcohol	41	6.824	6.824	0.000	1	908	1.00	1.45	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.897	0.006	77	76858	10.0	9.97	
59 Benzene	78	6.933	6.939	-0.006	92	14215	0.0200	0.0626	
60 1,2-Dichloroethane	62	7.006	7.006	0.000	1	1828	0.0200	0.0359	
63 Tert-amyl methyl ether	73	7.128	7.141	-0.013	95	3536	0.0200	0.0280	
* 64 Fluorobenzene (IS)	96	7.342	7.354	-0.012	99	1832045	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	60	3169	0.0200	0.0383	
67 n-Butanol	56		7.732				ND	ND	
68 Trichloroethene	95	7.848	7.842	0.006	94	3759	0.0200	0.0632	
69 Methylcyclohexane	83	8.153	8.159	-0.006	56	2561	0.0200	0.0247	
70 1,2-Dichloropropane	63	8.171	8.177	-0.006	71	2720	0.0200	0.0499	
71 2-ethoxy-2-methyl butane	87	8.201	8.195	0.006	87	3232	0.0200	0.0391	
72 Methyl methacrylate	69		8.268				ND	ND	
73 1,4-Dioxane	88		8.287				ND	ND	
74 Dibromomethane	93		8.287				ND	ND	
76 Dichlorobromomethane	83	8.537	8.531	0.007	89	2489	0.0200	0.0409	M
77 2-Nitropropane	41	8.811	8.793	0.018	46	1862	0.1000	0.3270	M
79 1-Bromo-2-chloroethane	63	8.951	8.927	0.024	1	941	0.0200	0.0193	
80 cis-1,3-Dichloropropene	75	9.116	9.097	0.019	84	3023	0.0200	0.0406	M
82 4-Methyl-2-pentanone (MIBK)	43	9.305	9.280	0.025	86	6716	0.2000	0.2632	M
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1848290	10.0	9.98	
84 Toluene	92	9.512	9.506	0.006	95	9137	0.0200	0.0637	
85 trans-1,3-Dichloropropene	75		9.786				ND	ND	U
104 Ethyl methacrylate	69		9.860				ND	ND	U
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	1	812	0.0200	0.0255	
S 105 1,3-Dichloropropene, Total	100				0			0.0406	
107 Tetrachloroethene	166	10.091	10.091	0.000	93	3845	0.0200	0.0567	
108 1,3-Dichloropropane	76	10.177	10.164	0.013	84	1281	0.0200	0.0231	
109 2-Hexanone	43	10.268	10.219	0.049	32	5438	0.2000	0.3335	M
111 Chlorodibromomethane	129	10.396	10.390	0.006	77	962	0.0200	0.0244	
112 Ethylene Dibromide	107	10.518	10.500	0.018	2	520	0.0200	0.0188	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	87	1331318	10.0	10.0	
114 1-Chlorohexane	91	10.957	10.963	-0.006	55	6362	0.0200	0.0704	M
115 Chlorobenzene	112	10.981	10.975	0.006	92	8792	0.0200	0.0579	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.060	0.001	40	2094	0.0200	0.0419	
117 Ethylbenzene	91	11.073	11.067	0.006	98	13973	0.0200	0.0493	
119 m-Xylene & p-Xylene	106	11.195	11.189	0.006	99	12209	0.0400	0.1134	
S 118 Xylenes, Total	106				0			0.1682	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.524	11.518	0.006	96	5600	0.0200	0.0549	
121 Styrene	104	11.560	11.536	0.024	89	3742	0.0200	0.0228	M
122 Bromoform	173		11.695				ND	ND	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	14053	0.0200	0.0563	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	669168	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83		12.079				ND	ND	
128 Bromobenzene	156	12.091	12.091	0.000	96	2667	0.0200	0.0453	
129 trans-1,4-Dichloro-2-butene	53	12.127	12.103	0.024	82	1864	0.2000	0.1977	
130 1,2,3-Trichloropropane	110		12.121				ND	ND	
131 N-Propylbenzene	91	12.170	12.164	0.006	99	17829	0.0200	0.0545	
132 2-Chlorotoluene	126	12.237	12.237	0.000	95	3518	0.0200	0.0563	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	13125	0.0200	0.0573	
134 4-Chlorotoluene	126	12.335	12.329	0.006	97	3203	0.0200	0.0509	
135 tert-Butylbenzene	134	12.542	12.542	0.000	92	2597	0.0200	0.0514	
136 Pentachloroethane	167	12.572	12.572	0.000	1	454	0.0200	0.0136	
137 1,2,4-Trimethylbenzene	105	12.591	12.585	0.006	97	12888	0.0200	0.0554	
138 sec-Butylbenzene	105	12.713	12.707	0.006	94	14211	0.0200	0.0481	
139 1,3-Dichlorobenzene	146	12.816	12.804	0.012	96	6096	0.0200	0.0518	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	12812	0.0200	0.0506	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	735717	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	85	6492	0.0200	0.0535	
143 1,2,3-Trimethylbenzene	120	12.896	12.889	0.007	93	5439	0.0200	0.0555	
144 Benzyl chloride	126		12.956				ND	ND	
145 p-Diethylbenzene	119	13.097	13.097	0.000	93	6907	0.0200	0.0466	
146 n-Butylbenzene	92	13.115	13.115	0.000	95	4896	0.0200	0.0411	
147 1,2-Dichlorobenzene	146	13.152	13.139	0.013	94	4416	0.0200	0.0430	
149 1,2-Dibromo-3-Chloropropane	155		13.688				ND	ND	
150 1,3,5-Trichlorobenzene	180	13.822	13.816	0.006	95	4542	0.0200	0.0525	
151 1,2,4-Trichlorobenzene	180	14.249	14.237	0.012	89	2862	0.0200	0.0414	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	88	1652	0.0200	0.0483	
153 Naphthalene	128	14.432	14.414	0.018	89	2753	0.0200	0.0243	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	93	2079	0.0200	0.0366	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LL_GAS826_00279

Amount Added: 0.40

Units: uL

MSV_LL_#1_826_00171

Amount Added: 0.40

Units: uL

MSV_LL_#2_826_00185

Amount Added: 0.40

Units: uL

MSV_LLcentISS_00016

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 16-Jul-2025 16:04:44

Chrom Revision: 2.3 14-Jul-2025 13:55:14

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std1 0.02

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

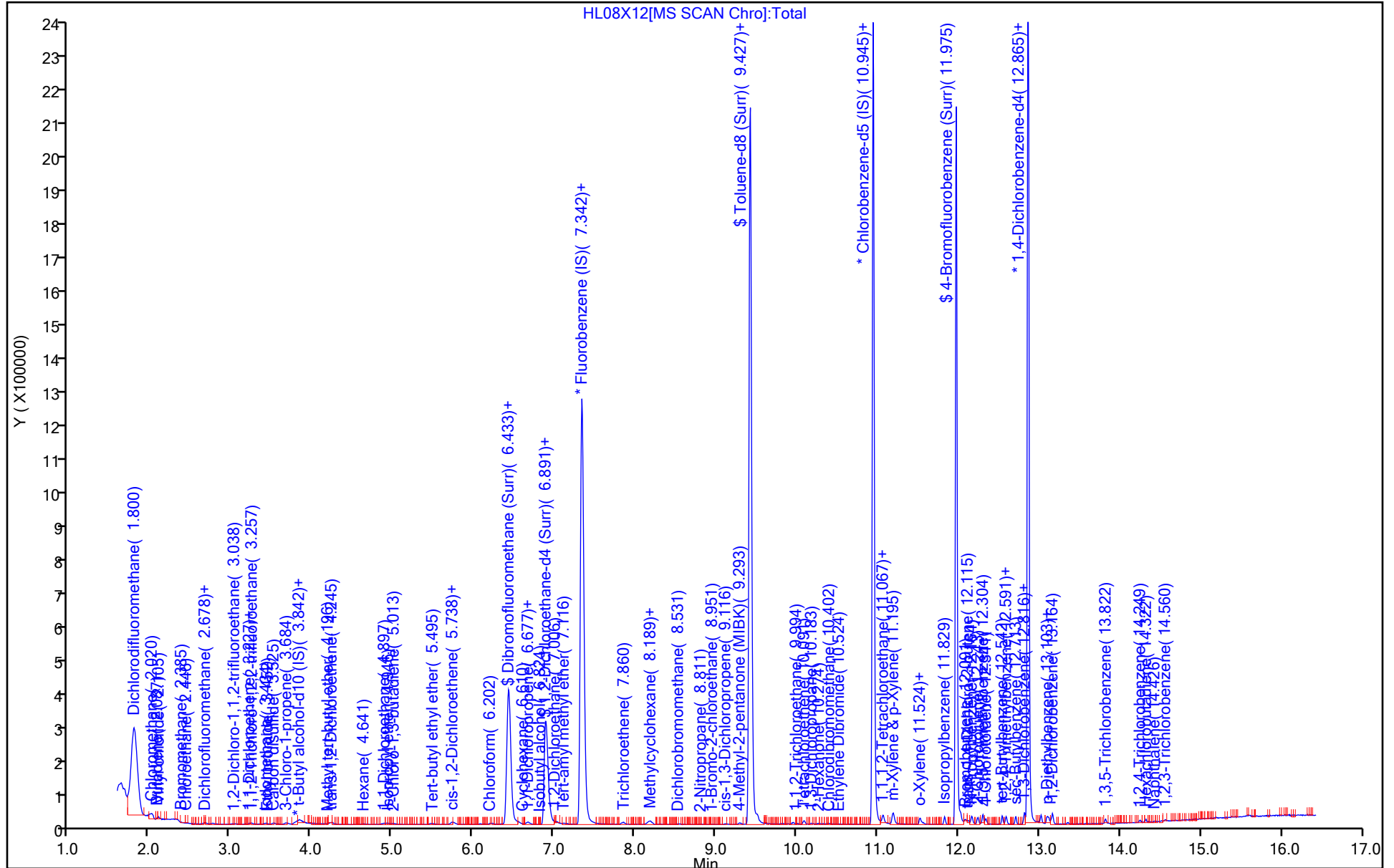
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

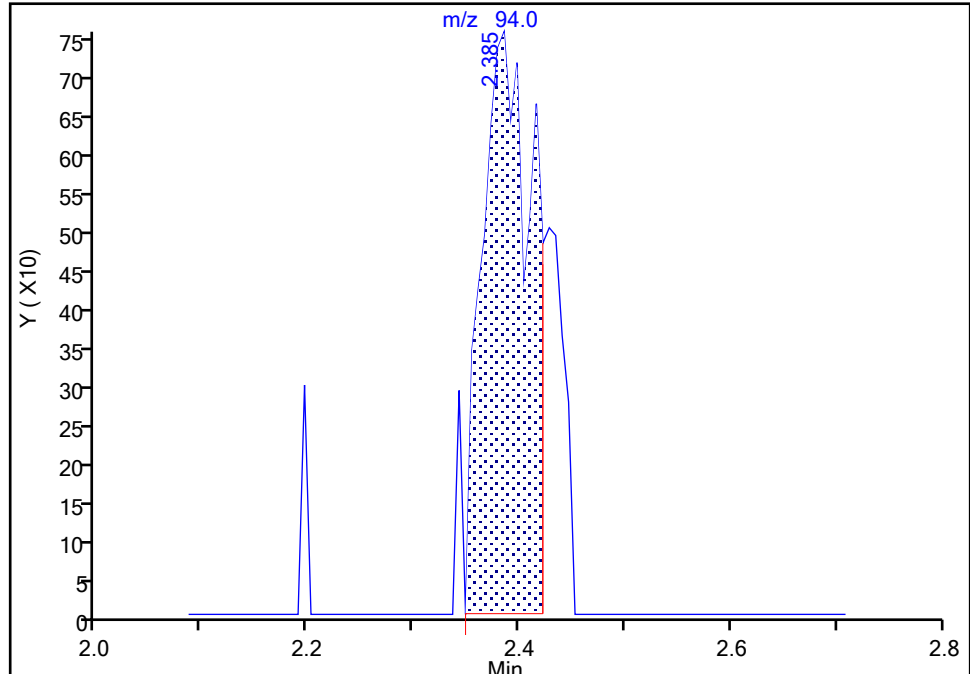
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

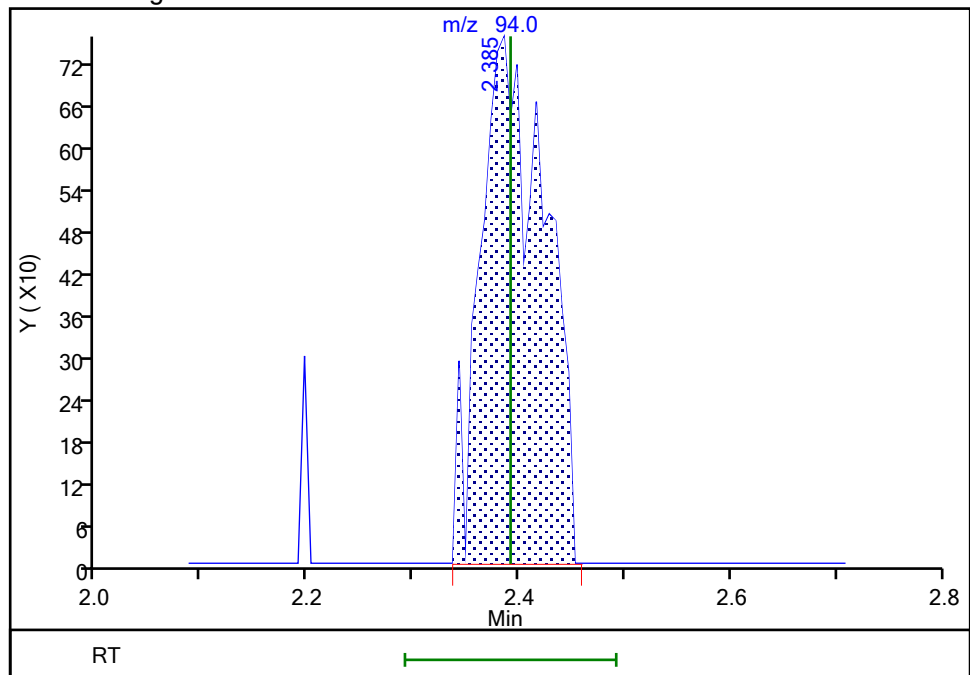
RT: 2.39
Area: 2481
Amount: 0.052060
Amount Units: ug/l

Processing Integration Results



RT: 2.39
Area: 3181
Amount: 0.063094
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:09:34 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

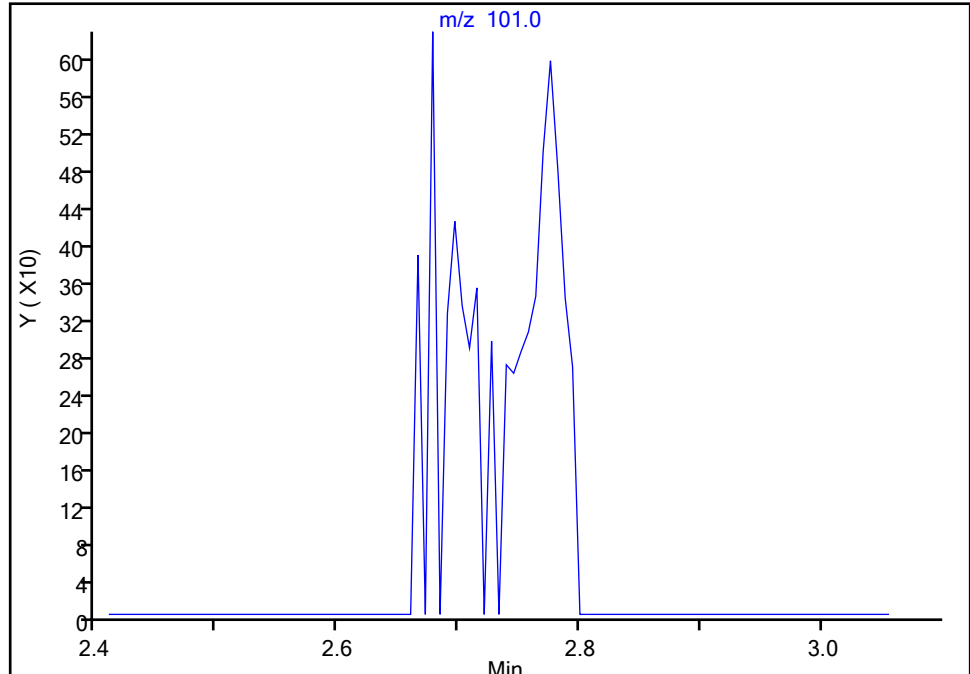
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

12 Trichlorofluoromethane, CAS: 75-69-4

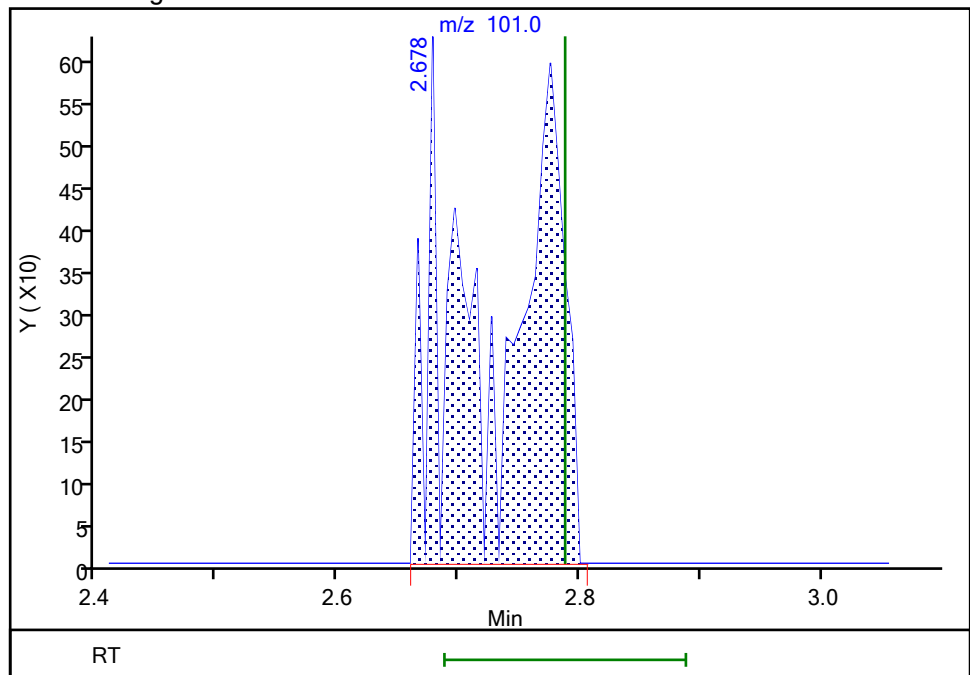
Signal: 1

Not Detected
Expected RT: 2.79

Processing Integration Results



Manual Integration Results



RT: 2.68
Area: 2413
Amount: 0.026204
Amount Units: ug/l

Reviewer: JS6E, 11-Jul-2025 01:09:40 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

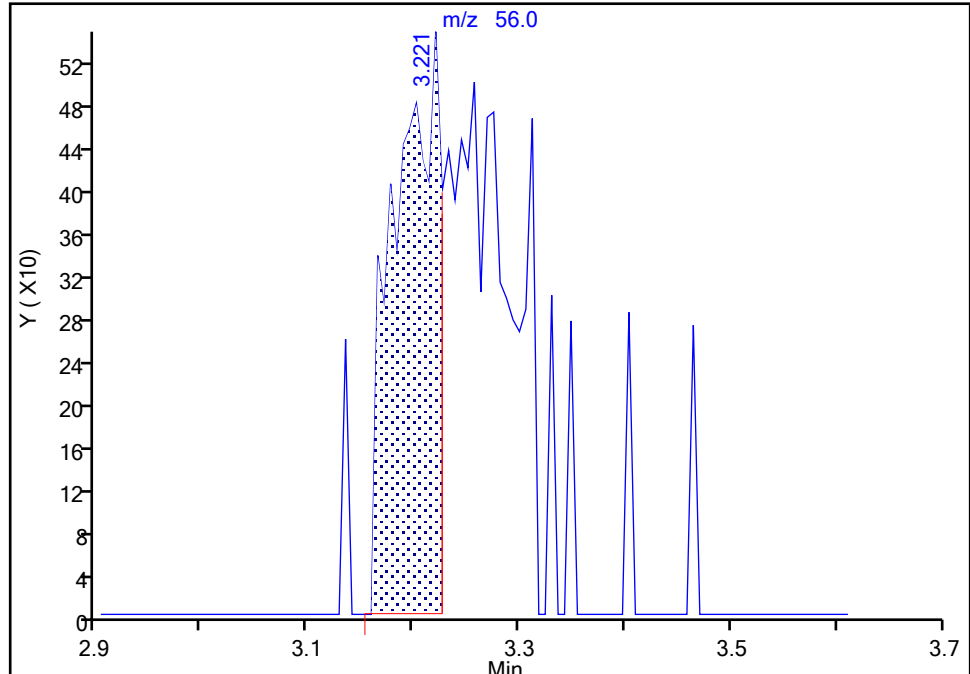
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acrolein, CAS: 107-02-8

Signal: 1

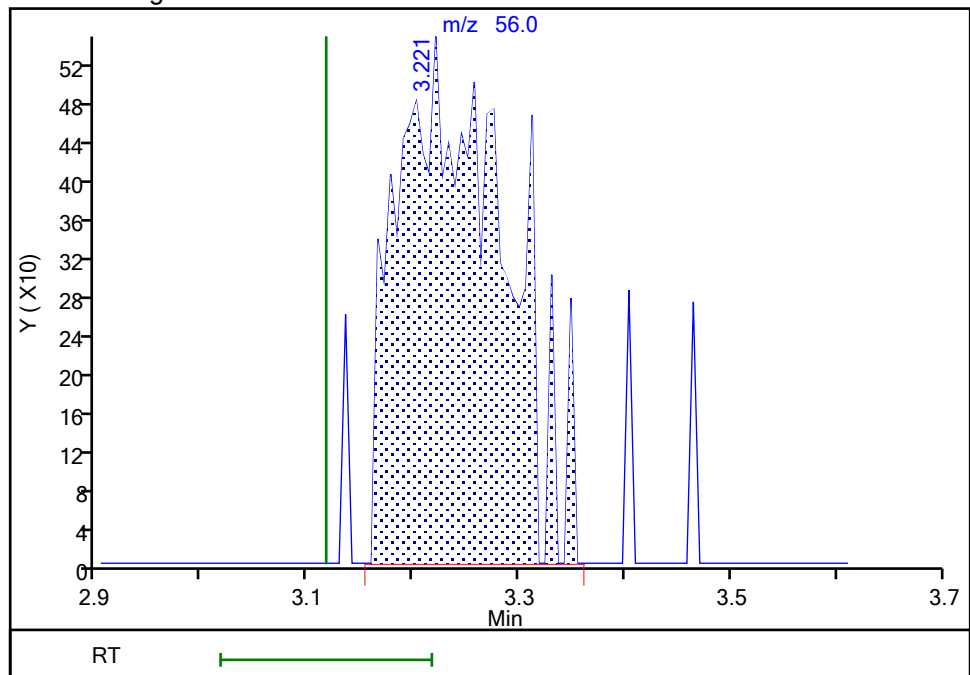
RT: 3.22
Area: 1643
Amount: 1.092740
Amount Units: ug/l

Processing Integration Results



RT: 3.22
Area: 3792
Amount: 0.889541
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:10:12 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

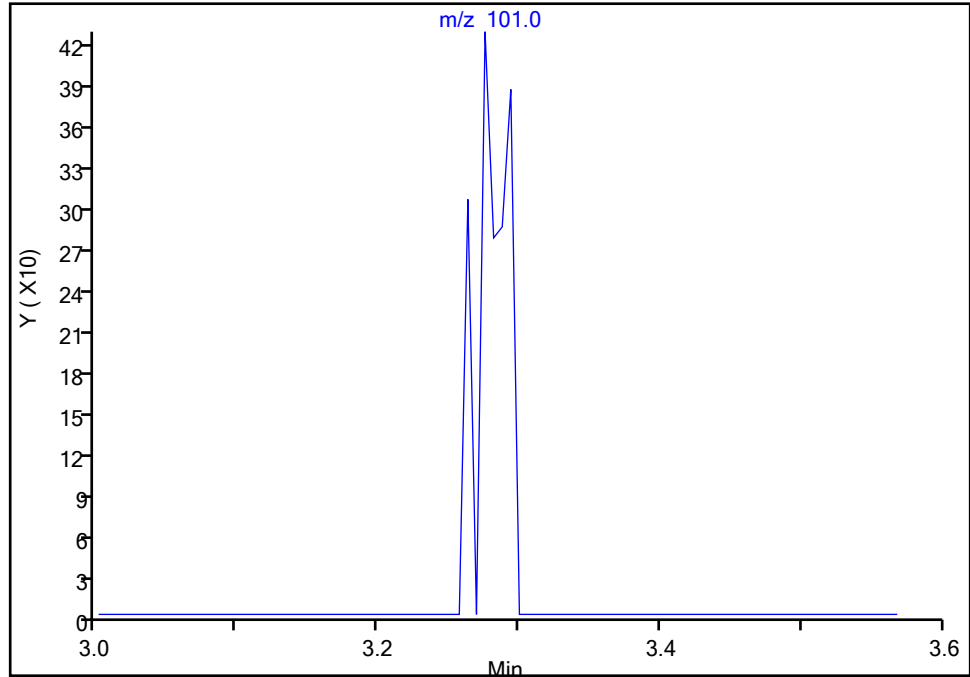
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

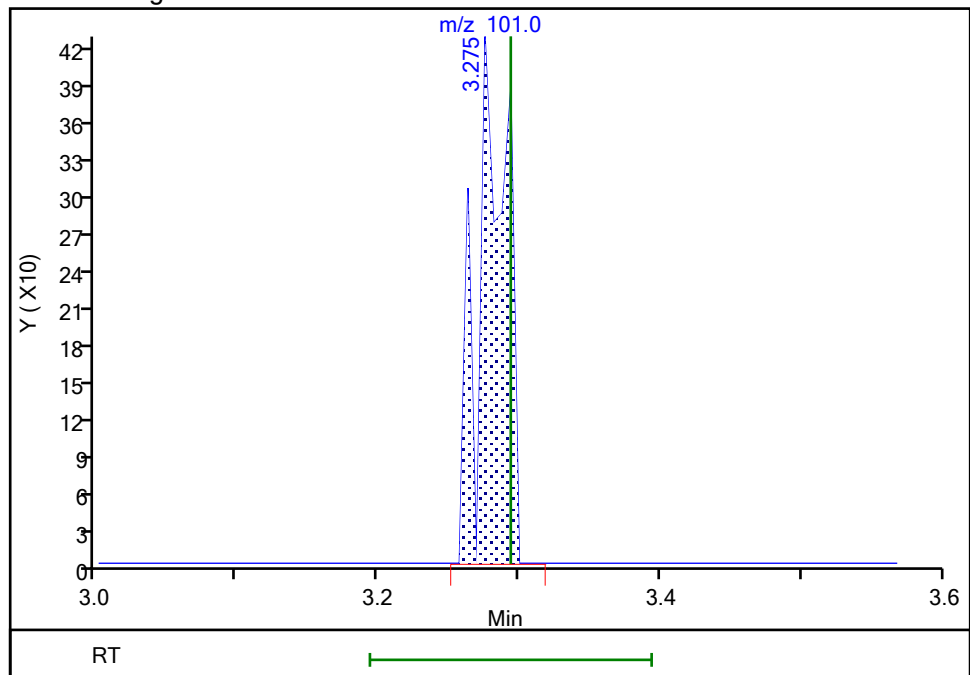
Not Detected
Expected RT: 3.29

Processing Integration Results



RT: 3.28
Area: 609
Amount: 0.013342
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:10:17 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

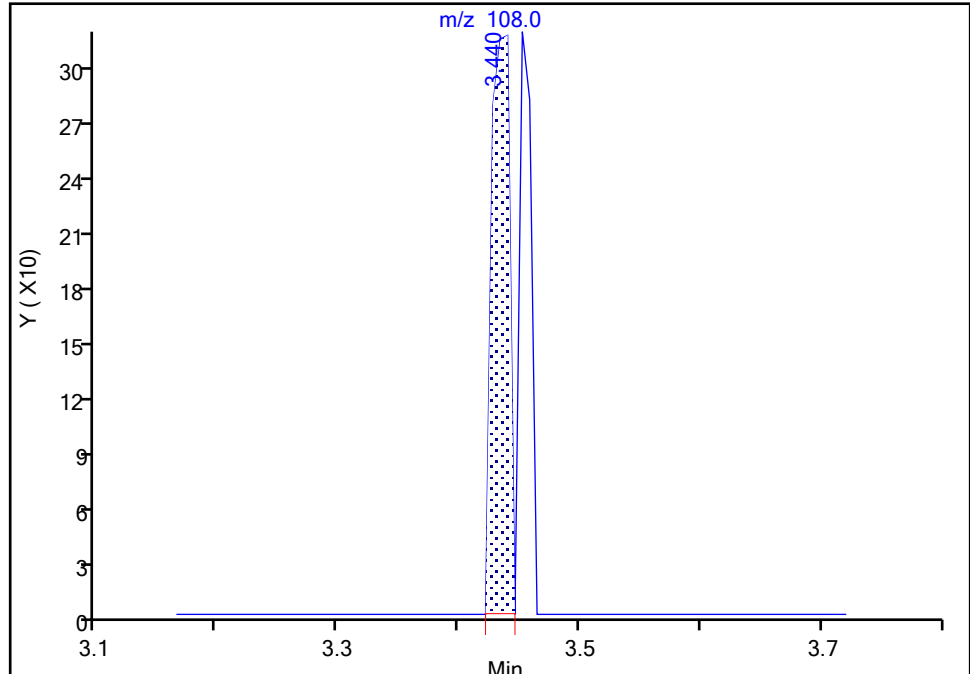
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Ethyl bromide, CAS: 74-96-4

Signal: 1

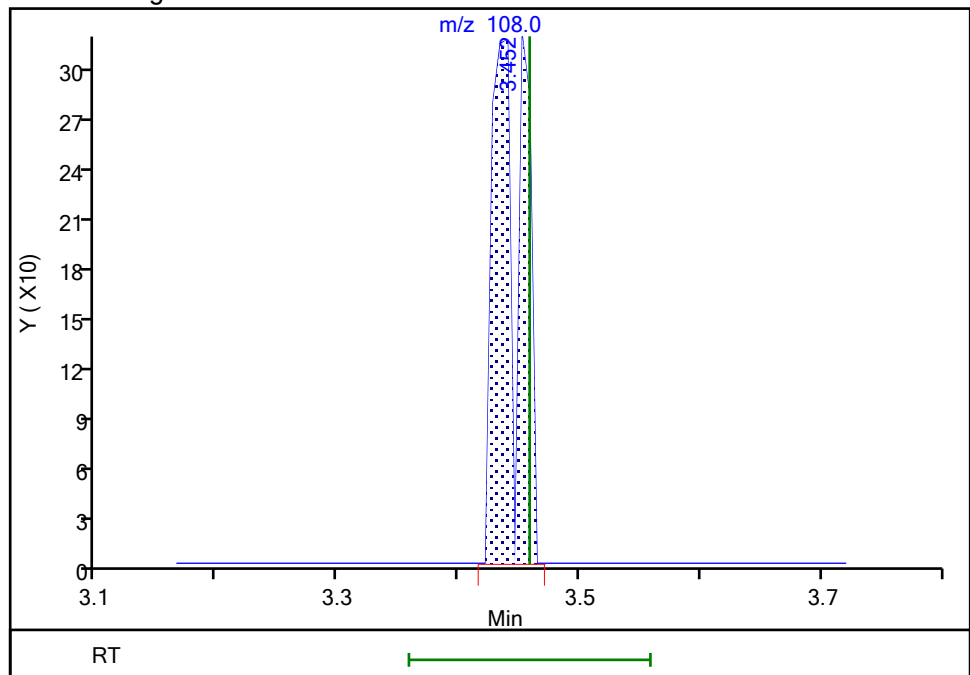
RT: 3.44
Area: 330
Amount: 0.019326
Amount Units: ug/l

Processing Integration Results



RT: 3.45
Area: 548
Amount: 0.013943
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:10:25 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

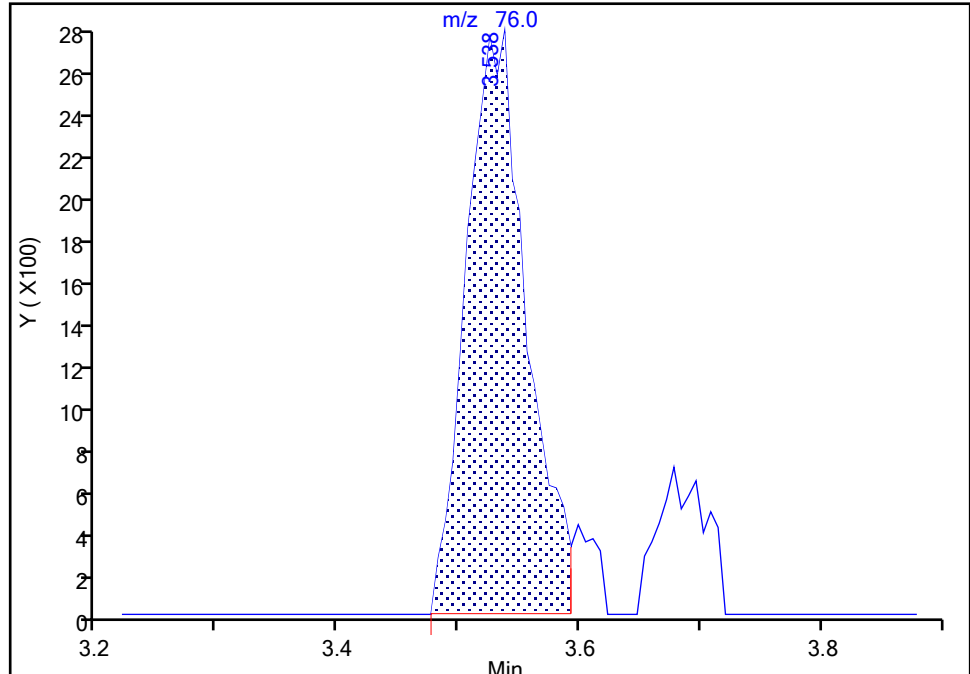
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

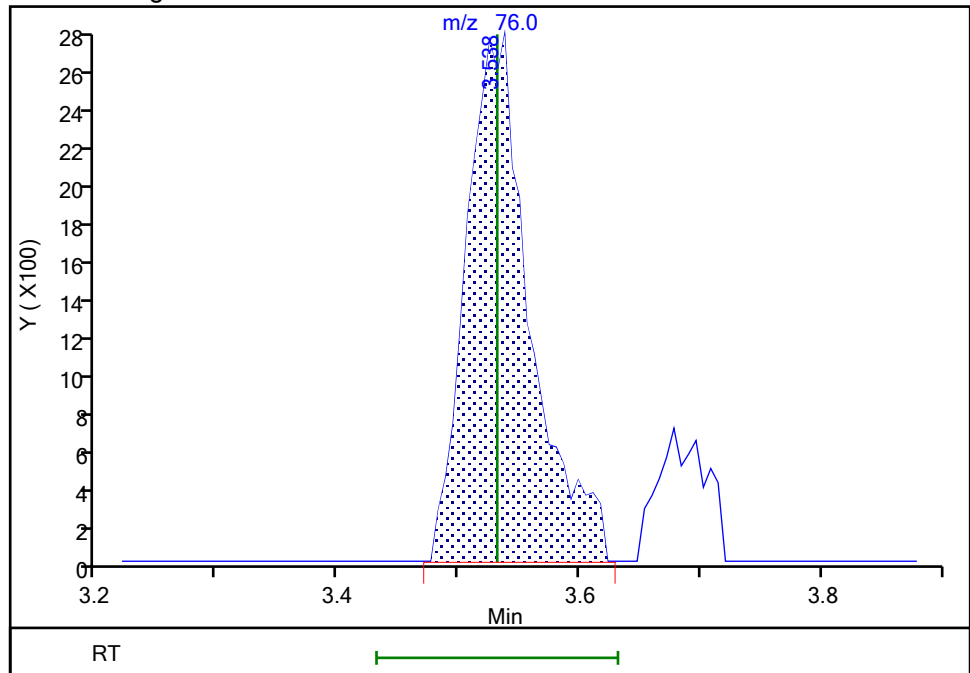
RT: 3.54
Area: 9579
Amount: 0.056114
Amount Units: ug/l

Processing Integration Results



RT: 3.54
Area: 10099
Amount: 0.070805
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:10:30 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

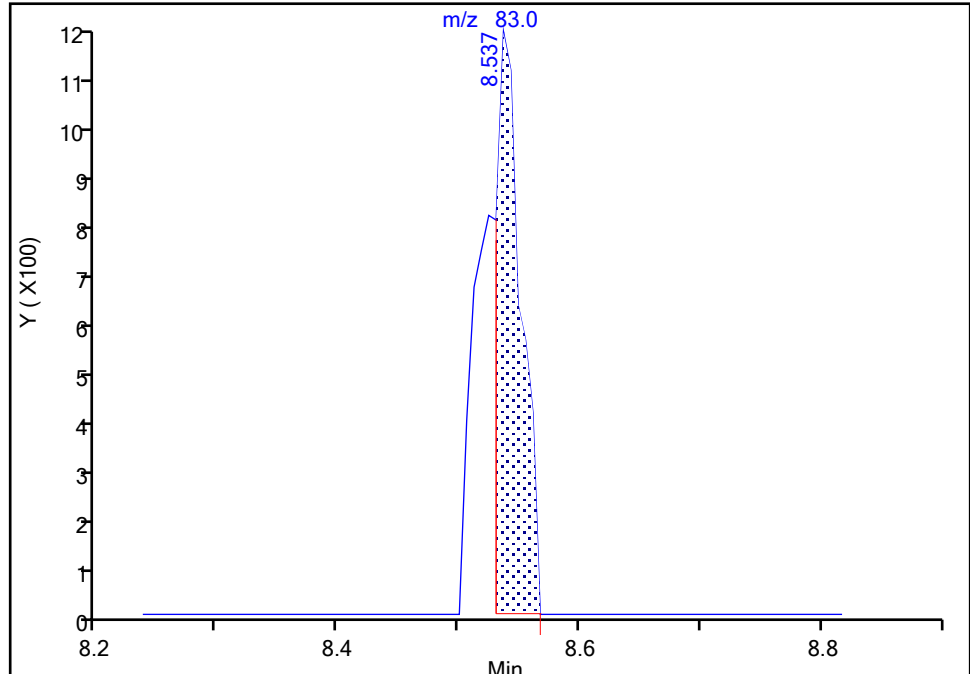
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D
Injection Date: 09-Jul-2025 04:17:30 Instrument ID: 19094
Lims ID: IC std1 0.02
Client ID:
Operator ID: gaw91131 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

76 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

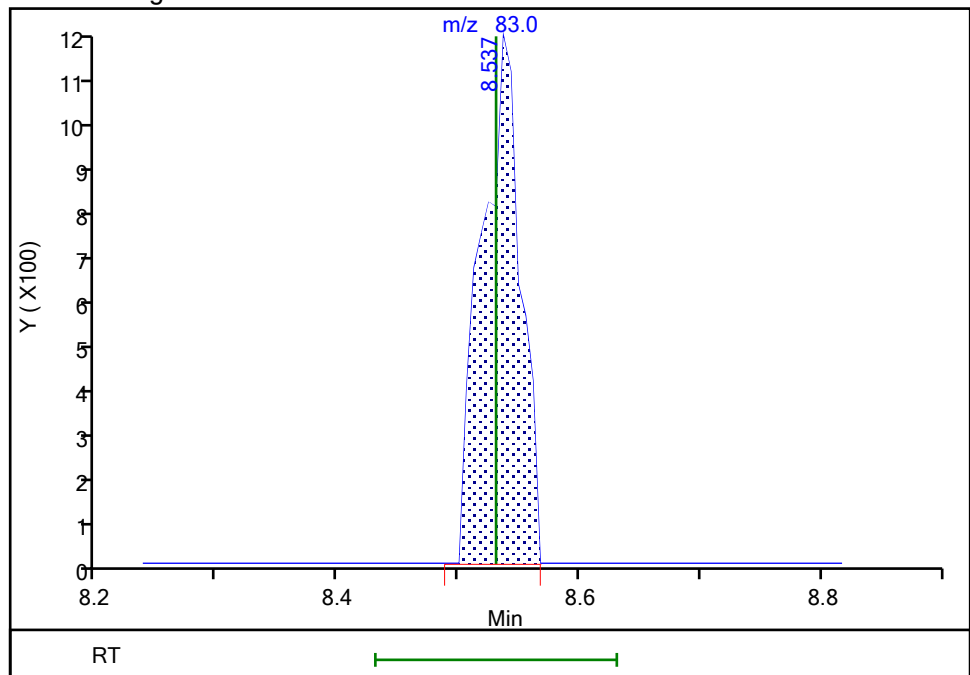
RT: 8.54
Area: 1599
Amount: 0.025389
Amount Units: ug/l

Processing Integration Results



RT: 8.54
Area: 2489
Amount: 0.040898
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:11:56 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

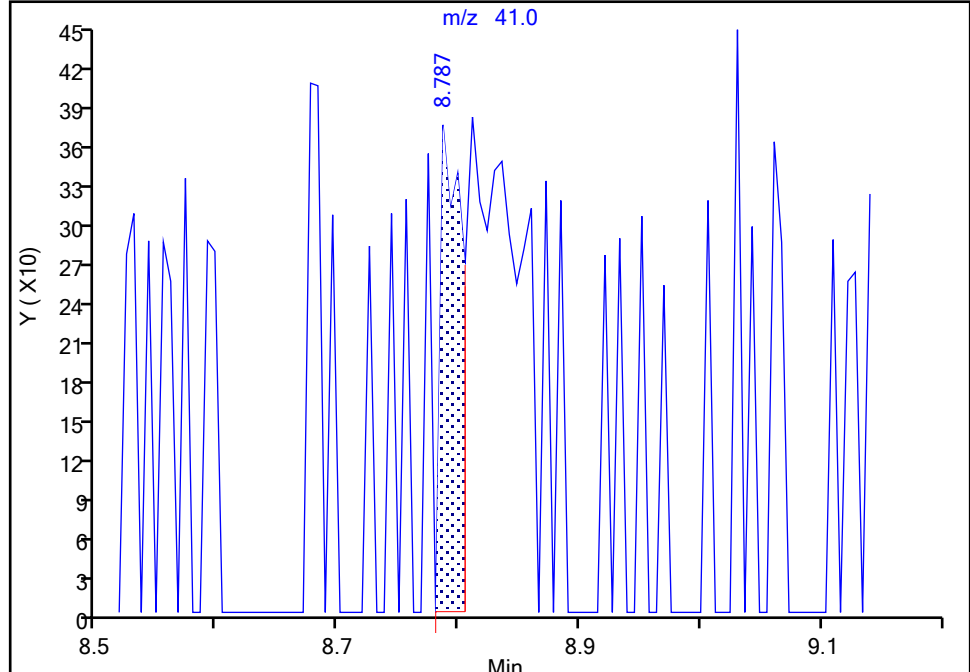
MS Quad

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

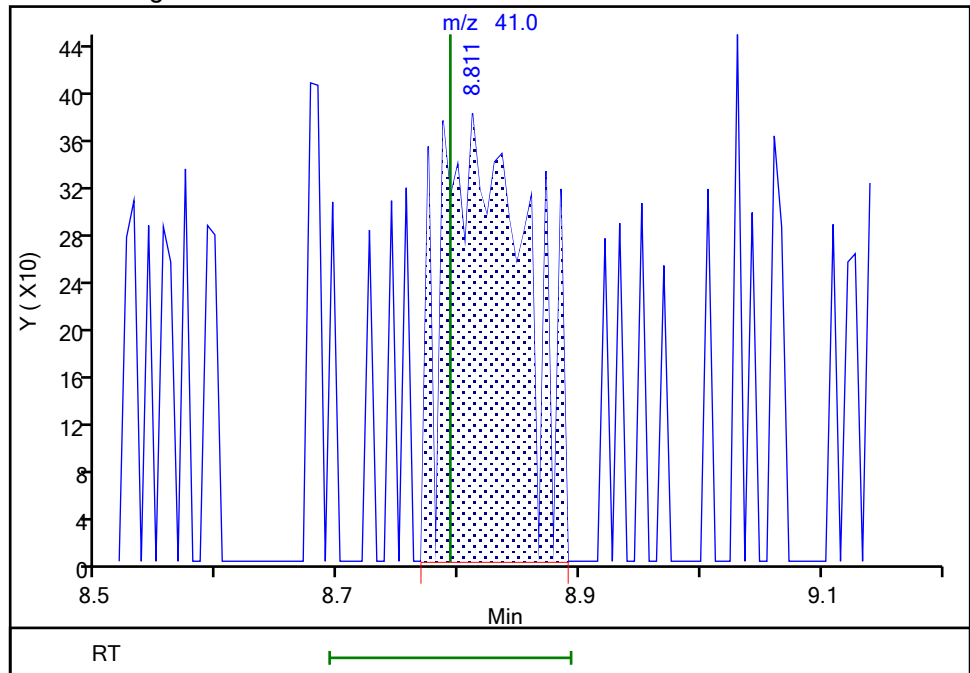
RT: 8.79
Area: 471
Amount: 0.097767
Amount Units: ug/l

Processing Integration Results



RT: 8.81
Area: 1862
Amount: 0.326992
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:12:05 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#:

13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

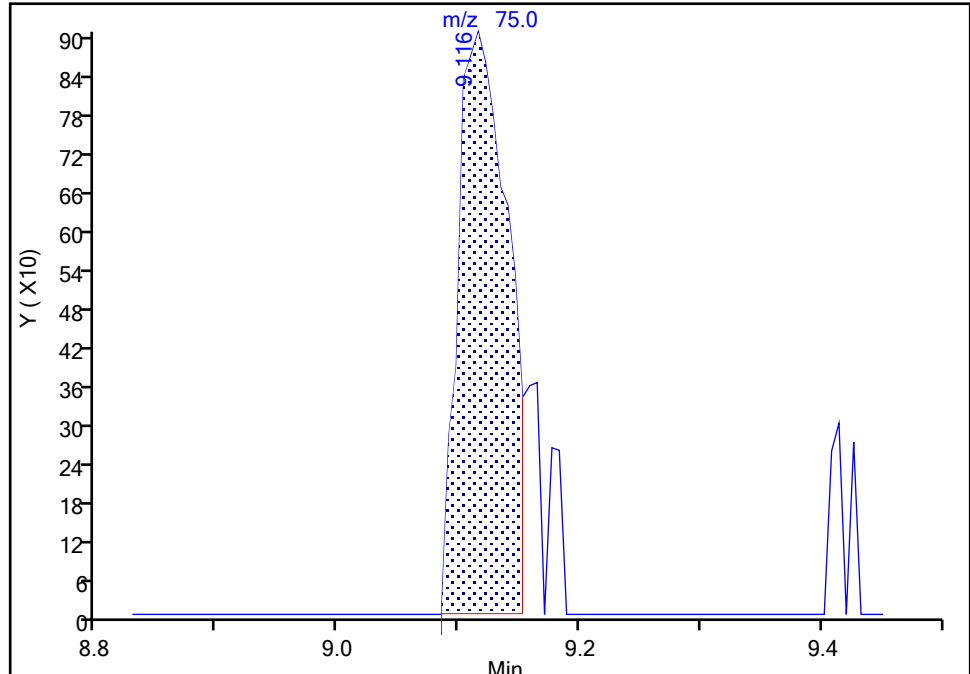
MS Quad

80 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

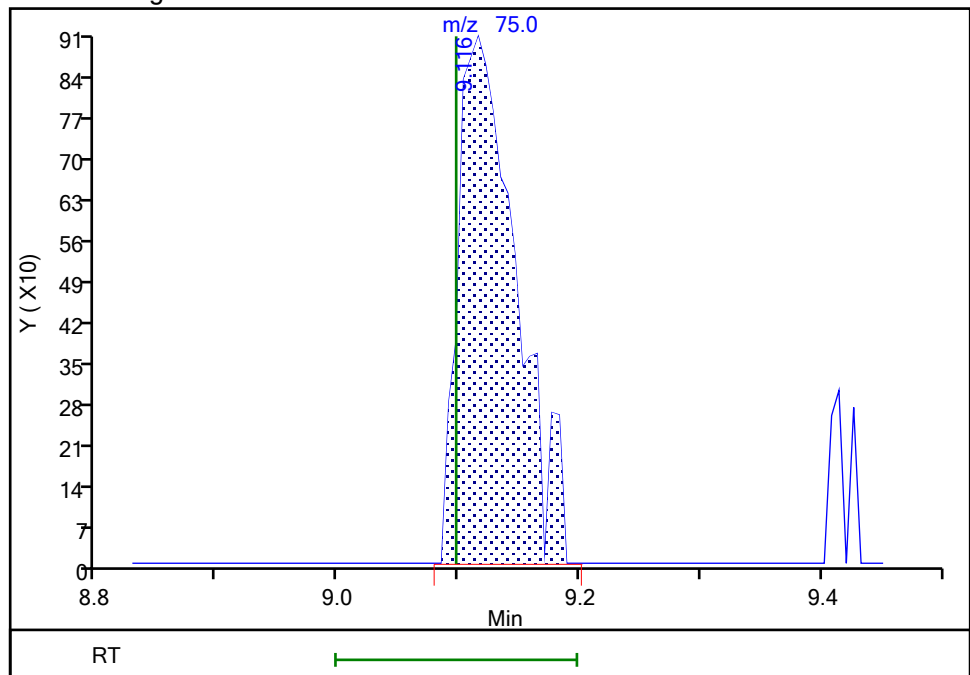
RT: 9.12
Area: 2575
Amount: 0.033322
Amount Units: ug/l

Processing Integration Results



RT: 9.12
Area: 3023
Amount: 0.040586
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:12:11 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

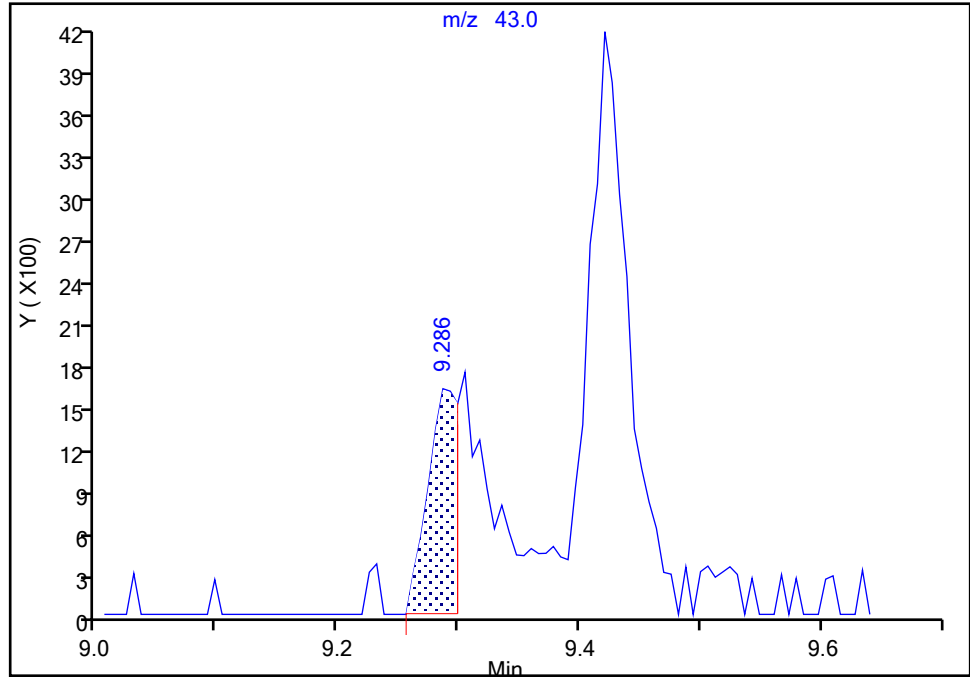
MS Quad

82 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

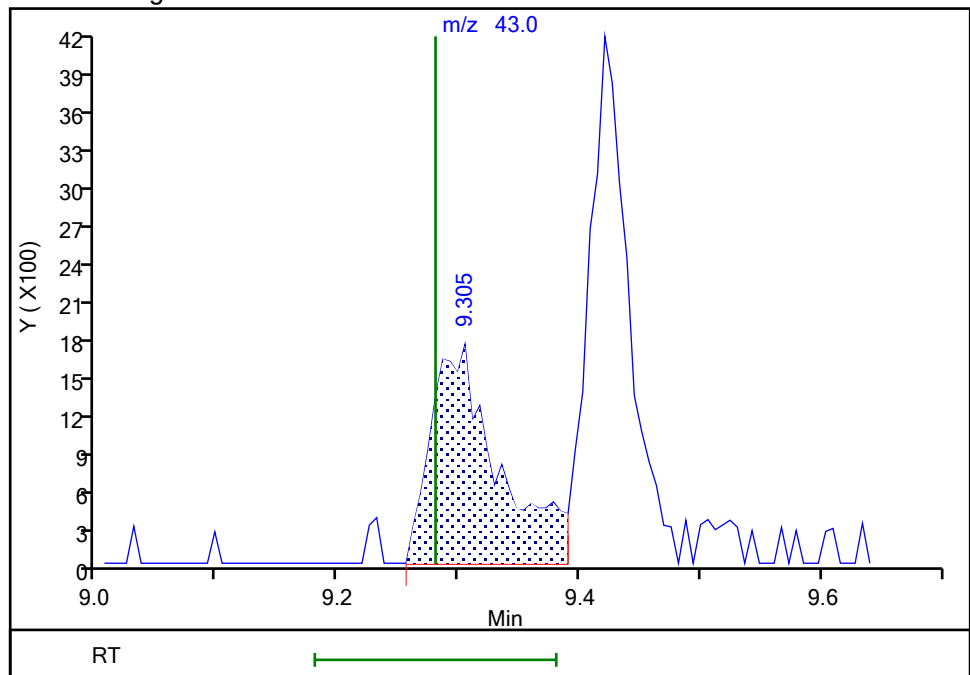
RT: 9.29
Area: 2869
Amount: 0.124666
Amount Units: ug/l

Processing Integration Results



RT: 9.30
Area: 6716
Amount: 0.263167
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:12:27 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

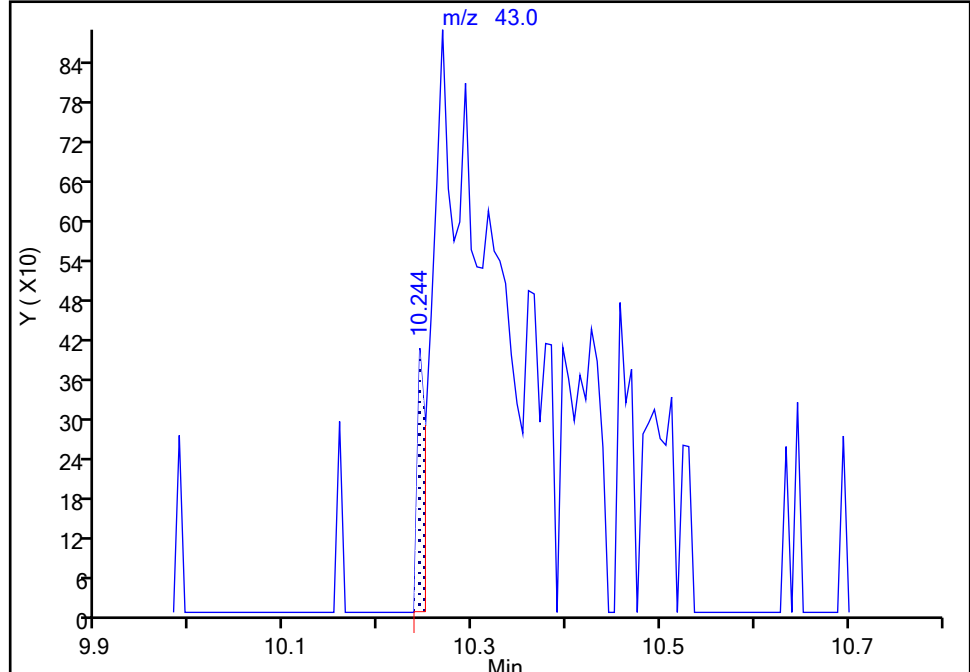
MS Quad

109 2-Hexanone, CAS: 591-78-6

Signal: 1

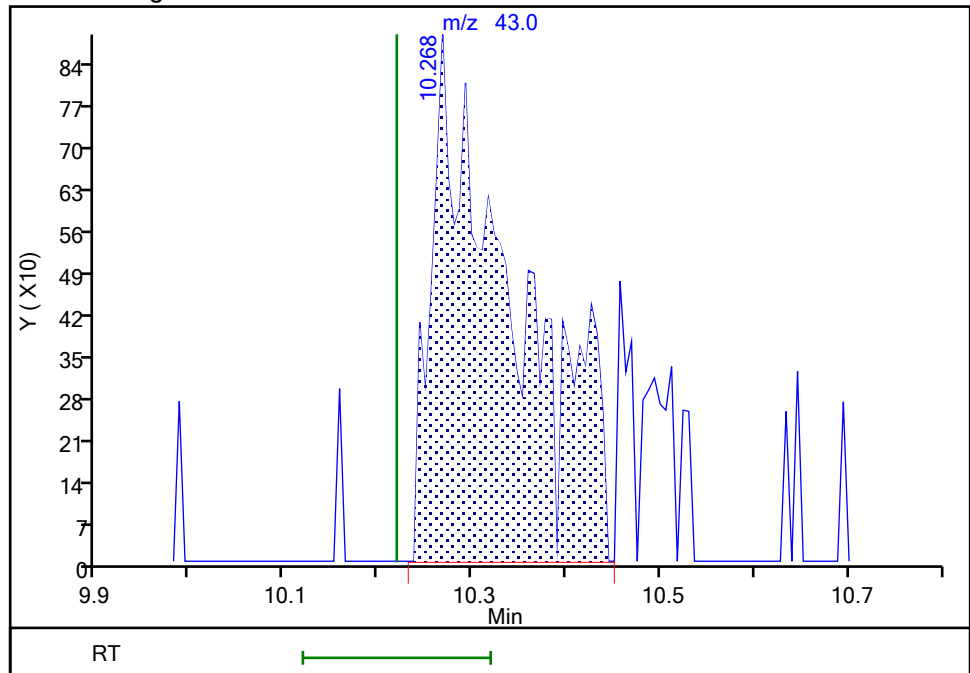
RT: 10.24
Area: 250
Amount: 0.019031
Amount Units: ug/l

Processing Integration Results



RT: 10.27
Area: 5438
Amount: 0.333477
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:13:00 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

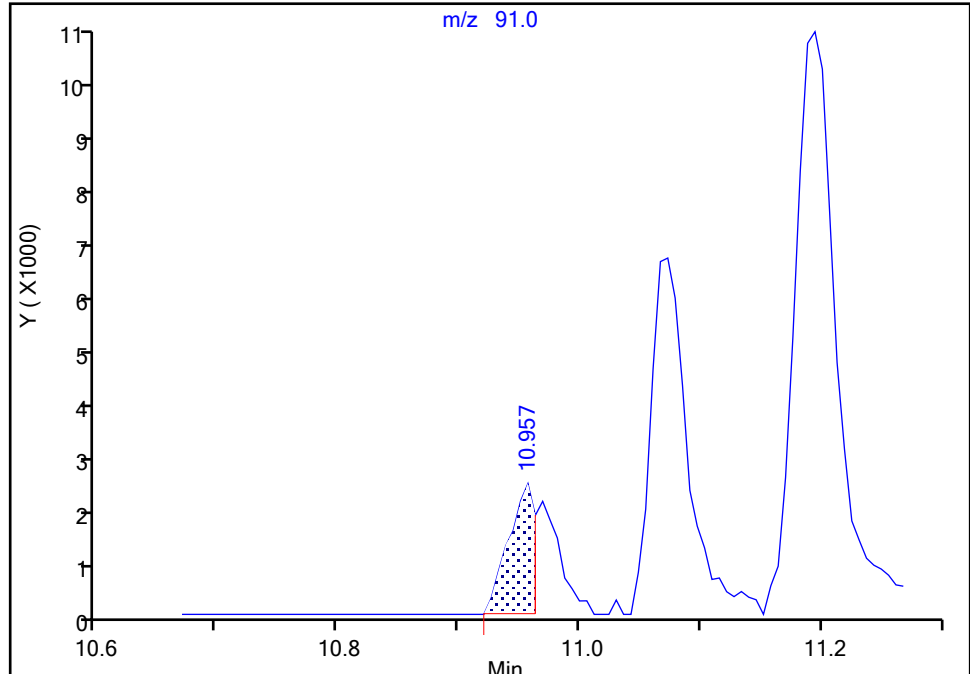
MS Quad

114 1-Chlorohexane, CAS: 544-10-5

Signal: 1

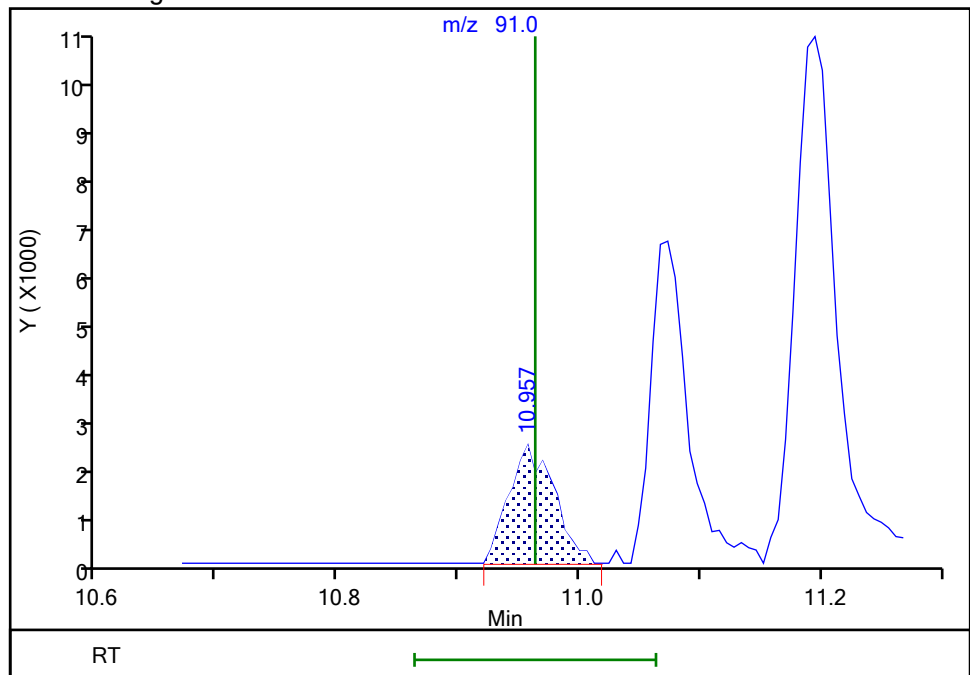
RT: 10.96
Area: 3805
Amount: 0.019178
Amount Units: ug/l

Processing Integration Results



RT: 10.96
Area: 6362
Amount: 0.070410
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:13:18 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

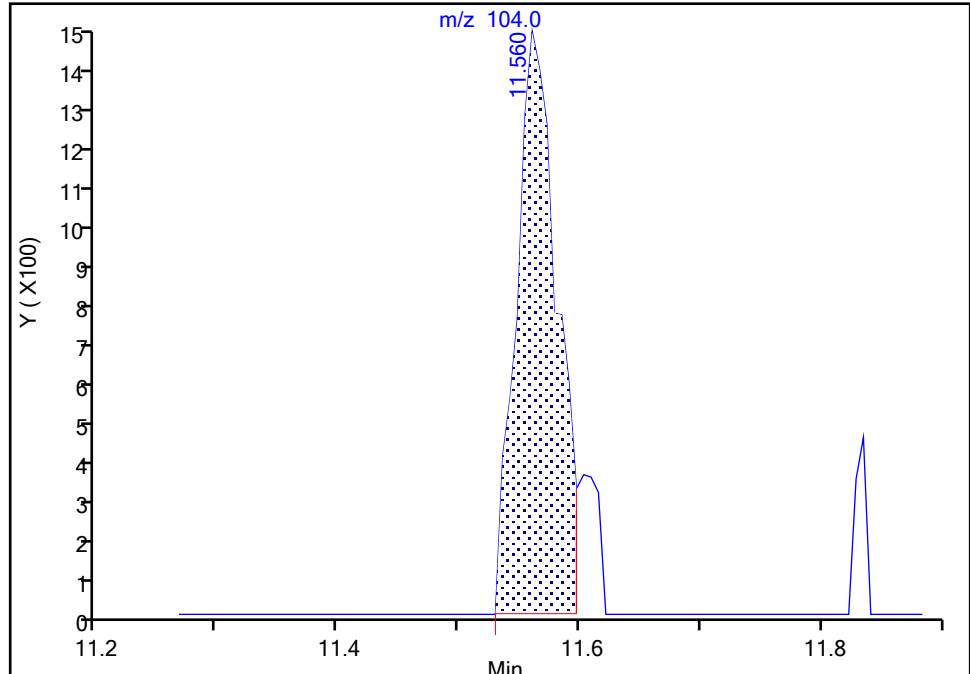
MS Quad

121 Styrene, CAS: 100-42-5

Signal: 1

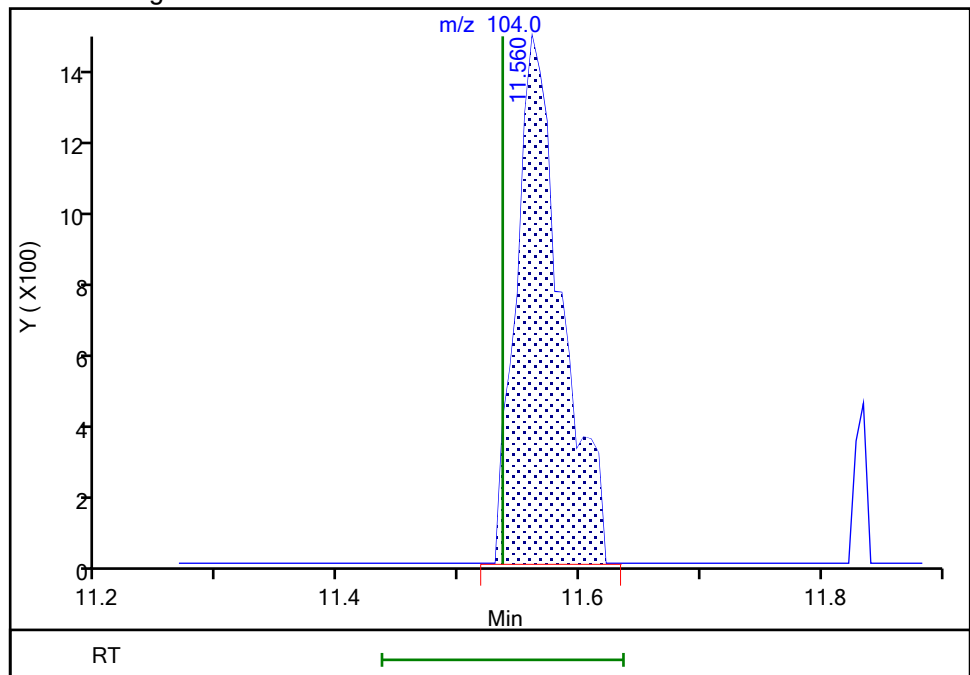
RT: 11.56
Area: 3381
Amount: 0.021248
Amount Units: ug/l

Processing Integration Results



RT: 11.56
Area: 3742
Amount: 0.022844
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:13:31 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

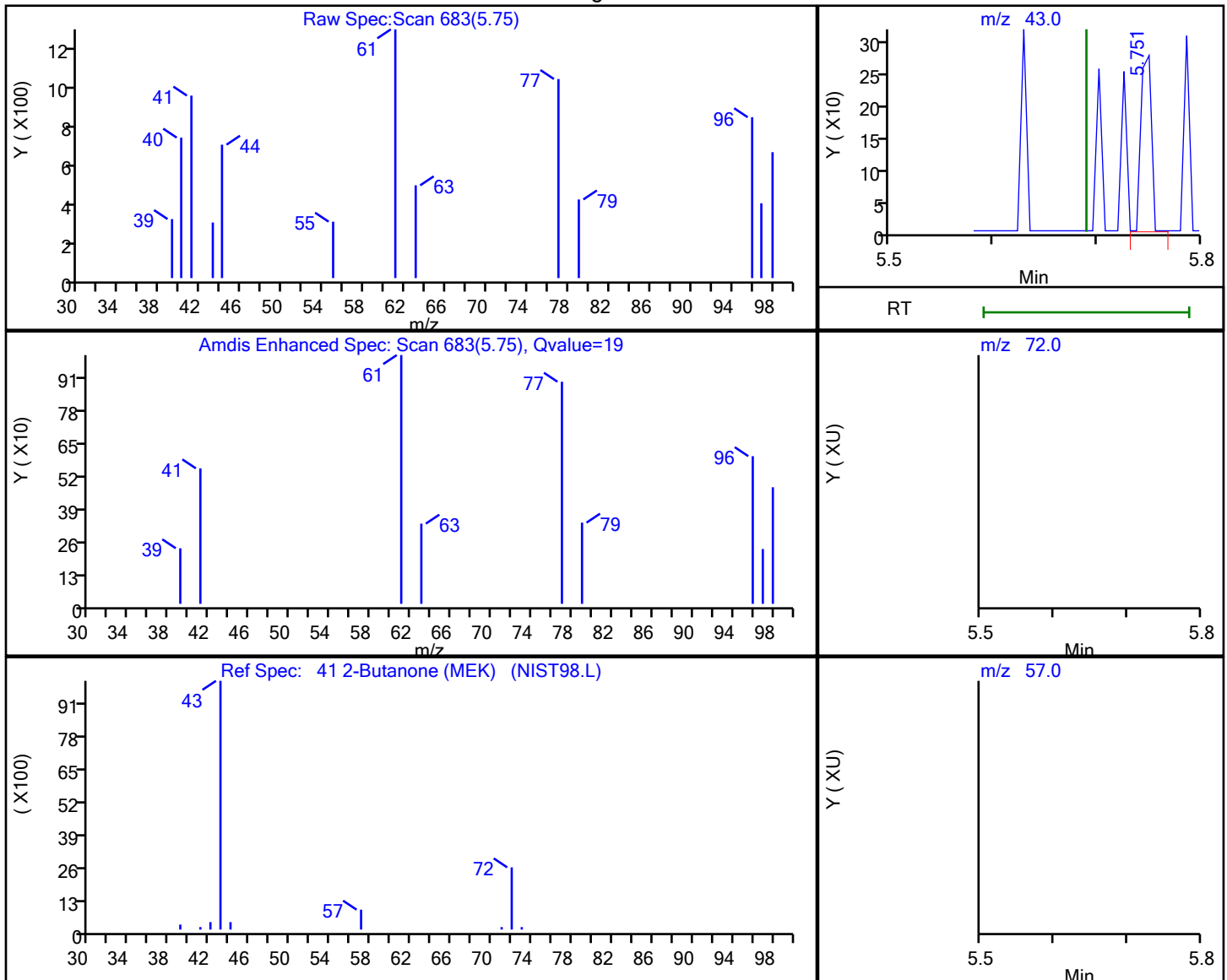
MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

41 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.75	43.00	194	0.029271
5.69	72.00	0	
5.69	57.00	0	

Reviewer: JS6E, 11-Jul-2025 01:10:56 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

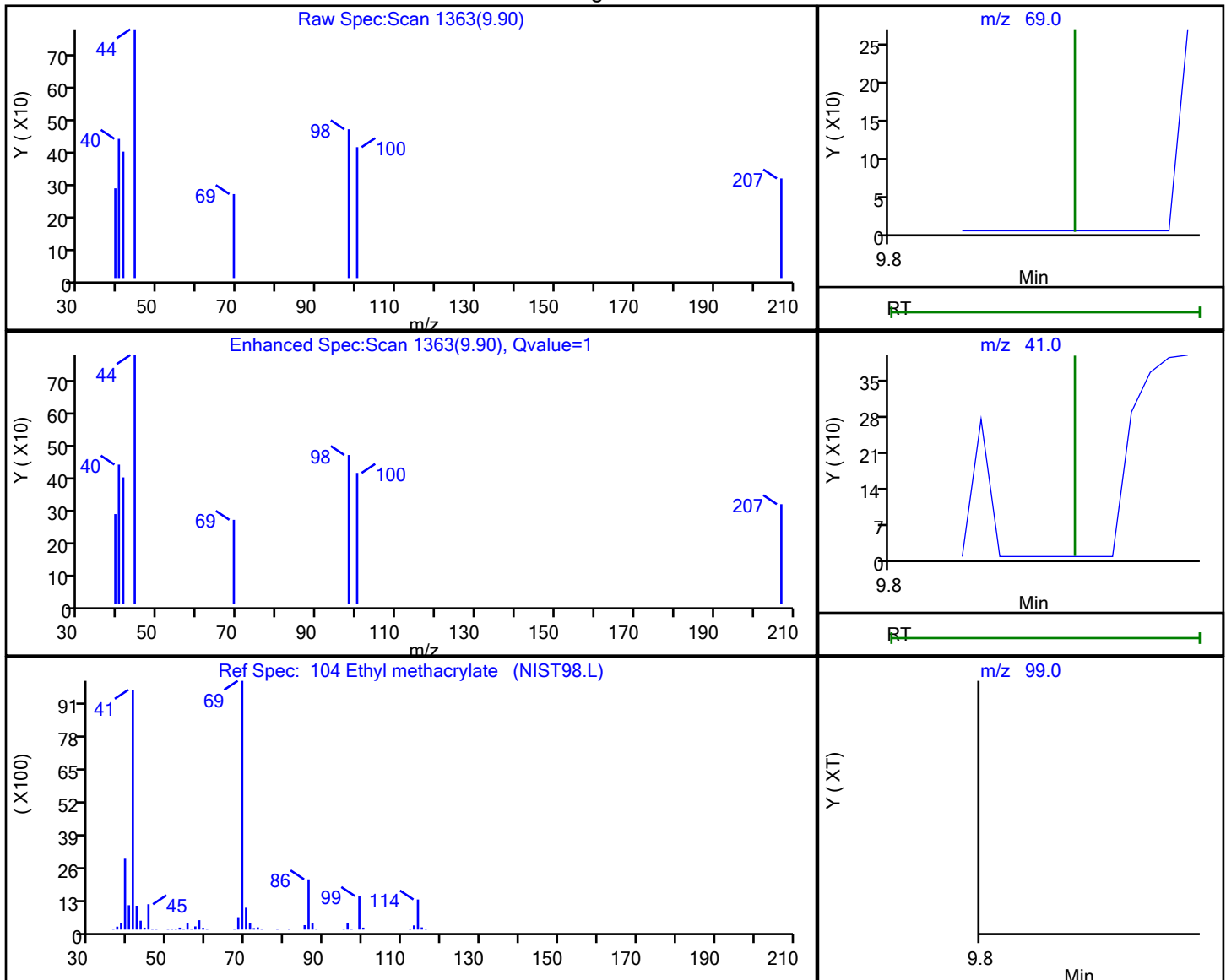
MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

104 Ethyl methacrylate, CAS: 97-63-2

Processing Results



RT	Mass	Response	Amount
9.90	69.00	96	0.002902
9.90	41.00	660	
9.86	99.00	0	
9.86	86.00	0	

Reviewer: JS6E, 11-Jul-2025 01:12:41 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

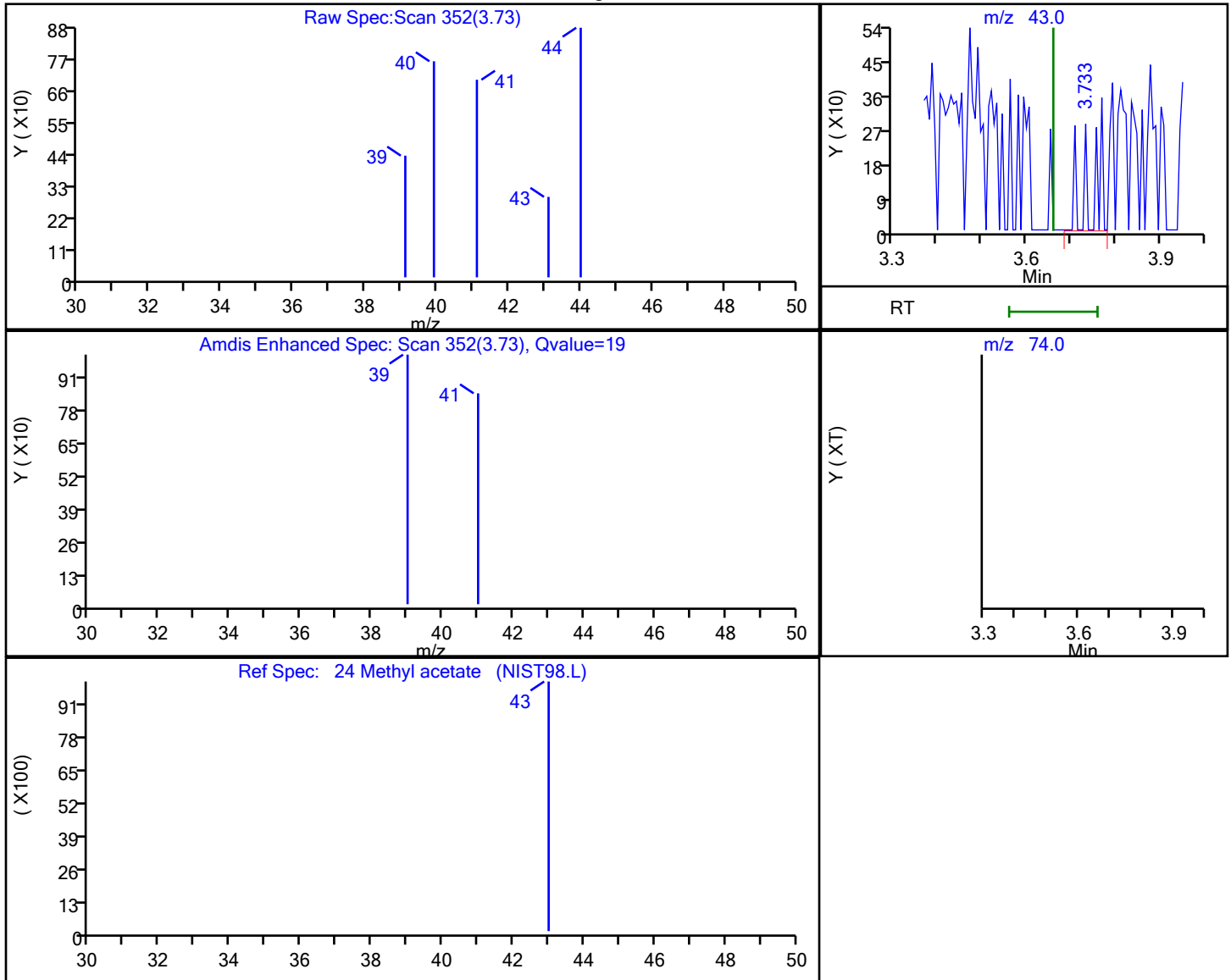
MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

24 Methyl acetate, CAS: 79-20-9

Processing Results



RT	Mass	Response	Amount
3.73	43.00	435	0.031330
3.66	74.00	0	

Reviewer: JS6E, 11-Jul-2025 01:11:03 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X12.D

Injection Date: 09-Jul-2025 04:17:30

Instrument ID: 19094

Lims ID: IC std1 0.02

Client ID:

Operator ID: gaw91131

ALS Bottle#:

12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

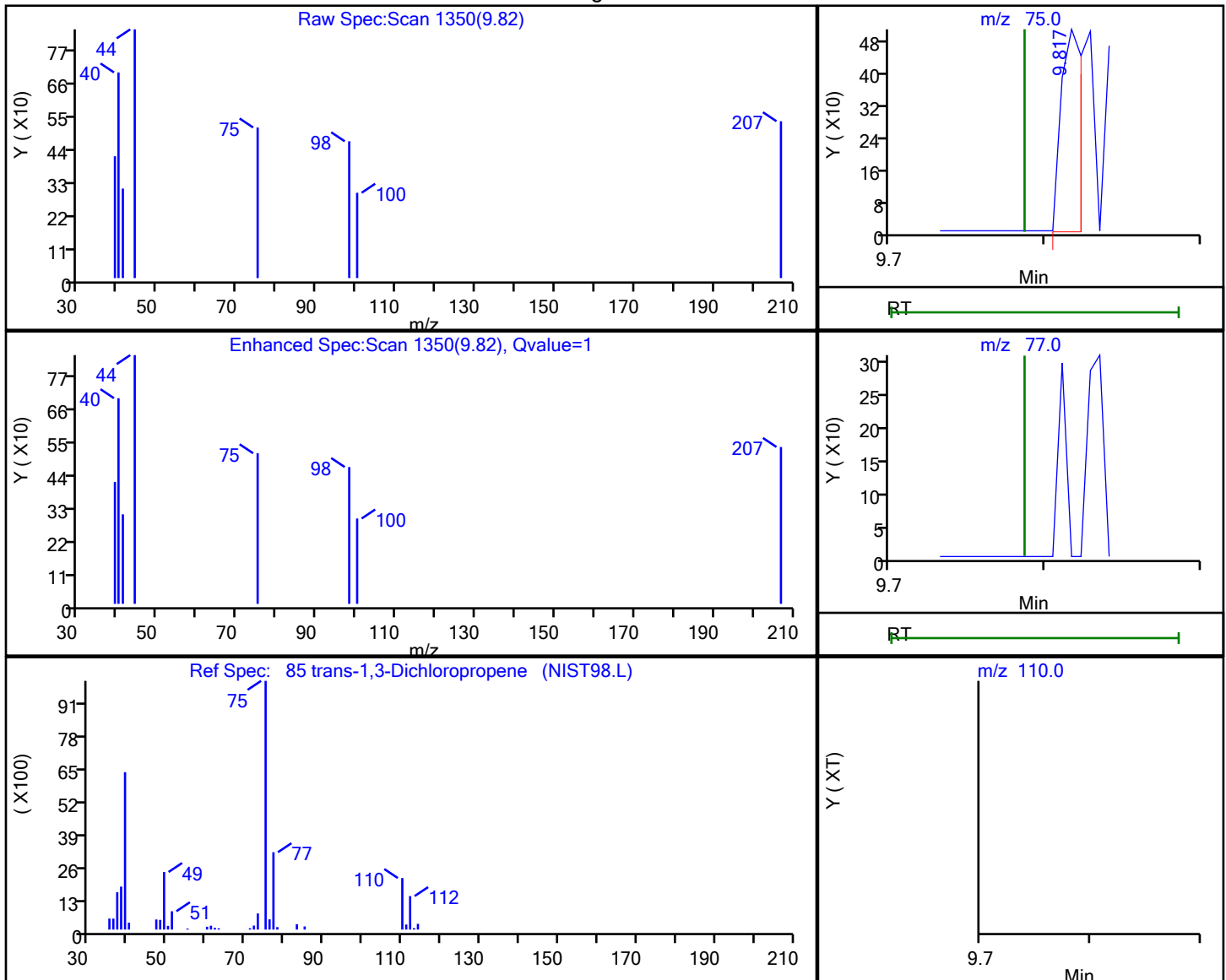
MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

85 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.82	75.00	484	0.009632
9.79	77.00	0	
9.79	110.00	0	
9.79	112.00	0	

Reviewer: JS6E, 11-Jul-2025 01:12:38 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D
 Lims ID: IC std2 0.06
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 09-Jul-2025 04:37:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-014
 Misc. Info.: IC STD2 0.06
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:04:52 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:17:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.819	1.831	-0.012	30	3816	0.0600	0.0642	
5 Chloromethane	50	2.014	2.013	0.001	95	6154	0.0600	0.0784	
7 Butadiene	39	2.105	2.105	0.000	89	5132	0.0600	0.0680	
6 Vinyl chloride	62	2.123	2.123	0.000	94	4695	0.0600	0.0662	
9 Bromomethane	94	2.385	2.391	-0.006	38	3254	0.0600	0.0646	M
10 Chloroethane	64	2.471	2.477	-0.006	95	2769	0.0600	0.0622	
11 Dichlorofluoromethane	67	2.684	2.690	-0.006	94	7904	0.0600	0.0663	
12 Trichlorofluoromethane	101	2.788	2.788	0.000	66	5683	0.0600	0.0617	
14 Ethyl ether	59	2.983	2.971	0.012	13	1326	0.0600	0.0425	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.050	3.050	0.000	88	4463	0.0600	0.0650	
16 Acrolein	56	3.178	3.117	0.061	91	11100	2.93	2.39	M
17 1,1-Dichloroethene	96	3.251	3.251	0.000	93	2731	0.0600	0.0587	
19 Acetone	43	3.379	3.275	0.104	16	4126	0.6000	0.7239	M
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.288	3.294	-0.006	80	2455	0.0600	0.0538	
21 Iodomethane	142	3.434	3.434	0.000	52	5034	0.0600	0.0565	
22 Ethyl bromide	108	3.465	3.458	0.007	20	2230	0.0599	0.0568	
23 Carbon disulfide	76	3.532	3.531	0.001	99	9291	0.0600	0.0652	M
24 Methyl acetate	43	3.757	3.660	0.097	19	2034	0.0600	0.1493	M
26 3-Chloro-1-propene	41	3.690	3.684	0.006	91	5857	0.0600	0.0638	
27 Methylene Chloride	84	3.849	3.855	-0.006	44	2958	0.0600	0.0607	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.891	-0.030	97	80230	50.0	50.0	
29 2-Methyl-2-propanol	59		3.995				1.20	ND	
31 Acrylonitrile	53		4.184				ND	ND	
32 Methyl tert-butyl ether	73	4.239	4.214	0.025	80	6154	0.0600	0.0576	
33 trans-1,2-Dichloroethene	96	4.251	4.239	0.012	96	2732	0.0600	0.0530	
34 Hexane	57	4.653	4.659	-0.006	90	4700	0.0600	0.0601	
36 1,1-Dichloroethane	63	4.891	4.891	0.000	1	5424	0.0600	0.0545	
37 Isopropyl ether	45	4.958	4.952	0.006	59	9696	0.0600	0.0577	
38 2-Chloro-1,3-butadiene	53	5.025	5.001	0.024	38	4314	0.0600	0.0501	
40 Tert-butyl ethyl ether	59	5.489	5.495	-0.005	95	8255	0.0600	0.0567	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43		5.690				0.6000	ND	
42 cis-1,2-Dichloroethene	96	5.751	5.732	0.019	80	2800	0.0600	0.0500	
43 2,2-Dichloropropane	77	5.751	5.744	0.007	72	5069	0.0600	0.0582	
44 Propionitrile	54		5.775				ND	ND	
47 Methacrylonitrile	67	6.086	5.988	0.098	84	4500	0.6000	0.4582	M
48 Chlorobromomethane	128	6.098	6.068	0.030	1	515	0.0600	0.0243	
49 Tetrahydrofuran	71		6.080				ND	ND	
S 46 1,2-Dichloroethene, Total	100				0			0.1030	
50 Chloroform	83	6.232	6.226	0.006	90	5205	0.0600	0.0563	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.446	-0.006	94	424242	10.0	9.98	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	35	5321	0.0600	0.0615	
54 Cyclohexane	56	6.549	6.561	-0.012	63	6456	0.0600	0.0608	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	88	4041	0.0600	0.0553	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	88	4580	0.0600	0.0574	
57 Isobutyl alcohol	41	6.897	6.824	0.073	30	3100	3.00	4.55	M
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.897	0.006	77	77896	10.0	10.1	
59 Benzene	78	6.939	6.939	0.000	93	14047	0.0600	0.0619	
60 1,2-Dichloroethane	62	7.025	7.006	0.019	11	3493	0.0600	0.0685	
63 Tert-amyl methyl ether	73	7.141	7.141	0.000	95	6658	0.0600	0.0528	
* 64 Fluorobenzene (IS)	96	7.348	7.354	-0.006	98	1831280	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	36	6489	0.0600	0.0785	
67 n-Butanol	56		7.732				ND	ND	
68 Trichloroethene	95	7.848	7.842	0.006	93	3623	0.0600	0.0610	M
69 Methylcyclohexane	83	8.159	8.159	0.000	85	6213	0.0600	0.0601	
70 1,2-Dichloropropane	63	8.183	8.177	0.006	83	2896	0.0600	0.0531	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	90	4715	0.0600	0.0571	
72 Methyl methacrylate	69		8.268				ND	ND	
73 1,4-Dioxane	88		8.287				ND	ND	
74 Dibromomethane	93	8.305	8.287	0.018	8	745	0.0600	0.0369	M
76 Dichlorobromomethane	83	8.531	8.531	0.001	93	3436	0.0600	0.0565	
77 2-Nitropropane	41	8.805	8.793	0.012	55	3259	0.3000	0.5252	M
79 1-Bromo-2-chloroethane	63	8.945	8.927	0.018	1	3153	0.0600	0.0648	M
80 cis-1,3-Dichloropropene	75	9.116	9.097	0.019	36	3925	0.0600	0.0527	M
82 4-Methyl-2-pentanone (MIBK)	43	9.299	9.280	0.019	96	14864	0.6000	0.5345	M
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1836061	10.0	9.92	
84 Toluene	92	9.512	9.506	0.006	96	8467	0.0600	0.0590	
85 trans-1,3-Dichloropropene	75	9.823	9.786	0.037	1	2833	0.0600	0.0499	M
104 Ethyl methacrylate	69	9.896	9.860	0.036	1	1672	0.0600	0.0416	M
106 1,1,2-Trichloroethane	97	10.012	10.000	0.012	84	1778	0.0600	0.0558	
S 105 1,3-Dichloropropene, Total	100				0			0.1026	
107 Tetrachloroethene	166	10.097	10.091	0.006	92	3909	0.0600	0.0577	
108 1,3-Dichloropropane	76	10.177	10.164	0.013	90	2789	0.0600	0.0503	
109 2-Hexanone	43	10.262	10.219	0.043	92	11341	0.6000	0.6382	M
111 Chlorodibromomethane	129	10.402	10.390	0.012	84	1759	0.0600	0.0447	
112 Ethylene Dibromide	107	10.524	10.500	0.024	95	1467	0.0600	0.0531	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	87	1330860	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	35	7873	0.0600	0.0872	
115 Chlorobenzene	112	10.981	10.975	0.006	83	8606	0.0600	0.0567	
116 1,1,1,2-Tetrachloroethane	131	11.067	11.060	0.007	37	2740	0.0600	0.0548	
117 Ethylbenzene	91	11.073	11.067	0.006	98	15708	0.0600	0.0555	
119 m-Xylene & p-Xylene	106	11.195	11.189	0.006	98	11594	0.1200	0.1077	
S 118 Xylenes, Total	106				0			0.1628	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.530	11.518	0.012	96	5625	0.0600	0.0551	
121 Styrene	104	11.554	11.536	0.018	89	8731	0.0600	0.0533	M
122 Bromoform	173	11.695	11.695	0.000	85	833	0.0600	0.0410	
123 Isopropylbenzene	105	11.829	11.829	0.000	95	13925	0.0600	0.0558	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	90	665620	10.0	9.96	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	1	2155	0.0600	0.0592	M
128 Bromobenzene	156	12.097	12.091	0.006	91	3378	0.0600	0.0571	
129 trans-1,4-Dichloro-2-butene	53	12.115	12.103	0.012	87	4801	0.6000	0.4672	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	75	428	0.0600	0.0469	
131 N-Propylbenzene	91	12.170	12.164	0.006	98	19070	0.0600	0.0580	
132 2-Chlorotoluene	126	12.243	12.237	0.006	96	3366	0.0600	0.0536	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	12613	0.0600	0.0548	M
134 4-Chlorotoluene	126	12.341	12.329	0.012	97	3285	0.0600	0.0519	
135 tert-Butylbenzene	134	12.542	12.542	0.000	93	2638	0.0600	0.0519	
136 Pentachloroethane	167	12.573	12.572	0.001	69	1558	0.0600	0.0465	
137 1,2,4-Trimethylbenzene	105	12.591	12.585	0.006	96	12726	0.0600	0.0545	
138 sec-Butylbenzene	105	12.713	12.707	0.006	94	17095	0.0600	0.0576	
139 1,3-Dichlorobenzene	146	12.816	12.804	0.012	93	6242	0.0600	0.0528	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	98	14094	0.0600	0.0554	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	739240	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	85	7182	0.0600	0.0589	
143 1,2,3-Trimethylbenzene	120	12.896	12.889	0.007	93	5345	0.0600	0.0543	
144 Benzyl chloride	126	12.963	12.956	0.007	94	652	0.0600	0.0454	M
145 p-Diethylbenzene	119	13.097	13.097	0.000	92	7907	0.0600	0.0531	
146 n-Butylbenzene	92	13.121	13.115	0.006	97	6337	0.0600	0.0529	
147 1,2-Dichlorobenzene	146	13.146	13.139	0.007	92	5469	0.0600	0.0530	
149 1,2-Dibromo-3-Chloropropane	155		13.688				ND	ND	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	93	4562	0.0600	0.0525	
151 1,2,4-Trichlorobenzene	180	14.249	14.237	0.012	89	3824	0.0600	0.0550	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	89	2028	0.0600	0.0590	
153 Naphthalene	128	14.432	14.414	0.018	95	6369	0.0600	0.0560	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	94	3096	0.0600	0.0542	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_GAS826_00279

Amount Added: 1.20

Units: uL

MSV_LL_#1_826_00171

Amount Added: 1.20

Units: uL

MSV_LL_#2_826_00185

Amount Added: 1.20

Units: uL

MSV_LLcentISS_00016

Amount Added: 5.00

Units: uL

Run Reagent

Chrom Revision: 2.3 14-Jul-2025 13:55:14

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

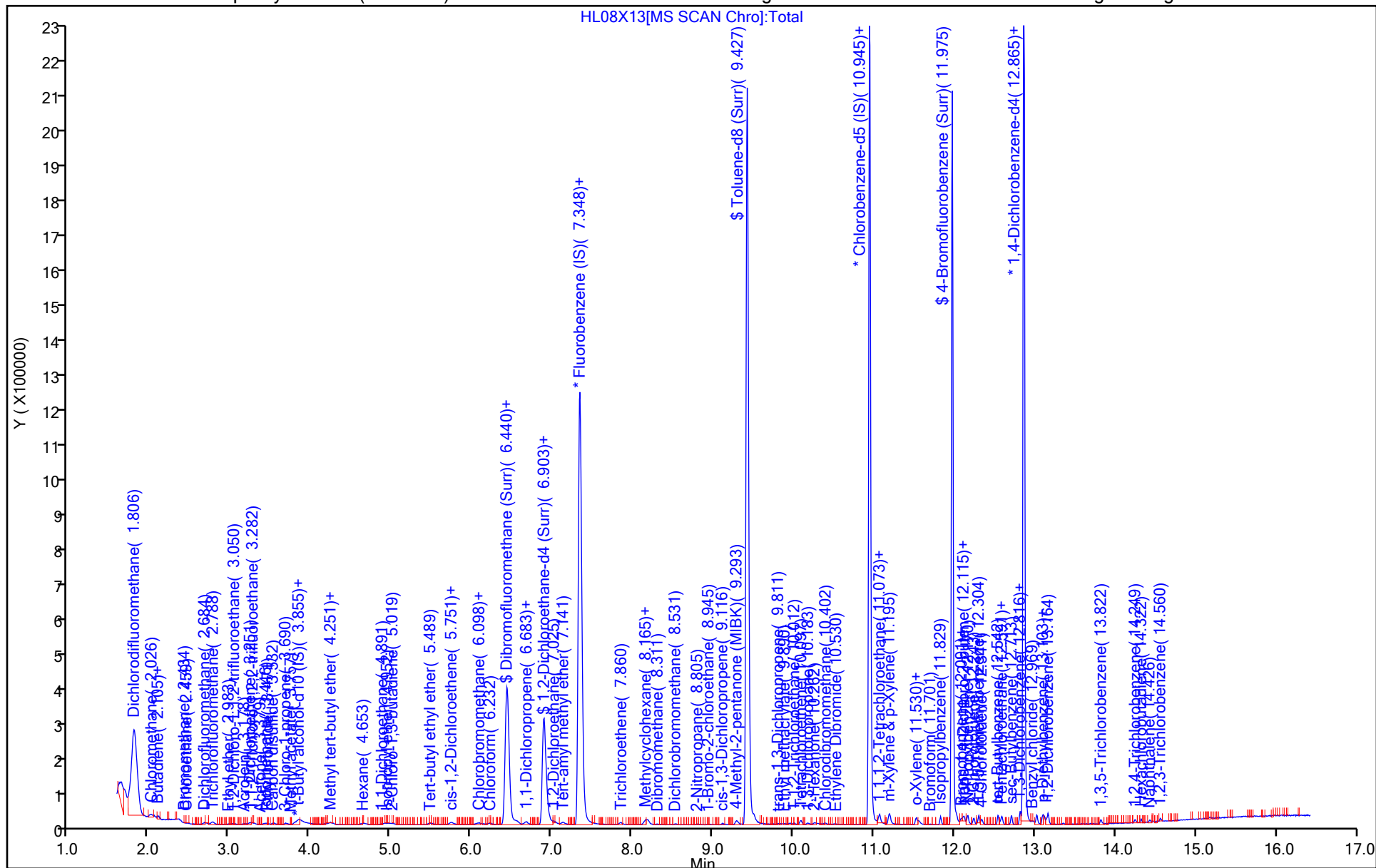
Operator ID: gaw91131

Worklist Smp#: 14

ALS Bottle#: 13

Limit Group: MSV - 8260C D

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

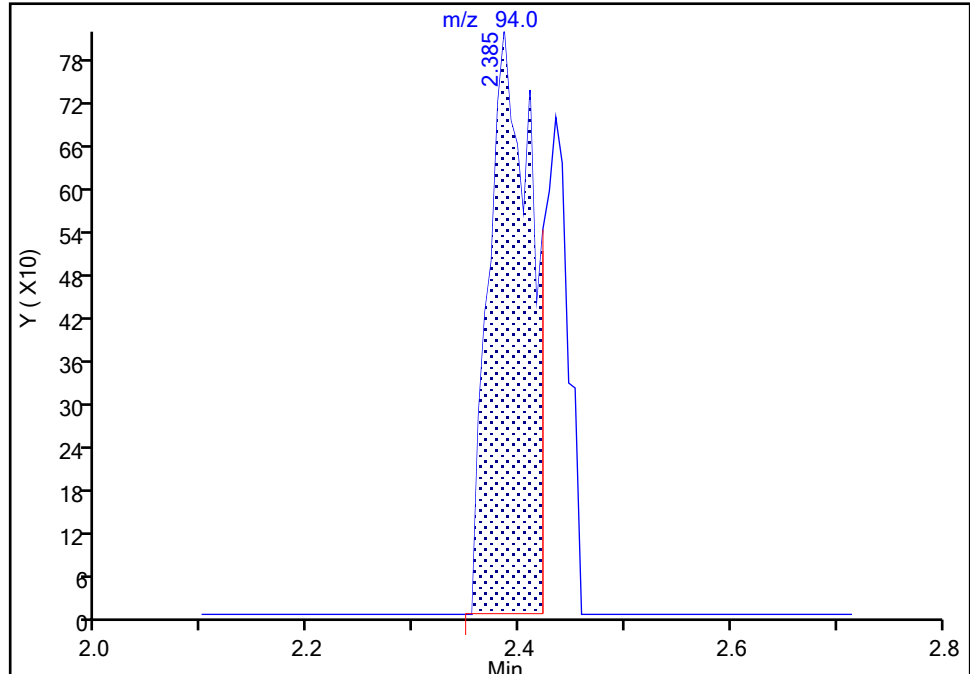
MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

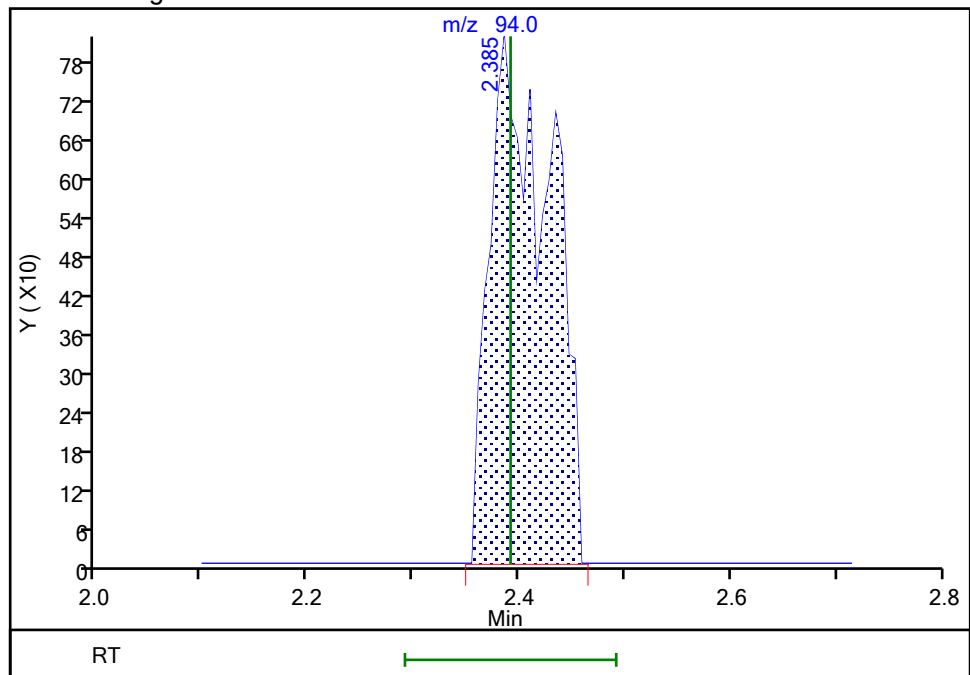
RT: 2.39
Area: 2318
Amount: 0.044989
Amount Units: ug/l

Processing Integration Results



RT: 2.39
Area: 3254
Amount: 0.064569
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:14:15 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

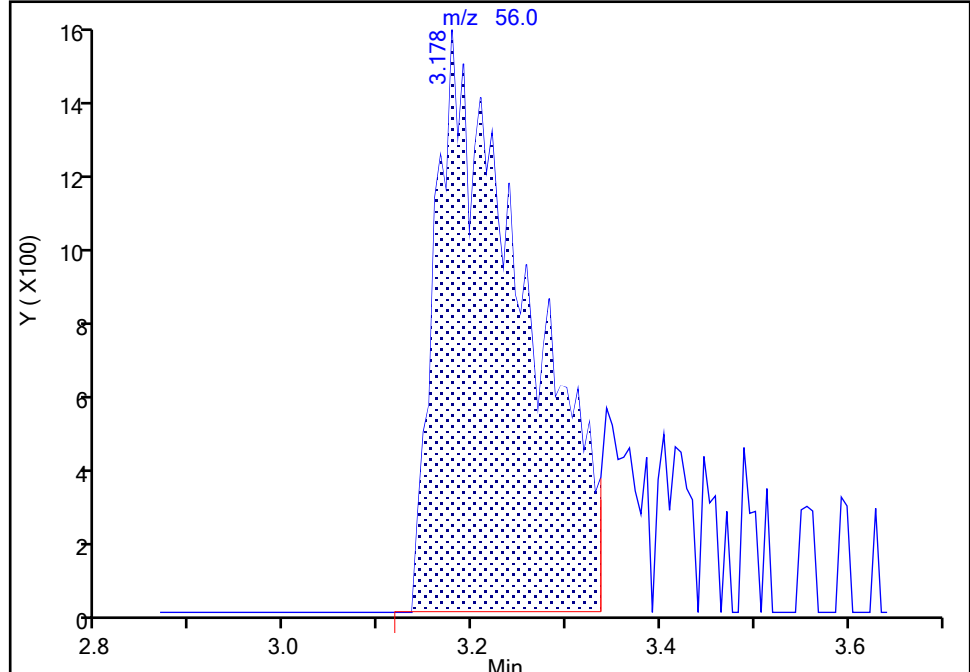
MS Quad

16 Acrolein, CAS: 107-02-8

Signal: 1

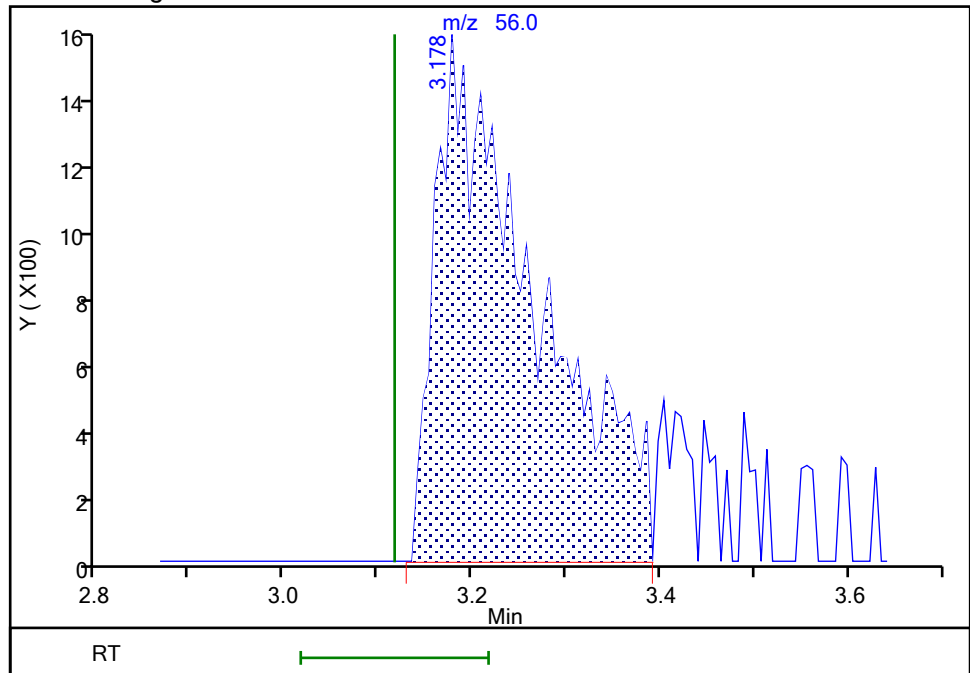
RT: 3.18
Area: 9928
Amount: 2.166420
Amount Units: ug/l

Processing Integration Results



RT: 3.18
Area: 11100
Amount: 2.389544
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:14:21 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

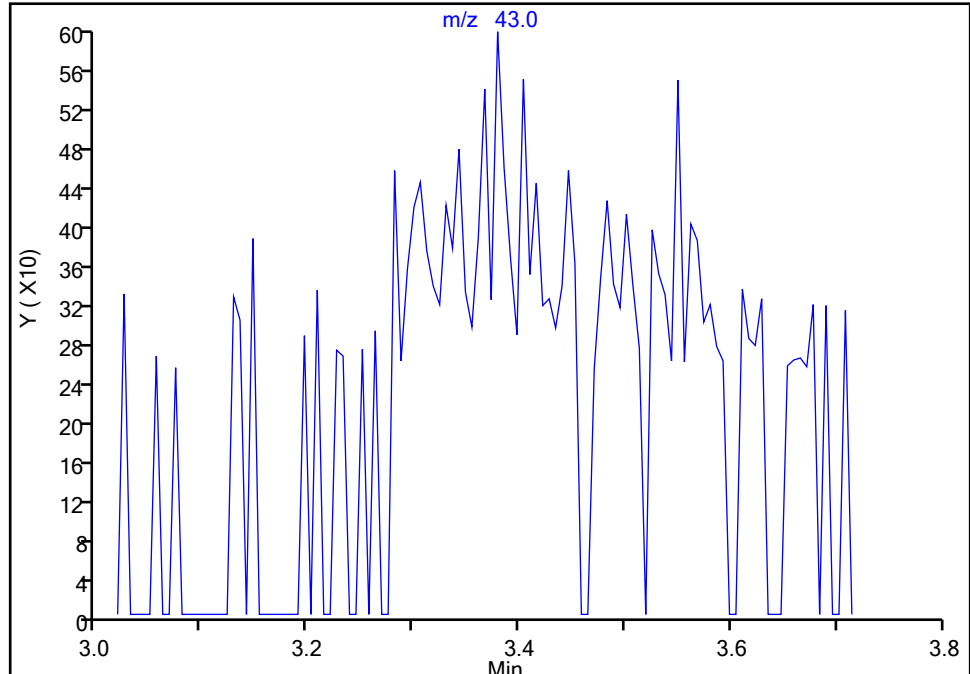
19 Acetone, CAS: 67-64-1

Signal: 1

Not Detected

Expected RT: 3.28

Processing Integration Results



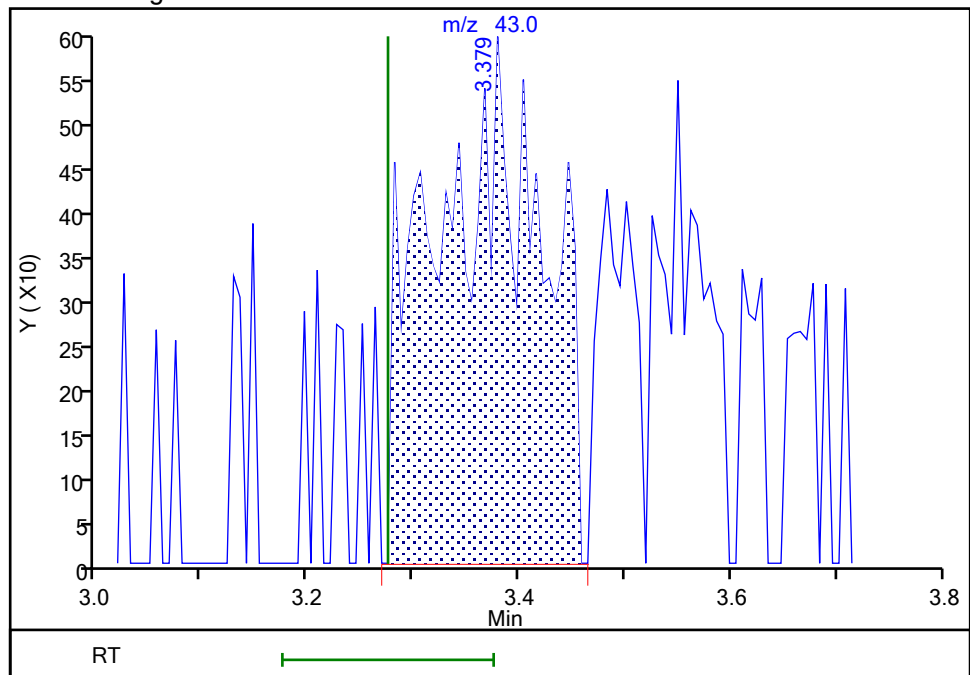
RT: 3.38

Area: 4126

Amount: 0.723903

Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:14:27 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

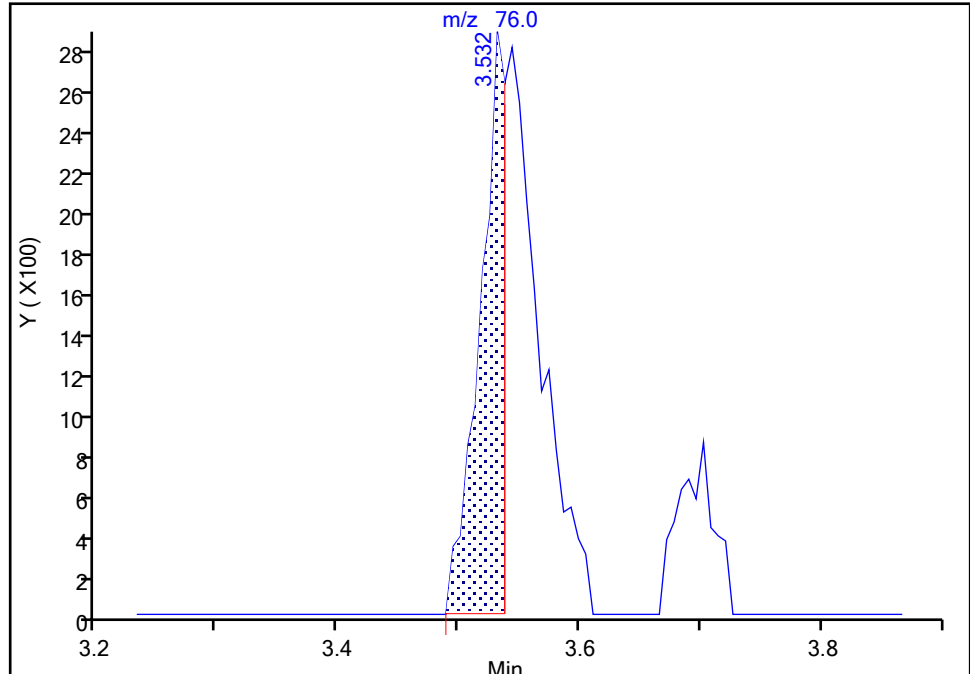
MS Quad

23 Carbon disulfide, CAS: 75-15-0

Signal: 1

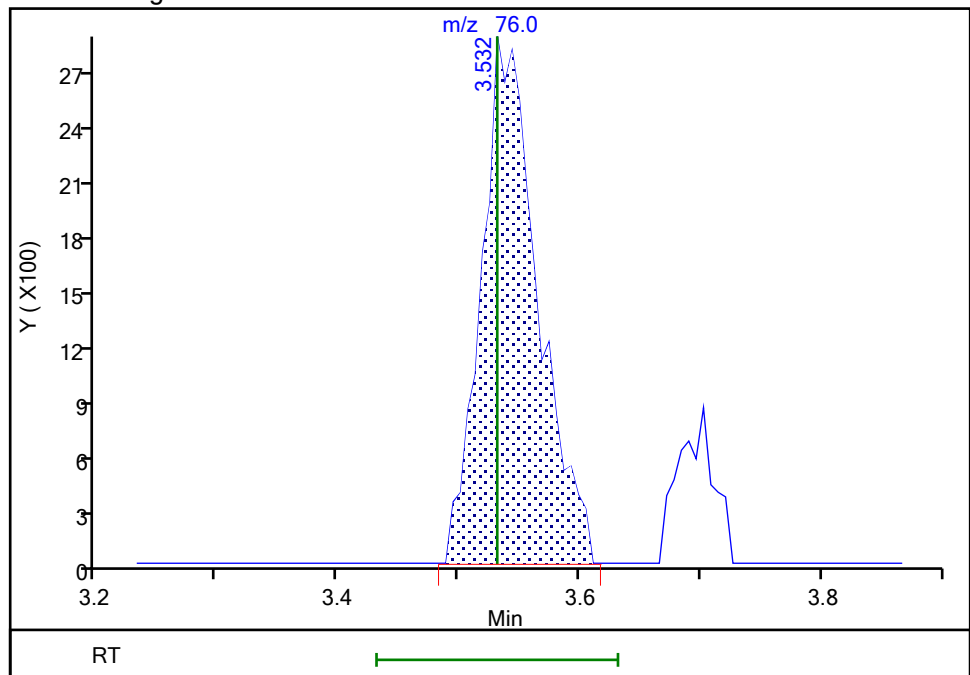
RT: 3.53
Area: 4275
Amount: 0.024637
Amount Units: ug/l

Processing Integration Results



RT: 3.53
Area: 9291
Amount: 0.065168
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:14:33 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

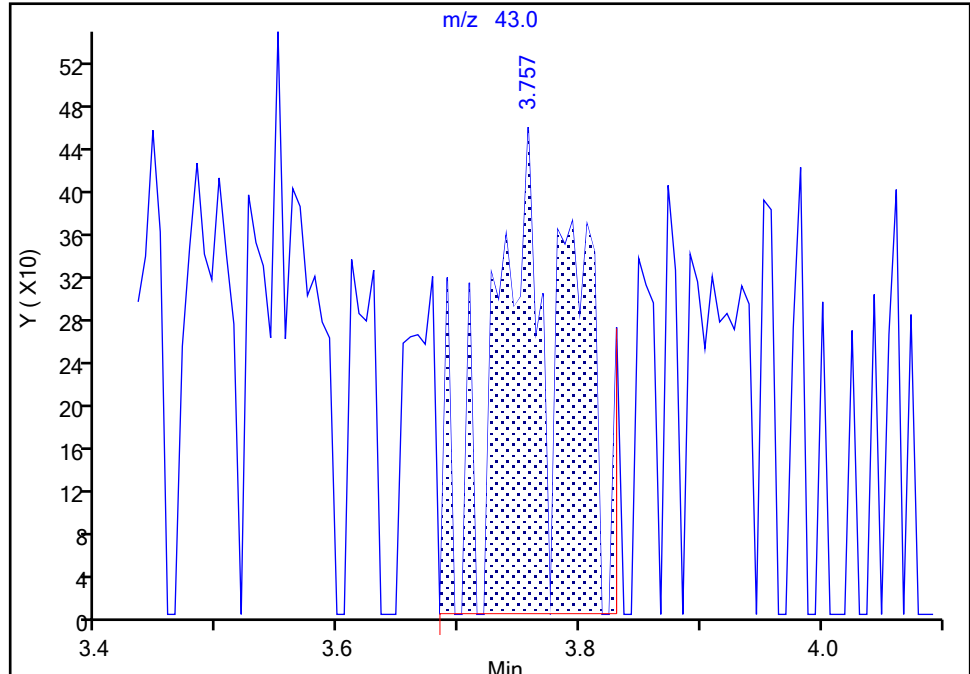
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

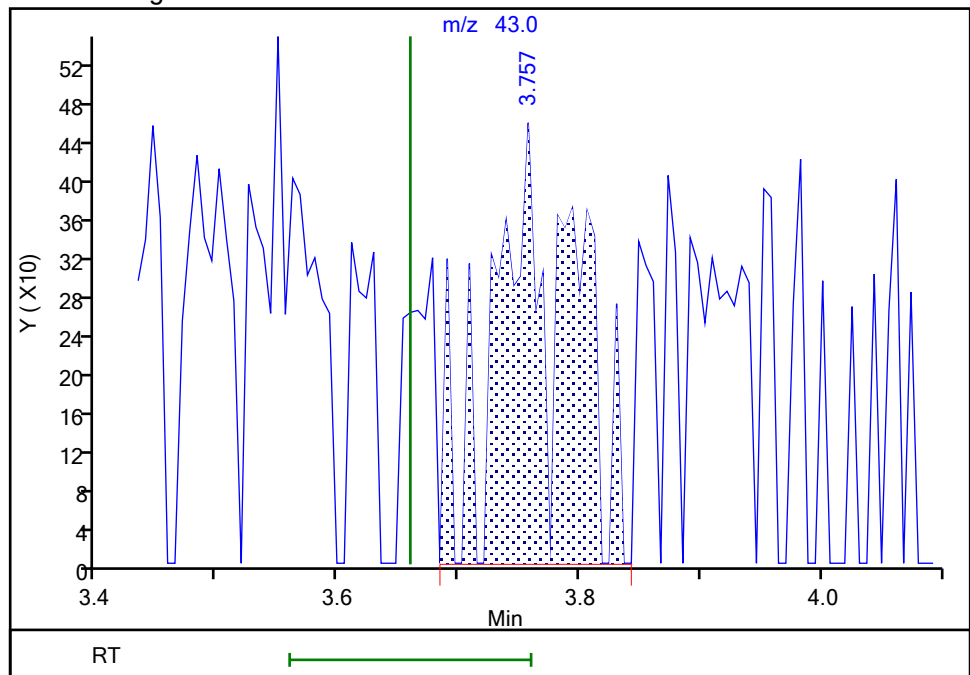
RT: 3.76
Area: 2034
Amount: 0.144681
Amount Units: ug/l

Processing Integration Results



RT: 3.76
Area: 2034
Amount: 0.149302
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:07 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

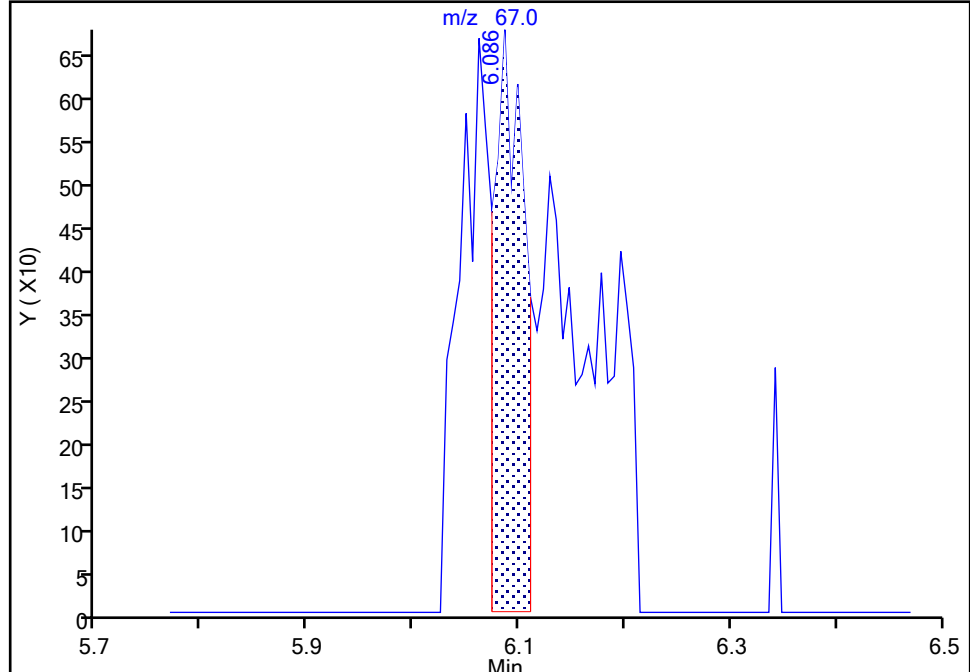
MS Quad

47 Methacrylonitrile, CAS: 126-98-7

Signal: 1

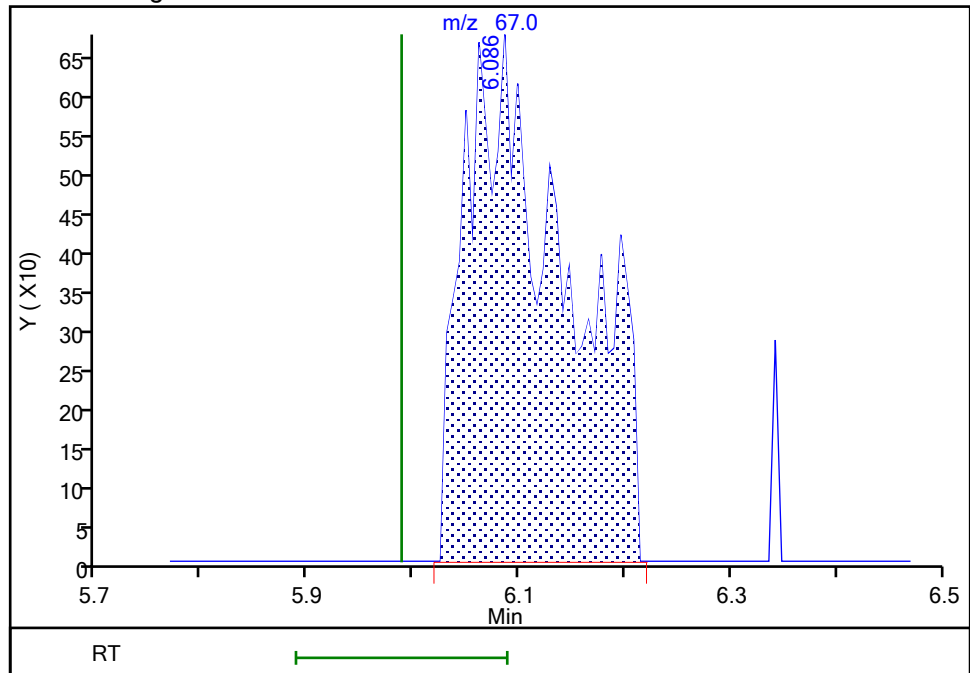
RT: 6.09
Area: 1321
Amount: 0.637383
Amount Units: ug/l

Processing Integration Results



RT: 6.09
Area: 4500
Amount: 0.458211
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:19 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

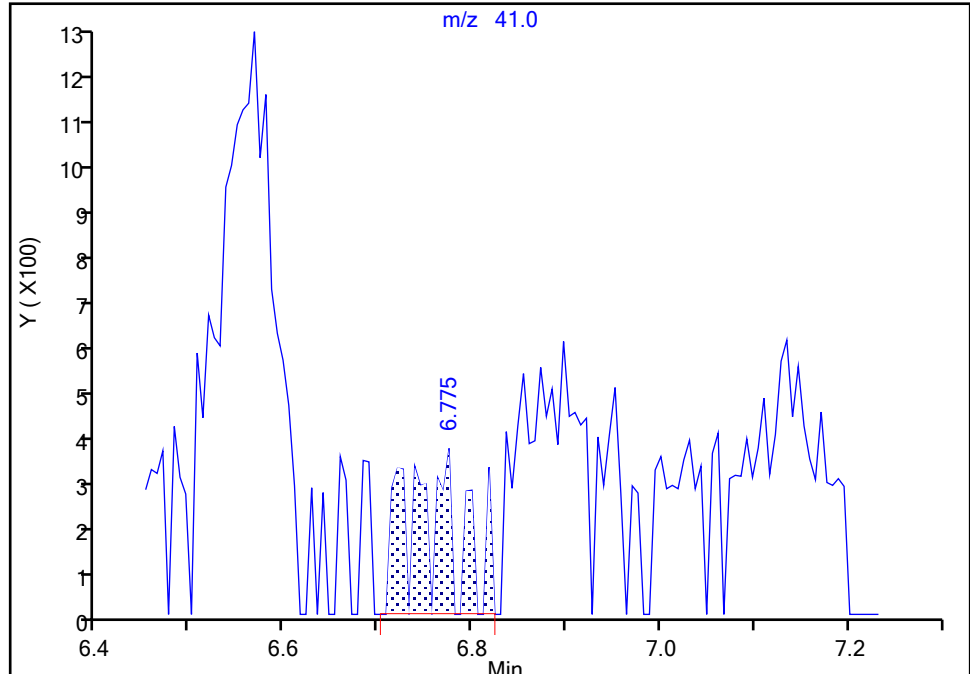
MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

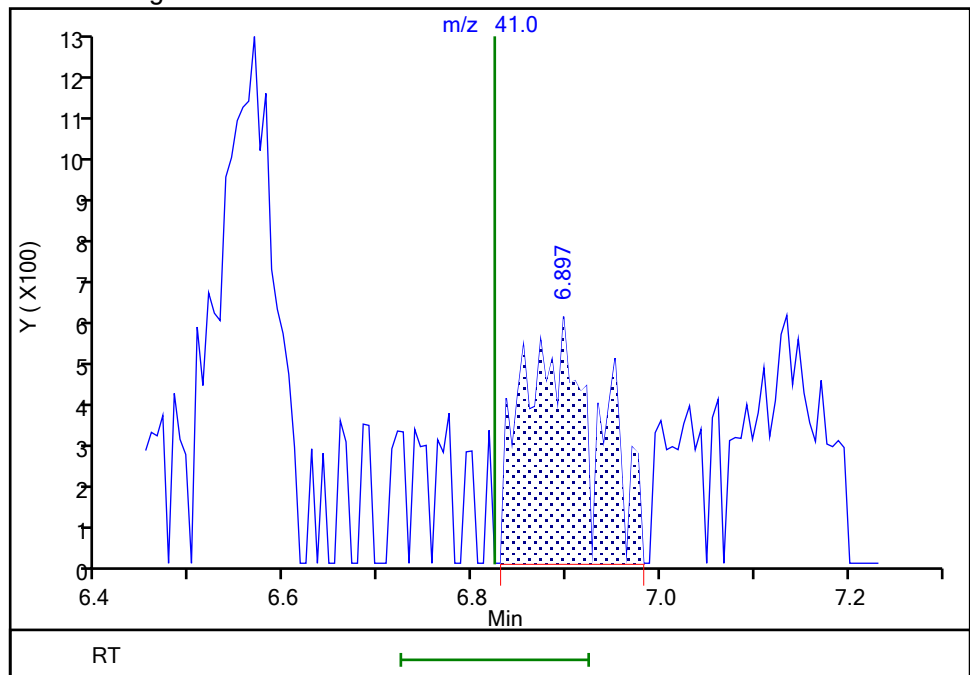
RT: 6.77
Area: 1255
Amount: 2.013227
Amount Units: ug/l

Processing Integration Results



RT: 6.90
Area: 3100
Amount: 4.547241
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:35 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

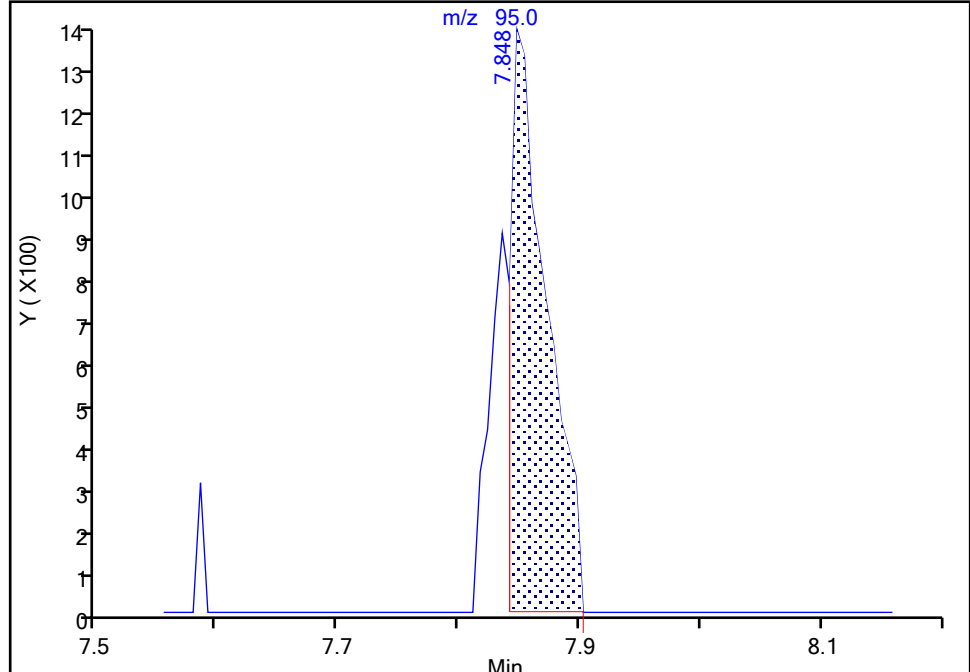
MS Quad

68 Trichloroethene, CAS: 79-01-6

Signal: 1

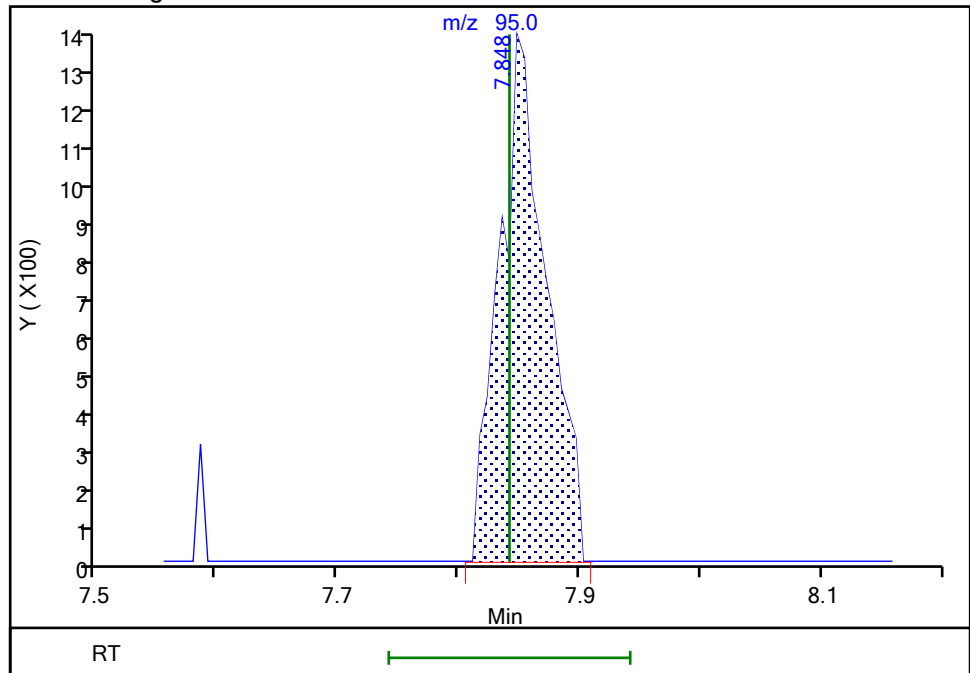
RT: 7.85
Area: 2784
Amount: 0.038705
Amount Units: ug/l

Processing Integration Results



RT: 7.85
Area: 3623
Amount: 0.060976
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:42 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

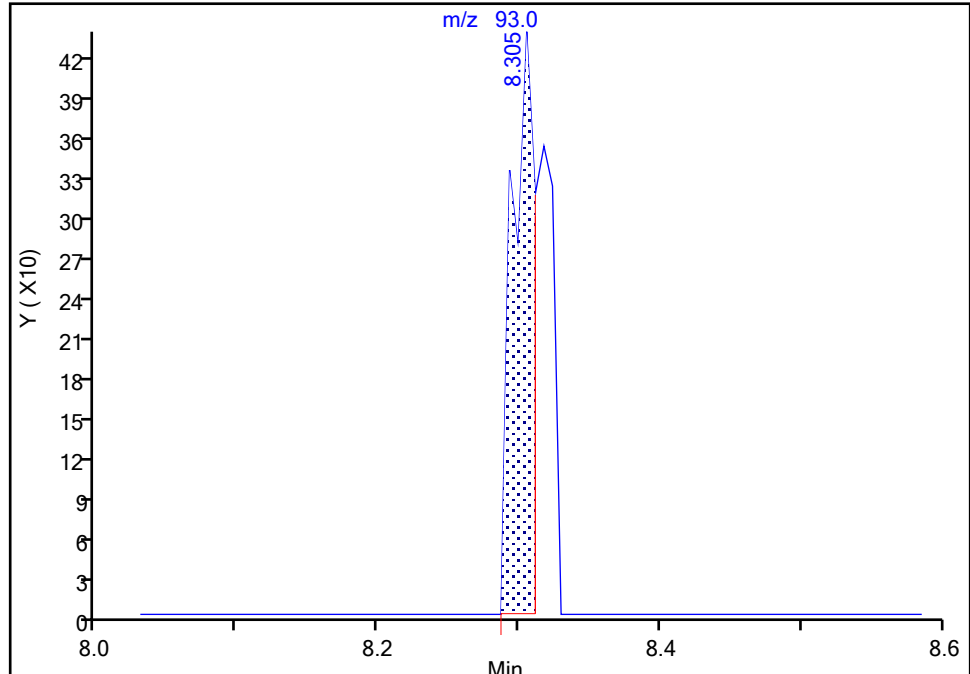
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D
Injection Date: 09-Jul-2025 04:37:30 Instrument ID: 19094
Lims ID: IC std2 0.06
Client ID:
Operator ID: gaw91131 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 Dibromomethane, CAS: 74-95-3

Signal: 1

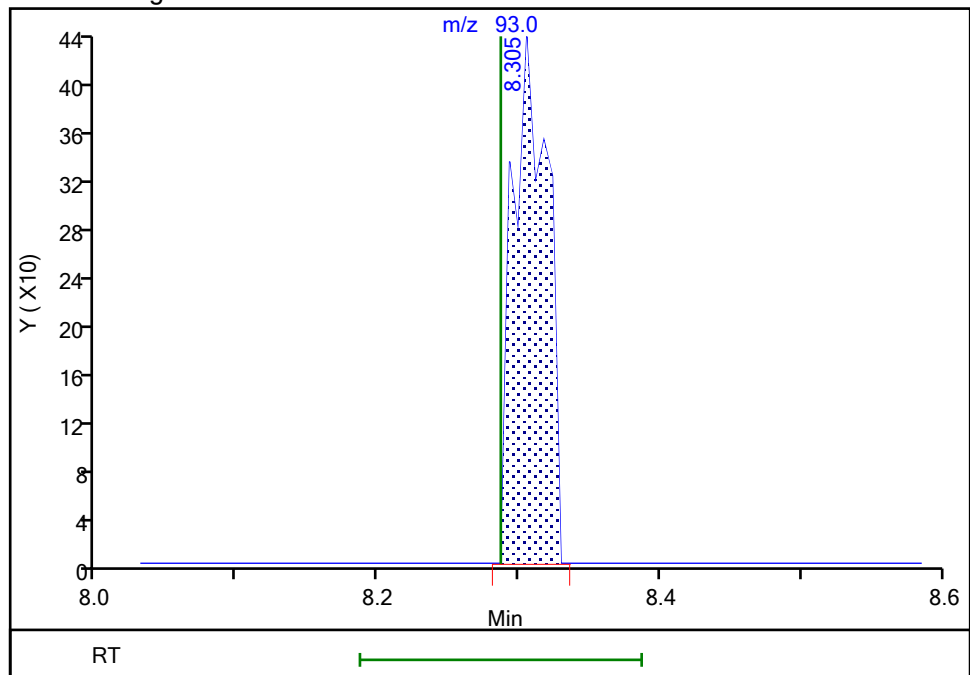
RT: 8.31
Area: 499
Amount: 0.026764
Amount Units: ug/l

Processing Integration Results



RT: 8.31
Area: 745
Amount: 0.036874
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:48 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

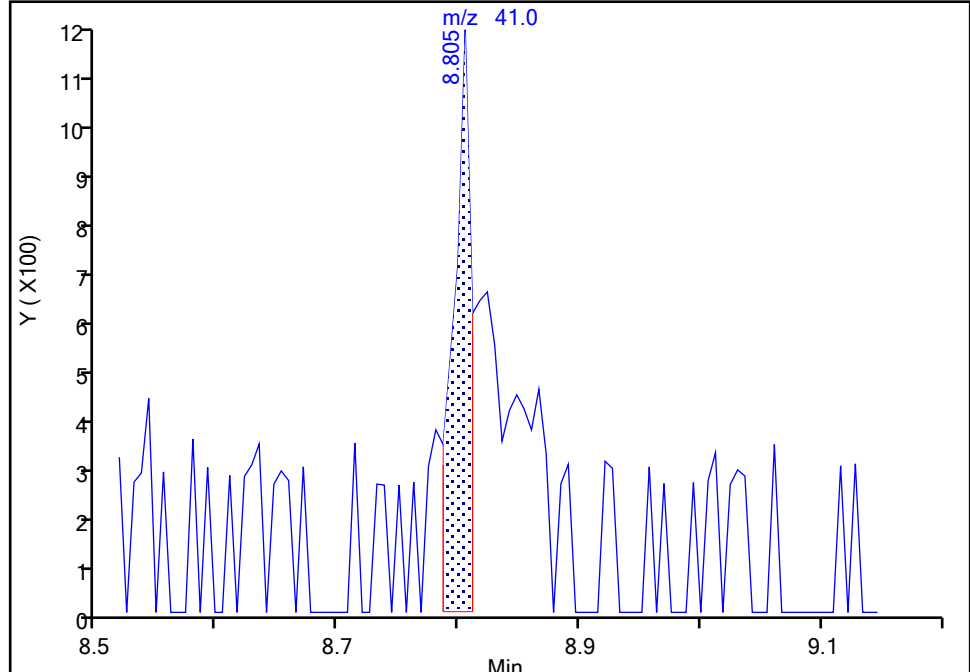
MS Quad

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

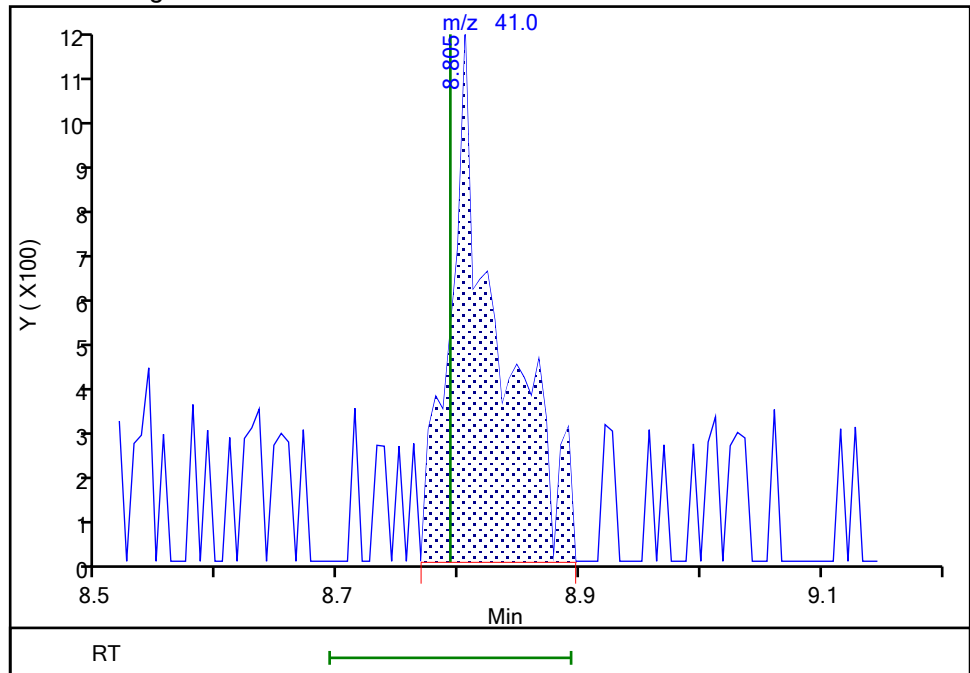
RT: 8.80
Area: 1194
Amount: 0.172197
Amount Units: ug/l

Processing Integration Results



RT: 8.80
Area: 3259
Amount: 0.525214
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:15:55 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

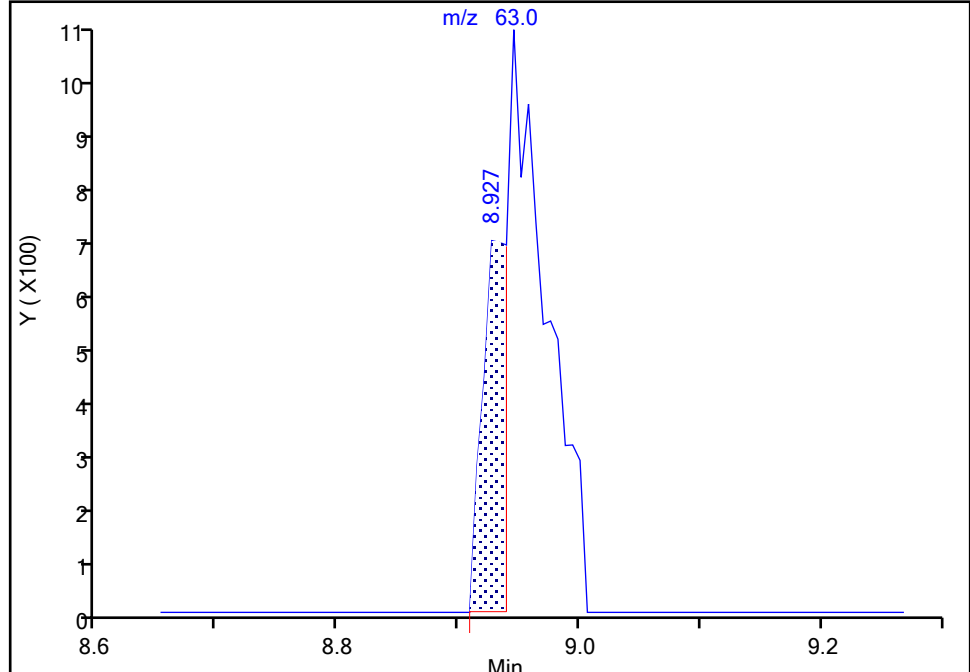
MS Quad

79 1-Bromo-2-chloroethane, CAS: 107-04-0

Signal: 1

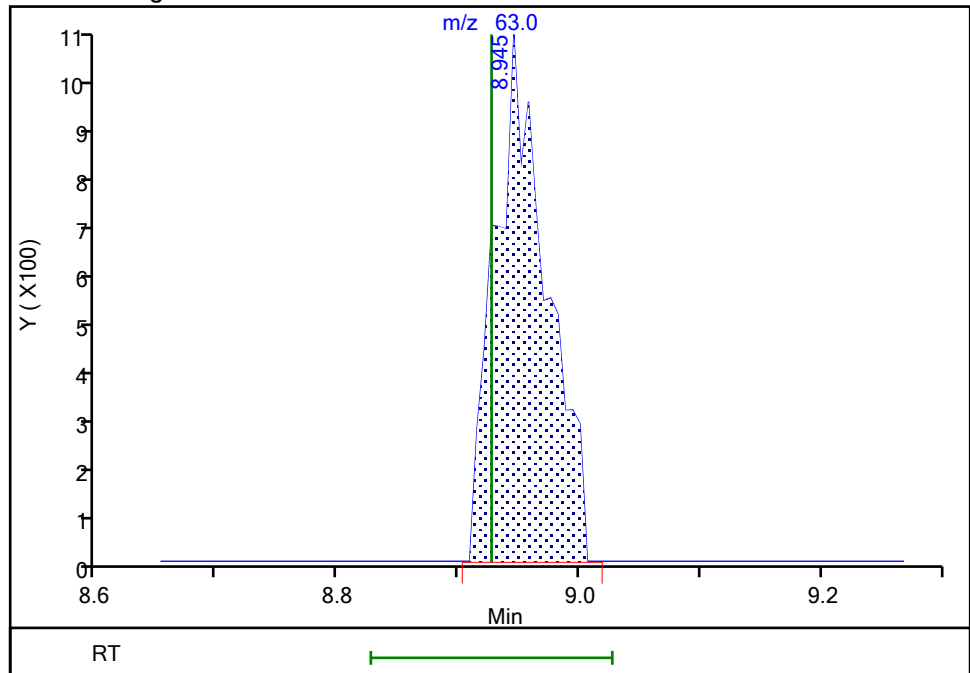
RT: 8.93
Area: 991
Amount: 0.022394
Amount Units: ug/l

Processing Integration Results



RT: 8.95
Area: 3153
Amount: 0.064788
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:01 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

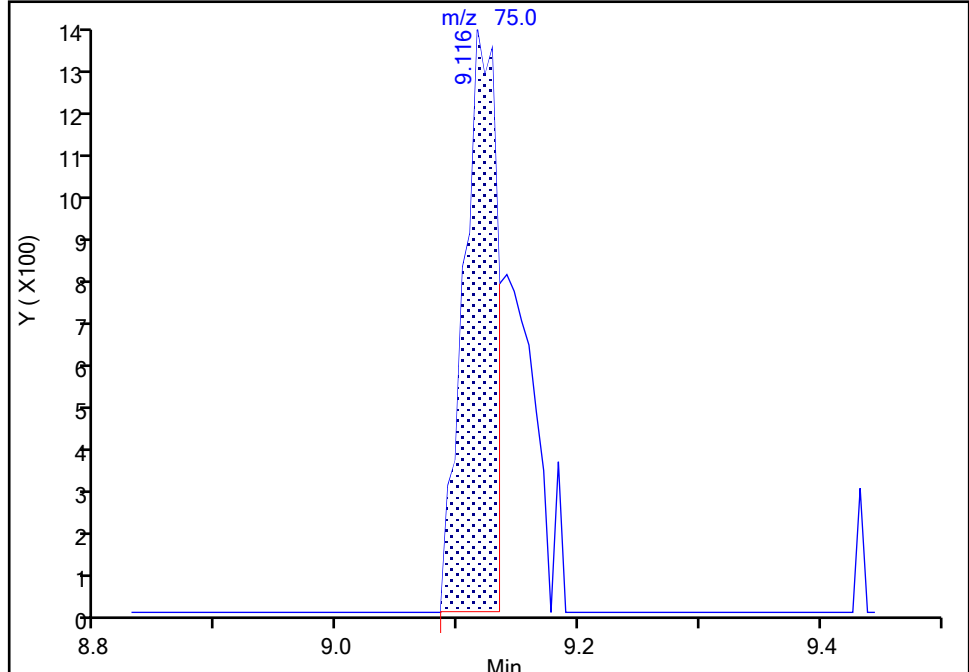
MS Quad

80 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

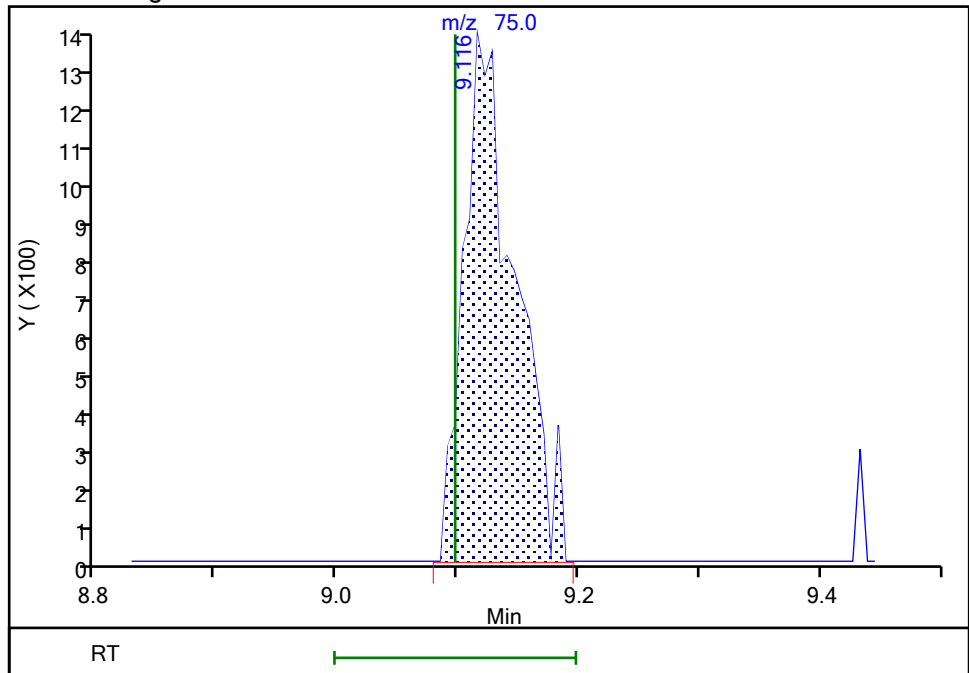
RT: 9.12
Area: 2503
Amount: 0.031393
Amount Units: ug/l

Processing Integration Results



RT: 9.12
Area: 3925
Amount: 0.052717
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:04 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

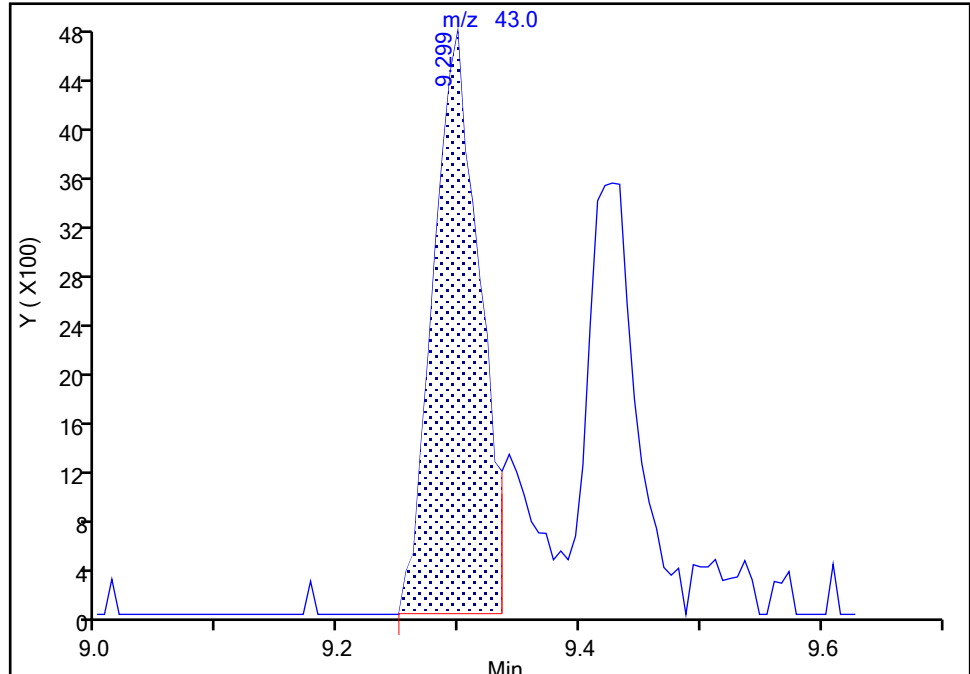
MS Quad

82 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

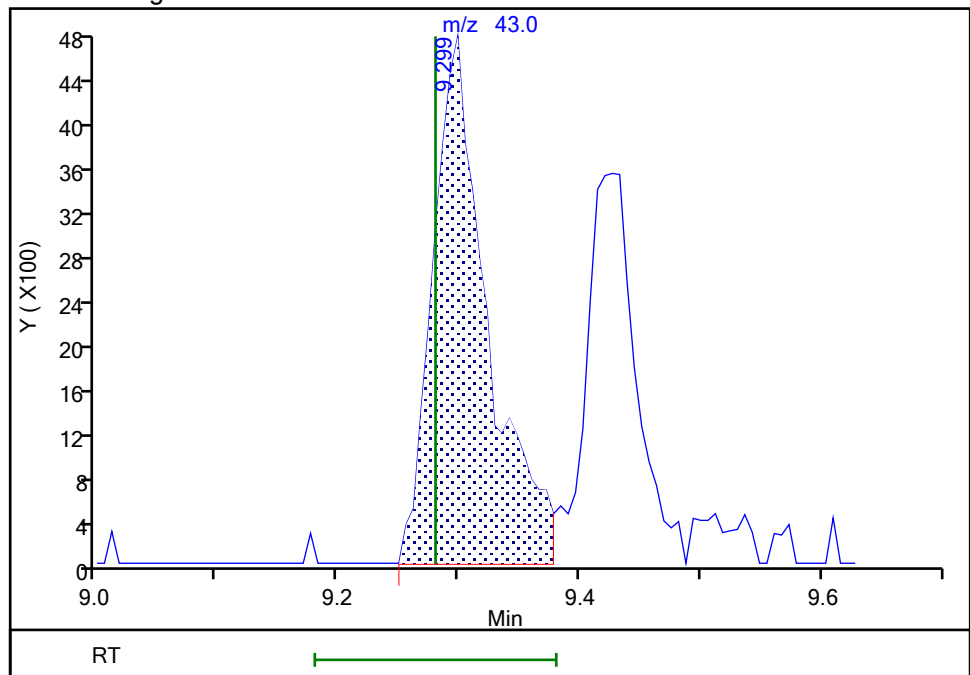
RT: 9.30
Area: 12692
Amount: 0.463099
Amount Units: ug/l

Processing Integration Results



RT: 9.30
Area: 14864
Amount: 0.534505
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:14 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

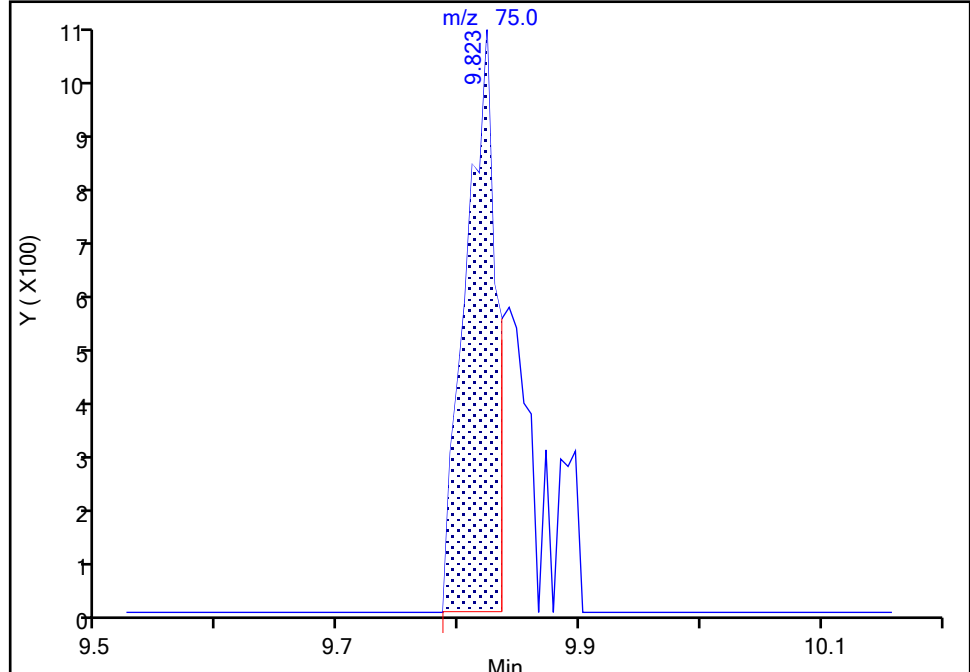
MS Quad

85 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

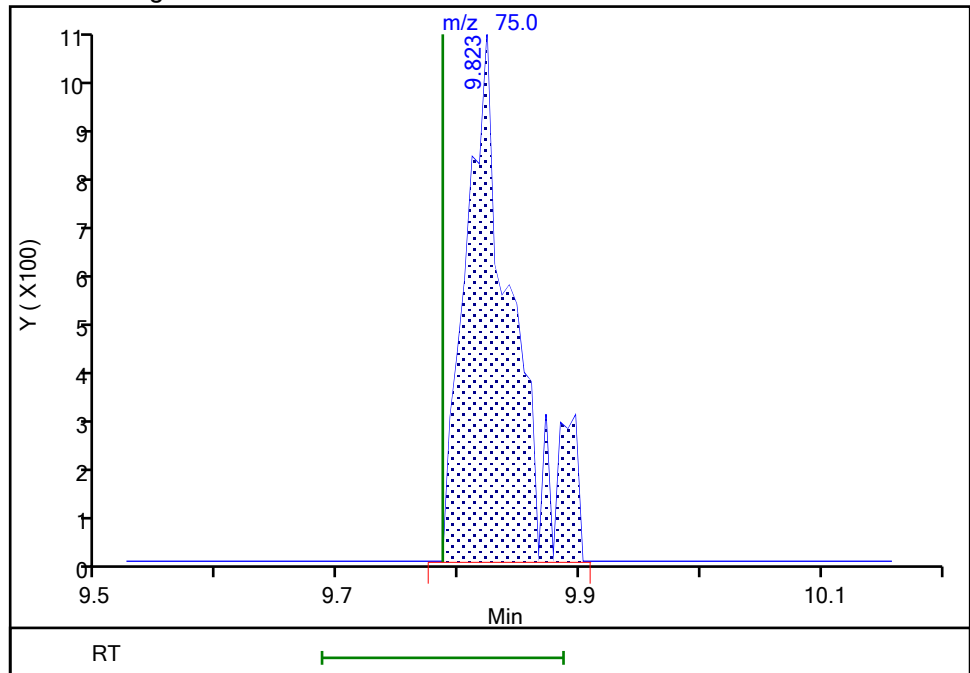
RT: 9.82
Area: 1794
Amount: 0.061813
Amount Units: ug/l

Processing Integration Results



RT: 9.82
Area: 2833
Amount: 0.049853
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:21 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

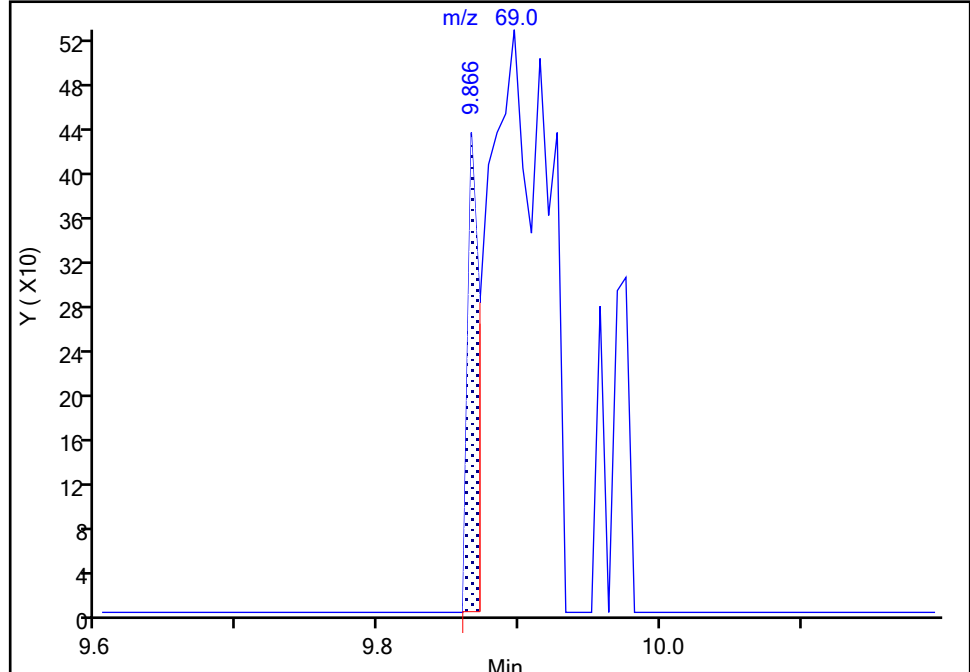
MS Quad

104 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

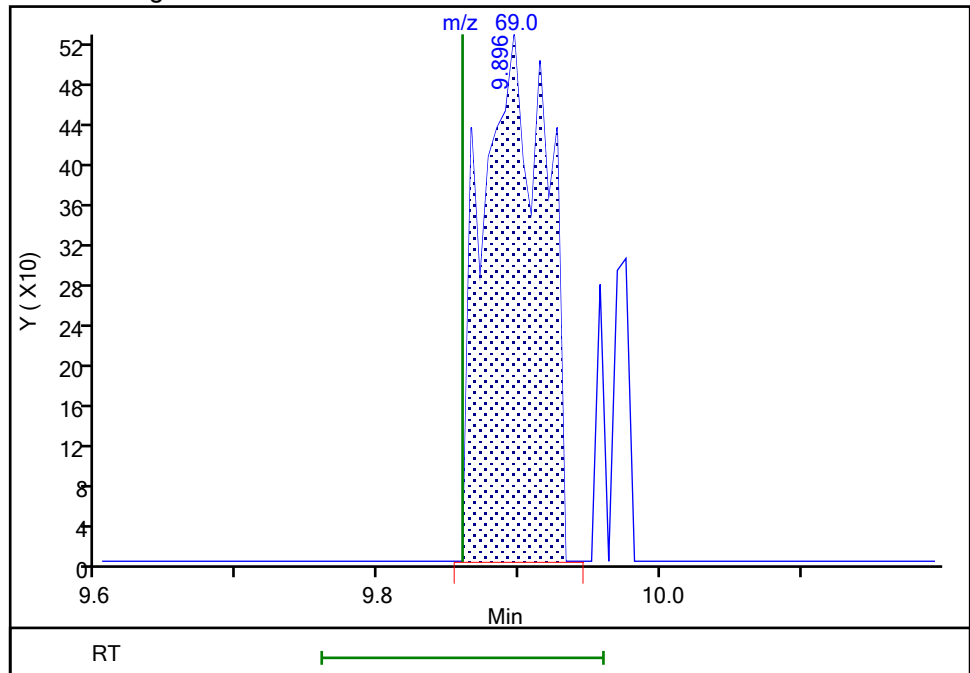
RT: 9.87
Area: 261
Amount: 0.064827
Amount Units: ug/l

Processing Integration Results



RT: 9.90
Area: 1672
Amount: 0.041622
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:25 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

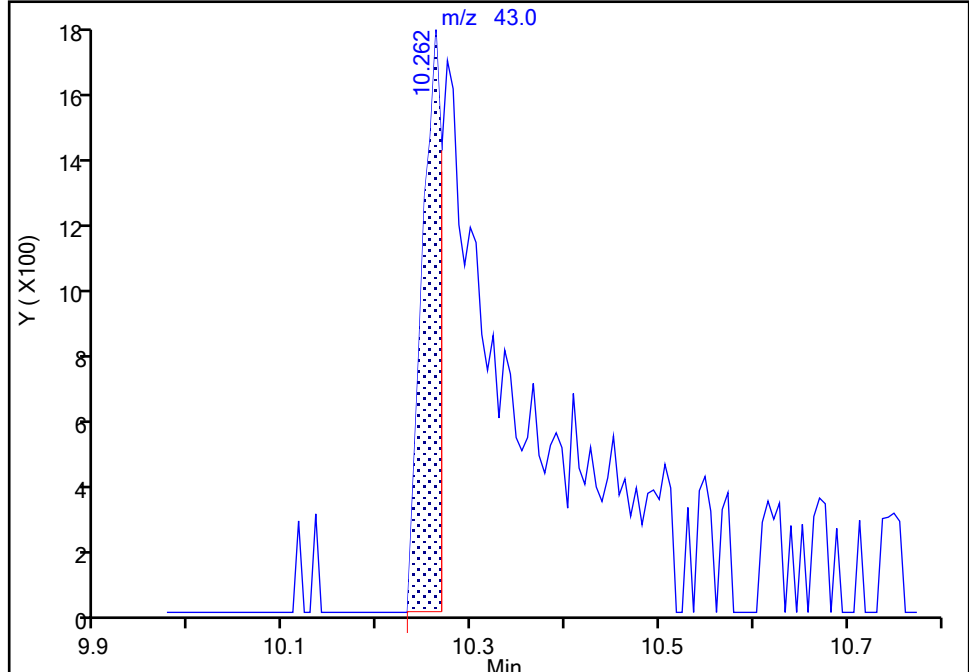
MS Quad

109 2-Hexanone, CAS: 591-78-6

Signal: 1

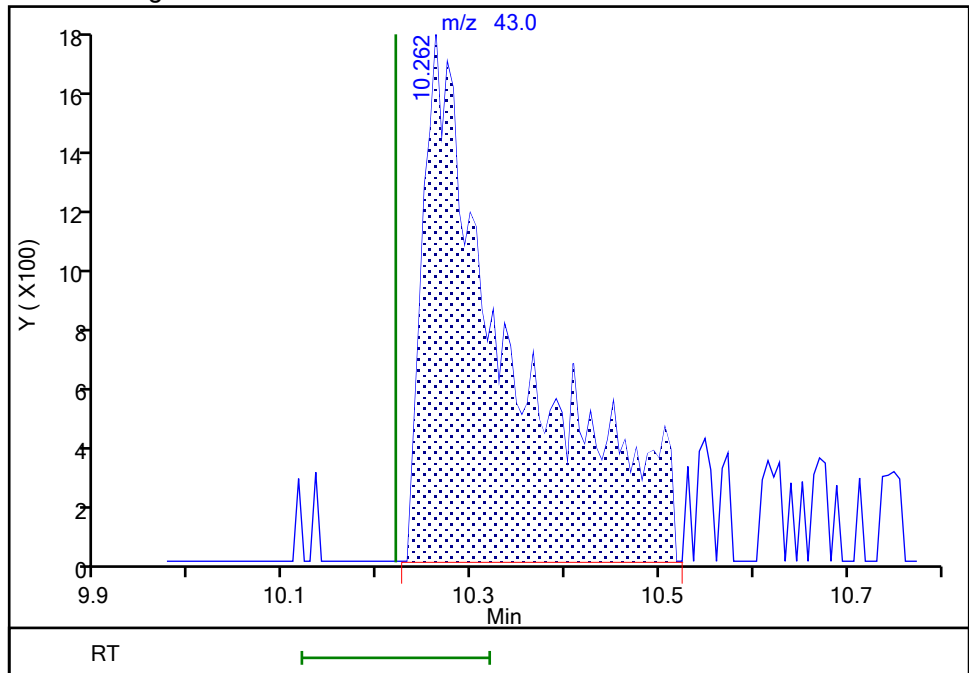
RT: 10.26
Area: 2530
Amount: 0.144939
Amount Units: ug/l

Processing Integration Results



RT: 10.26
Area: 11341
Amount: 0.638224
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:32 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

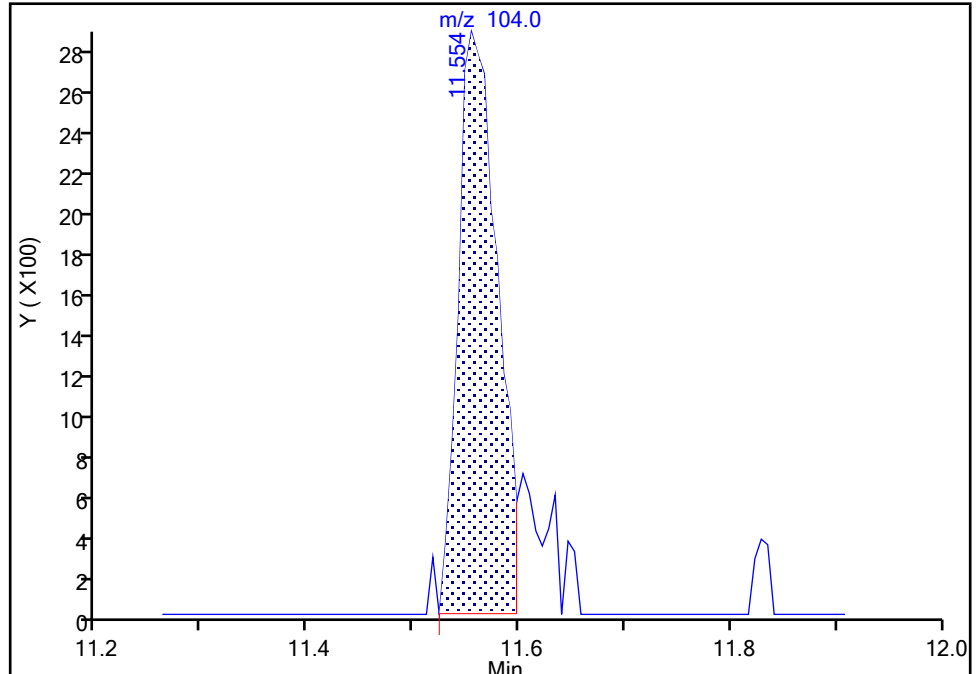
MS Quad

121 Styrene, CAS: 100-42-5

Signal: 1

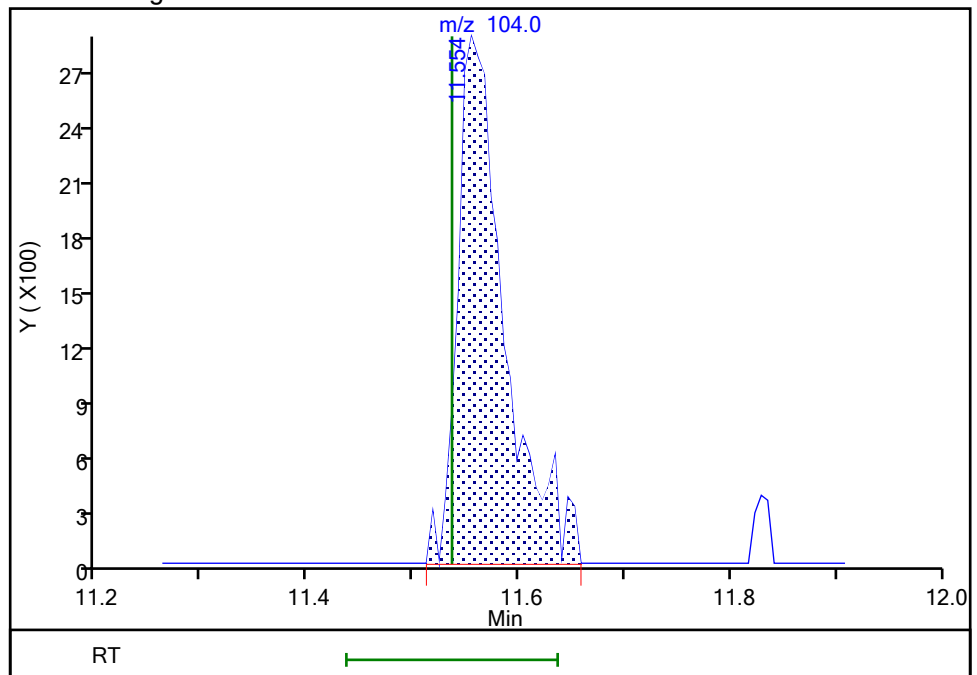
RT: 11.55
Area: 7286
Amount: 0.045234
Amount Units: ug/l

Processing Integration Results



RT: 11.55
Area: 8731
Amount: 0.053319
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:45 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

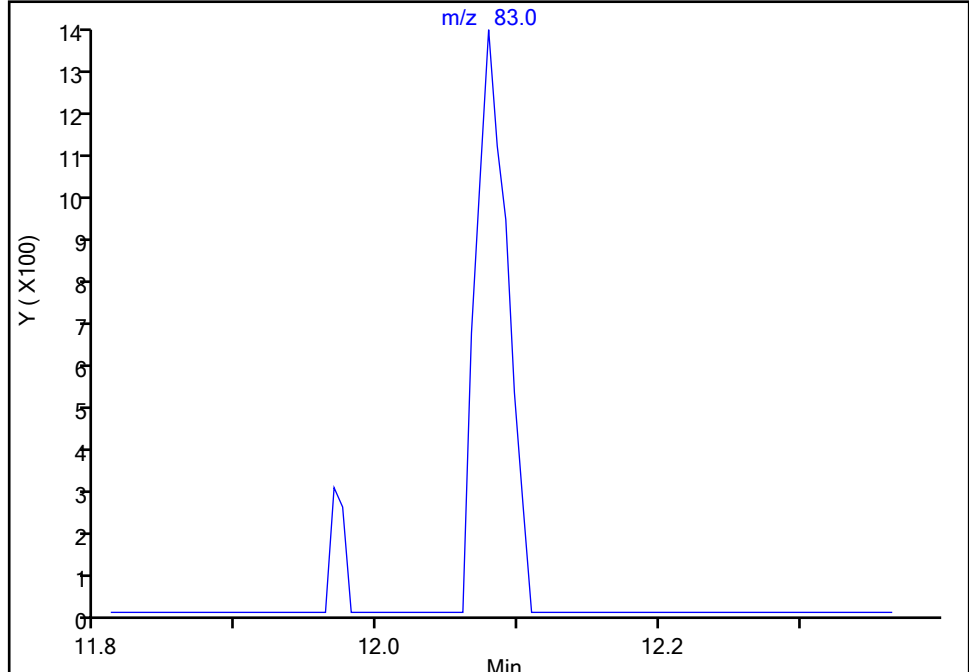
Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D
Injection Date: 09-Jul-2025 04:37:30 Instrument ID: 19094
Lims ID: IC std2 0.06
Client ID:
Operator ID: gaw91131 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

127 1,1,2,2-Tetrachloroethane, CAS: 79-34-5
Signal: 1

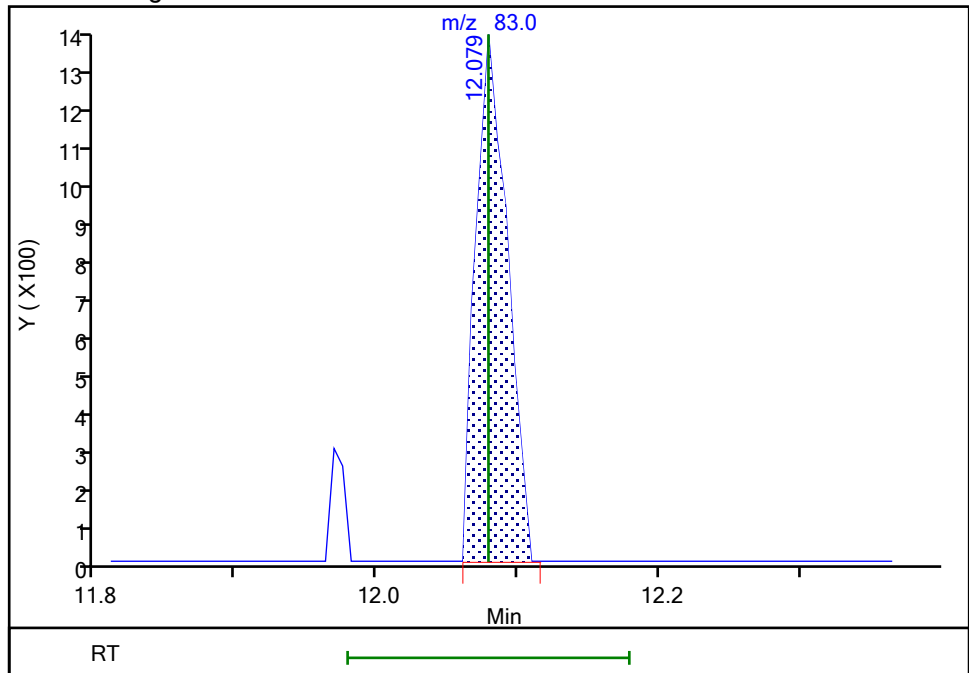
Not Detected
Expected RT: 12.08

Processing Integration Results



RT: 12.08
Area: 2155
Amount: 0.059154
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:16:54 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#:

13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

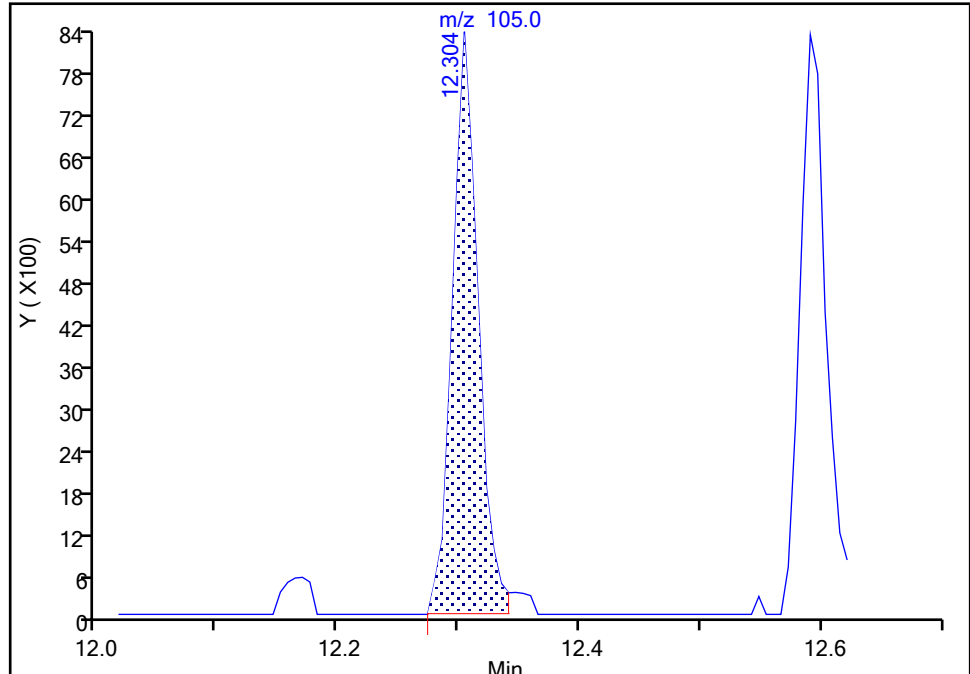
MS Quad

133 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

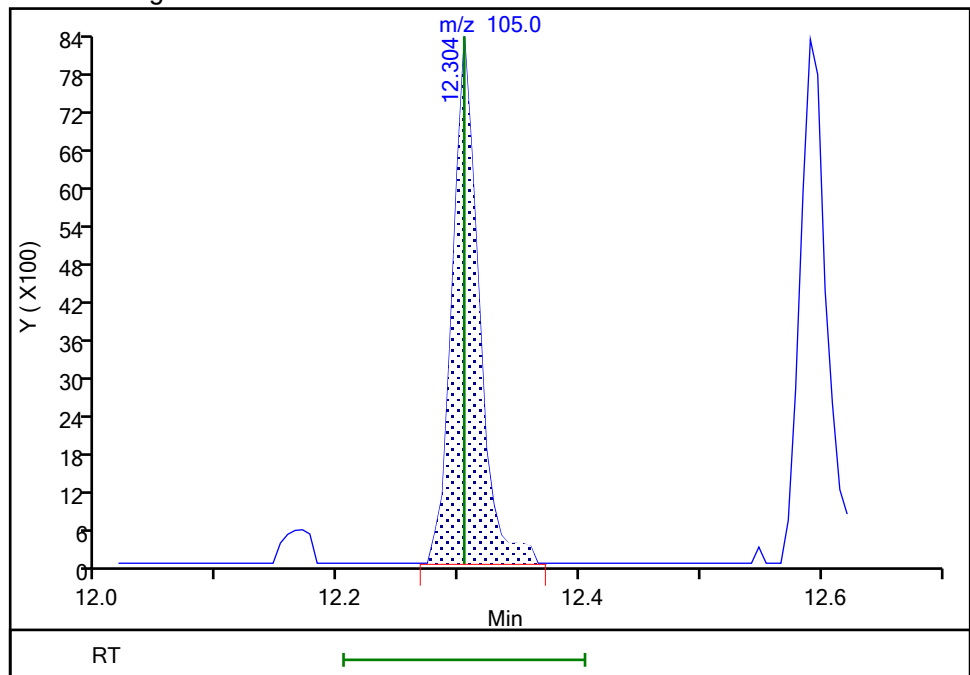
RT: 12.30
Area: 12290
Amount: 0.044324
Amount Units: ug/l

Processing Integration Results



RT: 12.30
Area: 12613
Amount: 0.054796
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:17:07 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X13.D

Injection Date: 09-Jul-2025 04:37:30

Instrument ID: 19094

Lims ID: IC std2 0.06

Client ID:

Operator ID: gaw91131

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

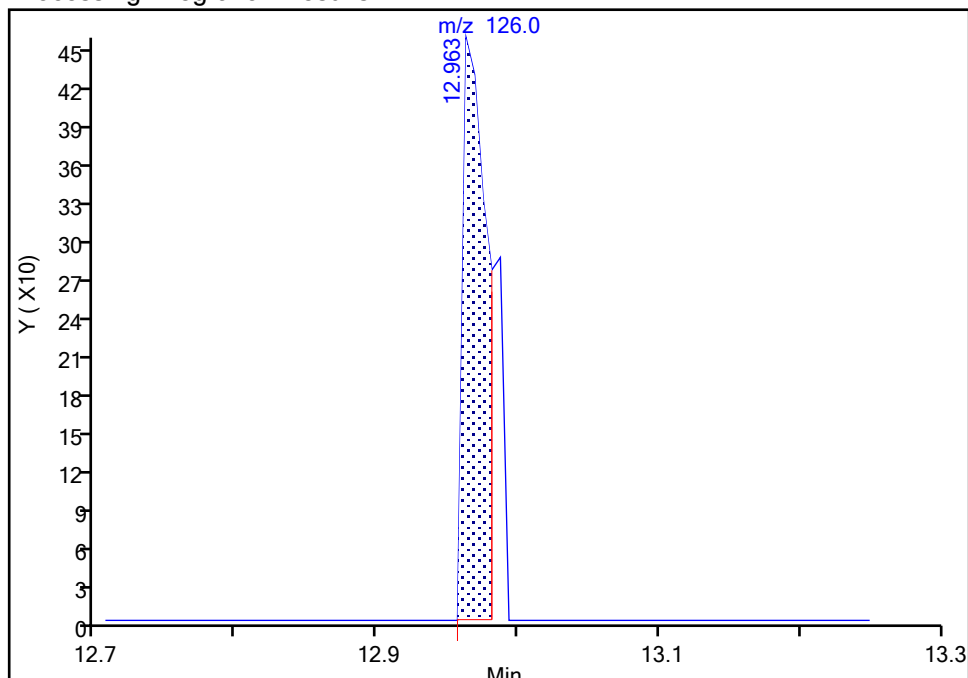
MS Quad

144 Benzyl chloride, CAS: 100-44-7

Signal: 1

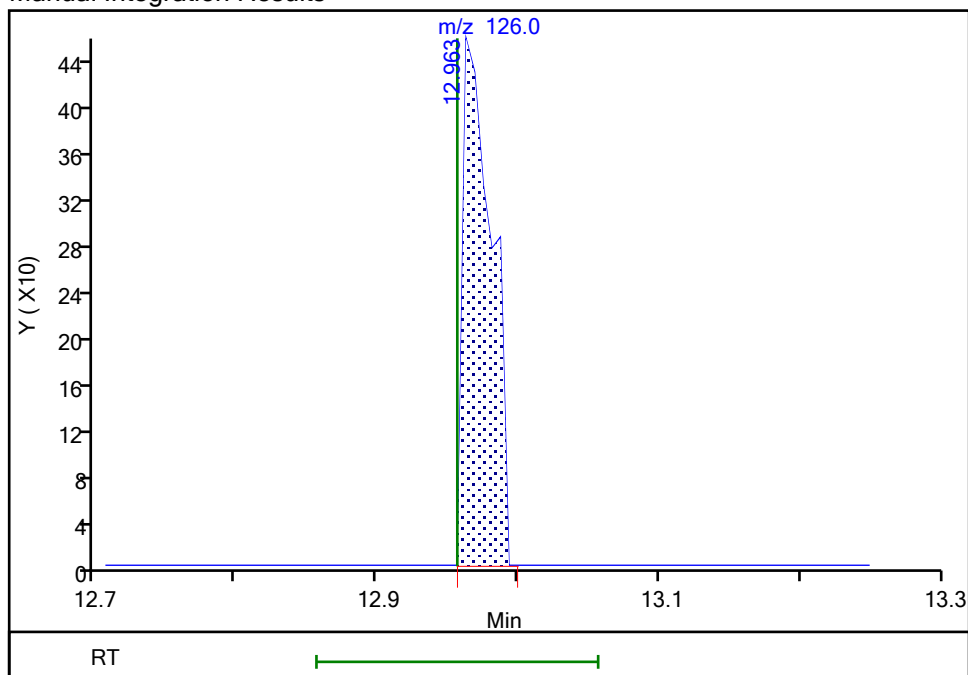
RT: 12.96
Area: 548
Amount: 0.038736
Amount Units: ug/l

Processing Integration Results



RT: 12.96
Area: 652
Amount: 0.045392
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:17:16 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
 Lims ID: IC std3 0.2
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 09-Jul-2025 04:58:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-015
 Misc. Info.: IC STD3 0.2
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:01 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:22:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.824	1.831	-0.007	91	10896	0.2000	0.1816	
5 Chloromethane	50	2.001	2.013	-0.012	99	16319	0.2000	0.2059	
7 Butadiene	39	2.093	2.105	-0.012	95	14128	0.2000	0.1854	
6 Vinyl chloride	62	2.111	2.123	-0.012	79	14044	0.2000	0.1959	
9 Bromomethane	94	2.385	2.391	-0.006	90	10656	0.2000	0.2093	
10 Chloroethane	64	2.465	2.477	-0.012	97	9729	0.2000	0.2162	
11 Dichlorofluoromethane	67	2.678	2.690	-0.012	97	24545	0.2000	0.2039	
12 Trichlorofluoromethane	101	2.776	2.788	-0.012	51	16541	0.2000	0.1779	
14 Ethyl ether	59	2.971	2.971	0.000	68	5694	0.2001	0.1805	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.032	3.050	-0.018	89	14258	0.2000	0.2056	
16 Acrolein	56	3.147	3.117	0.030	98	42306	9.76	8.79	M
17 1,1-Dichloroethene	96	3.251	3.251	0.000	96	9876	0.2000	0.2103	
19 Acetone	43	3.330	3.275	0.055	33	13299	2.00	2.25	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.275	3.294	-0.019	52	9271	0.2000	0.2011	
21 Iodomethane	142	3.422	3.434	-0.012	99	18331	0.2000	0.2035	
22 Ethyl bromide	108	3.446	3.458	-0.012	95	8744	0.1998	0.2203	
23 Carbon disulfide	76	3.525	3.531	-0.006	100	29965	0.2000	0.2081	
24 Methyl acetate	43	3.733	3.660	0.073	23	7151	0.2000	0.5064	M
26 3-Chloro-1-propene	41	3.684	3.684	0.000	92	20600	0.2000	0.2221	
27 Methylene Chloride	84	3.848	3.855	-0.007	97	10281	0.2000	0.2087	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.891	-0.036	97	83156	50.0	50.0	
29 2-Methyl-2-propanol	59	3.970	3.995	-0.025	28	7410	4.00	4.10	M
31 Acrylonitrile	53		4.184				ND	ND	
32 Methyl tert-butyl ether	73	4.208	4.214	-0.006	95	22002	0.2000	0.2038	
33 trans-1,2-Dichloroethene	96	4.245	4.239	0.006	98	10891	0.2000	0.2093	
34 Hexane	57	4.659	4.659	0.000	95	15138	0.2000	0.1917	
36 1,1-Dichloroethane	63	4.885	4.891	-0.006	94	20154	0.2000	0.2004	
37 Isopropyl ether	45	4.952	4.952	0.000	94	35572	0.2000	0.2096	
38 2-Chloro-1,3-butadiene	53	5.007	5.001	0.006	88	17900	0.2000	0.2058	M
40 Tert-butyl ethyl ether	59	5.488	5.495	-0.006	97	30125	0.2000	0.2047	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.781	5.690	0.091	78	17339	2.00	1.71	M
42 cis-1,2-Dichloroethene	96	5.738	5.732	0.006	81	11873	0.2000	0.2097	
43 2,2-Dichloropropane	77	5.738	5.744	-0.006	73	18843	0.2000	0.2143	
44 Propionitrile	54	6.007	5.775	0.232	17	5274	4.00	2.09	M
47 Methacrylonitrile	67	6.025	5.988	0.037	90	16662	2.00	1.64	M
48 Chlorobromomethane	128	6.074	6.068	0.006	85	4094	0.2000	0.1911	
49 Tetrahydrofuran	71	6.116	6.080	0.036	41	1490	1.00	0.5240	
S 46 1,2-Dichloroethene, Total	100				0			0.4190	
50 Chloroform	83	6.220	6.226	-0.006	94	19601	0.2000	0.2099	
\$ 52 Dibromofluoromethane (Surr)	113	6.439	6.446	-0.007	94	431324	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	98	17929	0.2000	0.2053	
54 Cyclohexane	56	6.555	6.561	-0.006	91	20145	0.2000	0.1877	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	91	14786	0.2000	0.2004	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	92	15668	0.2000	0.1944	
57 Isobutyl alcohol	41	6.884	6.824	0.060	30	9533	10.0	13.5	M
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.897	0.000	81	78343	10.0	10.1	
59 Benzene	78	6.939	6.939	0.000	96	46610	0.2000	0.2033	
60 1,2-Dichloroethane	62	7.012	7.006	0.006	94	10204	0.2000	0.1982	
63 Tert-amyl methyl ether	73	7.128	7.141	-0.013	96	24191	0.2000	0.1899	
* 64 Fluorobenzene (IS)	96	7.342	7.354	-0.012	99	1849831	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	36	16959	0.2000	0.2031	
67 n-Butanol	56	7.951	7.732	0.219	22	5674	17.5	45.4	M
68 Trichloroethene	95	7.842	7.842	0.000	97	12557	0.2000	0.2092	M
69 Methylcyclohexane	83	8.159	8.159	0.000	93	19474	0.2000	0.1864	
70 1,2-Dichloropropane	63	8.177	8.177	0.000	88	10560	0.2000	0.1917	
71 2-ethoxy-2-methyl butane	87	8.189	8.195	-0.006	91	17212	0.2000	0.2065	
72 Methyl methacrylate	69	8.299	8.268	0.031	51	3174	0.2000	0.1529	M
73 1,4-Dioxane	88		8.287				ND	ND	
74 Dibromomethane	93	8.293	8.287	0.006	96	4269	0.2000	0.2092	M
76 Dichlorobromomethane	83	8.530	8.531	0.000	98	12364	0.2000	0.2012	
77 2-Nitropropane	41	8.793	8.793	0.000	96	7390	1.00	1.15	M
79 1-Bromo-2-chloroethane	63	8.939	8.927	0.012	96	10197	0.2000	0.2074	
80 cis-1,3-Dichloropropene	75	9.110	9.097	0.013	94	14751	0.2000	0.1961	M
82 4-Methyl-2-pentanone (MIBK)	43	9.286	9.280	0.006	97	48068	2.00	1.67	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1867719	10.0	10.0	
84 Toluene	92	9.506	9.506	0.000	97	28809	0.2000	0.1990	
85 trans-1,3-Dichloropropene	75	9.805	9.786	0.019	92	11519	0.2000	0.2009	M
104 Ethyl methacrylate	69	9.878	9.860	0.018	91	8114	0.2000	0.2001	M
106 1,1,2-Trichloroethane	97	10.006	10.000	0.006	88	6443	0.2000	0.2004	
S 105 1,3-Dichloropropene, Total	100				0			0.3970	
107 Tetrachloroethene	166	10.091	10.091	0.000	96	14008	0.2000	0.2048	
108 1,3-Dichloropropane	76	10.170	10.164	0.006	92	10576	0.2000	0.1890	
109 2-Hexanone	43	10.244	10.219	0.025	98	30093	2.00	1.63	
111 Chlorodibromomethane	129	10.390	10.390	0.000	89	7519	0.2000	0.1894	
112 Ethylene Dibromide	107	10.512	10.500	0.012	96	5033	0.2000	0.1804	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	87	1343086	10.0	10.0	
114 1-Chlorohexane	91	10.969	10.963	0.006	90	18699	0.2000	0.2051	
115 Chlorobenzene	112	10.975	10.975	0.000	96	31907	0.2000	0.2083	
116 1,1,1,2-Tetrachloroethane	131	11.067	11.060	0.007	91	9697	0.2000	0.1923	
117 Ethylbenzene	91	11.073	11.067	0.006	98	58754	0.2000	0.2056	
119 m-Xylene & p-Xylene	106	11.188	11.189	-0.001	99	44021	0.4000	0.4052	
S 118 Xylenes, Total	106				0			0.5982	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.524	11.518	0.006	97	19867	0.2000	0.1930	
121 Styrene	104	11.548	11.536	0.012	95	30805	0.2000	0.1864	
122 Bromoform	173	11.694	11.695	-0.001	97	3664	0.2000	0.1785	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	50618	0.2000	0.2011	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	90	675483	10.0	10.0	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	59	7205	0.2000	0.1967	M
128 Bromobenzene	156	12.091	12.091	0.000	94	12032	0.2000	0.2023	
129 trans-1,4-Dichloro-2-butene	53	12.109	12.103	0.006	93	17609	2.00	1.65	
130 1,2,3-Trichloropropane	110	12.127	12.121	0.006	77	1856	0.2000	0.2021	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	63725	0.2000	0.1927	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	12429	0.2000	0.1968	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	93	46466	0.2000	0.2007	
134 4-Chlorotoluene	126	12.335	12.329	0.006	97	12425	0.2000	0.1953	
135 tert-Butylbenzene	134	12.542	12.542	0.000	93	9928	0.2000	0.1943	
136 Pentachloroethane	167	12.572	12.572	0.000	82	6538	0.2000	0.1942	
137 1,2,4-Trimethylbenzene	105	12.591	12.585	0.006	97	46296	0.2000	0.1970	
138 sec-Butylbenzene	105	12.706	12.707	-0.001	94	58887	0.2000	0.1974	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	24106	0.2000	0.2027	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	98	50415	0.2000	0.1972	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	743381	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	25632	0.2000	0.2092	
143 1,2,3-Trimethylbenzene	120	12.895	12.889	0.006	95	19961	0.2000	0.2015	
144 Benzyl chloride	126	12.969	12.956	0.013	98	2883	0.2000	0.1996	
145 p-Diethylbenzene	119	13.097	13.097	0.000	95	28899	0.2000	0.1929	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	22673	0.2000	0.1882	
147 1,2-Dichlorobenzene	146	13.145	13.139	0.006	98	20892	0.2000	0.2014	
149 1,2-Dibromo-3-Chloropropane	155	13.694	13.688	0.006	82	880	0.2000	0.1810	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	97	16922	0.2000	0.1937	
151 1,2,4-Trichlorobenzene	180	14.243	14.237	0.006	93	13424	0.2000	0.1920	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	6760	0.2000	0.1956	
153 Naphthalene	128	14.420	14.414	0.006	97	21107	0.2000	0.1845	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	96	10805	0.2000	0.1881	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00279	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00185	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std3 0.2

Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

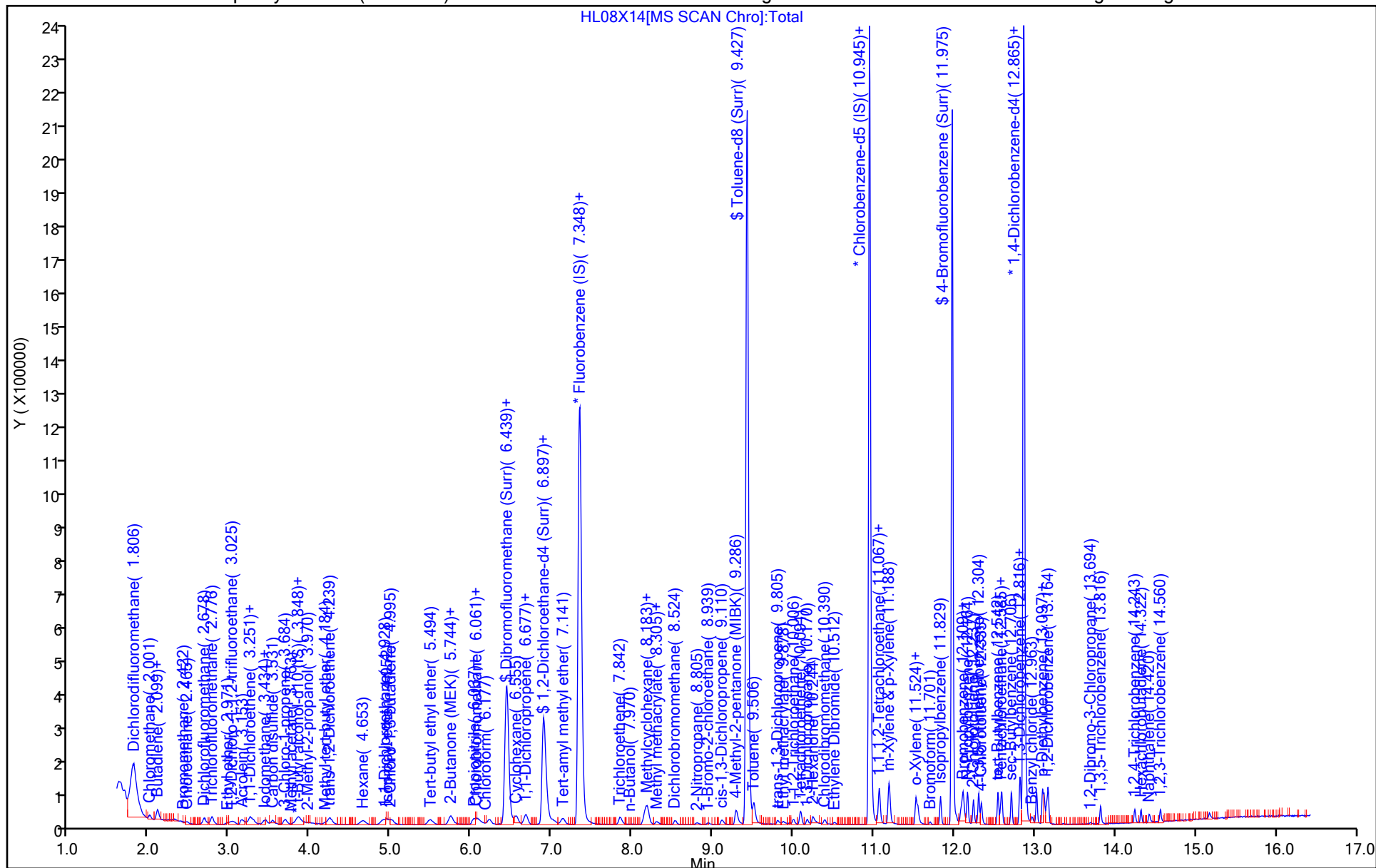
ALS Bottle#: 14

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

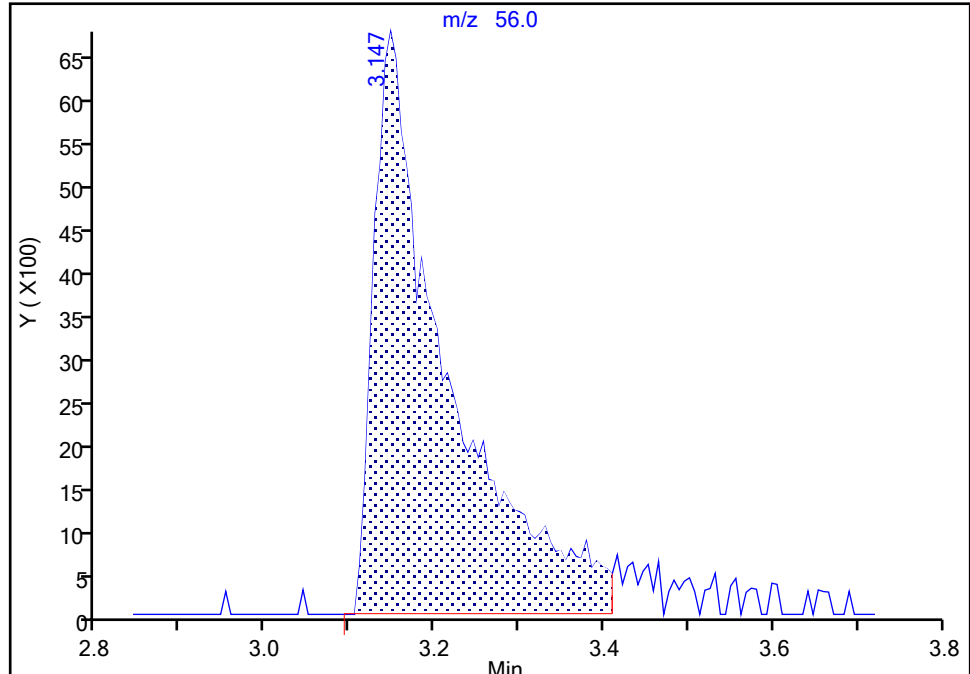
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

16 Acrolein, CAS: 107-02-8

Signal: 1

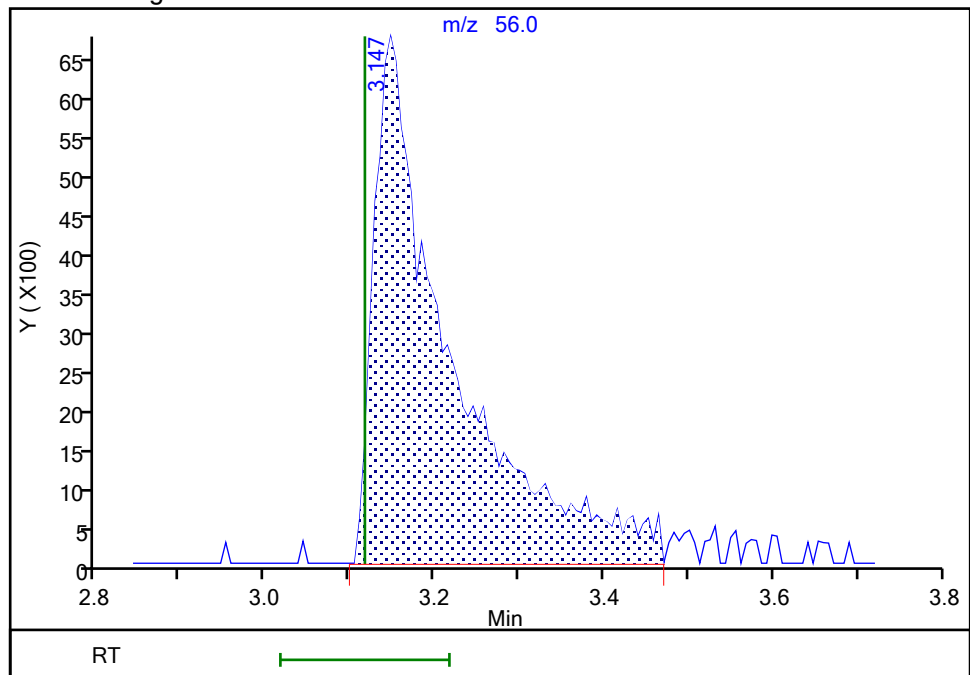
RT: 3.15
Area: 40660
Amount: 8.478059
Amount Units: ug/l

Processing Integration Results



RT: 3.15
Area: 42306
Amount: 8.786931
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:17:55 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

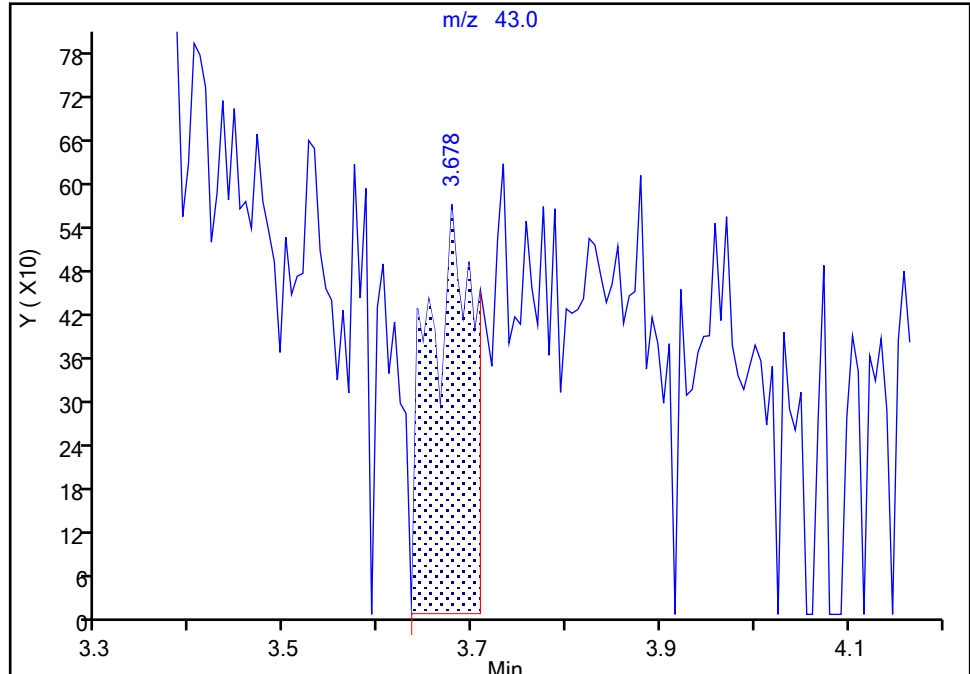
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

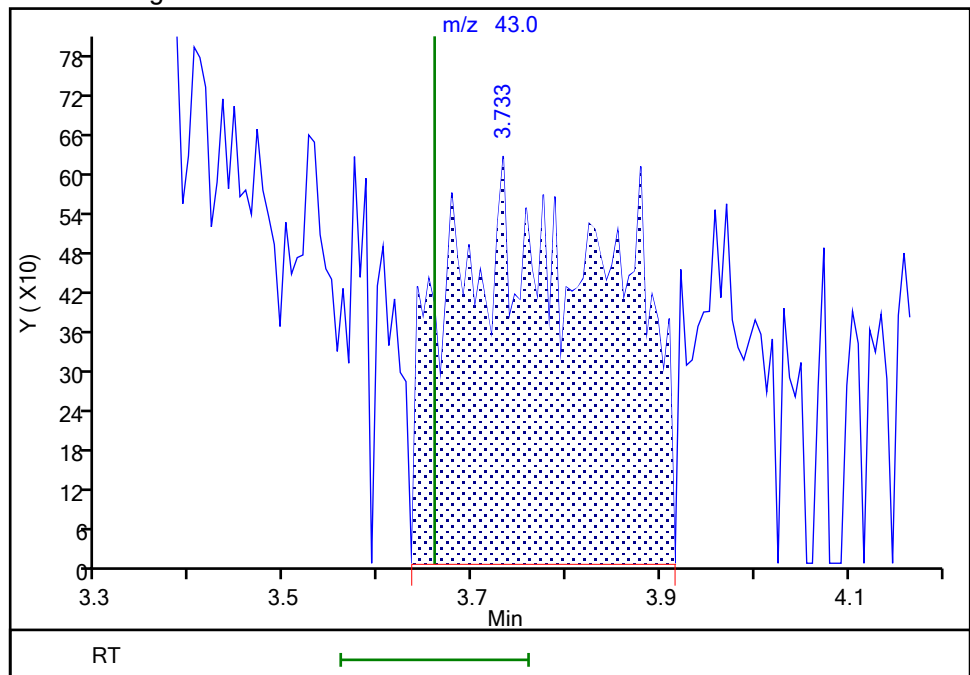
RT: 3.68
Area: 1853
Amount: 0.127168
Amount Units: ug/l

Processing Integration Results



RT: 3.73
Area: 7151
Amount: 0.506435
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:18:06 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

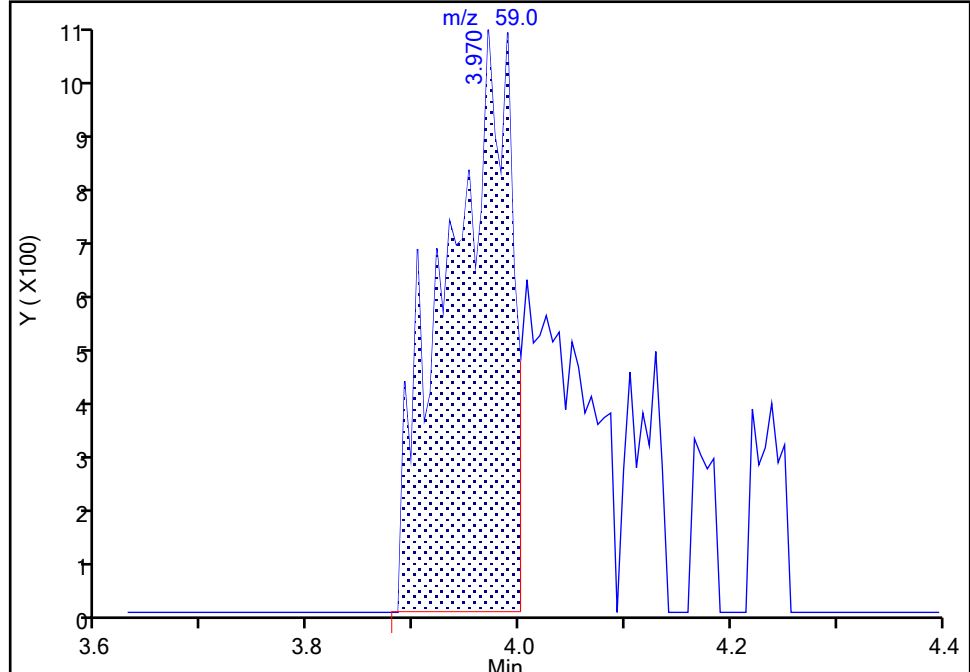
MS Quad

29 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

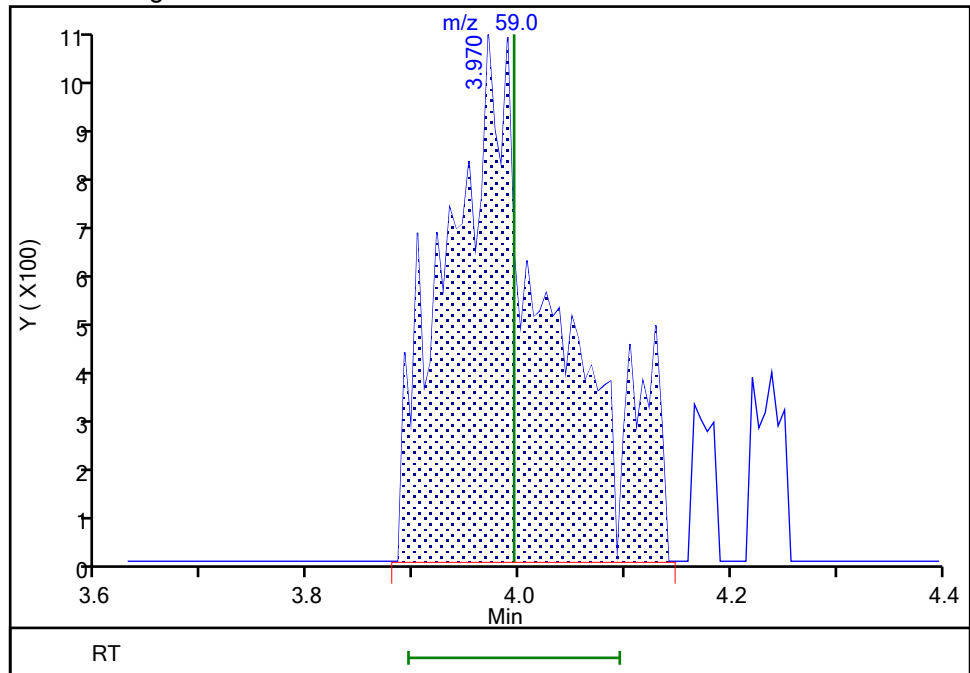
RT: 3.97
Area: 4363
Amount: 2.712791
Amount Units: ug/l

Processing Integration Results



RT: 3.97
Area: 7410
Amount: 4.096040
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:18:13 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

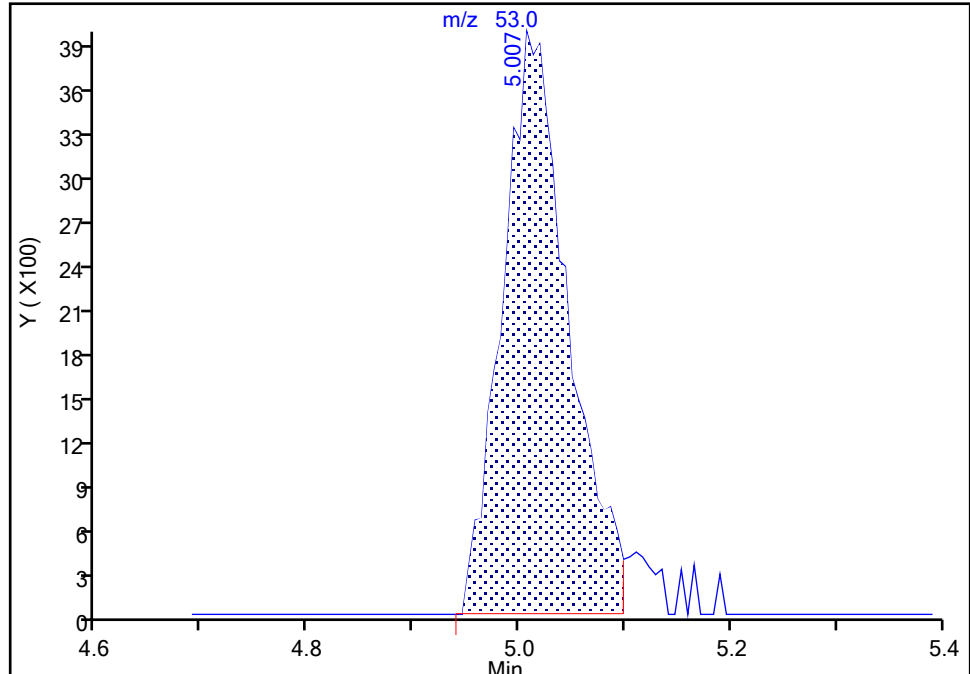
MS Quad

38 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

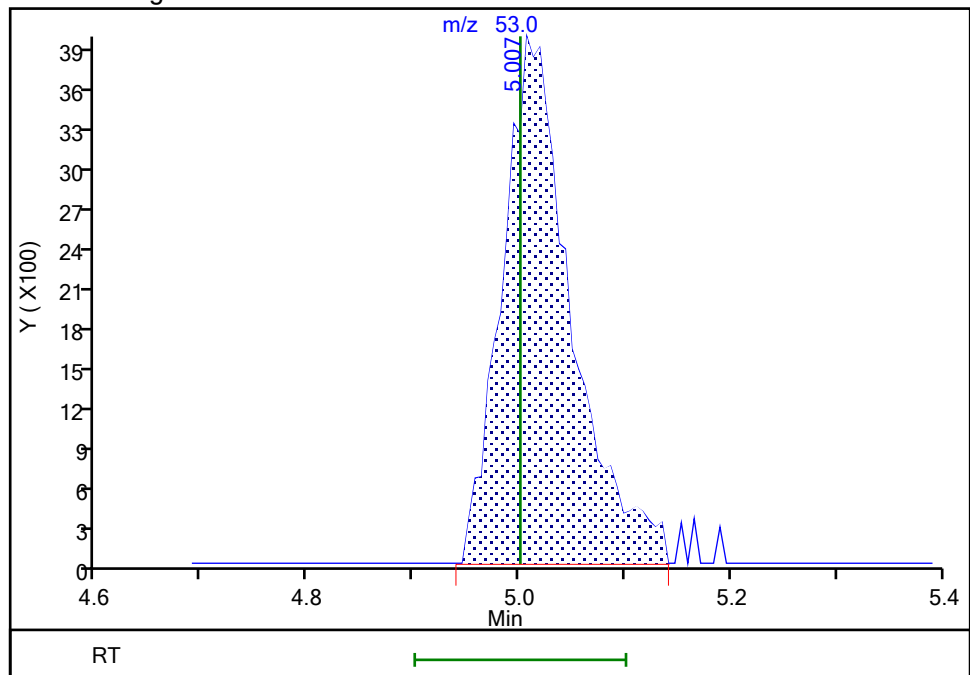
RT: 5.01
Area: 17136
Amount: 0.172583
Amount Units: ug/l

Processing Integration Results



RT: 5.01
Area: 17900
Amount: 0.205776
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:18:51 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

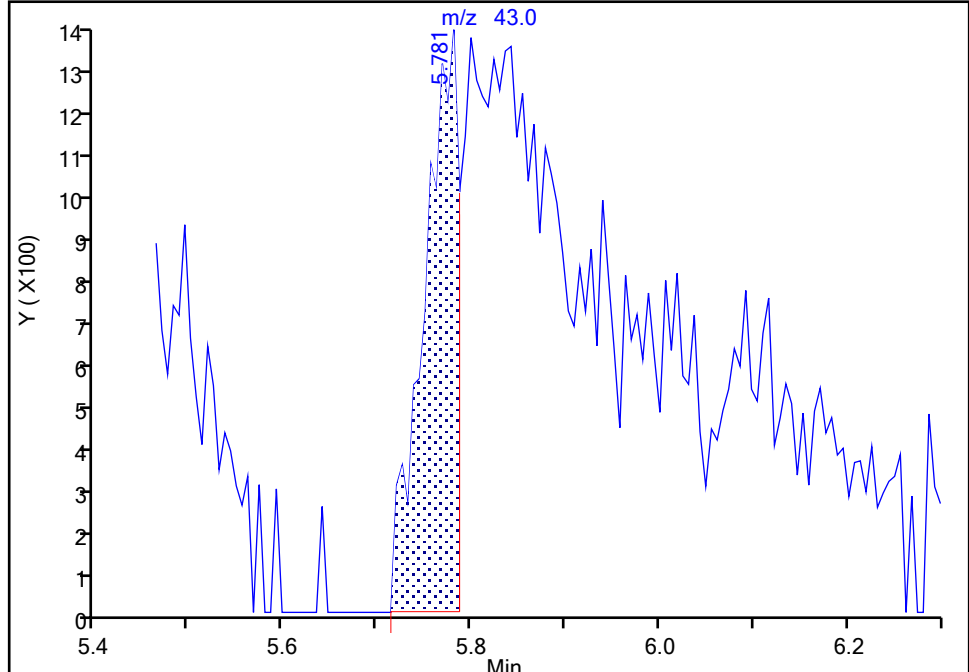
MS Quad

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

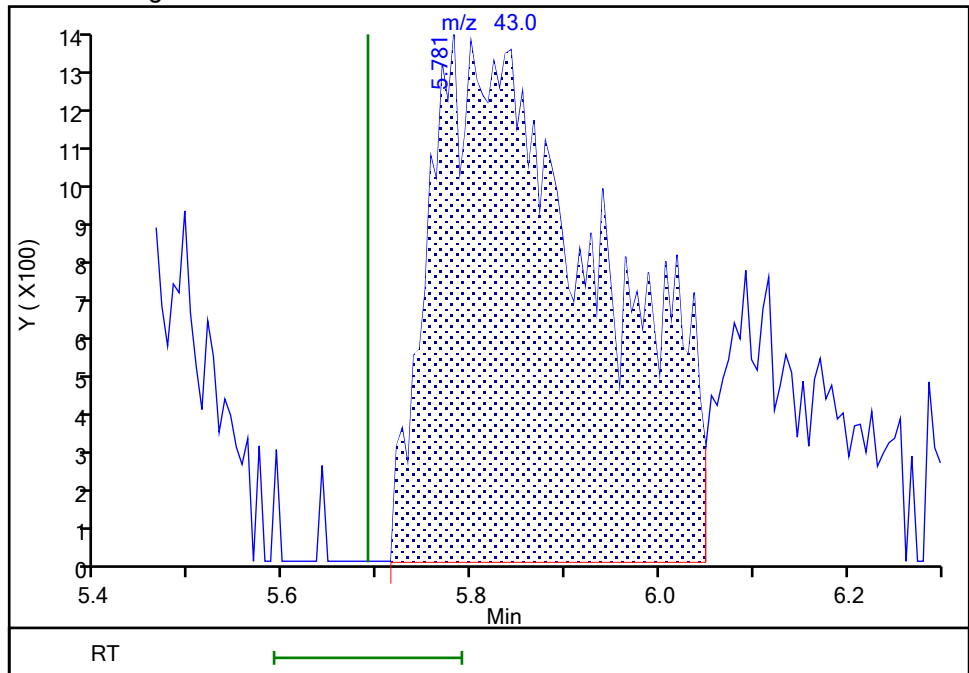
RT: 5.78
Area: 3556
Amount: 1.949551
Amount Units: ug/l

Processing Integration Results



RT: 5.78
Area: 17339
Amount: 1.713877
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:19:08 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

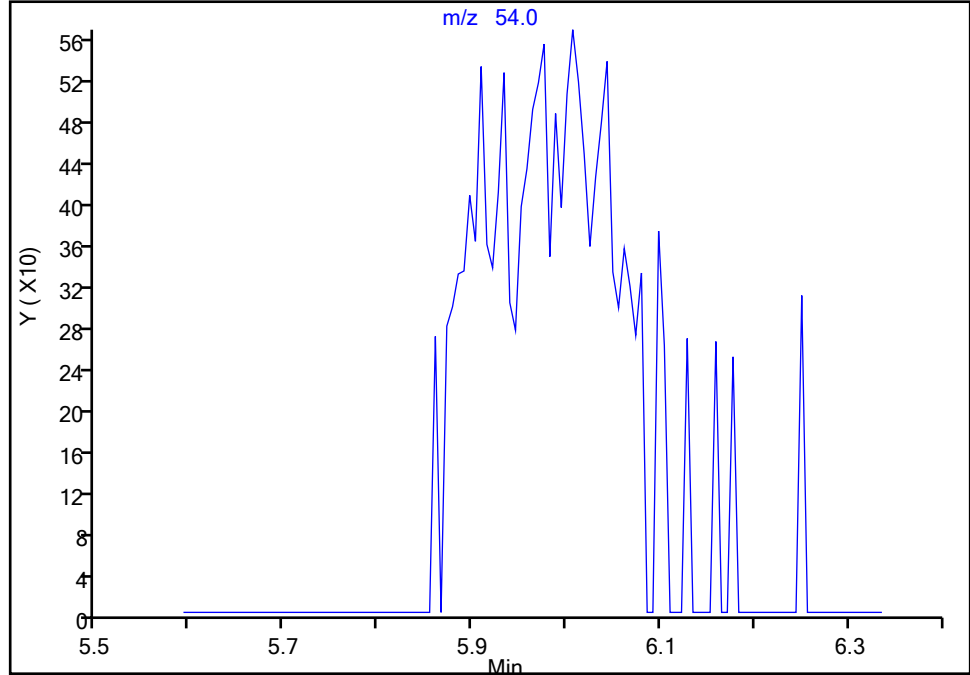
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

44 Propionitrile, CAS: 107-12-0

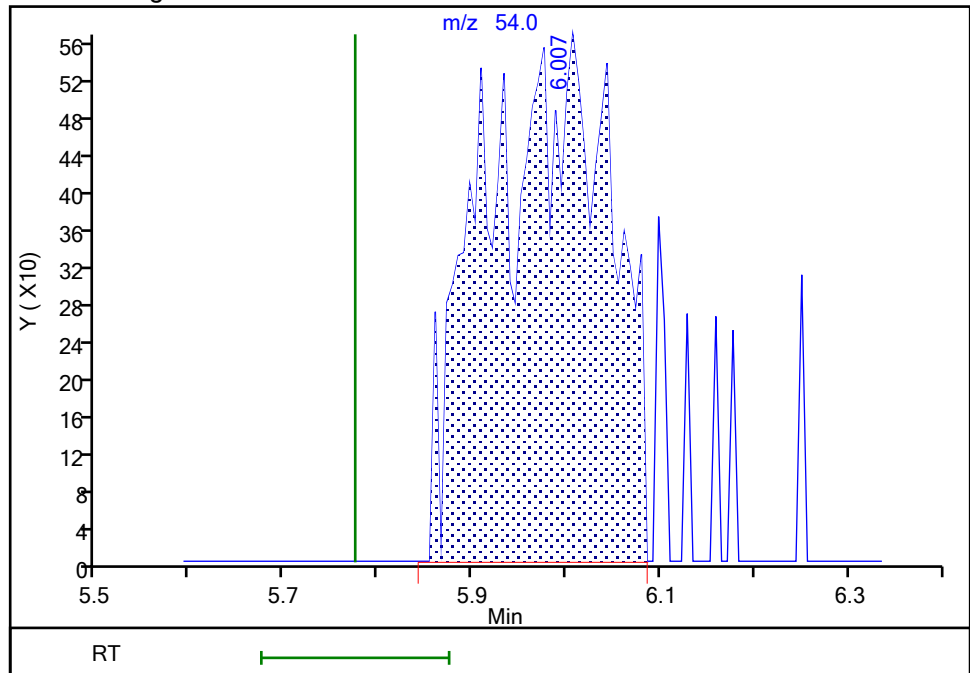
Signal: 1

Not Detected
Expected RT: 5.77

Processing Integration Results



Manual Integration Results



RT: 6.01
Area: 5274
Amount: 2.091651
Amount Units: ug/l

Reviewer: JS6E, 11-Jul-2025 01:19:45 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

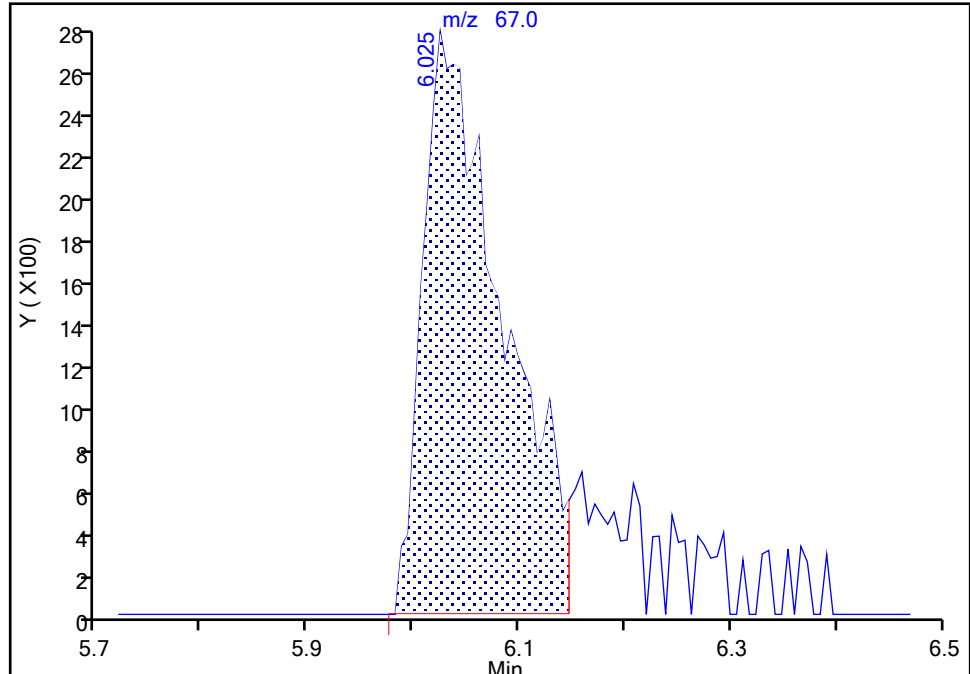
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

47 Methacrylonitrile, CAS: 126-98-7

Signal: 1

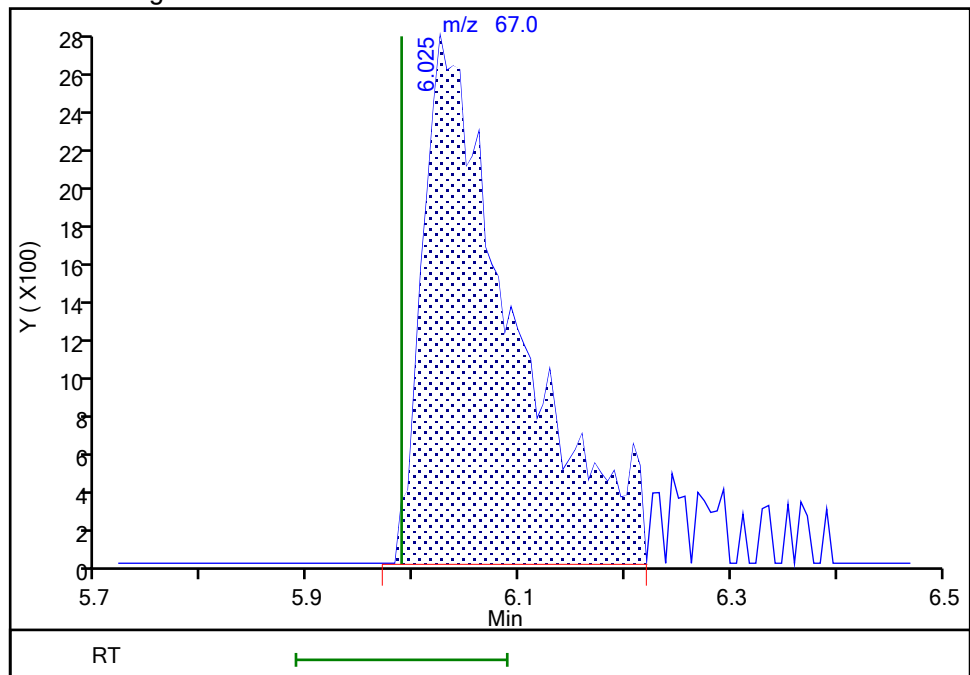
RT: 6.02
Area: 14652
Amount: 1.457425
Amount Units: ug/l

Processing Integration Results



RT: 6.02
Area: 16662
Amount: 1.636903
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:19:53 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

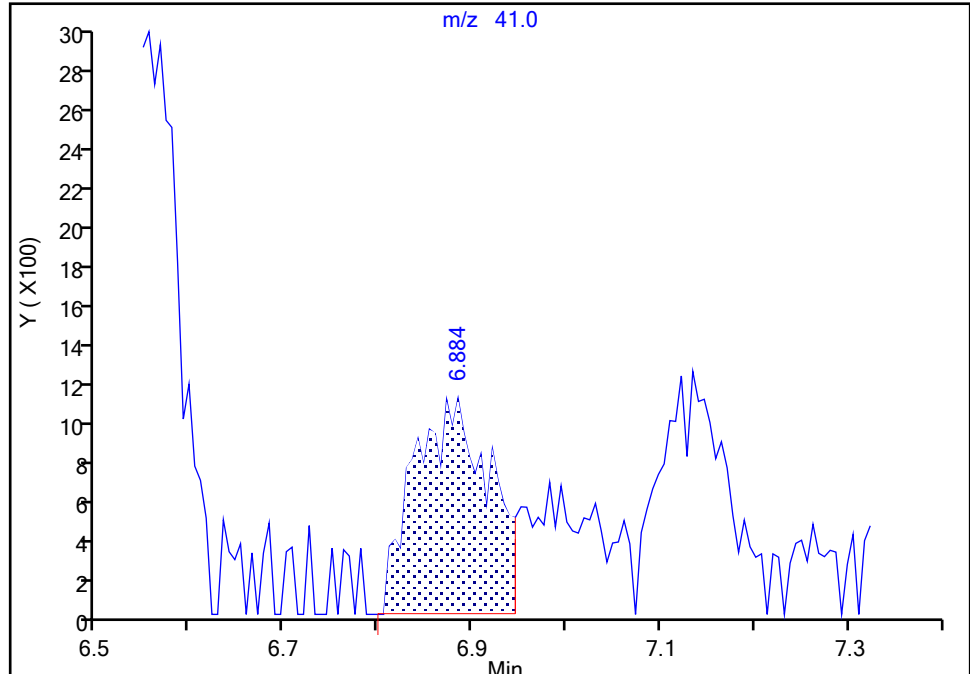
MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

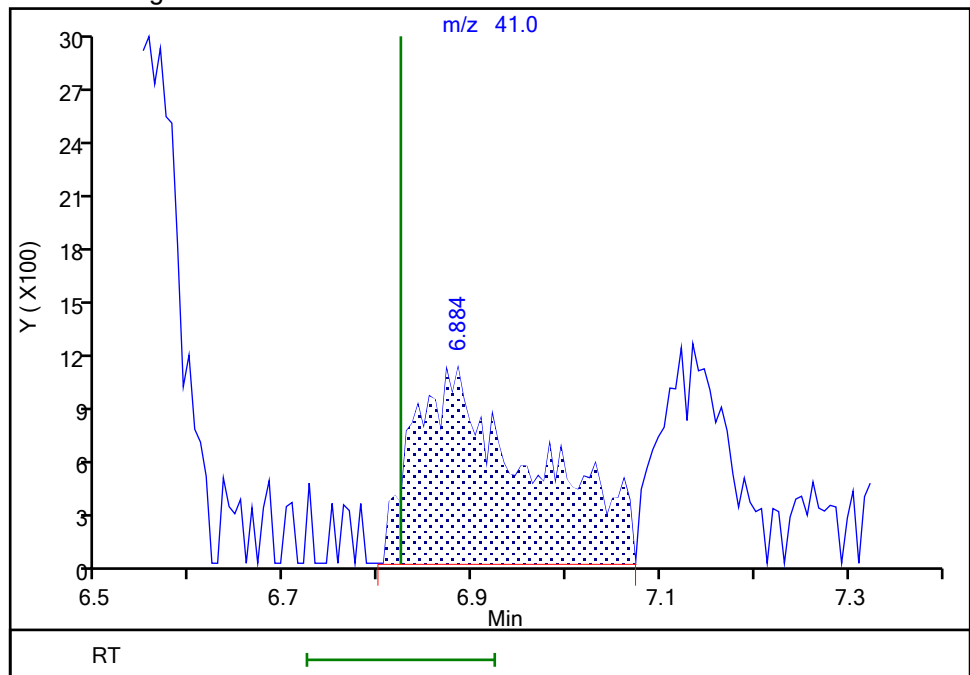
RT: 6.88
Area: 6130
Amount: 8.550258
Amount Units: ug/l

Processing Integration Results



RT: 6.88
Area: 9533
Amount: 13.491463
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:02 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

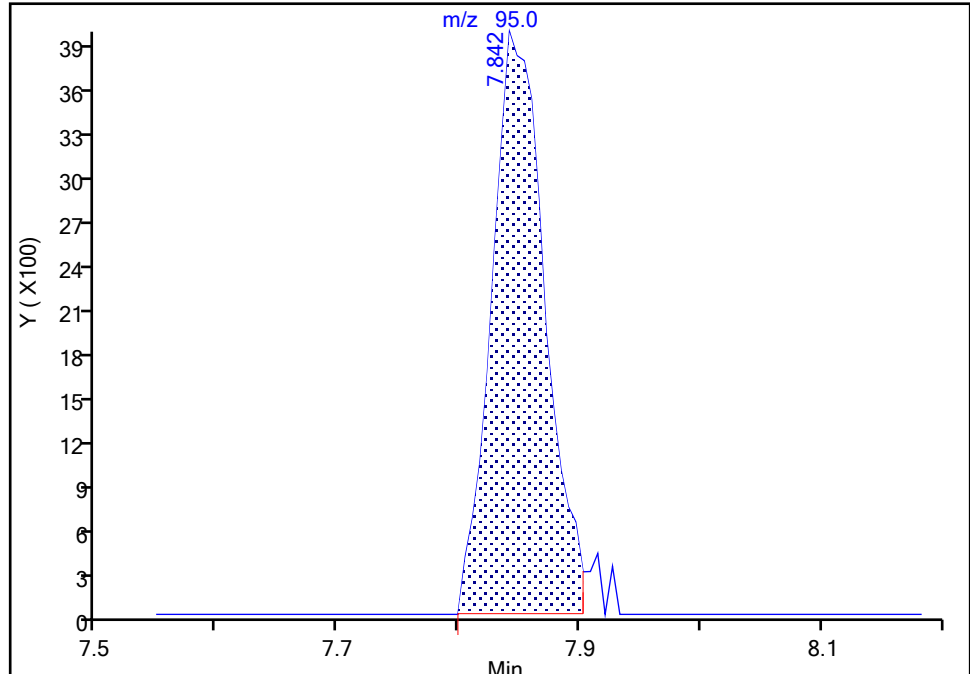
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

68 Trichloroethene, CAS: 79-01-6

Signal: 1

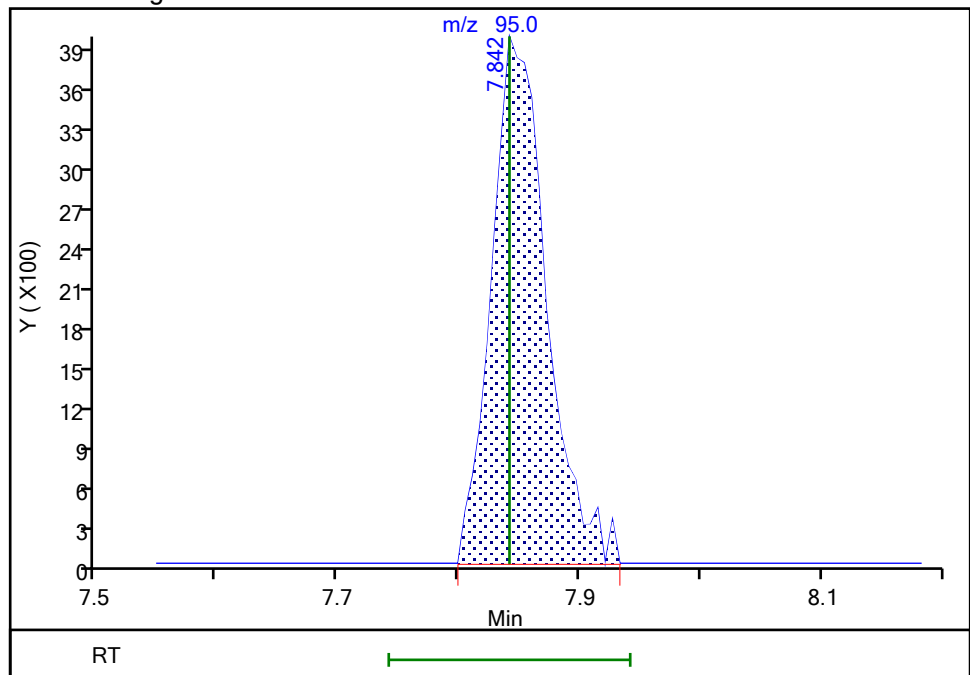
RT: 7.84
Area: 12180
Amount: 0.164093
Amount Units: ug/l

Processing Integration Results



RT: 7.84
Area: 12557
Amount: 0.209220
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:19 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

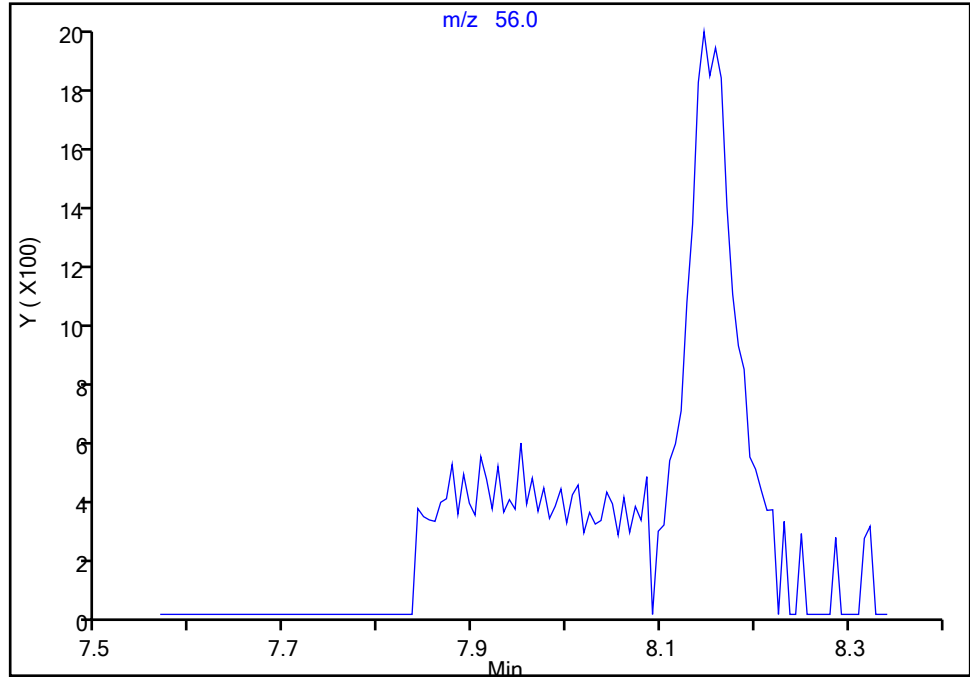
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 n-Butanol, CAS: 71-36-3

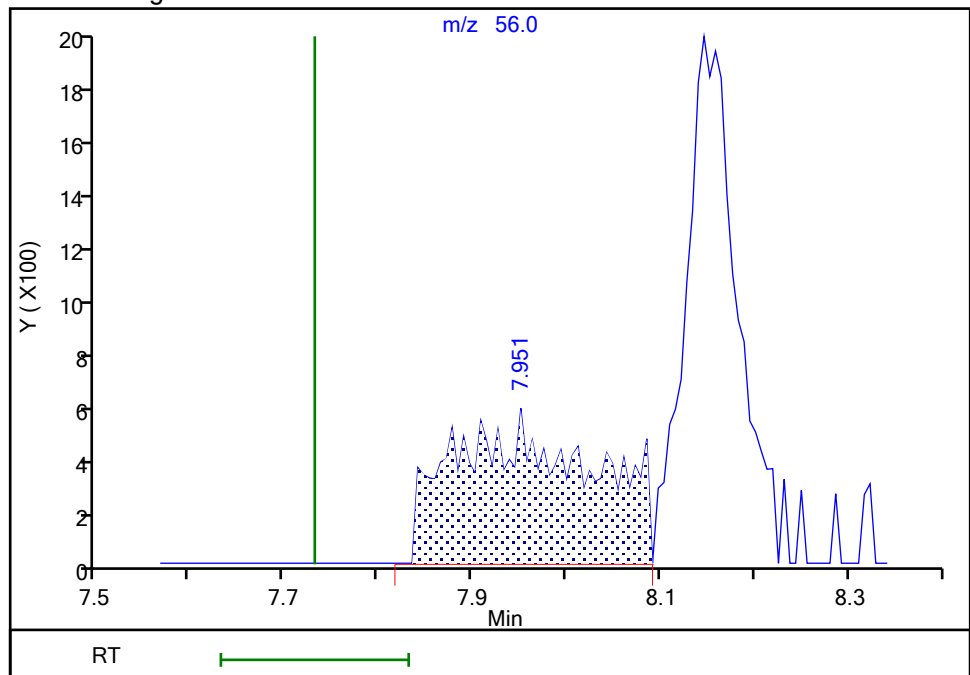
Signal: 1

Not Detected
Expected RT: 7.73

Processing Integration Results



Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:13 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

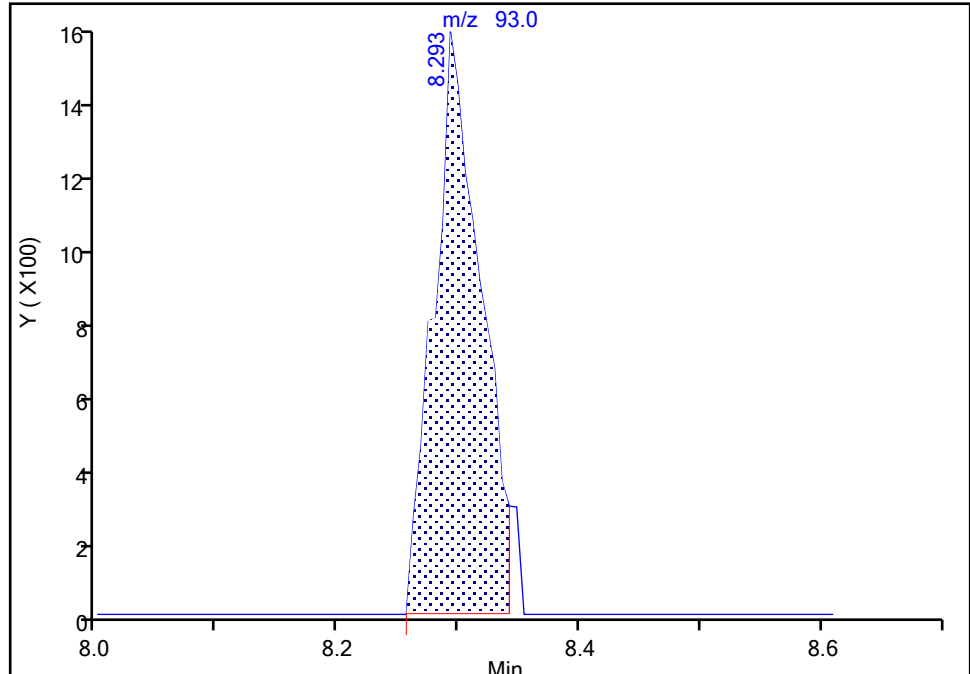
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

74 Dibromomethane, CAS: 74-95-3

Signal: 1

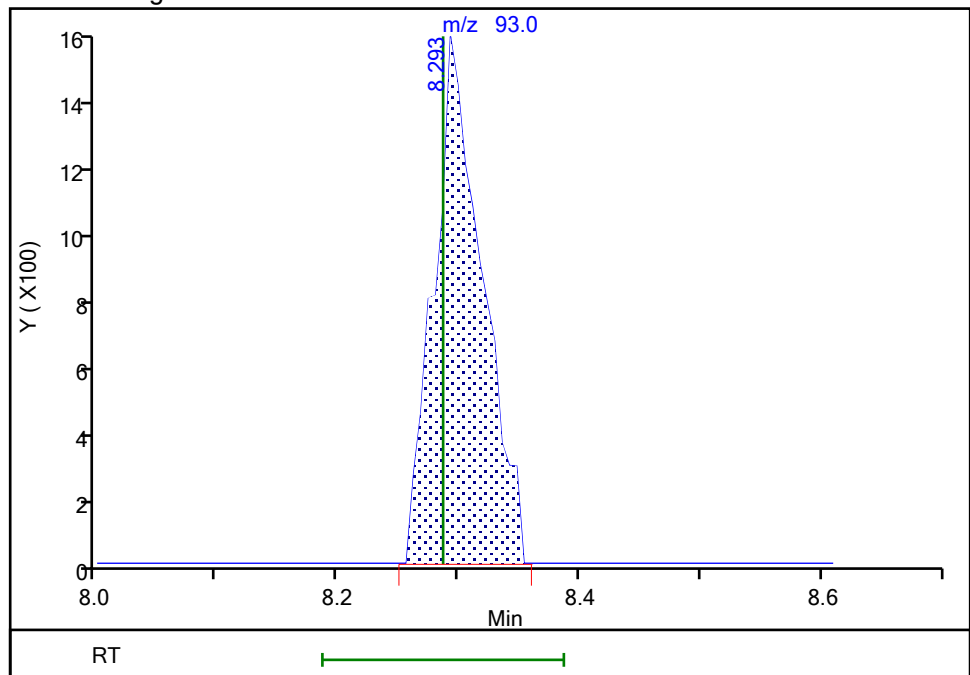
RT: 8.29
Area: 4165
Amount: 0.215238
Amount Units: ug/l

Processing Integration Results



RT: 8.29
Area: 4269
Amount: 0.209178
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:52 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

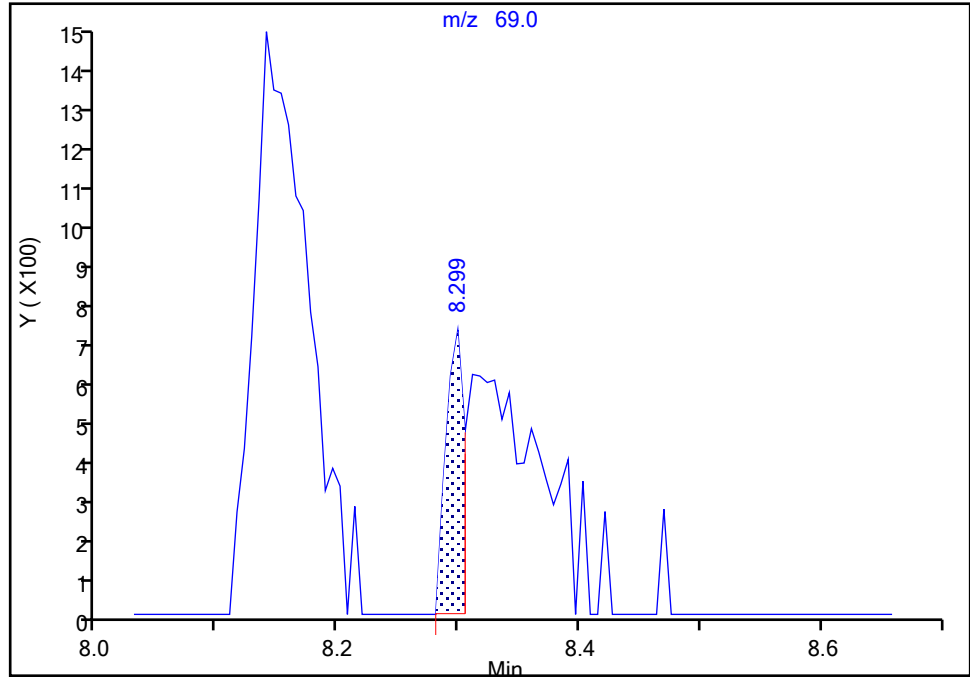
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 Methyl methacrylate, CAS: 80-62-6

Signal: 1

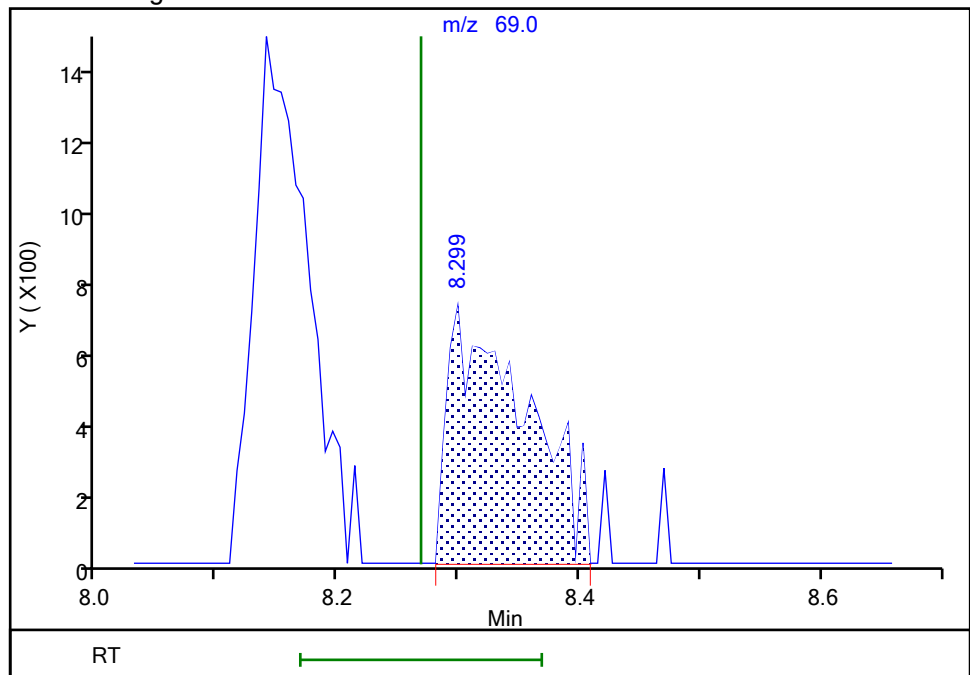
RT: 8.30
Area: 757
Amount: 0.200420
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 3174
Amount: 0.152917
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:26 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

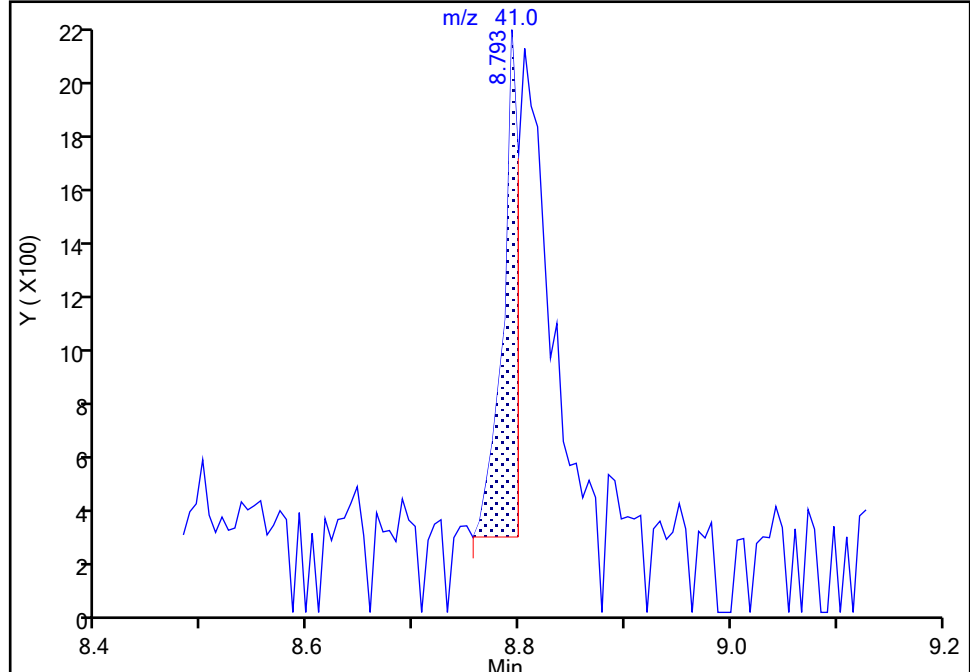
MS Quad

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

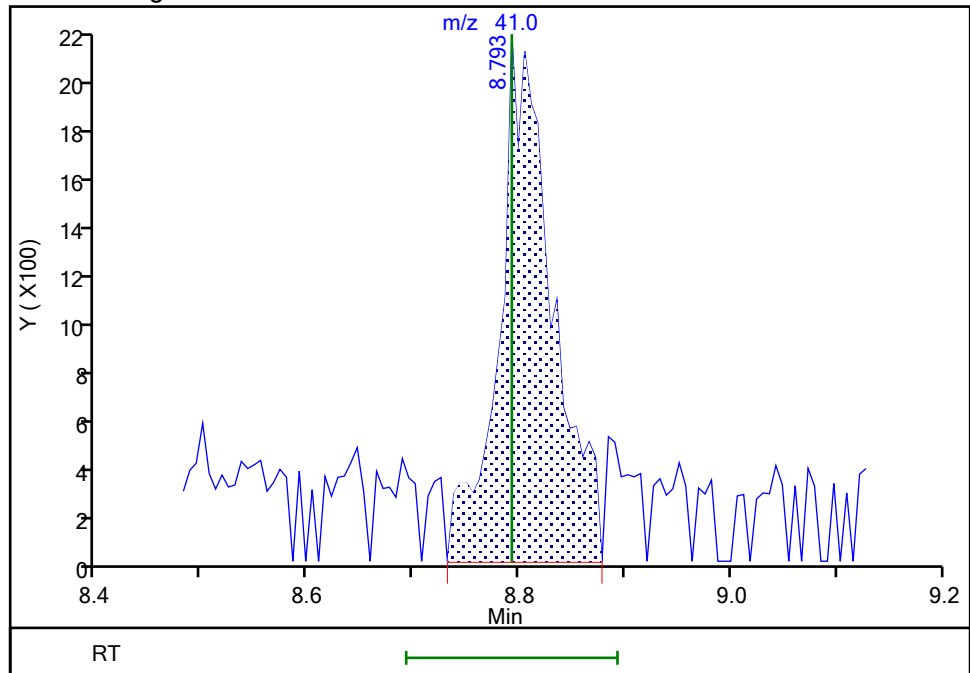
RT: 8.79
Area: 1896
Amount: 0.237609
Amount Units: ug/l

Processing Integration Results



RT: 8.79
Area: 7390
Amount: 1.149051
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:20:58 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

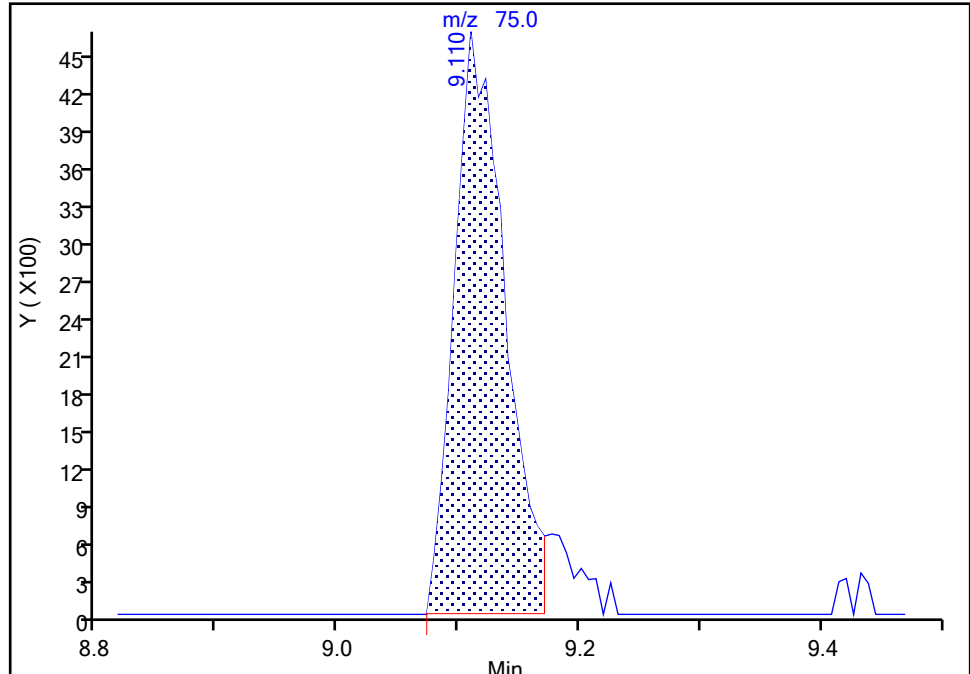
MS Quad

80 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

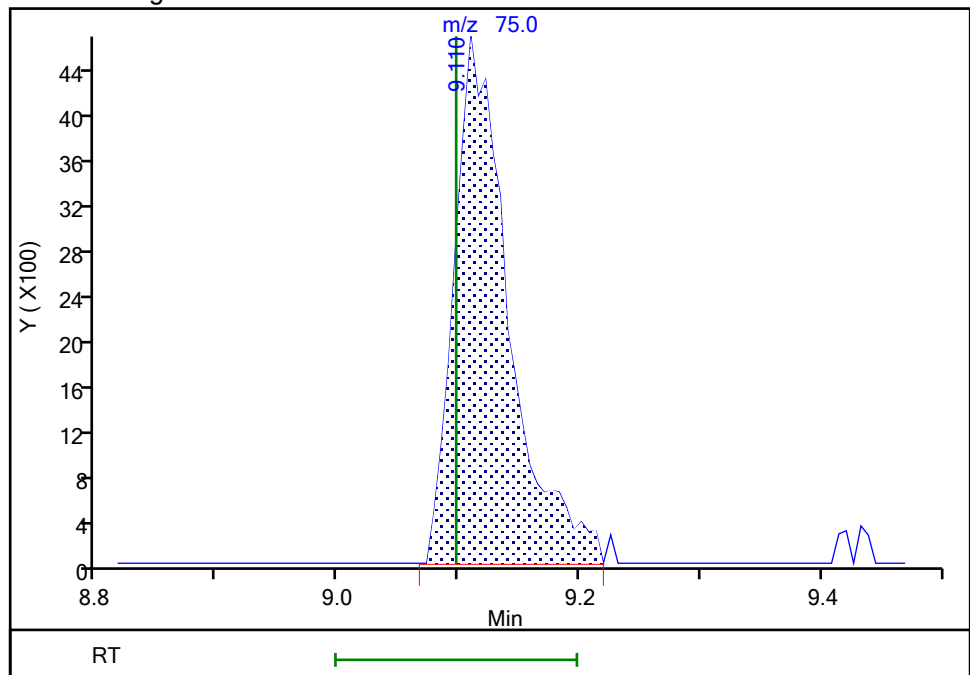
RT: 9.11
Area: 13653
Amount: 0.164101
Amount Units: ug/l

Processing Integration Results



RT: 9.11
Area: 14751
Amount: 0.196136
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:21:03 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

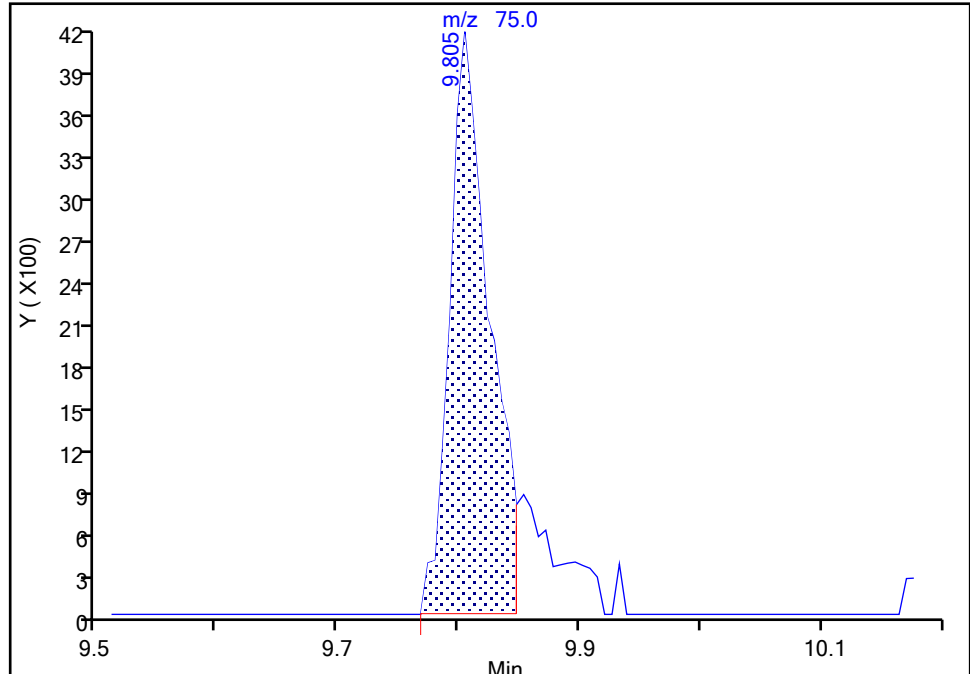
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

85 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

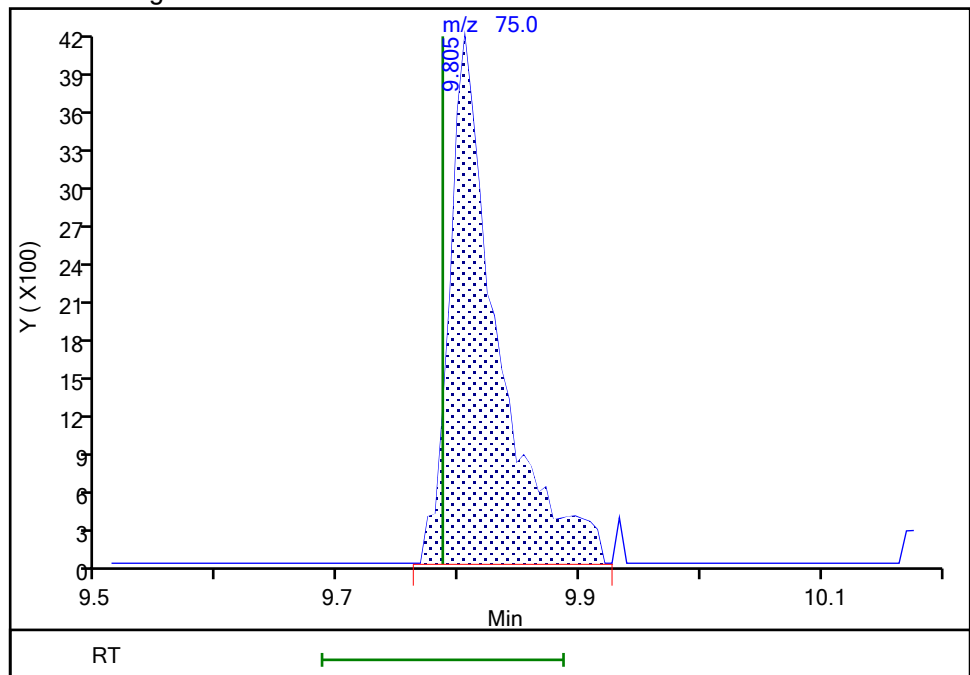
RT: 9.80
Area: 9617
Amount: 0.171241
Amount Units: ug/l

Processing Integration Results



RT: 9.80
Area: 11519
Amount: 0.200856
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:21:14 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D

Injection Date: 09-Jul-2025 04:58:30

Instrument ID: 19094

Lims ID: IC std3 0.2

Client ID:

Operator ID: gaw91131

ALS Bottle#:

14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

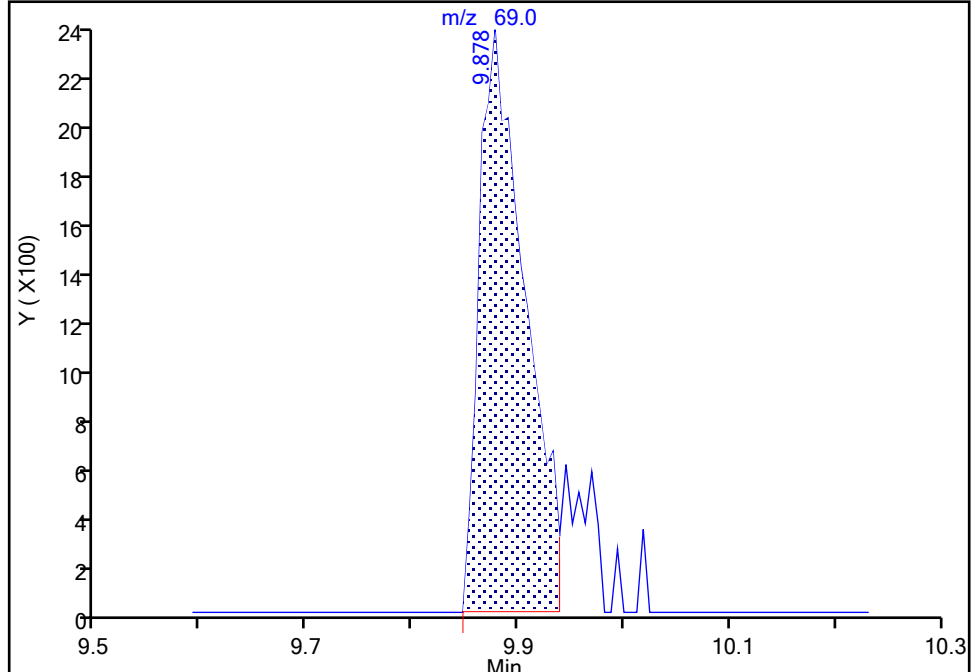
MS Quad

104 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

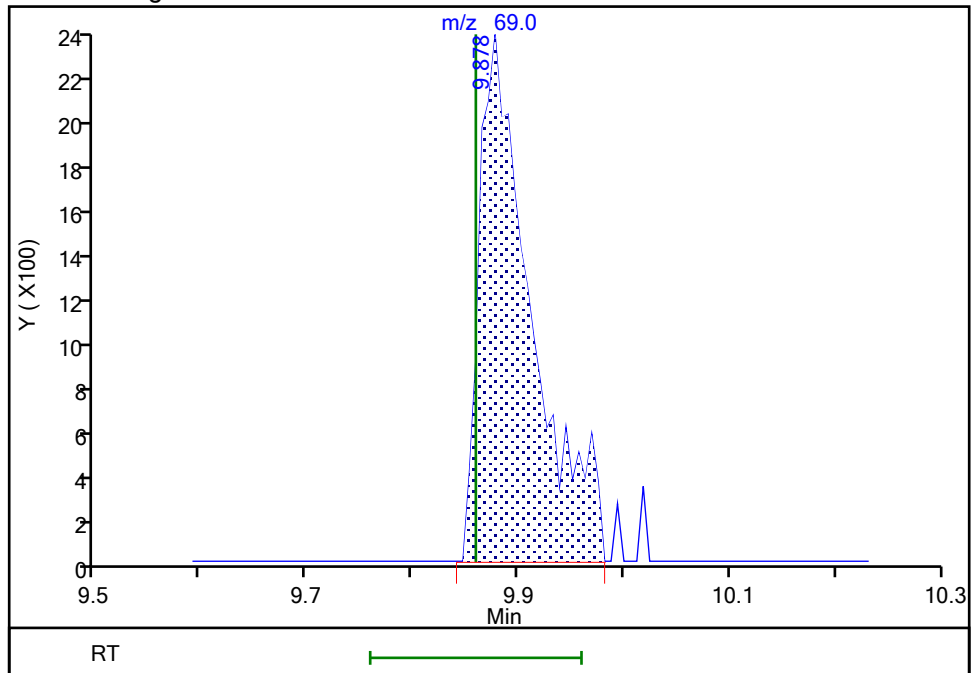
RT: 9.88
Area: 7109
Amount: 0.178118
Amount Units: ug/l

Processing Integration Results



RT: 9.88
Area: 8114
Amount: 0.200149
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:21:19 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

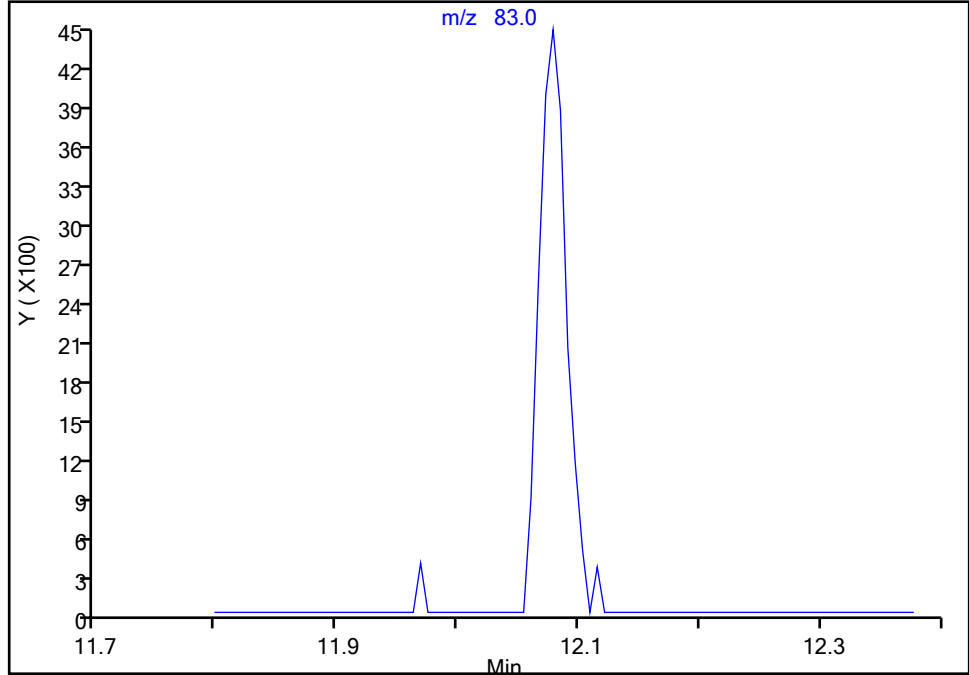
Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X14.D
Injection Date: 09-Jul-2025 04:58:30 Instrument ID: 19094
Lims ID: IC std3 0.2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

127 1,1,2,2-Tetrachloroethane, CAS: 79-34-5
Signal: 1

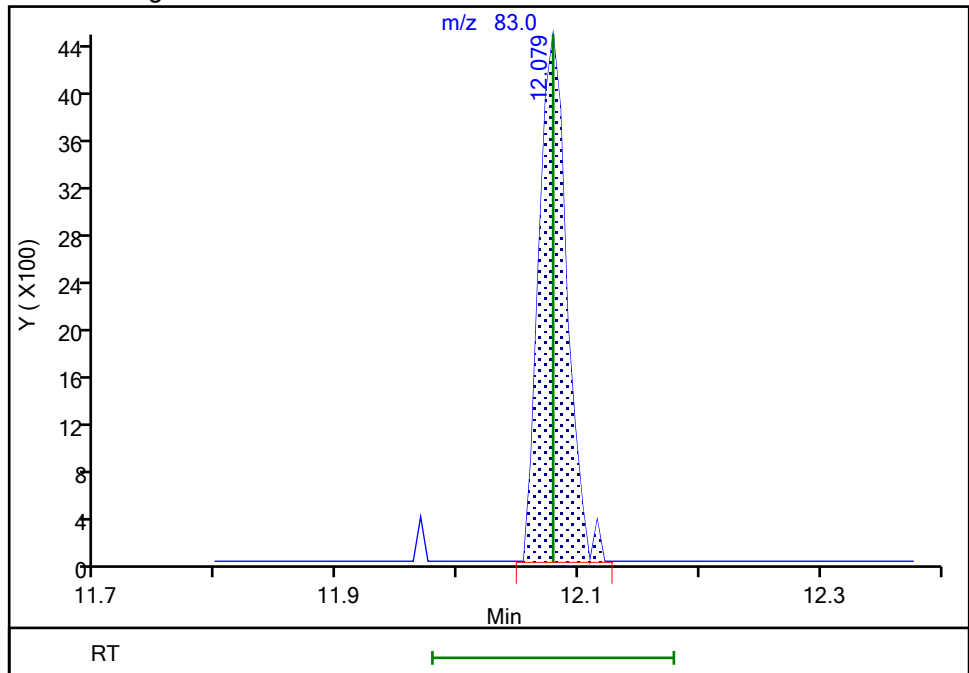
Not Detected
Expected RT: 12.08

Processing Integration Results



RT: 12.08
Area: 7205
Amount: 0.196671
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:21:40 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D
 Lims ID: IC std4 0.5
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 09-Jul-2025 05:18:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-016
 Misc. Info.: IC STD4 0.5
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:09 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:24:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.825	1.831	-0.007	98	33444	0.5000	0.5542	
5 Chloromethane	50	2.020	2.013	0.007	99	41386	0.5000	0.5192	
7 Butadiene	39	2.105	2.105	0.000	92	45900	0.5000	0.5991	
6 Vinyl chloride	62	2.123	2.123	0.000	98	39531	0.5000	0.5485	
9 Bromomethane	94	2.398	2.391	0.007	90	26674	0.5000	0.5211	M
10 Chloroethane	64	2.477	2.477	0.000	100	24216	0.5000	0.5351	
11 Dichlorofluoromethane	67	2.690	2.690	0.000	97	64284	0.5000	0.5309	
12 Trichlorofluoromethane	101	2.794	2.788	0.006	55	49879	0.5000	0.5335	
14 Ethyl ether	59	2.977	2.971	0.006	91	16510	0.5002	0.5205	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.044	3.050	-0.006	93	37083	0.5000	0.5319	
16 Acrolein	56	3.147	3.117	0.030	100	96203	24.4	23.0	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	97	21810	0.5000	0.4618	
19 Acetone	43	3.312	3.275	0.037	50	25870	5.00	5.04	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.294	3.294	0.000	92	22840	0.5000	0.4928	
21 Iodomethane	142	3.434	3.434	0.000	99	42979	0.5000	0.4746	
22 Ethyl bromide	108	3.464	3.458	0.006	97	21619	0.4995	0.5417	
23 Carbon disulfide	76	3.538	3.531	0.007	99	67533	0.5000	0.4663	
24 Methyl acetate	43	3.696	3.660	0.036	22	5896	0.5000	0.4803	M
26 3-Chloro-1-propene	41	3.696	3.684	0.012	92	40231	0.5000	0.4314	
27 Methylene Chloride	84	3.855	3.855	0.000	93	23348	0.5000	0.4713	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.891	-0.030	79	72295	50.0	50.0	
29 2-Methyl-2-propanol	59	3.977	3.995	-0.018	43	15135	10.0	9.62	M
31 Acrylonitrile	53	4.336	4.184	0.152	1	1924	1.25	0.7530	M
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	81	50040	0.5000	0.4609	
33 trans-1,2-Dichloroethene	96	4.257	4.239	0.018	97	24928	0.5000	0.4764	
34 Hexane	57	4.653	4.659	-0.006	93	36866	0.5000	0.4643	
36 1,1-Dichloroethane	63	4.897	4.891	0.006	96	47580	0.5000	0.4706	
37 Isopropyl ether	45	4.946	4.952	-0.006	95	79012	0.5000	0.4629	
38 2-Chloro-1,3-butadiene	53	5.019	5.001	0.018	92	40301	0.5000	0.4607	
40 Tert-butyl ethyl ether	59	5.501	5.495	0.007	98	70319	0.5000	0.4751	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.757	5.690	0.067	38	41063	5.00	4.67	M
42 cis-1,2-Dichloroethene	96	5.751	5.732	0.019	84	26237	0.5000	0.4608	
43 2,2-Dichloropropane	77	5.744	5.744	0.000	70	40962	0.5000	0.4633	
44 Propionitrile	54	6.013	5.775	0.238	33	16007	10.0	7.30	M
47 Methacrylonitrile	67	6.019	5.988	0.031	90	40734	5.00	4.60	
48 Chlorobromomethane	128	6.080	6.068	0.012	95	10286	0.5000	0.4775	
49 Tetrahydrofuran	71	6.092	6.080	0.012	61	5318	2.50	2.15	
S 46 1,2-Dichloroethene, Total	100				0			0.9373	
50 Chloroform	83	6.226	6.226	0.000	93	43528	0.5000	0.4635	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.446	0.000	93	429583	10.0	9.95	
53 1,1,1-Trichloroethane	97	6.458	6.458	0.000	39	41202	0.5000	0.4692	
54 Cyclohexane	56	6.567	6.561	0.006	91	47946	0.5000	0.4443	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	91	33826	0.5000	0.4560	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	95	38060	0.5000	0.4696	
57 Isobutyl alcohol	41	6.860	6.824	0.036	90	16101	25.0	26.2	M
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.897	0.006	79	79218	10.0	10.1	
59 Benzene	78	6.939	6.939	0.000	93	101760	0.5000	0.4415	
60 1,2-Dichloroethane	62	7.019	7.006	0.013	96	24134	0.5000	0.4663	
63 Tert-amyl methyl ether	73	7.134	7.141	-0.007	98	57087	0.5000	0.4458	
* 64 Fluorobenzene (IS)	96	7.348	7.354	-0.006	98	1860146	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	92	35600	0.5000	0.4240	
67 n-Butanol	56	7.836	7.732	0.104	22	12166	43.8	58.6	Ma
68 Trichloroethene	95	7.848	7.842	0.006	97	27316	0.5000	0.4526	
69 Methylcyclohexane	83	8.159	8.159	0.000	94	47579	0.5000	0.4529	
70 1,2-Dichloropropane	63	8.177	8.177	0.000	93	26586	0.5000	0.4799	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	38740	0.5000	0.4622	
72 Methyl methacrylate	69	8.299	8.268	0.031	72	7905	0.5000	0.4381	M
73 1,4-Dioxane	88	8.335	8.287	0.048	28	375	25.0	27.3	
74 Dibromomethane	93	8.293	8.287	0.006	94	10103	0.5000	0.4923	M
76 Dichlorobromomethane	83	8.531	8.531	0.000	98	28240	0.5000	0.4570	
77 2-Nitropropane	41	8.799	8.793	0.006	97	12288	2.50	2.20	
79 1-Bromo-2-chloroethane	63	8.939	8.927	0.012	97	25080	0.5000	0.5073	M
80 cis-1,3-Dichloropropene	75	9.110	9.097	0.013	95	34260	0.5000	0.4530	
82 4-Methyl-2-pentanone (MIBK)	43	9.286	9.280	0.006	98	116055	5.00	4.63	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1861945	10.0	10.0	
84 Toluene	92	9.512	9.506	0.006	98	65671	0.5000	0.4552	
85 trans-1,3-Dichloropropene	75	9.799	9.786	0.013	93	24503	0.5000	0.4288	
104 Ethyl methacrylate	69	9.872	9.860	0.012	89	17938	0.5000	0.4441	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	14835	0.5000	0.4632	M
S 105 1,3-Dichloropropene, Total	100				0			0.8818	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	31216	0.5000	0.4581	
108 1,3-Dichloropropane	76	10.170	10.164	0.006	90	25777	0.5000	0.4625	
109 2-Hexanone	43	10.237	10.219	0.018	96	65862	5.00	4.11	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	18274	0.5000	0.4619	
112 Ethylene Dibromide	107	10.512	10.500	0.012	98	13209	0.5000	0.4752	M
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	87	1338143	10.0	10.0	
114 1-Chlorohexane	91	10.969	10.963	0.006	97	40837	0.5000	0.4496	
115 Chlorobenzene	112	10.975	10.975	0.000	97	70237	0.5000	0.4602	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.060	0.000	94	23870	0.5000	0.4751	
117 Ethylbenzene	91	11.073	11.067	0.006	98	131172	0.5000	0.4607	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	99969	1.00	0.9236	
S 118 Xylenes, Total	106				0			1.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.524	11.518	0.006	97	47027	0.5000	0.4585	
121 Styrene	104	11.542	11.536	0.006	95	72995	0.5000	0.4433	
122 Bromoform	173	11.701	11.695	0.006	97	9558	0.5000	0.4673	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	114730	0.5000	0.4576	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	90	680449	10.0	10.1	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	92	17617	0.5000	0.4787	
128 Bromobenzene	156	12.091	12.091	0.000	94	27678	0.5000	0.4633	
129 trans-1,4-Dichloro-2-butene	53	12.109	12.103	0.006	95	44577	5.00	4.81	
130 1,2,3-Trichloropropane	110	12.127	12.121	0.006	76	4374	0.5000	0.4741	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	151451	0.5000	0.4558	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	28630	0.5000	0.4513	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	104912	0.5000	0.4511	
134 4-Chlorotoluene	126	12.335	12.329	0.006	98	30138	0.5000	0.4716	
135 tert-Butylbenzene	134	12.548	12.542	0.006	93	23903	0.5000	0.4656	
136 Pentachloroethane	167	12.579	12.572	0.006	79	17133	0.5000	0.5064	
137 1,2,4-Trimethylbenzene	105	12.591	12.585	0.006	97	105302	0.5000	0.4461	
138 sec-Butylbenzene	105	12.713	12.707	0.006	94	135188	0.5000	0.4511	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	97	53587	0.5000	0.4484	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	115129	0.5000	0.4483	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	746831	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	96	55773	0.5000	0.4531	
143 1,2,3-Trimethylbenzene	120	12.896	12.889	0.007	96	45642	0.5000	0.4586	
144 Benzyl chloride	126	12.963	12.956	0.007	99	6418	0.5000	0.4423	
145 p-Diethylbenzene	119	13.097	13.097	0.000	94	67890	0.5000	0.4511	
146 n-Butylbenzene	92	13.115	13.115	0.000	96	52968	0.5000	0.4376	
147 1,2-Dichlorobenzene	146	13.145	13.139	0.006	98	47281	0.5000	0.4536	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	85	2053	0.5000	0.4203	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	97	39280	0.5000	0.4476	
151 1,2,4-Trichlorobenzene	180	14.243	14.237	0.006	94	30990	0.5000	0.4411	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	15207	0.5000	0.4379	
153 Naphthalene	128	14.420	14.414	0.006	97	49166	0.5000	0.4278	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	95	25762	0.5000	0.4464	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00171	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00279	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00185	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std4 0.5

Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

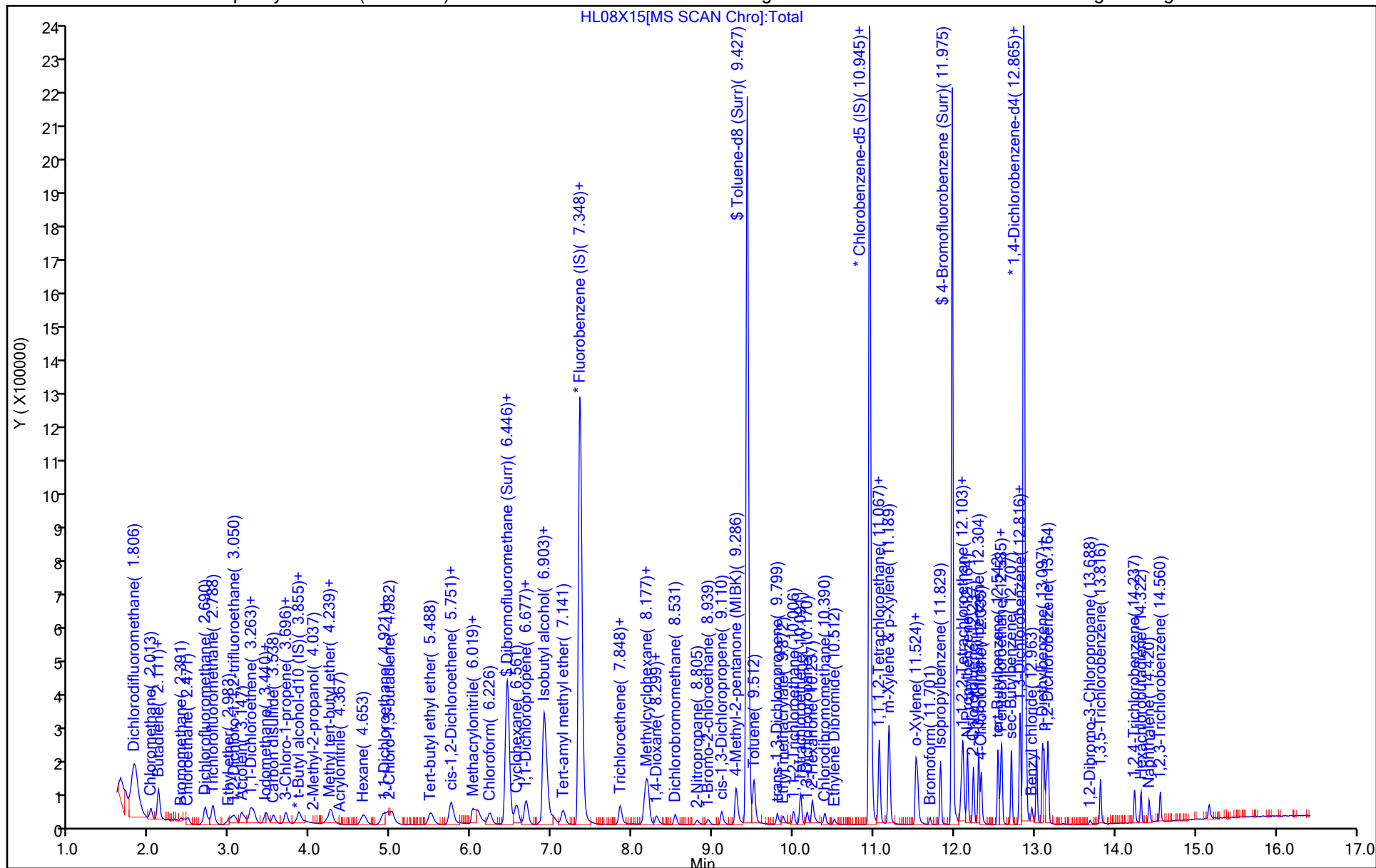
ALS Bottle#: 15

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

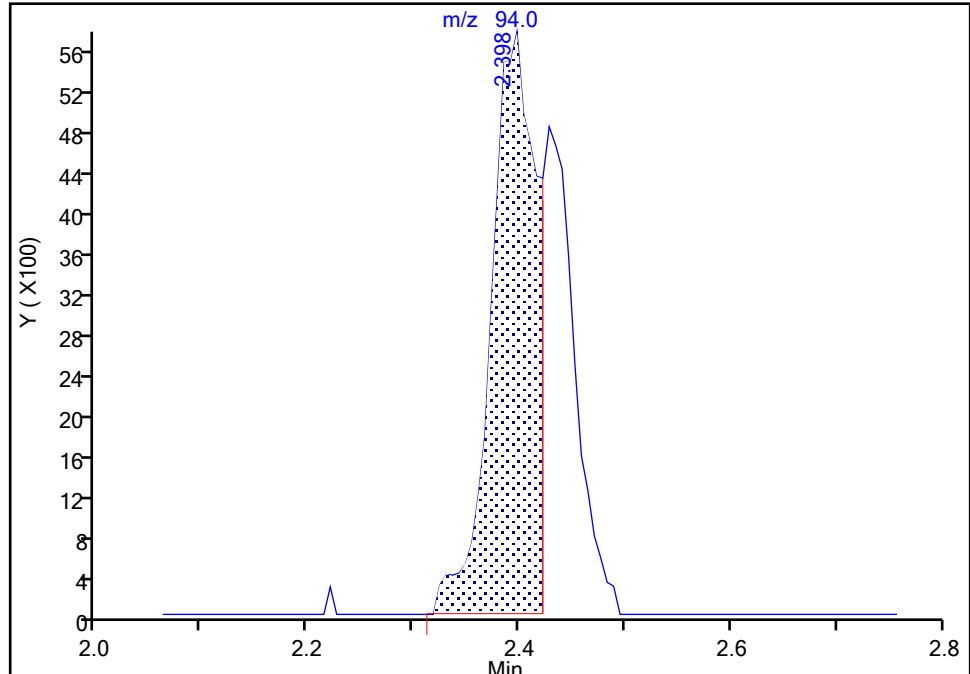
MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

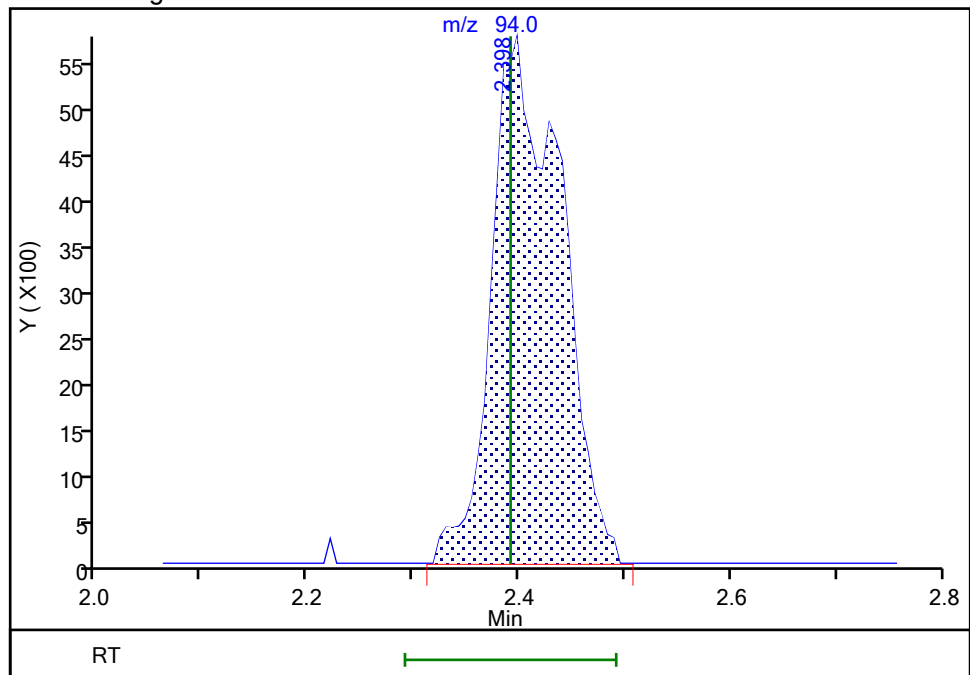
RT: 2.40
Area: 17621
Amount: 0.325730
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 26674
Amount: 0.521080
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:22:43 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

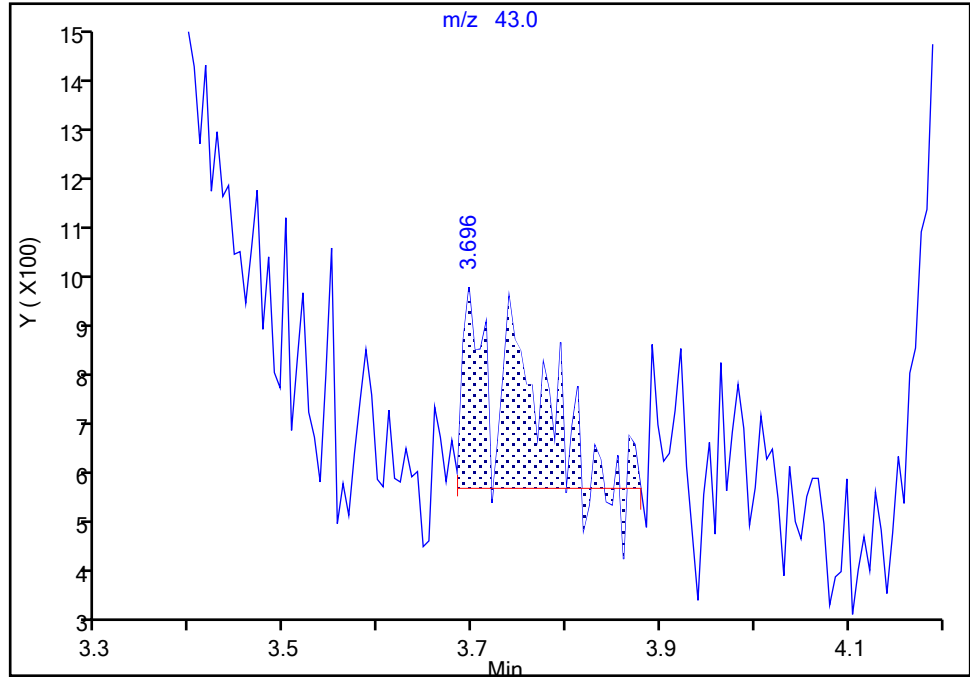
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

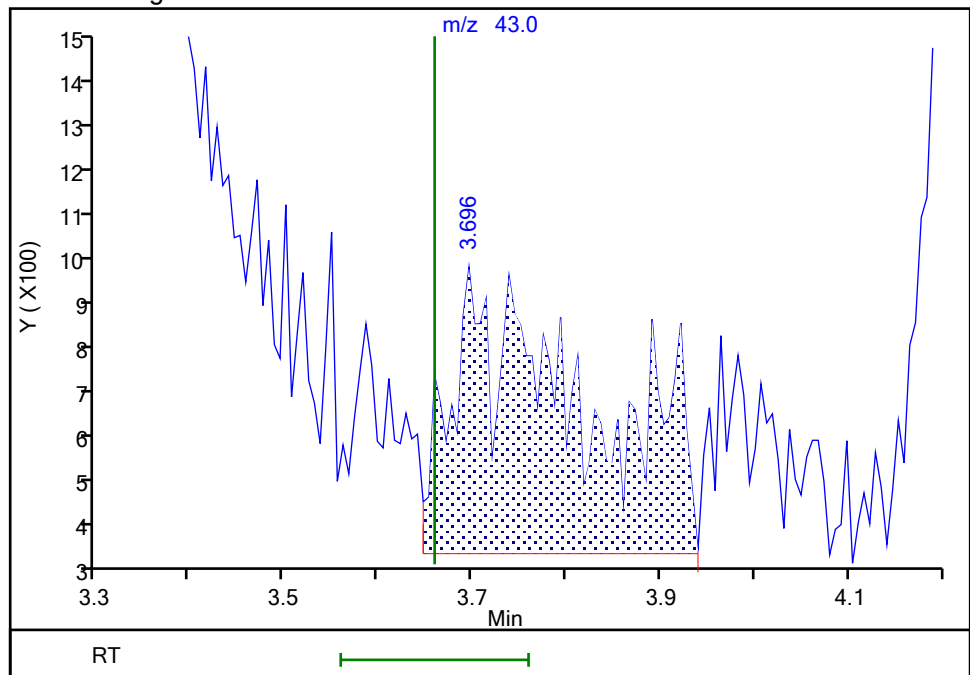
RT: 3.70
Area: 1585
Amount: 0.101950
Amount Units: ug/l

Processing Integration Results



RT: 3.70
Area: 5896
Amount: 0.480286
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:22:58 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

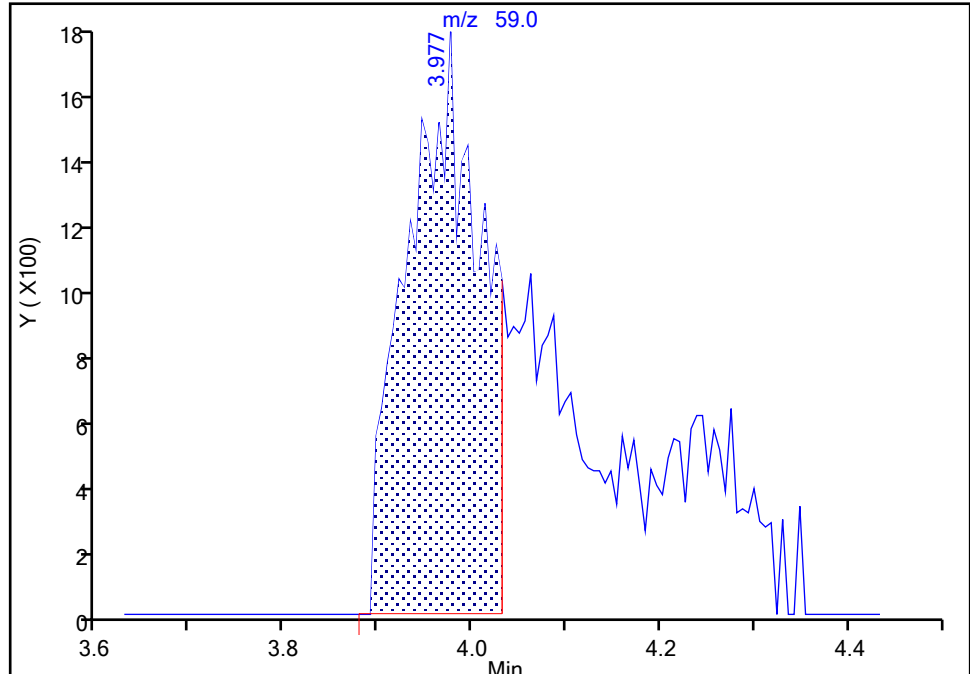
MS Quad

29 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

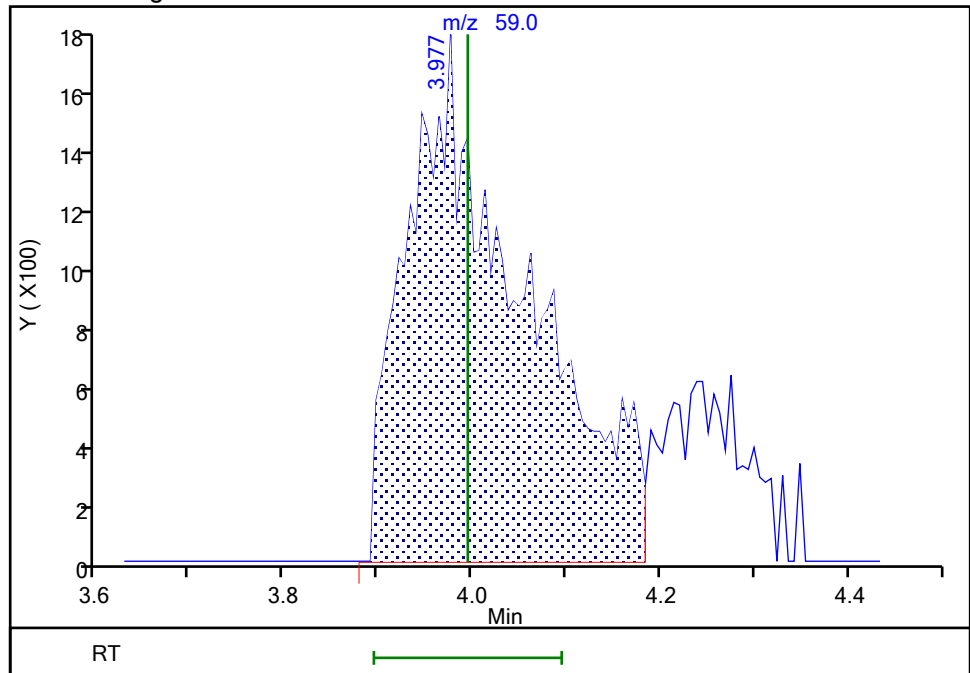
RT: 3.98
Area: 9540
Amount: 6.390444
Amount Units: ug/l

Processing Integration Results



RT: 3.98
Area: 15135
Amount: 9.623073
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:23:25 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

MS Quad

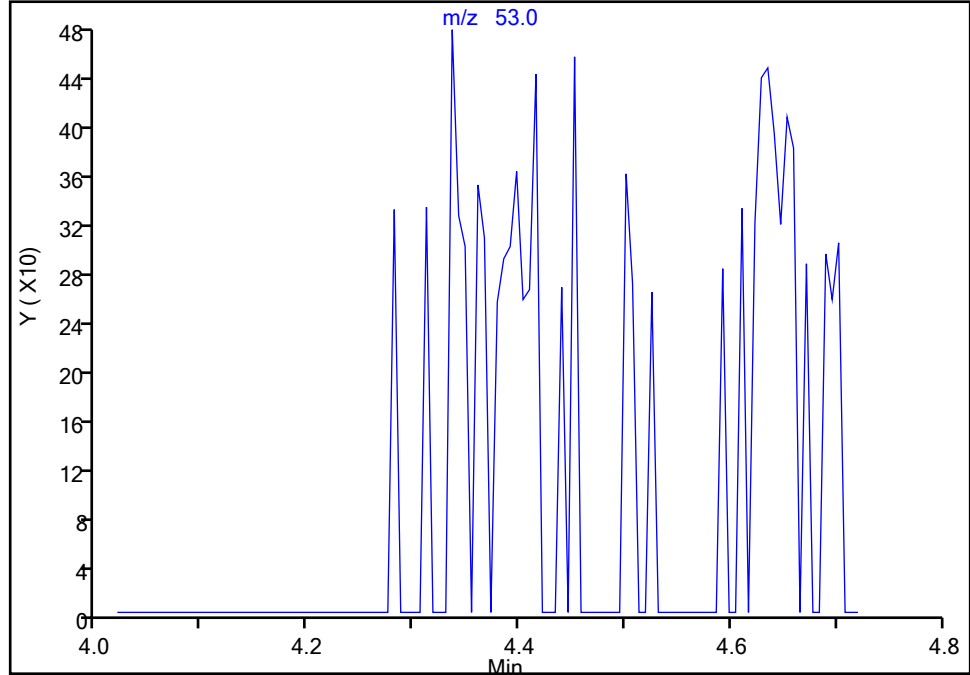
31 Acrylonitrile, CAS: 107-13-1

Signal: 1

Not Detected

Expected RT: 4.18

Processing Integration Results



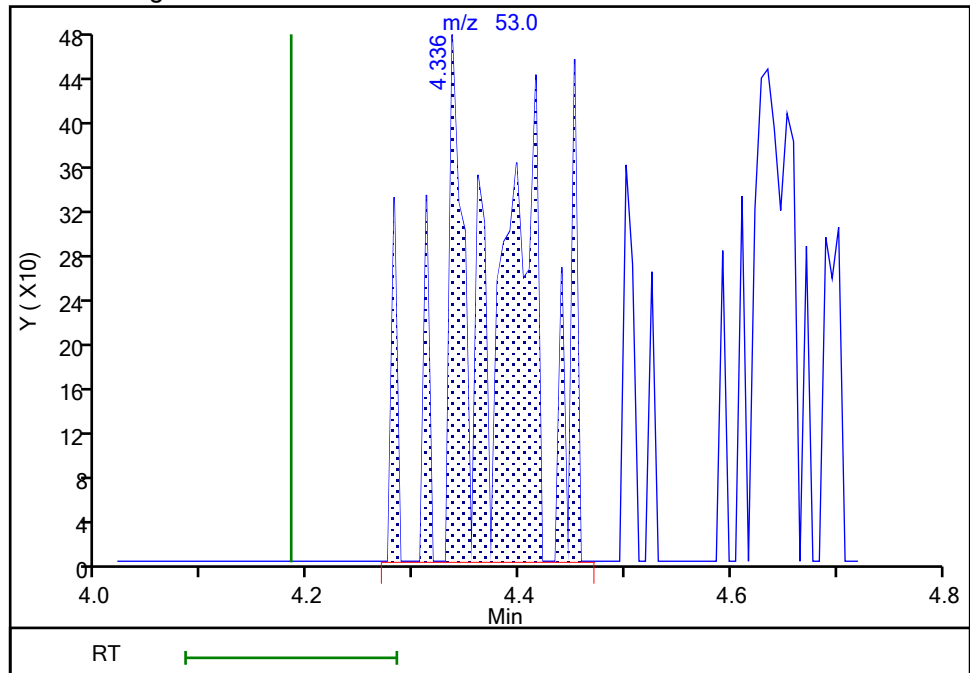
RT: 4.34

Area: 1924

Amount: 0.753014

Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:23:37 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

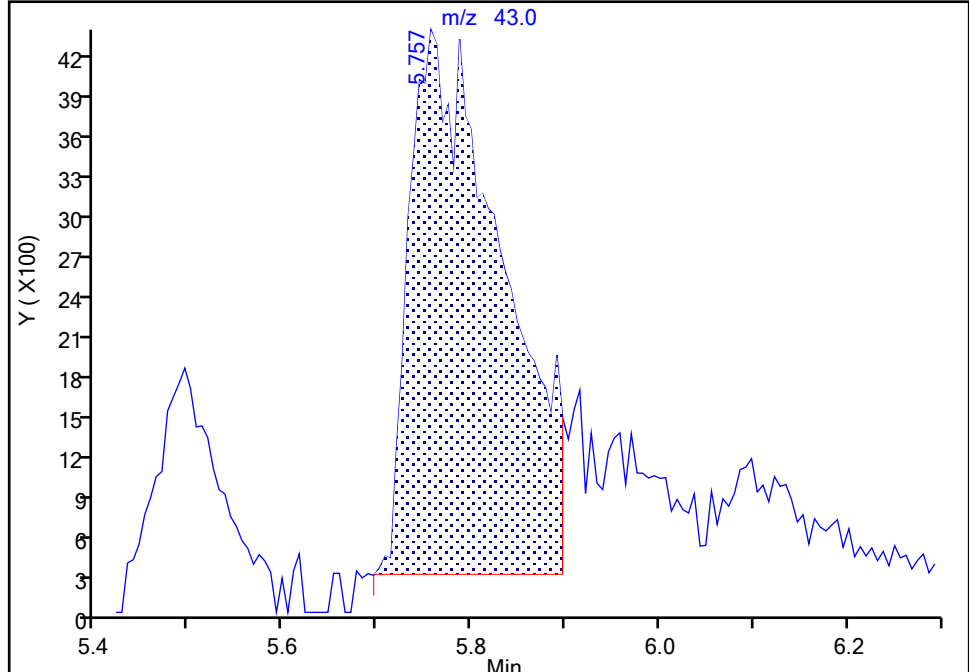
MS Quad

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

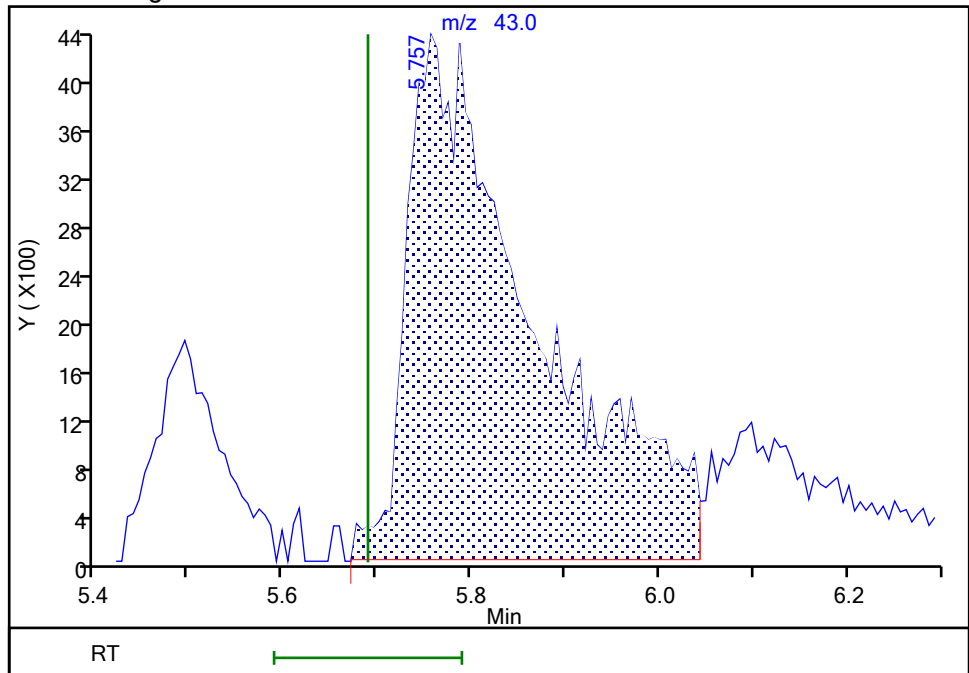
RT: 5.76
Area: 28195
Amount: 3.907703
Amount Units: ug/l

Processing Integration Results



RT: 5.76
Area: 41063
Amount: 4.668654
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:24:07 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

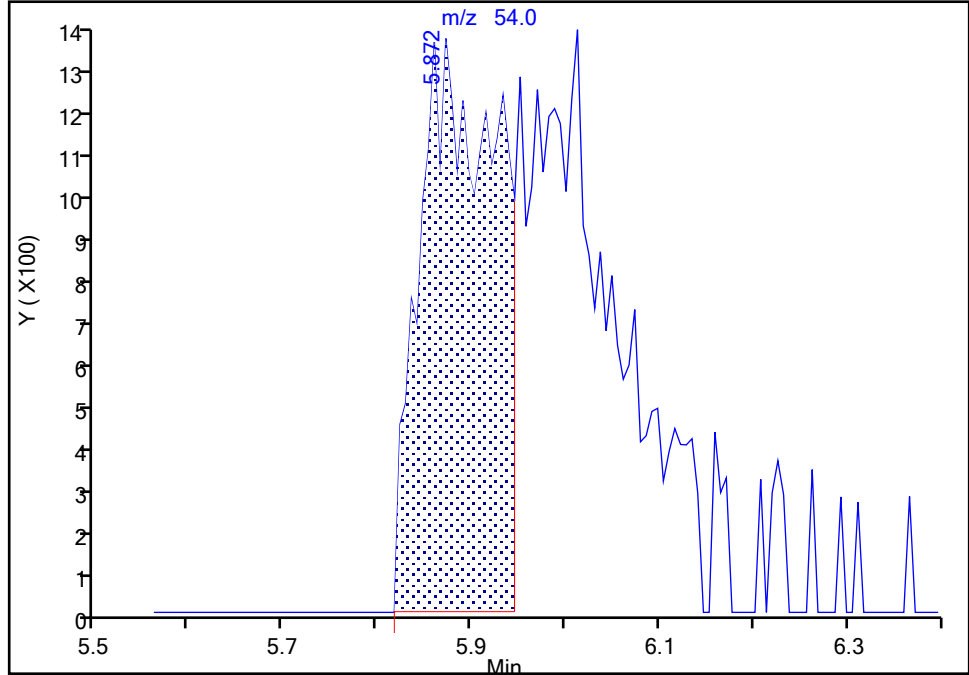
MS Quad

44 Propionitrile, CAS: 107-12-0

Signal: 1

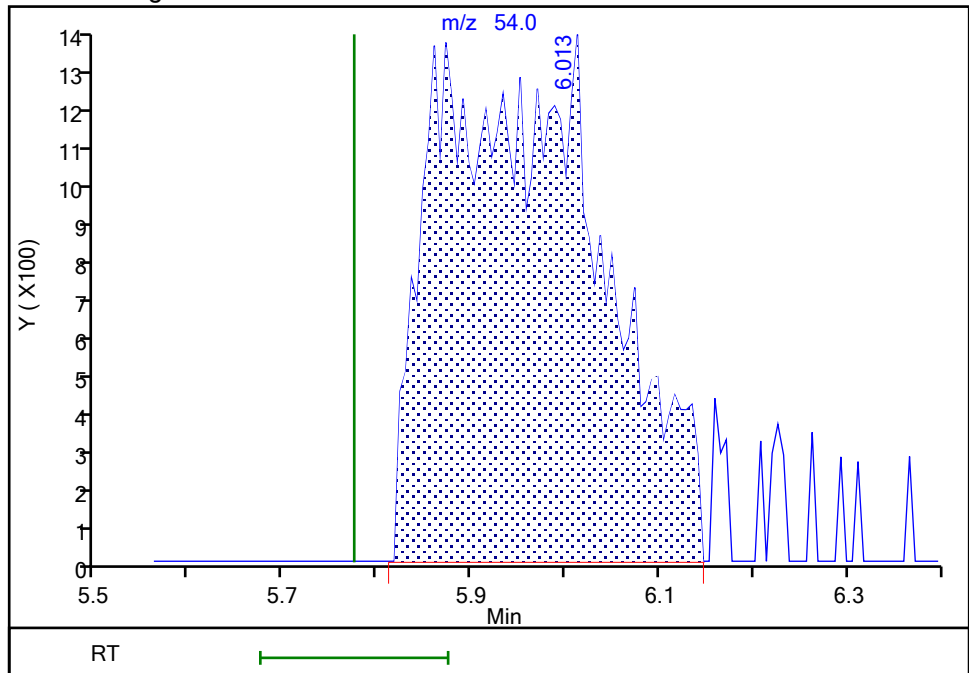
RT: 5.87
Area: 7502
Amount: 4.424431
Amount Units: ug/l

Processing Integration Results



RT: 6.01
Area: 16007
Amount: 7.302044
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:24:42 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

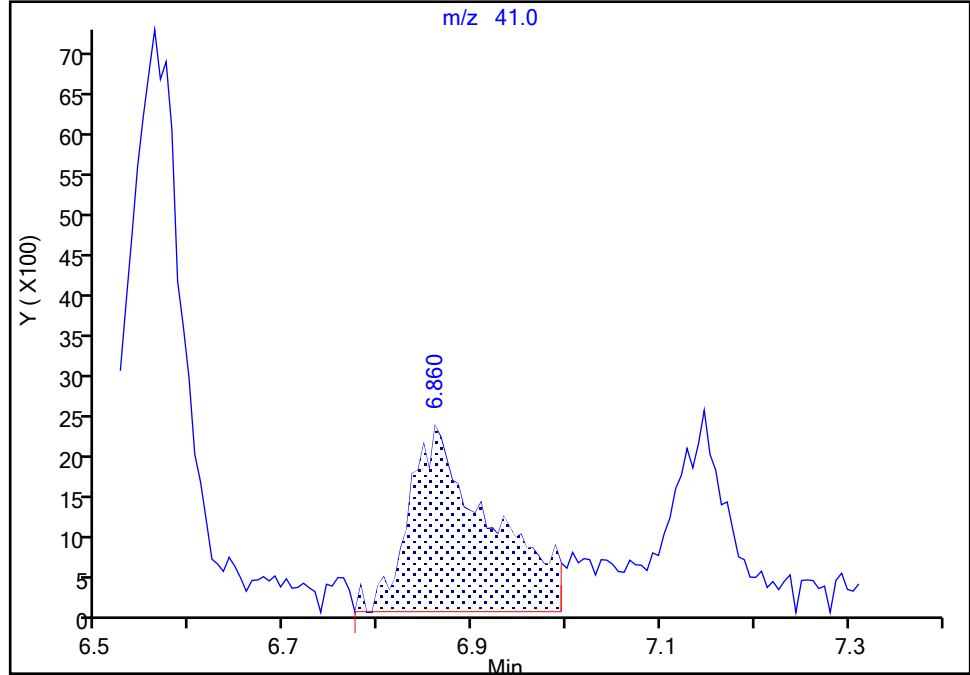
MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

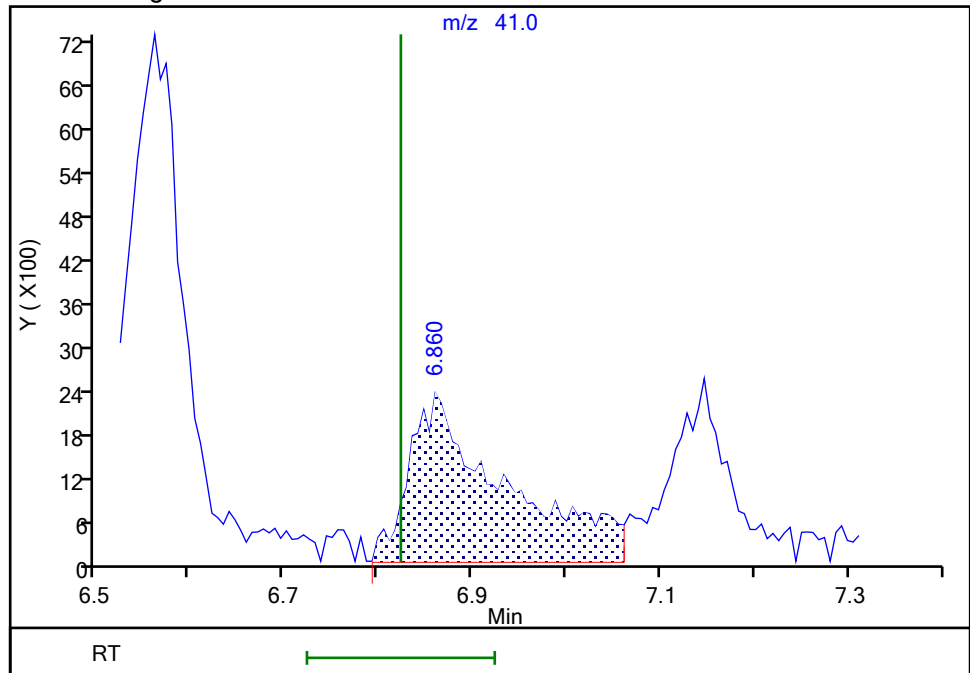
RT: 6.86
Area: 13815
Amount: 21.053968
Amount Units: ug/l

Processing Integration Results



RT: 6.86
Area: 16101
Amount: 26.210038
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:25:04 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

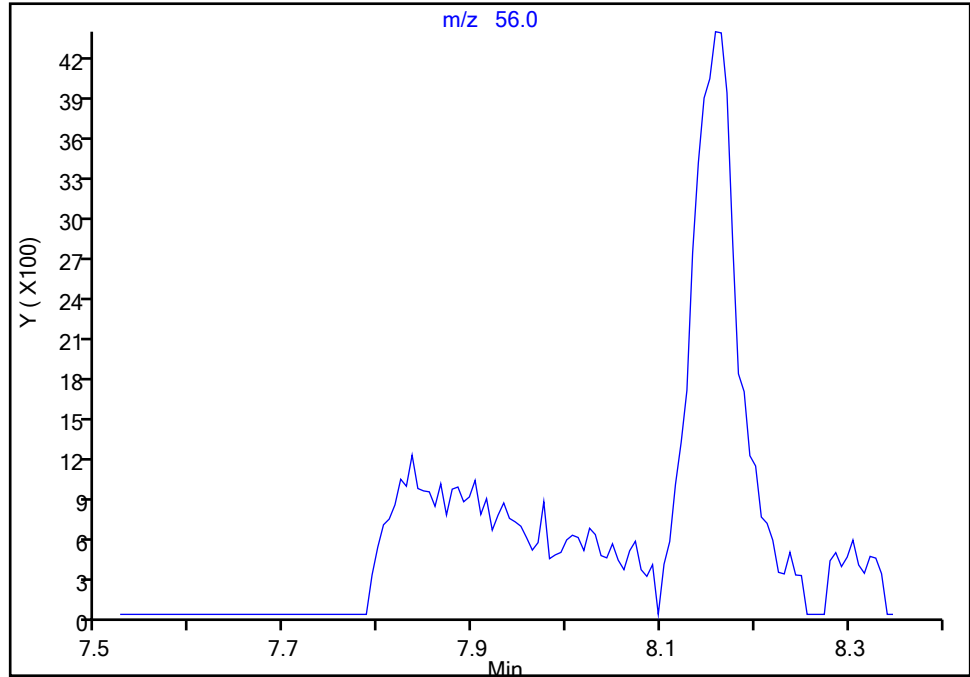
MS Quad

67 n-Butanol, CAS: 71-36-3

Signal: 1

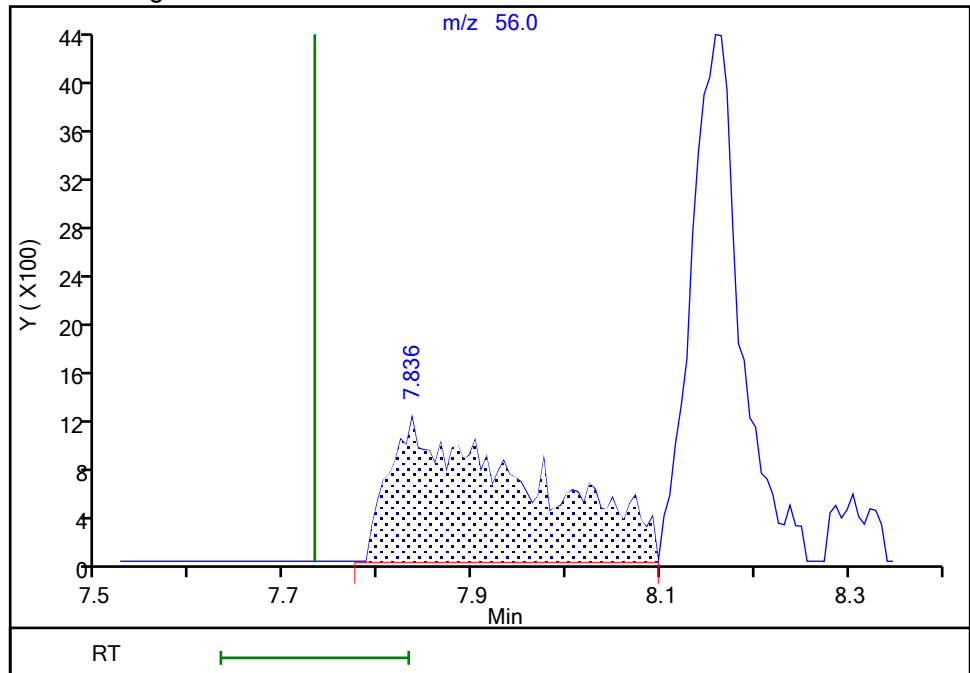
RT: 7.92
Area: 0
Amount: 0
Amount Units: ug/l

Processing Integration Results



RT: 7.84
Area: 12166
Amount: 58.643309
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:25:22 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

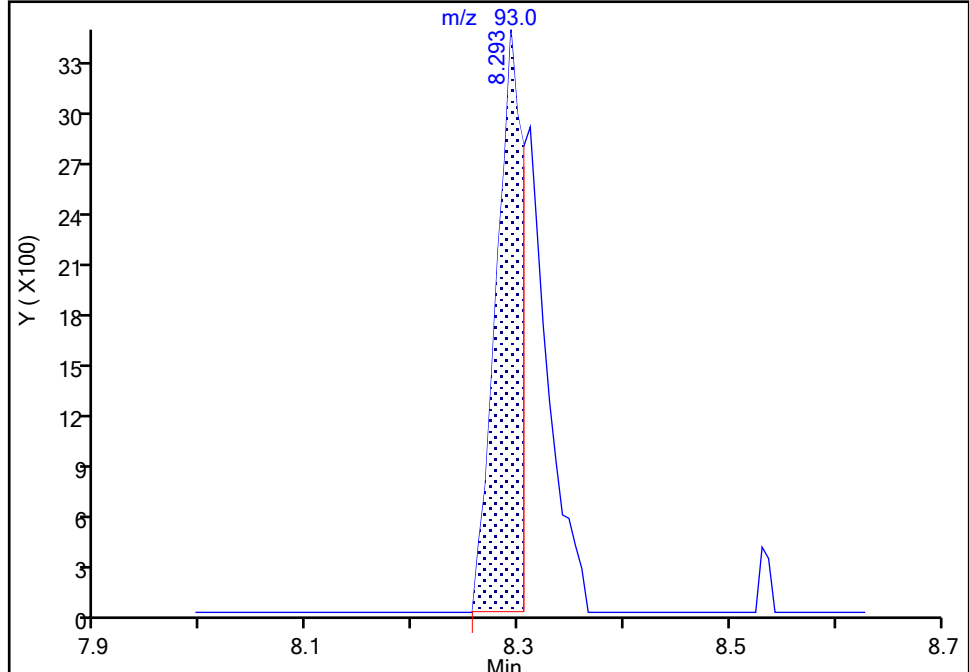
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D
Injection Date: 09-Jul-2025 05:18:30 Instrument ID: 19094
Lims ID: IC std4 0.5
Client ID:
Operator ID: gaw91131 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

74 Dibromomethane, CAS: 74-95-3

Signal: 1

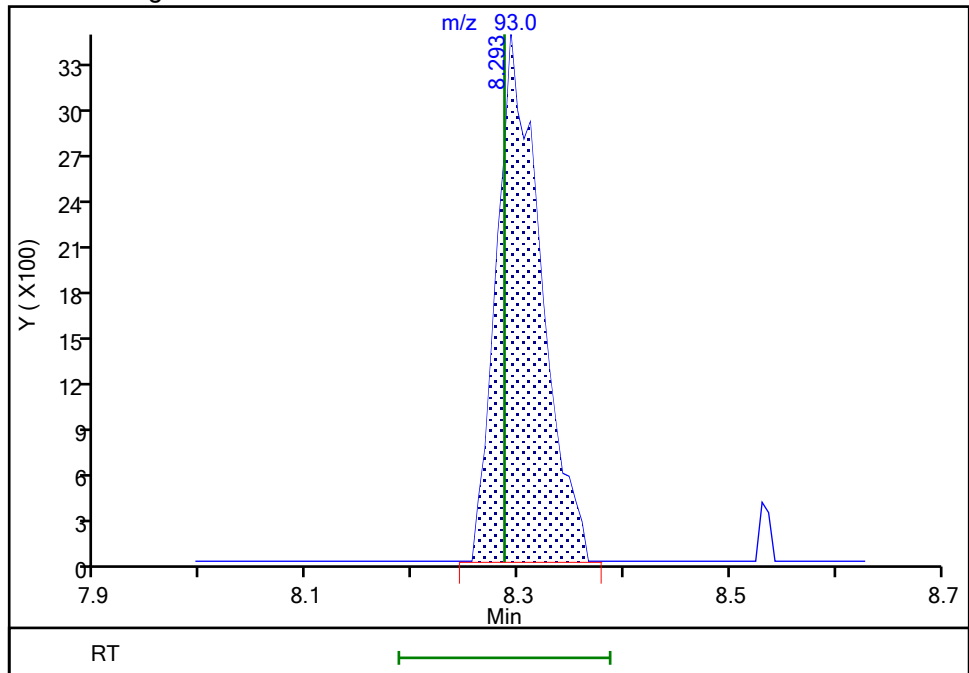
RT: 8.29
Area: 6110
Amount: 0.312949
Amount Units: ug/l

Processing Integration Results



RT: 8.29
Area: 10103
Amount: 0.492296
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:25:39 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

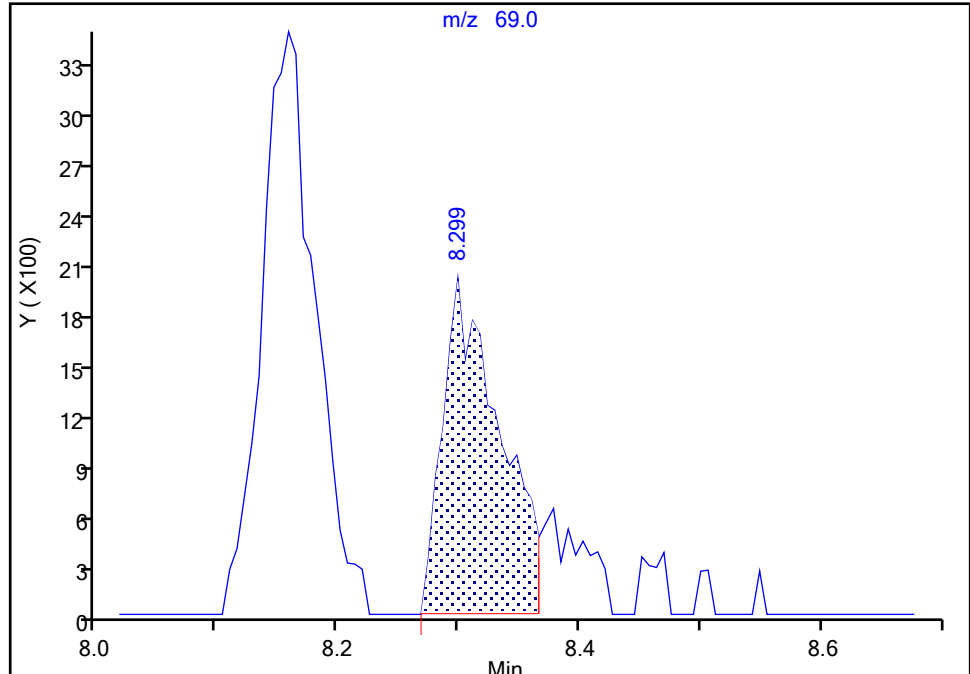
MS Quad

72 Methyl methacrylate, CAS: 80-62-6

Signal: 1

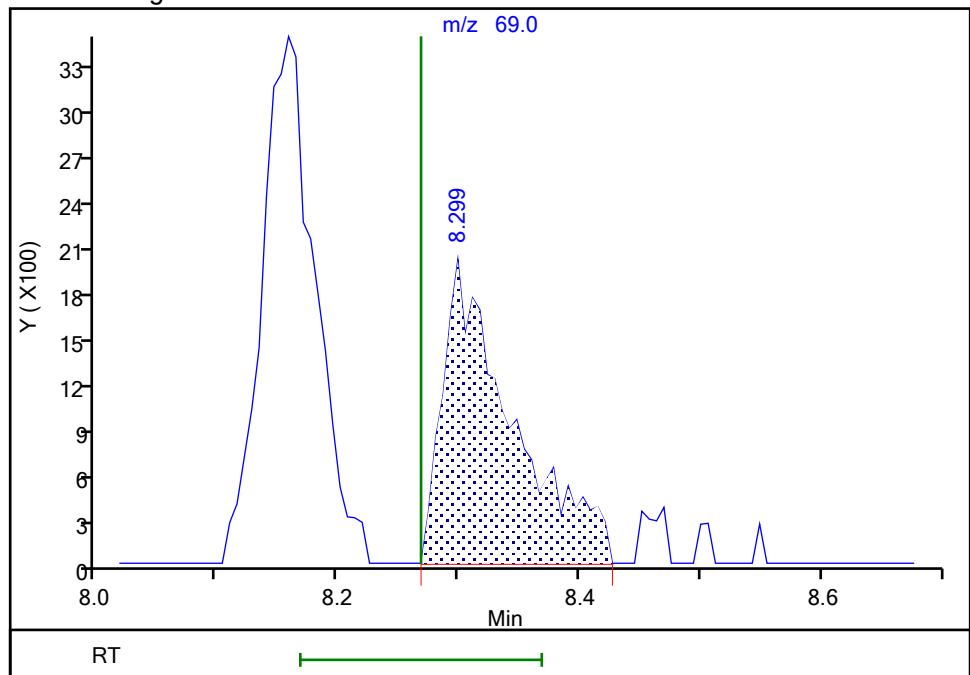
RT: 8.30
Area: 6534
Amount: 0.370123
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 7905
Amount: 0.438064
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:25:29 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

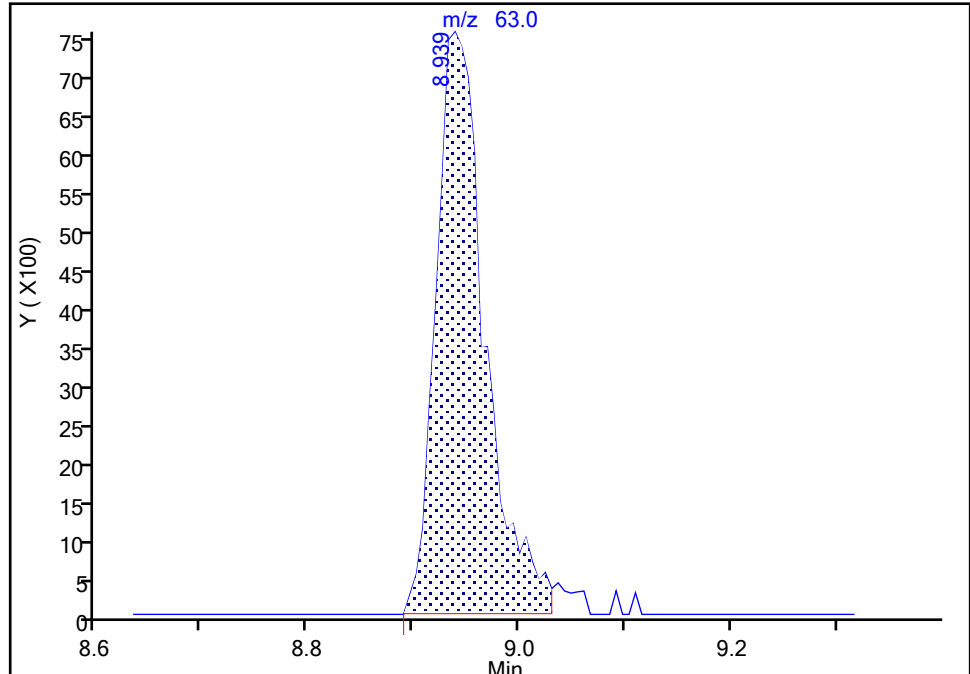
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D
Injection Date: 09-Jul-2025 05:18:30 Instrument ID: 19094
Lims ID: IC std4 0.5
Client ID:
Operator ID: gaw91131 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

79 1-Bromo-2-chloroethane, CAS: 107-04-0

Signal: 1

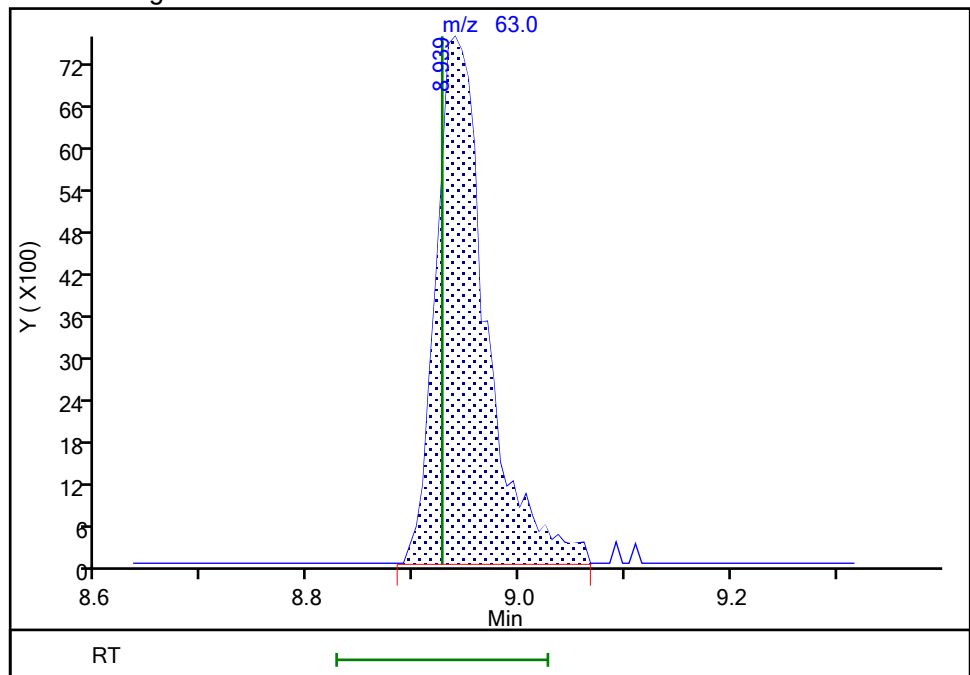
RT: 8.94
Area: 24500
Amount: 0.499823
Amount Units: ug/l

Processing Integration Results



RT: 8.94
Area: 25080
Amount: 0.507347
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:25:50 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

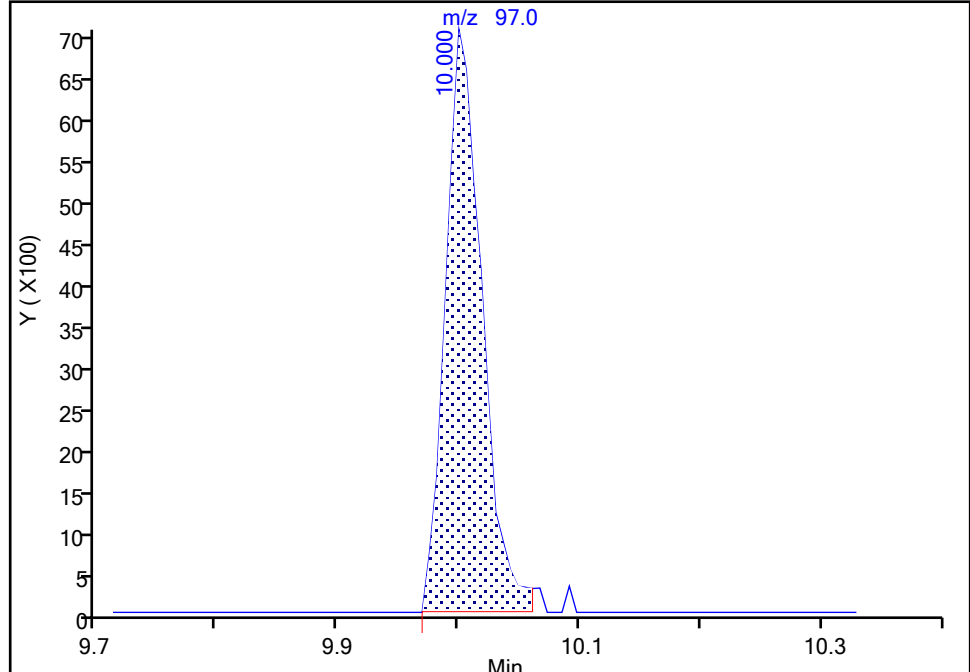
MS Quad

106 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 1

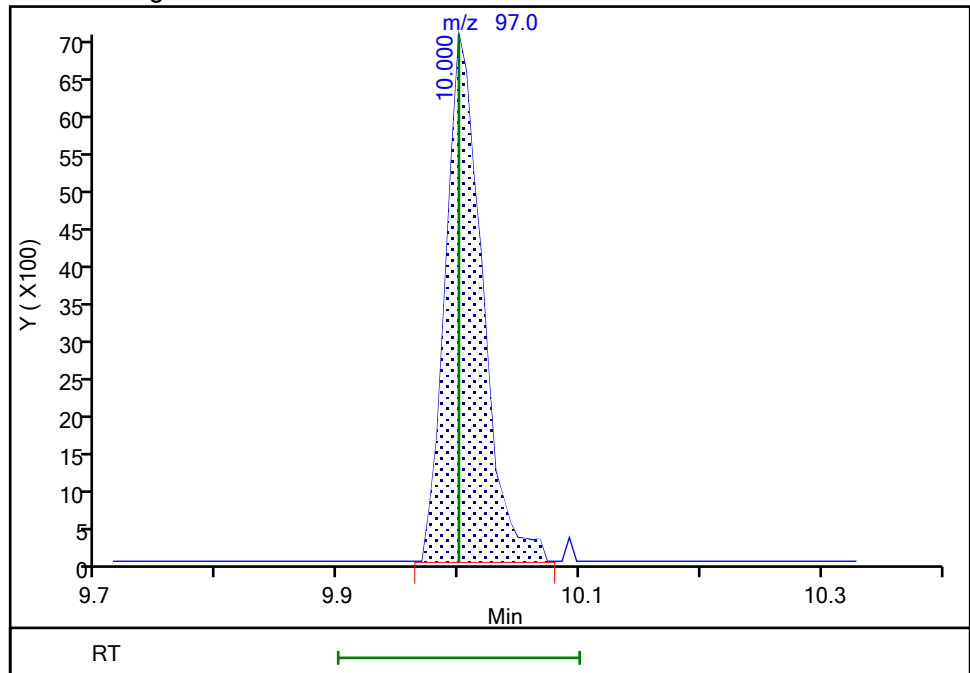
RT: 10.00
Area: 14728
Amount: 0.460177
Amount Units: ug/l

Processing Integration Results



RT: 10.00
Area: 14835
Amount: 0.463176
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:26:34 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X15.D

Injection Date: 09-Jul-2025 05:18:30

Instrument ID: 19094

Lims ID: IC std4 0.5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

15

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

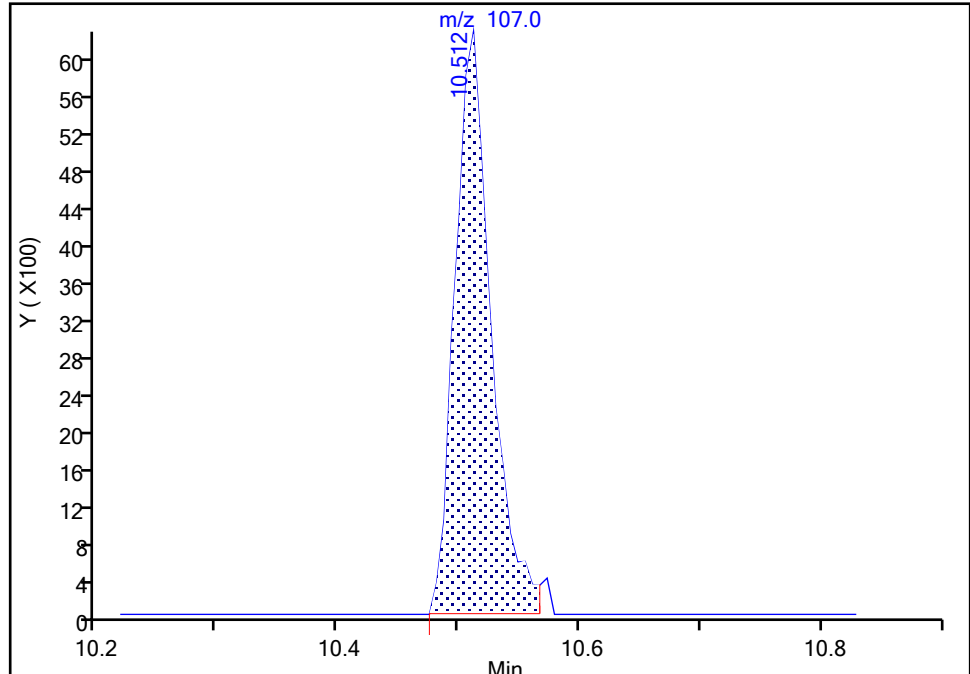
MS Quad

112 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

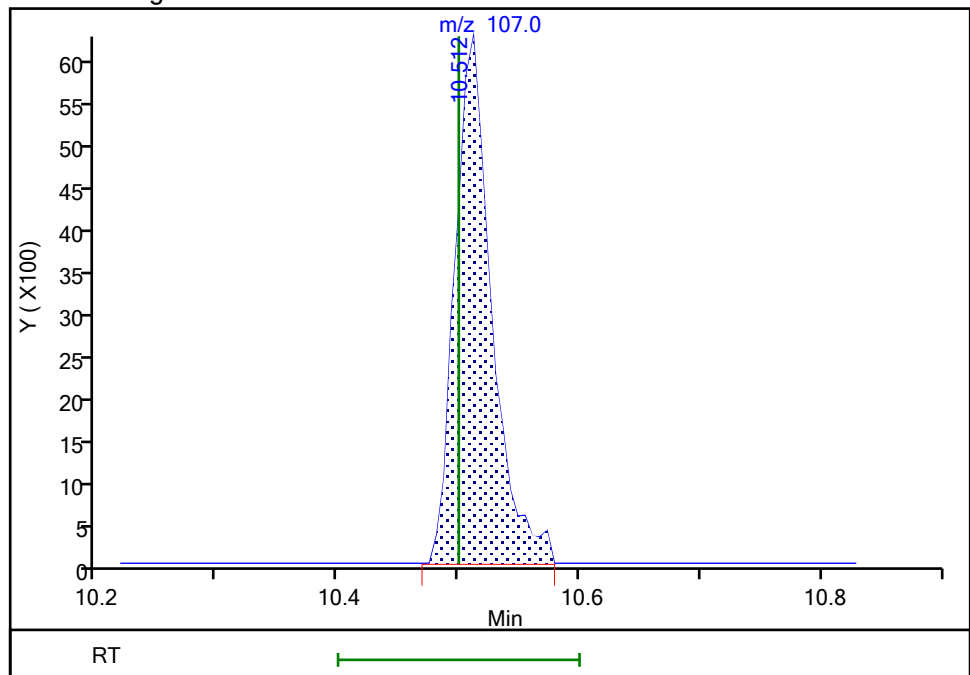
RT: 10.51
Area: 13067
Amount: 0.470671
Amount Units: ug/l

Processing Integration Results



RT: 10.51
Area: 13209
Amount: 0.475246
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:26:44 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D
 Lims ID: IC std5 1
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 09-Jul-2025 05:39:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-017
 Misc. Info.: IC STD5 1
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:17 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:28:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.824	1.831	-0.007	98	61195	1.00	1.00	
5 Chloromethane	50	2.013	2.013	0.000	99	88097	1.00	1.09	
7 Butadiene	39	2.105	2.105	0.000	92	78930	1.00	1.01	
6 Vinyl chloride	62	2.117	2.123	-0.006	98	80555	1.00	1.10	
9 Bromomethane	94	2.398	2.391	0.007	88	58080	1.00	1.11	M
10 Chloroethane	64	2.477	2.477	0.000	100	50372	1.00	1.09	
11 Dichlorofluoromethane	67	2.684	2.690	-0.006	97	130016	1.00	1.05	
12 Trichlorofluoromethane	101	2.782	2.788	-0.006	53	93150	1.00	0.9785	
14 Ethyl ether	59	2.977	2.971	0.006	92	32457	1.00	1.01	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.044	3.050	-0.006	94	71506	1.00	1.01	
16 Acrolein	56	3.135	3.117	0.018	99	207595	48.8	55.3	
17 1,1-Dichloroethene	96	3.257	3.251	0.006	97	51386	1.00	1.07	
19 Acetone	43	3.306	3.275	0.031	53	46047	10.0	10.0	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.294	3.294	0.000	92	47770	1.00	1.01	
21 Iodomethane	142	3.434	3.434	0.000	99	99728	1.00	1.08	
22 Ethyl bromide	108	3.458	3.458	0.000	97	39608	1.00	0.9748	
23 Carbon disulfide	76	3.538	3.531	0.007	99	157512	1.00	1.07	
24 Methyl acetate	43	3.702	3.660	0.042	22	10912	1.00	0.99	M
26 3-Chloro-1-propene	41	3.690	3.684	0.006	92	101799	1.00	1.07	
27 Methylene Chloride	84	3.855	3.855	0.000	94	52255	1.00	1.04	
* 28 t-Butyl alcohol-d10 (IS)	65	3.861	3.891	-0.030	94	64825	50.0	50.0	
29 2-Methyl-2-propanol	59	3.976	3.995	-0.019	91	24757	20.0	17.6	
31 Acrylonitrile	53	4.269	4.184	0.085	19	9277	2.50	2.04	M
32 Methyl tert-butyl ether	73	4.226	4.214	0.012	95	104199	1.00	0.9427	
33 trans-1,2-Dichloroethene	96	4.245	4.239	0.006	97	57900	1.00	1.09	
34 Hexane	57	4.659	4.659	0.000	92	77464	1.00	0.9582	
36 1,1-Dichloroethane	63	4.891	4.891	0.000	96	110510	1.00	1.07	
37 Isopropyl ether	45	4.958	4.952	0.006	95	170834	1.00	0.9830	
38 2-Chloro-1,3-butadiene	53	5.019	5.001	0.018	92	95438	1.00	1.07	
40 Tert-butyl ethyl ether	59	5.494	5.495	0.000	99	146425	1.00	0.9717	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.732	5.690	0.042	100	84562	10.0	10.7	M
42 cis-1,2-Dichloroethene	96	5.738	5.732	0.006	86	61566	1.00	1.06	
43 2,2-Dichloropropane	77	5.744	5.744	0.000	78	96232	1.00	1.07	
44 Propionitrile	54	5.860	5.775	0.085	97	38545	20.0	19.6	M
47 Methacrylonitrile	67	6.007	5.988	0.019	92	86632	10.0	10.9	
48 Chlorobromomethane	128	6.074	6.068	0.006	95	20976	1.00	0.9564	
49 Tetrahydrofuran	71	6.086	6.080	0.006	83	11085	5.00	5.00	
S 46 1,2-Dichloroethene, Total	100				0			2.15	
50 Chloroform	83	6.232	6.226	0.006	93	99467	1.00	1.04	
\$ 52 Dibromofluoromethane (Surr)	113	6.445	6.446	-0.001	94	437313	10.0	9.95	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	92932	1.00	1.04	
54 Cyclohexane	56	6.561	6.561	0.000	91	102163	1.00	0.9298	
56 Carbon tetrachloride	117	6.677	6.677	0.000	86	78314	1.00	1.04	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	94	86167	1.00	1.04	
57 Isobutyl alcohol	41	6.854	6.824	0.030	92	22218	50.0	40.3	M
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.897	0.006	81	78724	10.0	9.88	
59 Benzene	78	6.939	6.939	0.000	96	252625	1.00	1.08	
60 1,2-Dichloroethane	62	7.025	7.006	0.019	97	50003	1.00	0.9488	
63 Tert-amyl methyl ether	73	7.134	7.141	-0.007	98	119976	1.00	0.9201	
* 64 Fluorobenzene (IS)	96	7.348	7.354	-0.006	98	1893953	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	75711	1.00	0.8856	
67 n-Butanol	56	7.842	7.732	0.110	22	19477	87.5	76.2	M
68 Trichloroethene	95	7.842	7.842	0.000	99	64703	1.00	1.05	
69 Methylcyclohexane	83	8.159	8.159	0.000	91	97556	1.00	0.9120	
70 1,2-Dichloropropane	63	8.177	8.177	0.000	97	57558	1.00	1.02	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	81854	1.00	0.9591	
72 Methyl methacrylate	69	8.287	8.268	0.019	79	17132	1.00	1.06	
73 1,4-Dioxane	88	8.305	8.287	0.018	28	1959	50.0	44.3	M
74 Dibromomethane	93	8.287	8.287	0.000	95	20939	1.00	1.00	
76 Dichlorobromomethane	83	8.530	8.531	0.000	99	62768	1.00	1.00	
77 2-Nitropropane	41	8.799	8.793	0.006	98	25231	5.00	5.03	
79 1-Bromo-2-chloroethane	63	8.939	8.927	0.012	98	45636	1.00	0.9067	M
80 cis-1,3-Dichloropropene	75	9.110	9.097	0.013	95	74455	1.00	0.9669	
82 4-Methyl-2-pentanone (MIBK)	43	9.286	9.280	0.006	98	236617	10.0	10.5	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1877074	10.0	9.91	
84 Toluene	92	9.512	9.506	0.006	98	155904	1.00	1.06	
85 trans-1,3-Dichloropropene	75	9.799	9.786	0.012	94	53505	1.00	0.9208	
104 Ethyl methacrylate	69	9.866	9.860	0.006	91	37170	1.00	0.9049	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	29430	1.00	0.9035	
S 105 1,3-Dichloropropene, Total	100				0			1.89	
107 Tetrachloroethene	166	10.091	10.091	0.000	97	74060	1.00	1.07	
108 1,3-Dichloropropane	76	10.170	10.164	0.006	91	55118	1.00	0.9724	
109 2-Hexanone	43	10.231	10.219	0.012	97	151274	10.0	10.5	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	37944	1.00	0.9431	
112 Ethylene Dibromide	107	10.506	10.500	0.006	99	27393	1.00	0.9691	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	1360861	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	97	85990	1.00	0.9310	
115 Chlorobenzene	112	10.975	10.975	0.000	95	162377	1.00	1.05	
116 1,1,1,2-Tetrachloroethane	131	11.060	11.060	0.000	95	51167	1.00	1.00	
117 Ethylbenzene	91	11.067	11.067	0.000	99	304640	1.00	1.05	
119 m-Xylene & p-Xylene	106	11.188	11.189	-0.001	100	232944	2.00	2.12	
S 118 Xylenes, Total	106				0			3.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.524	11.518	0.006	98	107510	1.00	1.03	
121 Styrene	104	11.542	11.536	0.006	95	166885	1.00	1.00	
122 Bromoform	173	11.701	11.695	0.006	97	19846	1.00	0.9541	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	267430	1.00	1.05	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	90	682936	10.0	9.99	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	93	34943	1.00	0.9389	
128 Bromobenzene	156	12.091	12.091	0.000	95	59684	1.00	0.9880	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	94	94191	10.0	11.3	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	77	9112	1.00	0.9766	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	360035	1.00	1.07	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	68043	1.00	1.06	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	93	247870	1.00	1.05	
134 4-Chlorotoluene	126	12.335	12.329	0.006	98	66335	1.00	1.03	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	53085	1.00	1.02	
136 Pentachloroethane	167	12.572	12.572	0.000	83	32920	1.00	0.9623	
137 1,2,4-Trimethylbenzene	105	12.591	12.585	0.006	98	252696	1.00	1.06	
138 sec-Butylbenzene	105	12.706	12.707	-0.001	94	313774	1.00	1.04	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	122123	1.00	1.01	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	268626	1.00	1.03	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	755195	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	125248	1.00	1.01	
143 1,2,3-Trimethylbenzene	120	12.895	12.889	0.006	98	104340	1.00	1.04	
144 Benzyl chloride	126	12.963	12.956	0.007	99	13343	1.00	0.9093	
145 p-Diethylbenzene	119	13.097	13.097	0.000	94	156671	1.00	1.03	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	127261	1.00	1.04	
147 1,2-Dichlorobenzene	146	13.145	13.139	0.006	98	103857	1.00	0.9854	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	85	4528	1.00	0.9168	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	97	92882	1.00	1.05	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	68985	1.00	0.9711	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	34103	1.00	0.9712	
153 Naphthalene	128	14.420	14.414	0.006	97	104127	1.00	0.8960	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	95	56030	1.00	0.9602	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00279	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00185	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 16-Jul-2025 16:05:19

Chrom Revision: 2.3 14-Jul-2025 13:55:14

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std5 1

Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

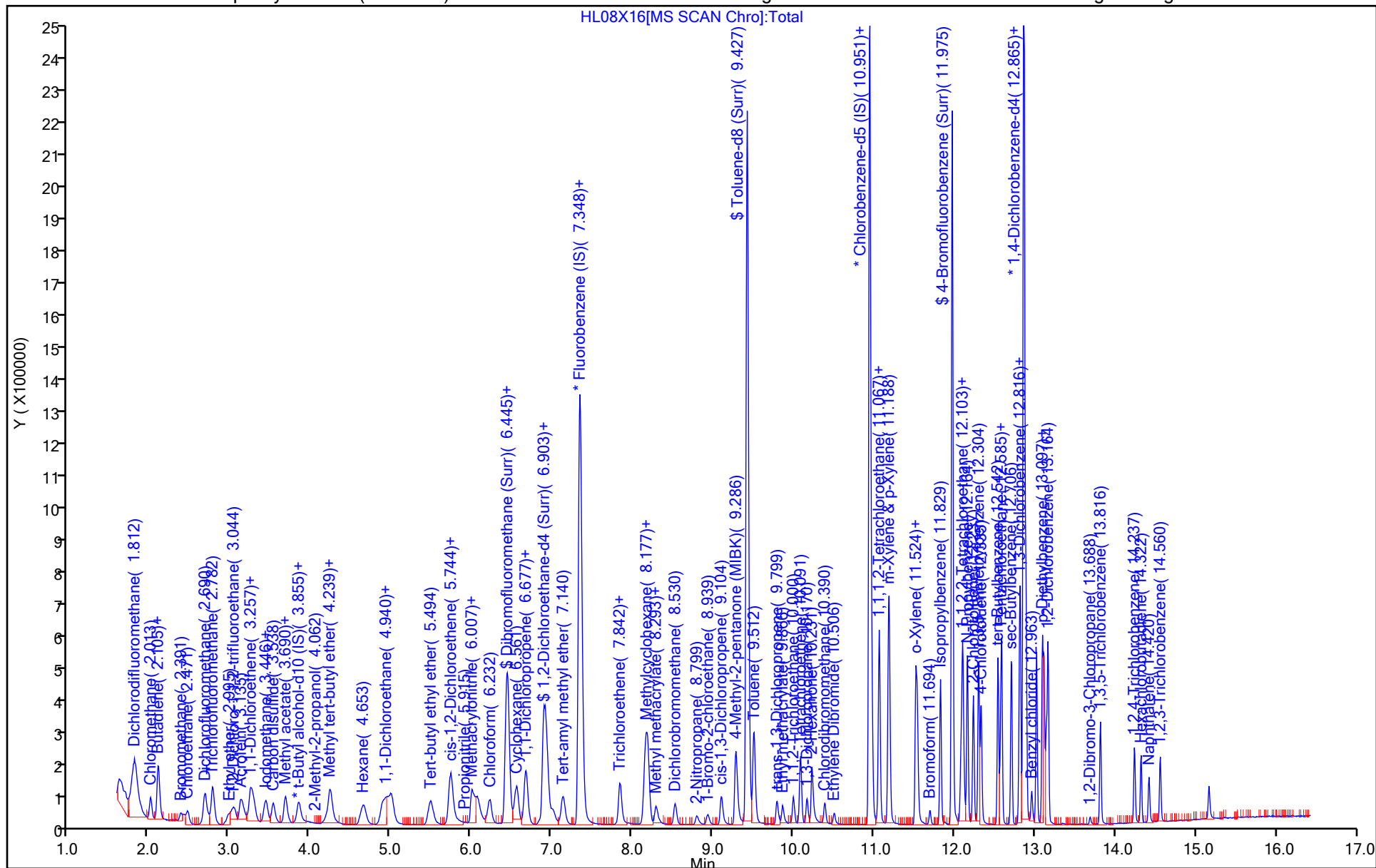
ALS Bottle#: 16

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

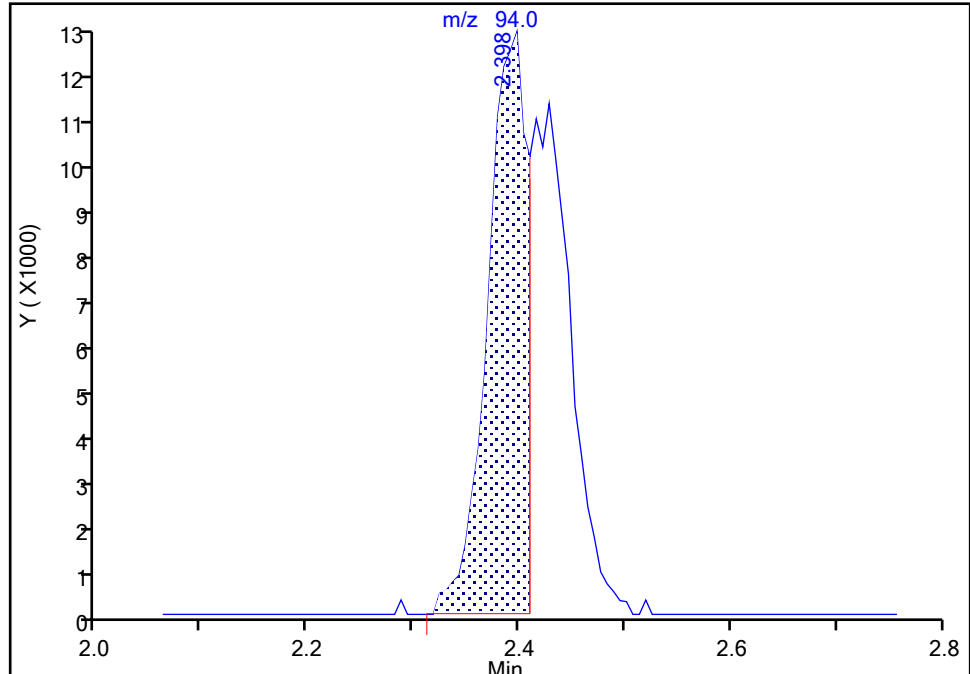
MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

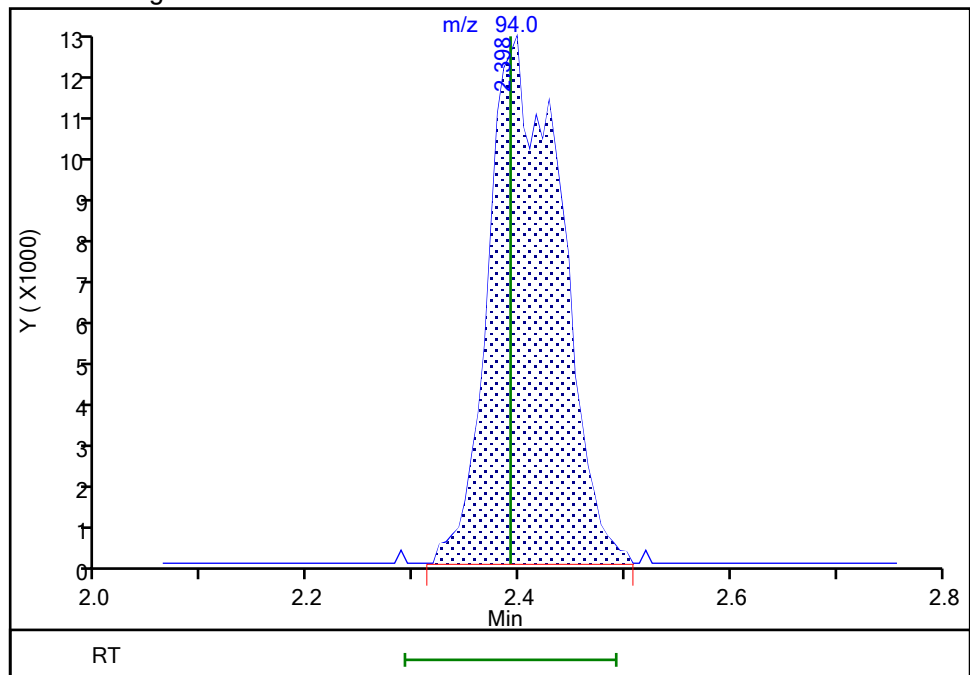
RT: 2.40
Area: 32408
Amount: 0.567283
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 58080
Amount: 1.114347
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:27:29 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

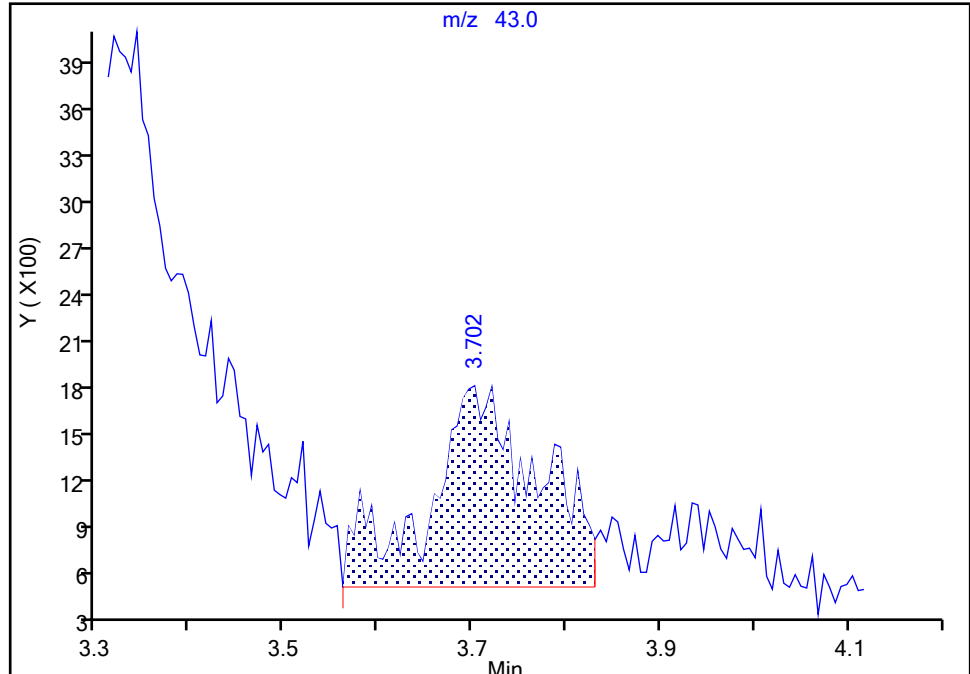
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

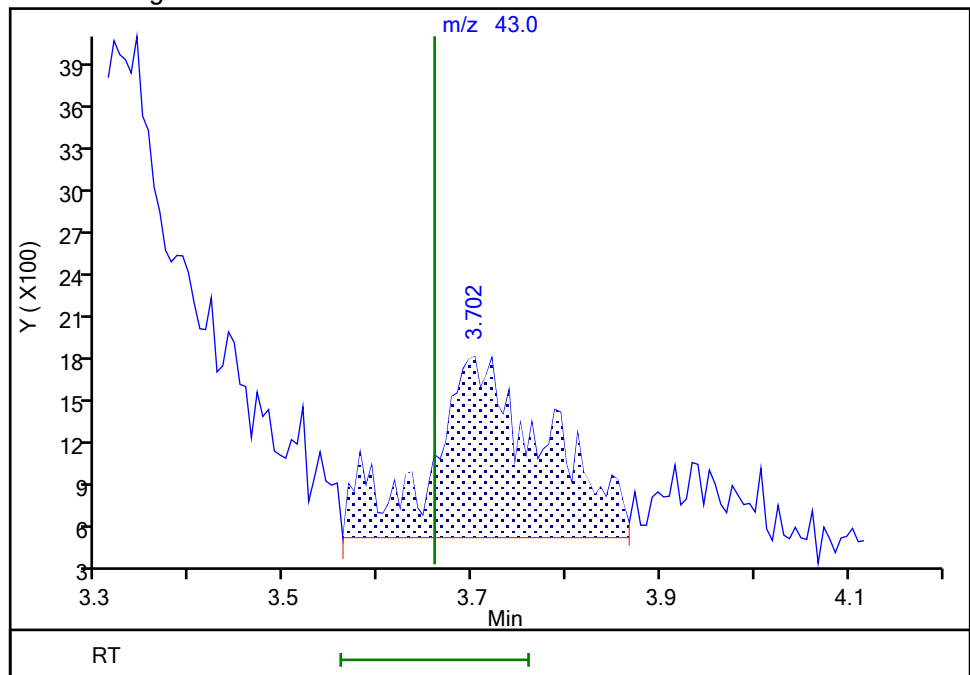
RT: 3.70
Area: 10235
Amount: 0.686598
Amount Units: ug/l

Processing Integration Results



RT: 3.70
Area: 10912
Amount: 0.991316
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:27:46 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

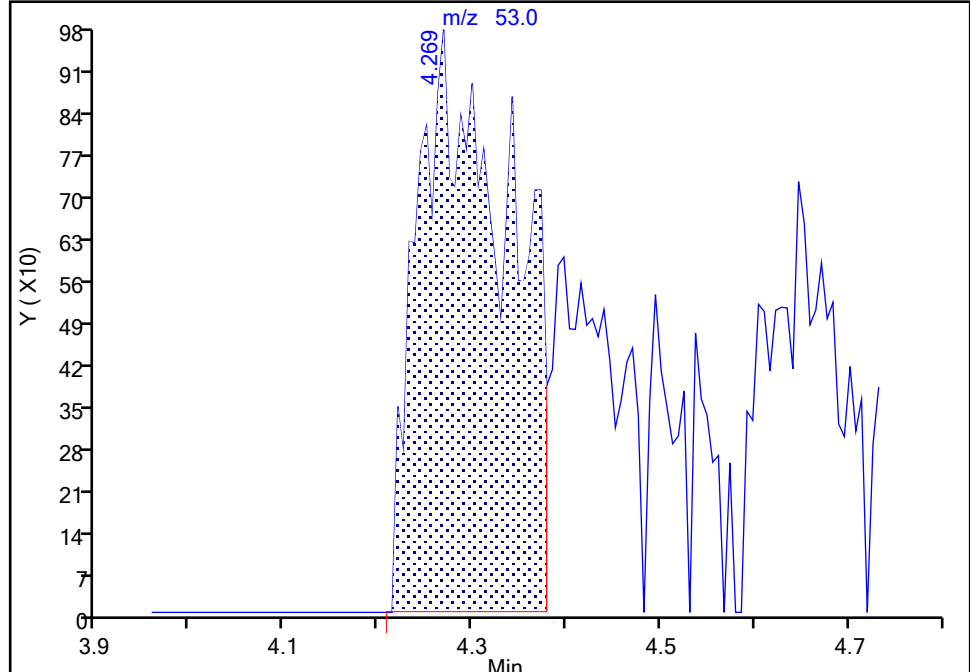
MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

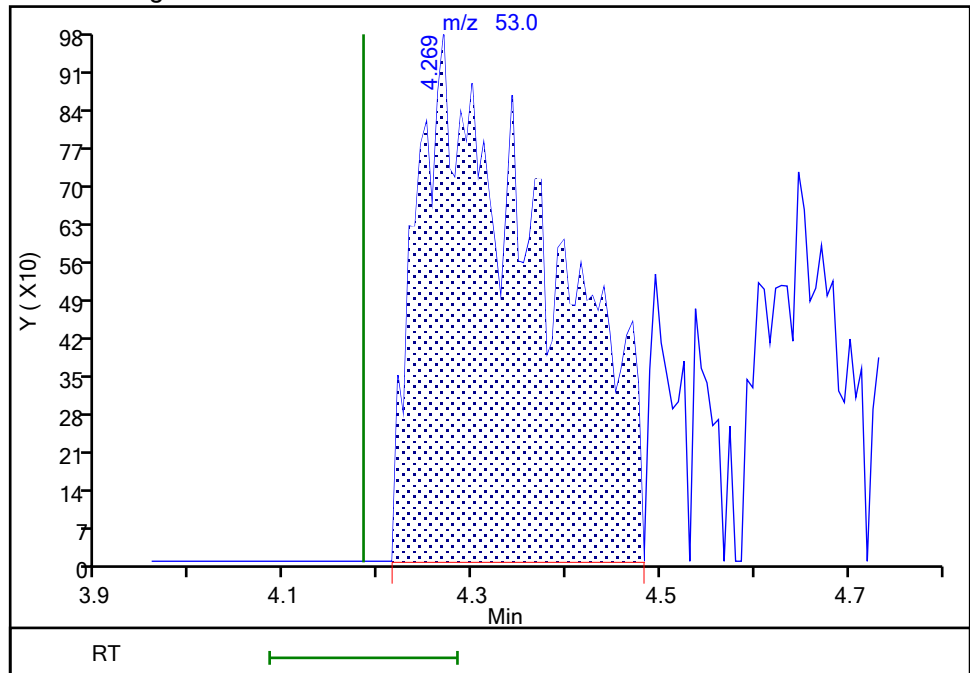
RT: 4.27
Area: 6610
Amount: 2.283440
Amount Units: ug/l

Processing Integration Results



RT: 4.27
Area: 9277
Amount: 2.041055
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:27:54 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

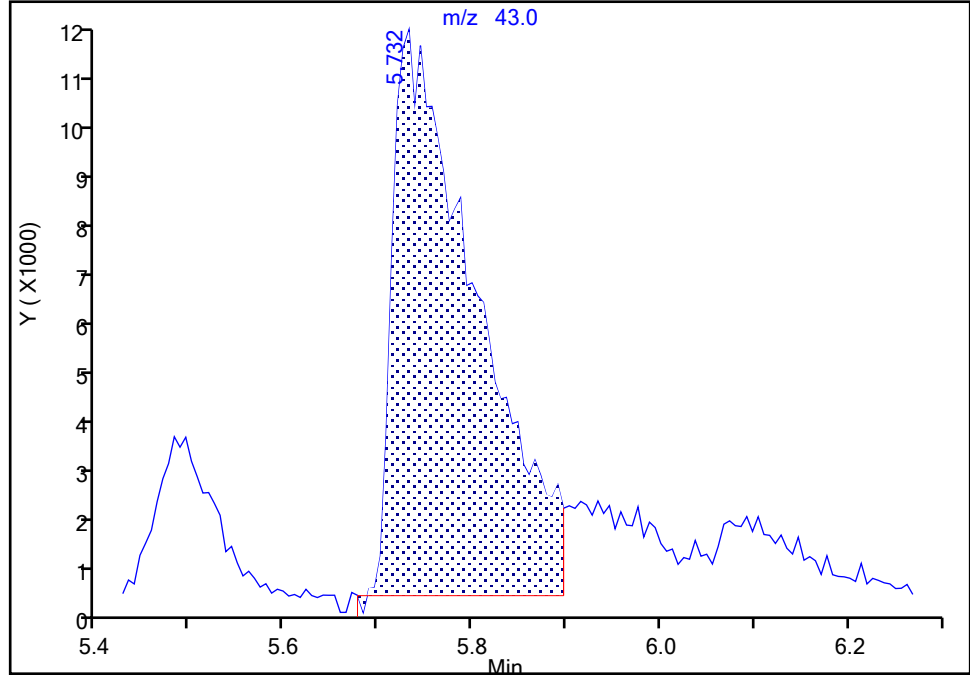
MS Quad

41 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

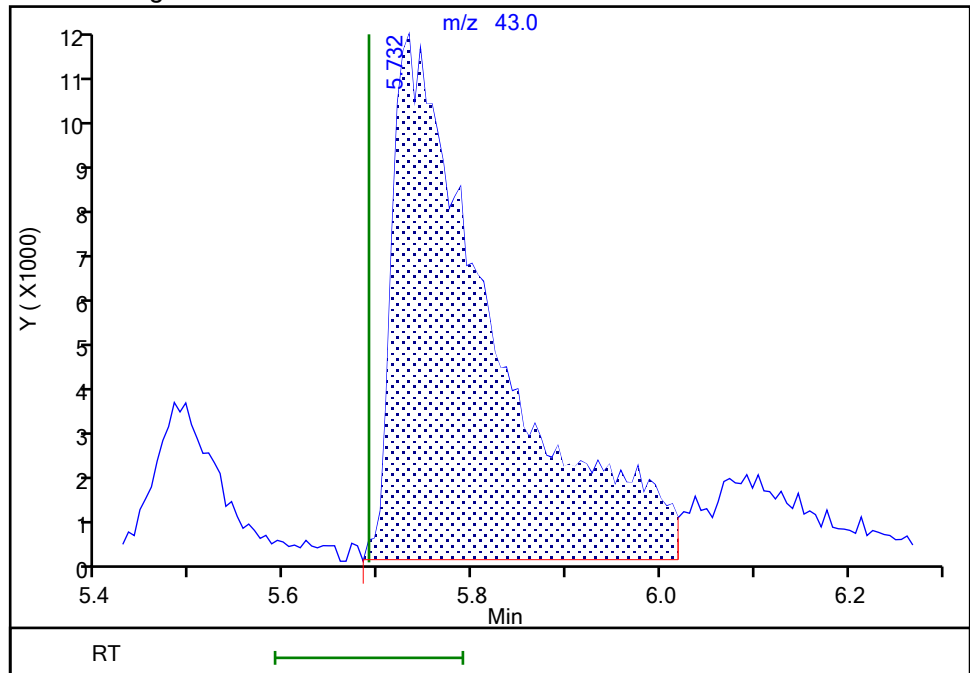
RT: 5.73
Area: 67593
Amount: 8.842334
Amount Units: ug/l

Processing Integration Results



RT: 5.73
Area: 84562
Amount: 10.722152
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:28:52 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

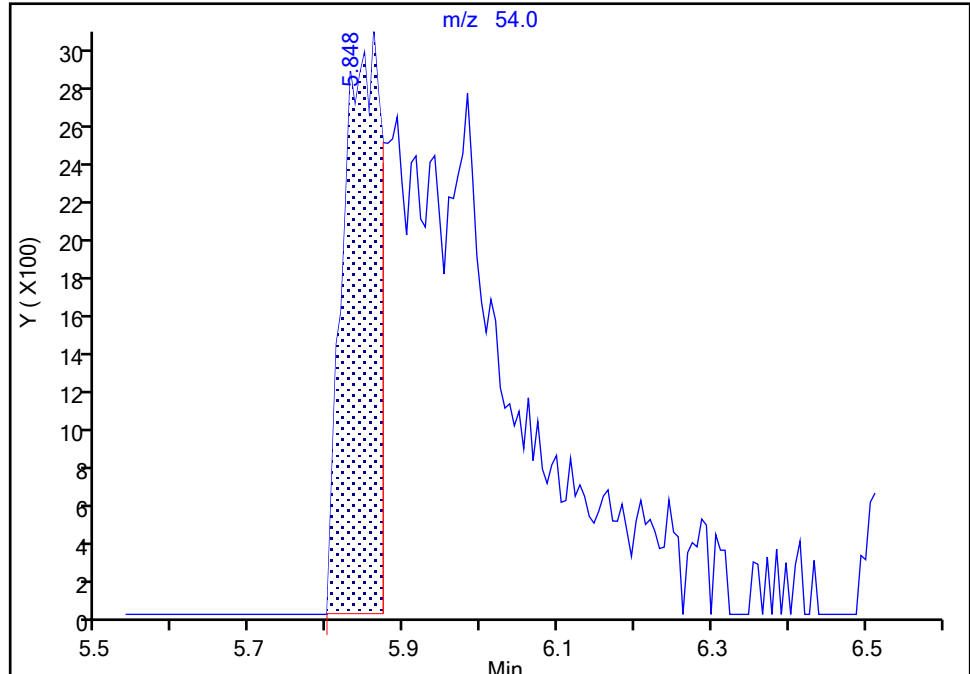
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D
Injection Date: 09-Jul-2025 05:39:30 Instrument ID: 19094
Lims ID: IC std5 1
Client ID:
Operator ID: gaw91131 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

44 Propionitrile, CAS: 107-12-0

Signal: 1

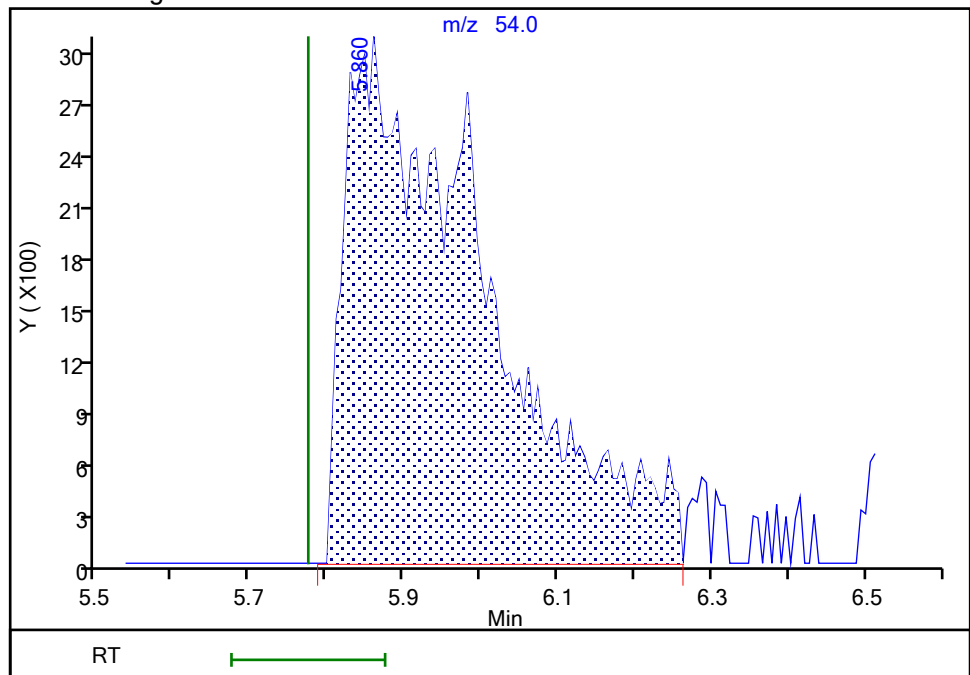
RT: 5.85
Area: 10220
Amount: 6.272509
Amount Units: ug/l

Processing Integration Results



RT: 5.86
Area: 38545
Amount: 19.609580
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:30:18 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

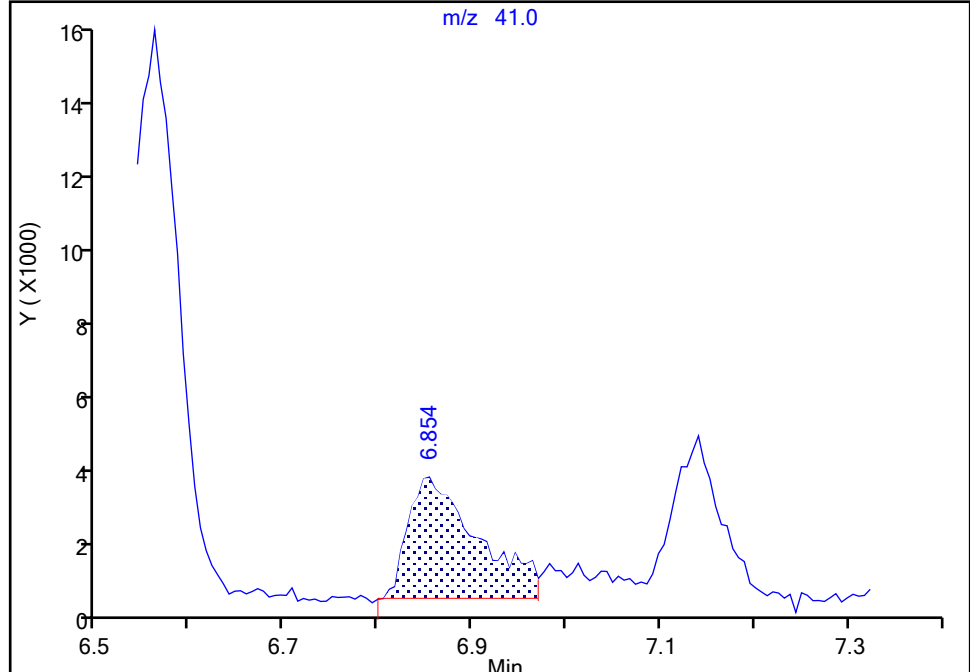
MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

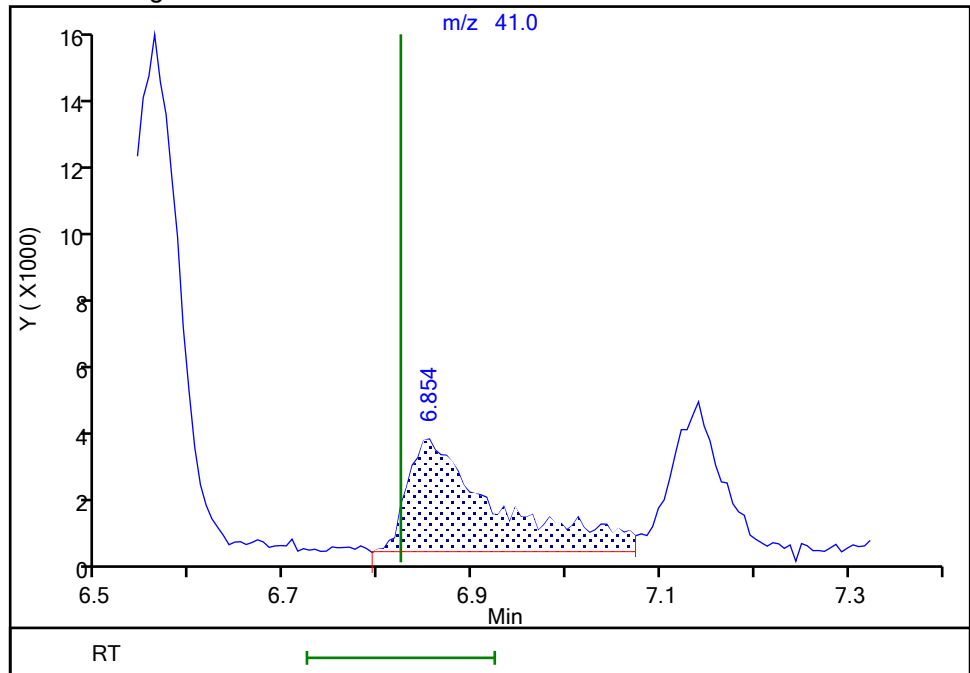
RT: 6.85
Area: 16574
Amount: 27.739789
Amount Units: ug/l

Processing Integration Results



RT: 6.85
Area: 22218
Amount: 40.335319
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:29:45 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

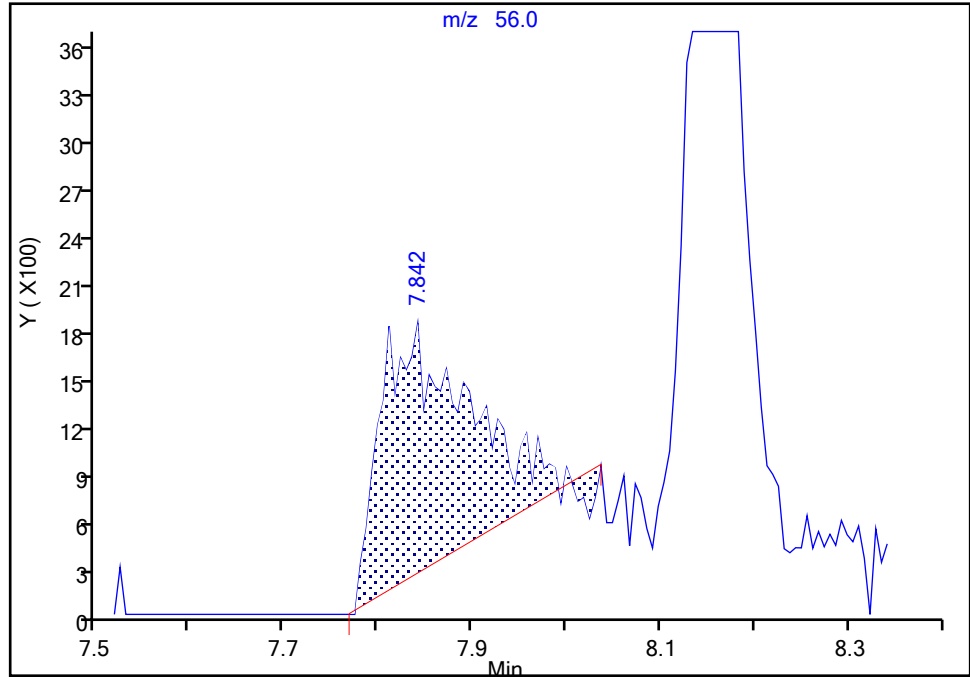
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D
Injection Date: 09-Jul-2025 05:39:30 Instrument ID: 19094
Lims ID: IC std5 1
Client ID:
Operator ID: gaw91131 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 n-Butanol, CAS: 71-36-3

Signal: 1

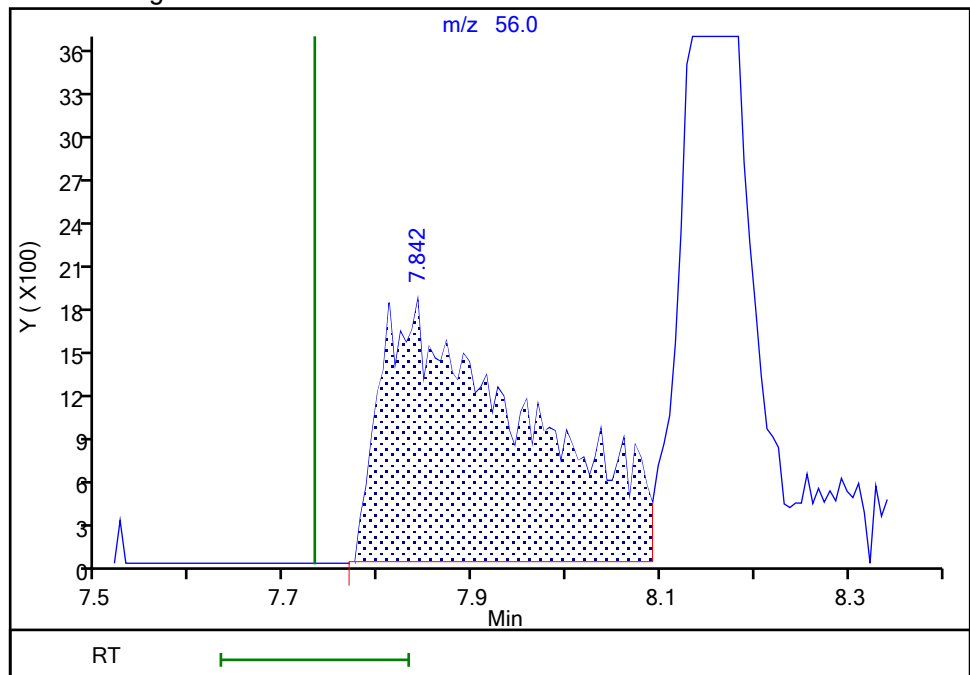
RT: 7.84
Area: 9900
Amount: 29.075860
Amount Units: ug/l

Processing Integration Results



RT: 7.84
Area: 19477
Amount: 76.195379
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:30:49 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

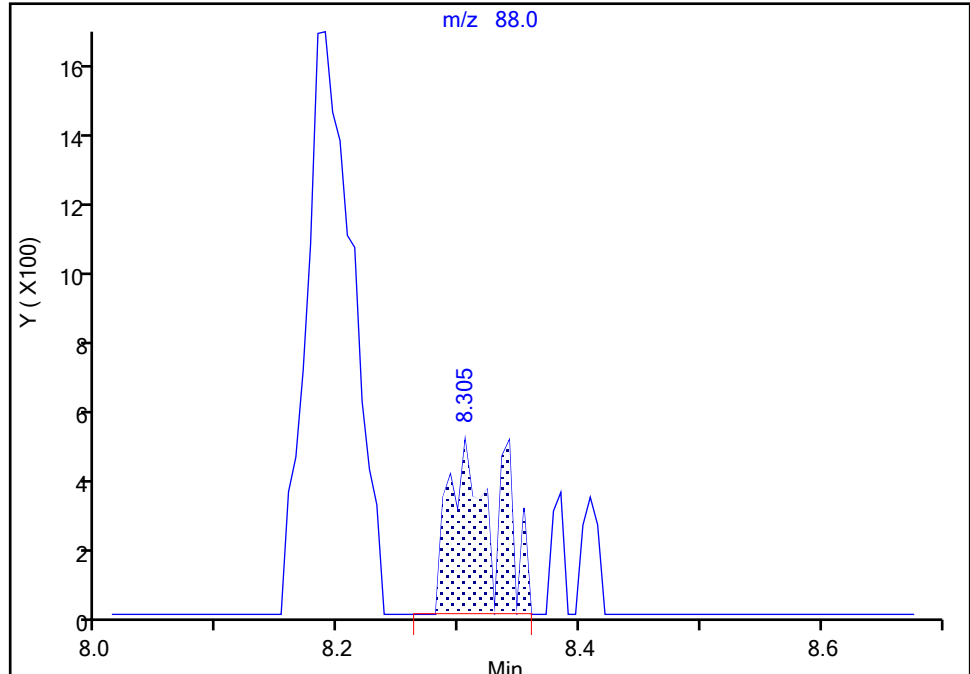
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D
Injection Date: 09-Jul-2025 05:39:30 Instrument ID: 19094
Lims ID: IC std5 1
Client ID:
Operator ID: gaw91131 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

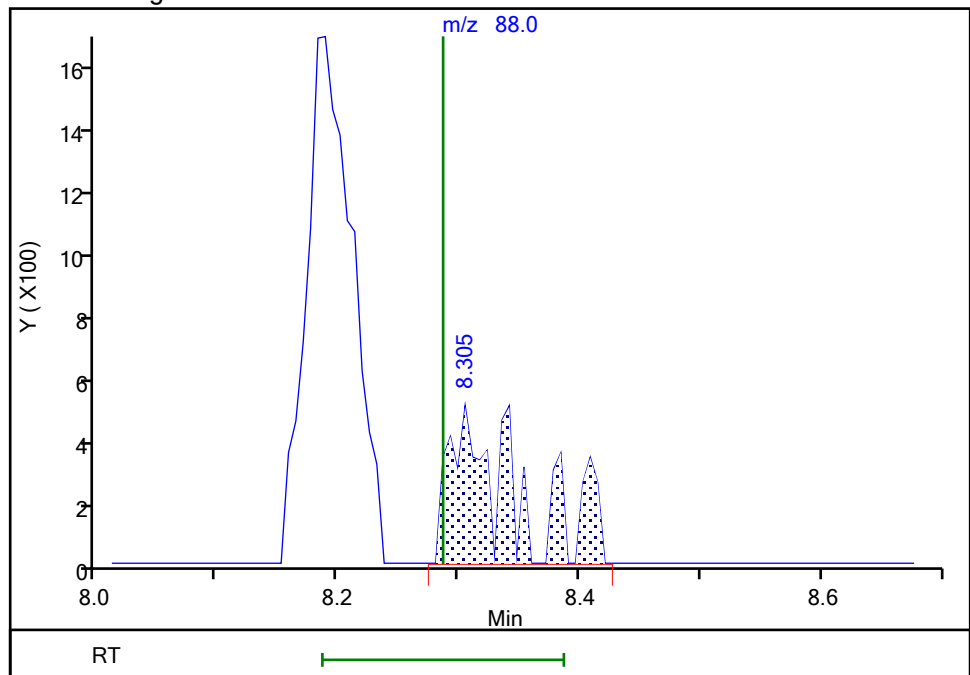
RT: 8.30
Area: 1407
Amount: 40.105481
Amount Units: ug/l

Processing Integration Results



RT: 8.30
Area: 1959
Amount: 44.306130
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:31:00 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X16.D

Injection Date: 09-Jul-2025 05:39:30

Instrument ID: 19094

Lims ID: IC std5 1

Client ID:

Operator ID: gaw91131

ALS Bottle#:

16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

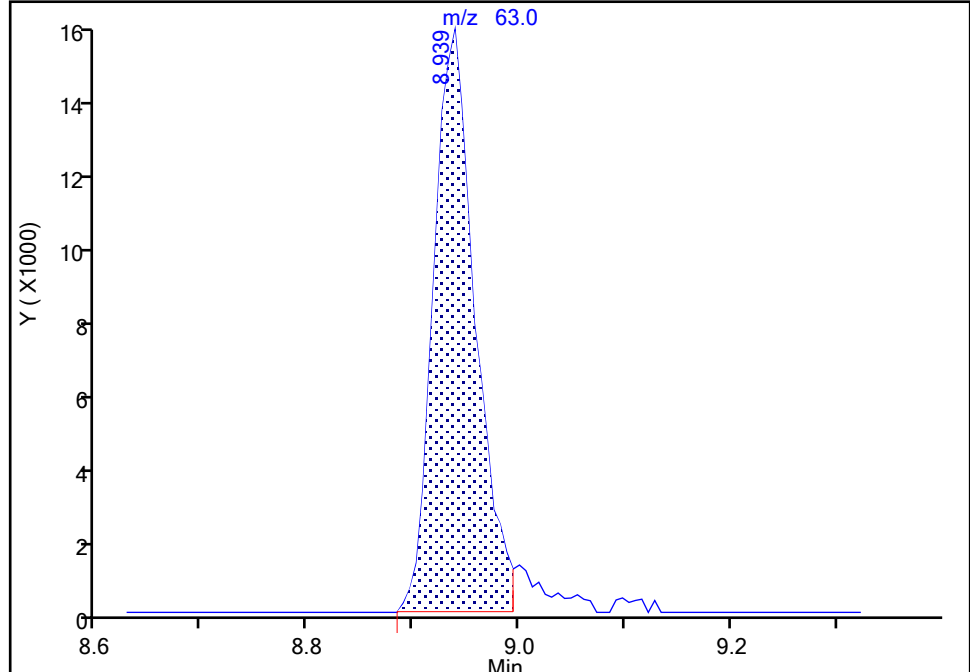
MS Quad

79 1-Bromo-2-chloroethane, CAS: 107-04-0

Signal: 1

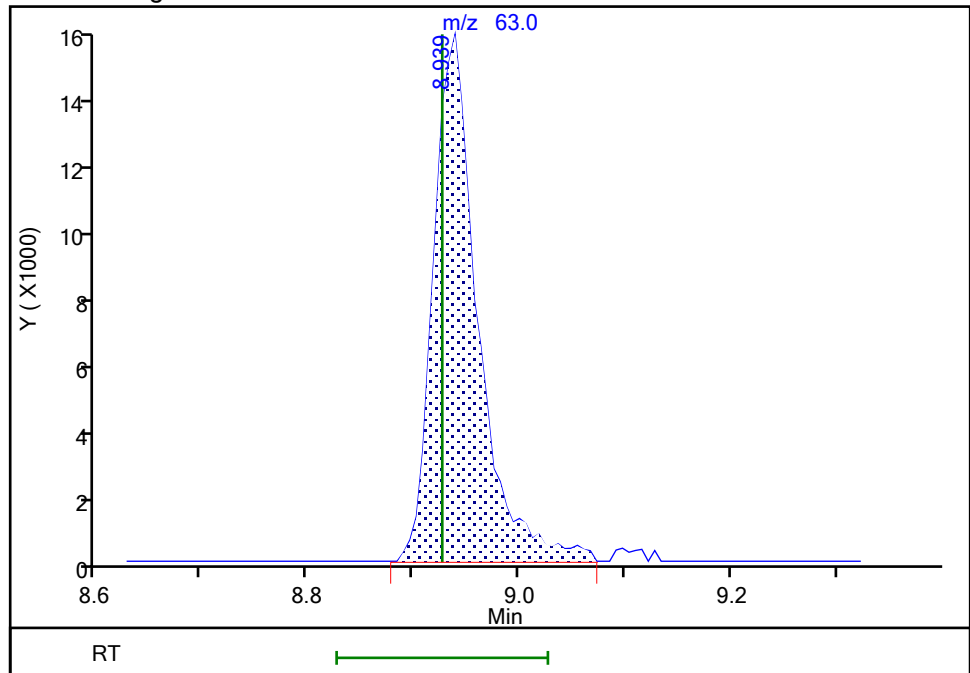
RT: 8.94
Area: 43003
Amount: 0.859381
Amount Units: ug/l

Processing Integration Results



RT: 8.94
Area: 45636
Amount: 0.906699
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:31:08 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X17.D
 Lims ID: IC std6 2
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 09-Jul-2025 06:00:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-018
 Misc. Info.: IC STD6 2
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:24 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:32:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.831	1.831	0.000	99	116582	2.00	1.87	
5 Chloromethane	50	2.020	2.020	0.000	99	149825	2.00	1.82	
7 Butadiene	39	2.111	2.111	0.000	94	146745	2.00	1.86	
6 Vinyl chloride	62	2.123	2.123	0.000	98	138881	2.00	1.87	
9 Bromomethane	94	2.392	2.392	0.000	90	99105	2.00	1.88	M
10 Chloroethane	64	2.477	2.477	0.000	100	86920	2.00	1.86	
11 Dichlorofluoromethane	67	2.690	2.690	0.000	97	233473	2.00	1.87	
12 Trichlorofluoromethane	101	2.788	2.788	0.000	49	177329	2.00	1.84	
14 Ethyl ether	59	2.983	2.983	0.000	92	68731	2.00	2.10	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.056	3.056	0.000	96	135158	2.00	1.88	
16 Acrolein	56	3.129	3.129	0.000	99	455724	97.6	90.0	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	98	94688	2.00	1.94	
19 Acetone	43	3.306	3.306	0.000	64	109794	20.0	17.7	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.294	3.294	0.000	92	101399	2.00	2.12	
21 Iodomethane	142	3.434	3.434	0.000	98	184654	2.00	1.98	
22 Ethyl bromide	108	3.458	3.458	0.000	98	83748	2.00	2.03	
23 Carbon disulfide	76	3.538	3.538	0.000	99	279844	2.00	1.87	
24 Methyl acetate	43	3.690	3.690	0.000	23	22409	2.00	1.51	M
26 3-Chloro-1-propene	41	3.690	3.690	0.000	92	183449	2.00	1.91	
27 Methylene Chloride	84	3.849	3.849	0.000	94	100038	2.00	1.96	
* 28 t-Butyl alcohol-d10 (IS)	65	3.879	3.879	0.000	92	87437	50.0	50.0	
29 2-Methyl-2-propanol	59	3.983	3.983	0.000	94	79019	40.0	41.5	
31 Acrylonitrile	53	4.239	4.239	0.000	24	28916	5.00	4.12	M
32 Methyl tert-butyl ether	73	4.221	4.221	0.000	95	222996	2.00	1.99	
33 trans-1,2-Dichloroethene	96	4.245	4.245	0.000	96	105838	2.00	1.96	
34 Hexane	57	4.659	4.659	0.000	93	161870	2.00	1.98	
36 1,1-Dichloroethane	63	4.891	4.891	0.000	96	207303	2.00	1.99	
37 Isopropyl ether	45	4.952	4.952	0.000	94	351264	2.00	2.00	
38 2-Chloro-1,3-butadiene	53	5.013	5.013	0.000	91	179644	2.00	1.99	
40 Tert-butyl ethyl ether	59	5.495	5.495	0.000	98	306907	2.00	2.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.714	5.714	0.000	100	181301	20.0	17.0	
42 cis-1,2-Dichloroethene	96	5.739	5.739	0.000	84	119416	2.00	2.03	
43 2,2-Dichloropropane	77	5.751	5.751	0.000	87	176775	2.00	1.94	
44 Propionitrile	54	5.806	5.806	0.000	98	100378	40.0	37.9	
47 Methacrylonitrile	67	6.007	6.007	0.000	96	199089	20.0	18.6	
48 Chlorobromomethane	128	6.080	6.080	0.000	95	44691	2.00	2.01	
49 Tetrahydrofuran	71	6.098	6.098	0.000	66	27680	10.0	9.26	
S 46 1,2-Dichloroethene, Total	100				0			3.99	
50 Chloroform	83	6.226	6.226	0.000	94	192868	2.00	1.99	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.446	0.000	94	444972	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.458	6.458	0.000	98	173849	2.00	1.92	
54 Cyclohexane	56	6.562	6.562	0.000	91	210628	2.00	1.89	
56 Carbon tetrachloride	117	6.677	6.677	0.000	95	150816	2.00	1.97	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	96	164035	2.00	1.96	
57 Isobutyl alcohol	41	6.836	6.836	0.000	94	64006	100.0	86.1	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	81	81800	10.0	10.1	
59 Benzene	78	6.933	6.933	0.000	96	464773	2.00	1.95	
60 1,2-Dichloroethane	62	7.007	7.007	0.000	97	105824	2.00	1.98	
63 Tert-amyl methyl ether	73	7.141	7.141	0.000	98	254992	2.00	1.93	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1918847	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	94	157443	2.00	1.82	
67 n-Butanol	56	7.756	7.756	0.000	88	89011	175.0	171.5	
68 Trichloroethene	95	7.842	7.842	0.000	99	119909	2.00	1.93	
69 Methylcyclohexane	83	8.159	8.159	0.000	93	203873	2.00	1.88	
70 1,2-Dichloropropane	63	8.171	8.171	0.000	97	115250	2.00	2.02	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	173808	2.00	2.01	
72 Methyl methacrylate	69	8.287	8.287	0.000	86	37852	2.00	1.73	
73 1,4-Dioxane	88	8.287	8.287	0.000	32	11842	100.0	115.7	
74 Dibromomethane	93	8.293	8.293	0.000	94	44722	2.00	2.11	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	128359	2.00	2.01	
77 2-Nitropropane	41	8.799	8.799	0.000	98	56130	10.0	8.30	
79 1-Bromo-2-chloroethane	63	8.933	8.933	0.000	98	100571	2.00	1.97	
80 cis-1,3-Dichloropropene	75	9.104	9.104	0.000	95	157614	2.00	2.02	
82 4-Methyl-2-pentanone (MIBK)	43	9.287	9.287	0.000	97	531151	20.0	17.5	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1923949	10.0	10.1	
84 Toluene	92	9.512	9.512	0.000	98	292117	2.00	1.97	
85 trans-1,3-Dichloropropene	75	9.793	9.793	0.000	93	120041	2.00	2.05	
104 Ethyl methacrylate	69	9.866	9.866	0.000	90	89339	2.00	2.16	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	63106	2.00	1.92	
S 105 1,3-Dichloropropene, Total	100				0			4.07	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	134794	2.00	1.93	
108 1,3-Dichloropropane	76	10.171	10.171	0.000	91	114638	2.00	2.00	
109 2-Hexanone	43	10.225	10.225	0.000	97	349222	20.0	18.0	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	82477	2.00	2.03	
112 Ethylene Dibromide	107	10.506	10.506	0.000	99	59928	2.00	2.10	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	1372931	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	163848	2.00	1.76	
115 Chlorobenzene	112	10.975	10.975	0.000	95	309505	2.00	1.98	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	94	103655	2.00	2.01	
117 Ethylbenzene	91	11.067	11.067	0.000	99	569846	2.00	1.95	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	435268	4.00	3.92	
S 118 Xylenes, Total	106				0			5.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.524	11.524	0.000	97	210355	2.00	2.00	
121 Styrene	104	11.542	11.542	0.000	95	336167	2.00	1.99	
122 Bromoform	173	11.701	11.701	0.000	97	44093	2.00	2.10	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	503108	2.00	1.96	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	687274	10.0	9.96	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	92	75701	2.00	2.01	
128 Bromobenzene	156	12.091	12.091	0.000	94	122079	2.00	2.00	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	94	203233	20.0	18.1	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	78	19860	2.00	2.11	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	655502	2.00	1.93	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	130193	2.00	2.01	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	93	462350	2.00	1.95	
134 4-Chlorotoluene	126	12.335	12.335	0.000	98	132295	2.00	2.03	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	106575	2.00	2.03	
136 Pentachloroethane	167	12.573	12.573	0.000	92	74092	2.00	2.14	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	97	475939	2.00	1.97	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	588910	2.00	1.92	
139 1,3-Dichlorobenzene	146	12.810	12.810	0.000	98	244888	2.00	2.01	
140 4-Isopropyltoluene	119	12.823	12.823	0.000	97	507767	2.00	1.94	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	762844	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	96	246726	2.00	1.96	
143 1,2,3-Trimethylbenzene	120	12.896	12.896	0.000	99	201953	2.00	1.99	
144 Benzyl chloride	126	12.963	12.963	0.000	99	30421	2.00	2.05	
145 p-Diethylbenzene	119	13.097	13.097	0.000	94	302010	2.00	1.96	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	238574	2.00	1.93	
147 1,2-Dichlorobenzene	146	13.140	13.140	0.000	98	217259	2.00	2.04	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	82	10280	2.00	2.06	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	174896	2.00	1.95	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	142676	2.00	1.99	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	66184	2.00	1.87	
153 Naphthalene	128	14.420	14.420	0.000	97	233797	2.00	1.99	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	96	119192	2.00	2.02	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00279	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00185	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 16-Jul-2025 16:05:26

Chrom Revision: 2.3 14-Jul-2025 13:55:14

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X17.D

Injection Date: 09-Jul-2025 06:00:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std6 2

Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

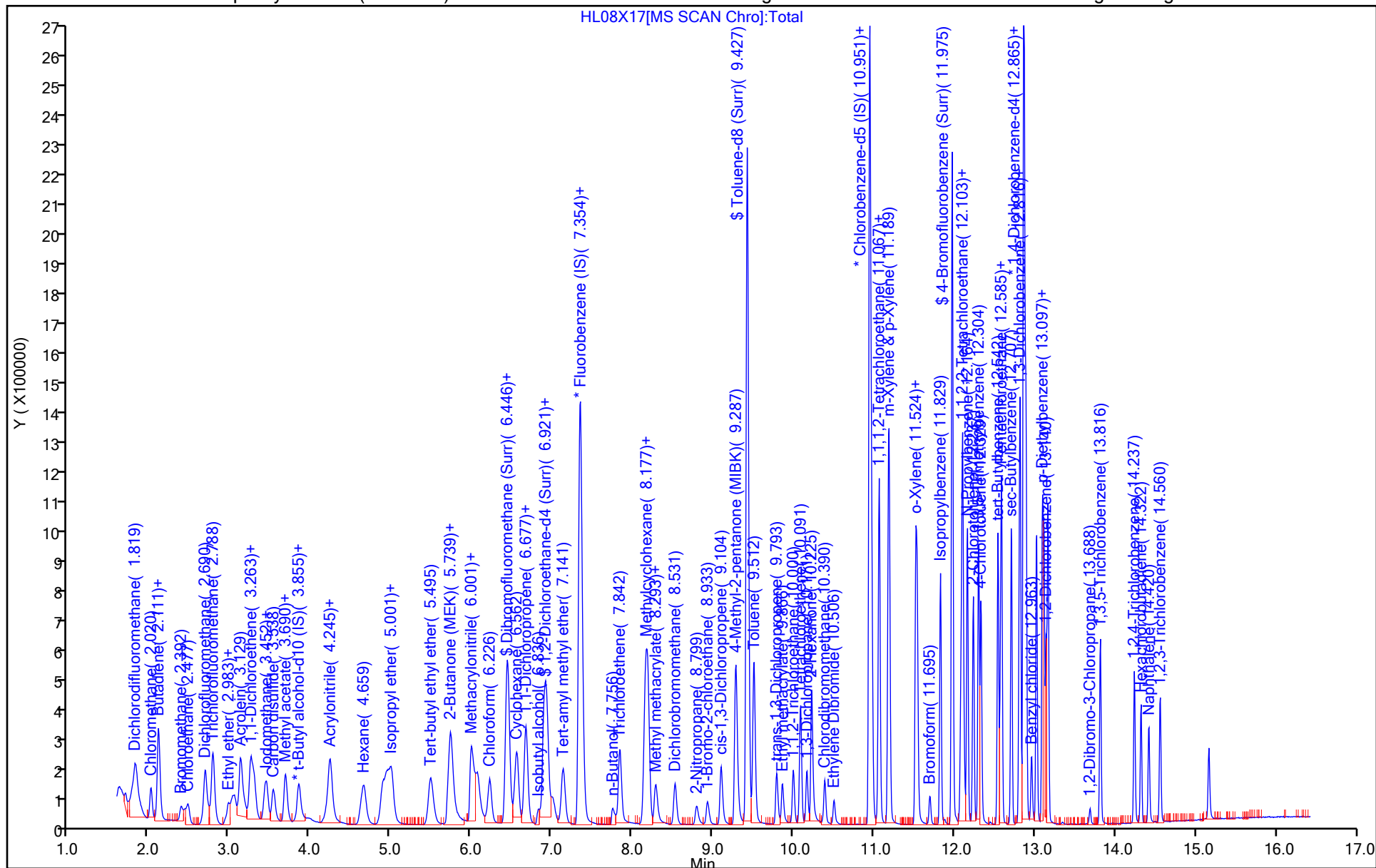
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

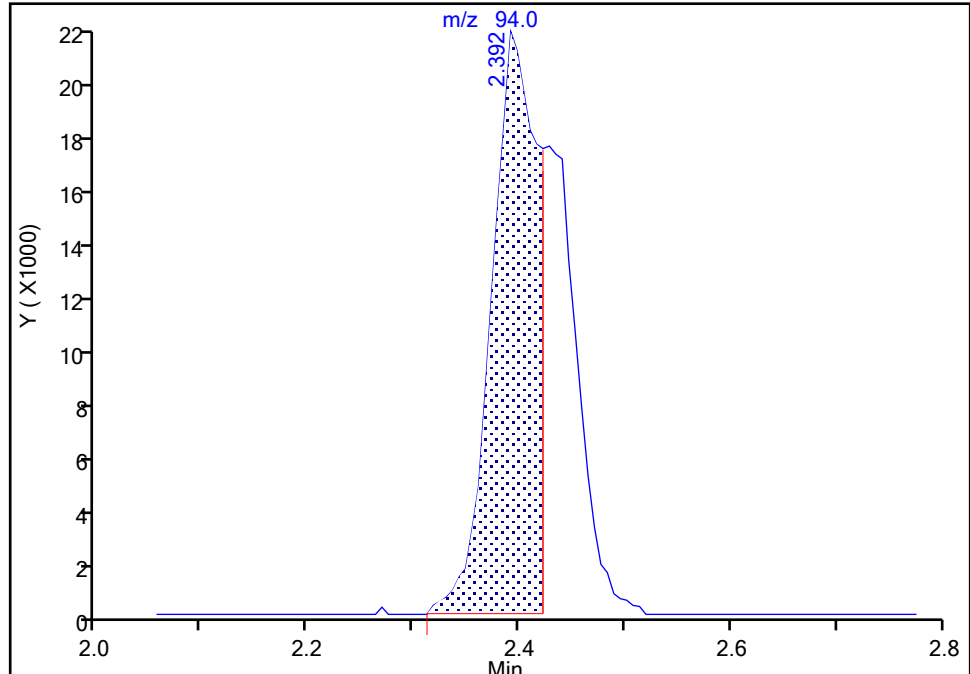
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X17.D
Injection Date: 09-Jul-2025 06:00:30 Instrument ID: 19094
Lims ID: IC std6 2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

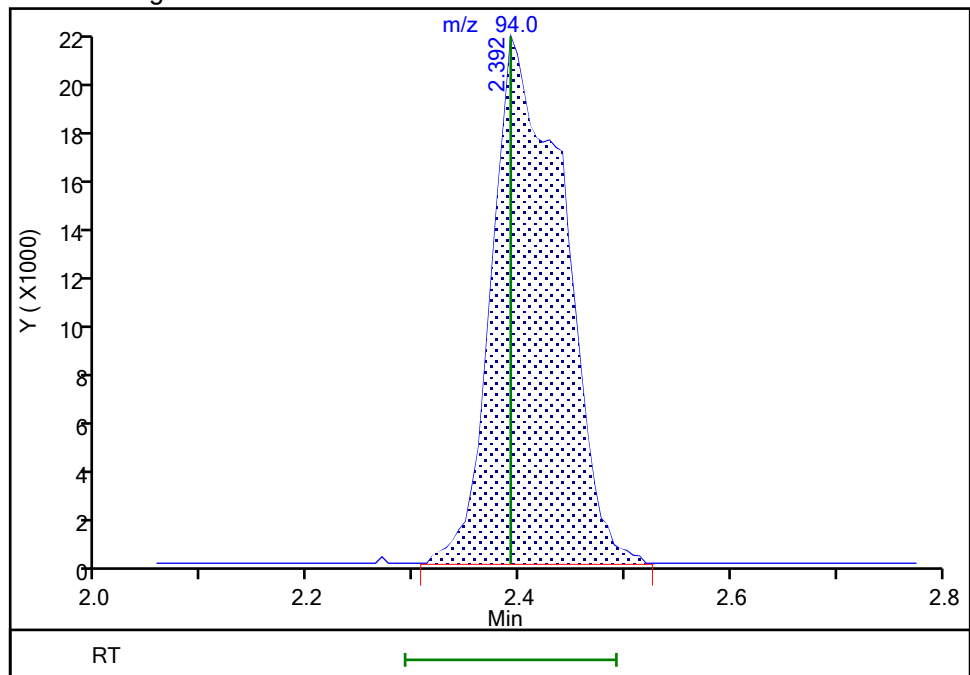
RT: 2.39
Area: 64601
Amount: 1.063054
Amount Units: ug/l

Processing Integration Results



RT: 2.39
Area: 99105
Amount: 1.876802
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:32:07 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

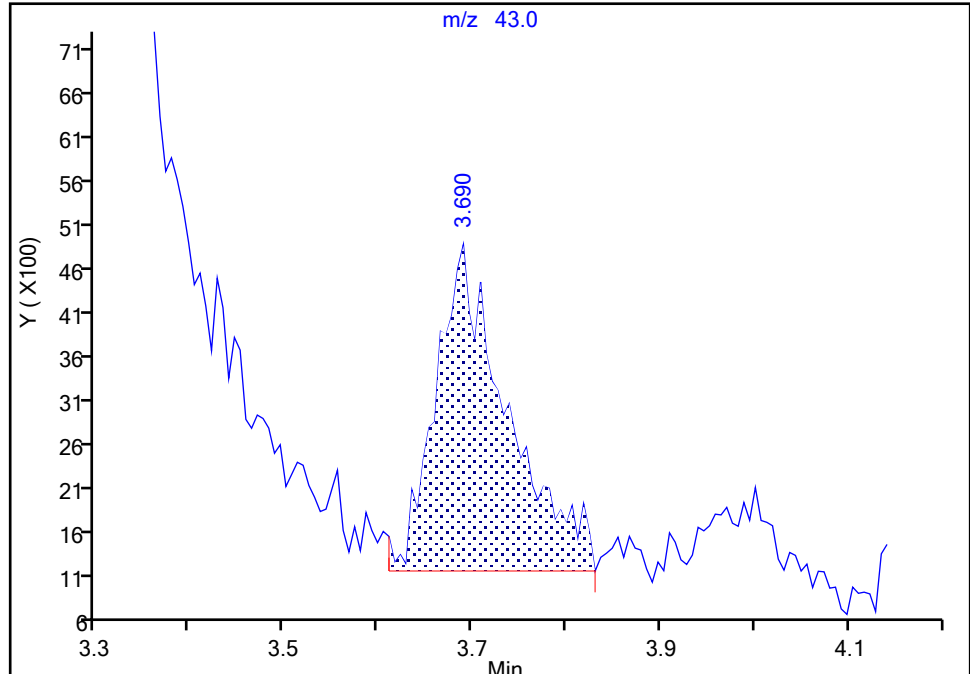
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X17.D
Injection Date: 09-Jul-2025 06:00:30 Instrument ID: 19094
Lims ID: IC std6 2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

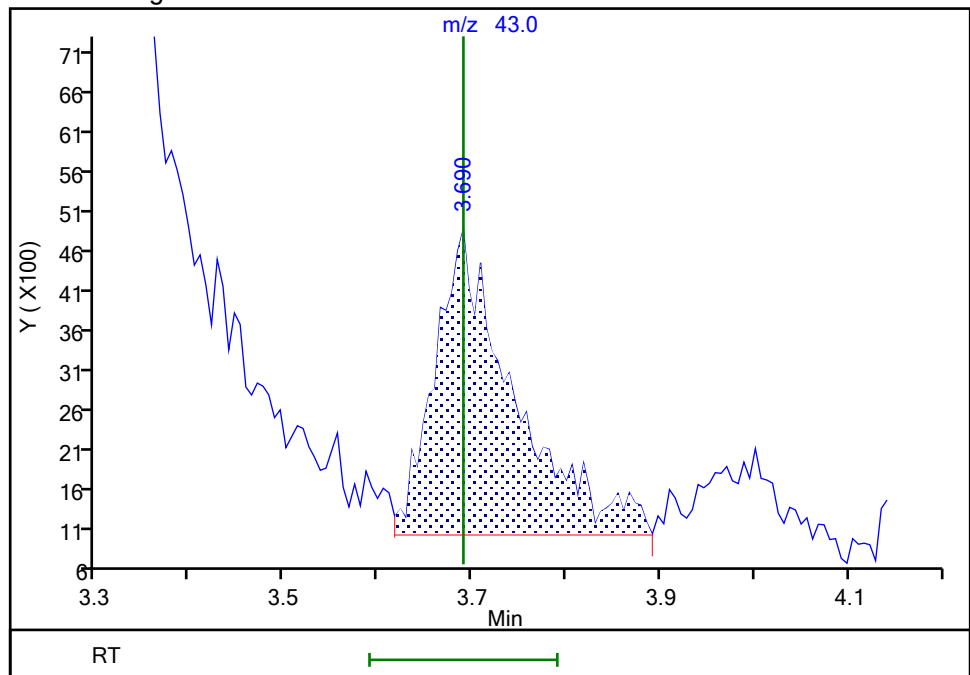
RT: 3.69
Area: 19680
Amount: 0.973259
Amount Units: ug/l

Processing Integration Results



RT: 3.69
Area: 22409
Amount: 1.509307
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:46:09 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

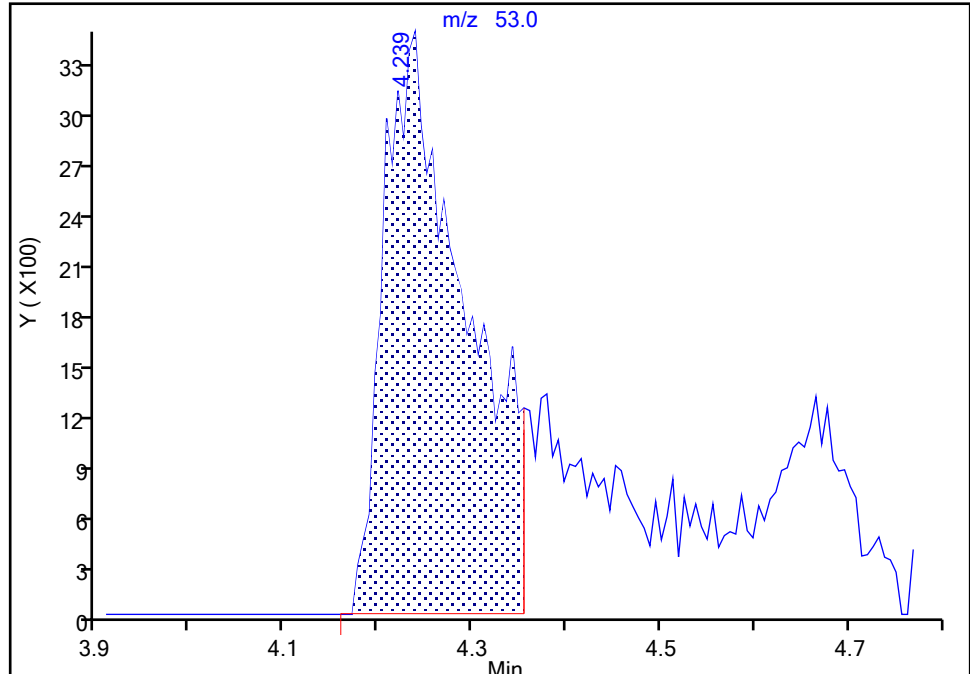
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X17.D
Injection Date: 09-Jul-2025 06:00:30 Instrument ID: 19094
Lims ID: IC std6 2
Client ID:
Operator ID: gaw91131 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

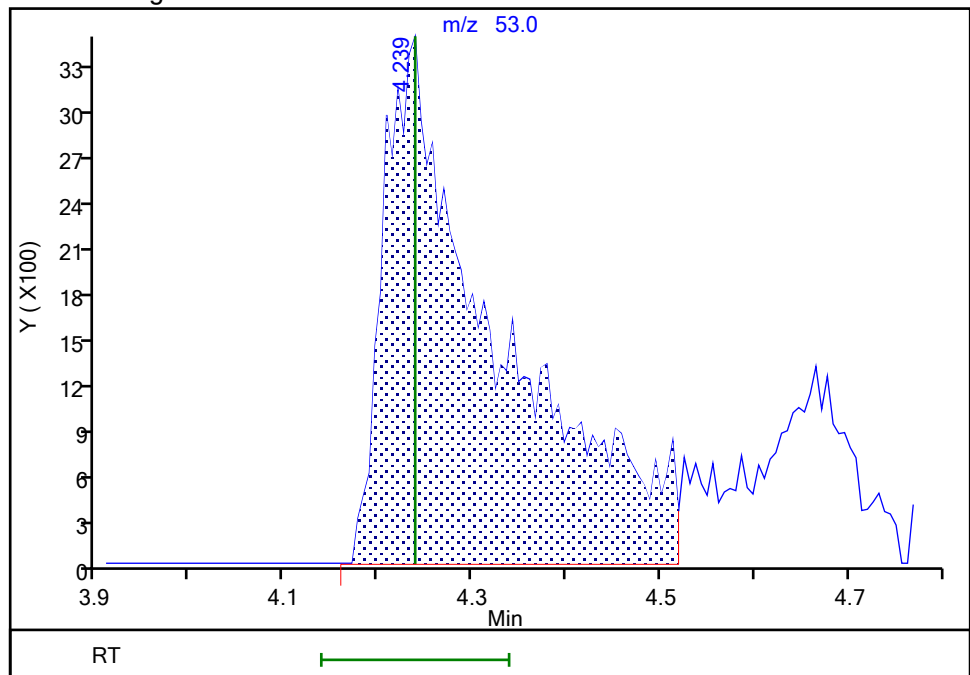
RT: 4.24
Area: 21123
Amount: 3.667950
Amount Units: ug/l

Processing Integration Results



RT: 4.24
Area: 28916
Amount: 4.115255
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:32:29 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X18.D
 Lims ID: IC std7 5
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 09-Jul-2025 06:21:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-019
 Misc. Info.: IC STD7 5
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:32 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:35:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.818	1.831	-0.013	99	302265	5.00	4.81	
5 Chloromethane	50	2.007	2.020	-0.013	99	378525	5.00	4.56	
7 Butadiene	39	2.093	2.111	-0.018	93	385703	5.00	4.84	
6 Vinyl chloride	62	2.111	2.123	-0.012	98	356177	5.00	4.75	
9 Bromomethane	94	2.385	2.392	-0.007	90	252303	5.00	4.74	
10 Chloroethane	64	2.465	2.477	-0.012	100	220980	5.00	4.69	
11 Dichlorofluoromethane	67	2.678	2.690	-0.012	97	601105	5.00	4.77	
12 Trichlorofluoromethane	101	2.776	2.788	-0.012	51	458755	5.00	4.72	
14 Ethyl ether	59	2.965	2.983	-0.018	91	182078	5.00	5.52	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.044	3.056	-0.012	94	347126	5.00	4.79	
16 Acrolein	56	3.111	3.129	-0.018	99	1239479	244.0	297.5	
17 1,1-Dichloroethene	96	3.245	3.251	-0.006	96	253325	5.00	5.16	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.288	3.294	-0.006	93	277462	5.00	5.75	
19 Acetone	43	3.276	3.306	-0.030	38	255788	50.0	50.0	M
21 Iodomethane	142	3.422	3.434	-0.012	99	493850	5.00	5.24	
22 Ethyl bromide	108	3.446	3.458	-0.012	98	222380	4.99	5.36	
23 Carbon disulfide	76	3.525	3.538	-0.013	99	759245	5.00	5.04	
24 Methyl acetate	43	3.660	3.690	-0.030	22	67190	5.00	5.50	M
26 3-Chloro-1-propene	41	3.678	3.690	-0.012	92	489873	5.00	5.05	
27 Methylene Chloride	84	3.842	3.849	-0.007	94	266520	5.00	5.17	
* 28 t-Butyl alcohol-d10 (IS)	65	3.842	3.879	-0.037	33	71966	50.0	50.0	
29 2-Methyl-2-propanol	59	3.946	3.983	-0.037	99	168309	100.0	107.5	
32 Methyl tert-butyl ether	73	4.208	4.221	-0.013	95	592543	5.00	5.25	
31 Acrylonitrile	53	4.190	4.239	-0.049	97	86303	12.5	13.7	
33 trans-1,2-Dichloroethene	96	4.233	4.245	-0.012	98	287503	5.00	5.28	
34 Hexane	57	4.647	4.659	-0.012	93	446874	5.00	5.41	
36 1,1-Dichloroethane	63	4.879	4.891	-0.012	96	559328	5.00	5.32	
37 Isopropyl ether	45	4.940	4.952	-0.012	96	938599	5.00	5.29	
38 2-Chloro-1,3-butadiene	53	4.995	5.013	-0.018	92	488508	5.00	5.37	
40 Tert-butyl ethyl ether	59	5.489	5.495	-0.007	98	822765	5.00	5.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.690	5.714	-0.024	100	521705	50.0	59.6	
42 cis-1,2-Dichloroethene	96	5.726	5.739	-0.012	83	319304	5.00	5.39	
43 2,2-Dichloropropane	77	5.745	5.751	-0.006	89	473211	5.00	5.14	
44 Propionitrile	54	5.781	5.806	-0.025	99	247792	100.0	113.6	
47 Methacrylonitrile	67	5.988	6.007	-0.019	93	553450	50.0	62.8	
48 Chlorobromomethane	128	6.068	6.080	-0.012	96	120719	5.00	5.39	
49 Tetrahydrofuran	71	6.074	6.098	-0.024	67	70382	25.0	28.6	
S 46 1,2-Dichloroethene, Total	100				0			10.7	
50 Chloroform	83	6.214	6.226	-0.012	94	512582	5.00	5.25	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.446	-0.006	94	449518	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	471646	5.00	5.16	
54 Cyclohexane	56	6.555	6.562	-0.007	92	563474	5.00	5.02	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	84	411604	5.00	5.33	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	95	445120	5.00	5.28	
57 Isobutyl alcohol	41	6.824	6.836	-0.012	94	149869	250.0	245.1	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.903	-0.006	94	79921	10.0	9.81	
59 Benzene	78	6.933	6.933	0.000	97	1238147	5.00	5.16	
60 1,2-Dichloroethane	62	7.000	7.007	-0.007	97	284381	5.00	5.28	
63 Tert-amyl methyl ether	73	7.135	7.141	-0.006	98	680442	5.00	5.11	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1935362	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	446501	5.00	5.11	
67 n-Butanol	56	7.738	7.756	-0.018	89	212286	437.5	428.0	
68 Trichloroethene	95	7.836	7.842	-0.006	99	324806	5.00	5.17	
69 Methylcyclohexane	83	8.153	8.159	-0.006	93	565122	5.00	5.17	
70 1,2-Dichloropropane	63	8.171	8.171	0.000	97	312143	5.00	5.42	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	93	463888	5.00	5.32	
72 Methyl methacrylate	69	8.268	8.287	-0.019	95	107390	5.00	5.98	
73 1,4-Dioxane	88	8.287	8.287	0.000	30	21502	250.0	226.5	
74 Dibromomethane	93	8.287	8.293	-0.006	96	118264	5.00	5.54	
76 Dichlorobromomethane	83	8.524	8.531	-0.007	99	340773	5.00	5.30	
77 2-Nitropropane	41	8.793	8.799	-0.006	98	157146	25.0	28.2	
79 1-Bromo-2-chloroethane	63	8.927	8.933	-0.006	99	258324	5.00	5.02	
80 cis-1,3-Dichloropropene	75	9.098	9.104	-0.006	95	433233	5.00	5.51	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.287	-0.007	97	1392531	50.0	55.8	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1925363	10.0	10.0	
84 Toluene	92	9.506	9.512	-0.006	98	782001	5.00	5.26	
85 trans-1,3-Dichloropropene	75	9.786	9.793	-0.007	93	333398	5.00	5.66	
104 Ethyl methacrylate	69	9.860	9.866	-0.006	90	242524	5.00	5.83	
106 1,1,2-Trichloroethane	97	9.994	10.000	-0.006	91	169067	5.00	5.12	
S 105 1,3-Dichloropropene, Total	100				0			11.2	
107 Tetrachloroethene	166	10.085	10.091	-0.006	98	369012	5.00	5.25	
108 1,3-Dichloropropane	76	10.164	10.171	-0.007	91	310635	5.00	5.41	
109 2-Hexanone	43	10.219	10.225	-0.006	97	949481	50.0	59.6	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	218816	5.00	5.37	
112 Ethylene Dibromide	107	10.500	10.506	-0.006	98	159363	5.00	5.56	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	86	1379202	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	450650	5.00	4.81	
115 Chlorobenzene	112	10.975	10.975	0.000	94	825184	5.00	5.25	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	96	279129	5.00	5.39	
117 Ethylbenzene	91	11.067	11.067	0.000	99	1556361	5.00	5.30	
119 m-Xylene & p-Xylene	106	11.183	11.189	-0.007	100	1195288	10.0	10.7	
S 118 Xylenes, Total	106				0			16.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.518	11.524	-0.006	97	573083	5.00	5.42	
121 Styrene	104	11.536	11.542	-0.006	94	910777	5.00	5.37	
122 Bromoform	173	11.695	11.701	-0.006	97	122749	5.00	5.82	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	1383452	5.00	5.35	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	696910	10.0	10.1	
127 1,1,2,2-Tetrachloroethane	83	12.073	12.079	-0.006	92	202504	5.00	5.36	
128 Bromobenzene	156	12.091	12.091	0.000	95	327504	5.00	5.34	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	91	555194	50.0	60.2	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	79	51950	5.00	5.49	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1808682	5.00	5.30	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	350817	5.00	5.39	
133 1,3,5-Trimethylbenzene	105	12.298	12.304	-0.006	94	1283556	5.00	5.38	
134 4-Chlorotoluene	126	12.329	12.335	-0.006	98	356779	5.00	5.44	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	278845	5.00	5.29	
136 Pentachloroethane	167	12.572	12.573	-0.001	93	199649	5.00	5.75	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	97	1302169	5.00	5.37	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	1644421	5.00	5.35	
139 1,3-Dichlorobenzene	146	12.804	12.810	-0.006	98	662850	5.00	5.40	
140 4-Isopropyltoluene	119	12.822	12.823	0.000	97	1424244	5.00	5.40	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	766613	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	94	661485	5.00	5.24	
143 1,2,3-Trimethylbenzene	120	12.889	12.896	-0.007	99	548633	5.00	5.37	
144 Benzyl chloride	126	12.957	12.963	-0.006	99	85767	5.00	5.76	
145 p-Diethylbenzene	119	13.097	13.097	0.000	94	842513	5.00	5.45	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	686136	5.00	5.52	
147 1,2-Dichlorobenzene	146	13.139	13.140	-0.001	98	584222	5.00	5.46	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	87	27817	5.00	5.55	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	493194	5.00	5.48	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	93	399683	5.00	5.54	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	194652	5.00	5.46	
153 Naphthalene	128	14.414	14.420	-0.006	97	629216	5.00	5.33	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	96	326758	5.00	5.52	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171

Amount Added: 5.00

Units: uL

MSV_LL_GAS826_00279

Amount Added: 5.00

Units: uL

MSV_LL_#2_826_00185

Amount Added: 5.00

Units: uL

MSV_LLcentISS_00016

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X18.D

Injection Date: 09-Jul-2025 06:21:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std7 5

Worklist Smp#: 19

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

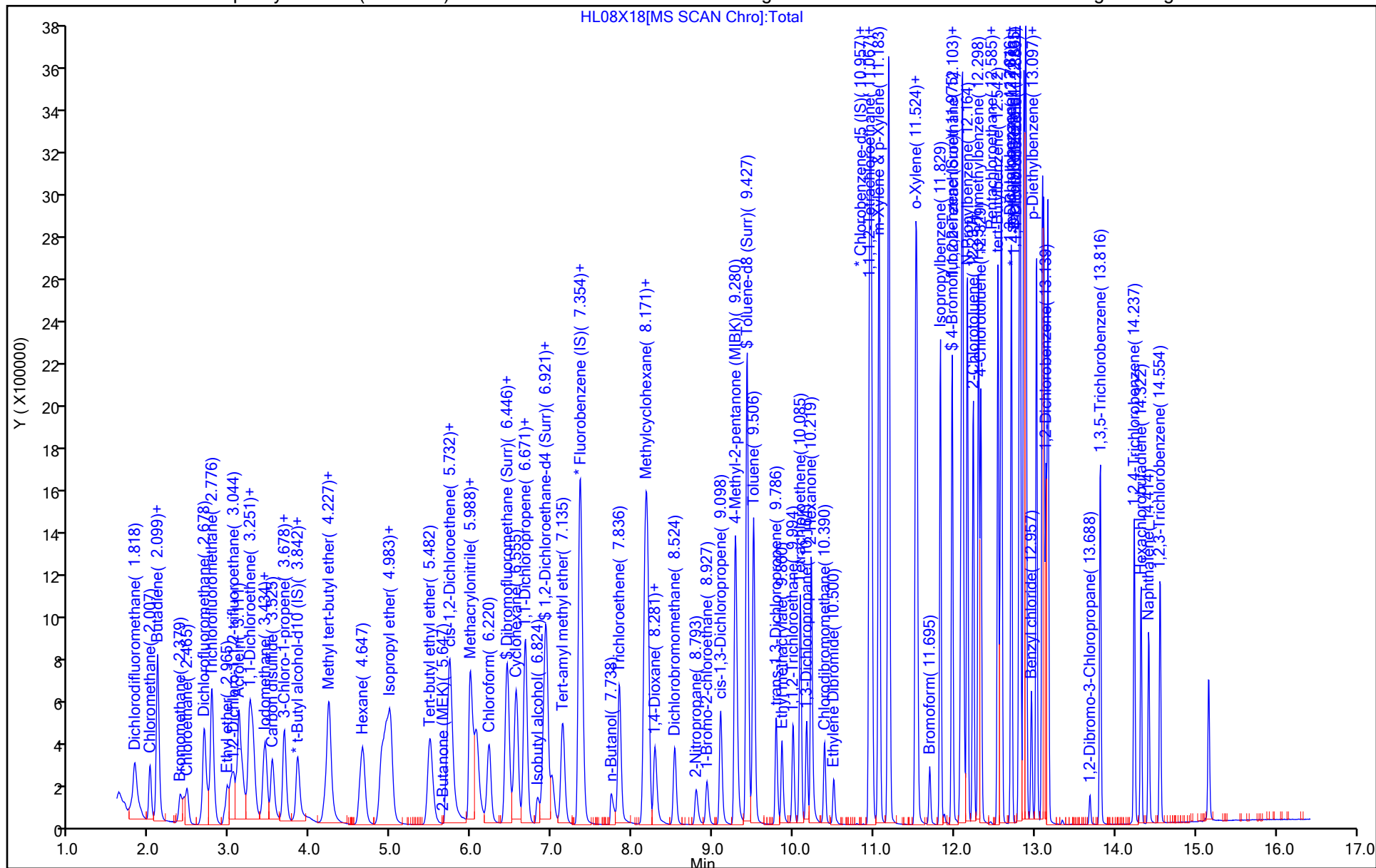
ALS Bottle#: 18

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

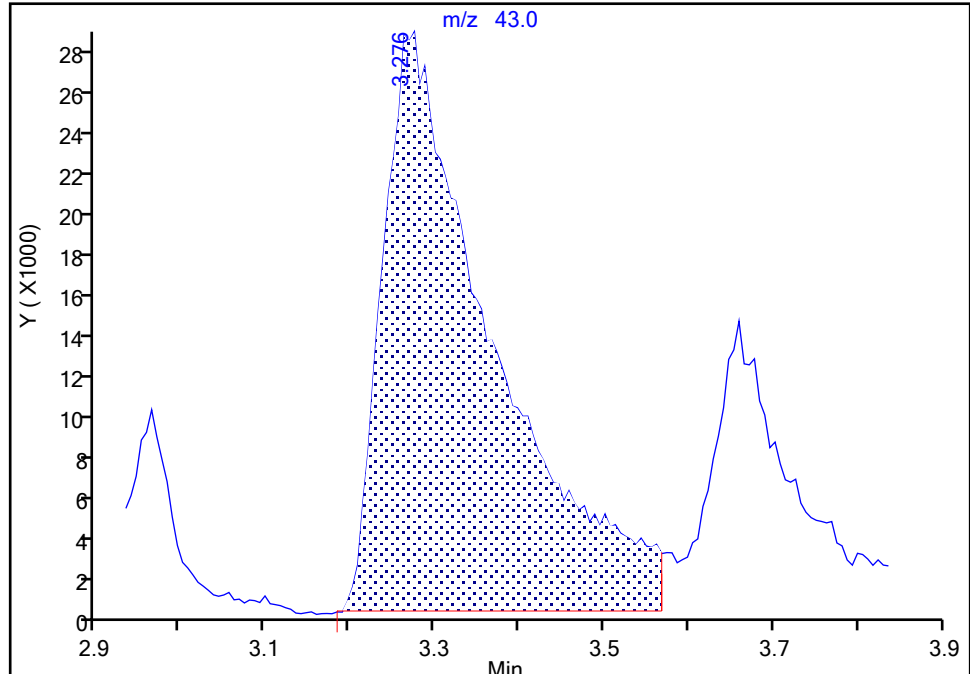
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X18.D
Injection Date: 09-Jul-2025 06:21:30 Instrument ID: 19094
Lims ID: IC std7 5
Client ID:
Operator ID: gaw91131 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

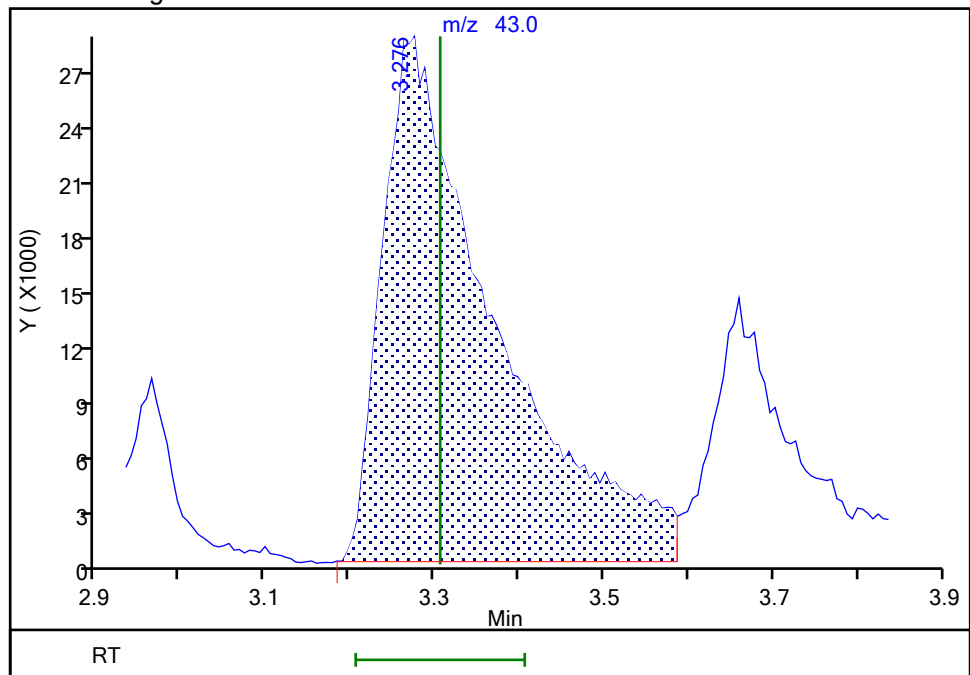
RT: 3.28
Area: 252847
Amount: 49.527172
Amount Units: ug/l

Processing Integration Results



RT: 3.28
Area: 255788
Amount: 50.031195
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:34:33 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X18.D

Injection Date: 09-Jul-2025 06:21:30

Instrument ID: 19094

Lims ID: IC std7 5

Client ID:

Operator ID: gaw91131

ALS Bottle#:

18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

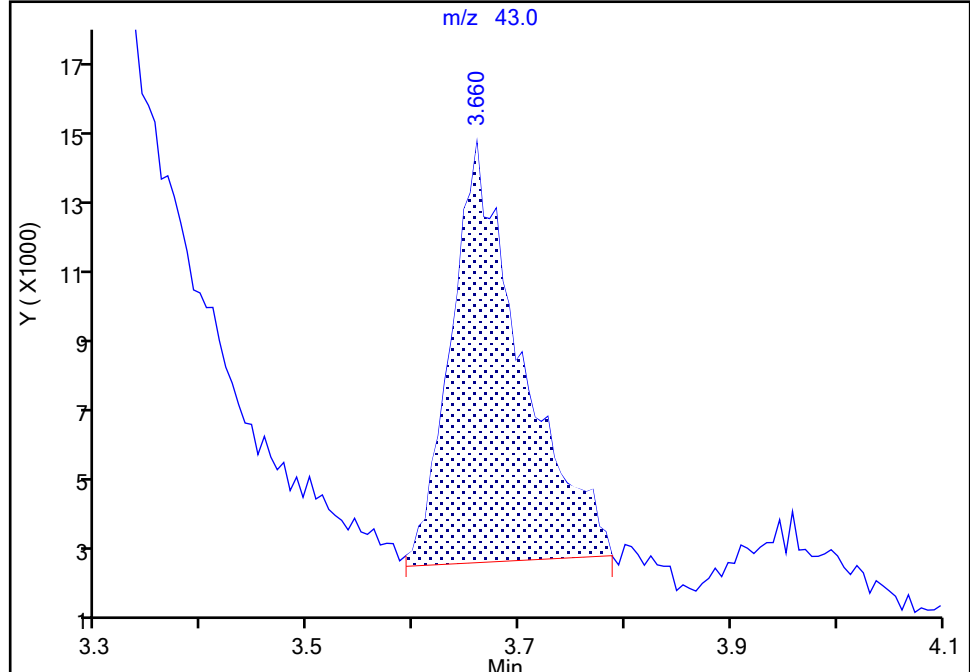
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

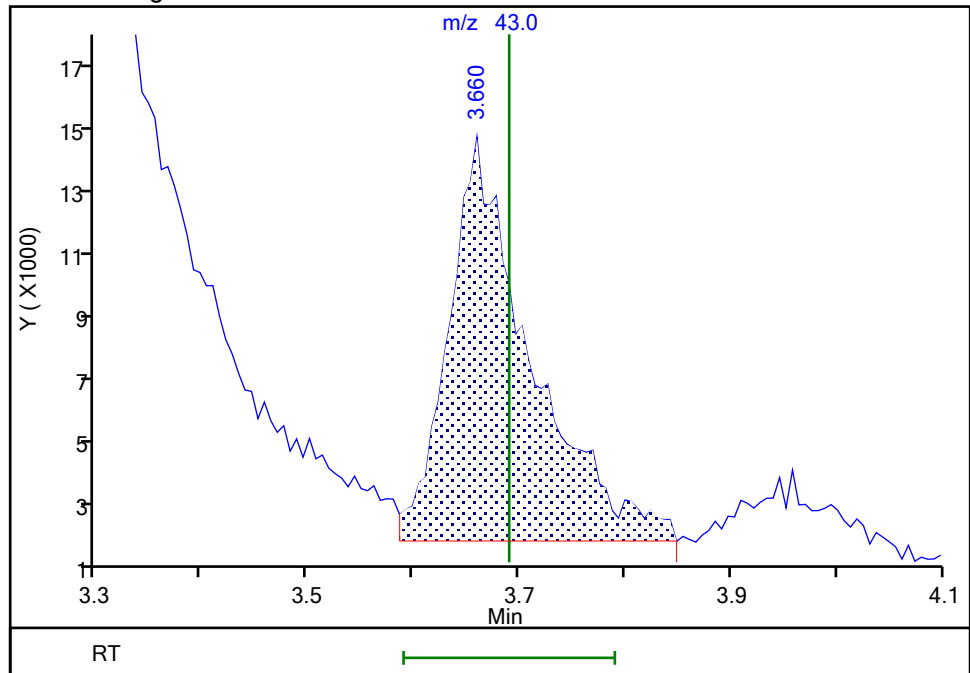
RT: 3.66
Area: 53794
Amount: 3.233700
Amount Units: ug/l

Processing Integration Results



RT: 3.66
Area: 67190
Amount: 5.498289
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:34:57 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X19.D
 Lims ID: ICIS 10
 Client ID:
 Sample Type: ICIS Calib Level: 8
 Inject. Date: 09-Jul-2025 06:41:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-020
 Misc. Info.: IC STD8 10
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:39 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:04:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.831	1.831	0.000	100	624423	10.0	9.81	
5 Chloromethane	50	2.013	2.013	0.000	99	718011	10.0	8.54	
7 Butadiene	39	2.105	2.105	0.000	92	763286	10.0	9.45	
6 Vinyl chloride	62	2.123	2.123	0.000	98	716713	10.0	9.43	
9 Bromomethane	94	2.391	2.391	0.000	90	499257	10.0	9.25	M
10 Chloroethane	64	2.477	2.477	0.000	100	442356	10.0	9.27	
11 Dichlorofluoromethane	67	2.690	2.690	0.000	97	1202204	10.0	9.42	
12 Trichlorofluoromethane	101	2.788	2.788	0.000	89	938347	10.0	9.52	
14 Ethyl ether	59	2.971	2.971	0.000	92	368397	10.0	11.0	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.050	3.050	0.000	94	711711	10.0	9.68	
16 Acrolein	56	3.117	3.117	0.000	99	2465164	487.9	561.5	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	97	499068	10.0	10.0	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.294	3.294	0.000	94	556026	10.0	11.4	
19 Acetone	43	3.275	3.275	0.000	97	505514	100.0	93.8	
21 Iodomethane	142	3.434	3.434	0.000	99	959180	10.0	10.0	
22 Ethyl bromide	108	3.458	3.458	0.000	98	442823	9.99	10.5	
23 Carbon disulfide	76	3.531	3.531	0.000	99	1481226	10.0	9.70	
24 Methyl acetate	43	3.660	3.660	0.000	95	140269	10.0	10.9	M
26 3-Chloro-1-propene	41	3.684	3.684	0.000	92	952934	10.0	9.69	
27 Methylene Chloride	84	3.855	3.855	0.000	95	515378	10.0	9.87	
* 28 t-Butyl alcohol-d10 (IS)	65	3.891	3.891	0.000	95	75826	50.0	50.0	
29 2-Methyl-2-propanol	59	3.995	3.995	0.000	100	336309	200.0	203.9	
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	96	1162506	10.0	10.2	
31 Acrylonitrile	53	4.184	4.184	0.000	98	177072	25.0	26.3	
33 trans-1,2-Dichloroethene	96	4.239	4.239	0.000	97	554106	10.0	10.0	
34 Hexane	57	4.659	4.659	0.000	93	908221	10.0	10.8	
36 1,1-Dichloroethane	63	4.891	4.891	0.000	96	1086565	10.0	10.2	
37 Isopropyl ether	45	4.952	4.952	0.000	95	1840317	10.0	10.2	
38 2-Chloro-1,3-butadiene	53	5.001	5.001	0.000	91	959967	10.0	10.4	
40 Tert-butyl ethyl ether	59	5.495	5.495	0.000	98	1611520	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.690	5.690	0.000	100	1035047	100.0	112.2	
42 cis-1,2-Dichloroethene	96	5.732	5.732	0.000	84	618692	10.0	10.3	
43 2,2-Dichloropropane	77	5.744	5.744	0.000	89	927098	10.0	9.94	
44 Propionitrile	54	5.775	5.775	0.000	98	547505	200.0	238.1	
47 Methacrylonitrile	67	5.988	5.988	0.000	93	1088759	100.0	117.3	
48 Chlorobromomethane	128	6.068	6.068	0.000	96	237208	10.0	10.4	
49 Tetrahydrofuran	71	6.080	6.080	0.000	70	144123	50.0	55.6	
50 Chloroform	83	6.226	6.226	0.000	94	1002345	10.0	10.1	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.446	0.000	93	457348	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.458	6.458	0.000	99	926264	10.0	10.0	
54 Cyclohexane	56	6.561	6.561	0.000	91	1145978	10.0	10.1	
56 Carbon tetrachloride	117	6.677	6.677	0.000	85	817391	10.0	10.4	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	95	880653	10.0	10.3	
57 Isobutyl alcohol	41	6.824	6.824	0.000	95	320353	500.0	497.2	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.897	0.000	84	82019	10.0	9.93	
59 Benzene	78	6.939	6.939	0.000	97	2429128	10.0	10.0	
60 1,2-Dichloroethane	62	7.006	7.006	0.000	97	541725	10.0	9.93	
63 Tert-amyl methyl ether	73	7.141	7.141	0.000	98	1335257	10.0	9.89	
* 64 Fluorobenzene (IS)	96	7.354	7.354	0.000	99	1961552	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	904590	10.0	10.2	
67 n-Butanol	56	7.732	7.732	0.000	89	485627	875.0	886.8	
68 Trichloroethene	95	7.842	7.842	0.000	98	634809	10.0	9.97	
69 Methylcyclohexane	83	8.159	8.159	0.000	93	1145666	10.0	10.3	
70 1,2-Dichloropropane	63	8.177	8.177	0.000	86	612112	10.0	10.5	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	917266	10.0	10.4	
72 Methyl methacrylate	69	8.268	8.268	0.000	94	218897	10.0	11.6	
73 1,4-Dioxane	88	8.287	8.287	0.000	33	48472	500.0	457.5	
74 Dibromomethane	93	8.287	8.287	0.000	98	238541	10.0	11.0	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	680527	10.0	10.4	
77 2-Nitropropane	41	8.793	8.793	0.000	97	311668	50.0	53.1	
79 1-Bromo-2-chloroethane	63	8.927	8.927	0.000	99	523216	10.0	10.0	
80 cis-1,3-Dichloropropene	75	9.097	9.097	0.000	96	863378	10.0	10.8	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	2766816	100.0	105.3	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	93	1953391	10.0	10.1	
84 Toluene	92	9.506	9.506	0.000	98	1523359	10.0	10.1	
85 trans-1,3-Dichloropropene	75	9.786	9.786	0.000	94	664468	10.0	11.1	
104 Ethyl methacrylate	69	9.860	9.860	0.000	90	480377	10.0	11.4	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	332280	10.0	9.94	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	725515	10.0	10.2	
108 1,3-Dichloropropane	76	10.164	10.164	0.000	92	609210	10.0	10.5	
109 2-Hexanone	43	10.219	10.219	0.000	97	1897130	100.0	113.0	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	442033	10.0	10.7	
112 Ethylene Dibromide	107	10.500	10.500	0.000	99	319837	10.0	11.0	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	1396688	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	886843	10.0	9.36	
115 Chlorobenzene	112	10.975	10.975	0.000	94	1613732	10.0	10.1	
116 1,1,1,2-Tetrachloroethane	131	11.060	11.060	0.000	95	555115	10.0	10.6	
117 Ethylbenzene	91	11.067	11.067	0.000	98	3052167	10.0	10.3	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	2340303	20.0	20.7	
120 o-Xylene	106	11.518	11.518	0.000	97	1124598	10.0	10.5	
121 Styrene	104	11.536	11.536	0.000	94	1806603	10.0	10.5	
122 Bromoform	173	11.695	11.695	0.000	97	248060	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.829	11.829	0.000	96	2704279	10.0	10.3	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	699215	10.0	9.97	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	92	397340	10.0	10.4	
128 Bromobenzene	156	12.091	12.091	0.000	95	642588	10.0	10.4	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	91	1108654	100.0	114.2	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	79	103598	10.0	10.8	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	3572093	10.0	10.4	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	689581	10.0	10.5	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	93	2521045	10.0	10.4	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	688971	10.0	10.4	
135 tert-Butylbenzene	134	12.542	12.542	0.000	93	571835	10.0	10.7	
136 Pentachloroethane	167	12.572	12.572	0.000	94	411223	10.0	11.7	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	97	2561134	10.0	10.5	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	3261820	10.0	10.5	
139 1,3-Dichlorobenzene	146	12.804	12.804	0.000	98	1318028	10.0	10.6	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	2827837	10.0	10.6	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	775184	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	94	1299870	10.0	10.2	
143 1,2,3-Trimethylbenzene	120	12.889	12.889	0.000	99	1070213	10.0	10.4	
144 Benzyl chloride	126	12.956	12.956	0.000	99	171072	10.0	11.4	
145 p-Diethylbenzene	119	13.097	13.097	0.000	93	1676907	10.0	10.7	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	1374829	10.0	10.9	
147 1,2-Dichlorobenzene	146	13.139	13.139	0.000	98	1145202	10.0	10.6	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	86	55579	10.0	11.0	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	97	973645	10.0	10.7	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	789615	10.0	10.8	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	389062	10.0	10.8	
153 Naphthalene	128	14.414	14.414	0.000	97	1262412	10.0	10.6	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	96	652335	10.0	10.9	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00279	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00185	Amount Added: 10.00	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X19.D

Injection Date: 09-Jul-2025 06:41:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: ICIS 10

Worklist Smp#: 20

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

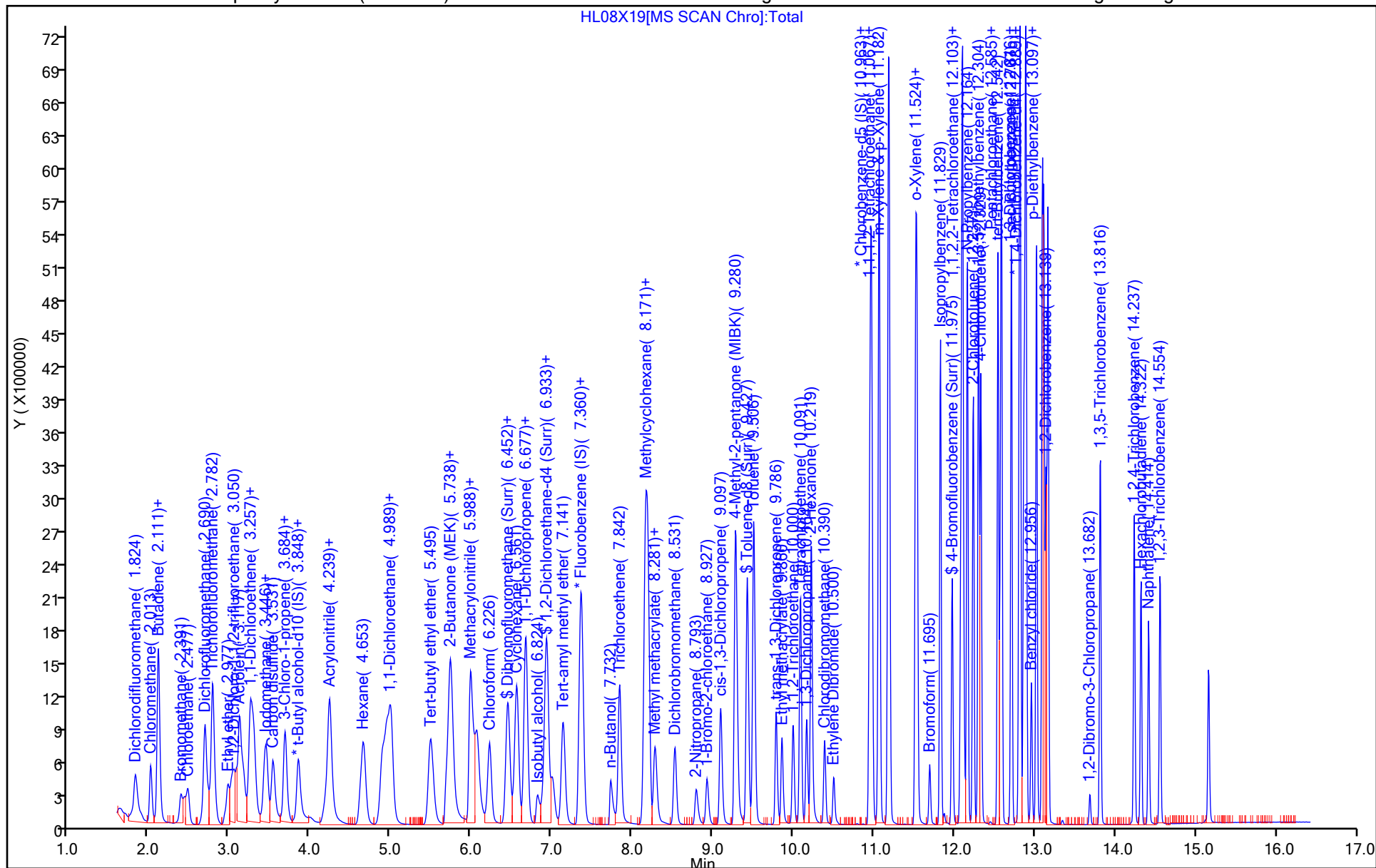
ALS Bottle#: 19

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

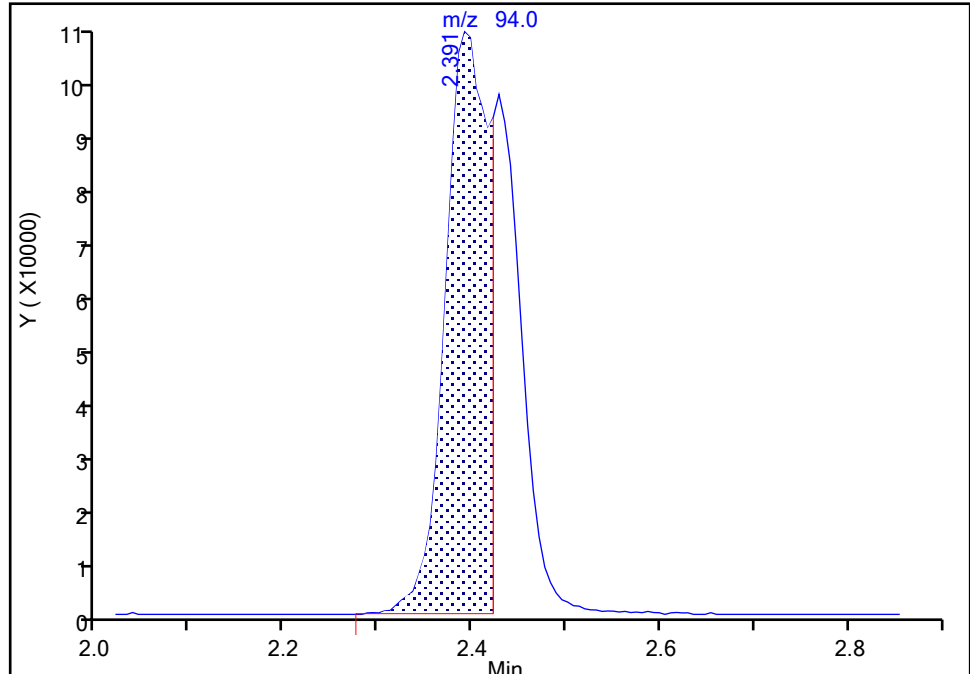
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X19.D
Injection Date: 09-Jul-2025 06:41:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: gaw91131 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

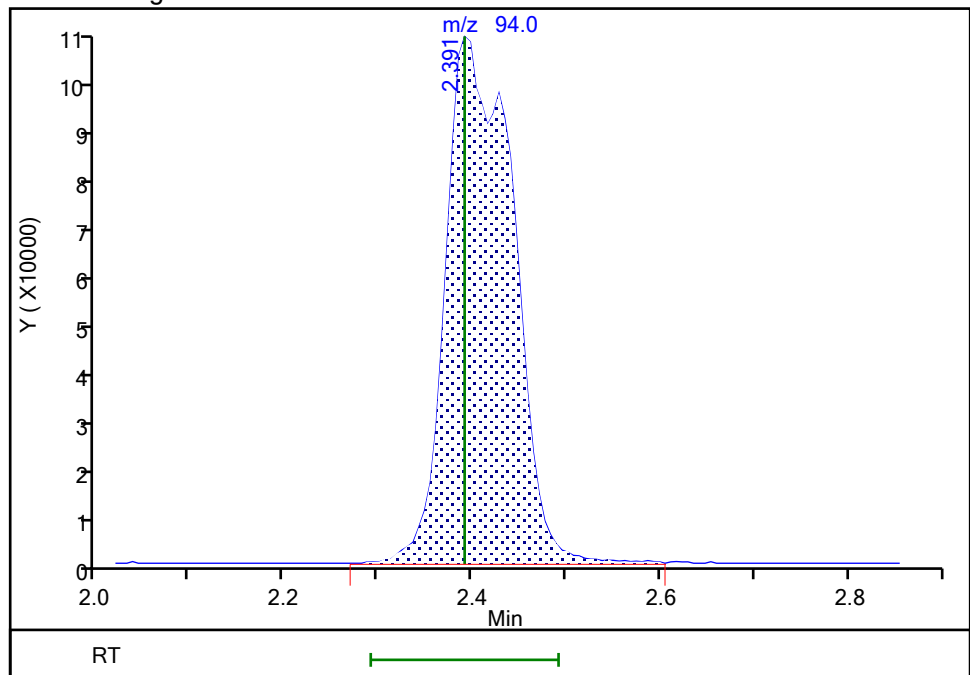
RT: 2.39
Area: 330057
Amount: 6.715901
Amount Units: ug/l

Processing Integration Results



RT: 2.39
Area: 499257
Amount: 9.248846
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:03:54 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X19.D

Injection Date: 09-Jul-2025 06:41:30

Instrument ID: 19094

Lims ID: ICIS 10

Client ID:

Operator ID: gaw91131

ALS Bottle#:

19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor:

1.0000

Method: MSV_19094_25mL

Limit Group:

MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

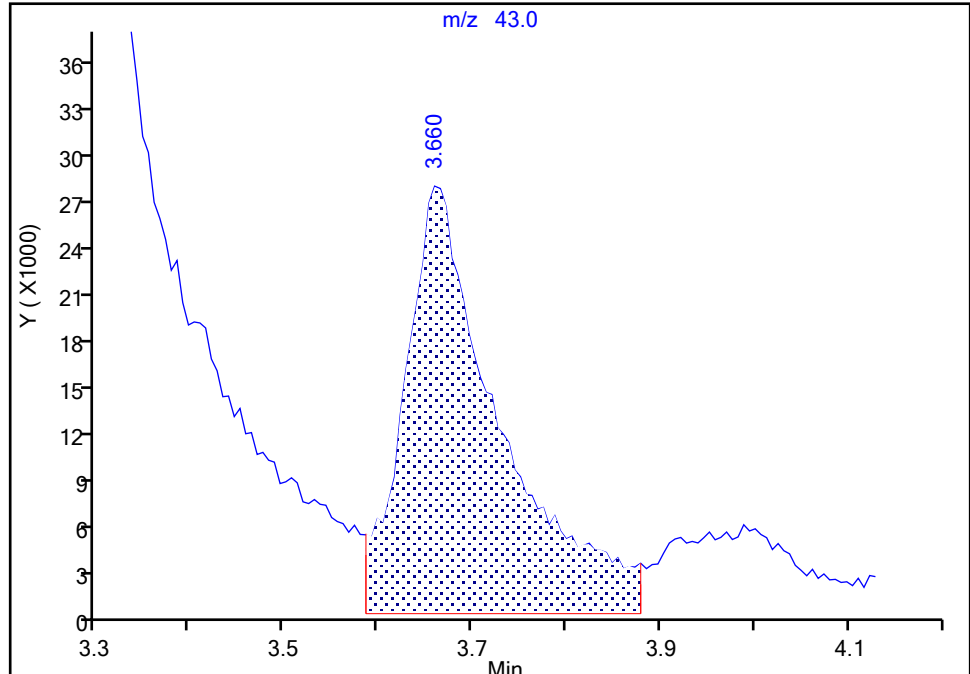
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

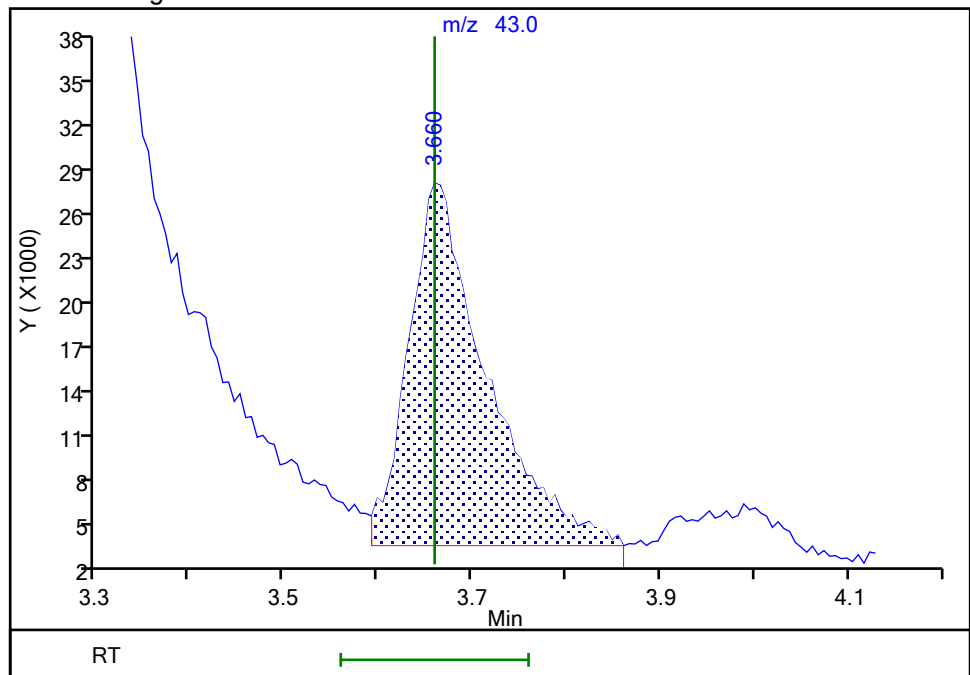
RT: 3.66
Area: 192917
Amount: 10.133415
Amount Units: ug/l

Processing Integration Results



RT: 3.66
Area: 140269
Amount: 10.894162
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:04:23 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Lims ID: IC std9 25
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 09-Jul-2025 07:02:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-021
 Misc. Info.: IC STD9 25
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 16:05:46 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 01:07:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.818	1.831	-0.013	99	1507706	25.0	23.4	
5 Chloromethane	50	2.007	2.013	-0.006	99	1830828	25.0	21.5	
7 Butadiene	39	2.099	2.105	-0.006	91	1814391	25.0	22.2	
6 Vinyl chloride	62	2.111	2.123	-0.012	98	1721907	25.0	22.4	
9 Bromomethane	94	2.422	2.391	0.031	90	1242644	25.0	22.7	M
10 Chloroethane	64	2.465	2.477	-0.012	100	1113888	25.0	23.1	
11 Dichlorofluoromethane	67	2.678	2.690	-0.012	97	2999151	25.0	23.2	
12 Trichlorofluoromethane	101	2.776	2.788	-0.012	98	2273664	25.0	22.8	
14 Ethyl ether	59	2.965	2.971	-0.006	92	922980	25.0	27.3	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.044	3.050	-0.006	94	1771846	25.0	23.8	
16 Acrolein	56	3.111	3.117	-0.006	99	5850045	1219.9	1224.5	
17 1,1-Dichloroethene	96	3.245	3.251	-0.006	97	1225652	25.0	24.3	
19 Acetone	43	3.269	3.275	-0.006	100	1227790	250.0	209.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.282	3.294	-0.012	93	1339738	25.0	27.1	
21 Iodomethane	142	3.422	3.434	-0.012	99	2342180	25.0	24.2	
22 Ethyl bromide	108	3.446	3.458	-0.012	98	1114461	25.0	26.2	
23 Carbon disulfide	76	3.525	3.531	-0.006	99	3702011	25.0	24.0	
24 Methyl acetate	43	3.653	3.660	-0.007	96	386860	25.0	27.6	M
26 3-Chloro-1-propene	41	3.672	3.684	-0.012	92	2383763	25.0	24.0	
27 Methylene Chloride	84	3.836	3.855	-0.019	94	1278663	25.0	24.2	
* 28 t-Butyl alcohol-d10 (IS)	65	3.873	3.891	-0.018	95	82517	50.0	50.0	
29 2-Methyl-2-propanol	59	3.970	3.995	-0.025	100	900300	500.0	501.5	
31 Acrylonitrile	53	4.147	4.184	-0.037	99	458127	62.5	61.8	
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	95	2850495	25.0	24.6	
33 trans-1,2-Dichloroethene	96	4.227	4.239	-0.013	97	1379887	25.0	24.7	
34 Hexane	57	4.647	4.659	-0.012	94	2198846	25.0	26.0	
36 1,1-Dichloroethane	63	4.879	4.891	-0.012	96	2693367	25.0	25.0	
37 Isopropyl ether	45	4.940	4.952	-0.012	94	4574470	25.0	25.1	
38 2-Chloro-1,3-butadiene	53	4.995	5.001	-0.006	91	2411612	25.0	25.8	
40 Tert-butyl ethyl ether	59	5.488	5.495	-0.006	98	3963662	25.0	25.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.677	5.690	-0.013	100	2437557	250.0	242.8	
42 cis-1,2-Dichloroethene	96	5.726	5.732	-0.006	84	1534308	25.0	25.3	
43 2,2-Dichloropropane	77	5.745	5.744	0.000	88	2289186	25.0	24.3	
44 Propionitrile	54	5.763	5.775	-0.012	99	1271828	500.0	508.3	
47 Methacrylonitrile	67	5.988	5.988	0.000	93	2641135	250.0	261.5	
48 Chlorobromomethane	128	6.068	6.068	0.000	97	578086	25.0	25.1	
49 Tetrahydrofuran	71	6.074	6.080	-0.006	80	337883	125.0	119.7	
S 46 1,2-Dichloroethene, Total	100				0			50.0	
50 Chloroform	83	6.220	6.226	-0.006	94	2476585	25.0	24.7	
\$ 52 Dibromofluoromethane (Surr)	113	6.439	6.446	-0.007	94	458587	10.0	9.95	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	2290094	25.0	24.4	
54 Cyclohexane	56	6.555	6.561	-0.006	91	2790308	25.0	24.2	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	82	2038956	25.0	25.8	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	95	2205717	25.0	25.5	
57 Isobutyl alcohol	41	6.817	6.824	-0.007	95	840990	1250.0	1199.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.897	0.000	92	83477	10.0	10.0	
59 Benzene	78	6.933	6.939	-0.006	96	6043873	25.0	24.6	
60 1,2-Dichloroethane	62	7.006	7.006	0.000	97	1305181	25.0	23.6	
63 Tert-amyl methyl ether	73	7.134	7.141	-0.007	98	3354384	25.0	24.5	
* 64 Fluorobenzene (IS)	96	7.348	7.354	-0.006	99	1984911	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	2217129	25.0	24.7	
67 n-Butanol	56	7.726	7.732	-0.006	88	1335228	2187.5	2185.1	
68 Trichloroethene	95	7.842	7.842	0.000	98	1585054	25.0	24.6	
69 Methylcyclohexane	83	8.153	8.159	-0.006	93	2811804	25.0	25.1	
70 1,2-Dichloropropane	63	8.171	8.177	-0.006	97	1531863	25.0	25.9	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	2292363	25.0	25.6	
72 Methyl methacrylate	69	8.268	8.268	0.000	92	556682	25.0	27.0	
73 1,4-Dioxane	88	8.268	8.287	-0.019	33	155644	1250.0	1303.6	
74 Dibromomethane	93	8.281	8.287	-0.006	97	594857	25.0	27.2	
76 Dichlorobromomethane	83	8.524	8.531	-0.006	99	1697281	25.0	25.7	
77 2-Nitropropane	41	8.793	8.793	0.000	97	752379	125.0	117.9	
79 1-Bromo-2-chloroethane	63	8.927	8.927	0.000	99	1319994	25.0	25.0	
80 cis-1,3-Dichloropropene	75	9.098	9.097	0.001	95	2166367	25.0	26.8	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	6682936	250.0	233.7	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1977484	10.0	10.0	
84 Toluene	92	9.506	9.506	0.000	98	3811666	25.0	24.9	
85 trans-1,3-Dichloropropene	75	9.780	9.786	-0.006	93	1688774	25.0	27.9	
104 Ethyl methacrylate	69	9.853	9.860	-0.007	90	1208466	25.0	28.2	
106 1,1,2-Trichloroethane	97	9.994	10.000	-0.006	91	835586	25.0	24.6	
S 105 1,3-Dichloropropene, Total	100				0			54.7	
107 Tetrachloroethene	166	10.085	10.091	-0.006	98	1795563	25.0	24.9	
108 1,3-Dichloropropane	76	10.164	10.164	0.000	91	1524489	25.0	25.8	
109 2-Hexanone	43	10.219	10.219	0.000	96	4662358	250.0	255.1	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	1110083	25.0	26.5	
112 Ethylene Dibromide	107	10.500	10.500	0.000	98	800536	25.0	27.2	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	86	1417363	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	2197487	25.0	22.8	
115 Chlorobenzene	112	10.975	10.975	0.000	96	4024592	25.0	24.9	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.060	0.001	97	1371335	25.0	25.8	
117 Ethylbenzene	91	11.067	11.067	0.000	99	7621052	25.0	25.3	
119 m-Xylene & p-Xylene	106	11.182	11.189	-0.007	100	5852696	50.0	51.0	
S 118 Xylenes, Total	106				0			76.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 o-Xylene	106	11.518	11.518	0.000	97	2808980	25.0	25.9	
121 Styrene	104	11.536	11.536	0.000	95	4508023	25.0	25.8	
122 Bromoform	173	11.695	11.695	0.000	97	627770	25.0	29.0	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	6756743	25.0	25.4	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	706803	10.0	9.93	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	92	985125	25.0	25.4	
128 Bromobenzene	156	12.085	12.091	-0.006	95	1601513	25.0	25.4	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	90	2786924	250.0	263.7	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	80	255677	25.0	26.3	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	8983978	25.0	25.6	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	1722075	25.0	25.7	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	6334320	25.0	25.8	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	1765816	25.0	26.2	
135 tert-Butylbenzene	134	12.542	12.542	0.000	93	1436811	25.0	26.5	
136 Pentachloroethane	167	12.572	12.572	0.000	94	1074097	25.0	30.1	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	98	6530111	25.0	26.2	
138 sec-Butylbenzene	105	12.707	12.707	0.000	97	8179372	25.0	25.9	
139 1,3-Dichlorobenzene	146	12.804	12.804	0.000	98	3317384	25.0	26.3	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	7101704	25.0	26.2	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	787338	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	94	3287920	25.0	25.3	
143 1,2,3-Trimethylbenzene	120	12.889	12.889	0.000	99	2703402	25.0	25.8	
144 Benzyl chloride	126	12.957	12.956	0.001	99	435250	25.0	28.5	
145 p-Diethylbenzene	119	13.097	13.097	0.000	95	4255565	25.0	26.8	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	3507357	25.0	27.5	
147 1,2-Dichlorobenzene	146	13.139	13.139	0.000	98	2874314	25.0	26.2	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	87	141763	25.0	27.5	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	2484502	25.0	26.9	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	2007740	25.0	27.1	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	995050	25.0	27.2	
153 Naphthalene	128	14.414	14.414	0.000	97	3199809	25.0	26.4	
154 1,2,3-Trichlorobenzene	180	14.554	14.560	-0.006	96	1671921	25.0	27.5	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00171

Amount Added: 25.00

Units: uL

MSV_LL_GAS826_00279

Amount Added: 25.00

Units: uL

MSV_LL_#2_826_00185

Amount Added: 25.00

Units: uL

MSV_LLcentISS_00016

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 16-Jul-2025 16:05:47

Chrom Revision: 2.3 14-Jul-2025 13:55:14

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D

Injection Date: 09-Jul-2025 07:02:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: IC std9 25

Worklist Smp#: 21

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

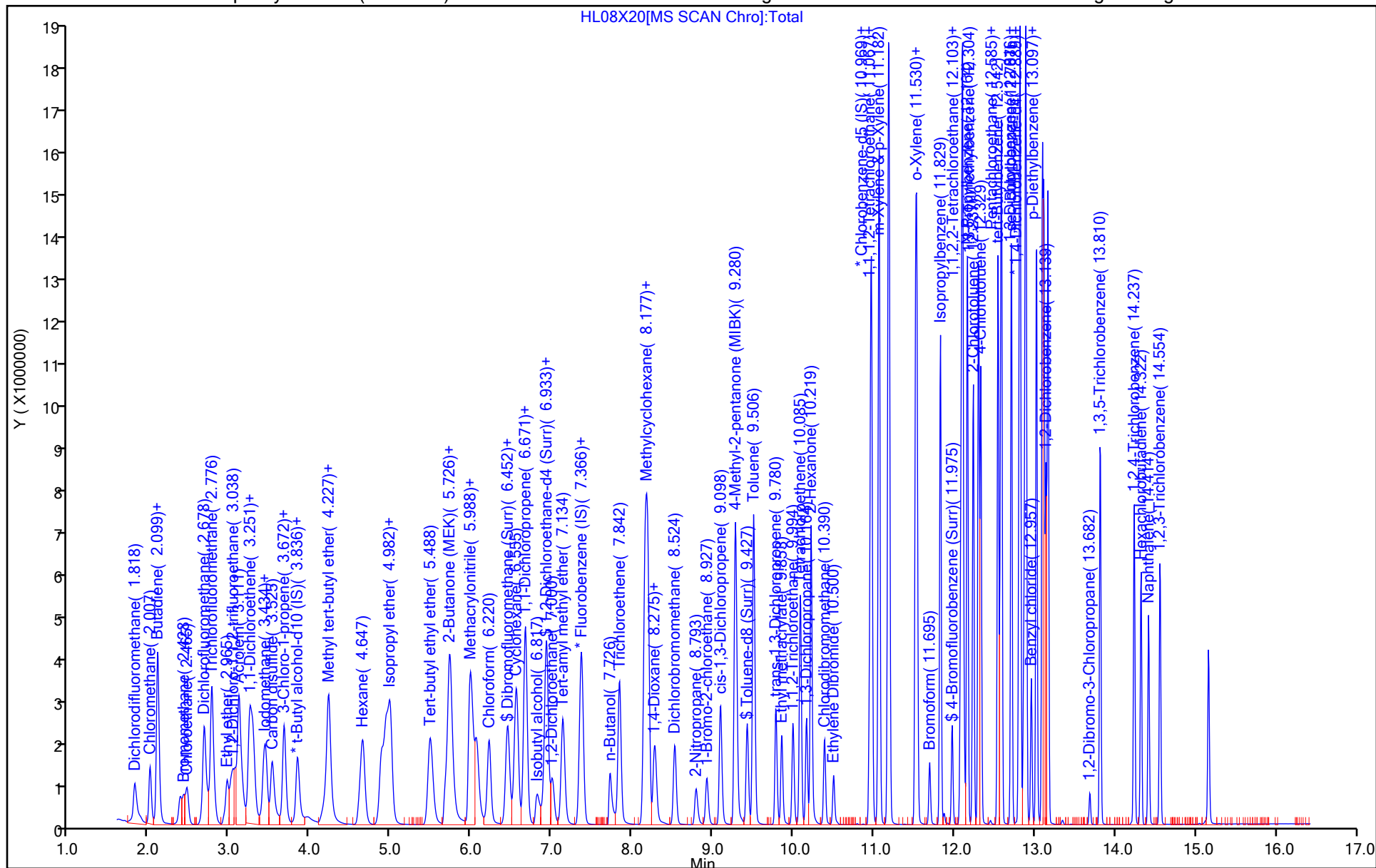
ALS Bottle#: 20

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

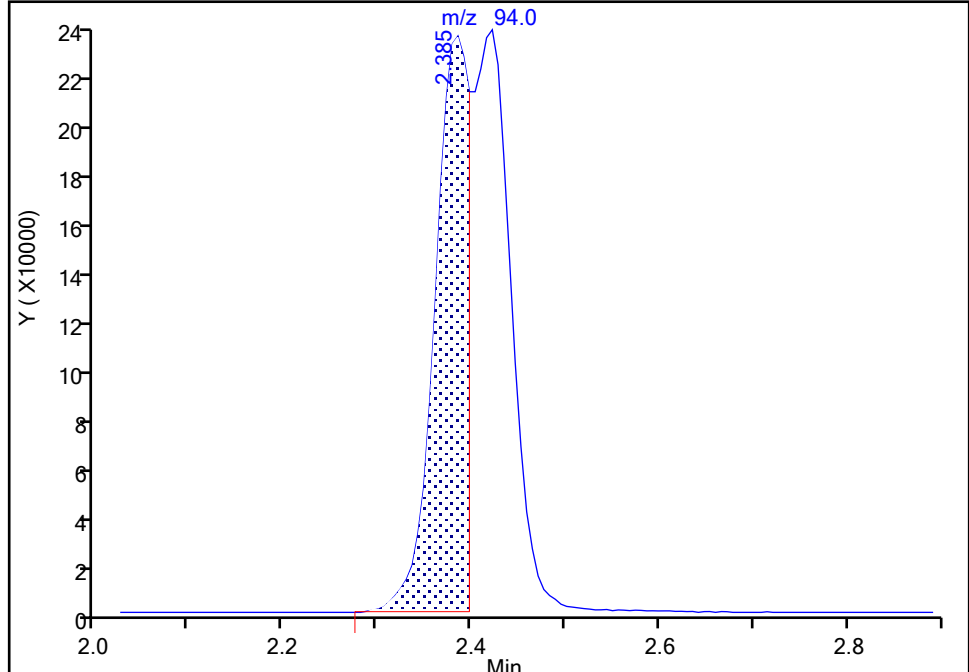
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
Injection Date: 09-Jul-2025 07:02:30 Instrument ID: 19094
Lims ID: IC std9 25
Client ID:
Operator ID: gaw91131 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

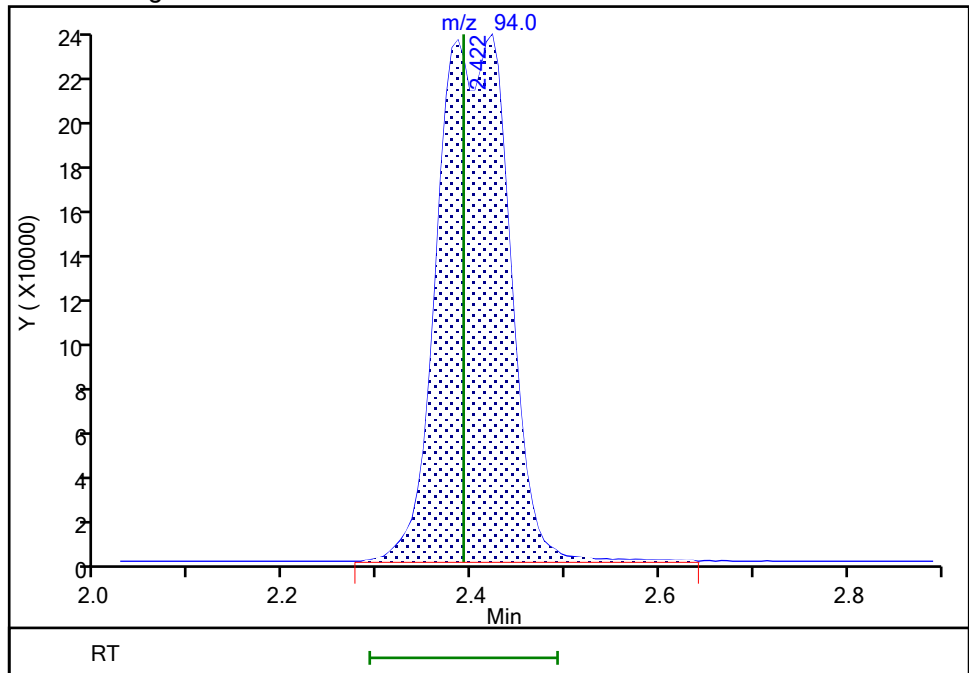
RT: 2.39
Area: 599946
Amount: 9.252087
Amount Units: ug/l

Processing Integration Results



RT: 2.42
Area: 1242644
Amount: 22.749344
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:35:44 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D

Injection Date: 09-Jul-2025 07:02:30

Instrument ID: 19094

Lims ID: IC std9 25

Client ID:

Operator ID: gaw91131

ALS Bottle#:

20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID)

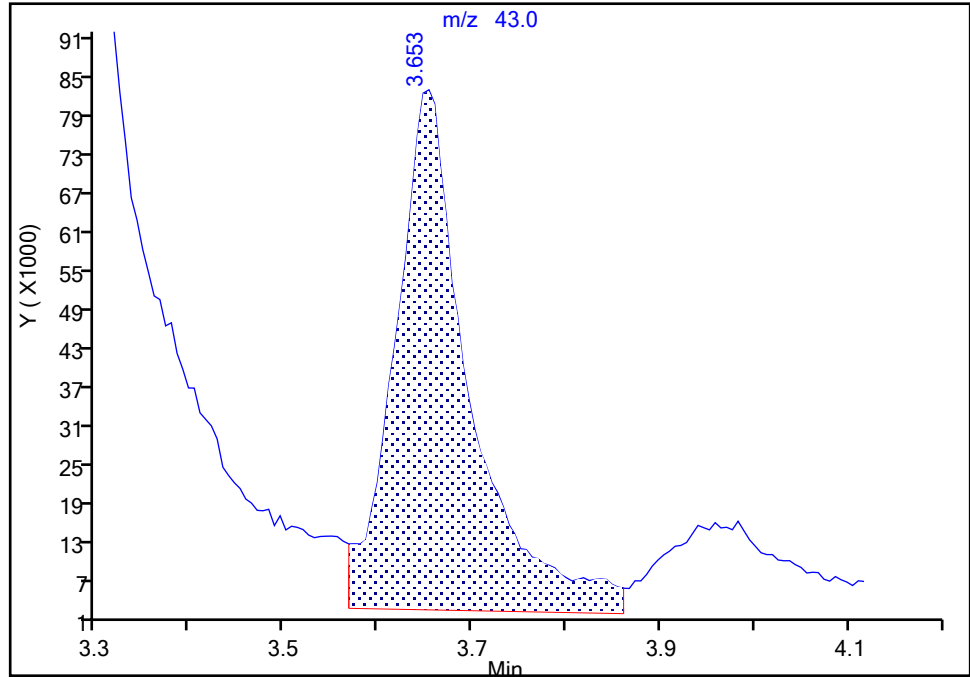
MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

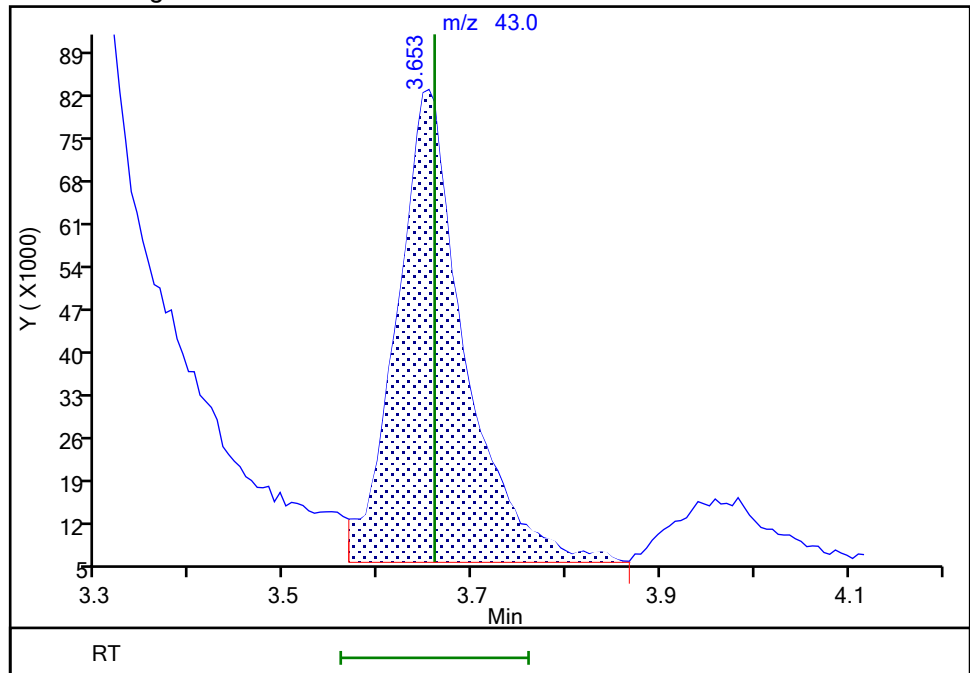
RT: 3.65
Area: 452007
Amount: 23.229437
Amount Units: ug/l

Processing Integration Results



RT: 3.65
Area: 386860
Amount: 27.609637
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 01:36:18 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Calibration

/ Dichlorodifluoromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

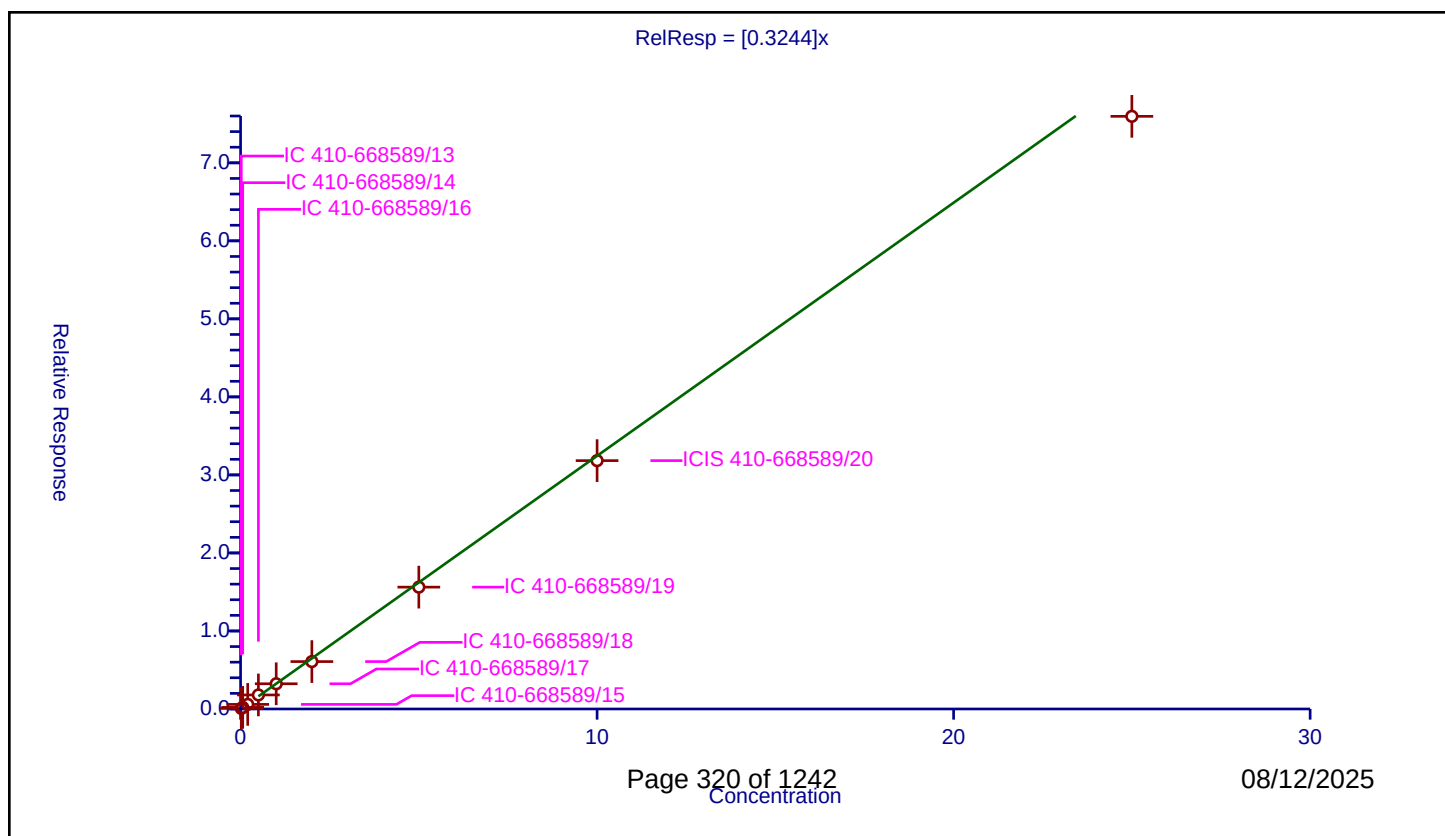
Curve Coefficients

Intercept: 0
Slope: 0.3244

Error Coefficients

Relative Standard Deviation: 7.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.00714	10.0	1832045.0	0.356978	Y
2	IC 410-668589/14	0.06	0.020838	10.0	1831280.0	0.347298	Y
3	IC 410-668589/15	0.2	0.058903	10.0	1849831.0	0.294513	Y
4	IC 410-668589/16	0.5	0.179792	10.0	1860146.0	0.359585	Y
5	IC 410-668589/17	1.0	0.323107	10.0	1893953.0	0.323107	Y
6	IC 410-668589/18	2.0	0.607563	10.0	1918847.0	0.303781	Y
7	IC 410-668589/19	5.0	1.561801	10.0	1935362.0	0.31236	Y
8	ICIS 410-668589/20	10.0	3.183311	10.0	1961552.0	0.318331	Y
9	IC 410-668589/21	25.0	7.595837	10.0	1984911.0	0.303833	Y



Calibration

/ Chloromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

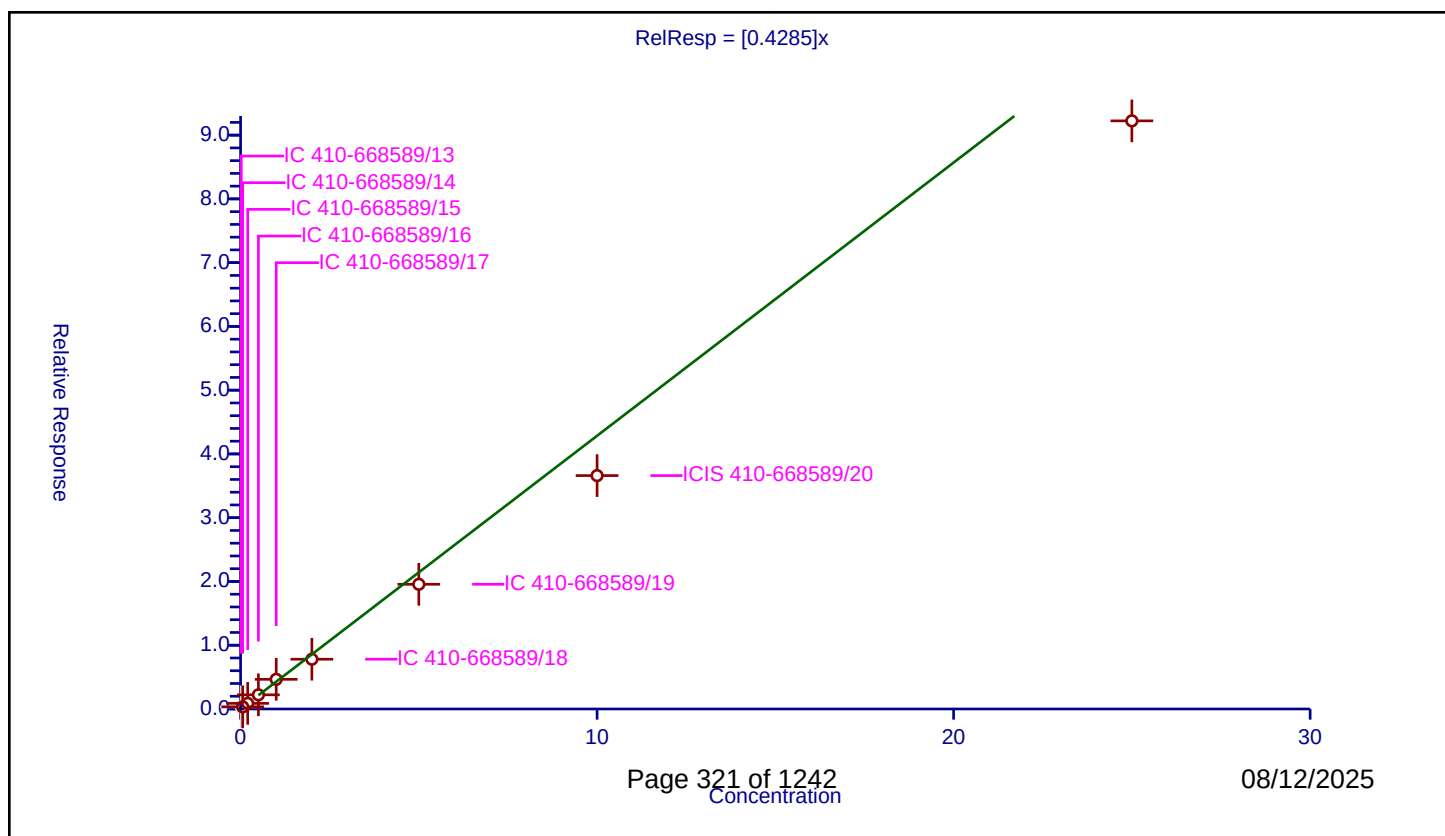
Curve Coefficients

Intercept: 0
Slope: 0.4285

Error Coefficients

Relative Standard Deviation: 15.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.032625	10.0	1832045.0	1.631237	N
2	IC 410-668589/14	0.06	0.033605	10.0	1831280.0	0.560082	Y
3	IC 410-668589/15	0.2	0.088219	10.0	1849831.0	0.441094	Y
4	IC 410-668589/16	0.5	0.222488	10.0	1860146.0	0.444976	Y
5	IC 410-668589/17	1.0	0.465149	10.0	1893953.0	0.465149	Y
6	IC 410-668589/18	2.0	0.780807	10.0	1918847.0	0.390404	Y
7	IC 410-668589/19	5.0	1.955836	10.0	1935362.0	0.391167	Y
8	ICIS 410-668589/20	10.0	3.660423	10.0	1961552.0	0.366042	Y
9	IC 410-668589/21	25.0	9.223728	10.0	1984911.0	0.368949	Y



Calibration

/ Butadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

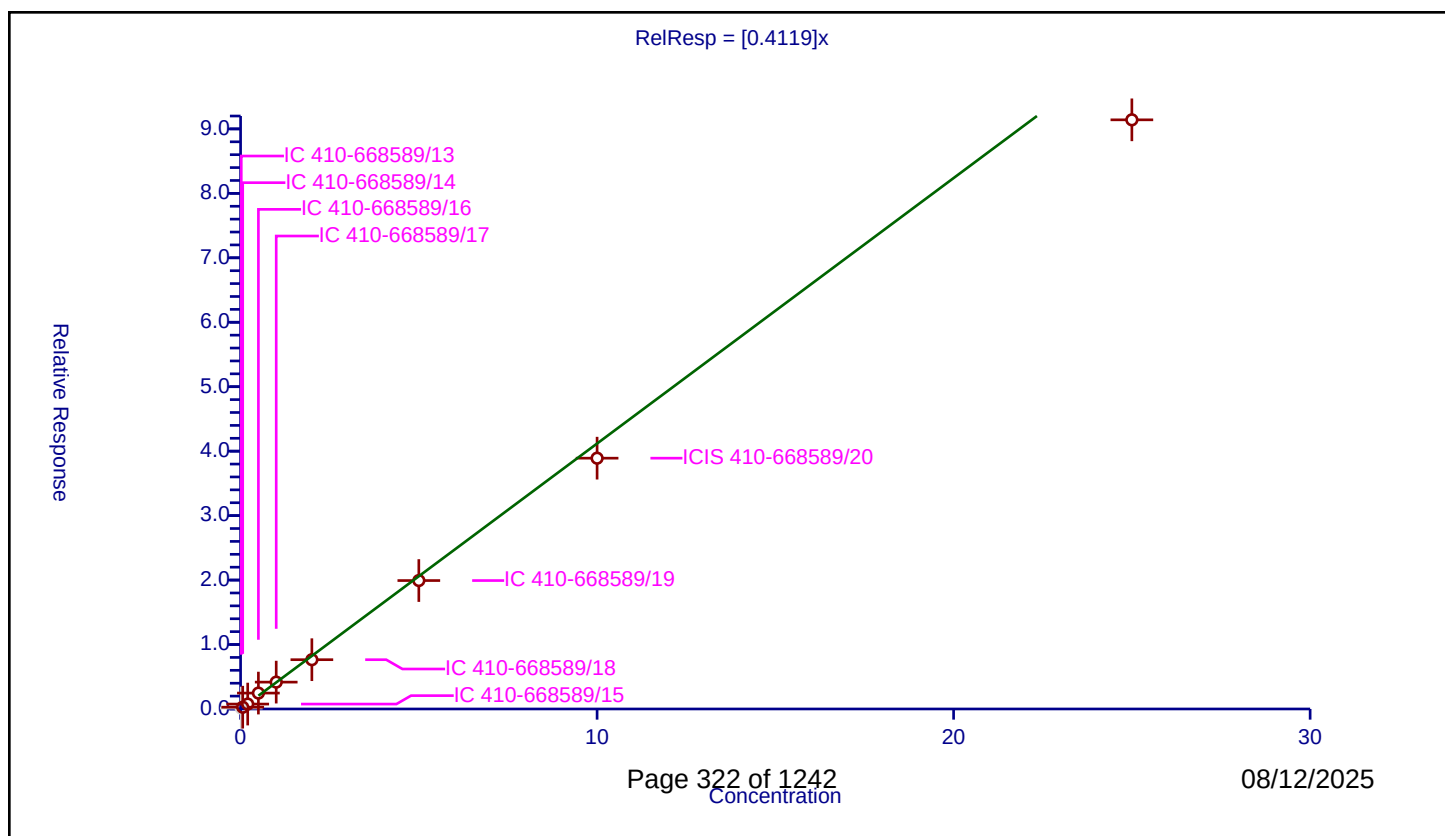
Curve Coefficients

Intercept: 0
Slope: 0.4119

Error Coefficients

Relative Standard Deviation: 11.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.014596	10.0	1832045.0	0.729786	N
2	IC 410-668589/14	0.06	0.028024	10.0	1831280.0	0.467069	Y
3	IC 410-668589/15	0.2	0.076375	10.0	1849831.0	0.381873	Y
4	IC 410-668589/16	0.5	0.246755	10.0	1860146.0	0.49351	Y
5	IC 410-668589/17	1.0	0.416747	10.0	1893953.0	0.416747	Y
6	IC 410-668589/18	2.0	0.764756	10.0	1918847.0	0.382378	Y
7	IC 410-668589/19	5.0	1.992924	10.0	1935362.0	0.398585	Y
8	ICIS 410-668589/20	10.0	3.891235	10.0	1961552.0	0.389124	Y
9	IC 410-668589/21	25.0	9.140919	10.0	1984911.0	0.365637	Y



Calibration

/ Vinyl chloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

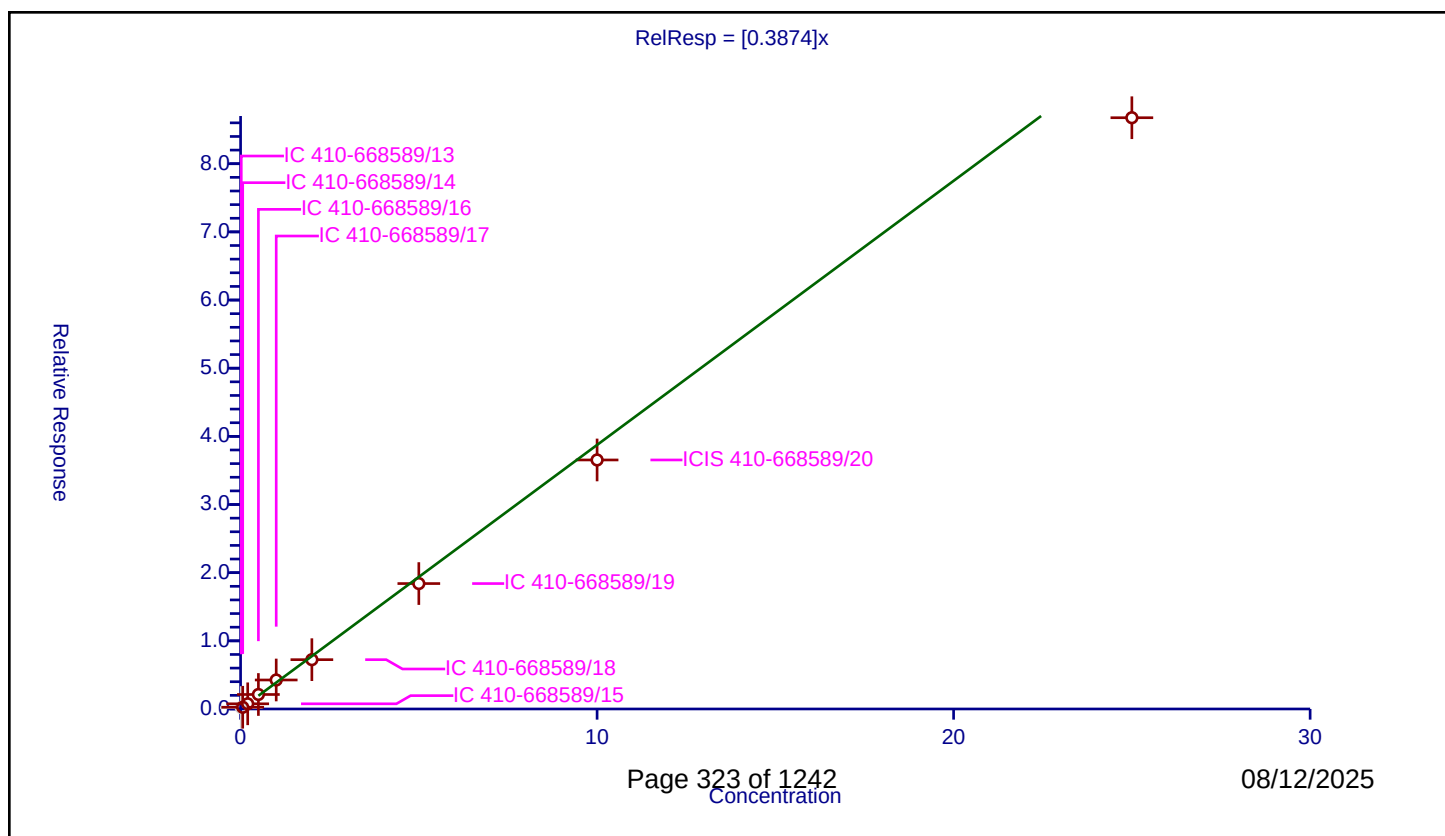
Curve Coefficients

Intercept: 0
Slope: 0.3874

Error Coefficients

Relative Standard Deviation: 8.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.020551	10.0	1832045.0	1.02754	N
2	IC 410-668589/14	0.06	0.025638	10.0	1831280.0	0.427297	Y
3	IC 410-668589/15	0.2	0.07592	10.0	1849831.0	0.379602	Y
4	IC 410-668589/16	0.5	0.212516	10.0	1860146.0	0.425031	Y
5	IC 410-668589/17	1.0	0.425327	10.0	1893953.0	0.425327	Y
6	IC 410-668589/18	2.0	0.723773	10.0	1918847.0	0.361887	Y
7	IC 410-668589/19	5.0	1.840364	10.0	1935362.0	0.368073	Y
8	ICIS 410-668589/20	10.0	3.653806	10.0	1961552.0	0.365381	Y
9	IC 410-668589/21	25.0	8.674983	10.0	1984911.0	0.346999	Y



Calibration

/ Bromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

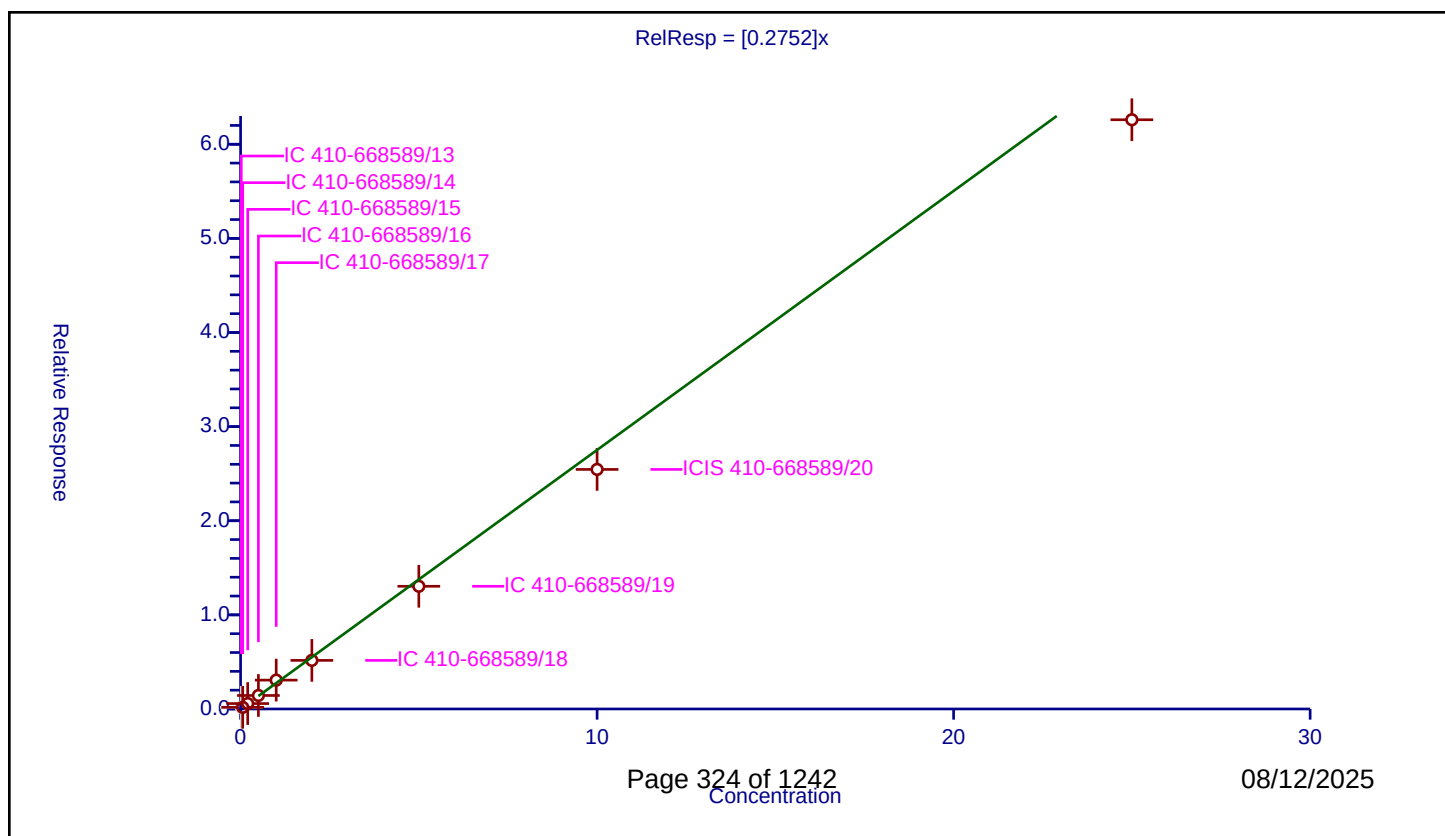
Curve Coefficients

Intercept: 0
Slope: 0.2752

Error Coefficients

Relative Standard Deviation: 7.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.017363	10.0	1832045.0	0.868156	N
2	IC 410-668589/14	0.06	0.017769	10.0	1831280.0	0.29615	Y
3	IC 410-668589/15	0.2	0.057605	10.0	1849831.0	0.288026	Y
4	IC 410-668589/16	0.5	0.143397	10.0	1860146.0	0.286795	Y
5	IC 410-668589/17	1.0	0.30666	10.0	1893953.0	0.30666	Y
6	IC 410-668589/18	2.0	0.516482	10.0	1918847.0	0.258241	Y
7	IC 410-668589/19	5.0	1.303648	10.0	1935362.0	0.26073	Y
8	ICIS 410-668589/20	10.0	2.545214	10.0	1961552.0	0.254521	Y
9	IC 410-668589/21	25.0	6.260452	10.0	1984911.0	0.250418	Y



Calibration

/ Chloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

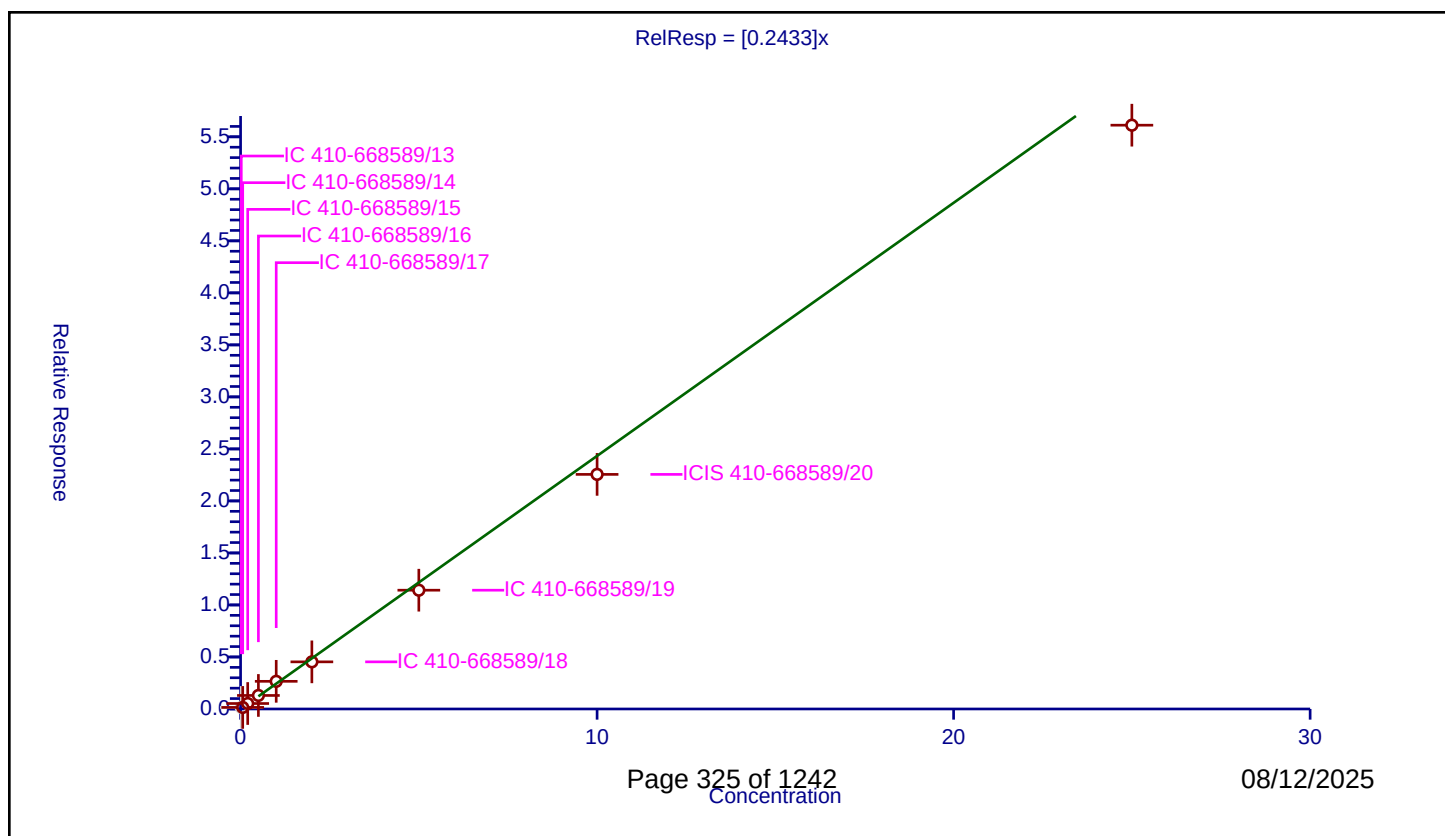
Curve Coefficients

Intercept: 0
Slope: 0.2433

Error Coefficients

Relative Standard Deviation: 7.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.014689	10.0	1832045.0	0.734425	N
2	IC 410-668589/14	0.06	0.015121	10.0	1831280.0	0.25201	Y
3	IC 410-668589/15	0.2	0.052594	10.0	1849831.0	0.26297	Y
4	IC 410-668589/16	0.5	0.130183	10.0	1860146.0	0.260367	Y
5	IC 410-668589/17	1.0	0.265962	10.0	1893953.0	0.265962	Y
6	IC 410-668589/18	2.0	0.45298	10.0	1918847.0	0.22649	Y
7	IC 410-668589/19	5.0	1.141802	10.0	1935362.0	0.22836	Y
8	ICIS 410-668589/20	10.0	2.255133	10.0	1961552.0	0.225513	Y
9	IC 410-668589/21	25.0	5.611778	10.0	1984911.0	0.224471	Y



Calibration

/ Dichlorofluoromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

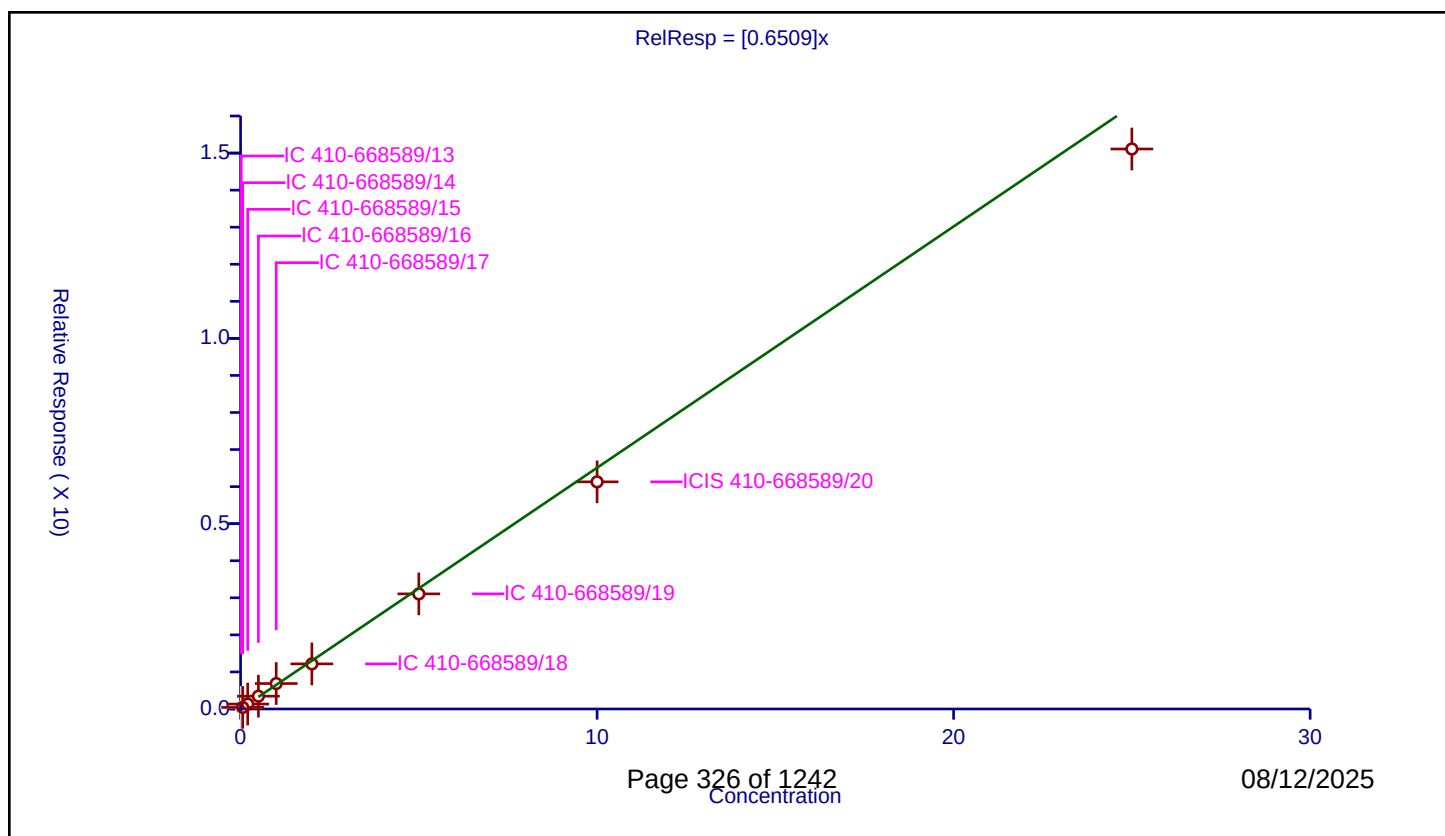
Curve Coefficients

Intercept: 0
Slope: 0.6509

Error Coefficients

Relative Standard Deviation: 6.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.04156	10.0	1832045.0	2.078006	N
2	IC 410-668589/14	0.06	0.043161	10.0	1831280.0	0.719351	Y
3	IC 410-668589/15	0.2	0.132688	10.0	1849831.0	0.663439	Y
4	IC 410-668589/16	0.5	0.345586	10.0	1860146.0	0.691172	Y
5	IC 410-668589/17	1.0	0.68648	10.0	1893953.0	0.68648	Y
6	IC 410-668589/18	2.0	1.216736	10.0	1918847.0	0.608368	Y
7	IC 410-668589/19	5.0	3.105905	10.0	1935362.0	0.621181	Y
8	ICIS 410-668589/20	10.0	6.128841	10.0	1961552.0	0.612884	Y
9	IC 410-668589/21	25.0	15.109751	10.0	1984911.0	0.60439	Y



Calibration

/ Trichlorofluoromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

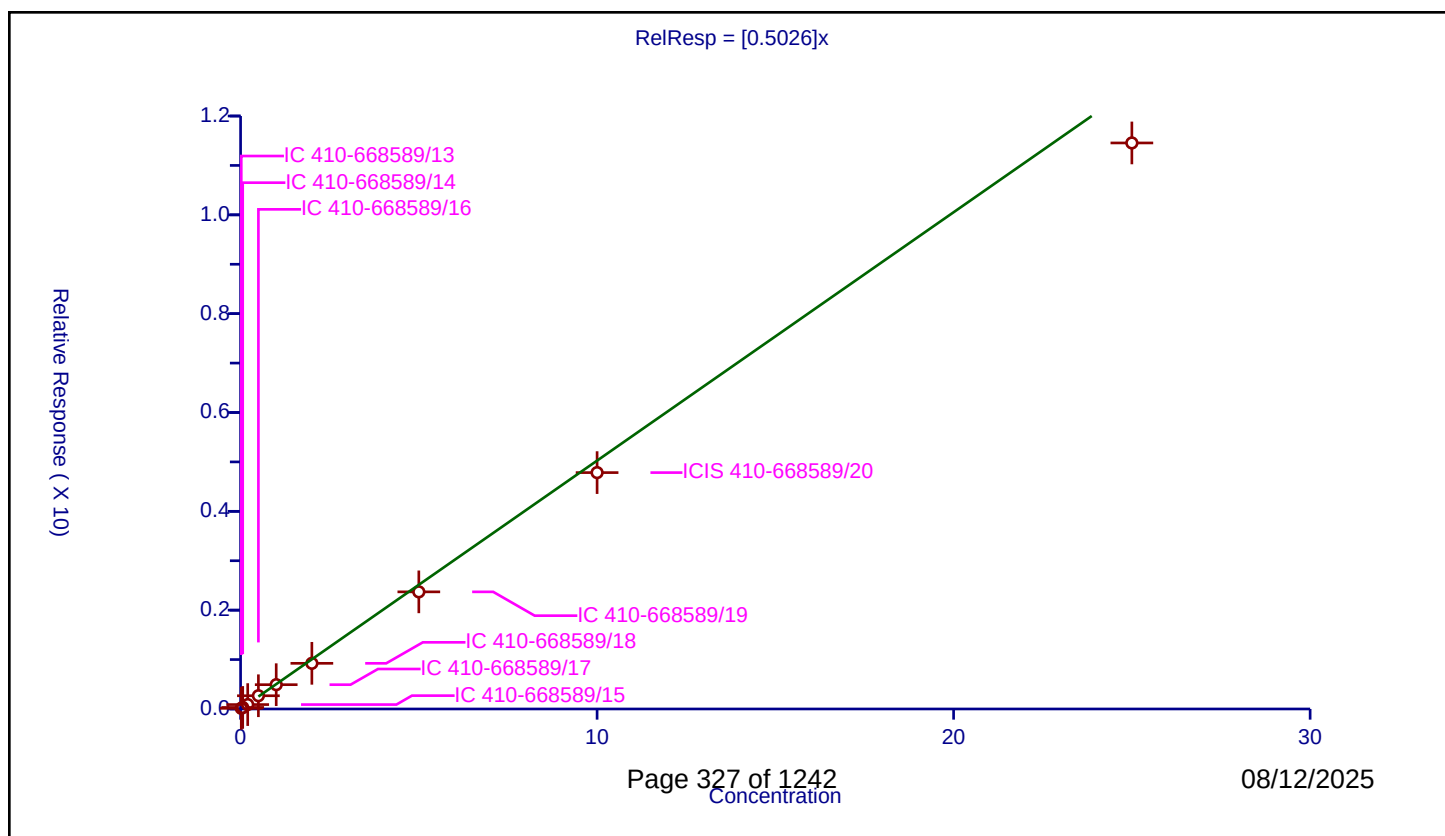
Curve Coefficients

Intercept: 0
Slope: 0.5026

Error Coefficients

Relative Standard Deviation: 12.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.013171	10.0	1832045.0	0.658554	Y
2	IC 410-668589/14	0.06	0.031033	10.0	1831280.0	0.517216	Y
3	IC 410-668589/15	0.2	0.089419	10.0	1849831.0	0.447095	Y
4	IC 410-668589/16	0.5	0.268146	10.0	1860146.0	0.536291	Y
5	IC 410-668589/17	1.0	0.491828	10.0	1893953.0	0.491828	Y
6	IC 410-668589/18	2.0	0.924144	10.0	1918847.0	0.462072	Y
7	IC 410-668589/19	5.0	2.370383	10.0	1935362.0	0.474077	Y
8	ICIS 410-668589/20	10.0	4.783697	10.0	1961552.0	0.47837	Y
9	IC 410-668589/21	25.0	11.45474	10.0	1984911.0	0.45819	Y



Calibration

/ Ethyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

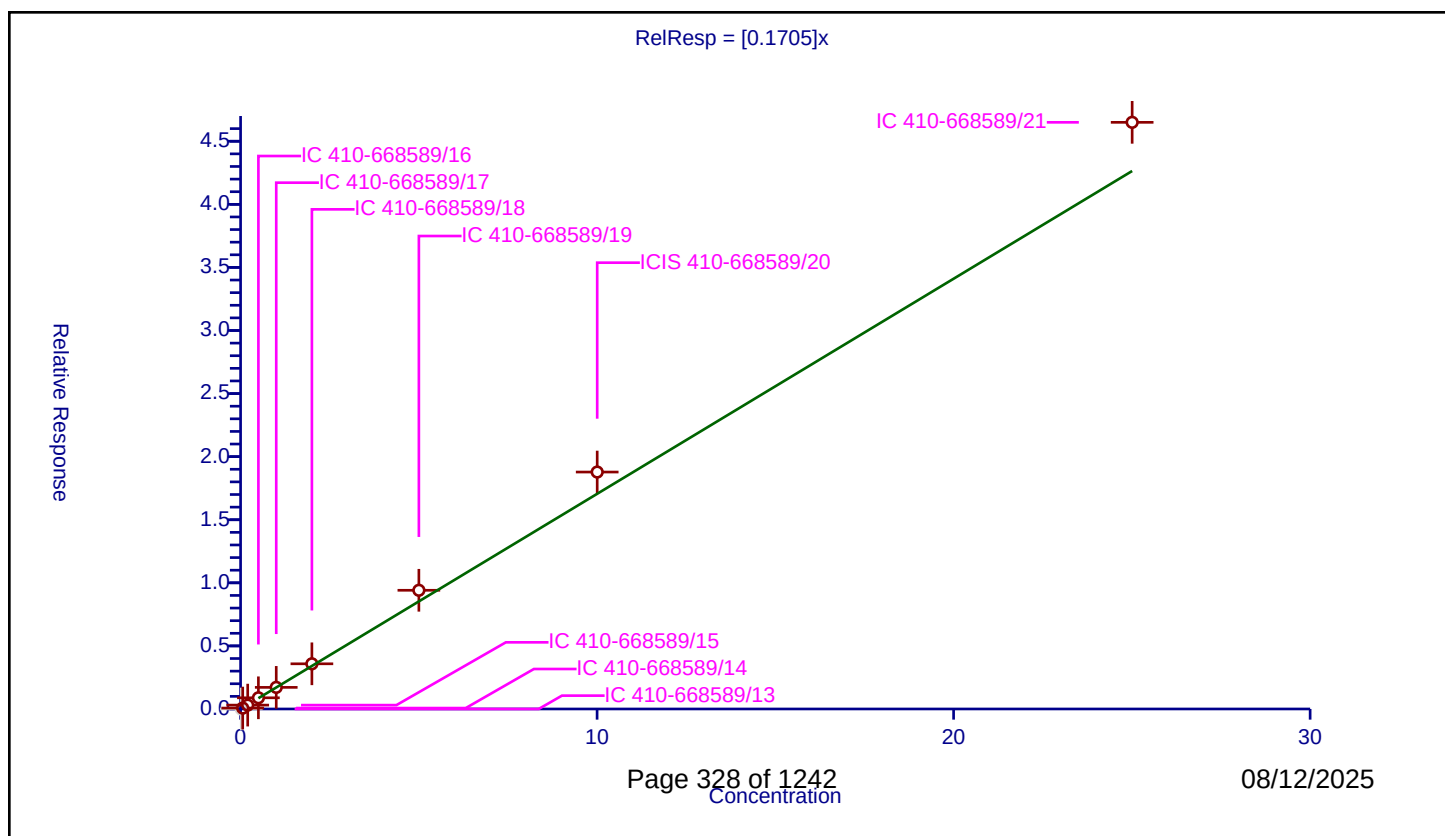
Curve Coefficients

Intercept: 0
Slope: 0.1705

Error Coefficients

Relative Standard Deviation: 13.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.020007	0.0	10.0	1832045.0	0.0	N
2	IC 410-668589/14	0.06002	0.007241	10.0	1831280.0	0.120641	Y
3	IC 410-668589/15	0.200066	0.030781	10.0	1849831.0	0.153855	Y
4	IC 410-668589/16	0.500166	0.088756	10.0	1860146.0	0.177454	Y
5	IC 410-668589/17	1.000332	0.171372	10.0	1893953.0	0.171315	Y
6	IC 410-668589/18	2.000664	0.358189	10.0	1918847.0	0.179035	Y
7	IC 410-668589/19	5.00166	0.940796	10.0	1935362.0	0.188097	Y
8	ICIS 410-668589/20	10.00332	1.878089	10.0	1961552.0	0.187747	Y
9	IC 410-668589/21	25.0083	4.649982	10.0	1984911.0	0.185938	Y



Calibration

/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

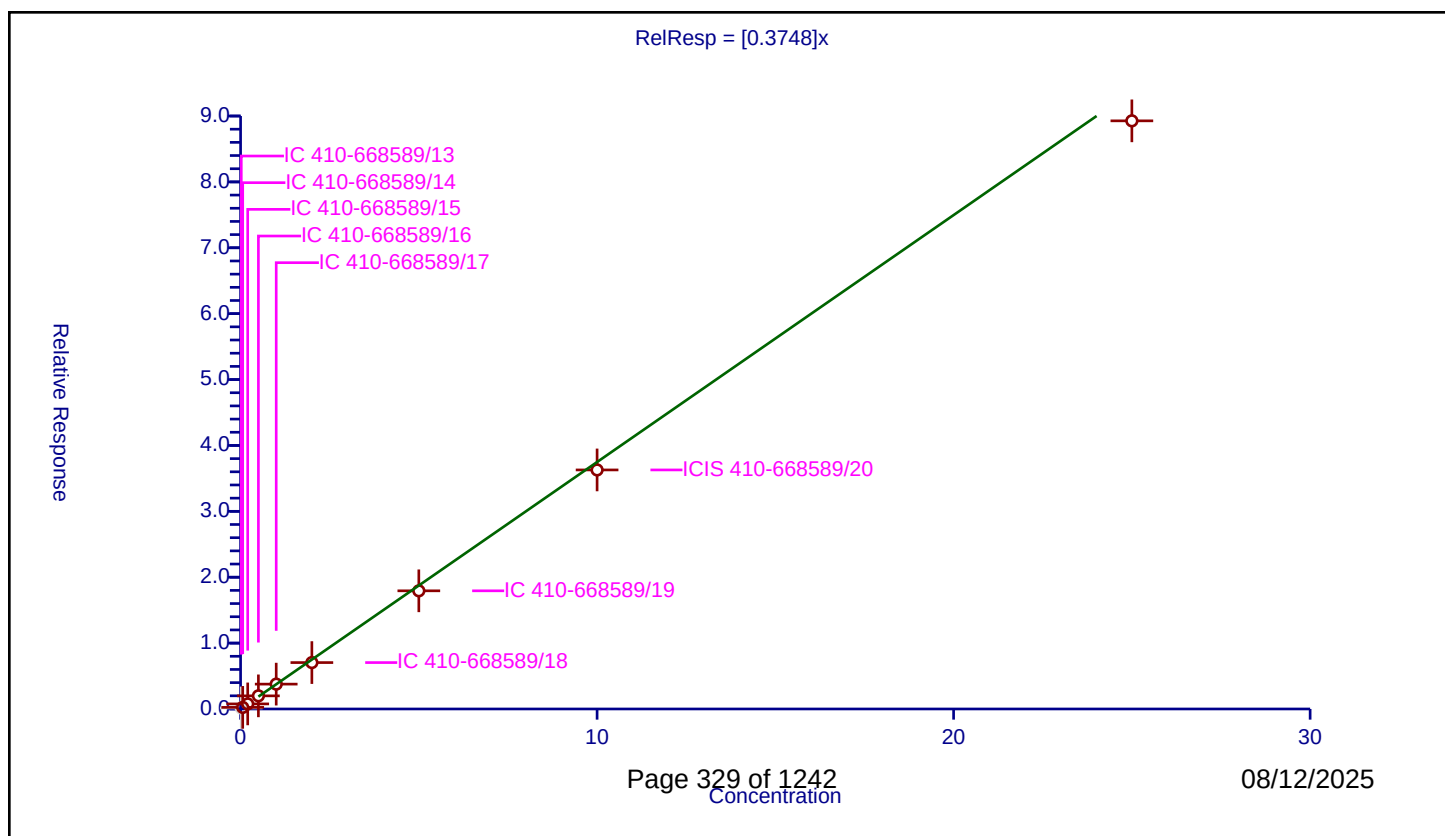
Curve Coefficients

Intercept: 0
Slope: 0.3748

Error Coefficients

Relative Standard Deviation: 5.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.01613	10.0	1832045.0	0.806476	N
2	IC 410-668589/14	0.06	0.024371	10.0	1831280.0	0.406182	Y
3	IC 410-668589/15	0.2	0.077077	10.0	1849831.0	0.385387	Y
4	IC 410-668589/16	0.5	0.199355	10.0	1860146.0	0.398711	Y
5	IC 410-668589/17	1.0	0.377549	10.0	1893953.0	0.377549	Y
6	IC 410-668589/18	2.0	0.704371	10.0	1918847.0	0.352185	Y
7	IC 410-668589/19	5.0	1.793597	10.0	1935362.0	0.358719	Y
8	ICIS 410-668589/20	10.0	3.628306	10.0	1961552.0	0.362831	Y
9	IC 410-668589/21	25.0	8.926577	10.0	1984911.0	0.357063	Y



Calibration

/ Acrolein

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

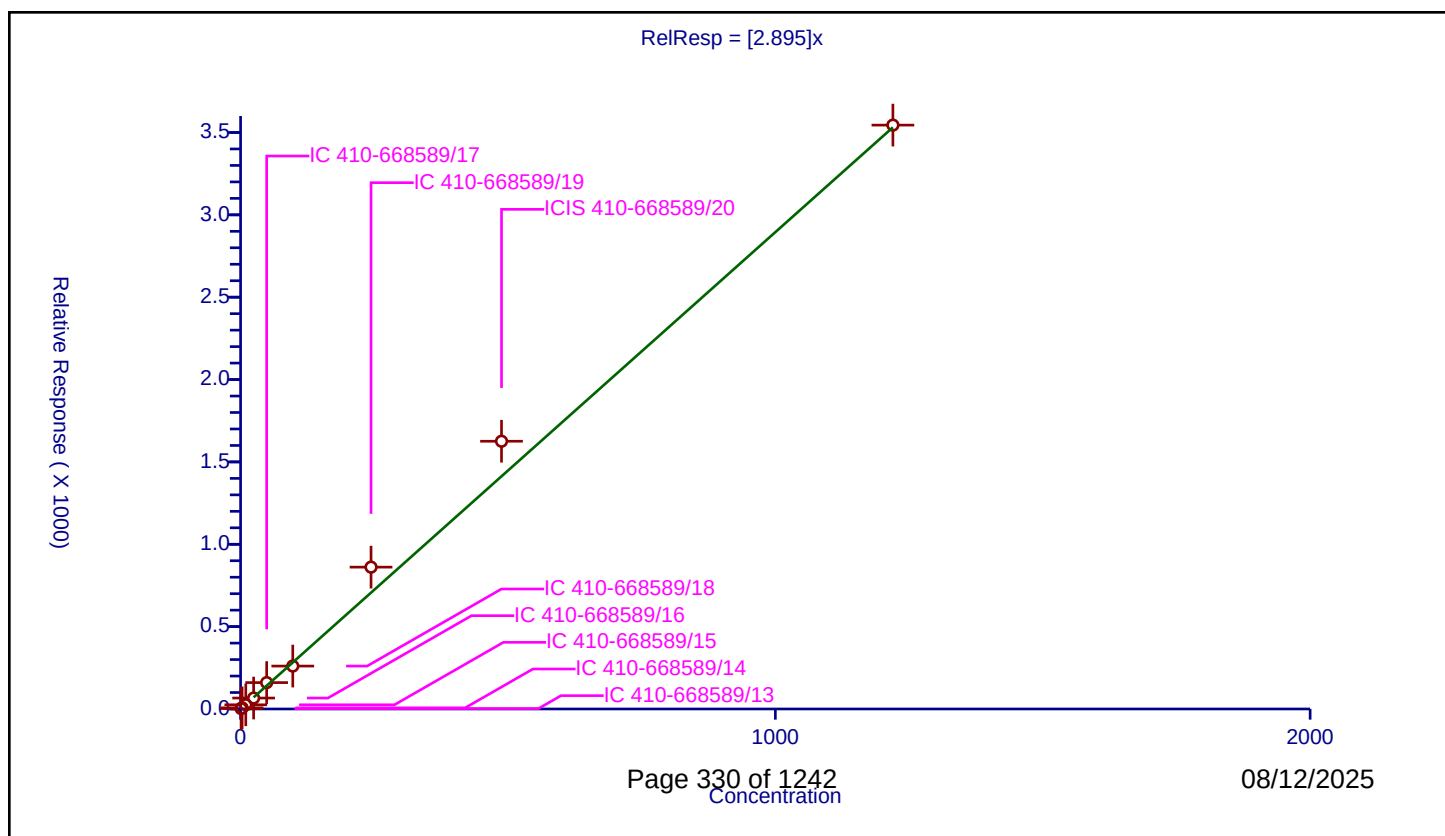
Curve Coefficients

Intercept: 0
Slope: 2.895

Error Coefficients

Relative Standard Deviation: 13.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.97588	2.575177	50.0	73626.0	2.638824	Y
2	IC 410-668589/14	2.927641	6.917612	50.0	80230.0	2.362862	Y
3	IC 410-668589/15	9.758805	25.437731	50.0	83156.0	2.606644	Y
4	IC 410-668589/16	24.397012	66.53503	50.0	72295.0	2.727179	Y
5	IC 410-668589/17	48.794025	160.119553	50.0	64825.0	3.28154	Y
6	IC 410-668589/18	97.588049	260.601347	50.0	87437.0	2.670423	Y
7	IC 410-668589/19	243.970123	861.155963	50.0	71966.0	3.52976	Y
8	ICIS 410-668589/20	487.940246	1625.540052	50.0	75826.0	3.331433	Y
9	IC 410-668589/21	1219.850614	3544.751385	50.0	82517.0	2.90589	Y



Calibration

/ 1,1-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

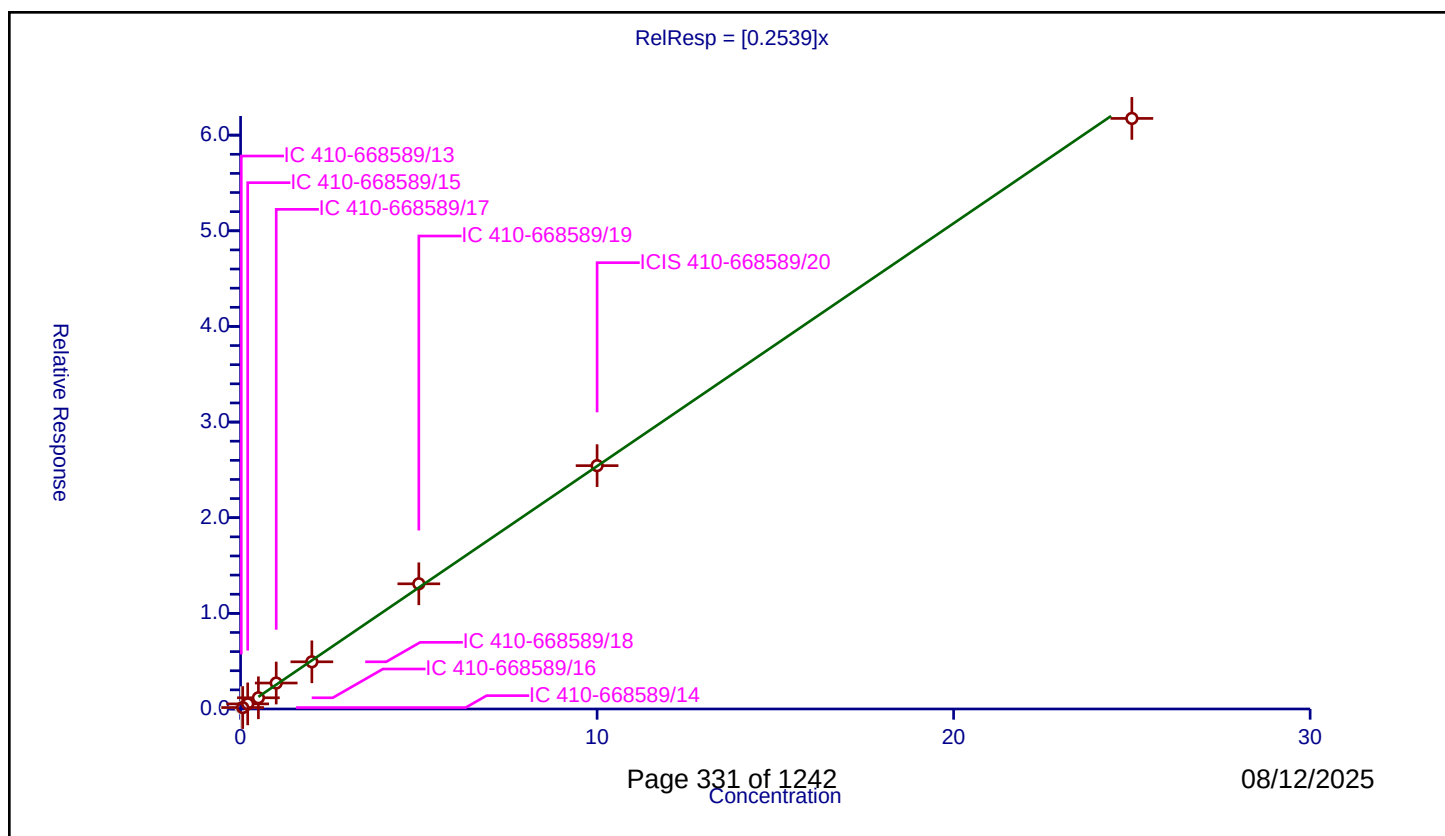
Curve Coefficients

Intercept: 0
Slope: 0.2539

Error Coefficients

Relative Standard Deviation: 4.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.013226	10.0	1832045.0	0.661283	N
2	IC 410-668589/14	0.06	0.014913	10.0	1831280.0	0.248551	Y
3	IC 410-668589/15	0.2	0.053389	10.0	1849831.0	0.266943	Y
4	IC 410-668589/16	0.5	0.117249	10.0	1860146.0	0.234498	Y
5	IC 410-668589/17	1.0	0.271316	10.0	1893953.0	0.271316	Y
6	IC 410-668589/18	2.0	0.493463	10.0	1918847.0	0.246732	Y
7	IC 410-668589/19	5.0	1.308928	10.0	1935362.0	0.261786	Y
8	ICIS 410-668589/20	10.0	2.544251	10.0	1961552.0	0.254425	Y
9	IC 410-668589/21	25.0	6.174846	10.0	1984911.0	0.246994	Y



Calibration

/ Acetone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

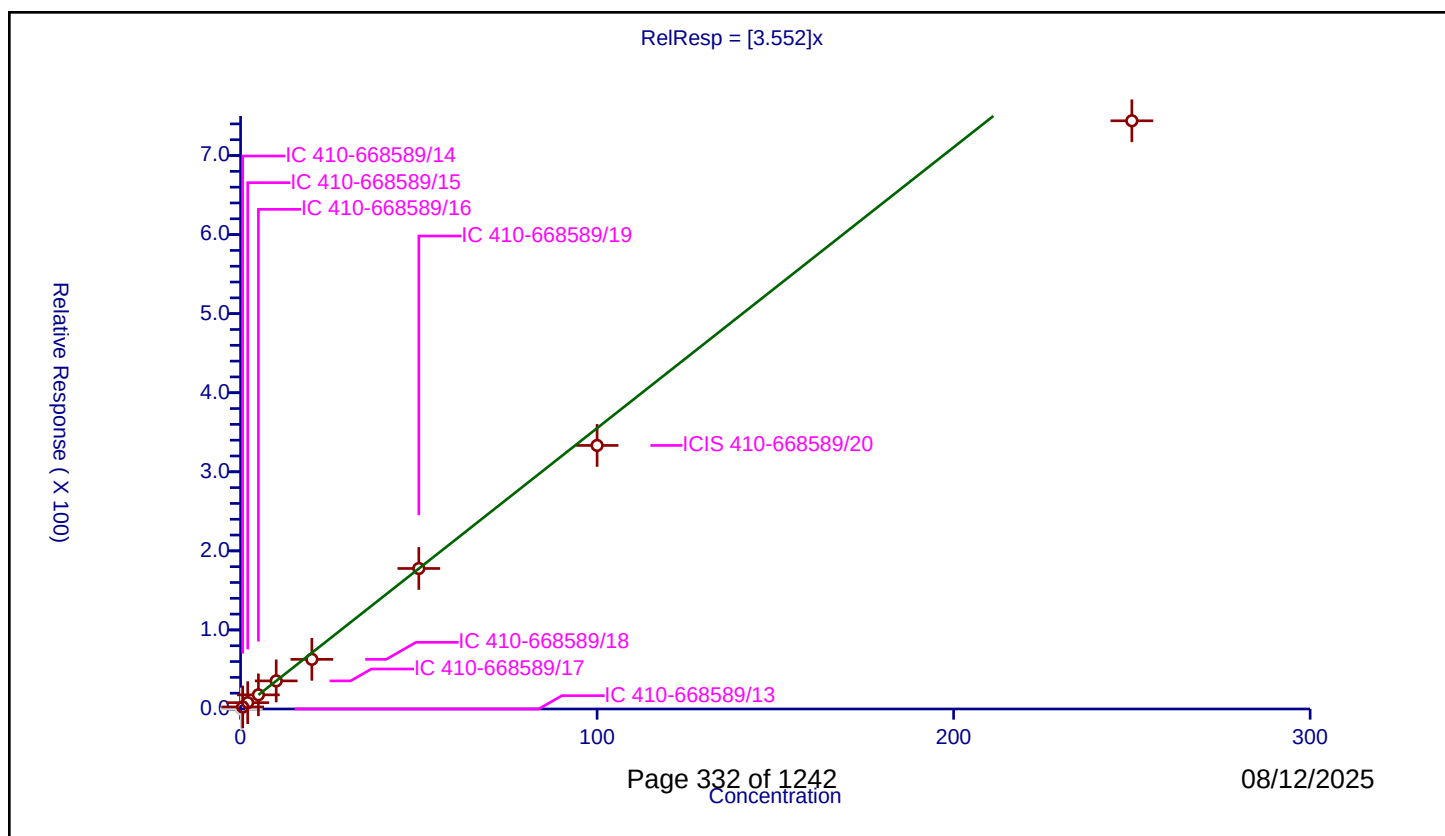
Curve Coefficients

Intercept: 0
Slope: 3.552

Error Coefficients

Relative Standard Deviation: 12.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.6	2.571357	50.0	80230.0	4.285596	Y
3	IC 410-668589/15	2.0	7.996416	50.0	83156.0	3.998208	Y
4	IC 410-668589/16	5.0	17.89197	50.0	72295.0	3.578394	Y
5	IC 410-668589/17	10.0	35.51639	50.0	64825.0	3.551639	Y
6	IC 410-668589/18	20.0	62.784634	50.0	87437.0	3.139232	Y
7	IC 410-668589/19	50.0	177.714476	50.0	71966.0	3.55429	Y
8	ICIS 410-668589/20	100.0	333.338169	50.0	75826.0	3.333382	Y
9	IC 410-668589/21	250.0	743.96185	50.0	82517.0	2.975847	Y



Calibration

/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

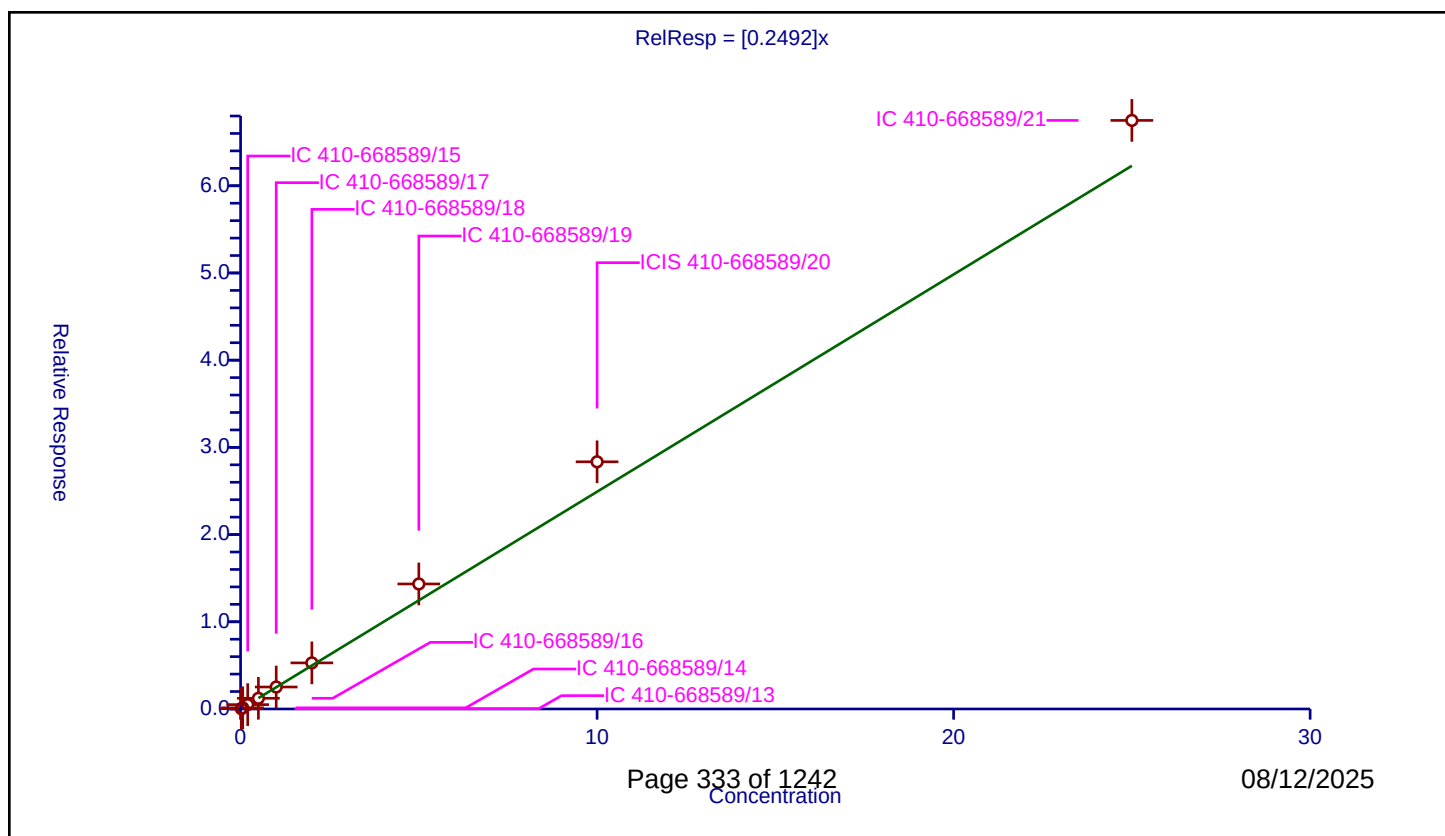
Curve Coefficients

Intercept: 0
Slope: 0.2492

Error Coefficients

Relative Standard Deviation: 14.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.003324	10.0	1832045.0	0.166208	Y
2	IC 410-668589/14	0.06	0.013406	10.0	1831280.0	0.223432	Y
3	IC 410-668589/15	0.2	0.050118	10.0	1849831.0	0.25059	Y
4	IC 410-668589/16	0.5	0.122786	10.0	1860146.0	0.245572	Y
5	IC 410-668589/17	1.0	0.252224	10.0	1893953.0	0.252224	Y
6	IC 410-668589/18	2.0	0.528437	10.0	1918847.0	0.264219	Y
7	IC 410-668589/19	5.0	1.433644	10.0	1935362.0	0.286729	Y
8	ICIS 410-668589/20	10.0	2.834623	10.0	1961552.0	0.283462	Y
9	IC 410-668589/21	25.0	6.749612	10.0	1984911.0	0.269984	Y



Calibration

/ Iodomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

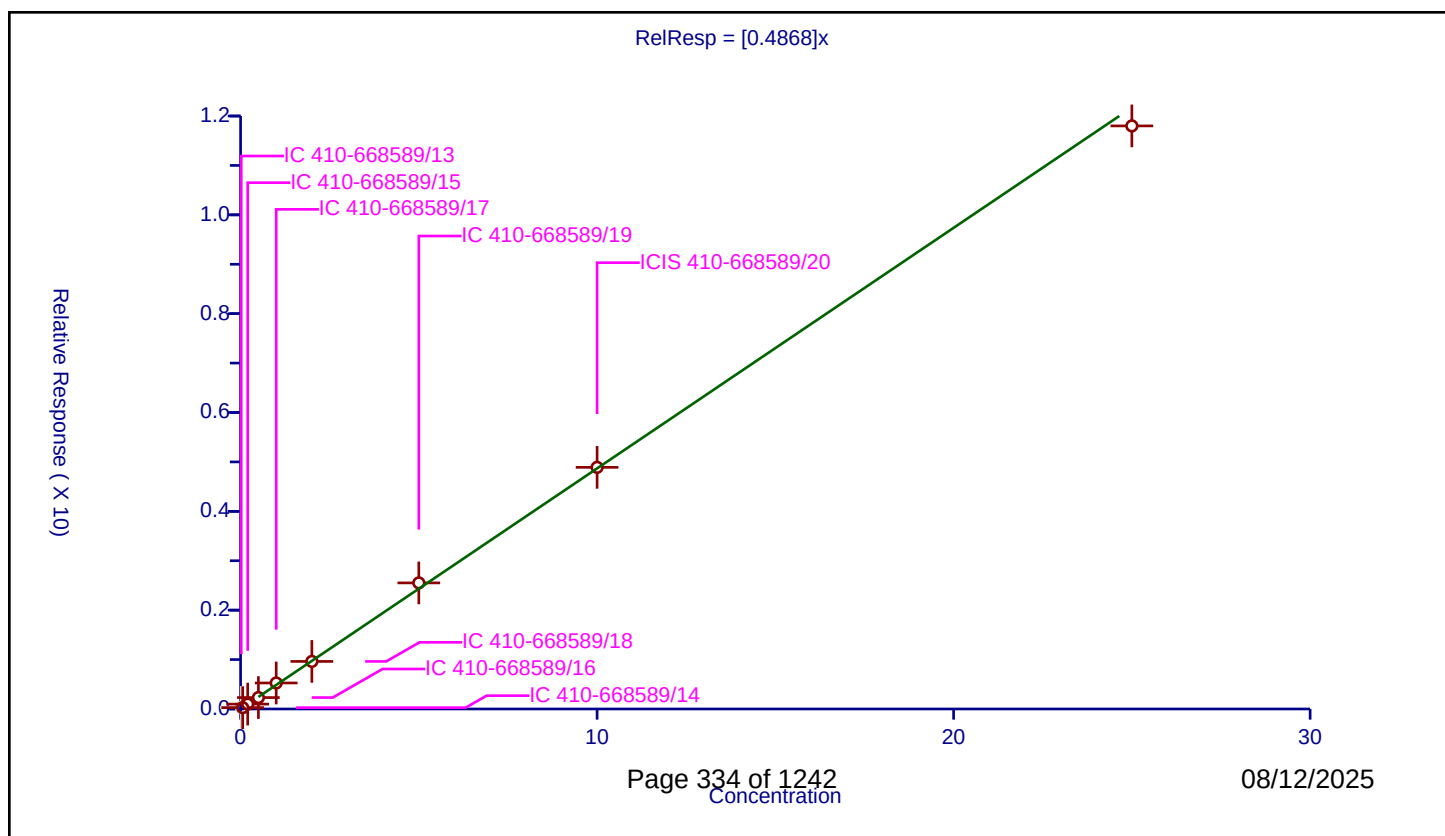
Curve Coefficients

Intercept: 0
Slope: 0.4868

Error Coefficients

Relative Standard Deviation: 4.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.032188	10.0	1832045.0	1.609404	N
2	IC 410-668589/14	0.06	0.027489	10.0	1831280.0	0.458149	Y
3	IC 410-668589/15	0.2	0.099096	10.0	1849831.0	0.495478	Y
4	IC 410-668589/16	0.5	0.231052	10.0	1860146.0	0.462104	Y
5	IC 410-668589/17	1.0	0.52656	10.0	1893953.0	0.52656	Y
6	IC 410-668589/18	2.0	0.962317	10.0	1918847.0	0.481159	Y
7	IC 410-668589/19	5.0	2.551719	10.0	1935362.0	0.510344	Y
8	ICIS 410-668589/20	10.0	4.889904	10.0	1961552.0	0.48899	Y
9	IC 410-668589/21	25.0	11.799925	10.0	1984911.0	0.471997	Y



Calibration

/ Ethyl bromide

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

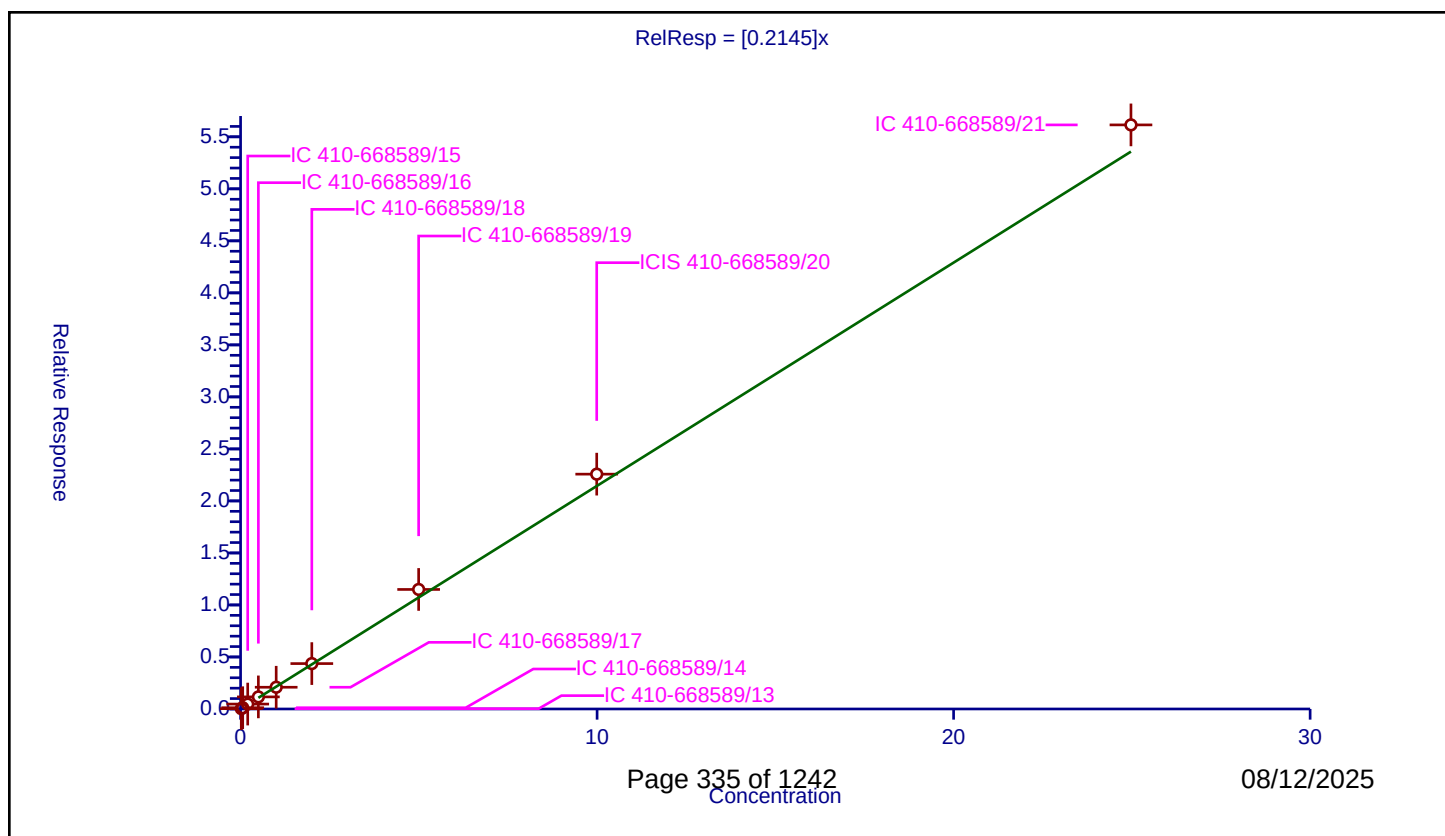
Curve Coefficients

Intercept: 0
Slope: 0.2145

Error Coefficients

Relative Standard Deviation: 12.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.01998	0.002991	10.0	1832045.0	0.149713	Y
2	IC 410-668589/14	0.059939	0.012177	10.0	1831280.0	0.203163	Y
3	IC 410-668589/15	0.199795	0.047269	10.0	1849831.0	0.236588	Y
4	IC 410-668589/16	0.499488	0.116222	10.0	1860146.0	0.232682	Y
5	IC 410-668589/17	0.998976	0.209129	10.0	1893953.0	0.209343	Y
6	IC 410-668589/18	1.997952	0.43645	10.0	1918847.0	0.218448	Y
7	IC 410-668589/19	4.99488	1.149036	10.0	1935362.0	0.230043	Y
8	ICIS 410-668589/20	9.98976	2.257513	10.0	1961552.0	0.225983	Y
9	IC 410-668589/21	24.9744	5.614665	10.0	1984911.0	0.224817	Y



Calibration

/ Carbon disulfide

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

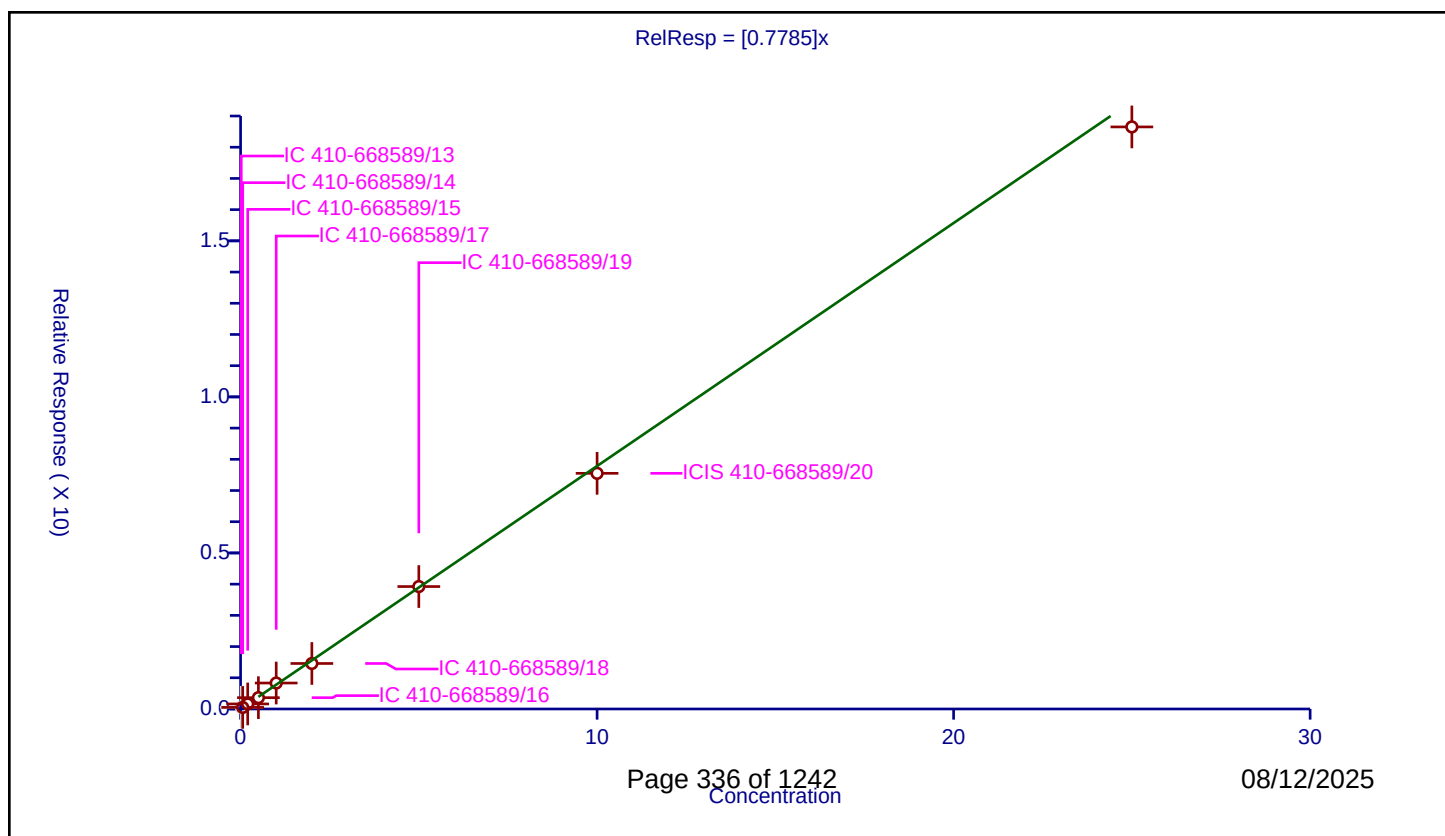
Curve Coefficients

Intercept: 0
Slope: 0.7785

Error Coefficients

Relative Standard Deviation: 6.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.055124	10.0	1832045.0	2.75621	N
2	IC 410-668589/14	0.06	0.050735	10.0	1831280.0	0.845583	Y
3	IC 410-668589/15	0.2	0.161988	10.0	1849831.0	0.809939	Y
4	IC 410-668589/16	0.5	0.363052	10.0	1860146.0	0.726104	Y
5	IC 410-668589/17	1.0	0.831657	10.0	1893953.0	0.831657	Y
6	IC 410-668589/18	2.0	1.458397	10.0	1918847.0	0.729198	Y
7	IC 410-668589/19	5.0	3.923013	10.0	1935362.0	0.784603	Y
8	ICIS 410-668589/20	10.0	7.551296	10.0	1961552.0	0.75513	Y
9	IC 410-668589/21	25.0	18.650766	10.0	1984911.0	0.746031	Y



Calibration

/ Methyl acetate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

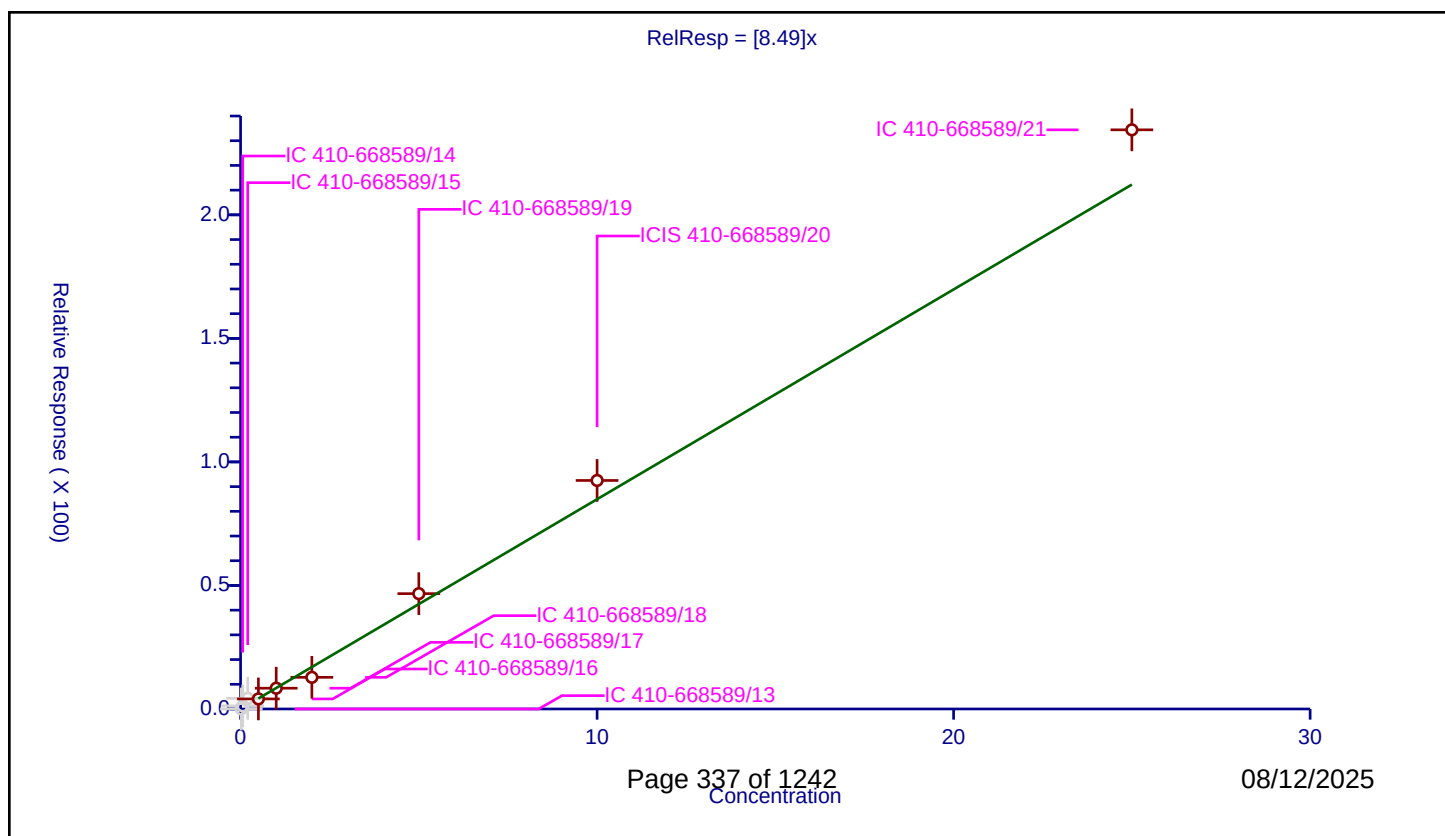
Curve Coefficients

Intercept: 0
Slope: 8.49

Error Coefficients

Relative Standard Deviation: 13.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.06	1.267606	50.0	80230.0	21.126761	N
3	IC 410-668589/15	0.2	4.29975	50.0	83156.0	21.498749	N
4	IC 410-668589/16	0.5	4.077737	50.0	72295.0	8.155474	Y
5	IC 410-668589/17	1.0	8.416506	50.0	64825.0	8.416506	Y
6	IC 410-668589/18	2.0	12.814369	50.0	87437.0	6.407185	Y
7	IC 410-668589/19	5.0	46.681766	50.0	71966.0	9.336353	Y
8	ICIS 410-668589/20	10.0	92.493999	50.0	75826.0	9.2494	Y
9	IC 410-668589/21	25.0	234.412303	50.0	82517.0	9.376492	Y



Calibration

/ 3-Chloro-1-propene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

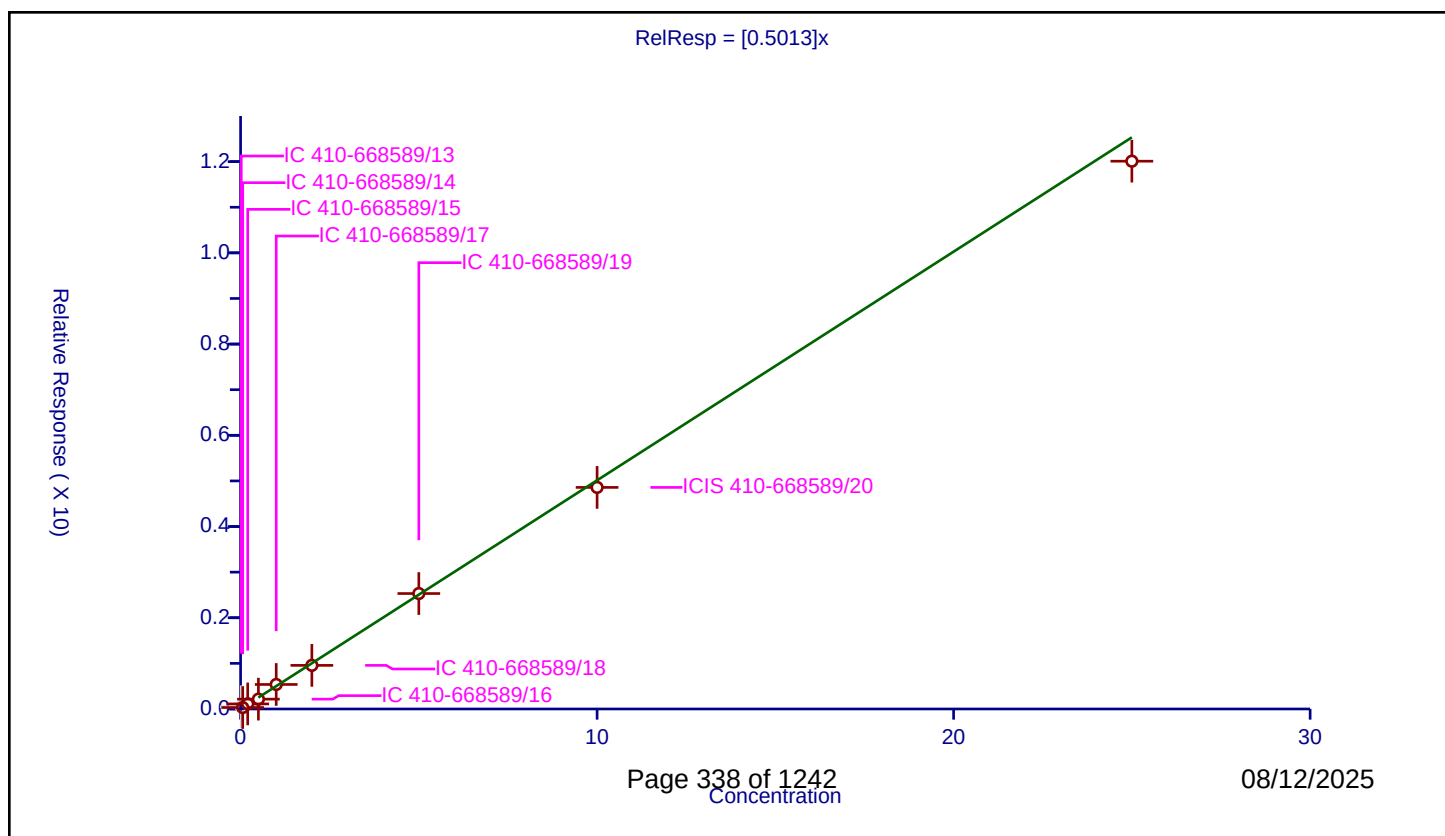
Curve Coefficients

Intercept: 0
Slope: 0.5013

Error Coefficients

Relative Standard Deviation: 8.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.047488	10.0	1832045.0	2.374396	N
2	IC 410-668589/14	0.06	0.031983	10.0	1831280.0	0.533052	Y
3	IC 410-668589/15	0.2	0.111362	10.0	1849831.0	0.556808	Y
4	IC 410-668589/16	0.5	0.216279	10.0	1860146.0	0.432557	Y
5	IC 410-668589/17	1.0	0.537495	10.0	1893953.0	0.537495	Y
6	IC 410-668589/18	2.0	0.956038	10.0	1918847.0	0.478019	Y
7	IC 410-668589/19	5.0	2.53117	10.0	1935362.0	0.506234	Y
8	ICIS 410-668589/20	10.0	4.858061	10.0	1961552.0	0.485806	Y
9	IC 410-668589/21	25.0	12.00942	10.0	1984911.0	0.480377	Y



Calibration

/ Methylene Chloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

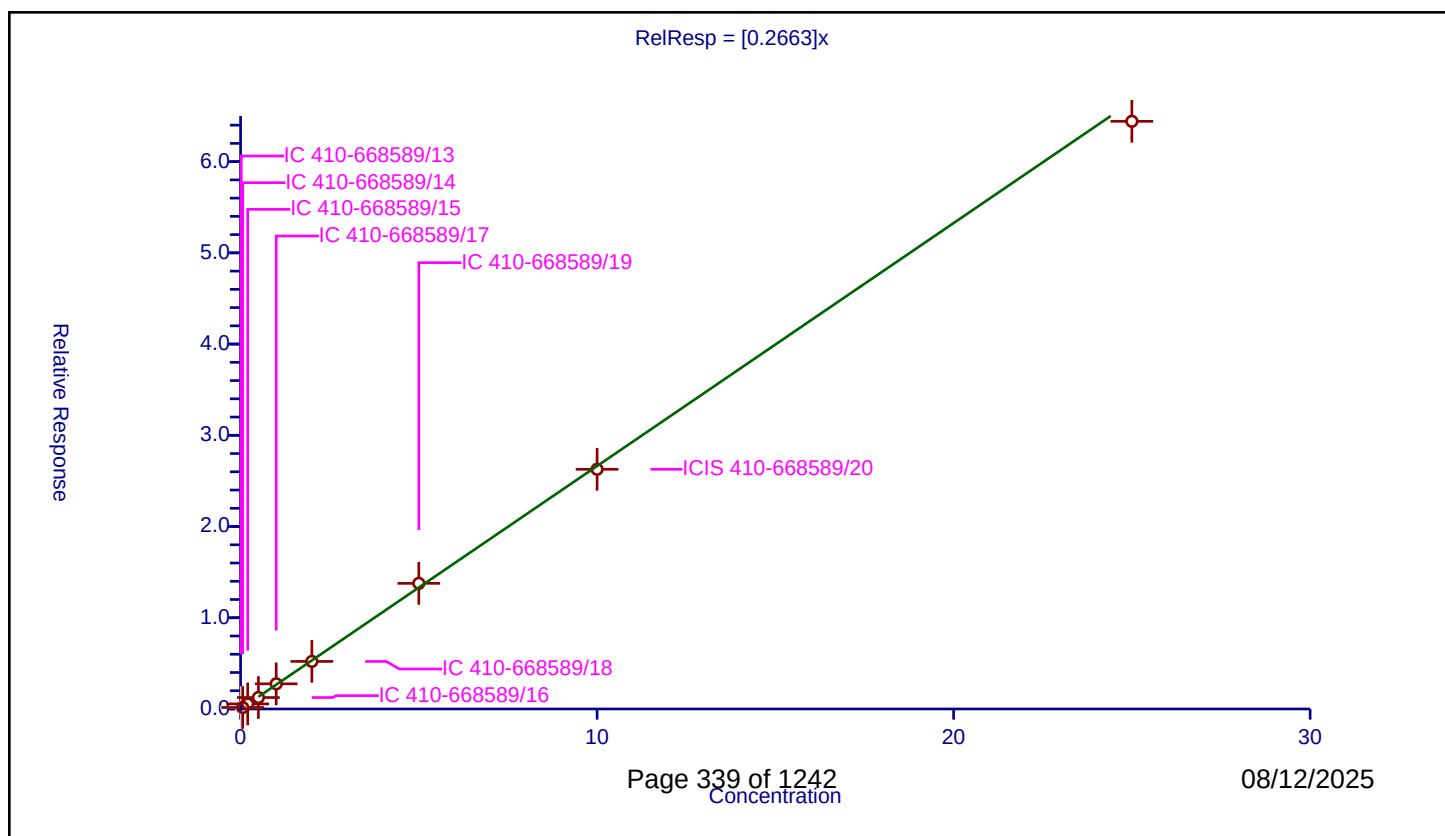
Curve Coefficients

Intercept: 0
Slope: 0.2663

Error Coefficients

Relative Standard Deviation: 3.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0153	10.0	1832045.0	0.764992	N
2	IC 410-668589/14	0.06	0.016153	10.0	1831280.0	0.269211	Y
3	IC 410-668589/15	0.2	0.055578	10.0	1849831.0	0.27789	Y
4	IC 410-668589/16	0.5	0.125517	10.0	1860146.0	0.251034	Y
5	IC 410-668589/17	1.0	0.275904	10.0	1893953.0	0.275904	Y
6	IC 410-668589/18	2.0	0.521344	10.0	1918847.0	0.260672	Y
7	IC 410-668589/19	5.0	1.377107	10.0	1935362.0	0.275421	Y
8	ICIS 410-668589/20	10.0	2.627399	10.0	1961552.0	0.26274	Y
9	IC 410-668589/21	25.0	6.441916	10.0	1984911.0	0.257677	Y



Calibration

/ 2-Methyl-2-propanol

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

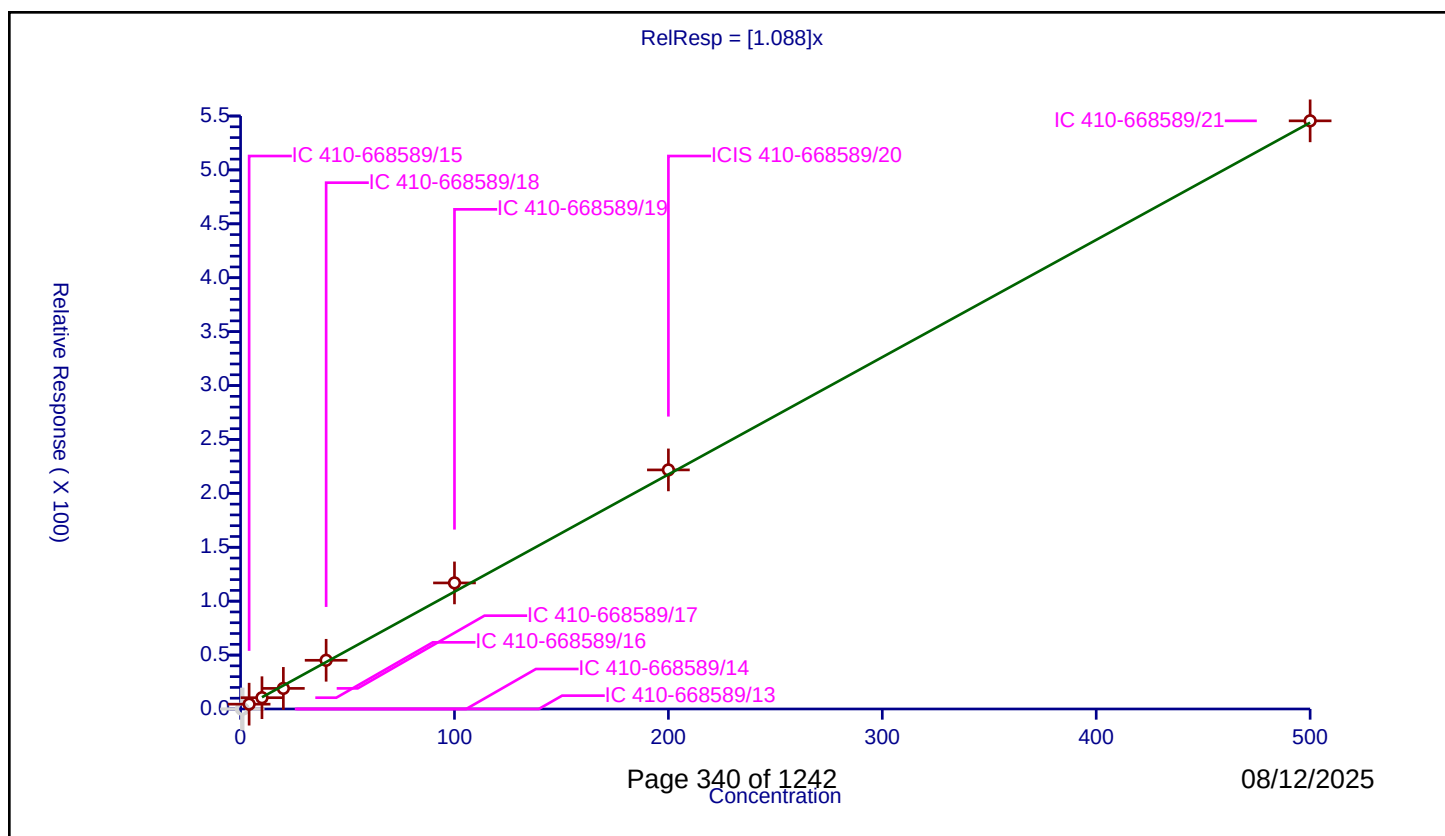
Curve Coefficients

Intercept: 0
Slope: 1.088

Error Coefficients

Relative Standard Deviation: 6.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.4	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	1.2	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	4.0	4.455481	50.0	83156.0	1.11387	Y
4	IC 410-668589/16	10.0	10.467529	50.0	72295.0	1.046753	Y
5	IC 410-668589/17	20.0	19.095256	50.0	64825.0	0.954763	Y
6	IC 410-668589/18	40.0	45.186248	50.0	87437.0	1.129656	Y
7	IC 410-668589/19	100.0	116.93647	50.0	71966.0	1.169365	Y
8	ICIS 410-668589/20	200.0	221.763643	50.0	75826.0	1.108818	Y
9	IC 410-668589/21	500.0	545.523953	50.0	82517.0	1.091048	Y



Calibration

/ Acrylonitrile

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

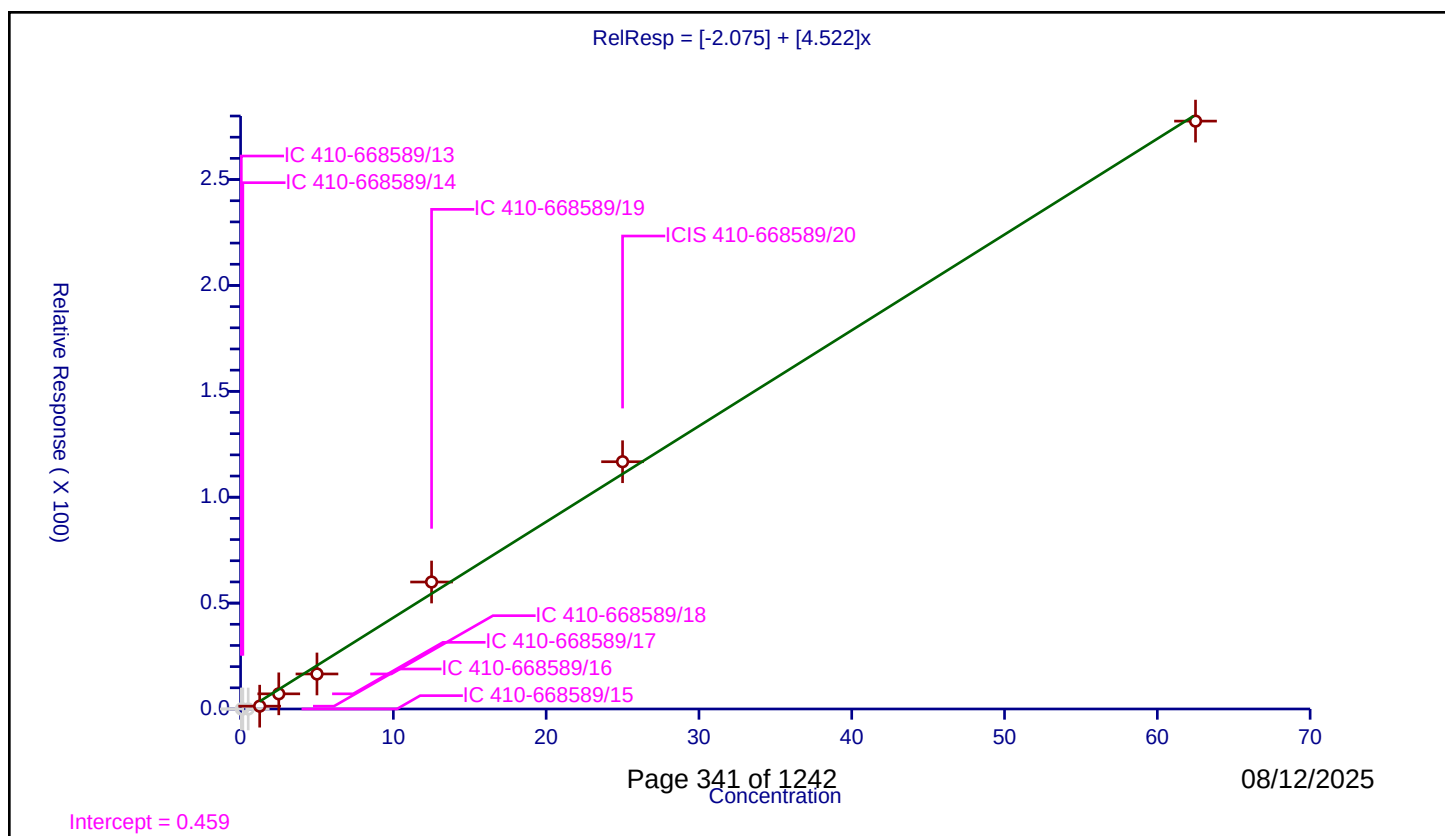
Curve Coefficients

Intercept: -2.075
Slope: 4.522

Error Coefficients

Relative Standard Deviation: 24.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.05	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.15	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	0.5	0.0	50.0	83156.0	0.0	N
4	IC 410-668589/16	1.25	1.330659	50.0	72295.0	1.064527	Y
5	IC 410-668589/17	2.5	7.155418	50.0	64825.0	2.862167	Y
6	IC 410-668589/18	5.0	16.535334	50.0	87437.0	3.307067	Y
7	IC 410-668589/19	12.5	59.960954	50.0	71966.0	4.796876	Y
8	ICIS 410-668589/20	25.0	116.762061	50.0	75826.0	4.670482	Y
9	IC 410-668589/21	62.5	277.595526	50.0	82517.0	4.441528	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

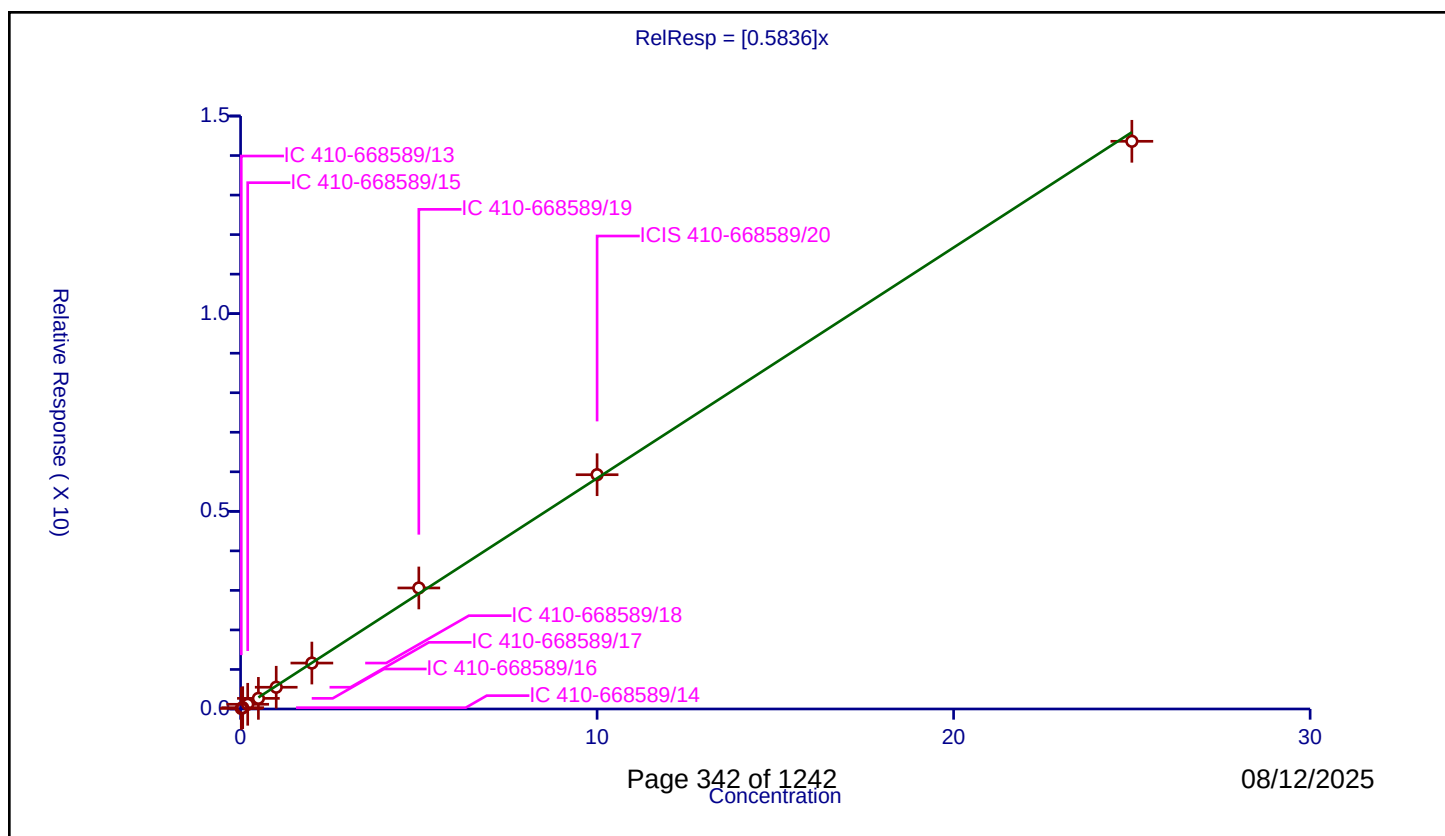
Curve Coefficients

Intercept: 0
Slope: 0.5836

Error Coefficients

Relative Standard Deviation: 5.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.01298	10.0	1832045.0	0.649002	Y
2	IC 410-668589/14	0.06	0.033605	10.0	1831280.0	0.560082	Y
3	IC 410-668589/15	0.2	0.118941	10.0	1849831.0	0.594703	Y
4	IC 410-668589/16	0.5	0.269011	10.0	1860146.0	0.538022	Y
5	IC 410-668589/17	1.0	0.550167	10.0	1893953.0	0.550167	Y
6	IC 410-668589/18	2.0	1.162135	10.0	1918847.0	0.581068	Y
7	IC 410-668589/19	5.0	3.061665	10.0	1935362.0	0.612333	Y
8	ICIS 410-668589/20	10.0	5.92646	10.0	1961552.0	0.592646	Y
9	IC 410-668589/21	25.0	14.36082	10.0	1984911.0	0.574433	Y



Calibration

/ trans-1,2-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

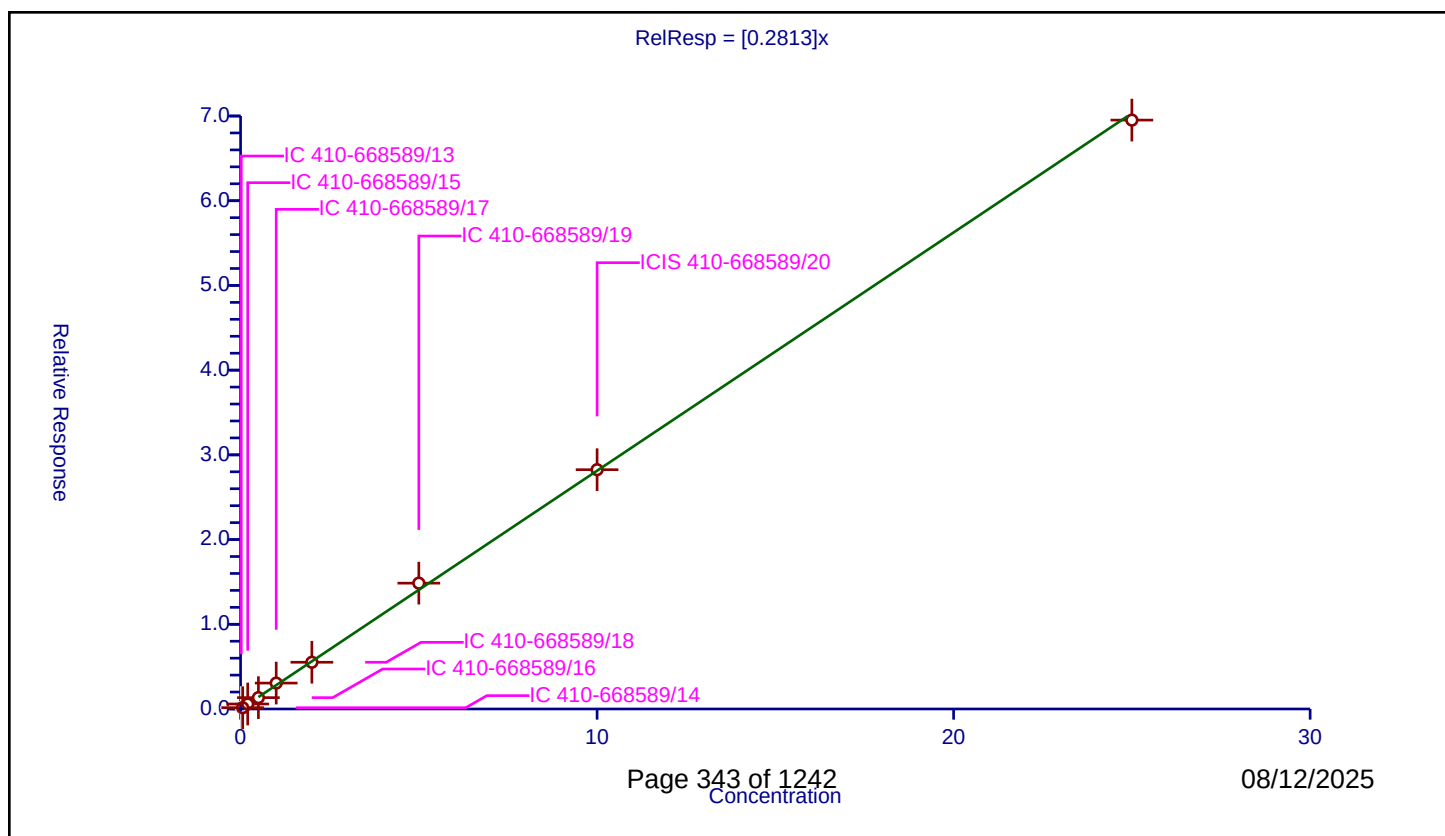
Curve Coefficients

Intercept: 0
Slope: 0.2813

Error Coefficients

Relative Standard Deviation: 6.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.01715	10.0	1832045.0	0.857512	N
2	IC 410-668589/14	0.06	0.014919	10.0	1831280.0	0.248642	Y
3	IC 410-668589/15	0.2	0.058876	10.0	1849831.0	0.294378	Y
4	IC 410-668589/16	0.5	0.134011	10.0	1860146.0	0.268022	Y
5	IC 410-668589/17	1.0	0.30571	10.0	1893953.0	0.30571	Y
6	IC 410-668589/18	2.0	0.551571	10.0	1918847.0	0.275785	Y
7	IC 410-668589/19	5.0	1.485526	10.0	1935362.0	0.297105	Y
8	ICIS 410-668589/20	10.0	2.824835	10.0	1961552.0	0.282483	Y
9	IC 410-668589/21	25.0	6.951883	10.0	1984911.0	0.278075	Y



Calibration

/ Hexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

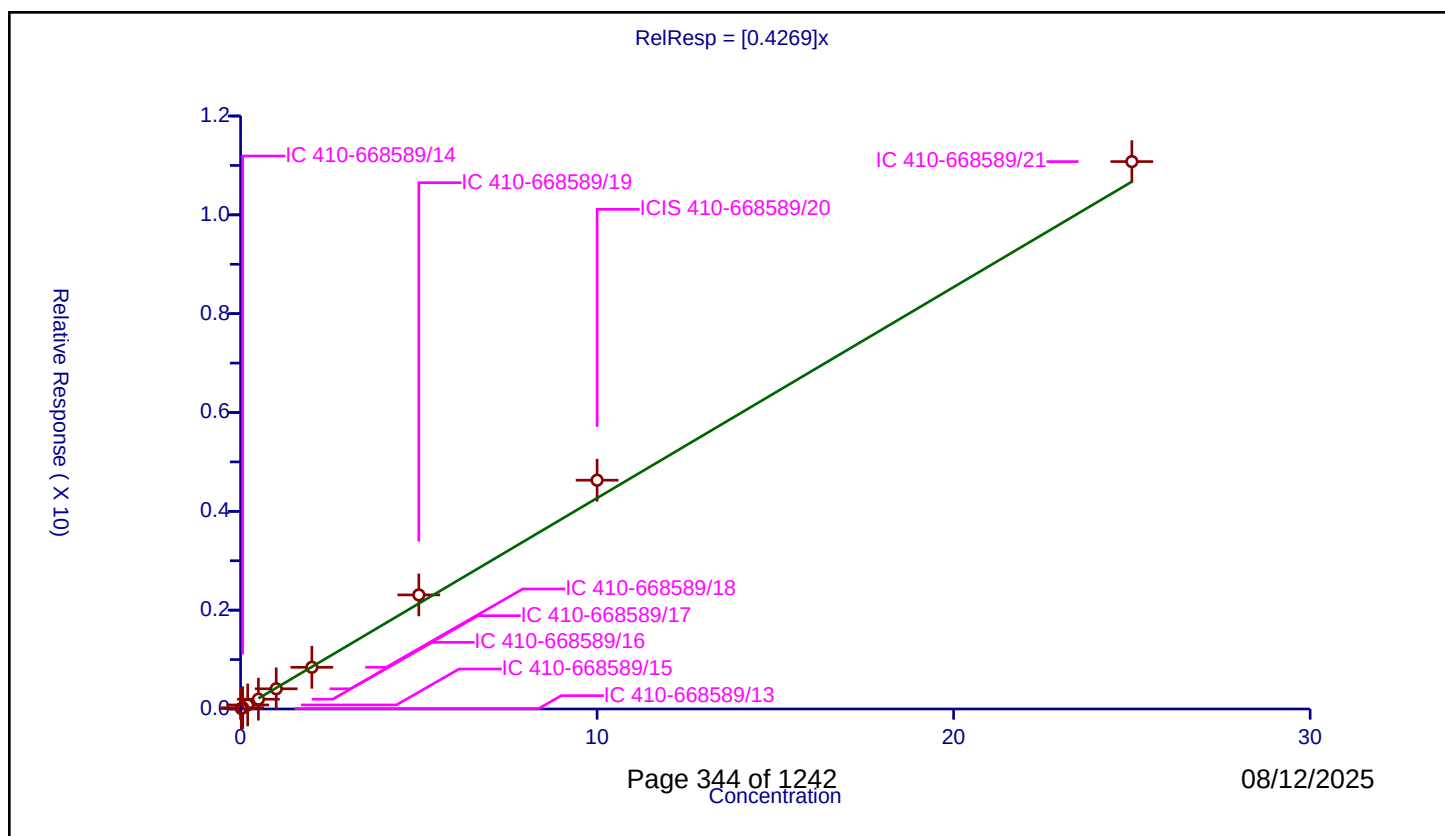
Curve Coefficients

Intercept: 0
Slope: 0.4269

Error Coefficients

Relative Standard Deviation: 5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.008193	10.0	1832045.0	0.409652	Y
2	IC 410-668589/14	0.06	0.025665	10.0	1831280.0	0.427752	Y
3	IC 410-668589/15	0.2	0.081835	10.0	1849831.0	0.409173	Y
4	IC 410-668589/16	0.5	0.198189	10.0	1860146.0	0.396377	Y
5	IC 410-668589/17	1.0	0.409007	10.0	1893953.0	0.409007	Y
6	IC 410-668589/18	2.0	0.84358	10.0	1918847.0	0.42179	Y
7	IC 410-668589/19	5.0	2.308994	10.0	1935362.0	0.461799	Y
8	ICIS 410-668589/20	10.0	4.630114	10.0	1961552.0	0.463011	Y
9	IC 410-668589/21	25.0	11.077807	10.0	1984911.0	0.443112	Y



Calibration

/ 1,1-Dichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

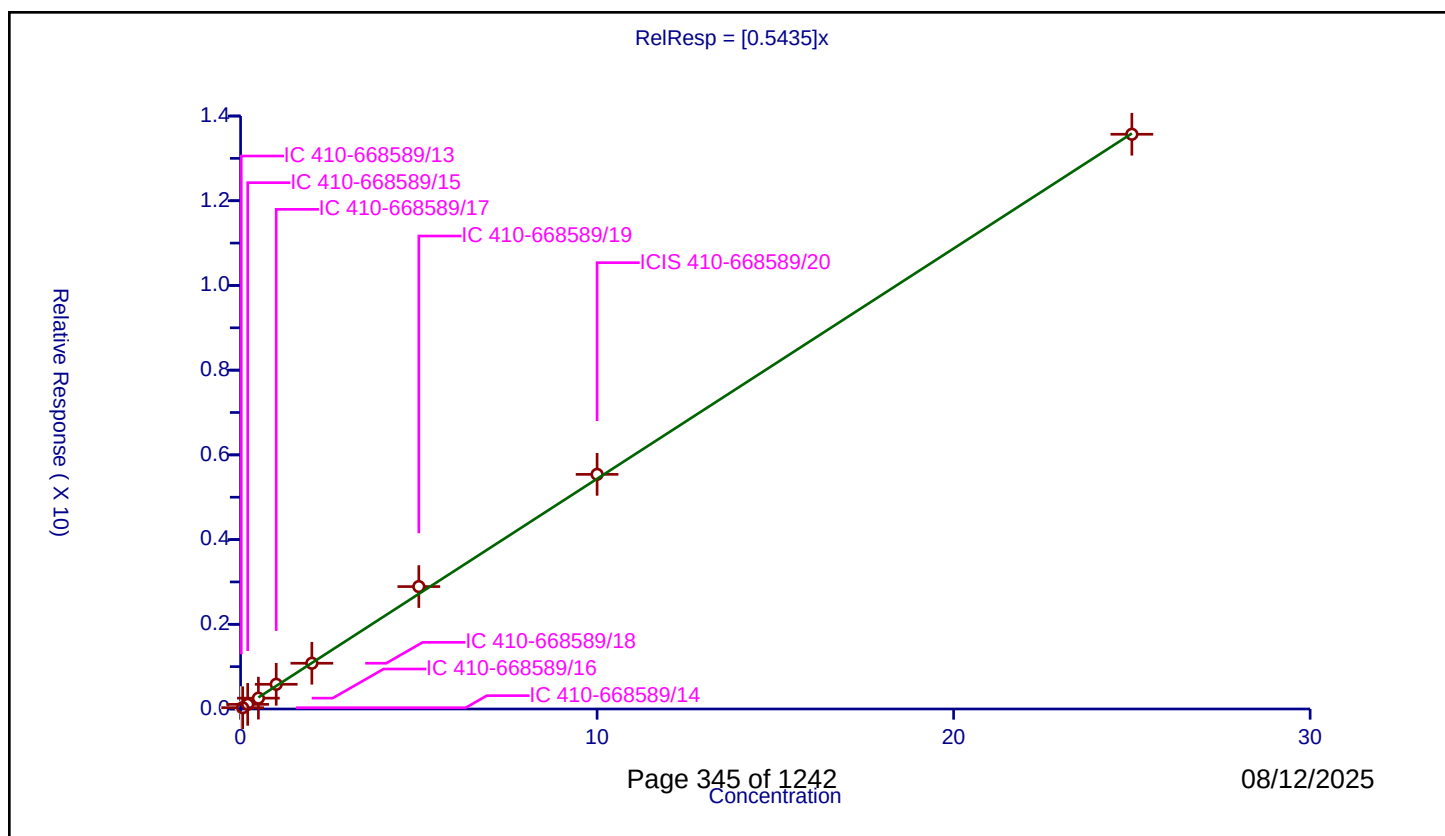
Curve Coefficients

Intercept: 0
Slope: 0.5435

Error Coefficients

Relative Standard Deviation: 5.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.033618	10.0	1832045.0	1.680908	N
2	IC 410-668589/14	0.06	0.029619	10.0	1831280.0	0.493644	Y
3	IC 410-668589/15	0.2	0.10895	10.0	1849831.0	0.544752	Y
4	IC 410-668589/16	0.5	0.255786	10.0	1860146.0	0.511573	Y
5	IC 410-668589/17	1.0	0.583489	10.0	1893953.0	0.583489	Y
6	IC 410-668589/18	2.0	1.080352	10.0	1918847.0	0.540176	Y
7	IC 410-668589/19	5.0	2.890043	10.0	1935362.0	0.578009	Y
8	ICIS 410-668589/20	10.0	5.539313	10.0	1961552.0	0.553931	Y
9	IC 410-668589/21	25.0	13.569208	10.0	1984911.0	0.542768	Y



Calibration

/ Isopropyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

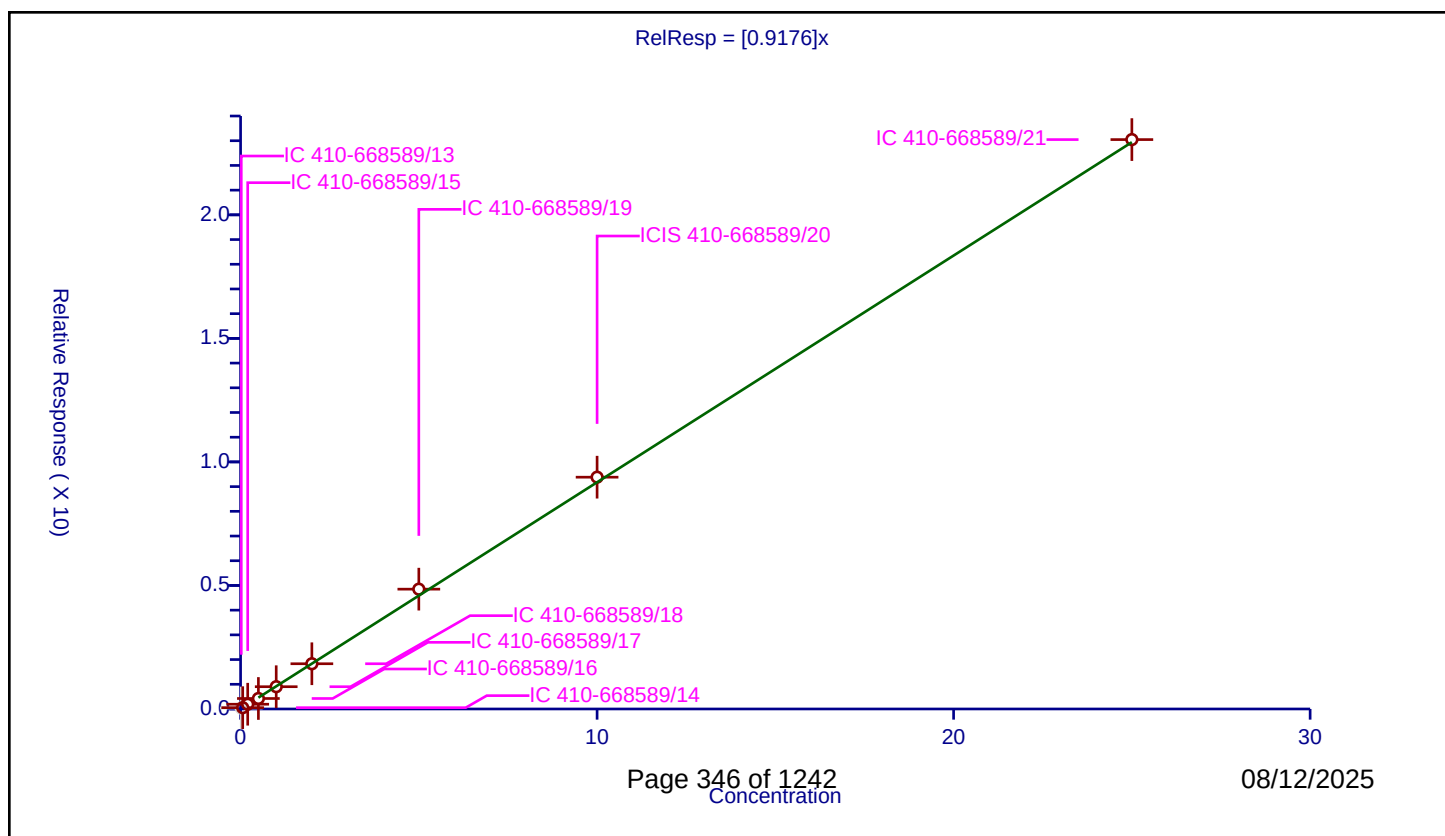
Curve Coefficients

Intercept: 0
Slope: 0.9176

Error Coefficients

Relative Standard Deviation: 4.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.038531	10.0	1832045.0	1.926536	N
2	IC 410-668589/14	0.06	0.052947	10.0	1831280.0	0.882443	Y
3	IC 410-668589/15	0.2	0.192299	10.0	1849831.0	0.961493	Y
4	IC 410-668589/16	0.5	0.424762	10.0	1860146.0	0.849525	Y
5	IC 410-668589/17	1.0	0.901997	10.0	1893953.0	0.901997	Y
6	IC 410-668589/18	2.0	1.830599	10.0	1918847.0	0.9153	Y
7	IC 410-668589/19	5.0	4.849734	10.0	1935362.0	0.969947	Y
8	ICIS 410-668589/20	10.0	9.381943	10.0	1961552.0	0.938194	Y
9	IC 410-668589/21	25.0	23.046222	10.0	1984911.0	0.921849	Y



Calibration

/ 2-Chloro-1,3-butadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

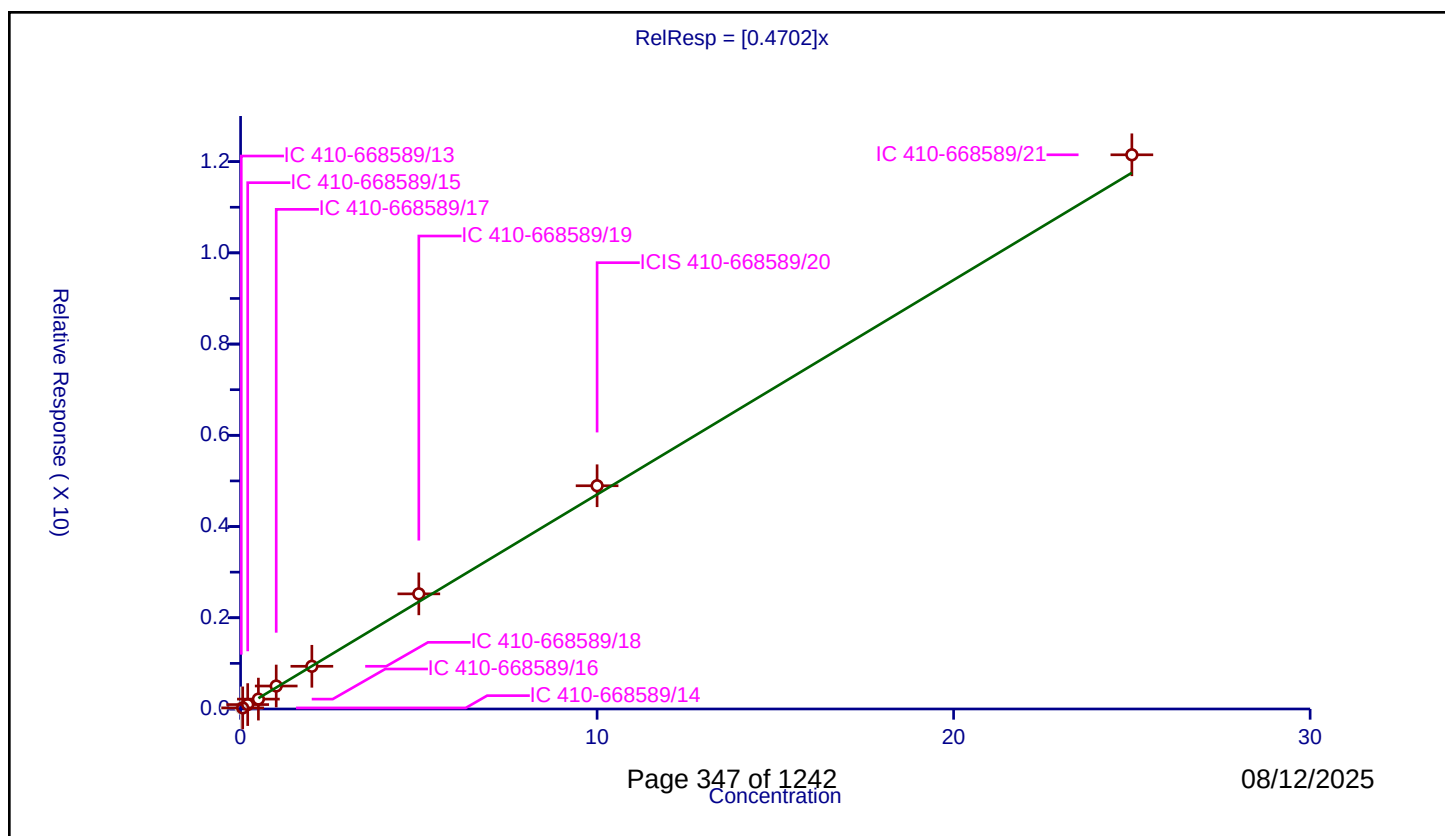
Curve Coefficients

Intercept: 0
Slope: 0.4702

Error Coefficients

Relative Standard Deviation: 8.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.02179	10.0	1832045.0	1.089493	N
2	IC 410-668589/14	0.06	0.023557	10.0	1831280.0	0.392622	Y
3	IC 410-668589/15	0.2	0.096766	10.0	1849831.0	0.483828	Y
4	IC 410-668589/16	0.5	0.216655	10.0	1860146.0	0.43331	Y
5	IC 410-668589/17	1.0	0.503909	10.0	1893953.0	0.503909	Y
6	IC 410-668589/18	2.0	0.936208	10.0	1918847.0	0.468104	Y
7	IC 410-668589/19	5.0	2.524117	10.0	1935362.0	0.504823	Y
8	ICIS 410-668589/20	10.0	4.893916	10.0	1961552.0	0.489392	Y
9	IC 410-668589/21	25.0	12.149724	10.0	1984911.0	0.485989	Y



Calibration

/ Tert-butyl ethyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

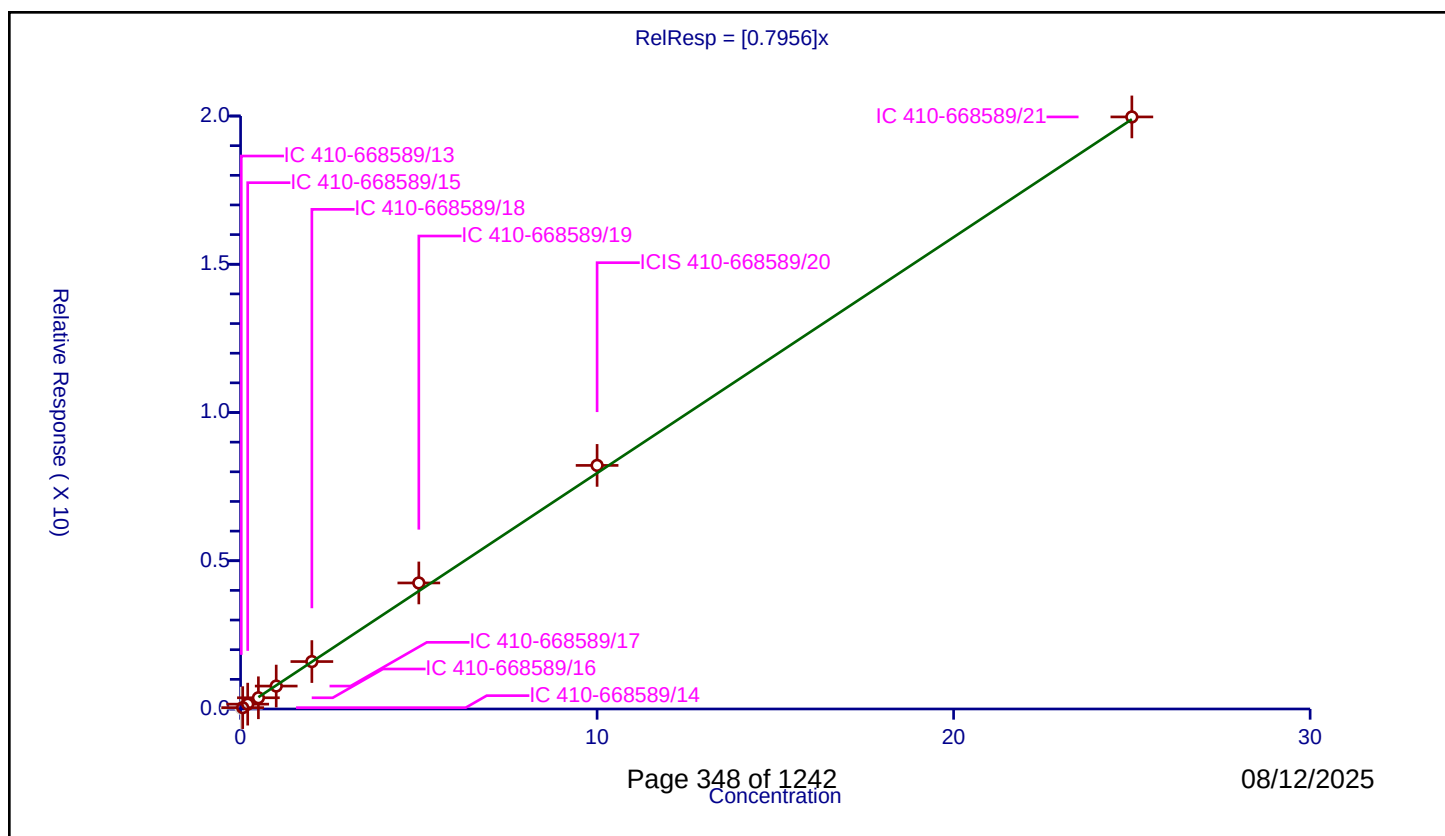
Curve Coefficients

Intercept: 0
Slope: 0.7956

Error Coefficients

Relative Standard Deviation: 4.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.027237	10.0	1832045.0	1.361866	N
2	IC 410-668589/14	0.06	0.045078	10.0	1831280.0	0.751296	Y
3	IC 410-668589/15	0.2	0.162853	10.0	1849831.0	0.814264	Y
4	IC 410-668589/16	0.5	0.378029	10.0	1860146.0	0.756059	Y
5	IC 410-668589/17	1.0	0.773118	10.0	1893953.0	0.773118	Y
6	IC 410-668589/18	2.0	1.599434	10.0	1918847.0	0.799717	Y
7	IC 410-668589/19	5.0	4.25122	10.0	1935362.0	0.850244	Y
8	ICIS 410-668589/20	10.0	8.215535	10.0	1961552.0	0.821554	Y
9	IC 410-668589/21	25.0	19.968966	10.0	1984911.0	0.798759	Y



Calibration

/ 2-Butanone (MEK)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

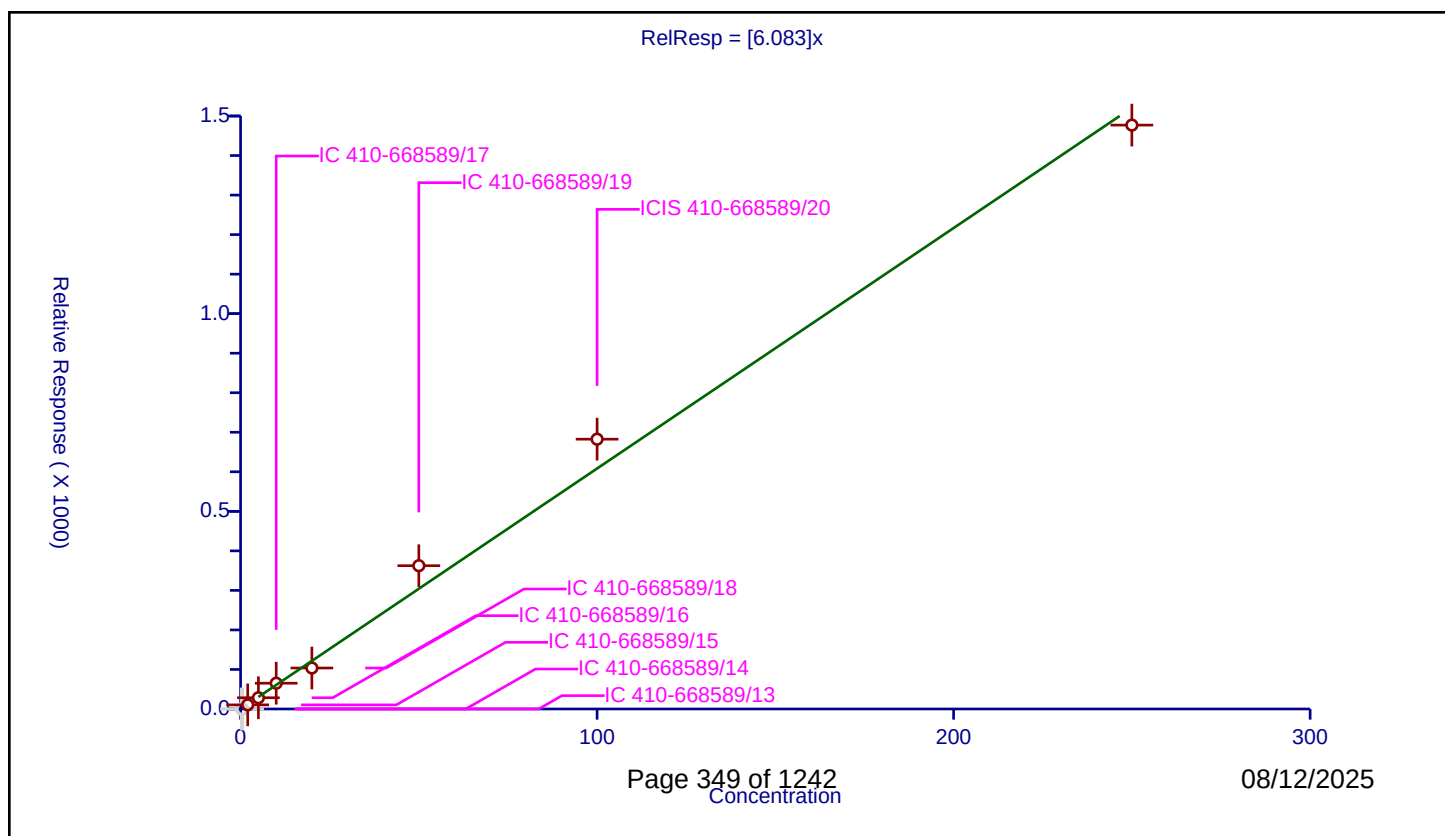
Curve Coefficients

Intercept: 0
Slope: 6.083

Error Coefficients

Relative Standard Deviation: 13.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.6	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	2.0	10.425586	50.0	83156.0	5.212793	Y
4	IC 410-668589/16	5.0	28.399613	50.0	72295.0	5.679923	Y
5	IC 410-668589/17	10.0	65.223293	50.0	64825.0	6.522329	Y
6	IC 410-668589/18	20.0	103.675218	50.0	87437.0	5.183761	Y
7	IC 410-668589/19	50.0	362.466304	50.0	71966.0	7.249326	Y
8	ICIS 410-668589/20	100.0	682.514573	50.0	75826.0	6.825146	Y
9	IC 410-668589/21	250.0	1477.002921	50.0	82517.0	5.908012	Y



Calibration

/ cis-1,2-Dichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

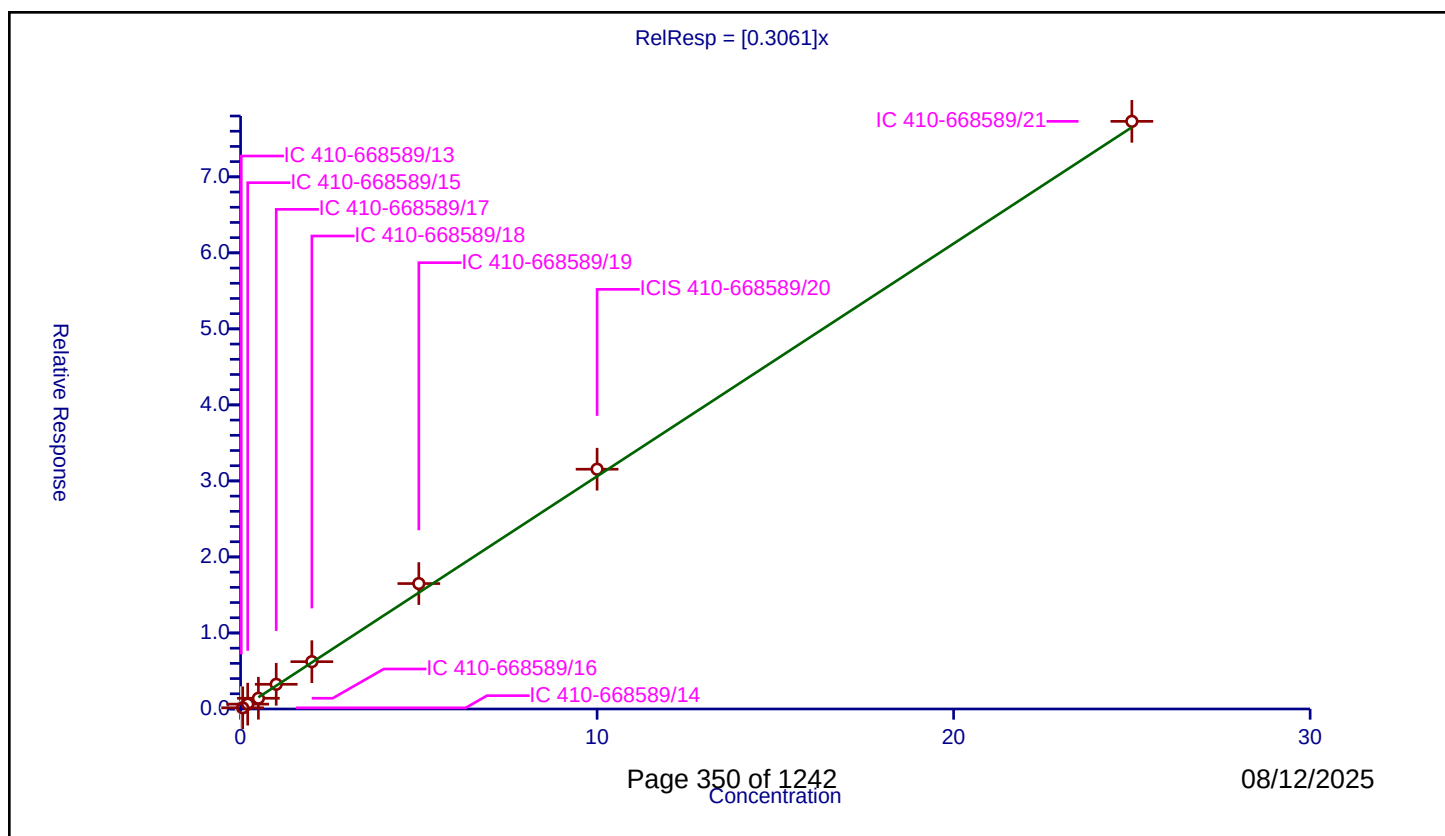
Curve Coefficients

Intercept: 0
Slope: 0.3061

Error Coefficients

Relative Standard Deviation: 8.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.016861	10.0	1832045.0	0.843047	N
2	IC 410-668589/14	0.06	0.01529	10.0	1831280.0	0.254831	Y
3	IC 410-668589/15	0.2	0.064184	10.0	1849831.0	0.320921	Y
4	IC 410-668589/16	0.5	0.141048	10.0	1860146.0	0.282096	Y
5	IC 410-668589/17	1.0	0.325066	10.0	1893953.0	0.325066	Y
6	IC 410-668589/18	2.0	0.622332	10.0	1918847.0	0.311166	Y
7	IC 410-668589/19	5.0	1.649841	10.0	1935362.0	0.329968	Y
8	ICIS 410-668589/20	10.0	3.154094	10.0	1961552.0	0.315409	Y
9	IC 410-668589/21	25.0	7.729858	10.0	1984911.0	0.309194	Y



Calibration

/ 2,2-Dichloropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

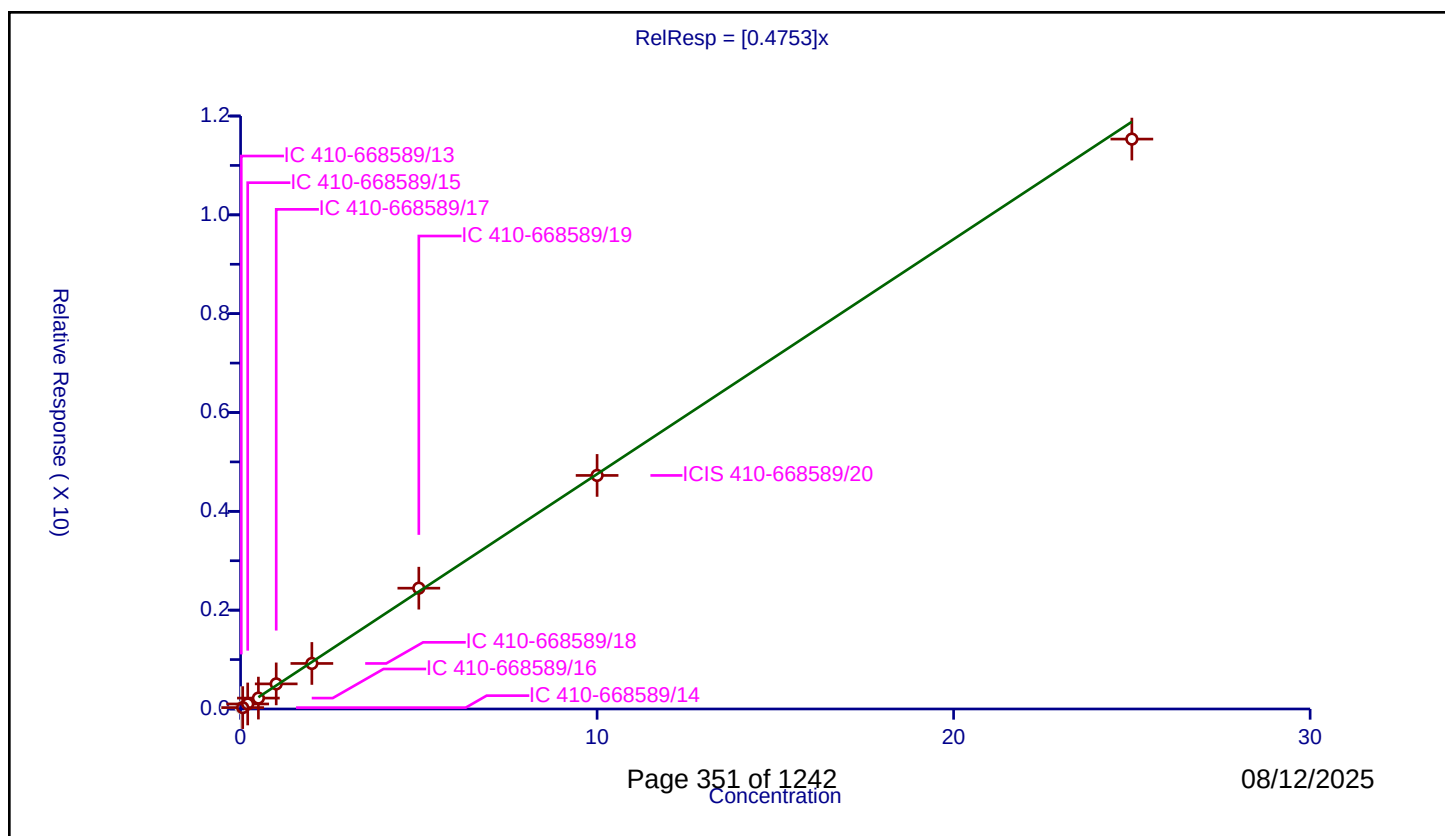
Curve Coefficients

Intercept: 0
Slope: 0.4753

Error Coefficients

Relative Standard Deviation: 5.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.025878	10.0	1832045.0	1.293909	N
2	IC 410-668589/14	0.06	0.02768	10.0	1831280.0	0.461335	Y
3	IC 410-668589/15	0.2	0.101863	10.0	1849831.0	0.509317	Y
4	IC 410-668589/16	0.5	0.220209	10.0	1860146.0	0.440417	Y
5	IC 410-668589/17	1.0	0.508101	10.0	1893953.0	0.508101	Y
6	IC 410-668589/18	2.0	0.921256	10.0	1918847.0	0.460628	Y
7	IC 410-668589/19	5.0	2.445077	10.0	1935362.0	0.489015	Y
8	ICIS 410-668589/20	10.0	4.726349	10.0	1961552.0	0.472635	Y
9	IC 410-668589/21	25.0	11.53294	10.0	1984911.0	0.461318	Y



Calibration

/ Propionitrile

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

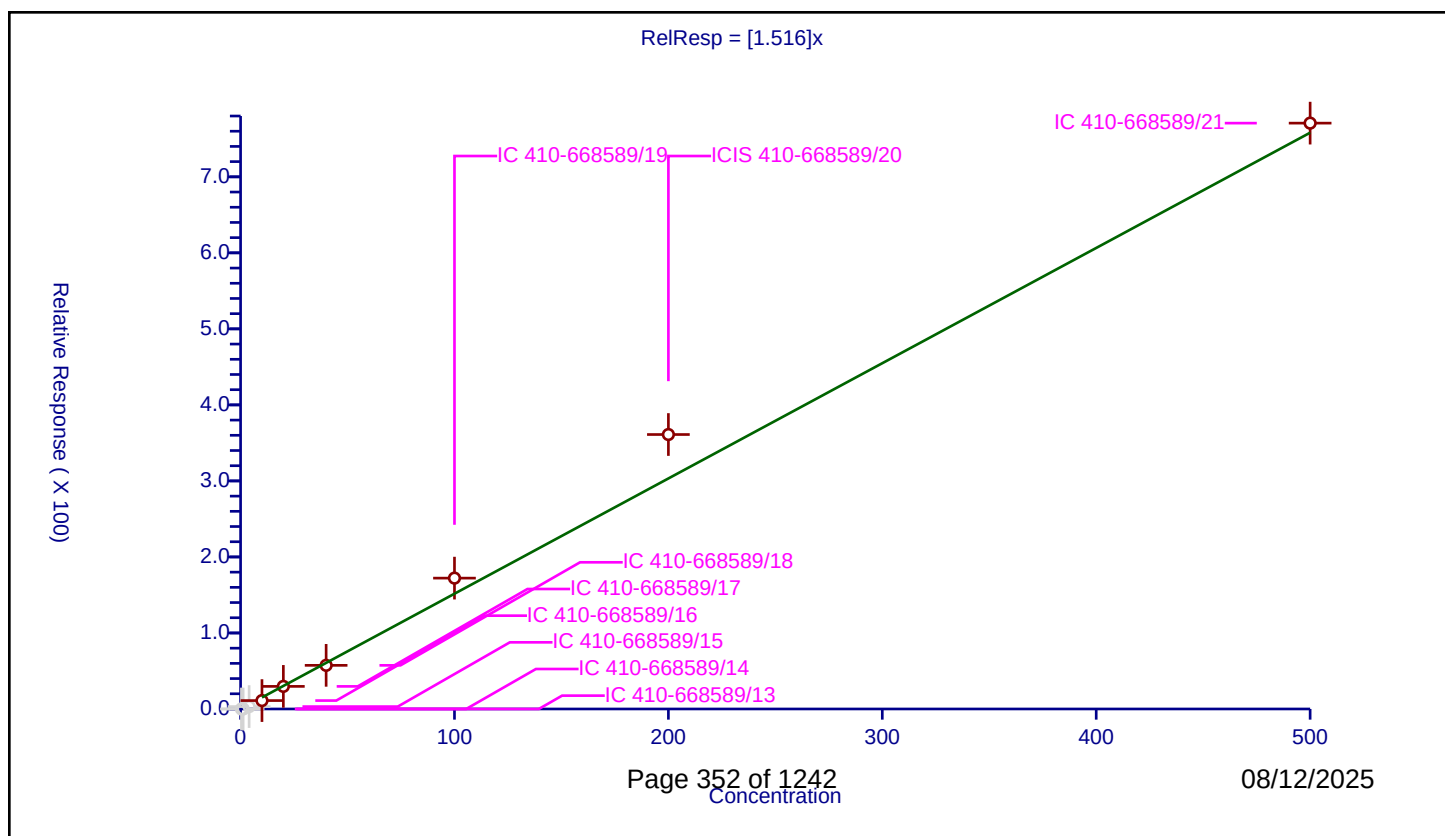
Curve Coefficients

Intercept: 0
Slope: 1.516

Error Coefficients

Relative Standard Deviation: 16.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.4	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	1.2	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	4.0	3.171148	50.0	83156.0	0.792787	N
4	IC 410-668589/16	10.0	11.070613	50.0	72295.0	1.107061	Y
5	IC 410-668589/17	20.0	29.730042	50.0	64825.0	1.486502	Y
6	IC 410-668589/18	40.0	57.400185	50.0	87437.0	1.435005	Y
7	IC 410-668589/19	100.0	172.159075	50.0	71966.0	1.721591	Y
8	ICIS 410-668589/20	200.0	361.02722	50.0	75826.0	1.805136	Y
9	IC 410-668589/21	500.0	770.646049	50.0	82517.0	1.541292	Y



Calibration

/ Methacrylonitrile

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

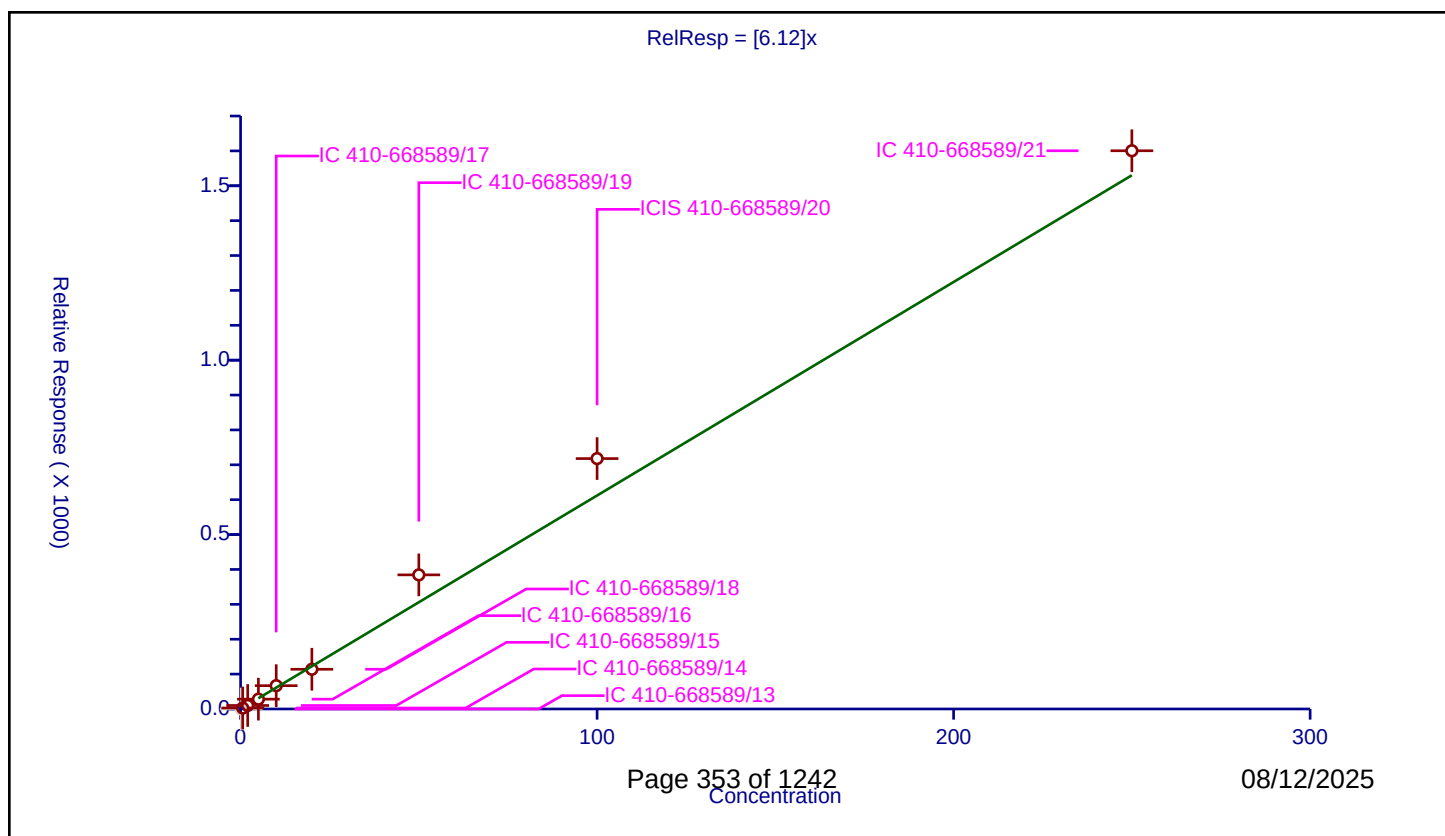
Curve Coefficients

Intercept: 0
Slope: 6.12

Error Coefficients

Relative Standard Deviation: 17.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.6	2.804437	50.0	80230.0	4.674062	Y
3	IC 410-668589/15	2.0	10.018519	50.0	83156.0	5.00926	Y
4	IC 410-668589/16	5.0	28.172073	50.0	72295.0	5.634415	Y
5	IC 410-668589/17	10.0	66.8199	50.0	64825.0	6.68199	Y
6	IC 410-668589/18	20.0	113.847113	50.0	87437.0	5.692356	Y
7	IC 410-668589/19	50.0	384.521858	50.0	71966.0	7.690437	Y
8	ICIS 410-668589/20	100.0	717.932503	50.0	75826.0	7.179325	Y
9	IC 410-668589/21	250.0	1600.358108	50.0	82517.0	6.401432	Y



Calibration

/ Chlorobromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

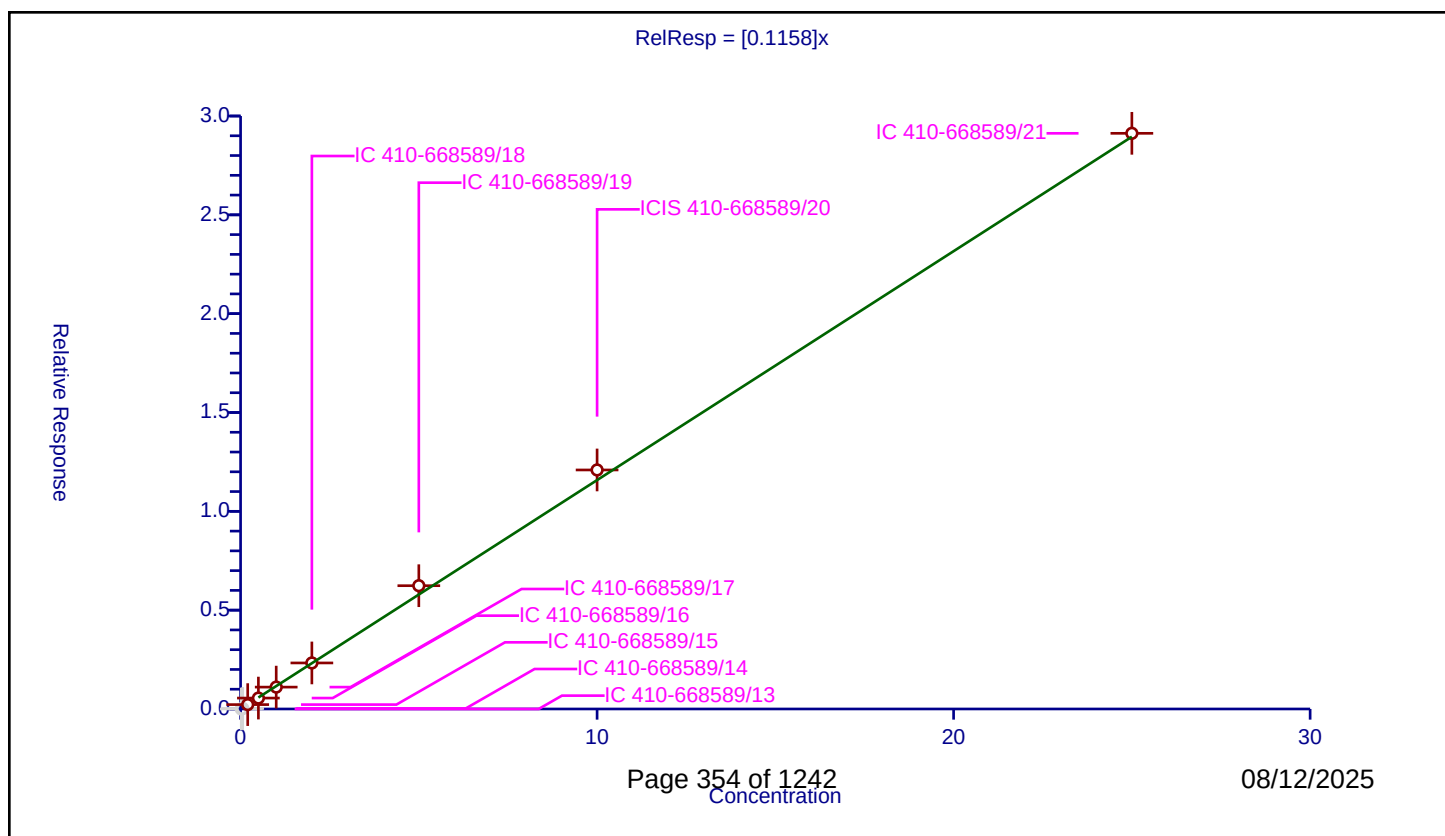
Curve Coefficients

Intercept: 0
Slope: 0.1158

Error Coefficients

Relative Standard Deviation: 4.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	1832045.0	0.0	N
2	IC 410-668589/14	0.06	0.002812	10.0	1831280.0	0.046871	N
3	IC 410-668589/15	0.2	0.022132	10.0	1849831.0	0.110659	Y
4	IC 410-668589/16	0.5	0.055297	10.0	1860146.0	0.110593	Y
5	IC 410-668589/17	1.0	0.110752	10.0	1893953.0	0.110752	Y
6	IC 410-668589/18	2.0	0.232905	10.0	1918847.0	0.116453	Y
7	IC 410-668589/19	5.0	0.623754	10.0	1935362.0	0.124751	Y
8	ICIS 410-668589/20	10.0	1.209287	10.0	1961552.0	0.120929	Y
9	IC 410-668589/21	25.0	2.912403	10.0	1984911.0	0.116496	Y



Calibration

/ Tetrahydrofuran

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

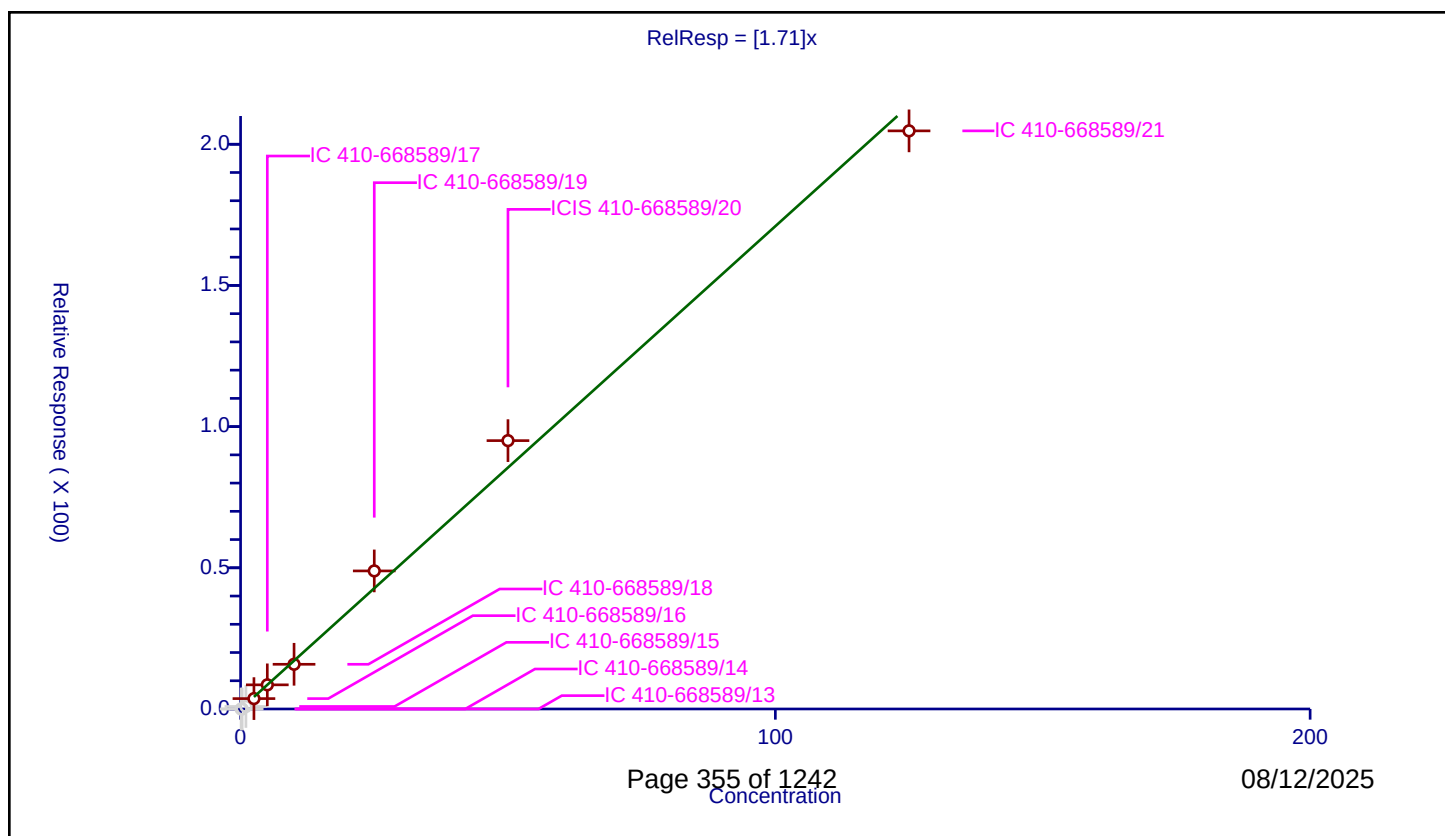
Curve Coefficients

Intercept: 0
Slope: 1.71

Error Coefficients

Relative Standard Deviation: 11.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.1	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.3	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	1.0	0.895906	50.0	83156.0	0.895906	N
4	IC 410-668589/16	2.5	3.677986	50.0	72295.0	1.471194	Y
5	IC 410-668589/17	5.0	8.549942	50.0	64825.0	1.709988	Y
6	IC 410-668589/18	10.0	15.828539	50.0	87437.0	1.582854	Y
7	IC 410-668589/19	25.0	48.89948	50.0	71966.0	1.955979	Y
8	ICIS 410-668589/20	50.0	95.035344	50.0	75826.0	1.900707	Y
9	IC 410-668589/21	125.0	204.735388	50.0	82517.0	1.637883	Y



Calibration

/ Chloroform

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

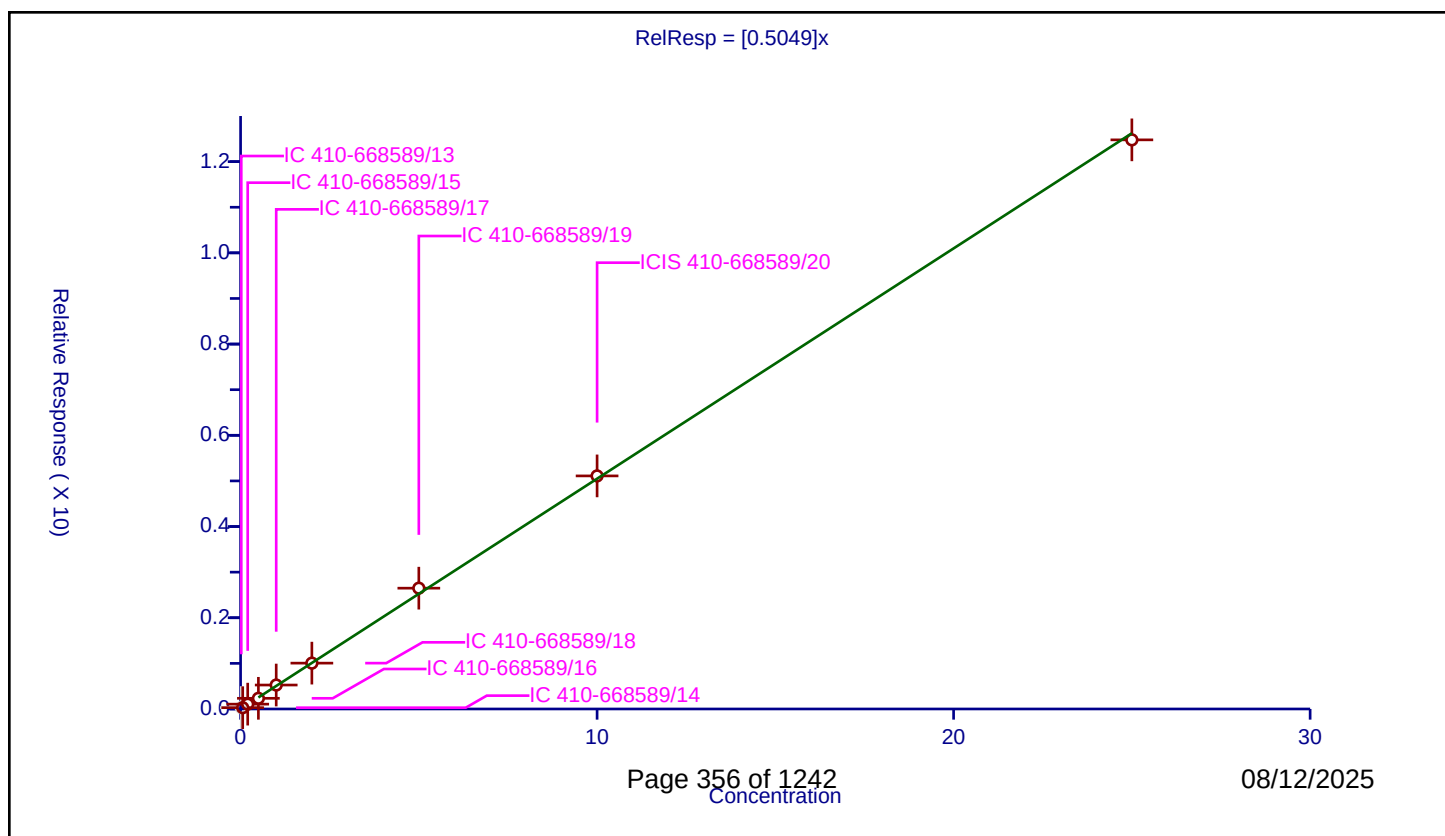
Curve Coefficients

Intercept: 0
Slope: 0.5049

Error Coefficients

Relative Standard Deviation: 4.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.030894	10.0	1832045.0	1.544722	N
2	IC 410-668589/14	0.06	0.028423	10.0	1831280.0	0.473712	Y
3	IC 410-668589/15	0.2	0.105961	10.0	1849831.0	0.529805	Y
4	IC 410-668589/16	0.5	0.234003	10.0	1860146.0	0.468006	Y
5	IC 410-668589/17	1.0	0.525182	10.0	1893953.0	0.525182	Y
6	IC 410-668589/18	2.0	1.005124	10.0	1918847.0	0.502562	Y
7	IC 410-668589/19	5.0	2.648507	10.0	1935362.0	0.529701	Y
8	ICIS 410-668589/20	10.0	5.109959	10.0	1961552.0	0.510996	Y
9	IC 410-668589/21	25.0	12.477058	10.0	1984911.0	0.499082	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

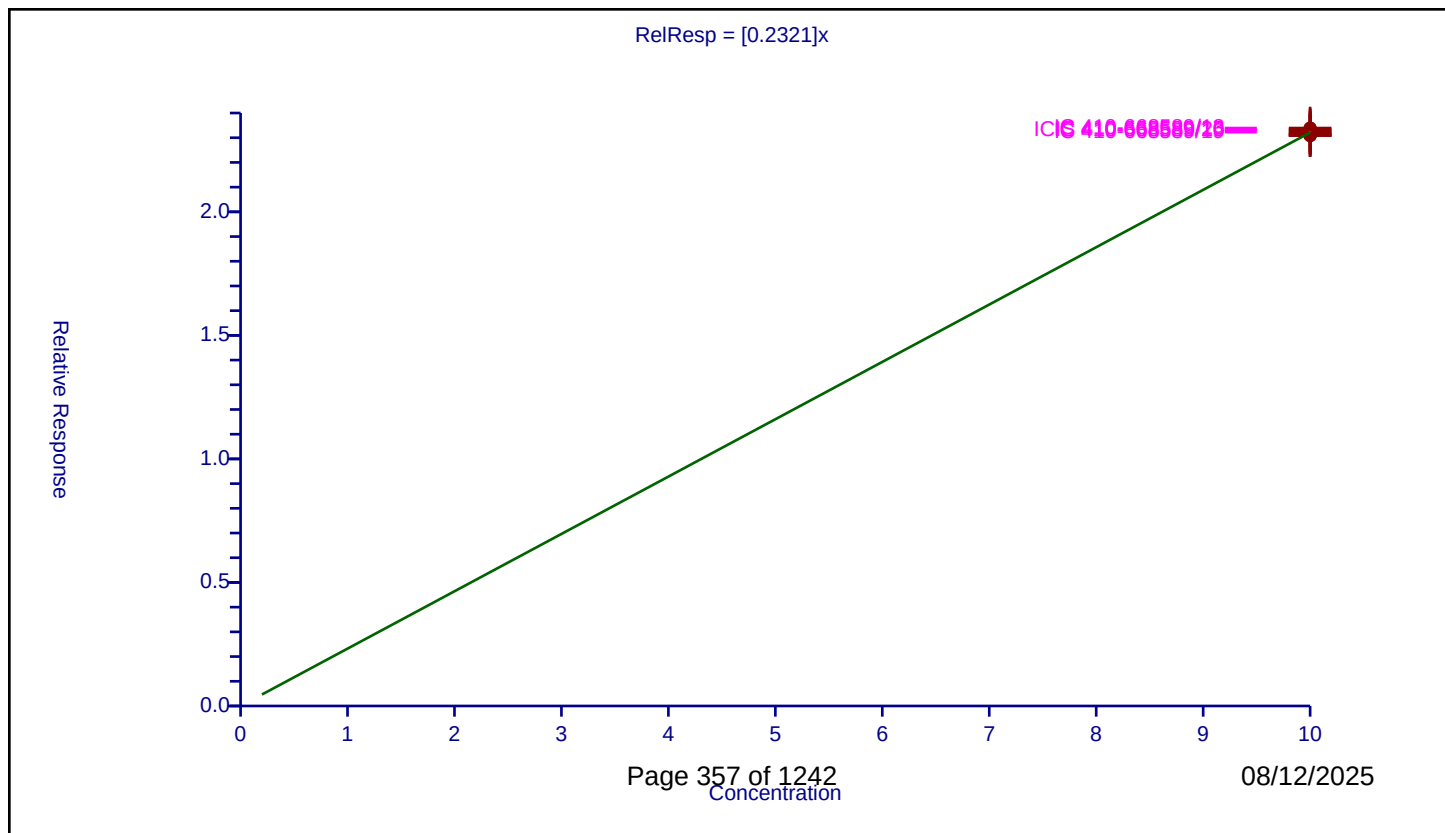
Curve Coefficients

Intercept: 0
 Slope: 0.2321

Error Coefficients

Relative Standard Deviation: 0.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	10.0	2.33914	10.0	1832045.0	0.233914	Y
2	IC 410-668589/14	10.0	2.316642	10.0	1831280.0	0.231664	Y
3	IC 410-668589/15	10.0	2.331694	10.0	1849831.0	0.233169	Y
4	IC 410-668589/16	10.0	2.309405	10.0	1860146.0	0.23094	Y
5	IC 410-668589/17	10.0	2.308996	10.0	1893953.0	0.2309	Y
6	IC 410-668589/18	10.0	2.318955	10.0	1918847.0	0.231896	Y
7	IC 410-668589/19	10.0	2.322656	10.0	1935362.0	0.232266	Y
8	ICIS 410-668589/20	10.0	2.331562	10.0	1961552.0	0.233156	Y
9	IC 410-668589/21	10.0	2.310366	10.0	1984911.0	0.231037	Y



Calibration

/ 1,1,1-Trichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

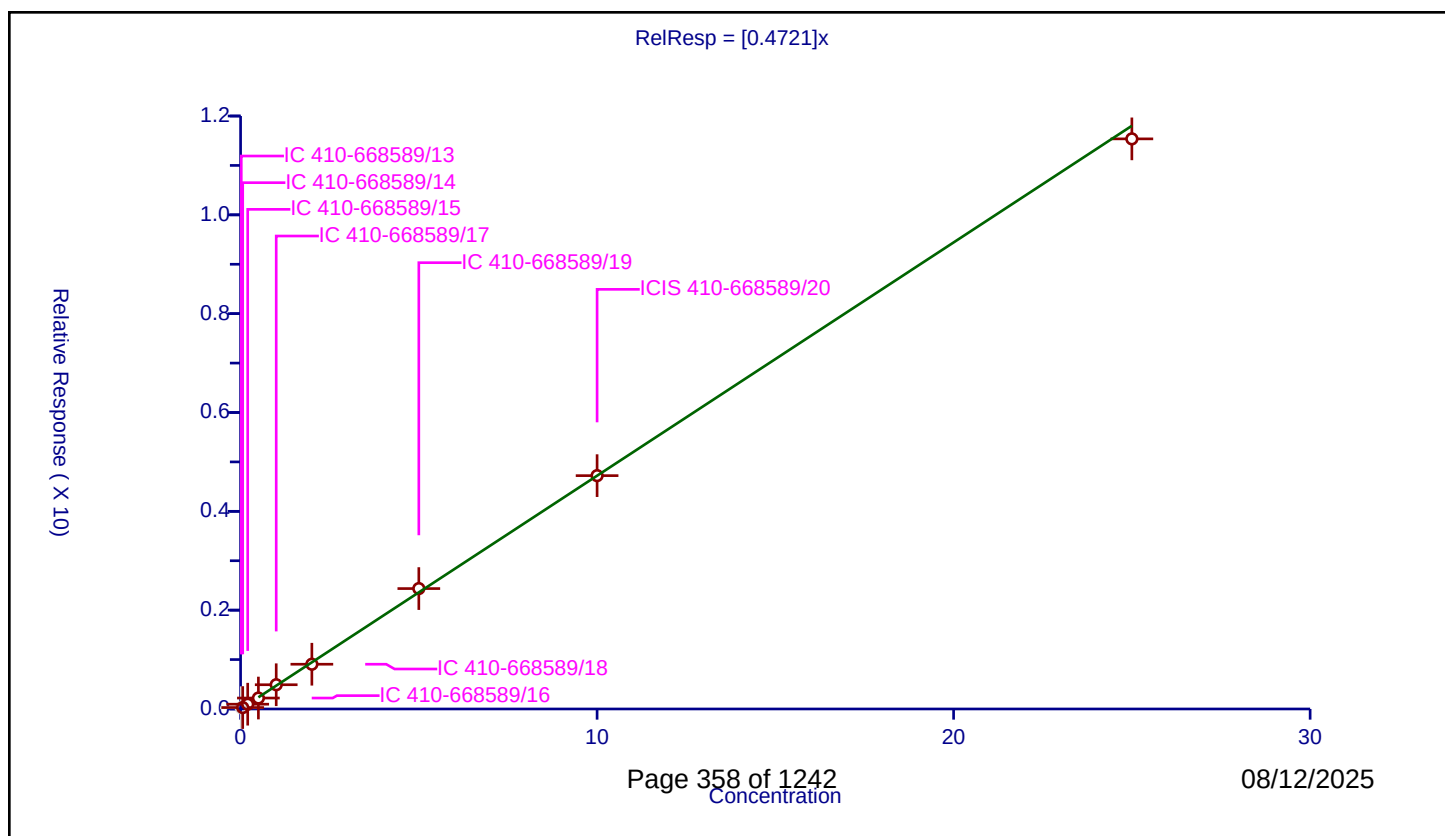
Curve Coefficients

Intercept: 0
Slope: 0.4721

Error Coefficients

Relative Standard Deviation: 3.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.025458	10.0	1832045.0	1.272894	N
2	IC 410-668589/14	0.06	0.029056	10.0	1831280.0	0.48427	Y
3	IC 410-668589/15	0.2	0.096922	10.0	1849831.0	0.484612	Y
4	IC 410-668589/16	0.5	0.221499	10.0	1860146.0	0.442997	Y
5	IC 410-668589/17	1.0	0.490677	10.0	1893953.0	0.490677	Y
6	IC 410-668589/18	2.0	0.906008	10.0	1918847.0	0.453004	Y
7	IC 410-668589/19	5.0	2.436991	10.0	1935362.0	0.487398	Y
8	ICIS 410-668589/20	10.0	4.722098	10.0	1961552.0	0.47221	Y
9	IC 410-668589/21	25.0	11.537515	10.0	1984911.0	0.461501	Y



Calibration

/ Cyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

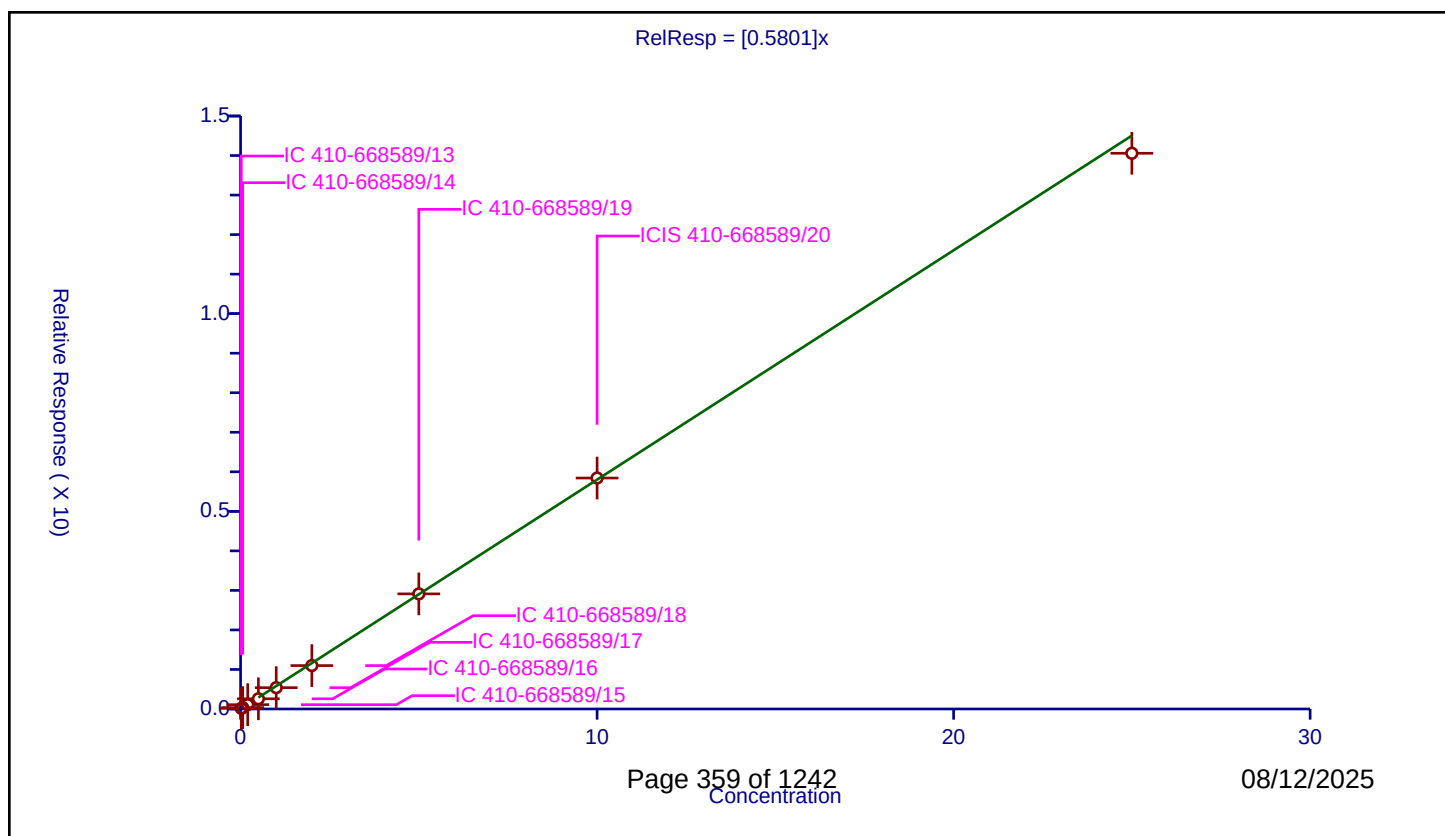
Curve Coefficients

Intercept: 0
Slope: 0.5801

Error Coefficients

Relative Standard Deviation: 12.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.015131	10.0	1832045.0	0.756532	Y
2	IC 410-668589/14	0.06	0.035254	10.0	1831280.0	0.587567	Y
3	IC 410-668589/15	0.2	0.108902	10.0	1849831.0	0.544509	Y
4	IC 410-668589/16	0.5	0.257754	10.0	1860146.0	0.515508	Y
5	IC 410-668589/17	1.0	0.539417	10.0	1893953.0	0.539417	Y
6	IC 410-668589/18	2.0	1.09768	10.0	1918847.0	0.54884	Y
7	IC 410-668589/19	5.0	2.911466	10.0	1935362.0	0.582293	Y
8	ICIS 410-668589/20	10.0	5.8422	10.0	1961552.0	0.58422	Y
9	IC 410-668589/21	25.0	14.057598	10.0	1984911.0	0.562304	Y



Calibration

/ Carbon tetrachloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

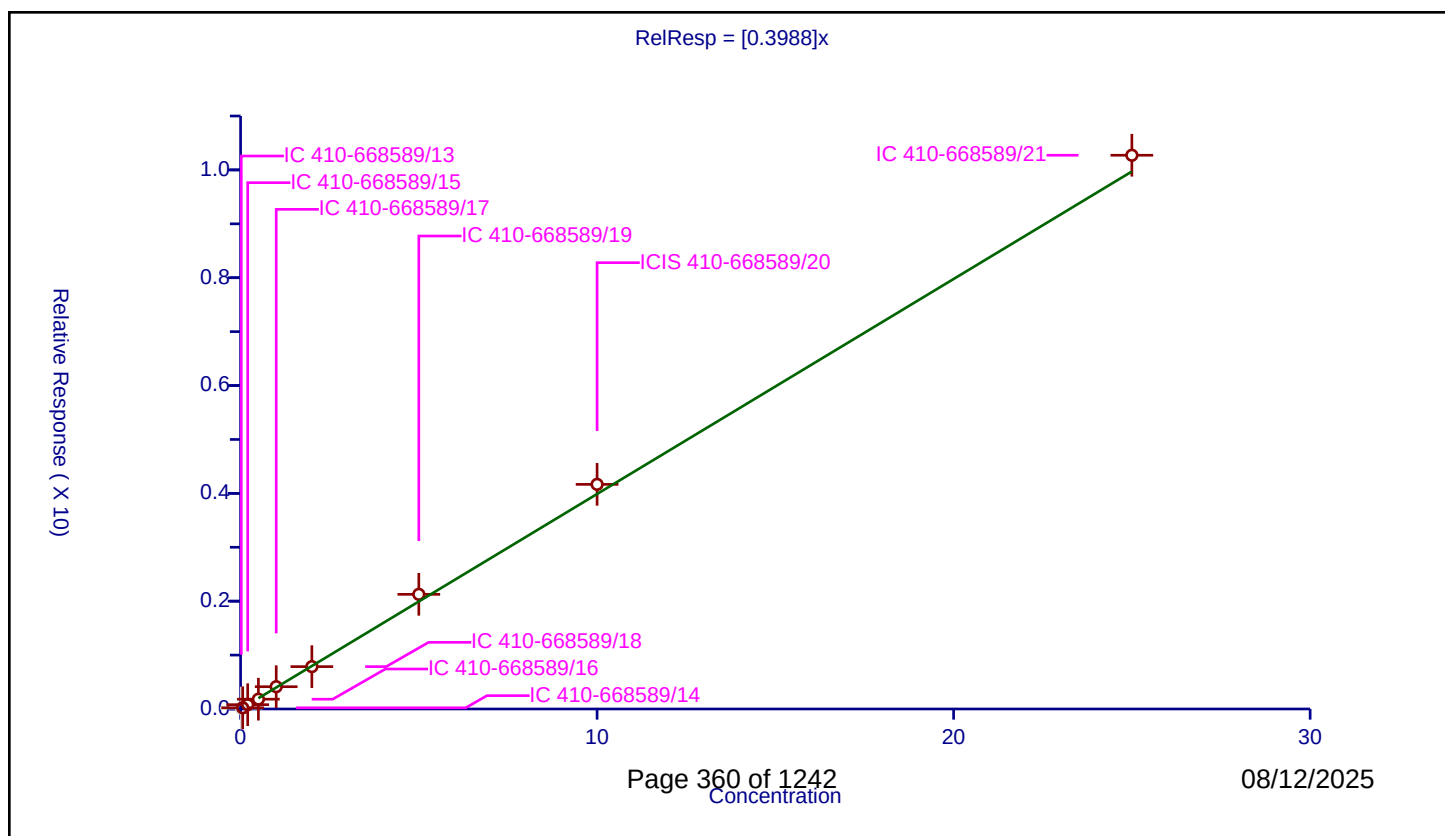
Curve Coefficients

Intercept: 0
Slope: 0.3988

Error Coefficients

Relative Standard Deviation: 5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.016479	10.0	1832045.0	0.823943	N
2	IC 410-668589/14	0.06	0.022067	10.0	1831280.0	0.367776	Y
3	IC 410-668589/15	0.2	0.079932	10.0	1849831.0	0.399658	Y
4	IC 410-668589/16	0.5	0.181846	10.0	1860146.0	0.363692	Y
5	IC 410-668589/17	1.0	0.413495	10.0	1893953.0	0.413495	Y
6	IC 410-668589/18	2.0	0.785972	10.0	1918847.0	0.392986	Y
7	IC 410-668589/19	5.0	2.126755	10.0	1935362.0	0.425351	Y
8	ICIS 410-668589/20	10.0	4.167063	10.0	1961552.0	0.416706	Y
9	IC 410-668589/21	25.0	10.272279	10.0	1984911.0	0.410891	Y



Calibration

/ 1,1-Dichloropropene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

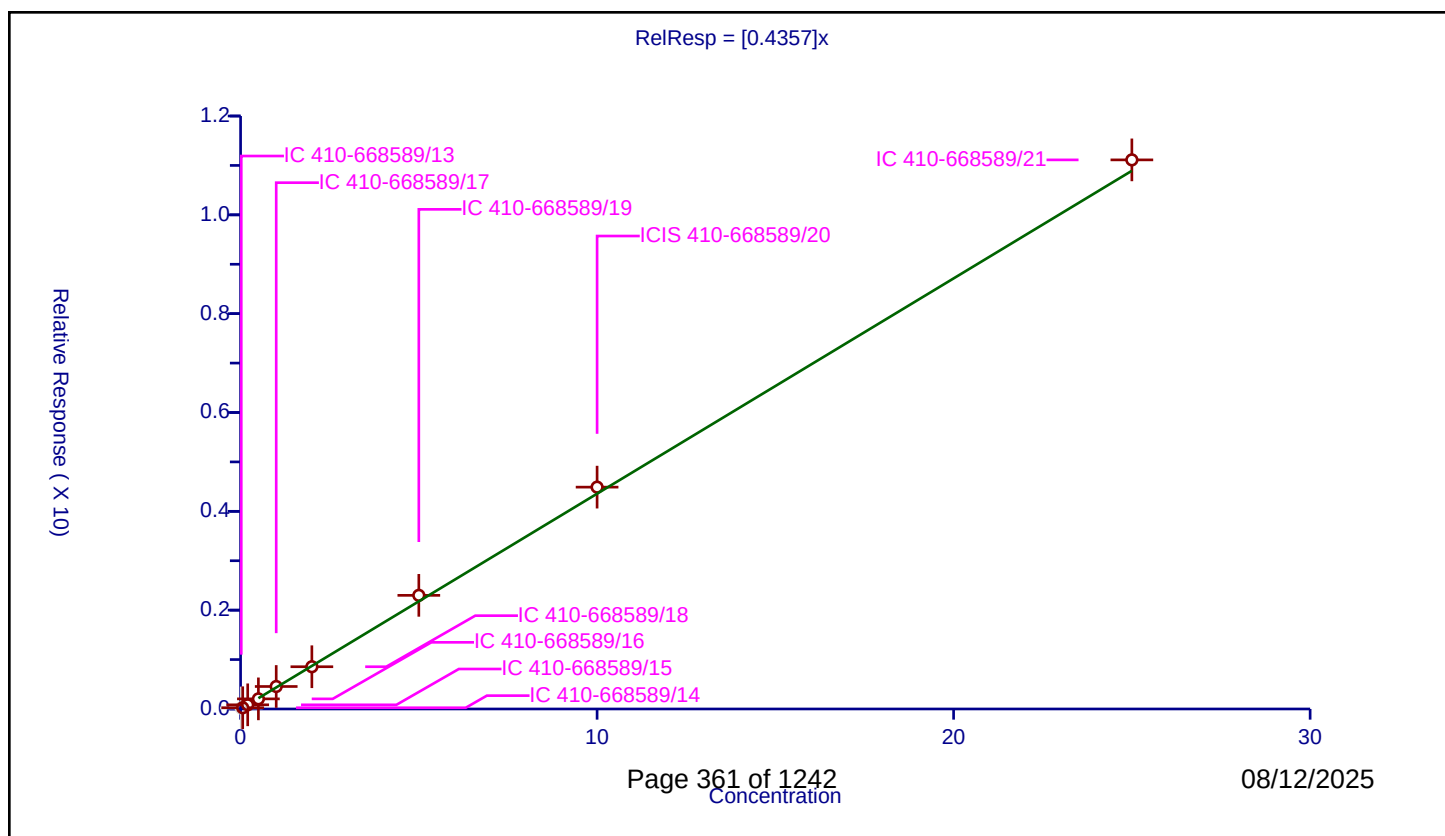
Curve Coefficients

Intercept: 0
Slope: 0.4357

Error Coefficients

Relative Standard Deviation: 4.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.020382	10.0	1832045.0	1.01908	N
2	IC 410-668589/14	0.06	0.02501	10.0	1831280.0	0.41683	Y
3	IC 410-668589/15	0.2	0.0847	10.0	1849831.0	0.423498	Y
4	IC 410-668589/16	0.5	0.204608	10.0	1860146.0	0.409215	Y
5	IC 410-668589/17	1.0	0.454958	10.0	1893953.0	0.454958	Y
6	IC 410-668589/18	2.0	0.854862	10.0	1918847.0	0.427431	Y
7	IC 410-668589/19	5.0	2.299931	10.0	1935362.0	0.459986	Y
8	ICIS 410-668589/20	10.0	4.489573	10.0	1961552.0	0.448957	Y
9	IC 410-668589/21	25.0	11.112423	10.0	1984911.0	0.444497	Y



Calibration

/ Isobutyl alcohol

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

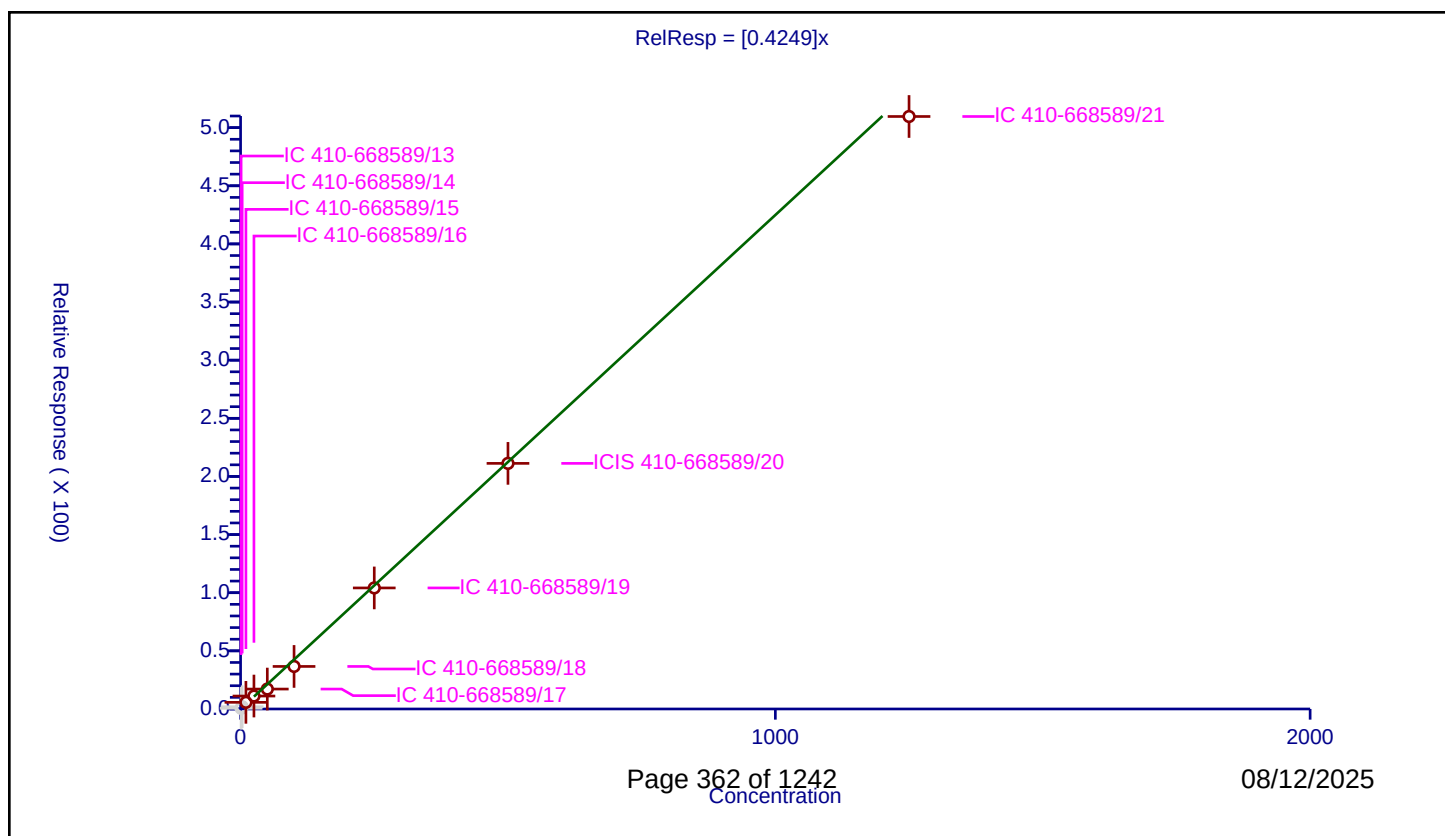
Curve Coefficients

Intercept: 0
Slope: 0.4249

Error Coefficients

Relative Standard Deviation: 17.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	1.0	0.61663	50.0	73626.0	0.61663	N
2	IC 410-668589/14	3.0	1.931946	50.0	80230.0	0.643982	N
3	IC 410-668589/15	10.0	5.731998	50.0	83156.0	0.5732	Y
4	IC 410-668589/16	25.0	11.135625	50.0	72295.0	0.445425	Y
5	IC 410-668589/17	50.0	17.136907	50.0	64825.0	0.342738	Y
6	IC 410-668589/18	100.0	36.60121	50.0	87437.0	0.366012	Y
7	IC 410-668589/19	250.0	104.124865	50.0	71966.0	0.416499	Y
8	ICIS 410-668589/20	500.0	211.242186	50.0	75826.0	0.422484	Y
9	IC 410-668589/21	1250.0	509.585904	50.0	82517.0	0.407669	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

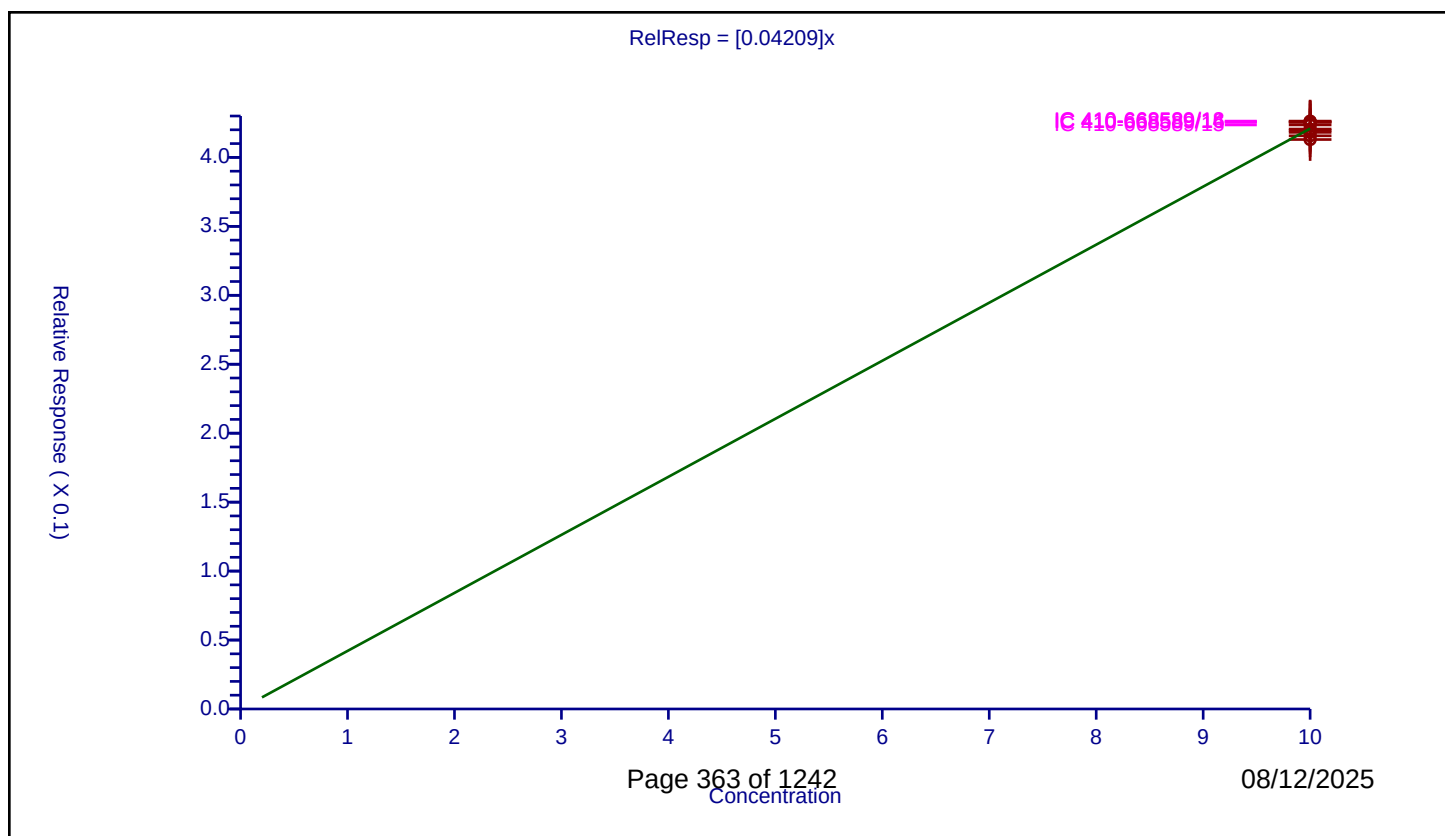
Curve Coefficients

Intercept: 0
Slope: 0.04209

Error Coefficients

Relative Standard Deviation: 1.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	10.0	0.41952	10.0	1832045.0	0.041952	Y
2	IC 410-668589/14	10.0	0.425364	10.0	1831280.0	0.042536	Y
3	IC 410-668589/15	10.0	0.423514	10.0	1849831.0	0.042351	Y
4	IC 410-668589/16	10.0	0.42587	10.0	1860146.0	0.042587	Y
5	IC 410-668589/17	10.0	0.41566	10.0	1893953.0	0.041566	Y
6	IC 410-668589/18	10.0	0.426298	10.0	1918847.0	0.04263	Y
7	IC 410-668589/19	10.0	0.412951	10.0	1935362.0	0.041295	Y
8	ICIS 410-668589/20	10.0	0.418133	10.0	1961552.0	0.041813	Y
9	IC 410-668589/21	10.0	0.420558	10.0	1984911.0	0.042056	Y



Calibration

/ Benzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

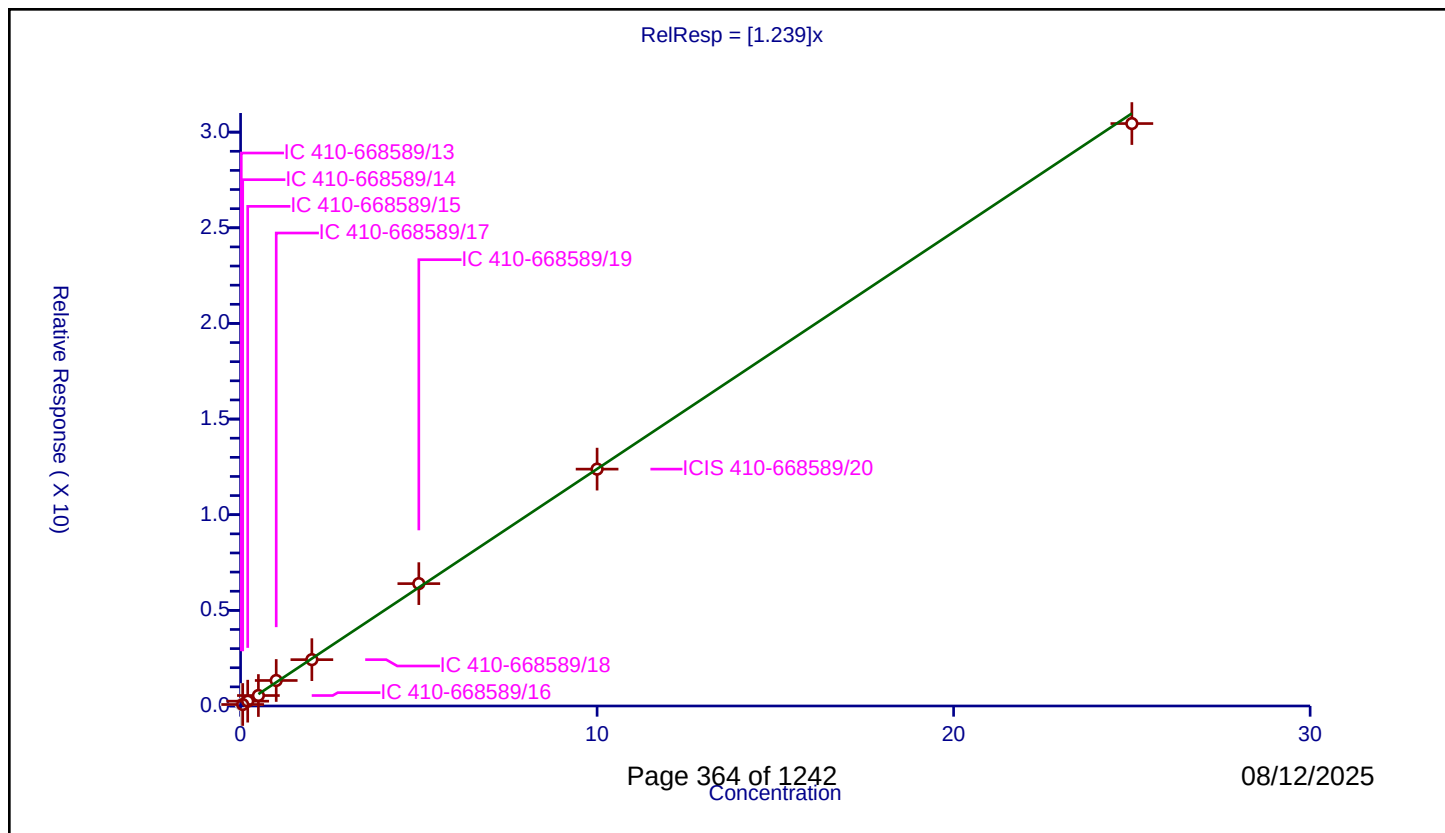
Curve Coefficients

Intercept: 0
Slope: 1.239

Error Coefficients

Relative Standard Deviation: 5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.077591	10.0	1832045.0	3.879544	N
2	IC 410-668589/14	0.06	0.076706	10.0	1831280.0	1.278432	Y
3	IC 410-668589/15	0.2	0.251969	10.0	1849831.0	1.259845	Y
4	IC 410-668589/16	0.5	0.547054	10.0	1860146.0	1.094108	Y
5	IC 410-668589/17	1.0	1.33385	10.0	1893953.0	1.33385	Y
6	IC 410-668589/18	2.0	2.422147	10.0	1918847.0	1.211074	Y
7	IC 410-668589/19	5.0	6.397496	10.0	1935362.0	1.279499	Y
8	ICIS 410-668589/20	10.0	12.383704	10.0	1961552.0	1.23837	Y
9	IC 410-668589/21	25.0	30.449088	10.0	1984911.0	1.217964	Y



Calibration

/ 1,2-Dichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

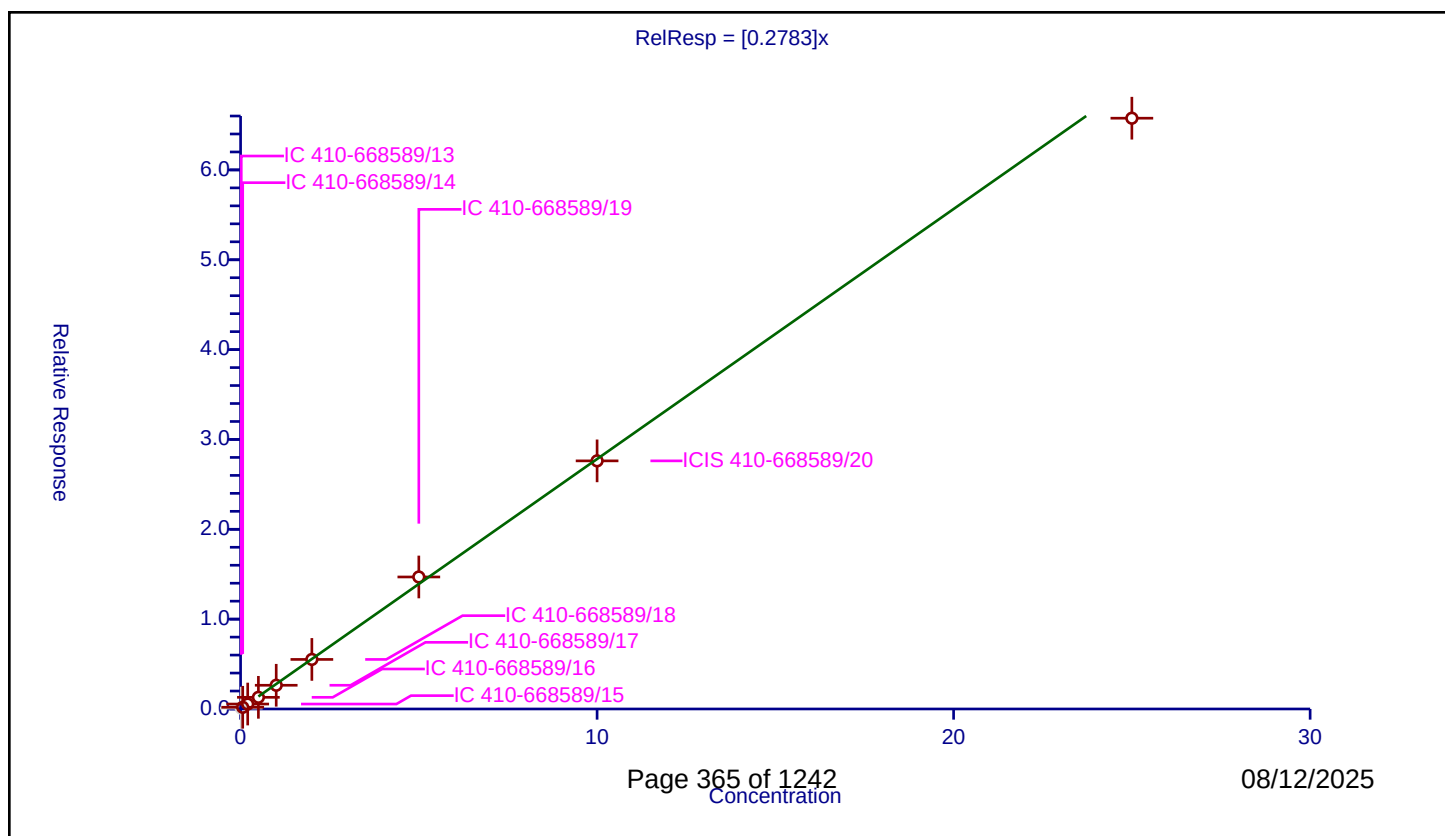
Curve Coefficients

Intercept: 0
Slope: 0.2783

Error Coefficients

Relative Standard Deviation: 7.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.009978	10.0	1832045.0	0.498896	N
2	IC 410-668589/14	0.06	0.019074	10.0	1831280.0	0.317902	Y
3	IC 410-668589/15	0.2	0.055162	10.0	1849831.0	0.275809	Y
4	IC 410-668589/16	0.5	0.129743	10.0	1860146.0	0.259485	Y
5	IC 410-668589/17	1.0	0.264014	10.0	1893953.0	0.264014	Y
6	IC 410-668589/18	2.0	0.551498	10.0	1918847.0	0.275749	Y
7	IC 410-668589/19	5.0	1.469394	10.0	1935362.0	0.293879	Y
8	ICIS 410-668589/20	10.0	2.761716	10.0	1961552.0	0.276172	Y
9	IC 410-668589/21	25.0	6.575514	10.0	1984911.0	0.263021	Y



Calibration

/ Tert-amyl methyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

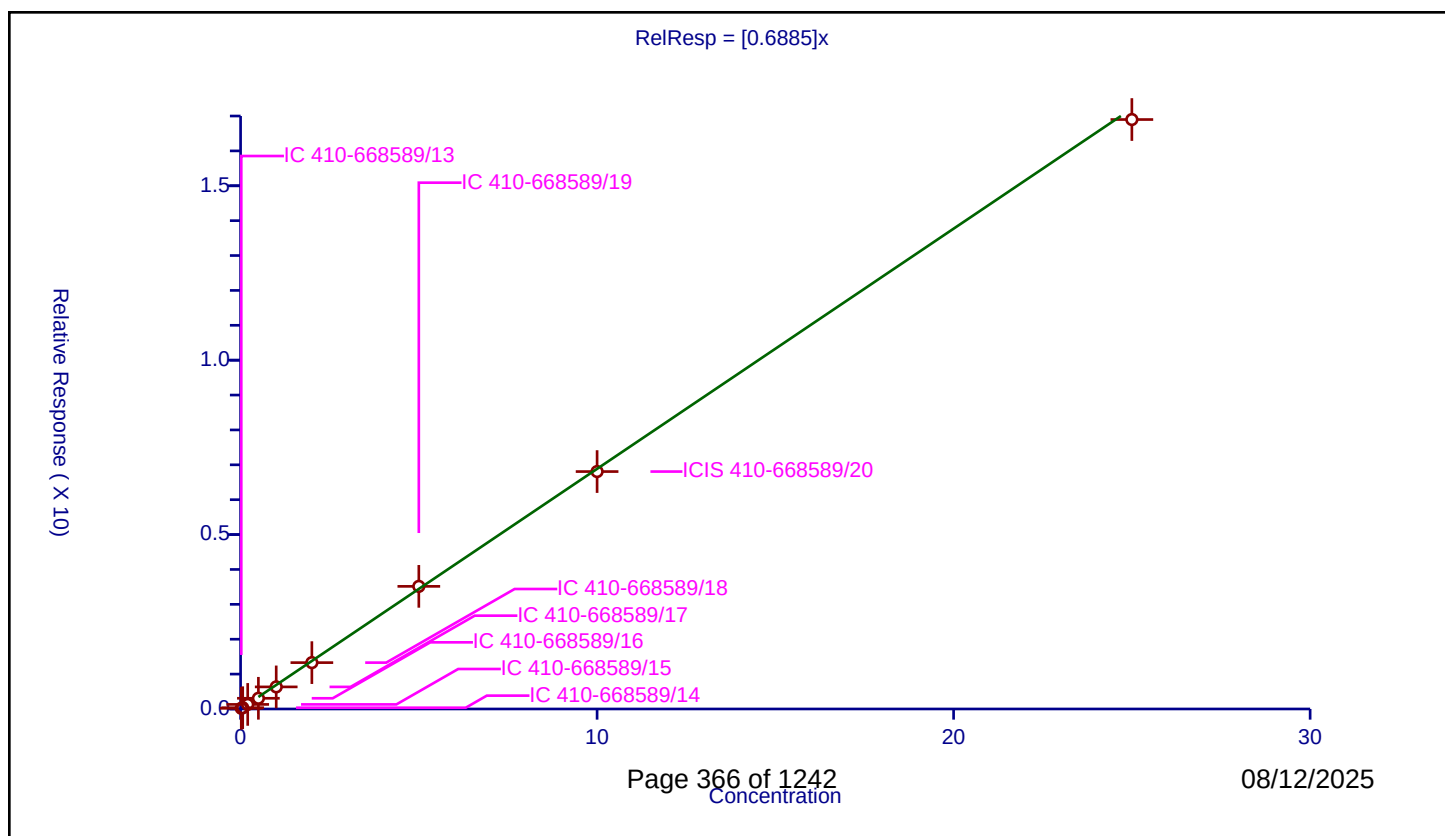
Curve Coefficients

Intercept: 0
Slope: 0.6885

Error Coefficients

Relative Standard Deviation: 15.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.019301	10.0	1832045.0	0.965042	Y
2	IC 410-668589/14	0.06	0.036357	10.0	1831280.0	0.605951	Y
3	IC 410-668589/15	0.2	0.130774	10.0	1849831.0	0.653871	Y
4	IC 410-668589/16	0.5	0.306895	10.0	1860146.0	0.613791	Y
5	IC 410-668589/17	1.0	0.633469	10.0	1893953.0	0.633469	Y
6	IC 410-668589/18	2.0	1.328881	10.0	1918847.0	0.664441	Y
7	IC 410-668589/19	5.0	3.515838	10.0	1935362.0	0.703168	Y
8	ICIS 410-668589/20	10.0	6.807146	10.0	1961552.0	0.680715	Y
9	IC 410-668589/21	25.0	16.899418	10.0	1984911.0	0.675977	Y



Calibration

/ n-Heptane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

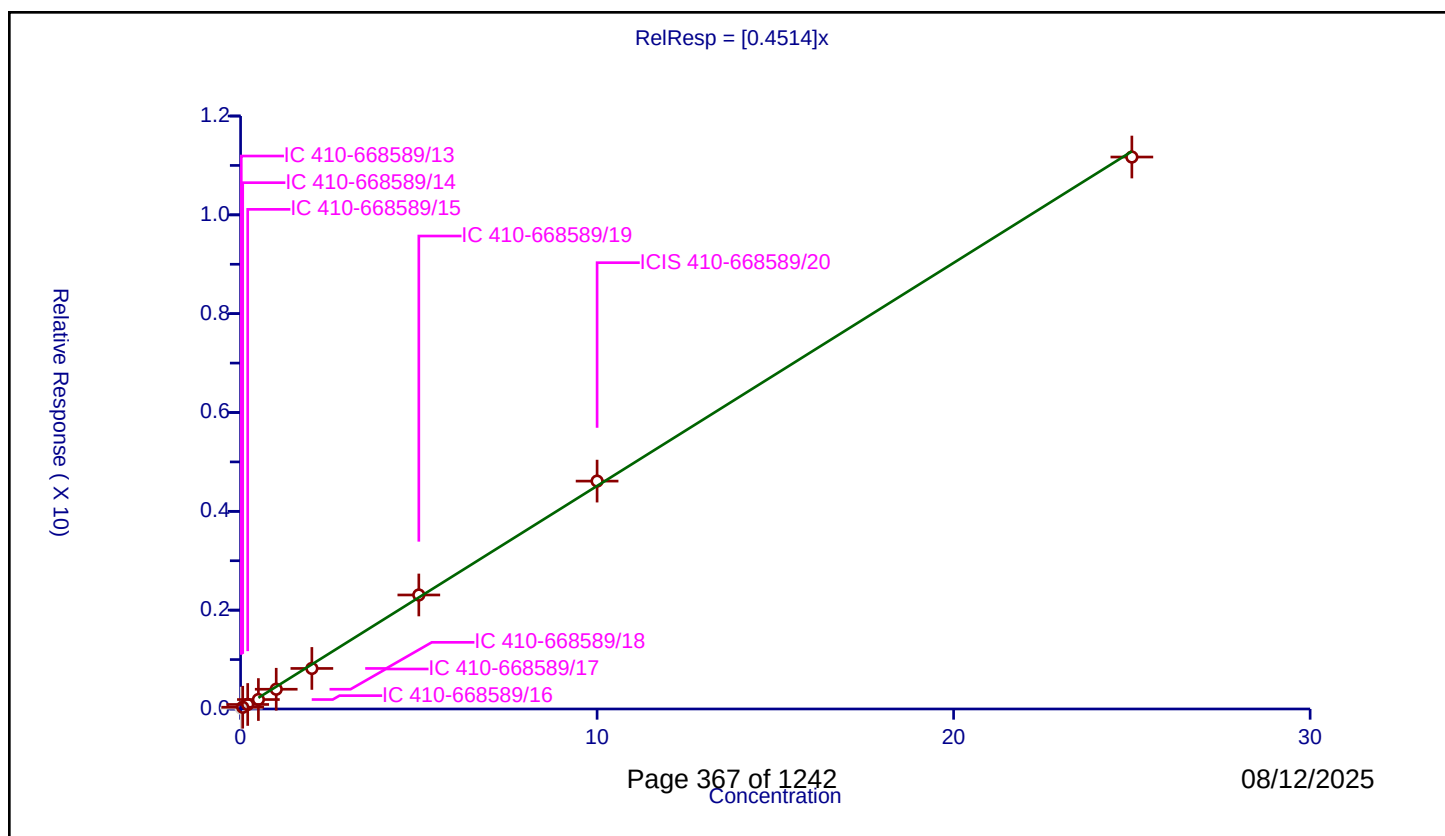
Curve Coefficients

Intercept: 0
Slope: 0.4514

Error Coefficients

Relative Standard Deviation: 14.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.017298	10.0	1832045.0	0.864881	N
2	IC 410-668589/14	0.06	0.035434	10.0	1831280.0	0.590571	Y
3	IC 410-668589/15	0.2	0.091679	10.0	1849831.0	0.458393	Y
4	IC 410-668589/16	0.5	0.191383	10.0	1860146.0	0.382766	Y
5	IC 410-668589/17	1.0	0.399751	10.0	1893953.0	0.399751	Y
6	IC 410-668589/18	2.0	0.820508	10.0	1918847.0	0.410254	Y
7	IC 410-668589/19	5.0	2.307067	10.0	1935362.0	0.461413	Y
8	ICIS 410-668589/20	10.0	4.611603	10.0	1961552.0	0.46116	Y
9	IC 410-668589/21	25.0	11.169916	10.0	1984911.0	0.446797	Y



Calibration

/ n-Butanol

Curve Type: Linear
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

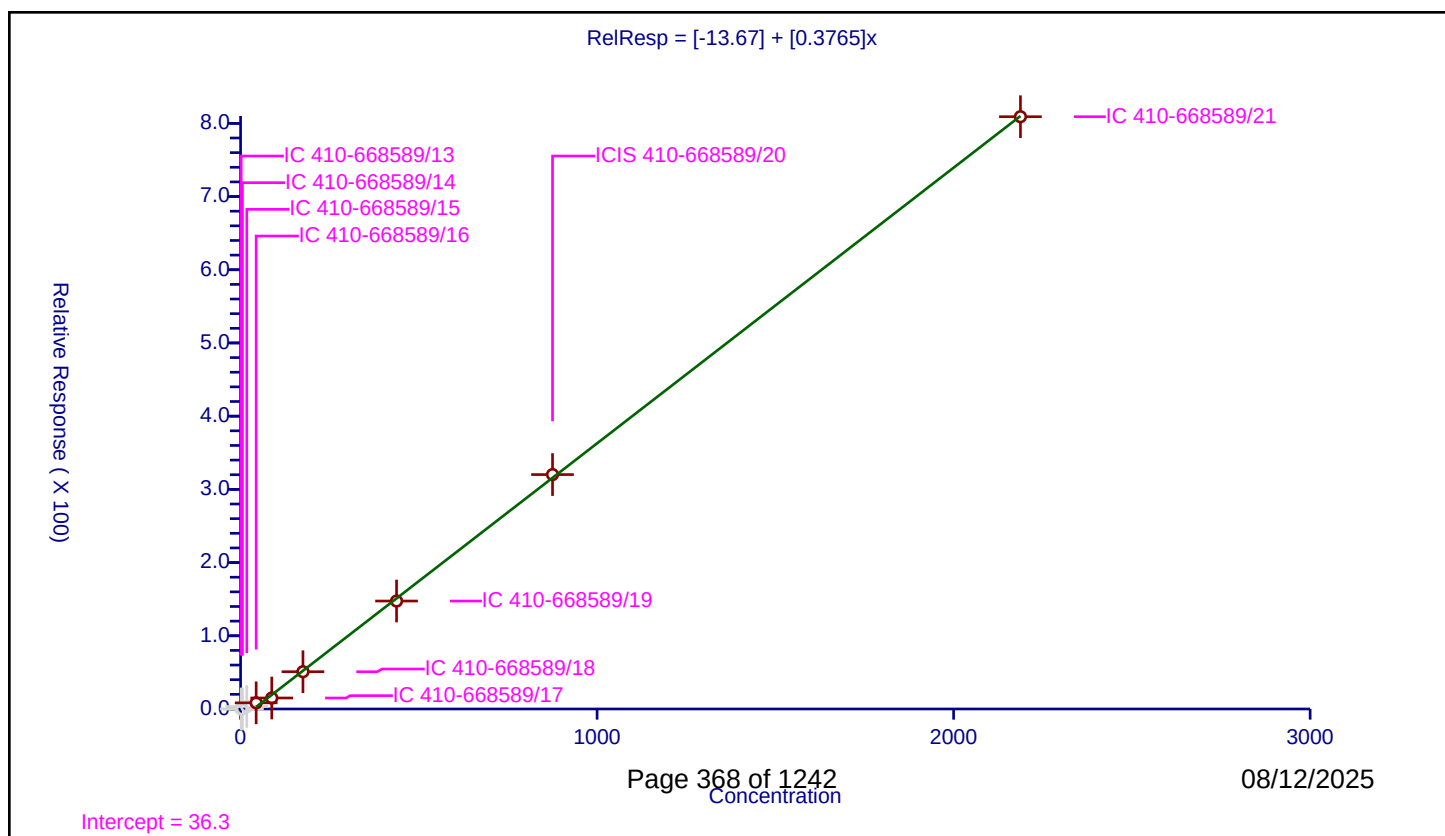
Curve Coefficients

Intercept: -13.67
Slope: 0.3765

Error Coefficients

Relative Standard Deviation: 18.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	1.75	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	5.25	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	17.5	3.41166	50.0	83156.0	0.194952	N
4	IC 410-668589/16	43.75	8.414137	50.0	72295.0	0.192323	Y
5	IC 410-668589/17	87.5	15.022754	50.0	64825.0	0.171689	Y
6	IC 410-668589/18	175.0	50.900077	50.0	87437.0	0.290858	Y
7	IC 410-668589/19	437.5	147.490482	50.0	71966.0	0.337121	Y
8	ICIS 410-668589/20	875.0	320.224593	50.0	75826.0	0.365971	Y
9	IC 410-668589/21	2187.5	809.062375	50.0	82517.0	0.369857	Y



Calibration

/ Trichloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

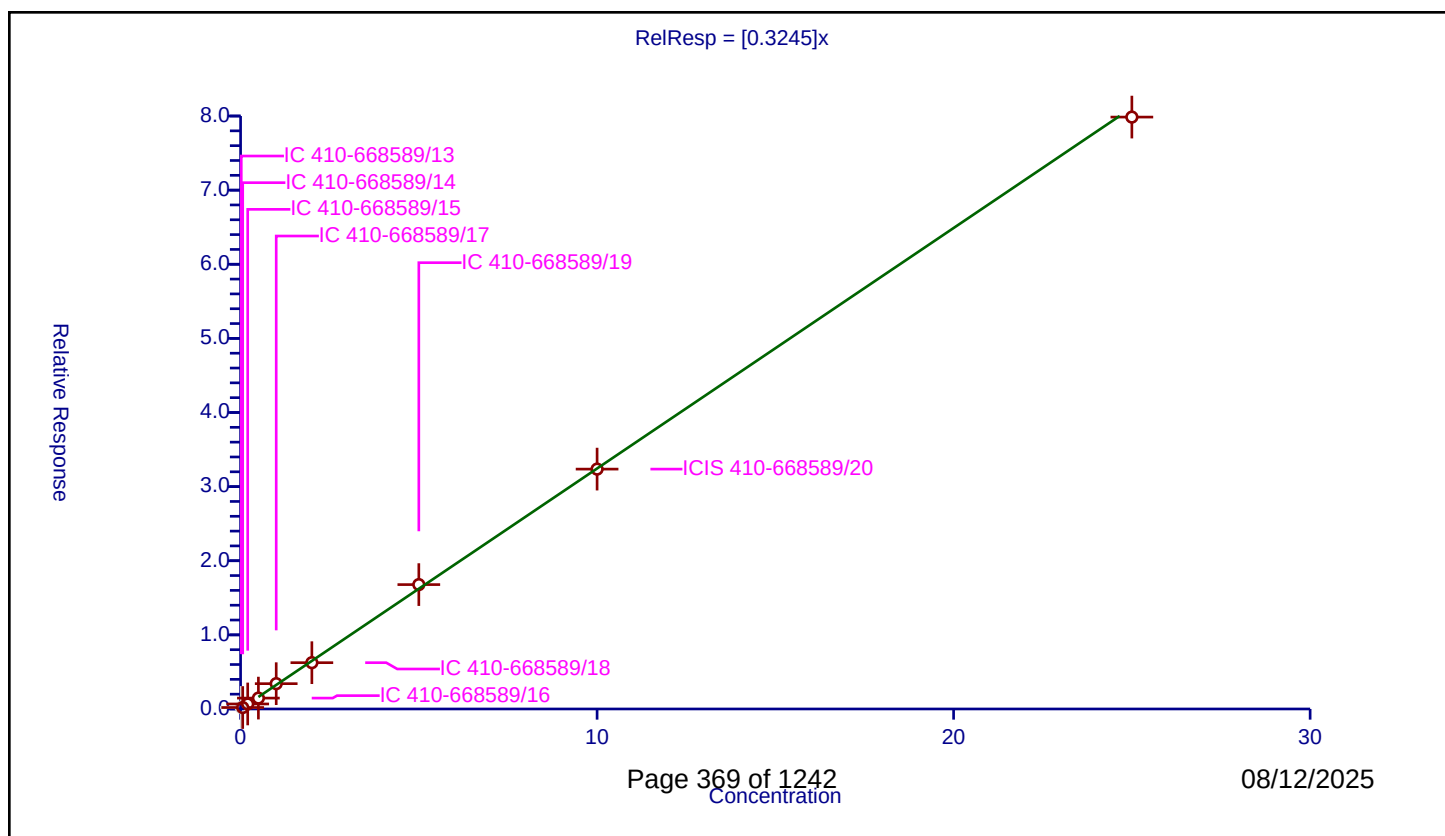
Curve Coefficients

Intercept: 0
Slope: 0.3245

Error Coefficients

Relative Standard Deviation: 4.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.020518	10.0	1832045.0	1.025903	N
2	IC 410-668589/14	0.06	0.019784	10.0	1831280.0	0.329733	Y
3	IC 410-668589/15	0.2	0.067882	10.0	1849831.0	0.339409	Y
4	IC 410-668589/16	0.5	0.146849	10.0	1860146.0	0.293697	Y
5	IC 410-668589/17	1.0	0.341629	10.0	1893953.0	0.341629	Y
6	IC 410-668589/18	2.0	0.624901	10.0	1918847.0	0.312451	Y
7	IC 410-668589/19	5.0	1.67827	10.0	1935362.0	0.335654	Y
8	ICIS 410-668589/20	10.0	3.236259	10.0	1961552.0	0.323626	Y
9	IC 410-668589/21	25.0	7.985517	10.0	1984911.0	0.319421	Y



Calibration

/ Methylcyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

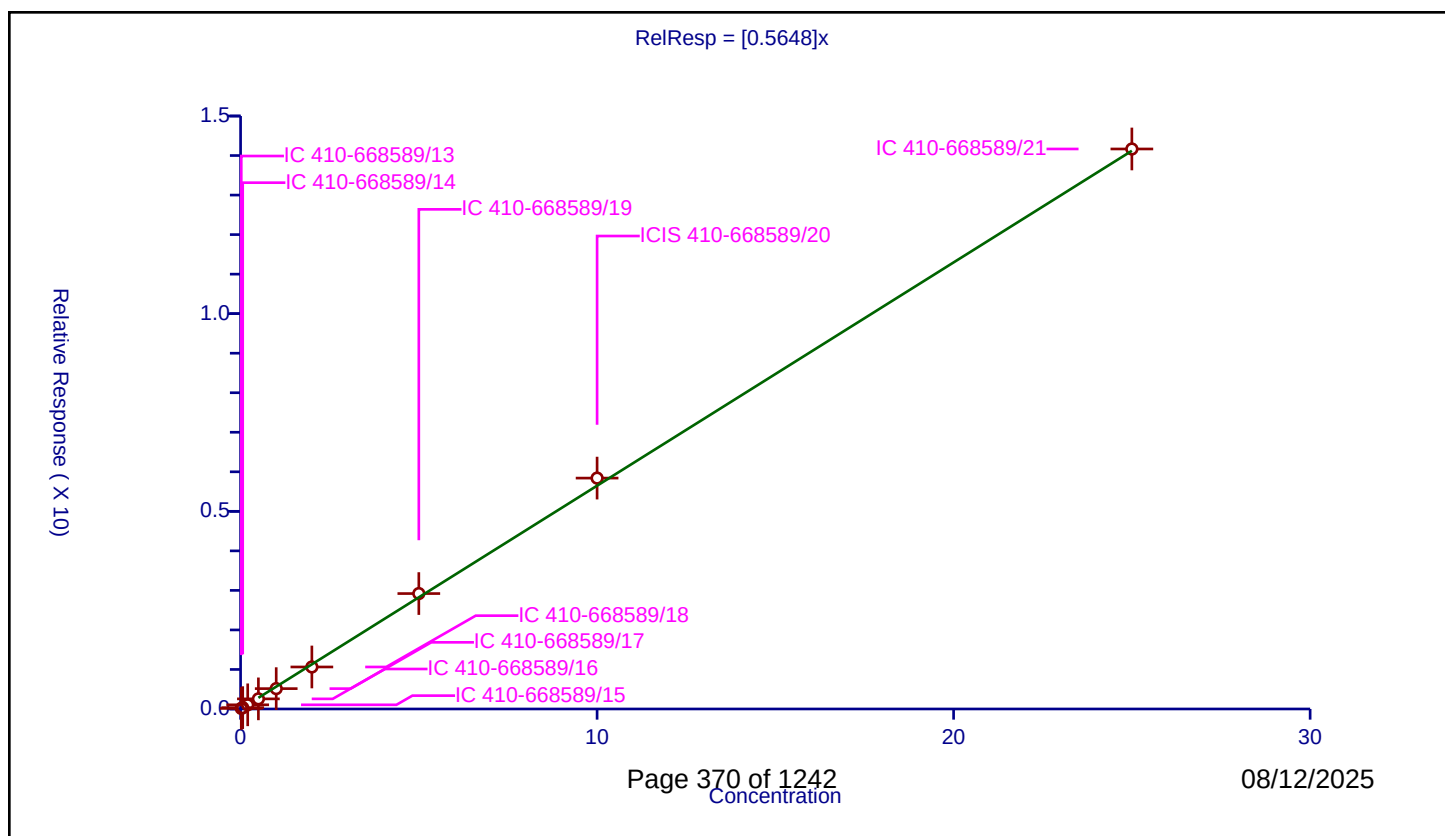
Curve Coefficients

Intercept: 0
Slope: 0.5648

Error Coefficients

Relative Standard Deviation: 10.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.013979	10.0	1832045.0	0.698946	Y
2	IC 410-668589/14	0.06	0.033927	10.0	1831280.0	0.565451	Y
3	IC 410-668589/15	0.2	0.105274	10.0	1849831.0	0.526372	Y
4	IC 410-668589/16	0.5	0.255781	10.0	1860146.0	0.511562	Y
5	IC 410-668589/17	1.0	0.515092	10.0	1893953.0	0.515092	Y
6	IC 410-668589/18	2.0	1.062477	10.0	1918847.0	0.531238	Y
7	IC 410-668589/19	5.0	2.919981	10.0	1935362.0	0.583996	Y
8	ICIS 410-668589/20	10.0	5.84061	10.0	1961552.0	0.584061	Y
9	IC 410-668589/21	25.0	14.165895	10.0	1984911.0	0.566636	Y



Calibration

/ 1,2-Dichloropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

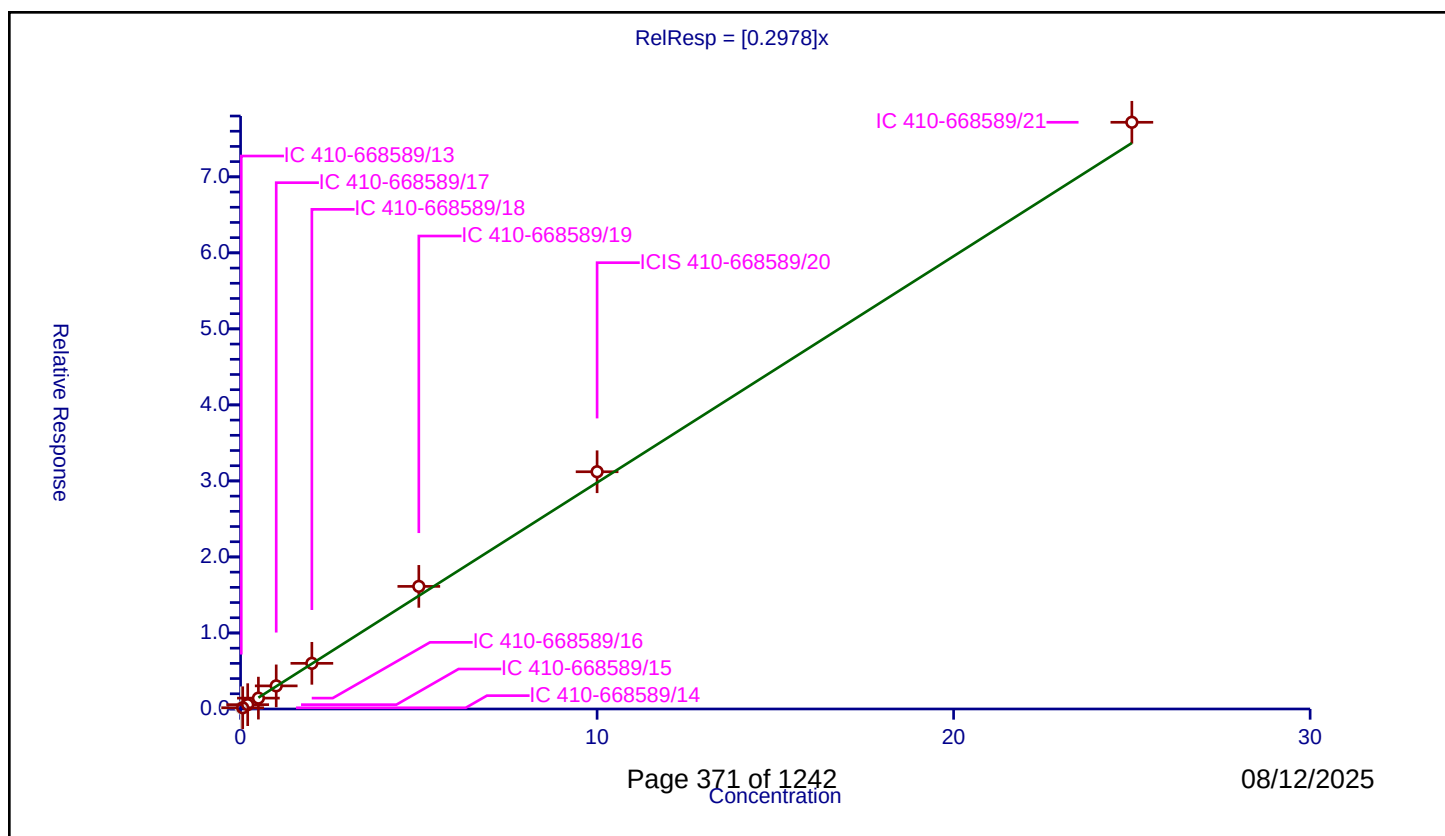
Curve Coefficients

Intercept: 0
Slope: 0.2978

Error Coefficients

Relative Standard Deviation: 6.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.014847	10.0	1832045.0	0.74234	N
2	IC 410-668589/14	0.06	0.015814	10.0	1831280.0	0.263568	Y
3	IC 410-668589/15	0.2	0.057086	10.0	1849831.0	0.285431	Y
4	IC 410-668589/16	0.5	0.142924	10.0	1860146.0	0.285849	Y
5	IC 410-668589/17	1.0	0.303904	10.0	1893953.0	0.303904	Y
6	IC 410-668589/18	2.0	0.600621	10.0	1918847.0	0.300311	Y
7	IC 410-668589/19	5.0	1.61284	10.0	1935362.0	0.322568	Y
8	ICIS 410-668589/20	10.0	3.120549	10.0	1961552.0	0.312055	Y
9	IC 410-668589/21	25.0	7.71754	10.0	1984911.0	0.308702	Y



Calibration

/ 1,4-Dioxane

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

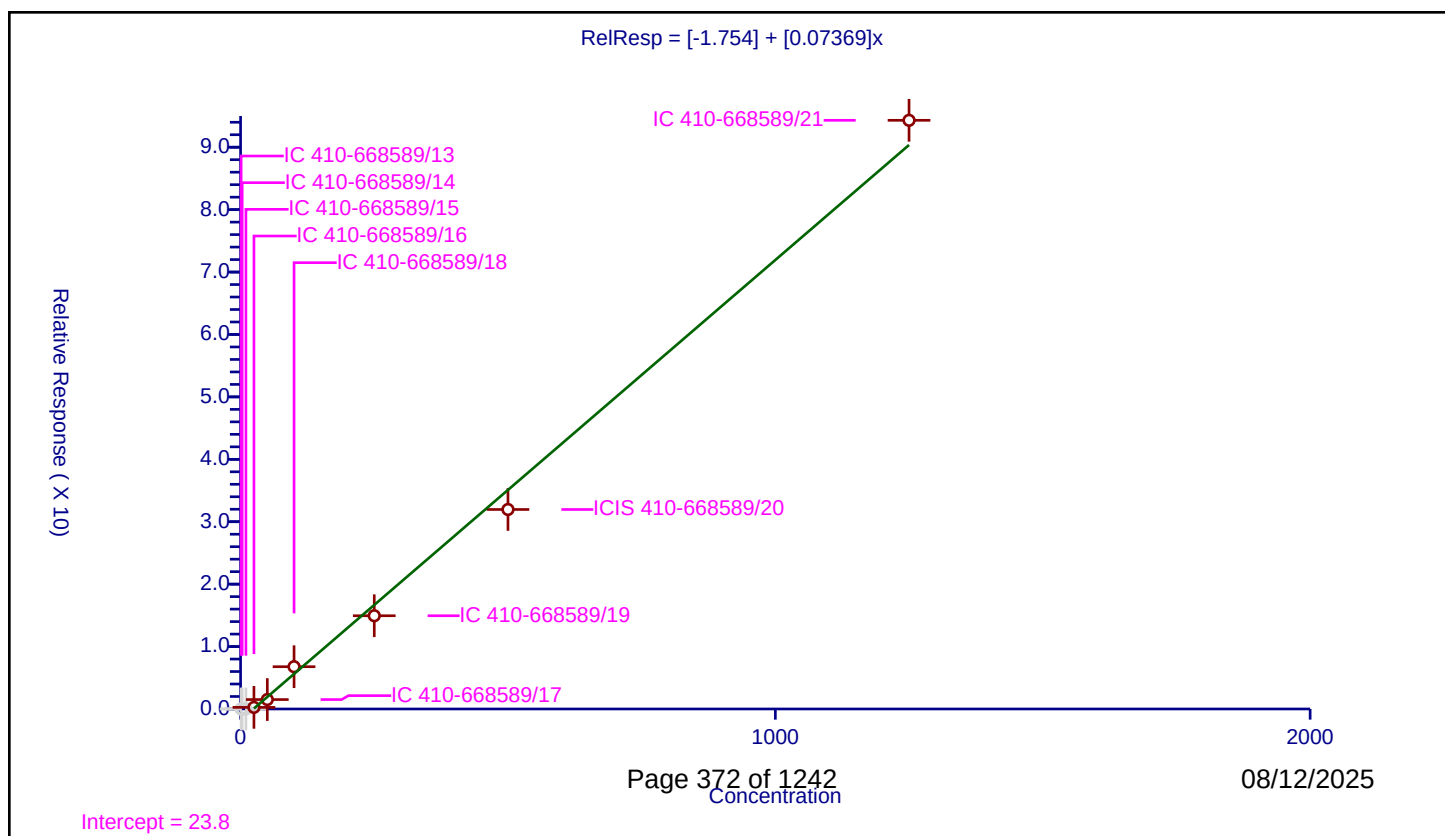
Curve Coefficients

Intercept: -1.754
Slope: 0.07369

Error Coefficients

Relative Standard Deviation: 12.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	1.0	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	3.0	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	10.0	0.0	50.0	83156.0	0.0	N
4	IC 410-668589/16	25.0	0.259354	50.0	72295.0	0.010374	Y
5	IC 410-668589/17	50.0	1.510991	50.0	64825.0	0.03022	Y
6	IC 410-668589/18	100.0	6.771733	50.0	87437.0	0.067717	Y
7	IC 410-668589/19	250.0	14.938999	50.0	71966.0	0.059756	Y
8	ICIS 410-668589/20	500.0	31.962651	50.0	75826.0	0.063925	Y
9	IC 410-668589/21	1250.0	94.310263	50.0	82517.0	0.075448	Y



Calibration

/ Methyl methacrylate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

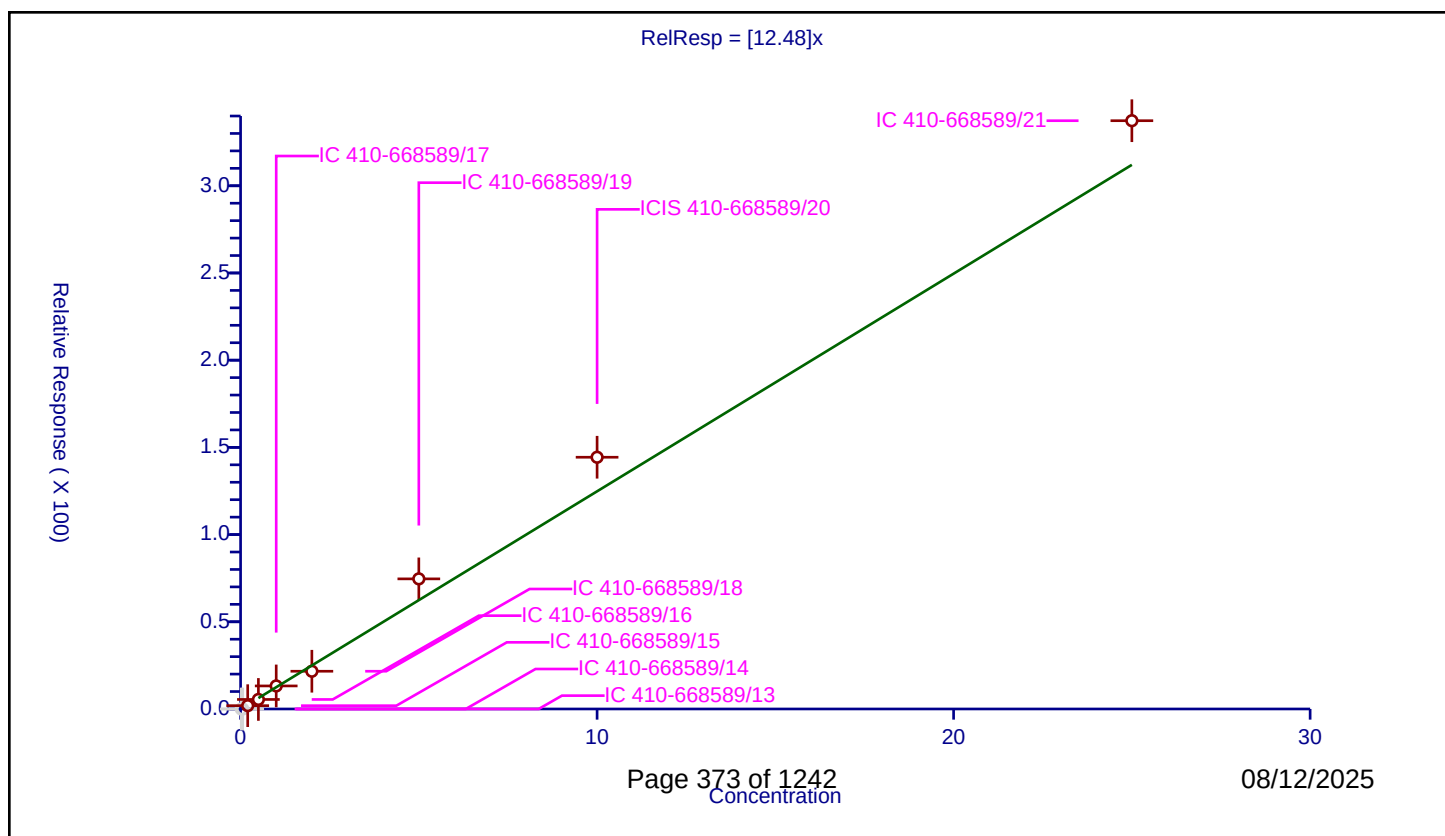
Curve Coefficients

Intercept: 0
Slope: 12.48

Error Coefficients

Relative Standard Deviation: 16.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	50.0	73626.0	0.0	N
2	IC 410-668589/14	0.06	0.0	50.0	80230.0	0.0	N
3	IC 410-668589/15	0.2	1.908461	50.0	83156.0	9.542306	Y
4	IC 410-668589/16	0.5	5.467183	50.0	72295.0	10.934366	Y
5	IC 410-668589/17	1.0	13.214038	50.0	64825.0	13.214038	Y
6	IC 410-668589/18	2.0	21.645299	50.0	87437.0	10.822649	Y
7	IC 410-668589/19	5.0	74.611622	50.0	71966.0	14.922324	Y
8	ICIS 410-668589/20	10.0	144.341651	50.0	75826.0	14.434165	Y
9	IC 410-668589/21	25.0	337.313523	50.0	82517.0	13.492541	Y



Calibration

/ Dibromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

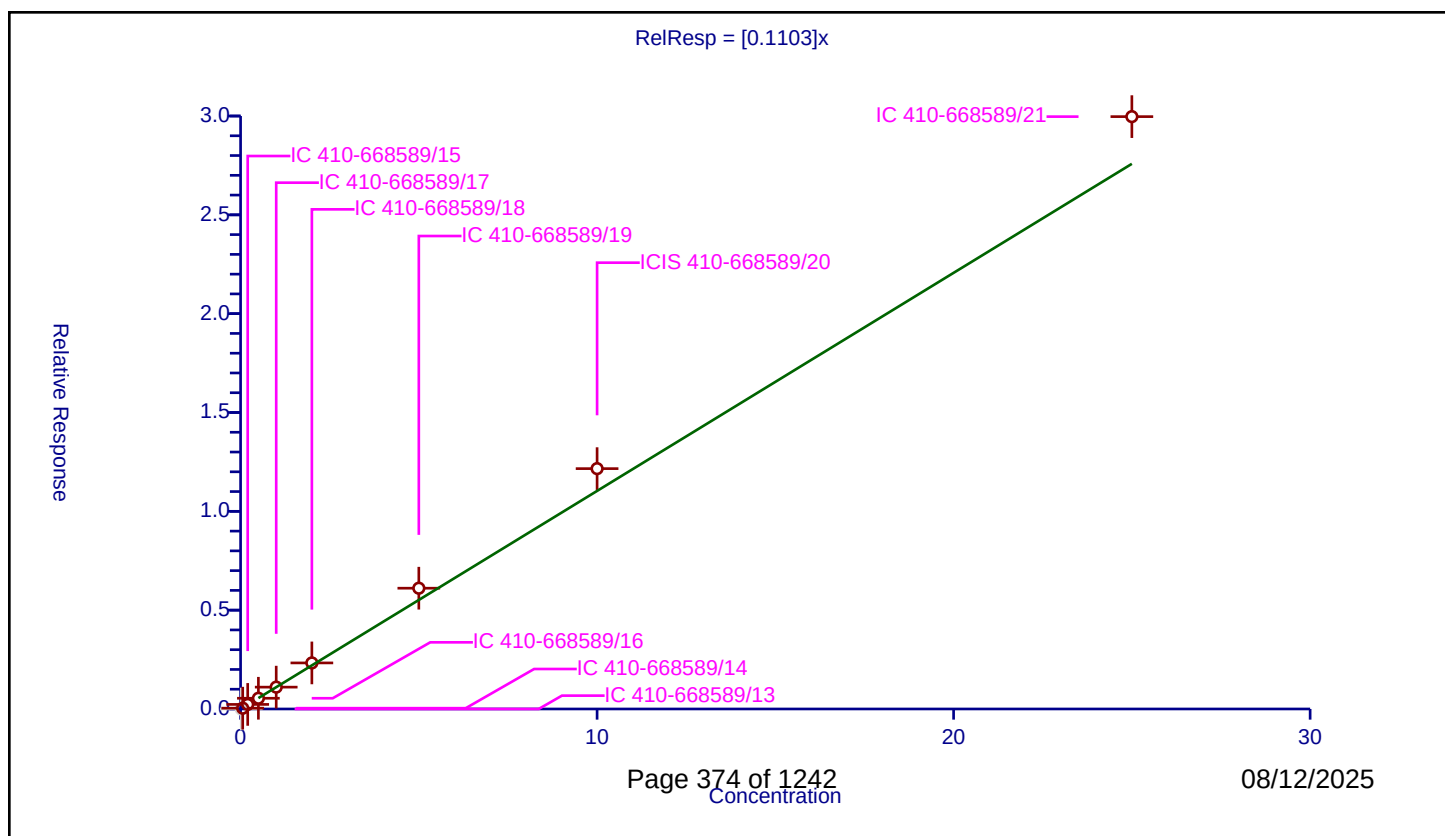
Curve Coefficients

Intercept: 0
Slope: 0.1103

Error Coefficients

Relative Standard Deviation: 16.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	1832045.0	0.0	N
2	IC 410-668589/14	0.06	0.004068	10.0	1831280.0	0.067803	Y
3	IC 410-668589/15	0.2	0.023078	10.0	1849831.0	0.115389	Y
4	IC 410-668589/16	0.5	0.054313	10.0	1860146.0	0.108626	Y
5	IC 410-668589/17	1.0	0.110557	10.0	1893953.0	0.110557	Y
6	IC 410-668589/18	2.0	0.233067	10.0	1918847.0	0.116534	Y
7	IC 410-668589/19	5.0	0.611069	10.0	1935362.0	0.122214	Y
8	ICIS 410-668589/20	10.0	1.216083	10.0	1961552.0	0.121608	Y
9	IC 410-668589/21	25.0	2.996895	10.0	1984911.0	0.119876	Y



Calibration

/ Dichlorobromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

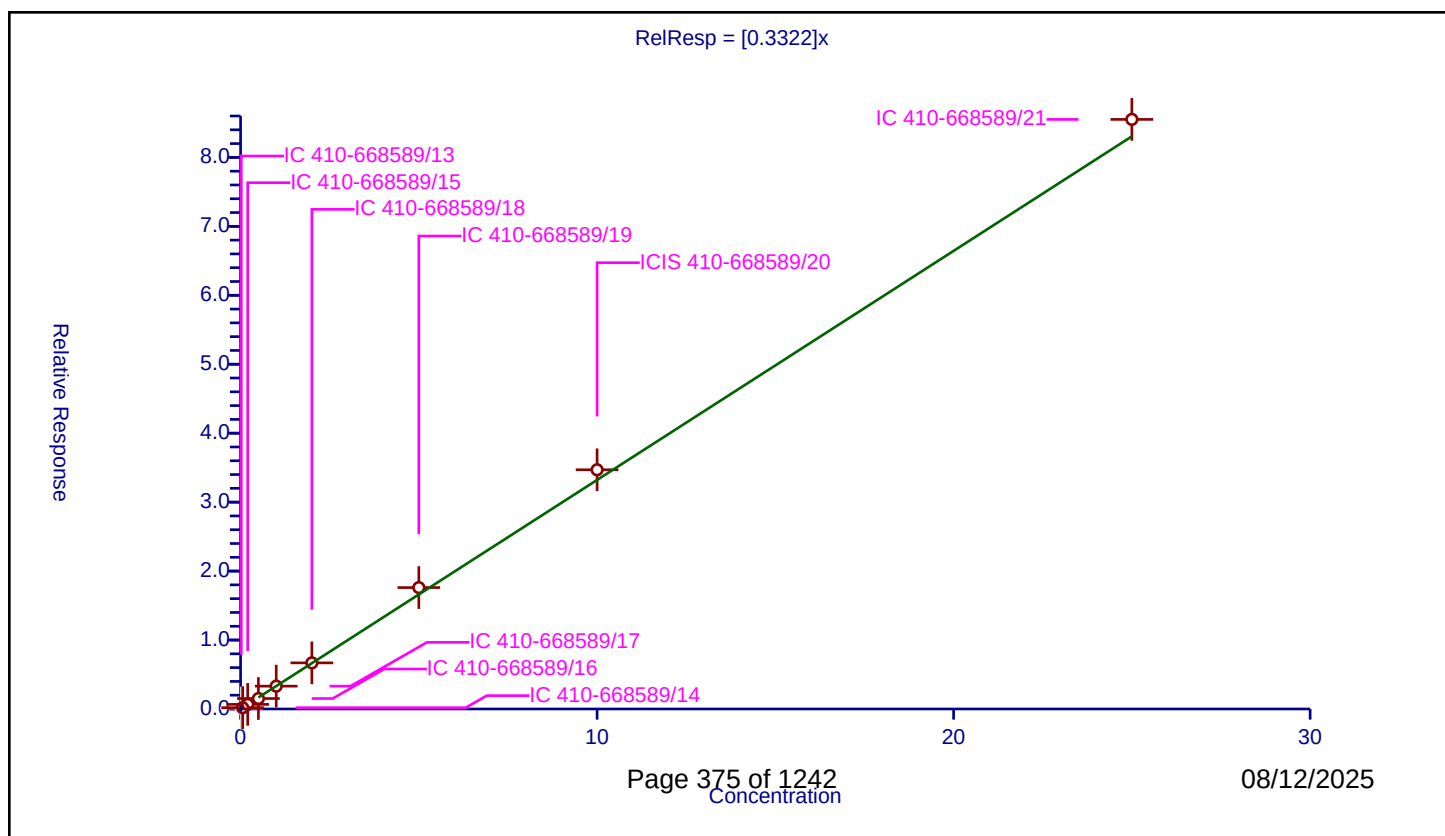
Curve Coefficients

Intercept: 0
Slope: 0.3322

Error Coefficients

Relative Standard Deviation: 5.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.013586	10.0	1832045.0	0.679296	N
2	IC 410-668589/14	0.06	0.018763	10.0	1831280.0	0.312714	Y
3	IC 410-668589/15	0.2	0.066839	10.0	1849831.0	0.334193	Y
4	IC 410-668589/16	0.5	0.151816	10.0	1860146.0	0.303632	Y
5	IC 410-668589/17	1.0	0.331413	10.0	1893953.0	0.331413	Y
6	IC 410-668589/18	2.0	0.668938	10.0	1918847.0	0.334469	Y
7	IC 410-668589/19	5.0	1.760771	10.0	1935362.0	0.352154	Y
8	ICIS 410-668589/20	10.0	3.469329	10.0	1961552.0	0.346933	Y
9	IC 410-668589/21	25.0	8.550917	10.0	1984911.0	0.342037	Y



Calibration

/ 2-Nitropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

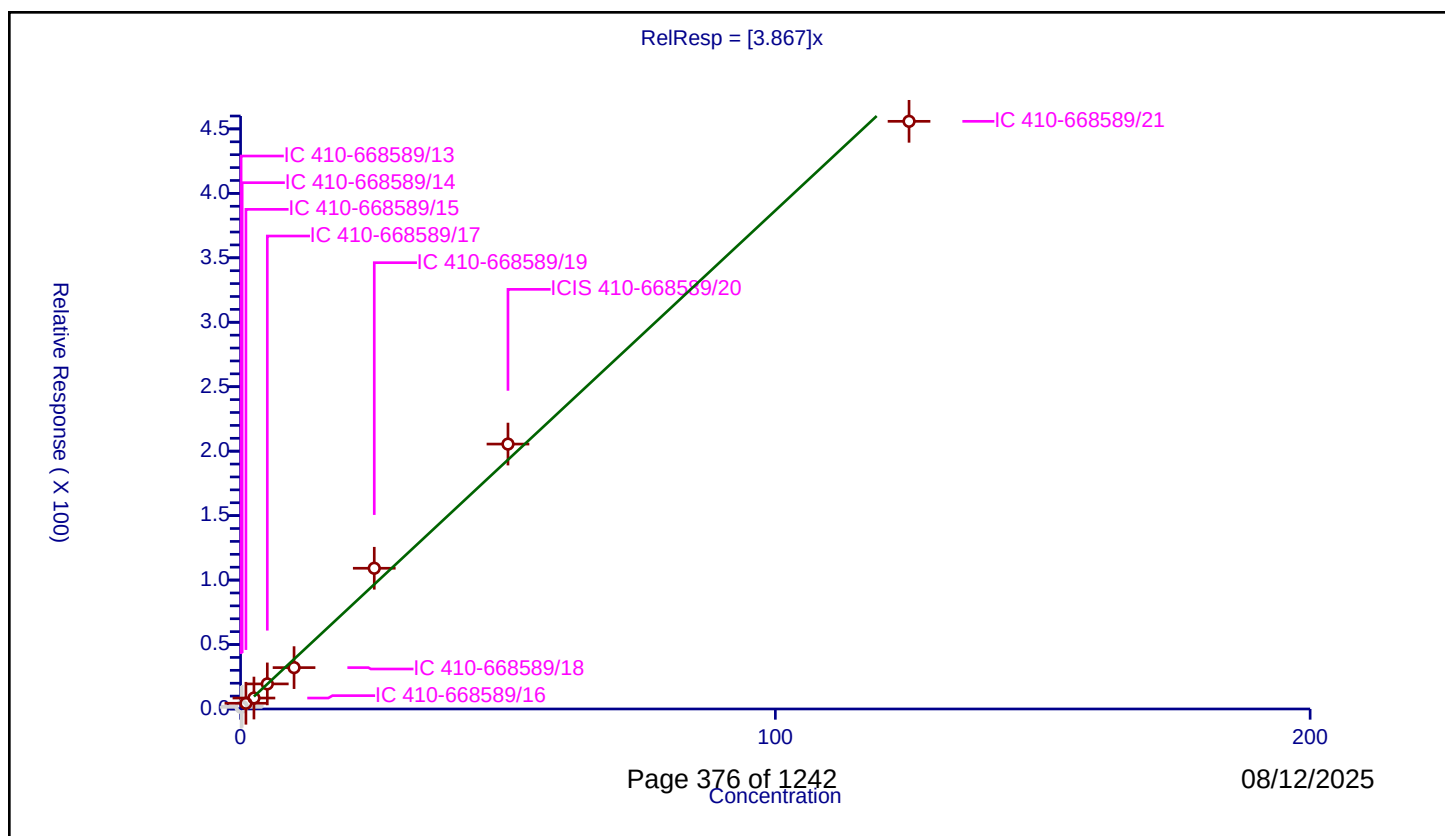
Curve Coefficients

Intercept: 0
Slope: 3.867

Error Coefficients

Relative Standard Deviation: 12.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.1	1.264499	50.0	73626.0	12.64499	N
2	IC 410-668589/14	0.3	2.031036	50.0	80230.0	6.770119	N
3	IC 410-668589/15	1.0	4.443456	50.0	83156.0	4.443456	Y
4	IC 410-668589/16	2.5	8.498513	50.0	72295.0	3.399405	Y
5	IC 410-668589/17	5.0	19.460856	50.0	64825.0	3.892171	Y
6	IC 410-668589/18	10.0	32.097396	50.0	87437.0	3.20974	Y
7	IC 410-668589/19	25.0	109.180724	50.0	71966.0	4.367229	Y
8	ICIS 410-668589/20	50.0	205.515259	50.0	75826.0	4.110305	Y
9	IC 410-668589/21	125.0	455.893331	50.0	82517.0	3.647147	Y



Calibration

/ 1-Bromo-2-chloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

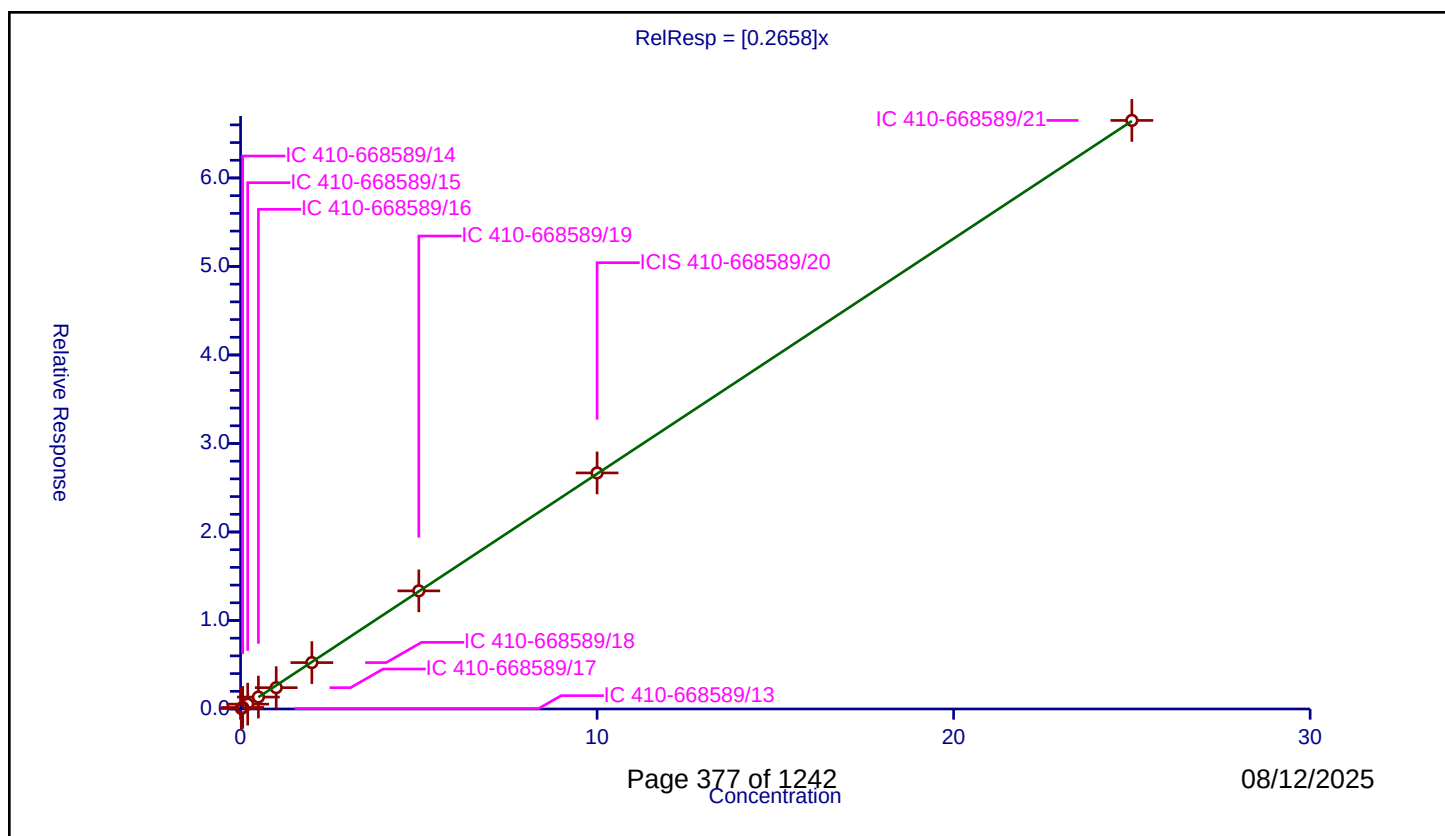
Curve Coefficients

Intercept: 0
Slope: 0.2658

Error Coefficients

Relative Standard Deviation: 4.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.005136	10.0	1832045.0	0.256817	Y
2	IC 410-668589/14	0.06	0.017217	10.0	1831280.0	0.286958	Y
3	IC 410-668589/15	0.2	0.055124	10.0	1849831.0	0.27562	Y
4	IC 410-668589/16	0.5	0.134828	10.0	1860146.0	0.269656	Y
5	IC 410-668589/17	1.0	0.240956	10.0	1893953.0	0.240956	Y
6	IC 410-668589/18	2.0	0.524122	10.0	1918847.0	0.262061	Y
7	IC 410-668589/19	5.0	1.334758	10.0	1935362.0	0.266952	Y
8	ICIS 410-668589/20	10.0	2.667357	10.0	1961552.0	0.266736	Y
9	IC 410-668589/21	25.0	6.650142	10.0	1984911.0	0.266006	Y



Calibration

/ cis-1,3-Dichloropropene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

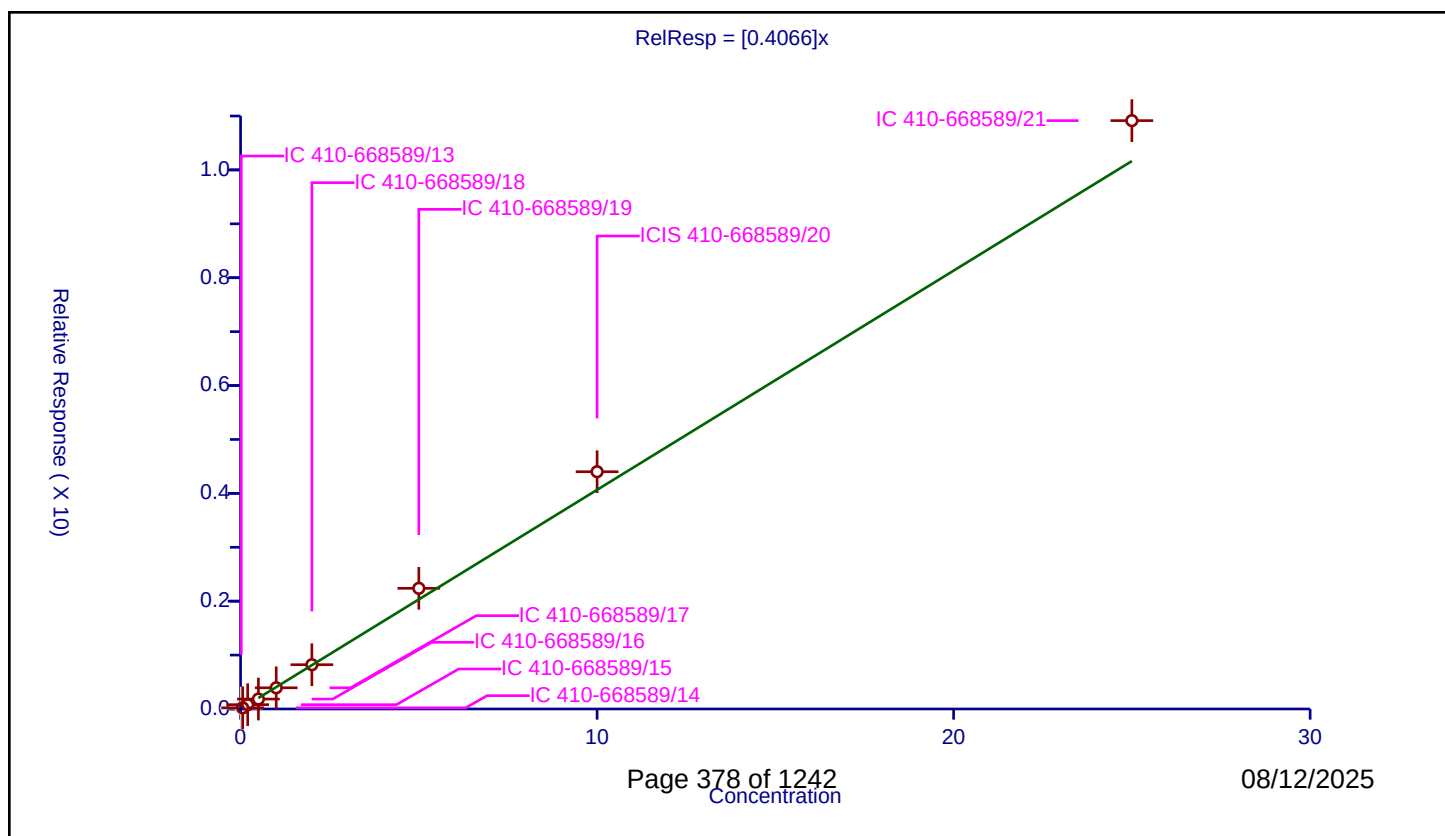
Curve Coefficients

Intercept: 0
Slope: 0.4066

Error Coefficients

Relative Standard Deviation: 8.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.016501	10.0	1832045.0	0.825034	N
2	IC 410-668589/14	0.06	0.021433	10.0	1831280.0	0.357218	Y
3	IC 410-668589/15	0.2	0.079742	10.0	1849831.0	0.398712	Y
4	IC 410-668589/16	0.5	0.184179	10.0	1860146.0	0.368358	Y
5	IC 410-668589/17	1.0	0.39312	10.0	1893953.0	0.39312	Y
6	IC 410-668589/18	2.0	0.8214	10.0	1918847.0	0.4107	Y
7	IC 410-668589/19	5.0	2.238511	10.0	1935362.0	0.447702	Y
8	ICIS 410-668589/20	10.0	4.401505	10.0	1961552.0	0.44015	Y
9	IC 410-668589/21	25.0	10.914177	10.0	1984911.0	0.436567	Y



Calibration

/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

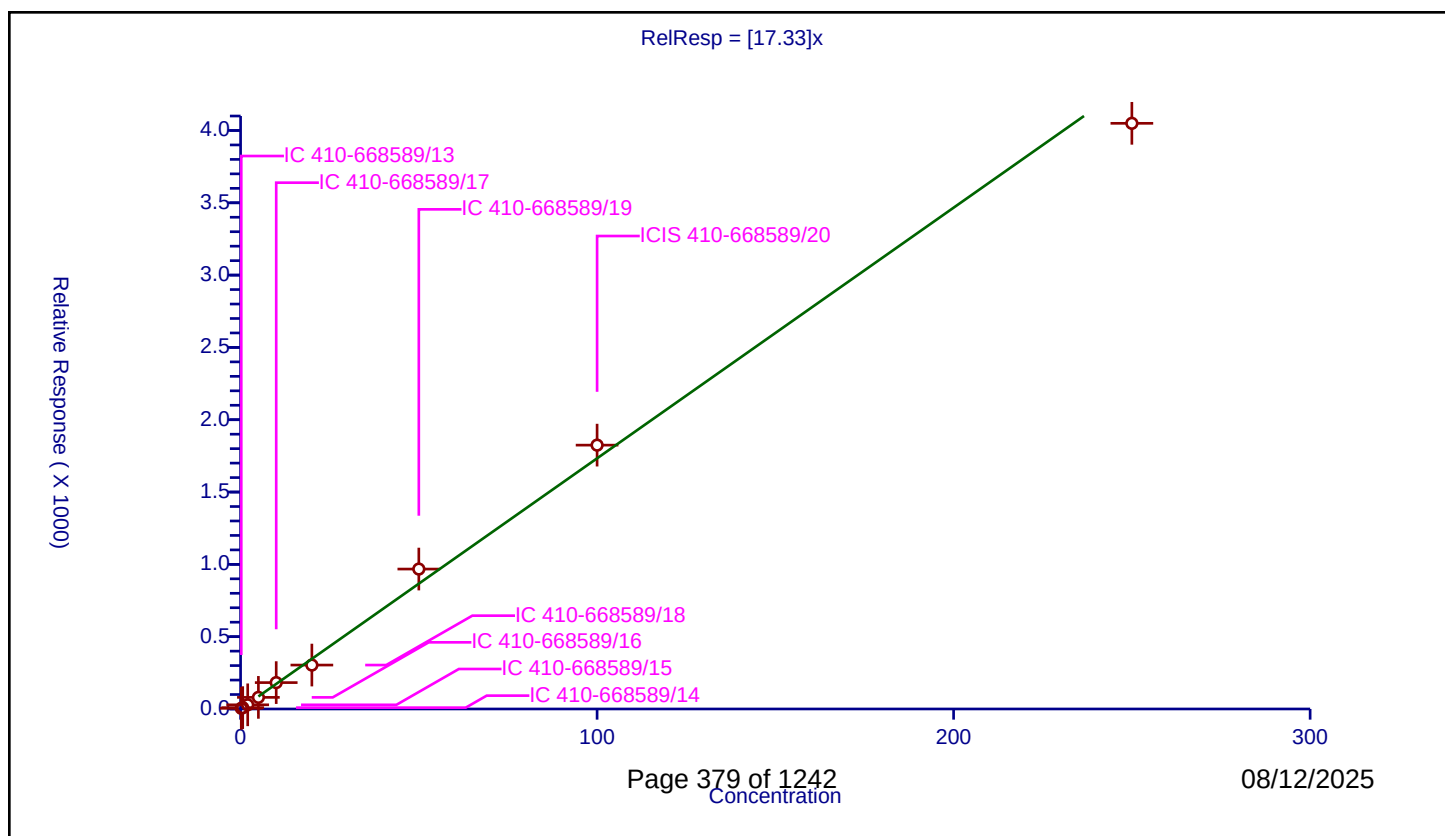
Curve Coefficients

Intercept: 0
Slope: 17.33

Error Coefficients

Relative Standard Deviation: 15.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	4.560889	50.0	73626.0	22.804444	Y
2	IC 410-668589/14	0.6	9.263368	50.0	80230.0	15.438946	Y
3	IC 410-668589/15	2.0	28.902304	50.0	83156.0	14.451152	Y
4	IC 410-668589/16	5.0	80.264887	50.0	72295.0	16.052977	Y
5	IC 410-668589/17	10.0	182.504435	50.0	64825.0	18.250444	Y
6	IC 410-668589/18	20.0	303.733545	50.0	87437.0	15.186677	Y
7	IC 410-668589/19	50.0	967.492288	50.0	71966.0	19.349846	Y
8	ICIS 410-668589/20	100.0	1824.450716	50.0	75826.0	18.244507	Y
9	IC 410-668589/21	250.0	4049.429814	50.0	82517.0	16.197719	Y



Calibration

/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

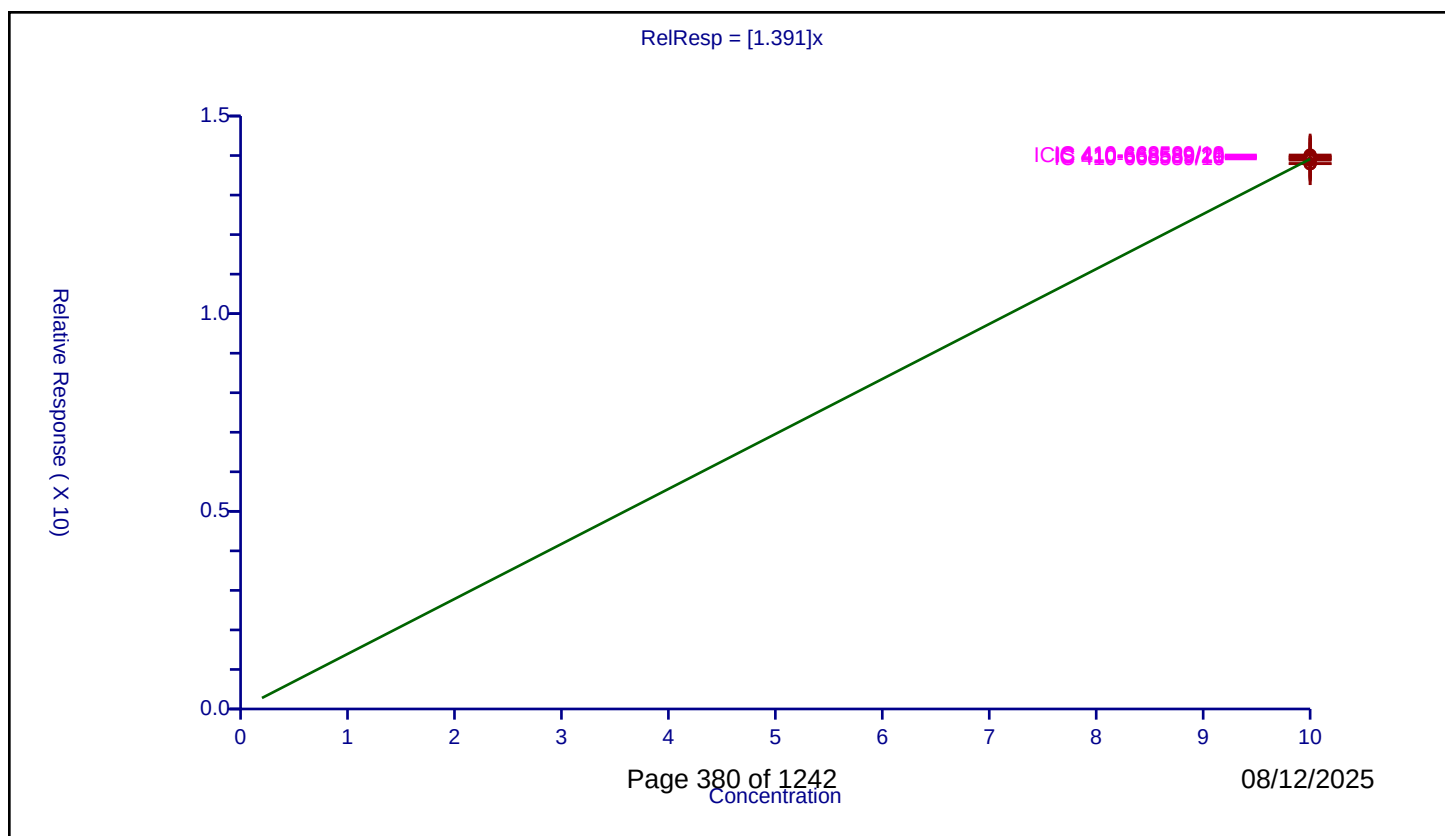
Curve Coefficients

Intercept: 0
 Slope: 1.391

Error Coefficients

Relative Standard Deviation: 0.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/21	10.0	13.951853	10.0	1417363.0	1.395185	Y
2	ICIS 410-668589/20	10.0	13.985879	10.0	1396688.0	1.398588	Y
3	IC 410-668589/19	10.0	13.959978	10.0	1379202.0	1.395998	Y
4	IC 410-668589/18	10.0	14.013443	10.0	1372931.0	1.401344	Y
5	IC 410-668589/17	10.0	13.793282	10.0	1360861.0	1.379328	Y
6	IC 410-668589/16	10.0	13.914395	10.0	1338143.0	1.391439	Y
7	IC 410-668589/15	10.0	13.906176	10.0	1343086.0	1.390618	Y
8	IC 410-668589/14	10.0	13.796049	10.0	1330860.0	1.379605	Y
9	IC 410-668589/13	10.0	13.883159	10.0	1331318.0	1.388316	Y



Calibration

/ Toluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

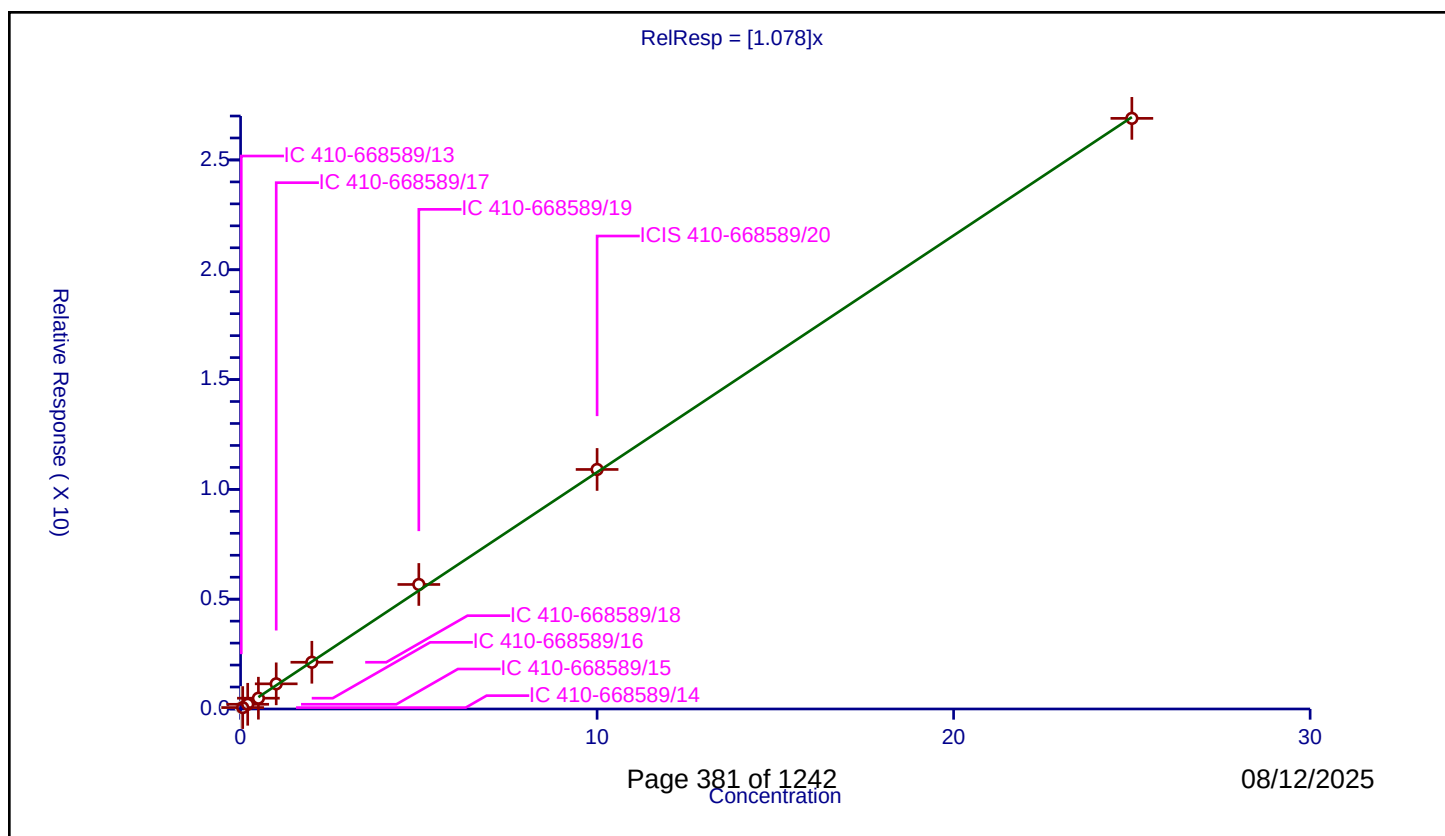
Curve Coefficients

Intercept: 0
Slope: 1.078

Error Coefficients

Relative Standard Deviation: 4.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.068631	10.0	1331318.0	3.431562	N
2	IC 410-668589/14	0.06	0.063621	10.0	1330860.0	1.060342	Y
3	IC 410-668589/15	0.2	0.214499	10.0	1343086.0	1.072493	Y
4	IC 410-668589/16	0.5	0.490762	10.0	1338143.0	0.981524	Y
5	IC 410-668589/17	1.0	1.145628	10.0	1360861.0	1.145628	Y
6	IC 410-668589/18	2.0	2.127689	10.0	1372931.0	1.063844	Y
7	IC 410-668589/19	5.0	5.669953	10.0	1379202.0	1.133991	Y
8	ICIS 410-668589/20	10.0	10.906938	10.0	1396688.0	1.090694	Y
9	IC 410-668589/21	25.0	26.892659	10.0	1417363.0	1.075706	Y



Calibration

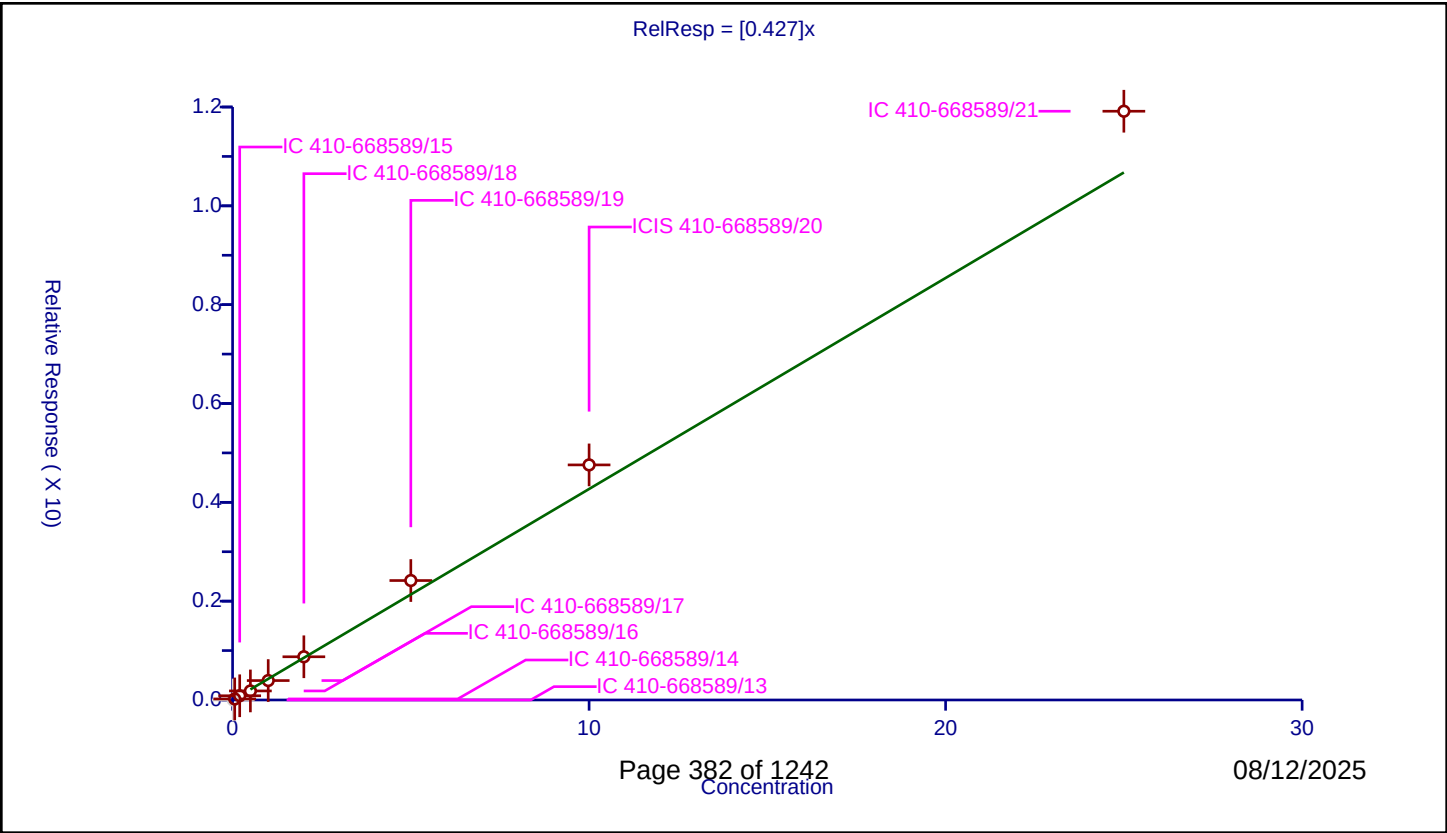
/ trans-1,3-Dichloropropene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.427
Error Coefficients	

Relative Standard Deviation: 11.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	1331318.0	0.0	N
2	IC 410-668589/14	0.06	0.021287	10.0	1330860.0	0.354783	Y
3	IC 410-668589/15	0.2	0.085765	10.0	1343086.0	0.428826	Y
4	IC 410-668589/16	0.5	0.183112	10.0	1338143.0	0.366224	Y
5	IC 410-668589/17	1.0	0.39317	10.0	1360861.0	0.39317	Y
6	IC 410-668589/18	2.0	0.874341	10.0	1372931.0	0.437171	Y
7	IC 410-668589/19	5.0	2.417325	10.0	1379202.0	0.483465	Y
8	ICIS 410-668589/20	10.0	4.757455	10.0	1396688.0	0.475745	Y
9	IC 410-668589/21	25.0	11.914901	10.0	1417363.0	0.476596	Y



Calibration

/ Ethyl methacrylate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

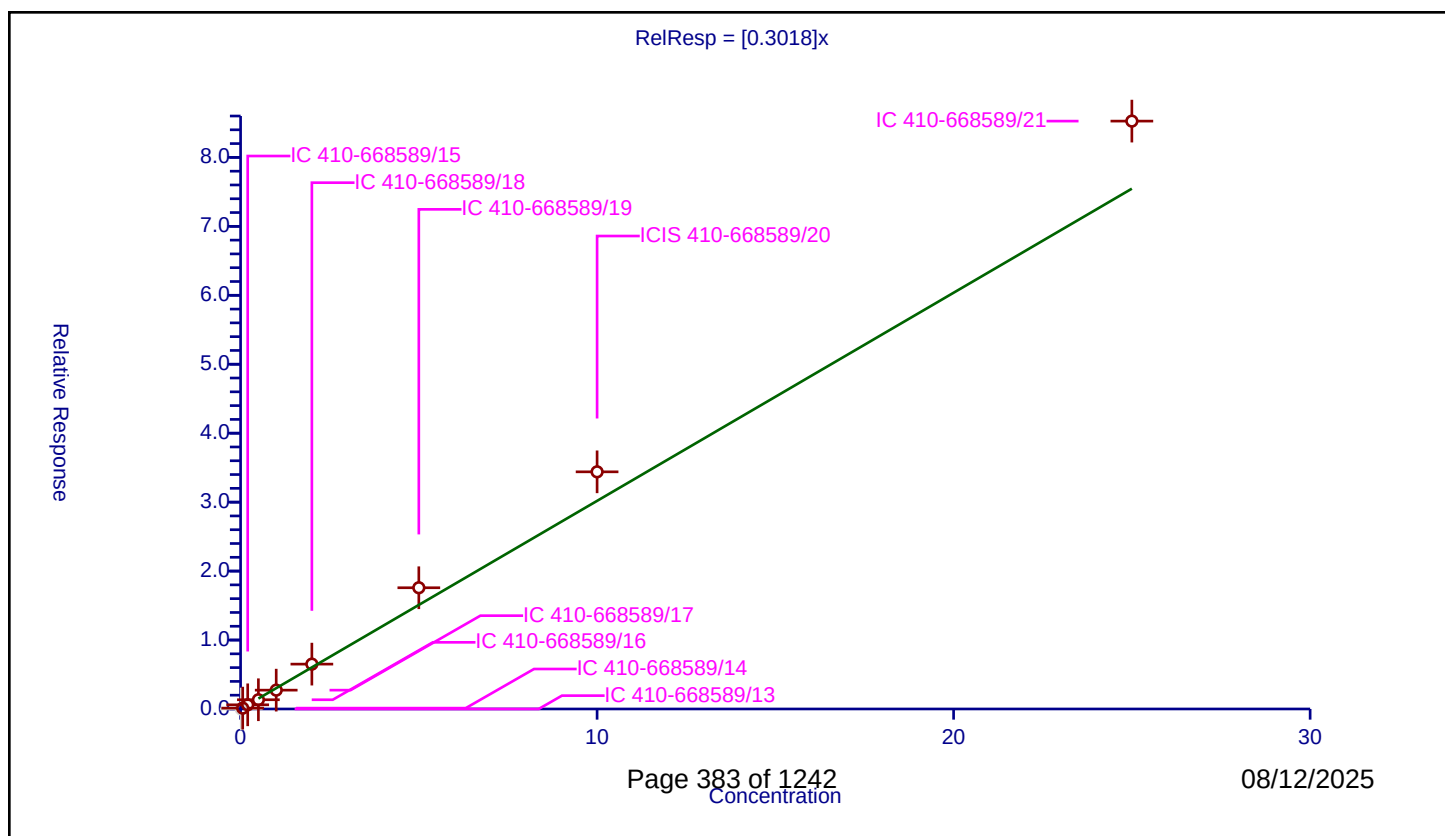
Curve Coefficients

Intercept: 0
Slope: 0.3018

Error Coefficients

Relative Standard Deviation: 16.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	1331318.0	0.0	N
2	IC 410-668589/14	0.06	0.012563	10.0	1330860.0	0.209388	Y
3	IC 410-668589/15	0.2	0.060413	10.0	1343086.0	0.302066	Y
4	IC 410-668589/16	0.5	0.134051	10.0	1338143.0	0.268103	Y
5	IC 410-668589/17	1.0	0.273136	10.0	1360861.0	0.273136	Y
6	IC 410-668589/18	2.0	0.650717	10.0	1372931.0	0.325359	Y
7	IC 410-668589/19	5.0	1.758437	10.0	1379202.0	0.351687	Y
8	ICIS 410-668589/20	10.0	3.439401	10.0	1396688.0	0.34394	Y
9	IC 410-668589/21	25.0	8.526157	10.0	1417363.0	0.341046	Y



Calibration

/ 1,1,2-Trichloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

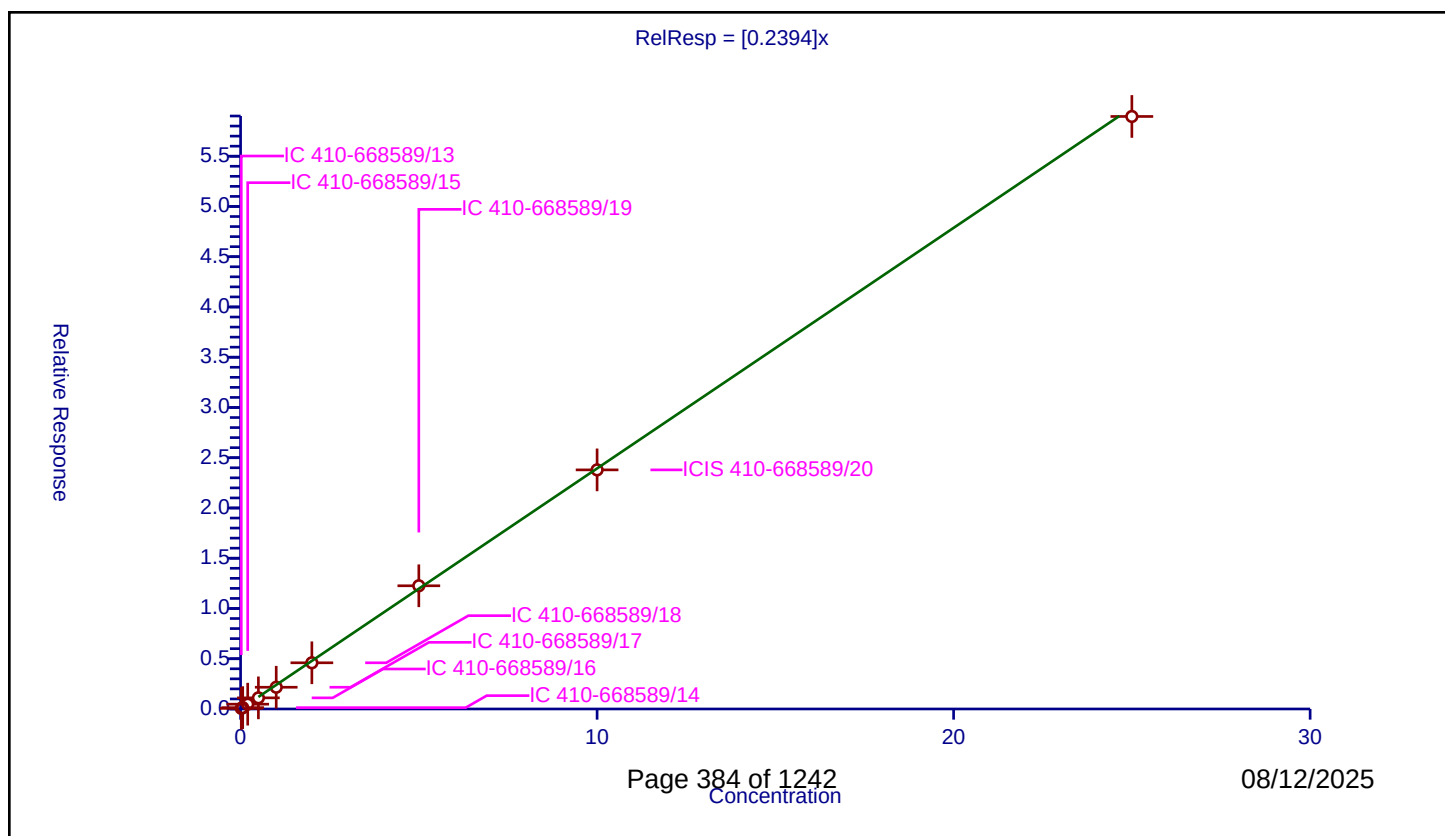
Curve Coefficients

Intercept: 0
Slope: 0.2394

Error Coefficients

Relative Standard Deviation: 11.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.006099	10.0	1331318.0	0.304961	Y
2	IC 410-668589/14	0.06	0.01336	10.0	1330860.0	0.222663	Y
3	IC 410-668589/15	0.2	0.047972	10.0	1343086.0	0.239858	Y
4	IC 410-668589/16	0.5	0.110863	10.0	1338143.0	0.221725	Y
5	IC 410-668589/17	1.0	0.21626	10.0	1360861.0	0.21626	Y
6	IC 410-668589/18	2.0	0.459644	10.0	1372931.0	0.229822	Y
7	IC 410-668589/19	5.0	1.225832	10.0	1379202.0	0.245166	Y
8	ICIS 410-668589/20	10.0	2.379057	10.0	1396688.0	0.237906	Y
9	IC 410-668589/21	25.0	5.895356	10.0	1417363.0	0.235814	Y



Calibration

/ Tetrachloroethene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

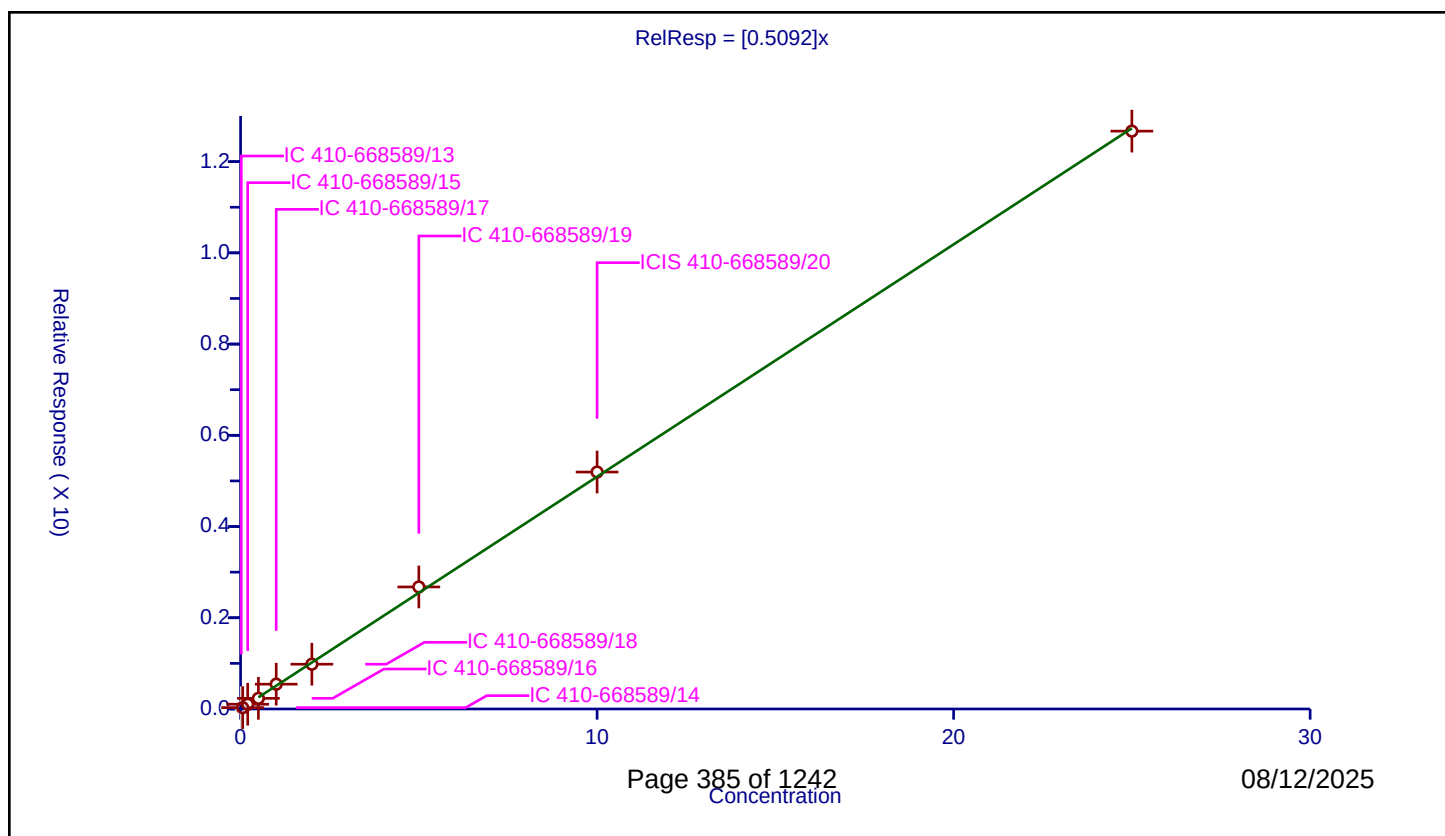
Curve Coefficients

Intercept: 0
Slope: 0.5092

Error Coefficients

Relative Standard Deviation: 5.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.028881	10.0	1331318.0	1.444058	N
2	IC 410-668589/14	0.06	0.029372	10.0	1330860.0	0.489533	Y
3	IC 410-668589/15	0.2	0.104297	10.0	1343086.0	0.521486	Y
4	IC 410-668589/16	0.5	0.233279	10.0	1338143.0	0.466557	Y
5	IC 410-668589/17	1.0	0.544214	10.0	1360861.0	0.544214	Y
6	IC 410-668589/18	2.0	0.981797	10.0	1372931.0	0.490899	Y
7	IC 410-668589/19	5.0	2.675547	10.0	1379202.0	0.535109	Y
8	ICIS 410-668589/20	10.0	5.194539	10.0	1396688.0	0.519454	Y
9	IC 410-668589/21	25.0	12.668335	10.0	1417363.0	0.506733	Y



Calibration

/ 1,3-Dichloropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

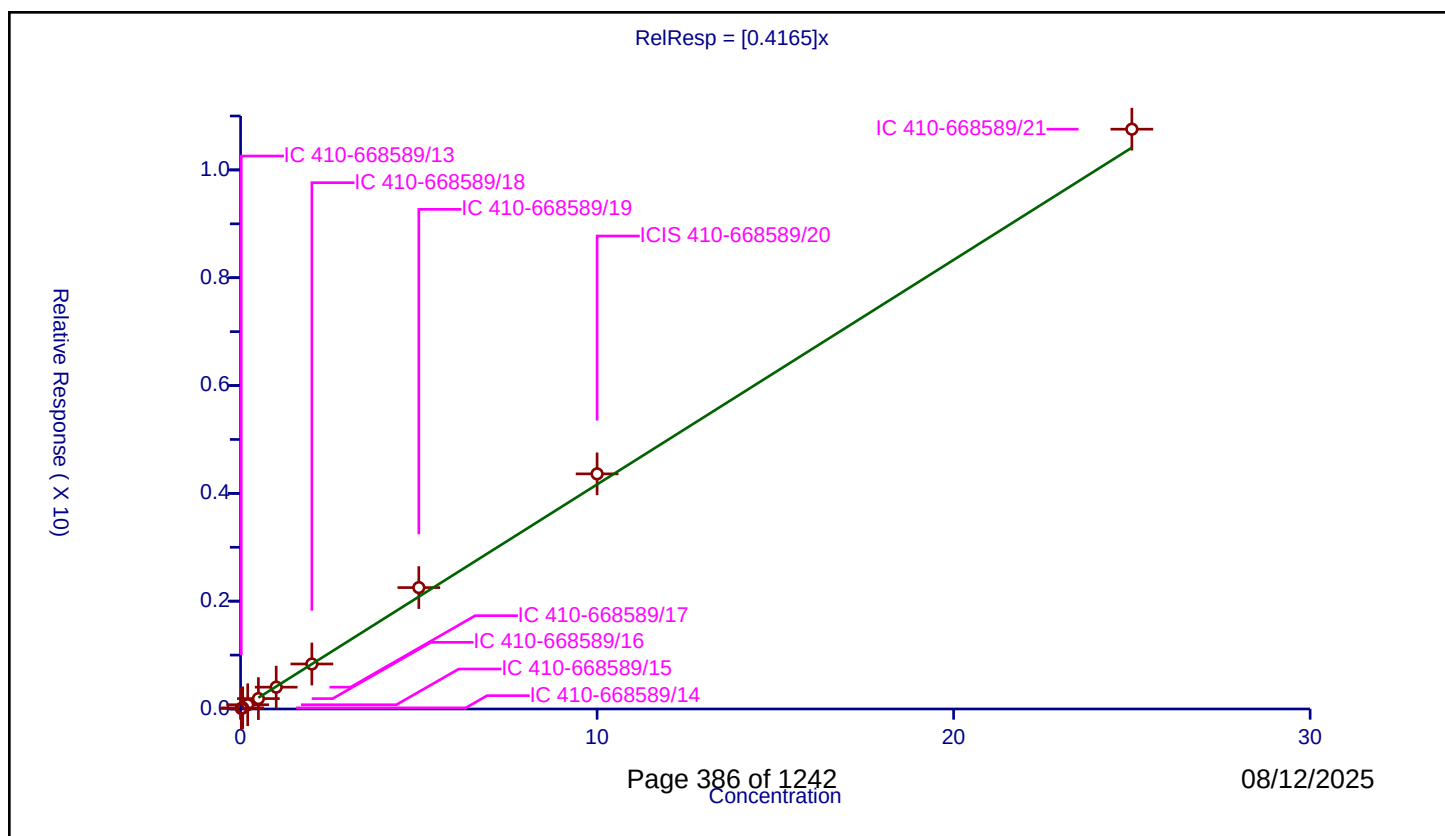
Curve Coefficients

Intercept: 0
Slope: 0.4165

Error Coefficients

Relative Standard Deviation: 9.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.009622	10.0	1331318.0	0.481102	Y
2	IC 410-668589/14	0.06	0.020956	10.0	1330860.0	0.349273	Y
3	IC 410-668589/15	0.2	0.078744	10.0	1343086.0	0.39372	Y
4	IC 410-668589/16	0.5	0.192633	10.0	1338143.0	0.385265	Y
5	IC 410-668589/17	1.0	0.405023	10.0	1360861.0	0.405023	Y
6	IC 410-668589/18	2.0	0.834987	10.0	1372931.0	0.417494	Y
7	IC 410-668589/19	5.0	2.252281	10.0	1379202.0	0.450456	Y
8	ICIS 410-668589/20	10.0	4.361819	10.0	1396688.0	0.436182	Y
9	IC 410-668589/21	25.0	10.755812	10.0	1417363.0	0.430232	Y



Calibration

/ 2-Hexanone

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

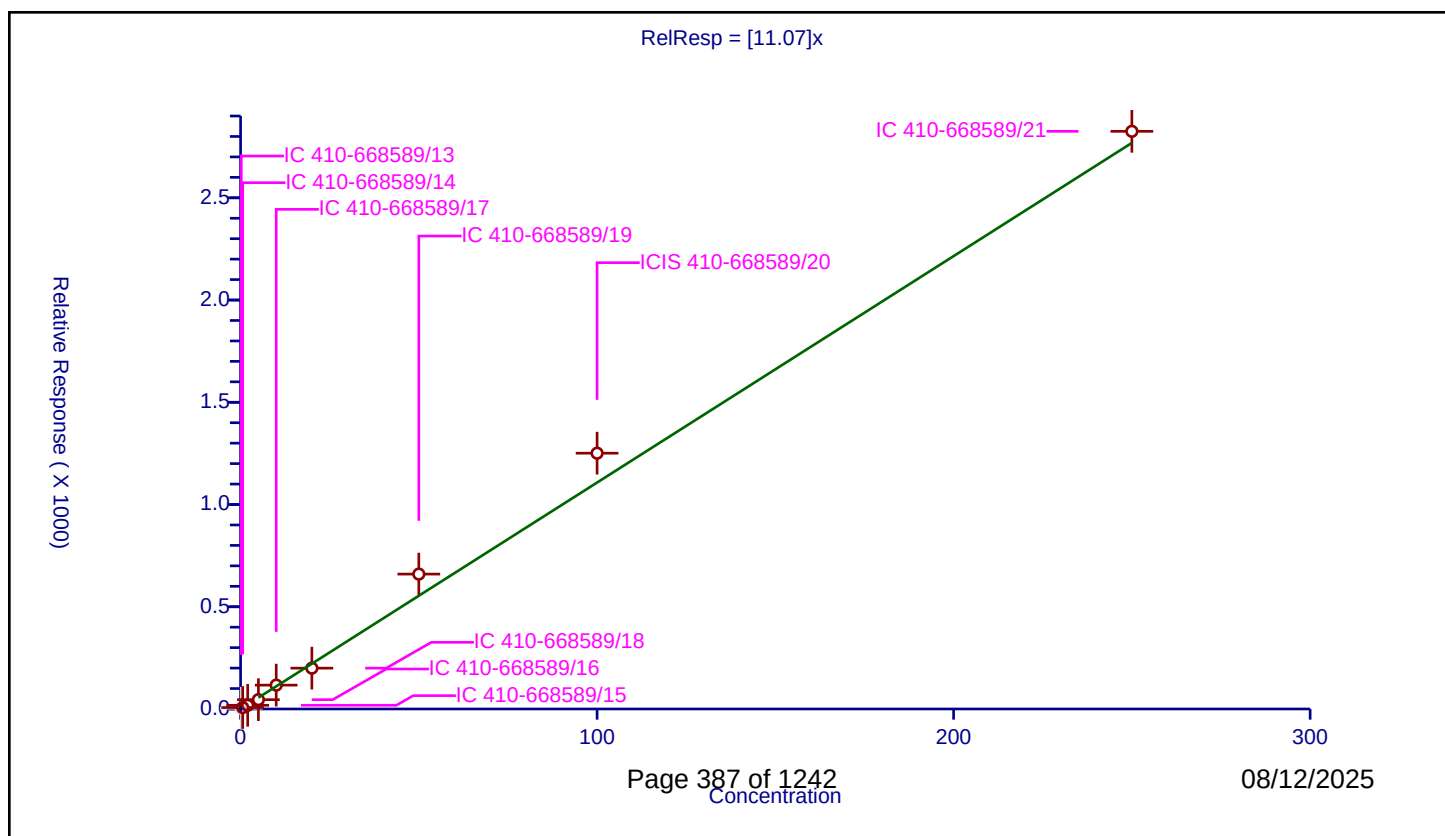
Curve Coefficients

Intercept: 0
Slope: 11.07

Error Coefficients

Relative Standard Deviation: 13.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	3.692989	50.0	73626.0	18.464944	N
2	IC 410-668589/14	0.6	7.067805	50.0	80230.0	11.779675	Y
3	IC 410-668589/15	2.0	18.094305	50.0	83156.0	9.047152	Y
4	IC 410-668589/16	5.0	45.550868	50.0	72295.0	9.110174	Y
5	IC 410-668589/17	10.0	116.67875	50.0	64825.0	11.667875	Y
6	IC 410-668589/18	20.0	199.699212	50.0	87437.0	9.984961	Y
7	IC 410-668589/19	50.0	659.673318	50.0	71966.0	13.193466	Y
8	ICIS 410-668589/20	100.0	1250.975919	50.0	75826.0	12.509759	Y
9	IC 410-668589/21	250.0	2825.089376	50.0	82517.0	11.300358	Y



Calibration

/ Chlorodibromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

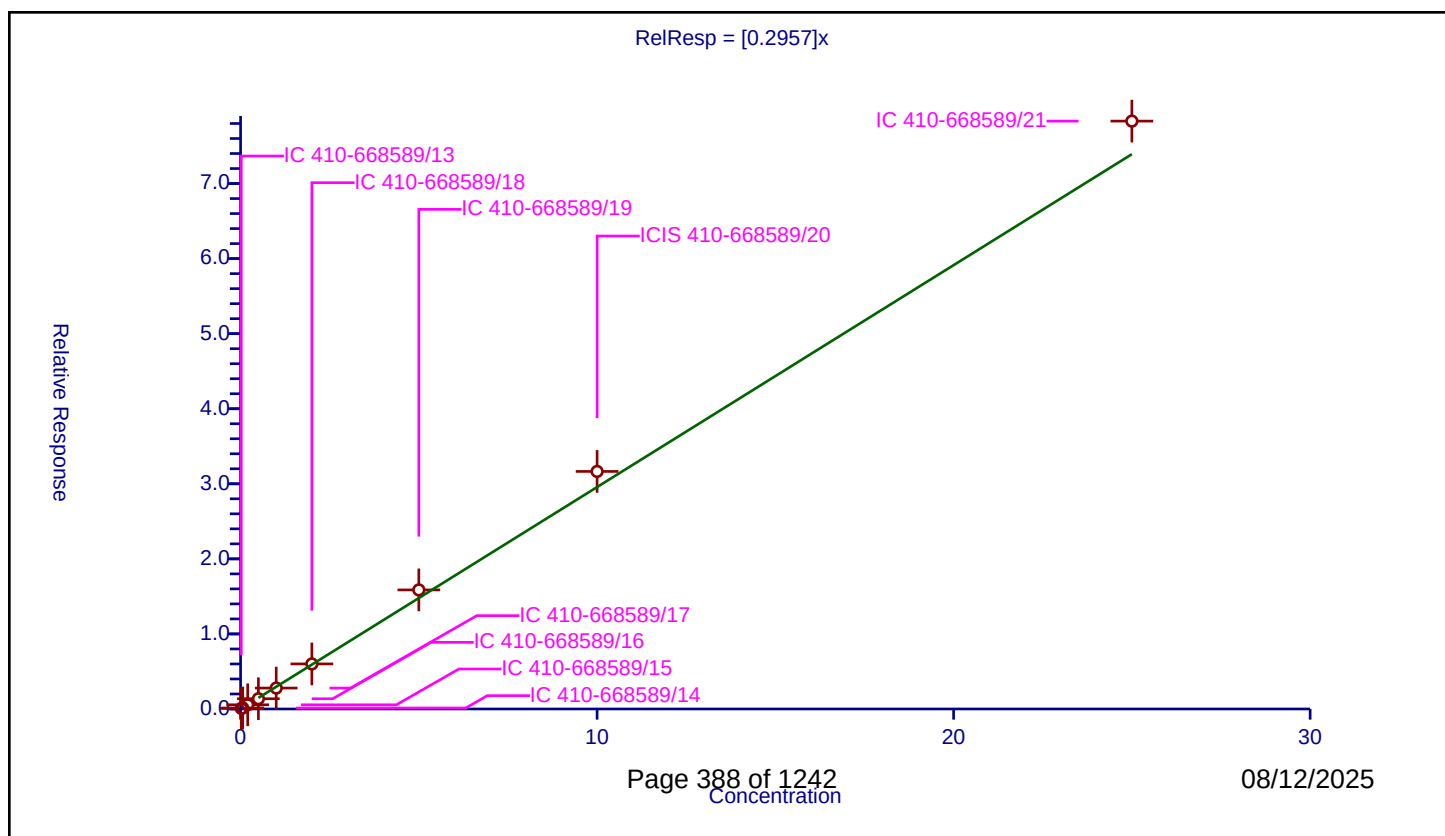
Curve Coefficients

Intercept: 0
Slope: 0.2957

Error Coefficients

Relative Standard Deviation: 13.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.007226	10.0	1331318.0	0.361296	Y
2	IC 410-668589/14	0.06	0.013217	10.0	1330860.0	0.220284	Y
3	IC 410-668589/15	0.2	0.055983	10.0	1343086.0	0.279915	Y
4	IC 410-668589/16	0.5	0.136562	10.0	1338143.0	0.273125	Y
5	IC 410-668589/17	1.0	0.278823	10.0	1360861.0	0.278823	Y
6	IC 410-668589/18	2.0	0.600737	10.0	1372931.0	0.300368	Y
7	IC 410-668589/19	5.0	1.586541	10.0	1379202.0	0.317308	Y
8	ICIS 410-668589/20	10.0	3.164866	10.0	1396688.0	0.316487	Y
9	IC 410-668589/21	25.0	7.83203	10.0	1417363.0	0.313281	Y



Calibration

/ Ethylene Dibromide

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

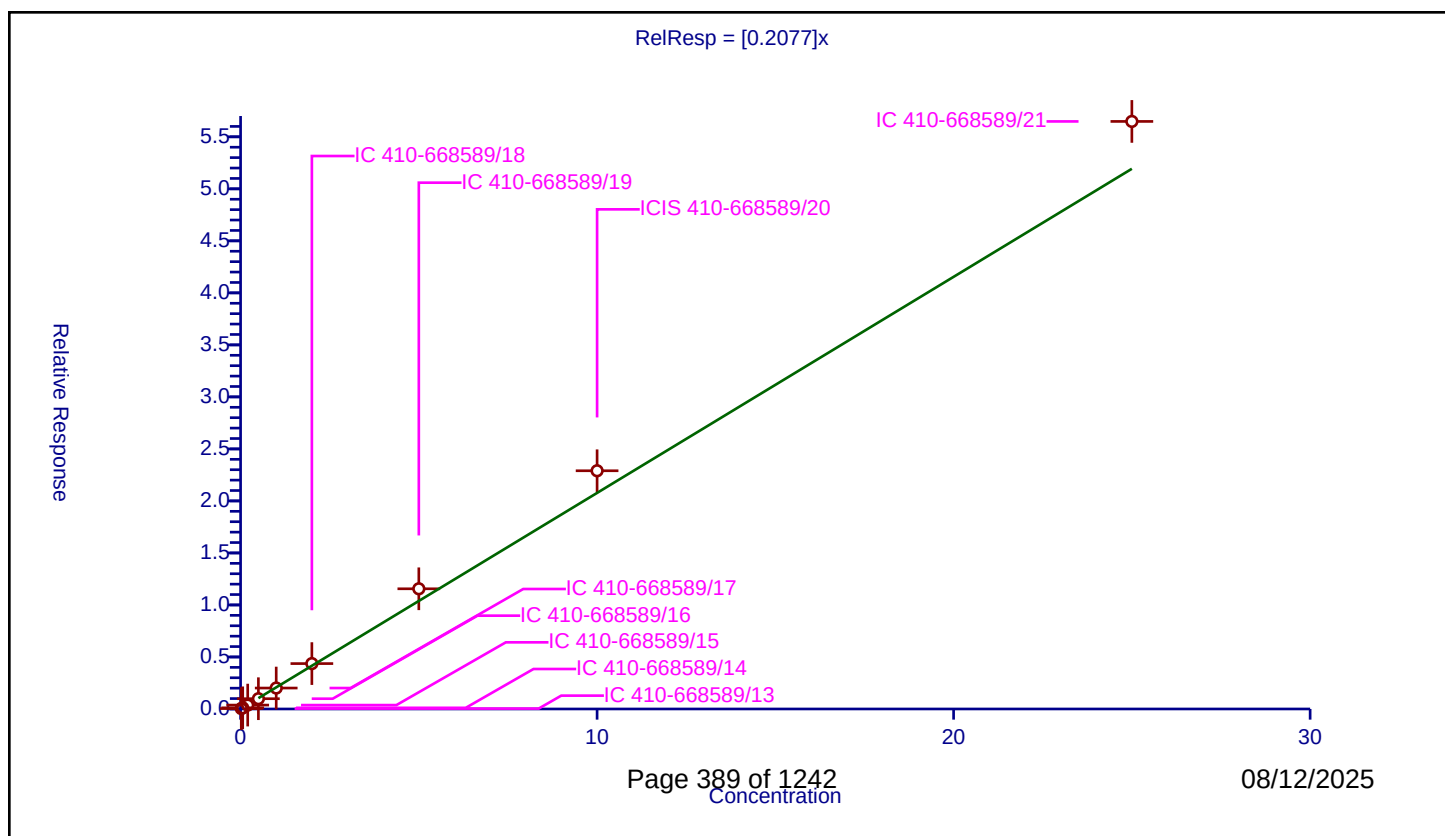
Curve Coefficients

Intercept: 0
Slope: 0.2077

Error Coefficients

Relative Standard Deviation: 8.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.003906	10.0	1331318.0	0.195295	Y
2	IC 410-668589/14	0.06	0.011023	10.0	1330860.0	0.183716	Y
3	IC 410-668589/15	0.2	0.037473	10.0	1343086.0	0.187367	Y
4	IC 410-668589/16	0.5	0.098711	10.0	1338143.0	0.197423	Y
5	IC 410-668589/17	1.0	0.201292	10.0	1360861.0	0.201292	Y
6	IC 410-668589/18	2.0	0.436497	10.0	1372931.0	0.218248	Y
7	IC 410-668589/19	5.0	1.155473	10.0	1379202.0	0.231095	Y
8	ICIS 410-668589/20	10.0	2.289967	10.0	1396688.0	0.228997	Y
9	IC 410-668589/21	25.0	5.648066	10.0	1417363.0	0.225923	Y



Calibration

/ 1-Chlorohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

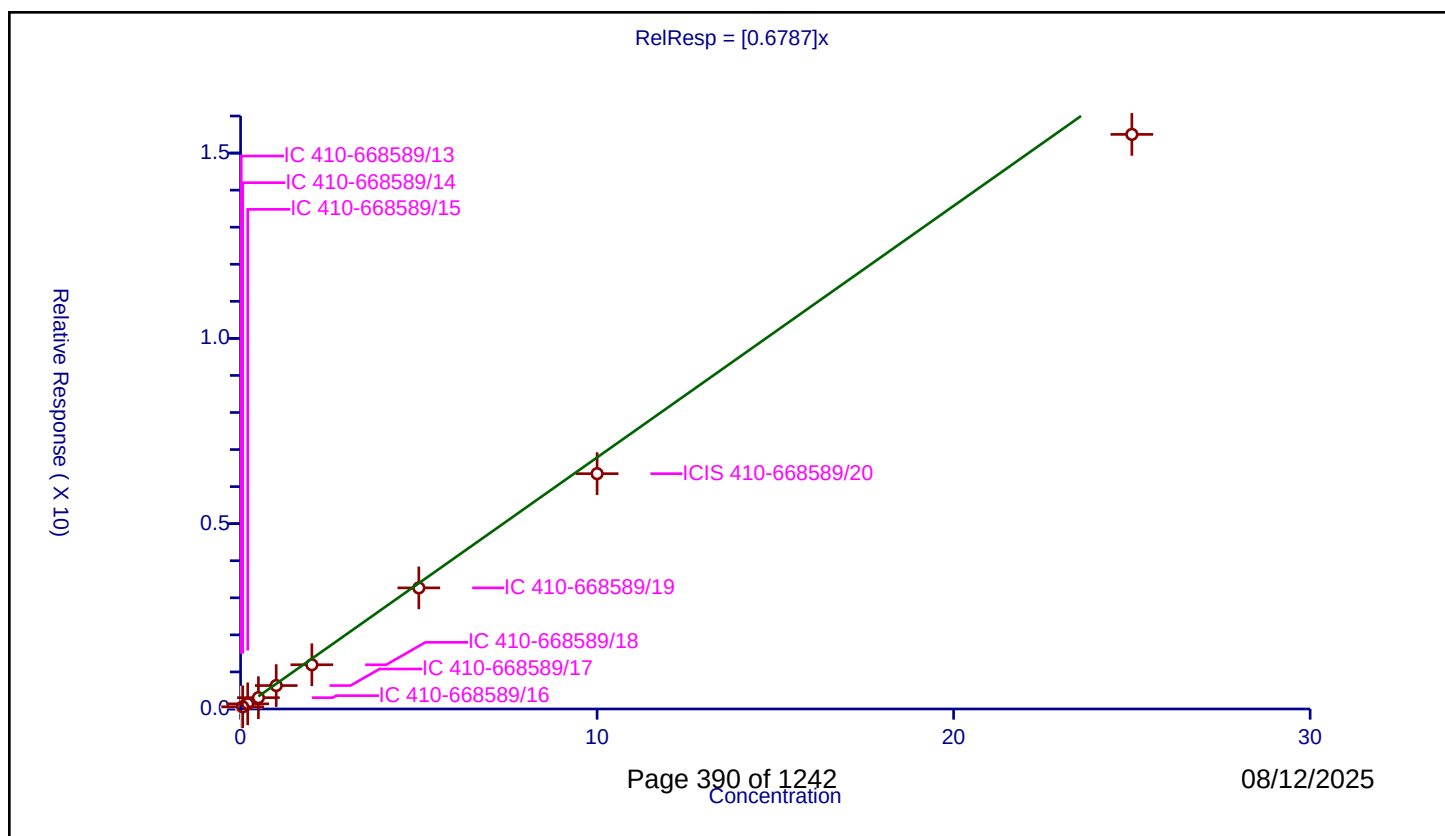
Curve Coefficients

Intercept: 0
Slope: 0.6787

Error Coefficients

Relative Standard Deviation: 18.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.047787	10.0	1331318.0	2.389362	N
2	IC 410-668589/14	0.06	0.059157	10.0	1330860.0	0.985954	Y
3	IC 410-668589/15	0.2	0.139224	10.0	1343086.0	0.696121	Y
4	IC 410-668589/16	0.5	0.305177	10.0	1338143.0	0.610353	Y
5	IC 410-668589/17	1.0	0.631879	10.0	1360861.0	0.631879	Y
6	IC 410-668589/18	2.0	1.193418	10.0	1372931.0	0.596709	Y
7	IC 410-668589/19	5.0	3.267469	10.0	1379202.0	0.653494	Y
8	ICIS 410-668589/20	10.0	6.349614	10.0	1396688.0	0.634961	Y
9	IC 410-668589/21	25.0	15.504052	10.0	1417363.0	0.620162	Y



Calibration

/ Chlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

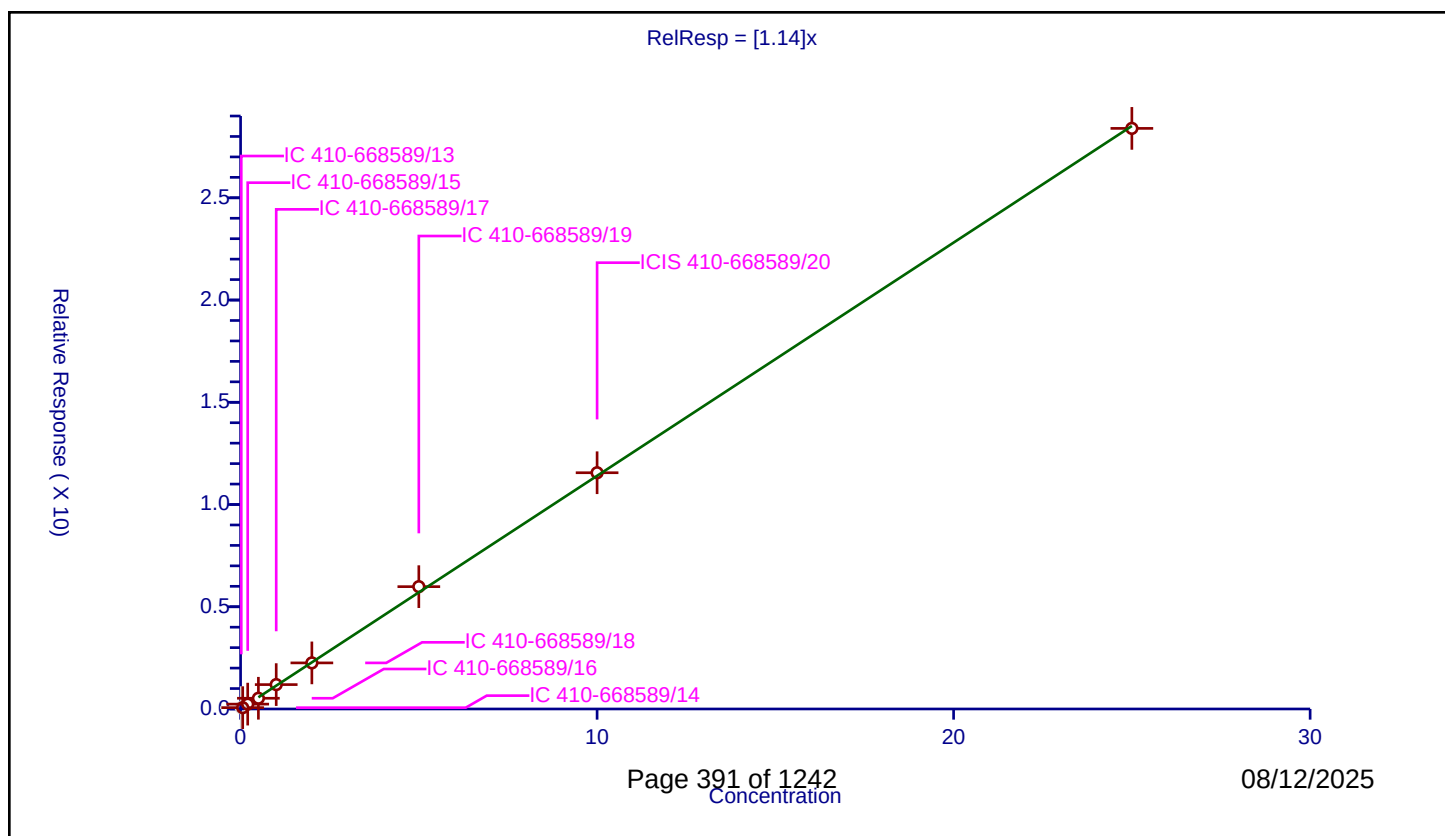
Curve Coefficients

Intercept: 0
Slope: 1.14

Error Coefficients

Relative Standard Deviation: 4.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.06604	10.0	1331318.0	3.301991	N
2	IC 410-668589/14	0.06	0.064665	10.0	1330860.0	1.077749	Y
3	IC 410-668589/15	0.2	0.237565	10.0	1343086.0	1.187824	Y
4	IC 410-668589/16	0.5	0.524884	10.0	1338143.0	1.049768	Y
5	IC 410-668589/17	1.0	1.193193	10.0	1360861.0	1.193193	Y
6	IC 410-668589/18	2.0	2.254338	10.0	1372931.0	1.127169	Y
7	IC 410-668589/19	5.0	5.983054	10.0	1379202.0	1.196611	Y
8	ICIS 410-668589/20	10.0	11.553991	10.0	1396688.0	1.155399	Y
9	IC 410-668589/21	25.0	28.394928	10.0	1417363.0	1.135797	Y



Calibration

/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

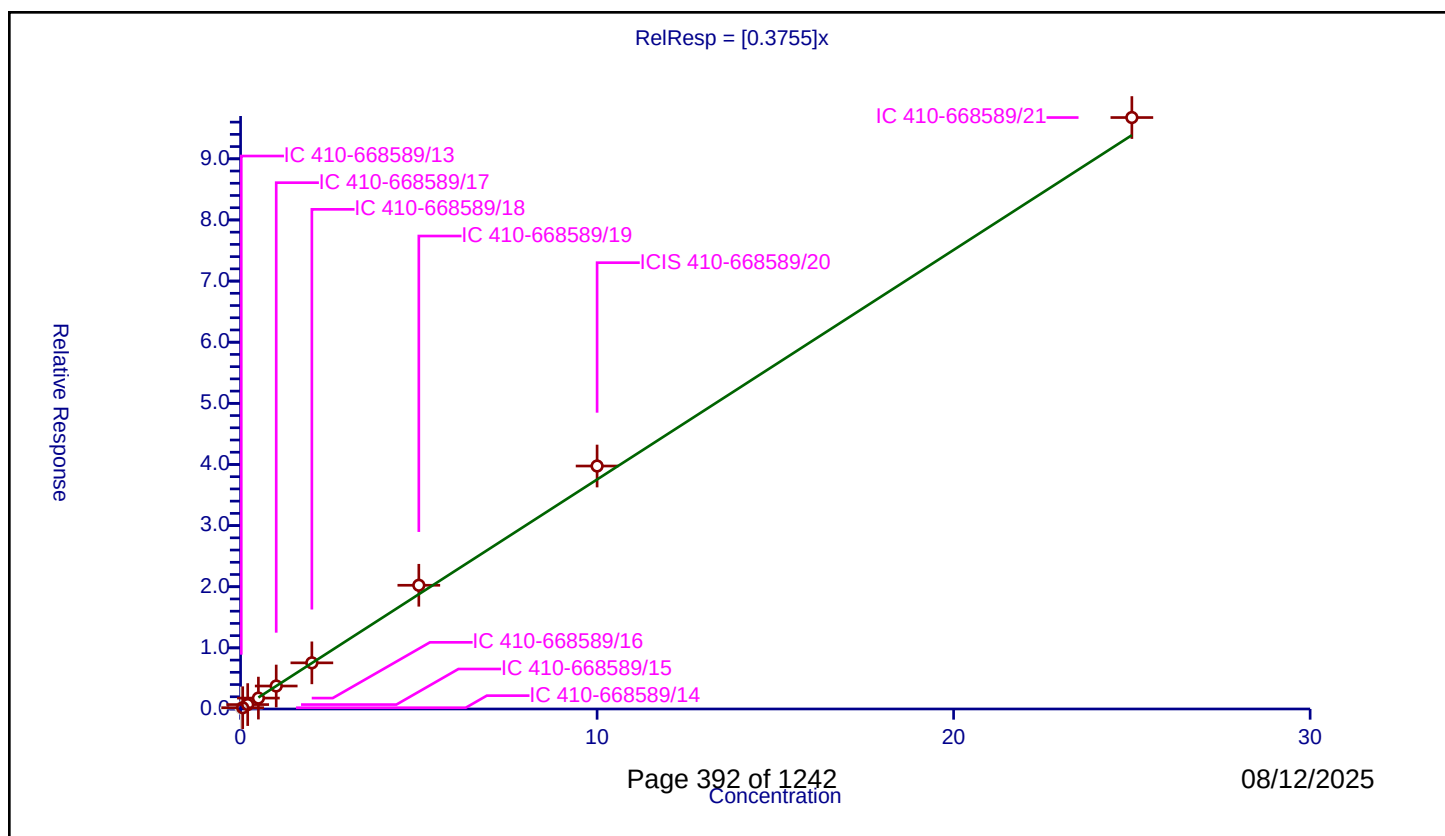
Curve Coefficients

Intercept: 0
Slope: 0.3755

Error Coefficients

Relative Standard Deviation: 5.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.015729	10.0	1331318.0	0.786439	N
2	IC 410-668589/14	0.06	0.020588	10.0	1330860.0	0.343137	Y
3	IC 410-668589/15	0.2	0.072199	10.0	1343086.0	0.360997	Y
4	IC 410-668589/16	0.5	0.178382	10.0	1338143.0	0.356763	Y
5	IC 410-668589/17	1.0	0.37599	10.0	1360861.0	0.37599	Y
6	IC 410-668589/18	2.0	0.754991	10.0	1372931.0	0.377495	Y
7	IC 410-668589/19	5.0	2.023844	10.0	1379202.0	0.404769	Y
8	ICIS 410-668589/20	10.0	3.97451	10.0	1396688.0	0.397451	Y
9	IC 410-668589/21	25.0	9.675256	10.0	1417363.0	0.38701	Y



Calibration

/ Ethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

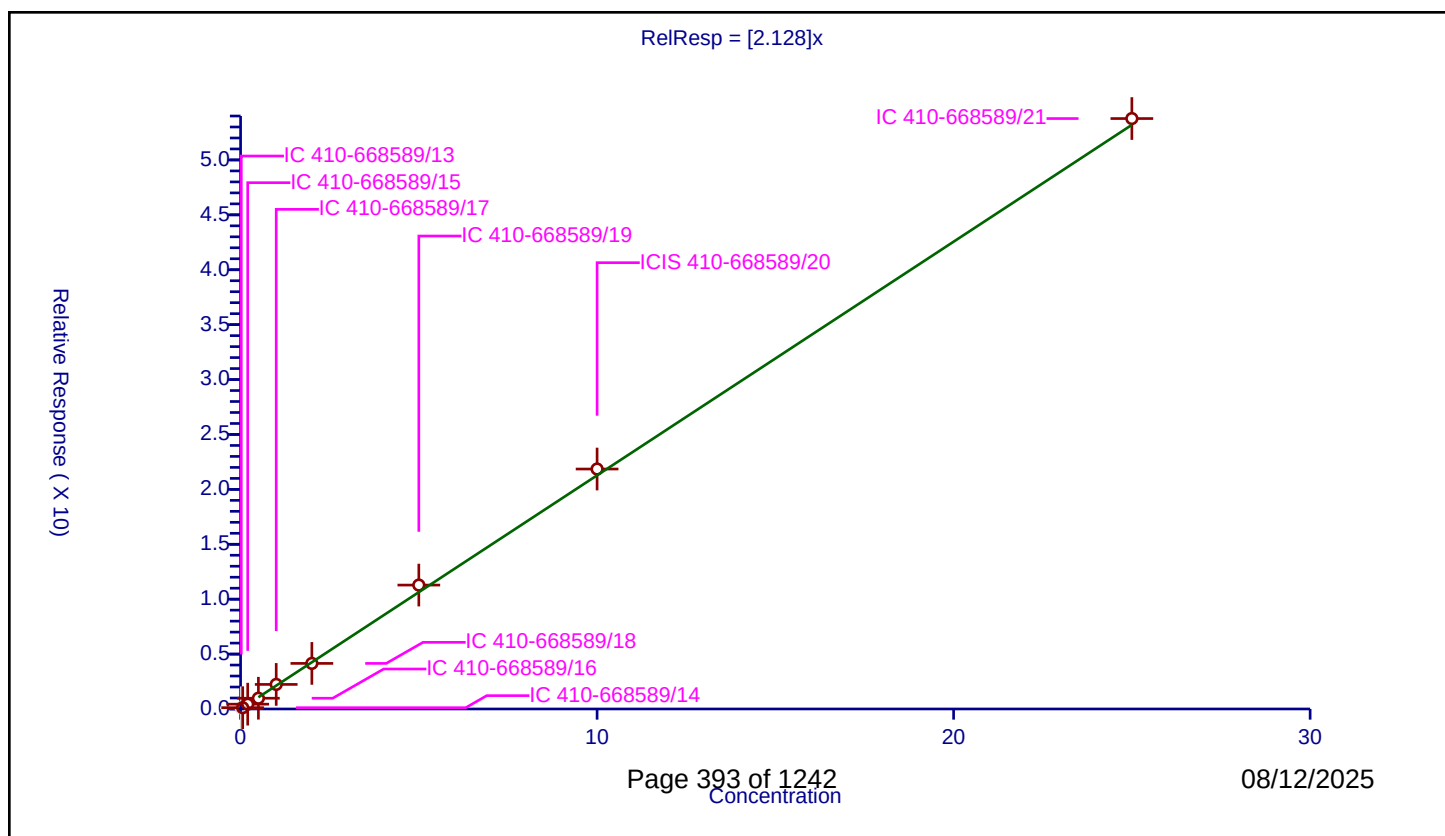
Curve Coefficients

Intercept: 0
Slope: 2.128

Error Coefficients

Relative Standard Deviation: 5.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.104956	10.0	1331318.0	5.247807	N
2	IC 410-668589/14	0.06	0.118029	10.0	1330860.0	1.967149	Y
3	IC 410-668589/15	0.2	0.437455	10.0	1343086.0	2.187276	Y
4	IC 410-668589/16	0.5	0.980254	10.0	1338143.0	1.960508	Y
5	IC 410-668589/17	1.0	2.238583	10.0	1360861.0	2.238583	Y
6	IC 410-668589/18	2.0	4.15058	10.0	1372931.0	2.07529	Y
7	IC 410-668589/19	5.0	11.284504	10.0	1379202.0	2.256901	Y
8	ICIS 410-668589/20	10.0	21.852891	10.0	1396688.0	2.185289	Y
9	IC 410-668589/21	25.0	53.769232	10.0	1417363.0	2.150769	Y



Calibration

/ m-Xylene & p-Xylene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

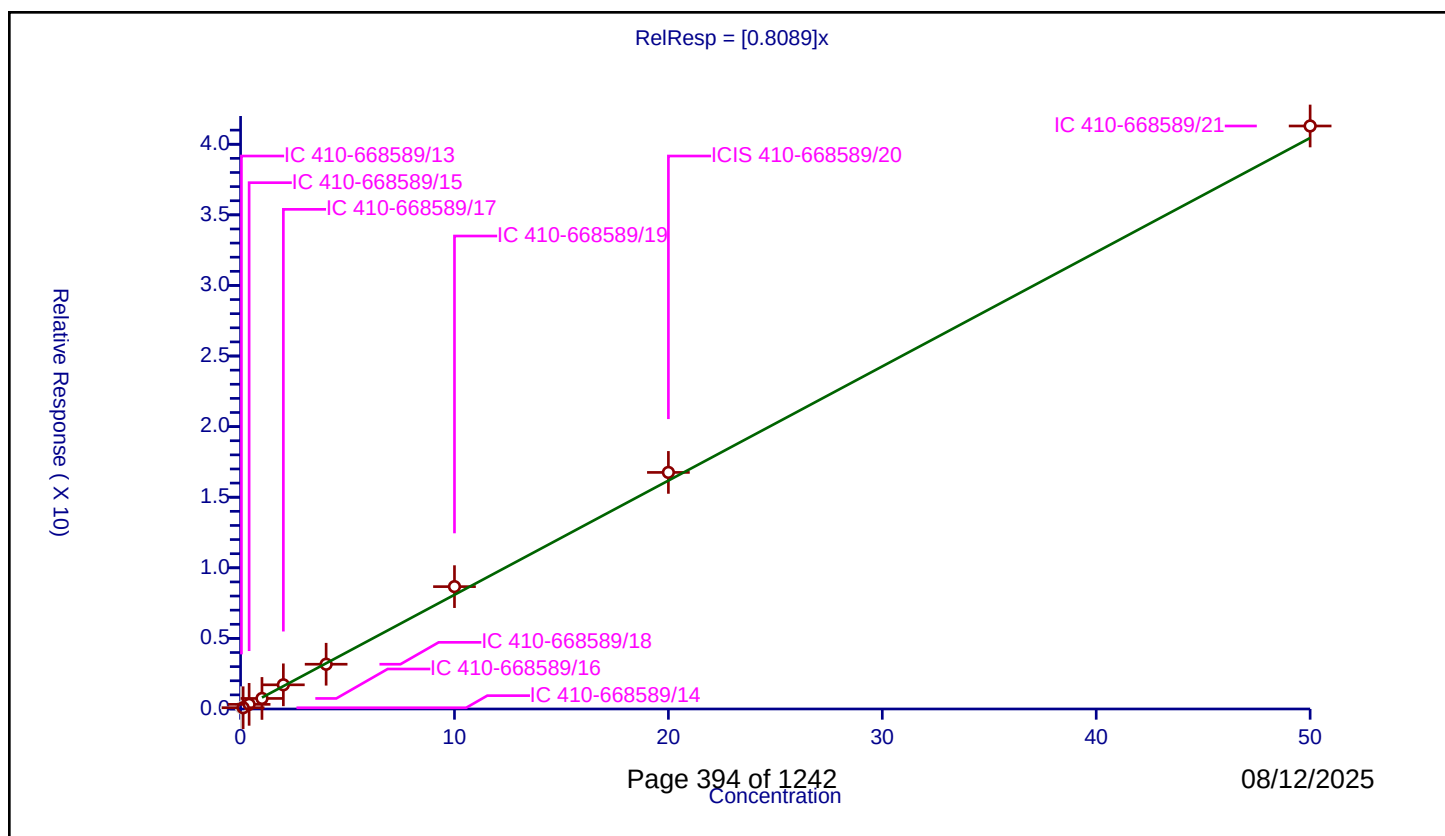
Curve Coefficients

Intercept: 0
Slope: 0.8089

Error Coefficients

Relative Standard Deviation: 6.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.04	0.091706	10.0	1331318.0	2.292653	N
2	IC 410-668589/14	0.12	0.087117	10.0	1330860.0	0.725972	Y
3	IC 410-668589/15	0.4	0.32776	10.0	1343086.0	0.8194	Y
4	IC 410-668589/16	1.0	0.747073	10.0	1338143.0	0.747073	Y
5	IC 410-668589/17	2.0	1.71174	10.0	1360861.0	0.85587	Y
6	IC 410-668589/18	4.0	3.170356	10.0	1372931.0	0.792589	Y
7	IC 410-668589/19	10.0	8.666519	10.0	1379202.0	0.866652	Y
8	ICIS 410-668589/20	20.0	16.75609	10.0	1396688.0	0.837805	Y
9	IC 410-668589/21	50.0	41.292852	10.0	1417363.0	0.825857	Y



Calibration

/ o-Xylene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

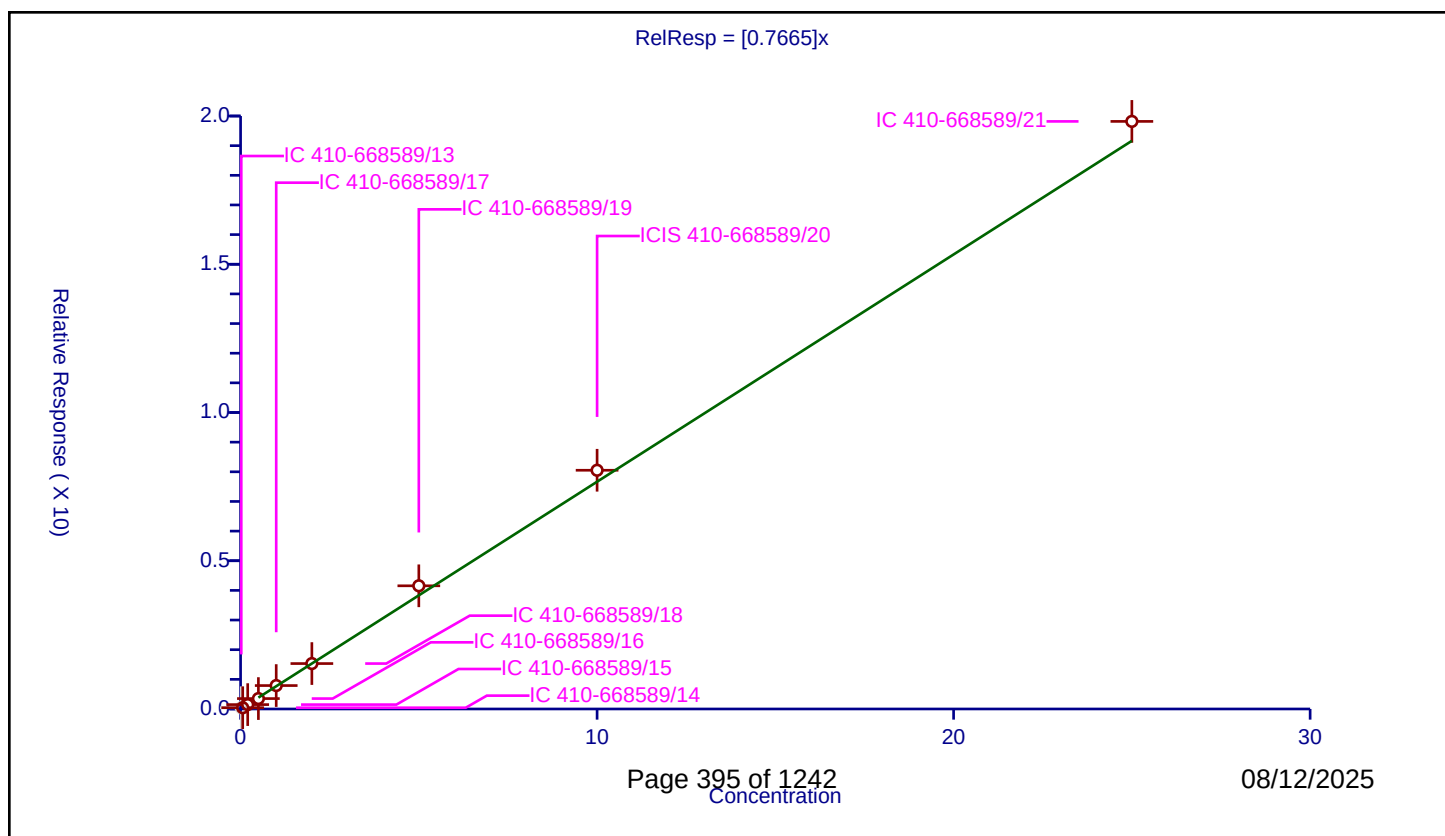
Curve Coefficients

Intercept: 0
Slope: 0.7665

Error Coefficients

Relative Standard Deviation: 6.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.042064	10.0	1331318.0	2.103179	N
2	IC 410-668589/14	0.06	0.042266	10.0	1330860.0	0.704432	Y
3	IC 410-668589/15	0.2	0.147921	10.0	1343086.0	0.739603	Y
4	IC 410-668589/16	0.5	0.351435	10.0	1338143.0	0.70287	Y
5	IC 410-668589/17	1.0	0.790015	10.0	1360861.0	0.790015	Y
6	IC 410-668589/18	2.0	1.53216	10.0	1372931.0	0.76608	Y
7	IC 410-668589/19	5.0	4.155178	10.0	1379202.0	0.831036	Y
8	ICIS 410-668589/20	10.0	8.051891	10.0	1396688.0	0.805189	Y
9	IC 410-668589/21	25.0	19.818353	10.0	1417363.0	0.792734	Y



Calibration

/ Styrene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

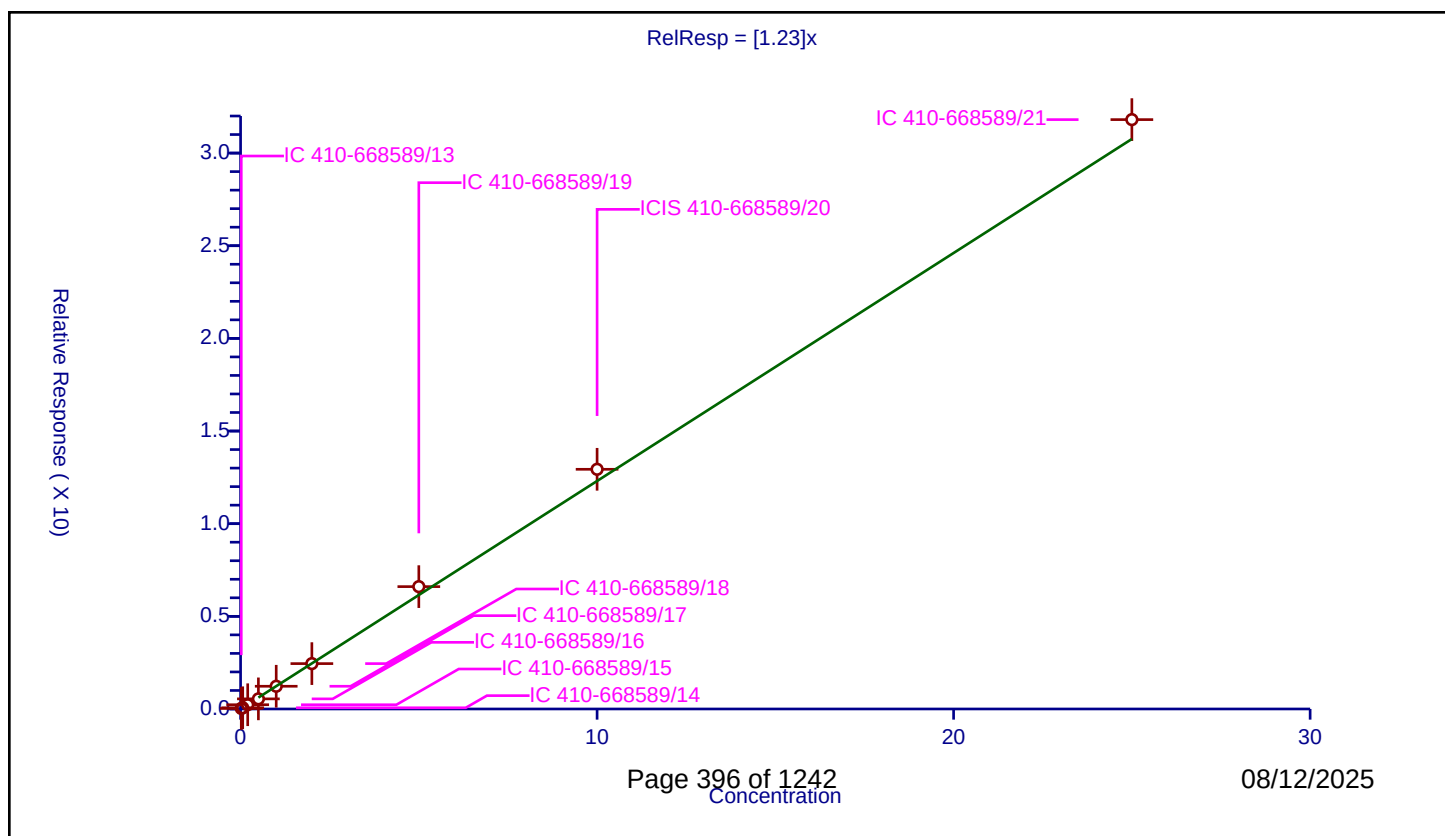
Curve Coefficients

Intercept: 0
Slope: 1.23

Error Coefficients

Relative Standard Deviation: 8.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.028107	10.0	1331318.0	1.405374	Y
2	IC 410-668589/14	0.06	0.065604	10.0	1330860.0	1.093403	Y
3	IC 410-668589/15	0.2	0.22936	10.0	1343086.0	1.146799	Y
4	IC 410-668589/16	0.5	0.545495	10.0	1338143.0	1.09099	Y
5	IC 410-668589/17	1.0	1.226319	10.0	1360861.0	1.226319	Y
6	IC 410-668589/18	2.0	2.448535	10.0	1372931.0	1.224268	Y
7	IC 410-668589/19	5.0	6.603652	10.0	1379202.0	1.32073	Y
8	ICIS 410-668589/20	10.0	12.934907	10.0	1396688.0	1.293491	Y
9	IC 410-668589/21	25.0	31.805705	10.0	1417363.0	1.272228	Y



Calibration

/ Bromoform

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

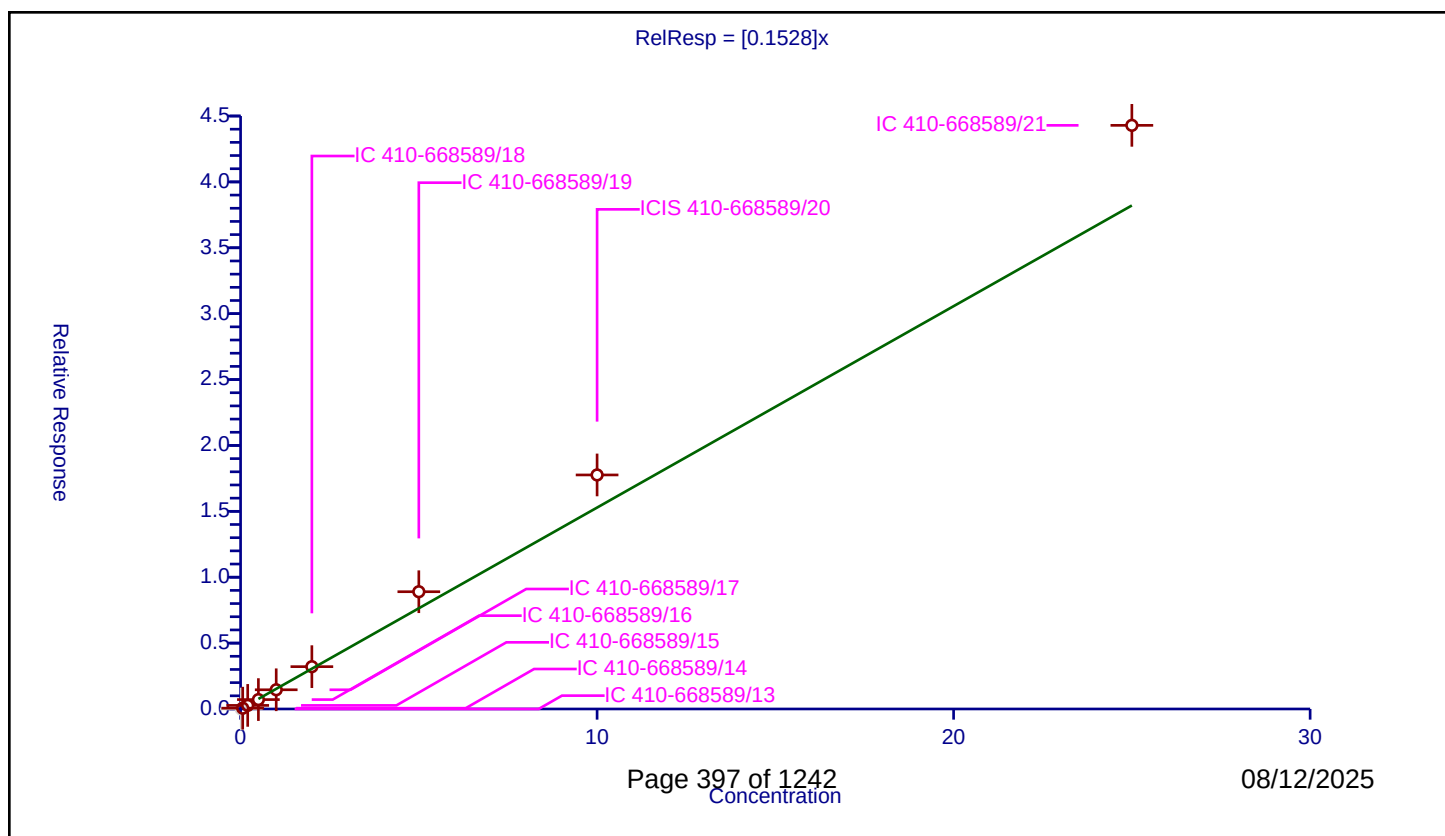
Curve Coefficients

Intercept: 0
Slope: 0.1528

Error Coefficients

Relative Standard Deviation: 16.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	1331318.0	0.0	N
2	IC 410-668589/14	0.06	0.006259	10.0	1330860.0	0.104319	Y
3	IC 410-668589/15	0.2	0.02728	10.0	1343086.0	0.136402	Y
4	IC 410-668589/16	0.5	0.071427	10.0	1338143.0	0.142855	Y
5	IC 410-668589/17	1.0	0.145834	10.0	1360861.0	0.145834	Y
6	IC 410-668589/18	2.0	0.32116	10.0	1372931.0	0.16058	Y
7	IC 410-668589/19	5.0	0.89	10.0	1379202.0	0.178	Y
8	ICIS 410-668589/20	10.0	1.776059	10.0	1396688.0	0.177606	Y
9	IC 410-668589/21	25.0	4.429141	10.0	1417363.0	0.177166	Y



Calibration

/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

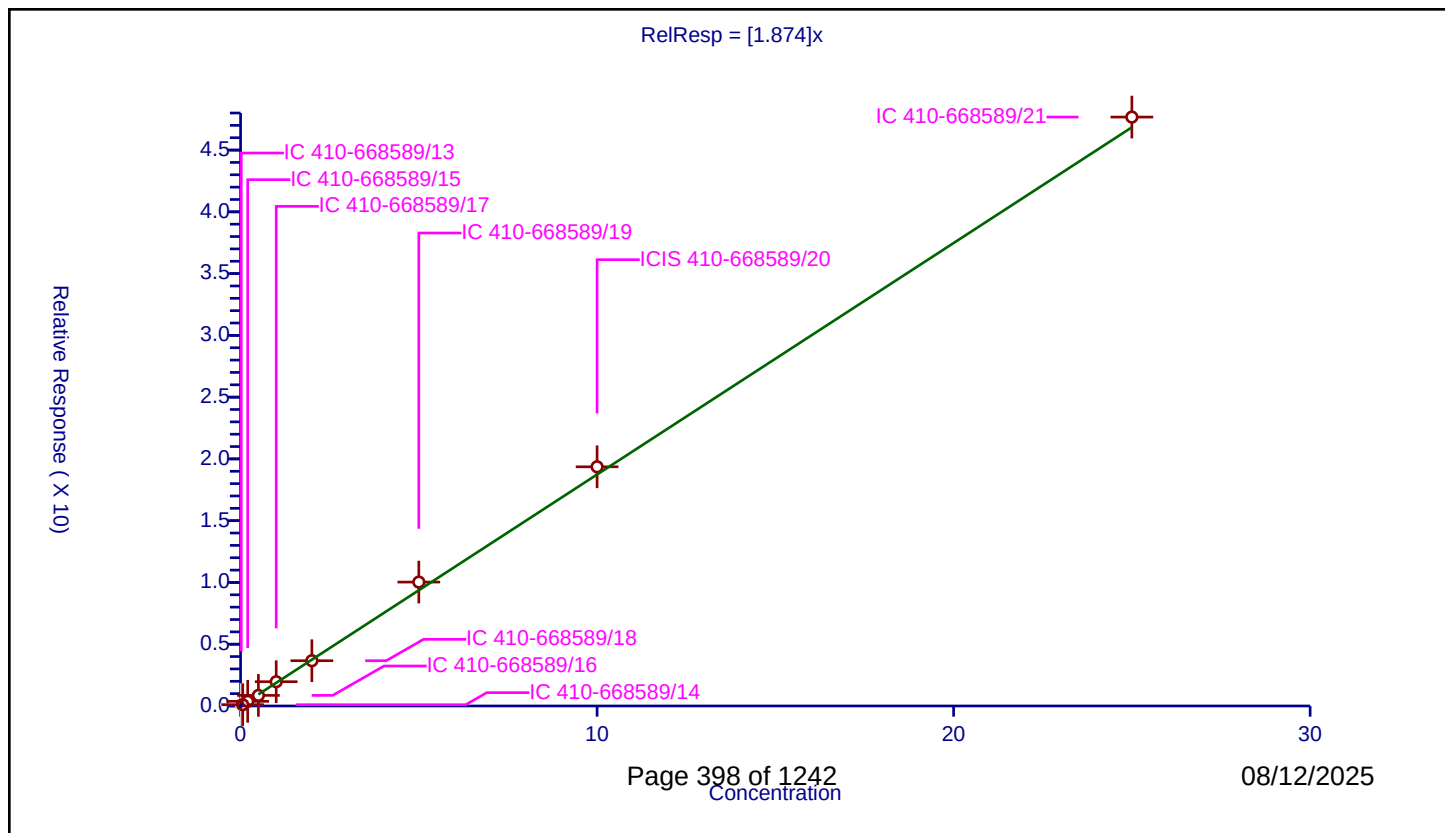
Curve Coefficients

Intercept: 0
 Slope: 1.874

Error Coefficients

Relative Standard Deviation: 5.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.105557	10.0	1331318.0	5.277852	N
2	IC 410-668589/14	0.06	0.104632	10.0	1330860.0	1.74386	Y
3	IC 410-668589/15	0.2	0.376878	10.0	1343086.0	1.884392	Y
4	IC 410-668589/16	0.5	0.857382	10.0	1338143.0	1.714764	Y
5	IC 410-668589/17	1.0	1.965153	10.0	1360861.0	1.965153	Y
6	IC 410-668589/18	2.0	3.664481	10.0	1372931.0	1.832241	Y
7	IC 410-668589/19	5.0	10.030815	10.0	1379202.0	2.006163	Y
8	ICIS 410-668589/20	10.0	19.362084	10.0	1396688.0	1.936208	Y
9	IC 410-668589/21	25.0	47.671225	10.0	1417363.0	1.906849	Y



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

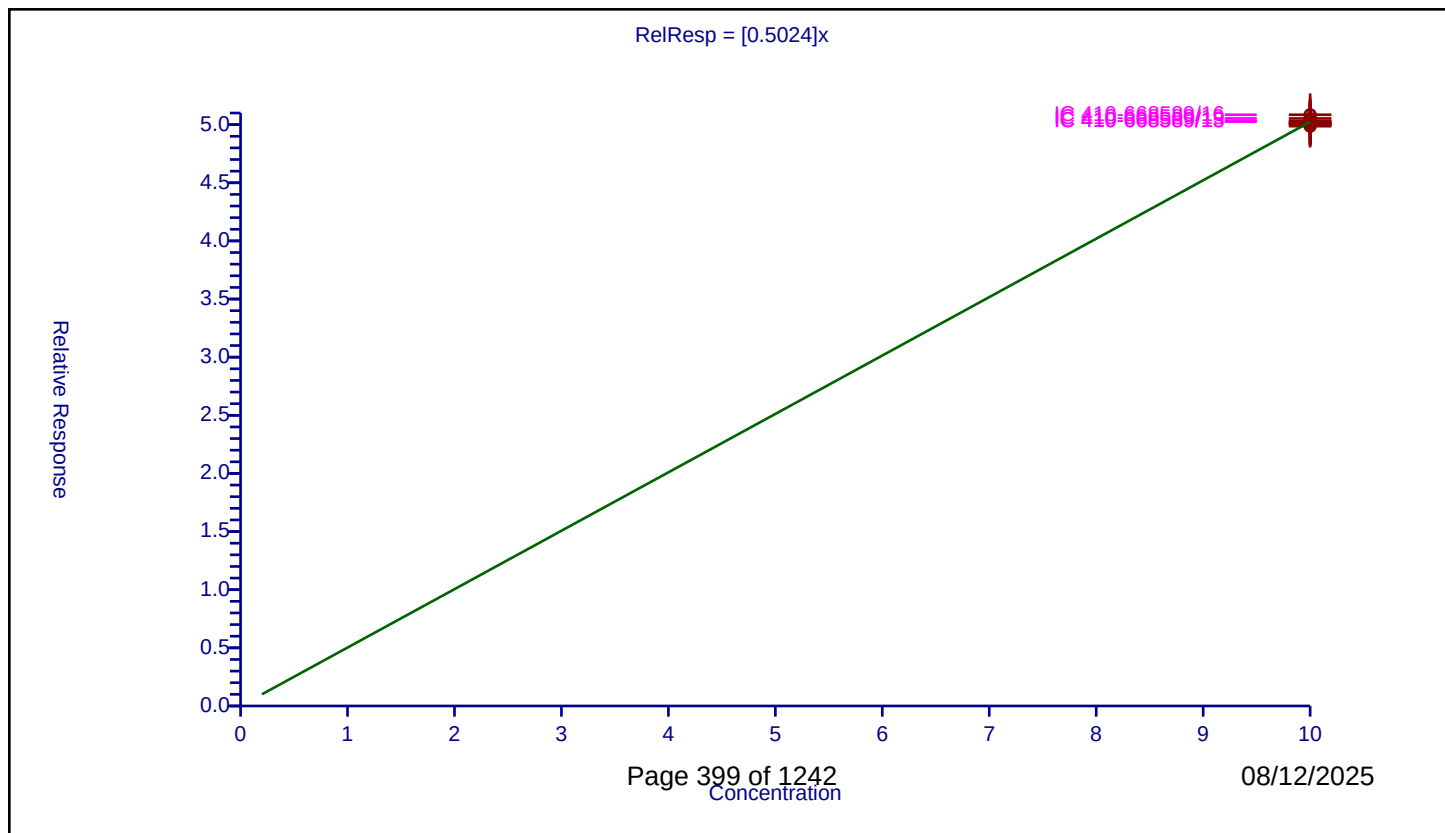
Curve Coefficients

Intercept: 0
 Slope: 0.5024

Error Coefficients

Relative Standard Deviation: 0.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/21	10.0	4.986747	10.0	1417363.0	0.498675	Y
2	ICIS 410-668589/20	10.0	5.006236	10.0	1396688.0	0.500624	Y
3	IC 410-668589/19	10.0	5.052994	10.0	1379202.0	0.505299	Y
4	IC 410-668589/18	10.0	5.005889	10.0	1372931.0	0.500589	Y
5	IC 410-668589/17	10.0	5.018411	10.0	1360861.0	0.501841	Y
6	IC 410-668589/16	10.0	5.085025	10.0	1338143.0	0.508502	Y
7	IC 410-668589/15	10.0	5.029335	10.0	1343086.0	0.502934	Y
8	IC 410-668589/14	10.0	5.001428	10.0	1330860.0	0.500143	Y
9	IC 410-668589/13	10.0	5.026357	10.0	1331318.0	0.502636	Y



Calibration

/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

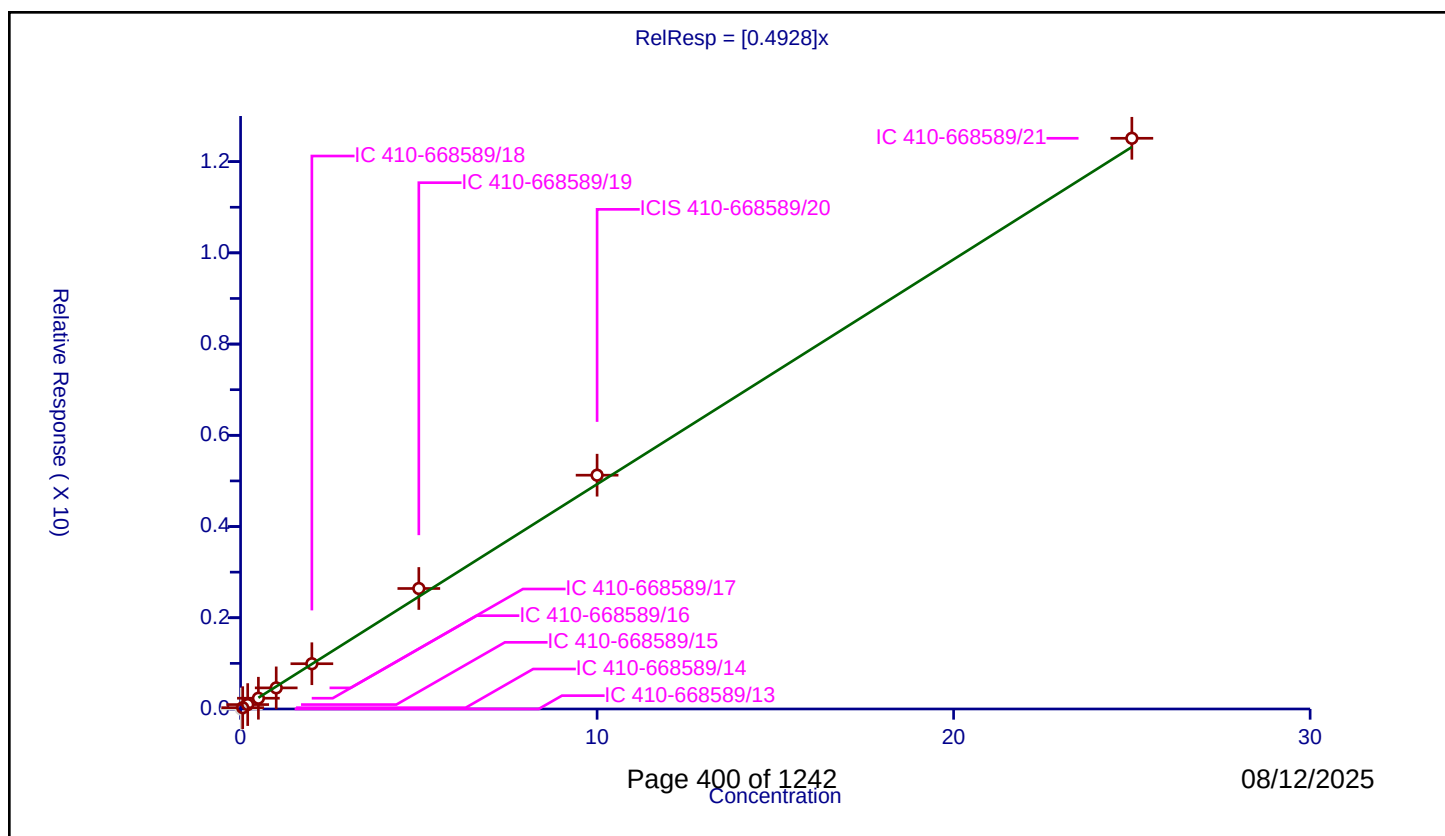
Curve Coefficients

Intercept: 0
Slope: 0.4928

Error Coefficients

Relative Standard Deviation: 4.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	735717.0	0.0	N
2	IC 410-668589/14	0.06	0.029152	10.0	739240.0	0.485859	Y
3	IC 410-668589/15	0.2	0.096922	10.0	743381.0	0.48461	Y
4	IC 410-668589/16	0.5	0.23589	10.0	746831.0	0.47178	Y
5	IC 410-668589/17	1.0	0.462702	10.0	755195.0	0.462702	Y
6	IC 410-668589/18	2.0	0.992352	10.0	762844.0	0.496176	Y
7	IC 410-668589/19	5.0	2.641541	10.0	766613.0	0.528308	Y
8	ICIS 410-668589/20	10.0	5.125751	10.0	775184.0	0.512575	Y
9	IC 410-668589/21	25.0	12.512098	10.0	787338.0	0.500484	Y



Calibration

/ Bromobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

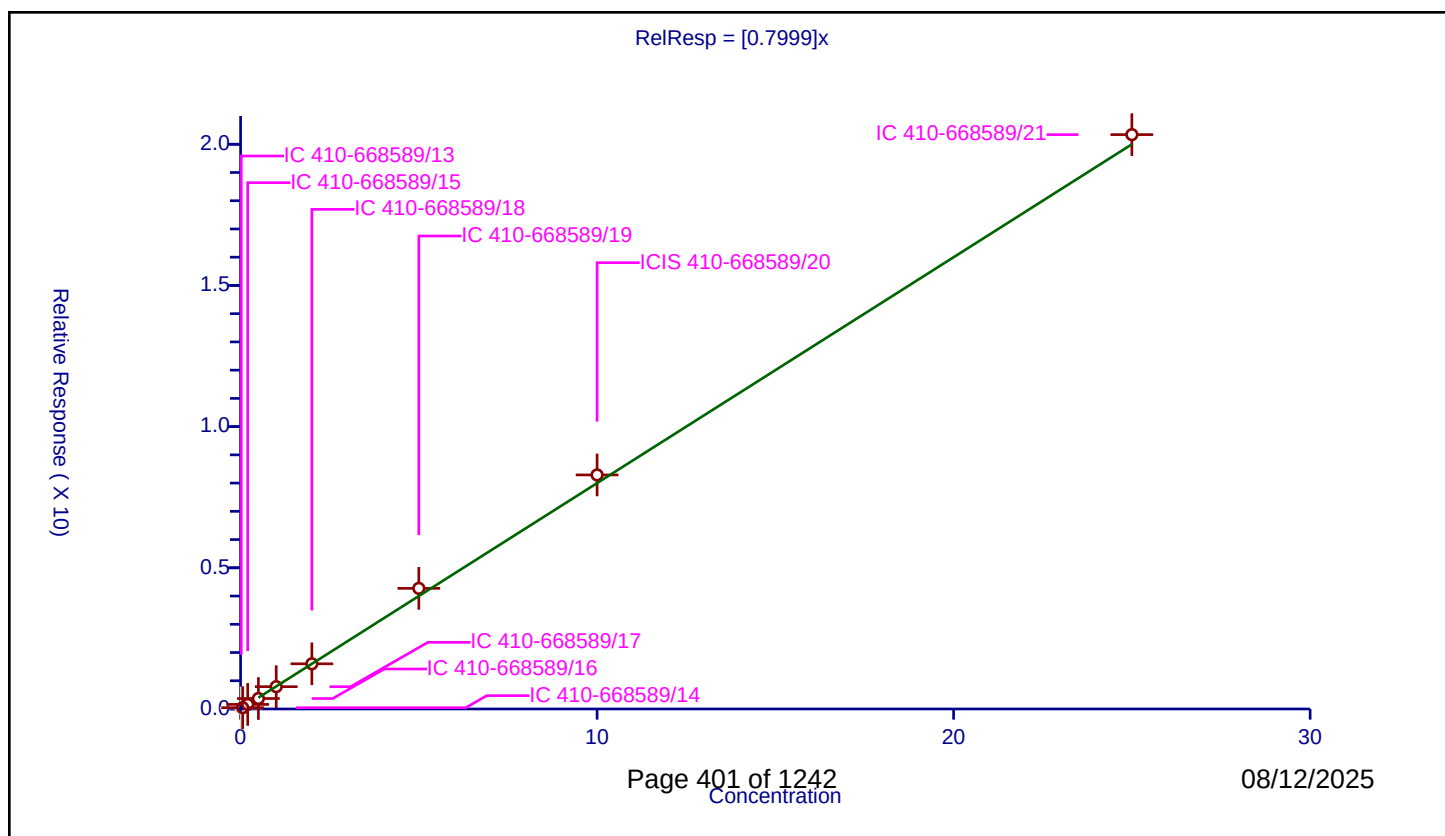
Curve Coefficients

Intercept: 0
Slope: 0.7999

Error Coefficients

Relative Standard Deviation: 4.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.03625	10.0	735717.0	1.812518	N
2	IC 410-668589/14	0.06	0.045696	10.0	739240.0	0.761593	Y
3	IC 410-668589/15	0.2	0.161855	10.0	743381.0	0.809275	Y
4	IC 410-668589/16	0.5	0.370606	10.0	746831.0	0.741212	Y
5	IC 410-668589/17	1.0	0.790312	10.0	755195.0	0.790312	Y
6	IC 410-668589/18	2.0	1.600314	10.0	762844.0	0.800157	Y
7	IC 410-668589/19	5.0	4.27209	10.0	766613.0	0.854418	Y
8	ICIS 410-668589/20	10.0	8.28949	10.0	775184.0	0.828949	Y
9	IC 410-668589/21	25.0	20.340857	10.0	787338.0	0.813634	Y



Calibration

/ trans-1,4-Dichloro-2-butene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

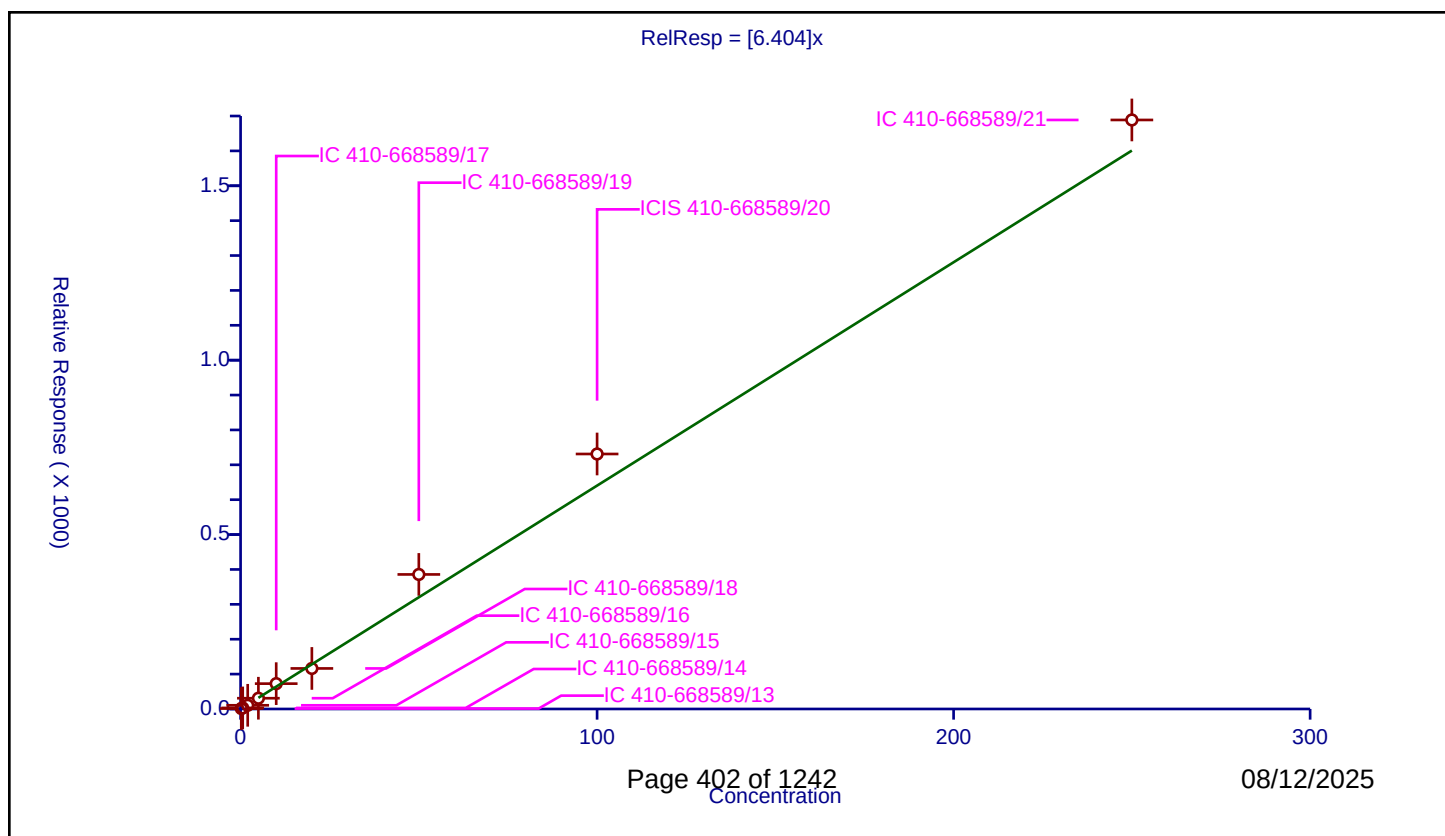
Curve Coefficients

Intercept: 0
Slope: 6.404

Error Coefficients

Relative Standard Deviation: 14.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.2	1.265857	50.0	73626.0	6.329286	Y
2	IC 410-668589/14	0.6	2.992023	50.0	80230.0	4.986705	Y
3	IC 410-668589/15	2.0	10.587931	50.0	83156.0	5.293966	Y
4	IC 410-668589/16	5.0	30.829933	50.0	72295.0	6.165987	Y
5	IC 410-668589/17	10.0	72.650212	50.0	64825.0	7.265021	Y
6	IC 410-668589/18	20.0	116.216819	50.0	87437.0	5.810841	Y
7	IC 410-668589/19	50.0	385.733541	50.0	71966.0	7.714671	Y
8	ICIS 410-668589/20	100.0	731.051354	50.0	75826.0	7.310514	Y
9	IC 410-668589/21	250.0	1688.696875	50.0	82517.0	6.754787	Y



Calibration

/ 1,2,3-Trichloropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

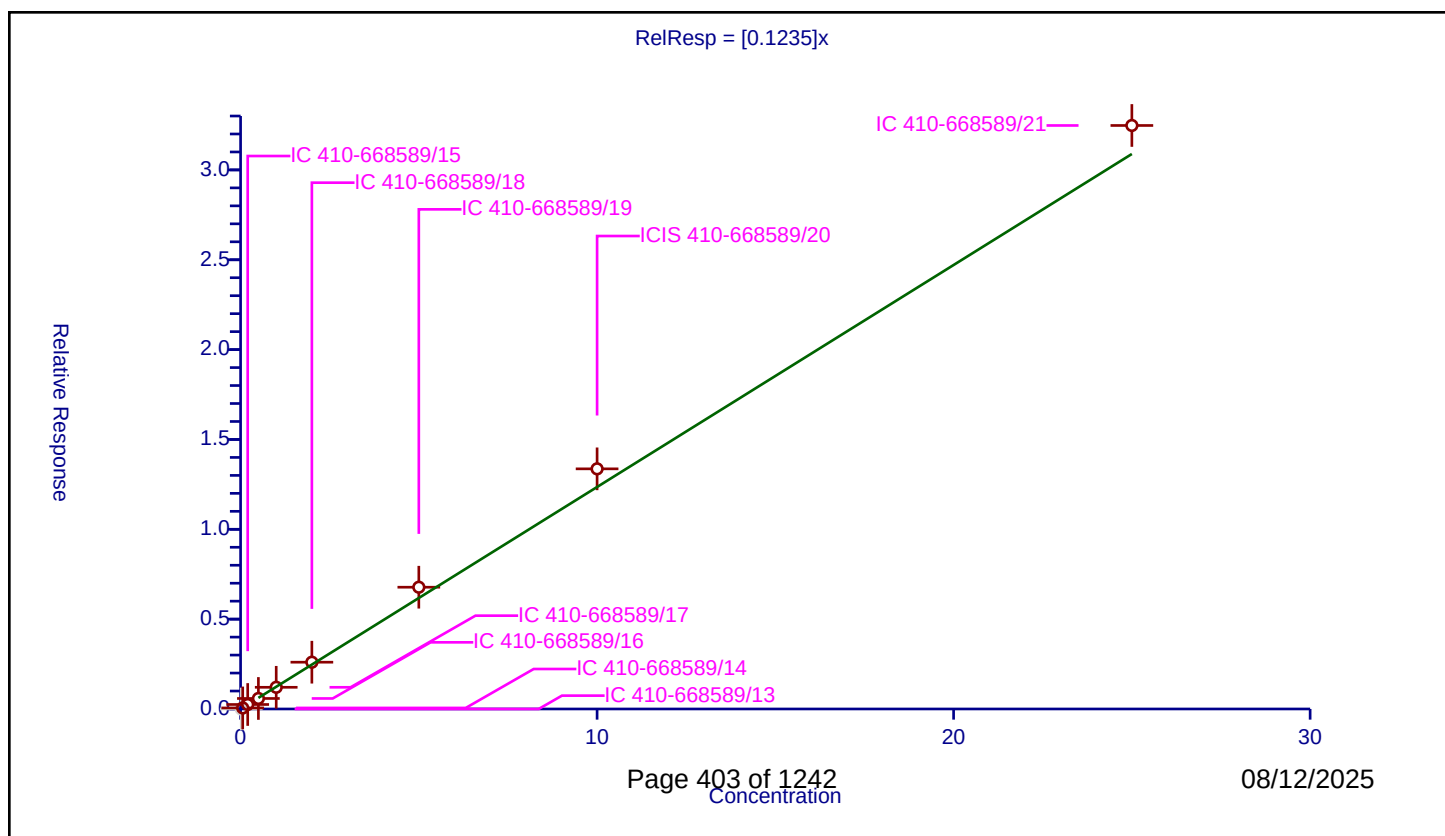
Curve Coefficients

Intercept: 0
Slope: 0.1235

Error Coefficients

Relative Standard Deviation: 10.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	735717.0	0.0	N
2	IC 410-668589/14	0.06	0.00579	10.0	739240.0	0.096495	Y
3	IC 410-668589/15	0.2	0.024967	10.0	743381.0	0.124835	Y
4	IC 410-668589/16	0.5	0.058567	10.0	746831.0	0.117135	Y
5	IC 410-668589/17	1.0	0.120658	10.0	755195.0	0.120658	Y
6	IC 410-668589/18	2.0	0.260342	10.0	762844.0	0.130171	Y
7	IC 410-668589/19	5.0	0.677656	10.0	766613.0	0.135531	Y
8	ICIS 410-668589/20	10.0	1.336431	10.0	775184.0	0.133643	Y
9	IC 410-668589/21	25.0	3.24736	10.0	787338.0	0.129894	Y



Calibration

/ N-Propylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

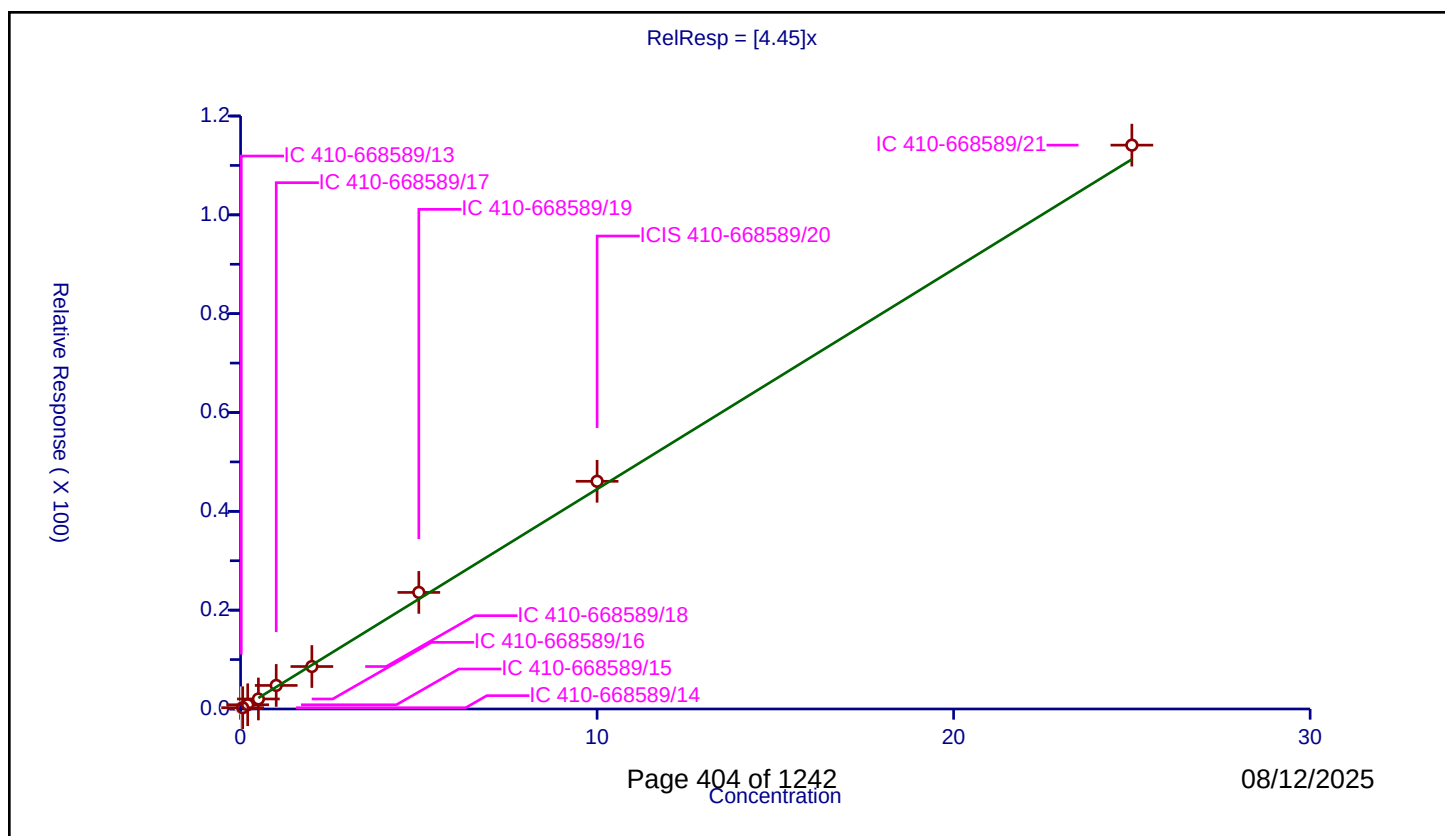
Curve Coefficients

Intercept: 0
Slope: 4.45

Error Coefficients

Relative Standard Deviation: 5.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.242335	10.0	735717.0	12.116751	N
2	IC 410-668589/14	0.06	0.257968	10.0	739240.0	4.299461	Y
3	IC 410-668589/15	0.2	0.857232	10.0	743381.0	4.28616	Y
4	IC 410-668589/16	0.5	2.027915	10.0	746831.0	4.055831	Y
5	IC 410-668589/17	1.0	4.767444	10.0	755195.0	4.767444	Y
6	IC 410-668589/18	2.0	8.592871	10.0	762844.0	4.296435	Y
7	IC 410-668589/19	5.0	23.593156	10.0	766613.0	4.718631	Y
8	ICIS 410-668589/20	10.0	46.080582	10.0	775184.0	4.608058	Y
9	IC 410-668589/21	25.0	114.105733	10.0	787338.0	4.564229	Y



Calibration

/ 2-Chlorotoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

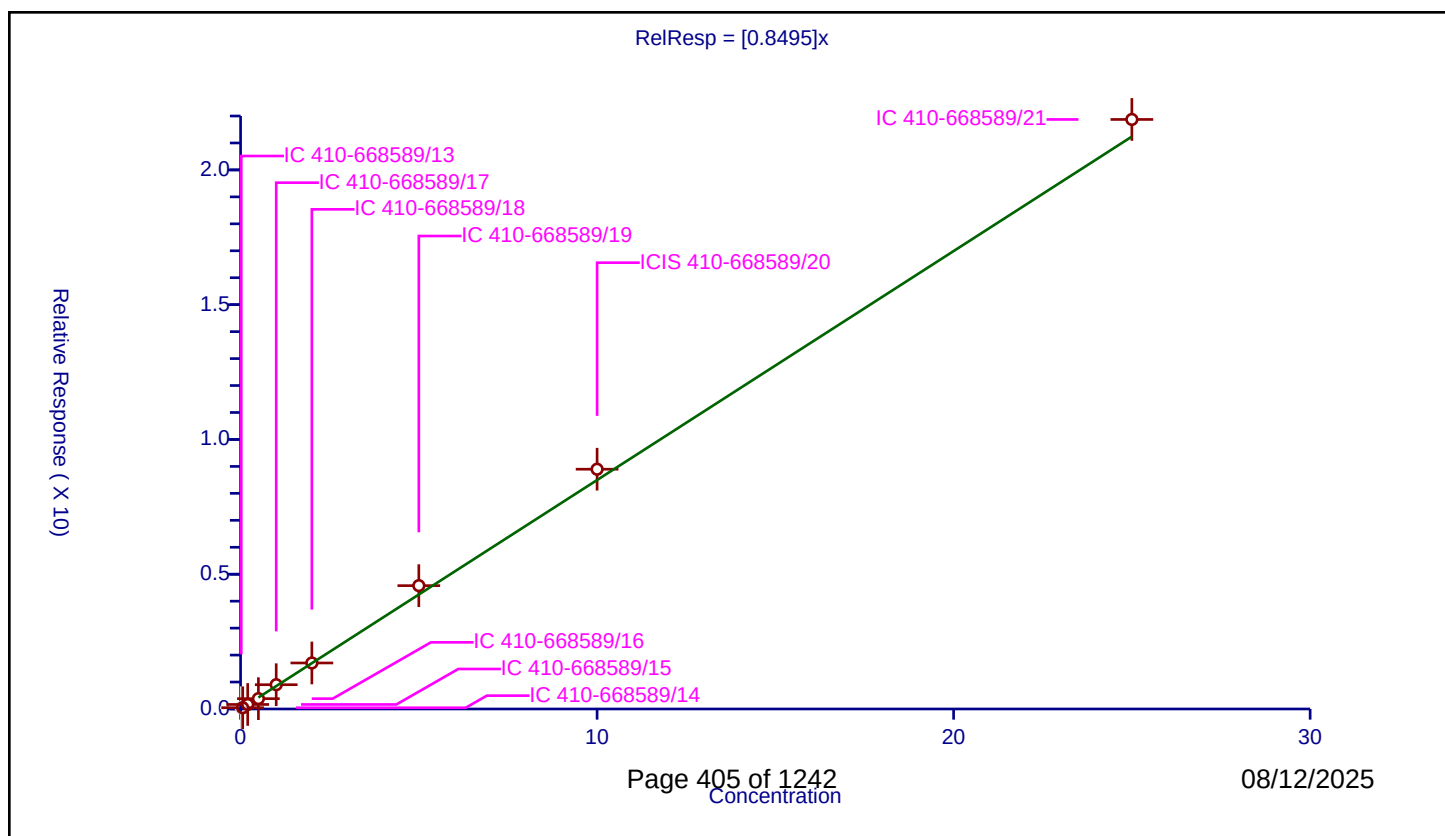
Curve Coefficients

Intercept: 0
Slope: 0.8495

Error Coefficients

Relative Standard Deviation: 7.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.047817	10.0	735717.0	2.390865	N
2	IC 410-668589/14	0.06	0.045533	10.0	739240.0	0.758888	Y
3	IC 410-668589/15	0.2	0.167196	10.0	743381.0	0.835978	Y
4	IC 410-668589/16	0.5	0.383353	10.0	746831.0	0.766706	Y
5	IC 410-668589/17	1.0	0.900999	10.0	755195.0	0.900999	Y
6	IC 410-668589/18	2.0	1.706679	10.0	762844.0	0.85334	Y
7	IC 410-668589/19	5.0	4.576194	10.0	766613.0	0.915239	Y
8	ICIS 410-668589/20	10.0	8.895707	10.0	775184.0	0.889571	Y
9	IC 410-668589/21	25.0	21.872118	10.0	787338.0	0.874885	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

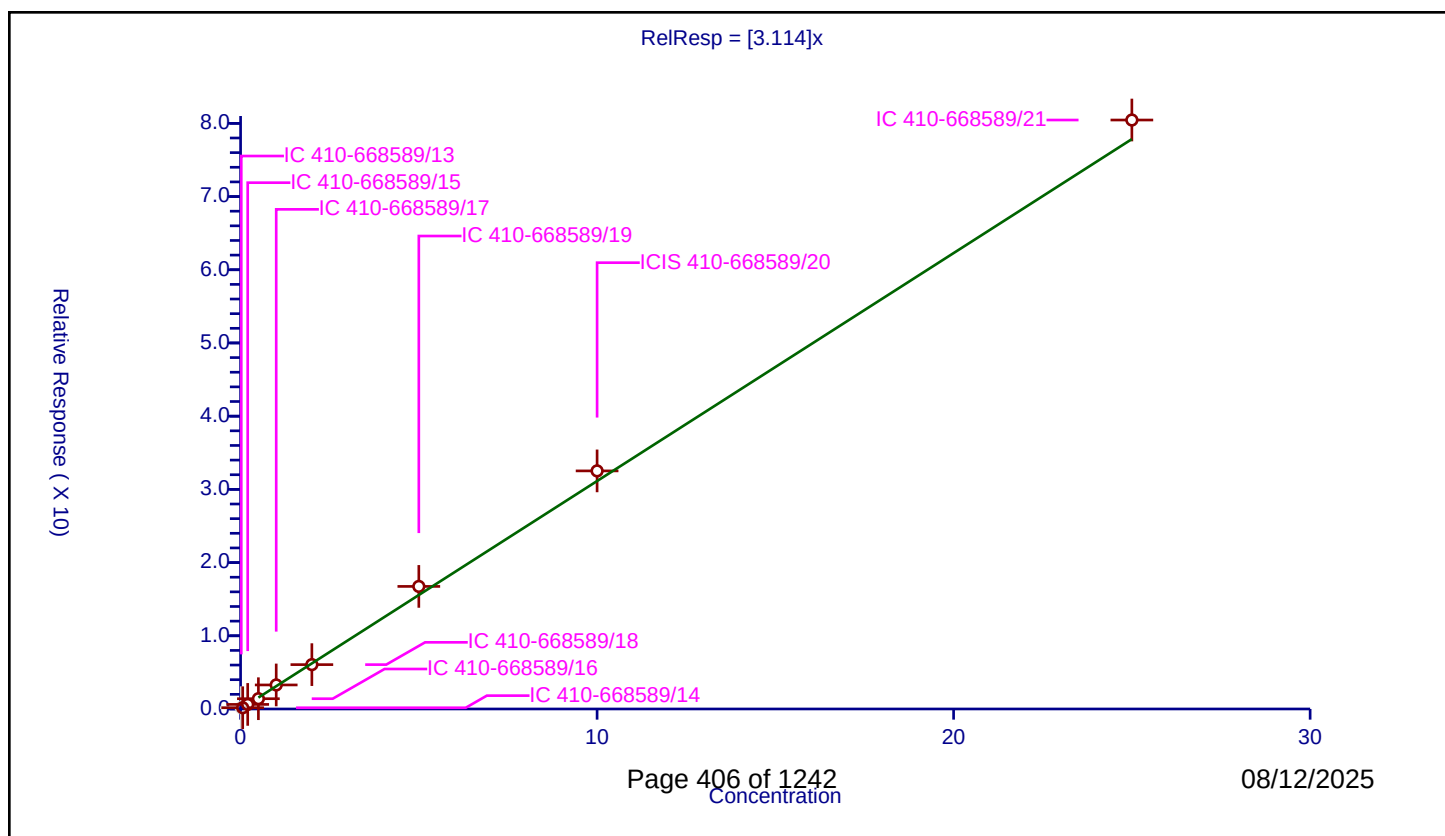
Curve Coefficients

Intercept: 0
Slope: 3.114

Error Coefficients

Relative Standard Deviation: 6.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.178397	10.0	735717.0	8.91987	N
2	IC 410-668589/14	0.06	0.170621	10.0	739240.0	2.843686	Y
3	IC 410-668589/15	0.2	0.625063	10.0	743381.0	3.125315	Y
4	IC 410-668589/16	0.5	1.404762	10.0	746831.0	2.809525	Y
5	IC 410-668589/17	1.0	3.282199	10.0	755195.0	3.282199	Y
6	IC 410-668589/18	2.0	6.060872	10.0	762844.0	3.030436	Y
7	IC 410-668589/19	5.0	16.743207	10.0	766613.0	3.348641	Y
8	ICIS 410-668589/20	10.0	32.521892	10.0	775184.0	3.252189	Y
9	IC 410-668589/21	25.0	80.45236	10.0	787338.0	3.218094	Y



Calibration

/ 4-Chlorotoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

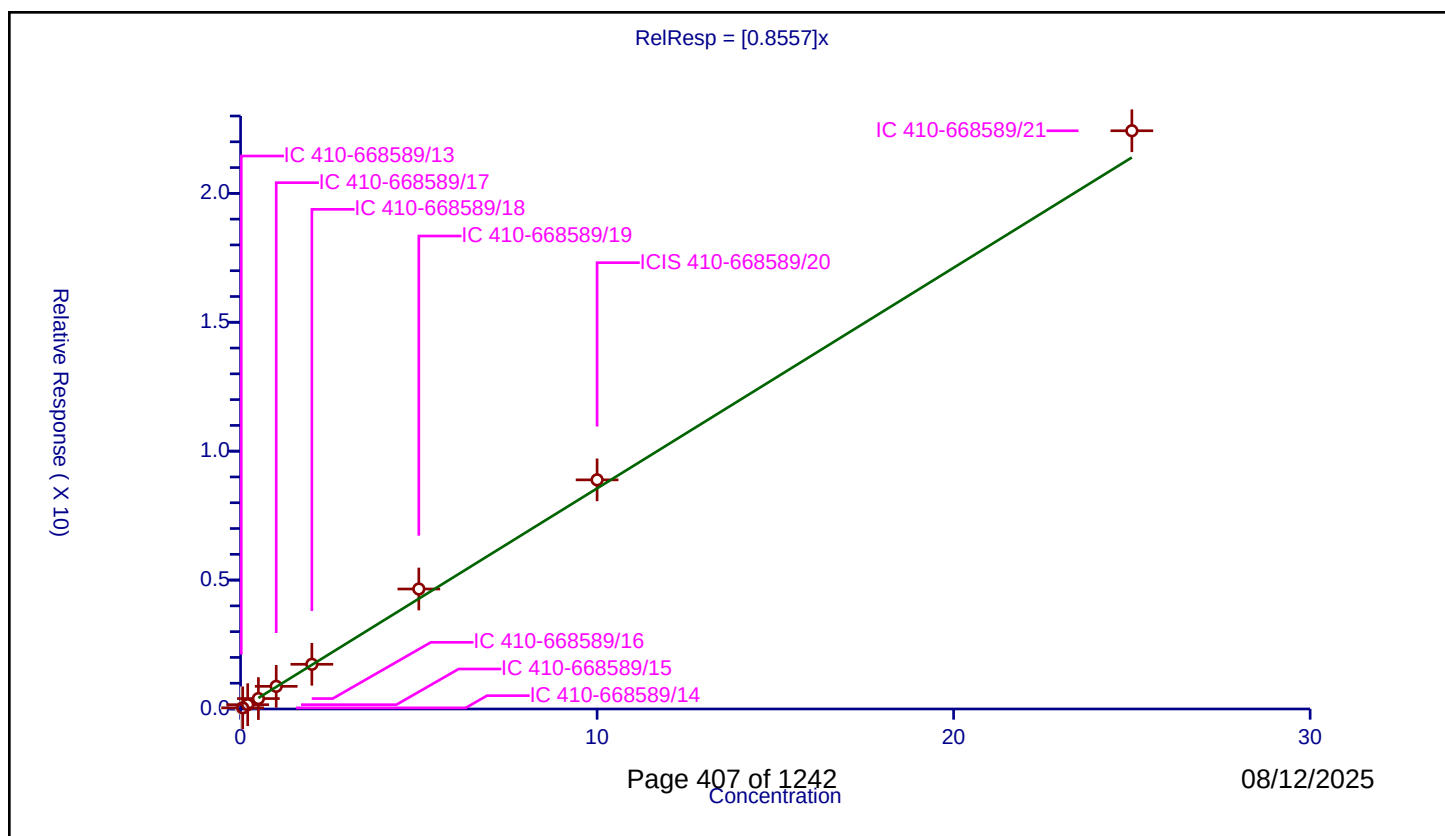
Curve Coefficients

Intercept: 0
Slope: 0.8557

Error Coefficients

Relative Standard Deviation: 7.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.043536	10.0	735717.0	2.176788	N
2	IC 410-668589/14	0.06	0.044438	10.0	739240.0	0.740626	Y
3	IC 410-668589/15	0.2	0.167142	10.0	743381.0	0.835709	Y
4	IC 410-668589/16	0.5	0.403545	10.0	746831.0	0.80709	Y
5	IC 410-668589/17	1.0	0.878382	10.0	755195.0	0.878382	Y
6	IC 410-668589/18	2.0	1.734234	10.0	762844.0	0.867117	Y
7	IC 410-668589/19	5.0	4.653965	10.0	766613.0	0.930793	Y
8	ICIS 410-668589/20	10.0	8.887838	10.0	775184.0	0.888784	Y
9	IC 410-668589/21	25.0	22.427674	10.0	787338.0	0.897107	Y



Calibration

/ tert-Butylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

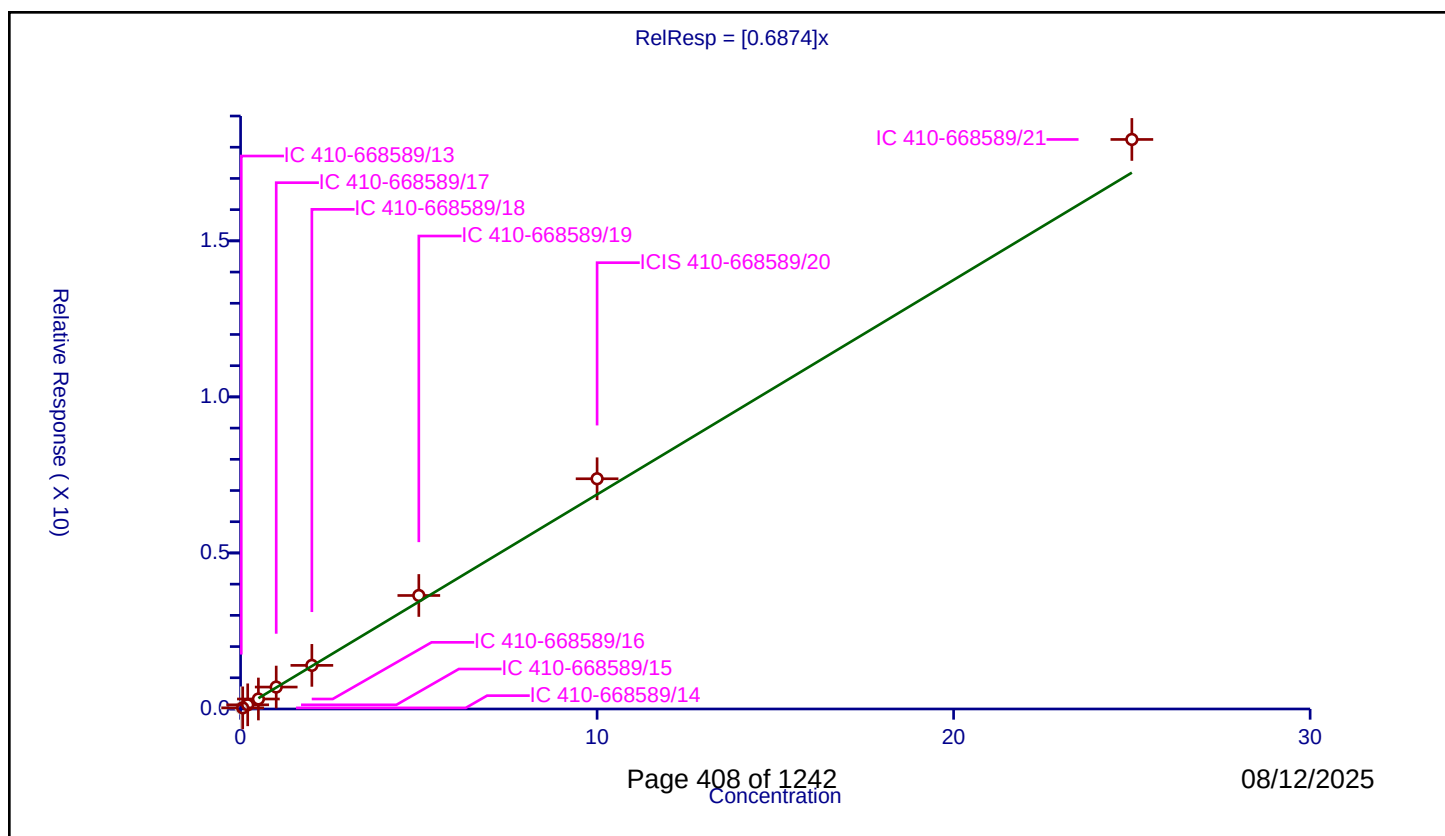
Curve Coefficients

Intercept: 0
Slope: 0.6874

Error Coefficients

Relative Standard Deviation: 7.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.035299	10.0	735717.0	1.764945	N
2	IC 410-668589/14	0.06	0.035685	10.0	739240.0	0.594755	Y
3	IC 410-668589/15	0.2	0.133552	10.0	743381.0	0.66776	Y
4	IC 410-668589/16	0.5	0.320059	10.0	746831.0	0.640118	Y
5	IC 410-668589/17	1.0	0.702931	10.0	755195.0	0.702931	Y
6	IC 410-668589/18	2.0	1.397075	10.0	762844.0	0.698537	Y
7	IC 410-668589/19	5.0	3.637363	10.0	766613.0	0.727473	Y
8	ICIS 410-668589/20	10.0	7.376765	10.0	775184.0	0.737676	Y
9	IC 410-668589/21	25.0	18.248973	10.0	787338.0	0.729959	Y



Calibration

/ Pentachloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

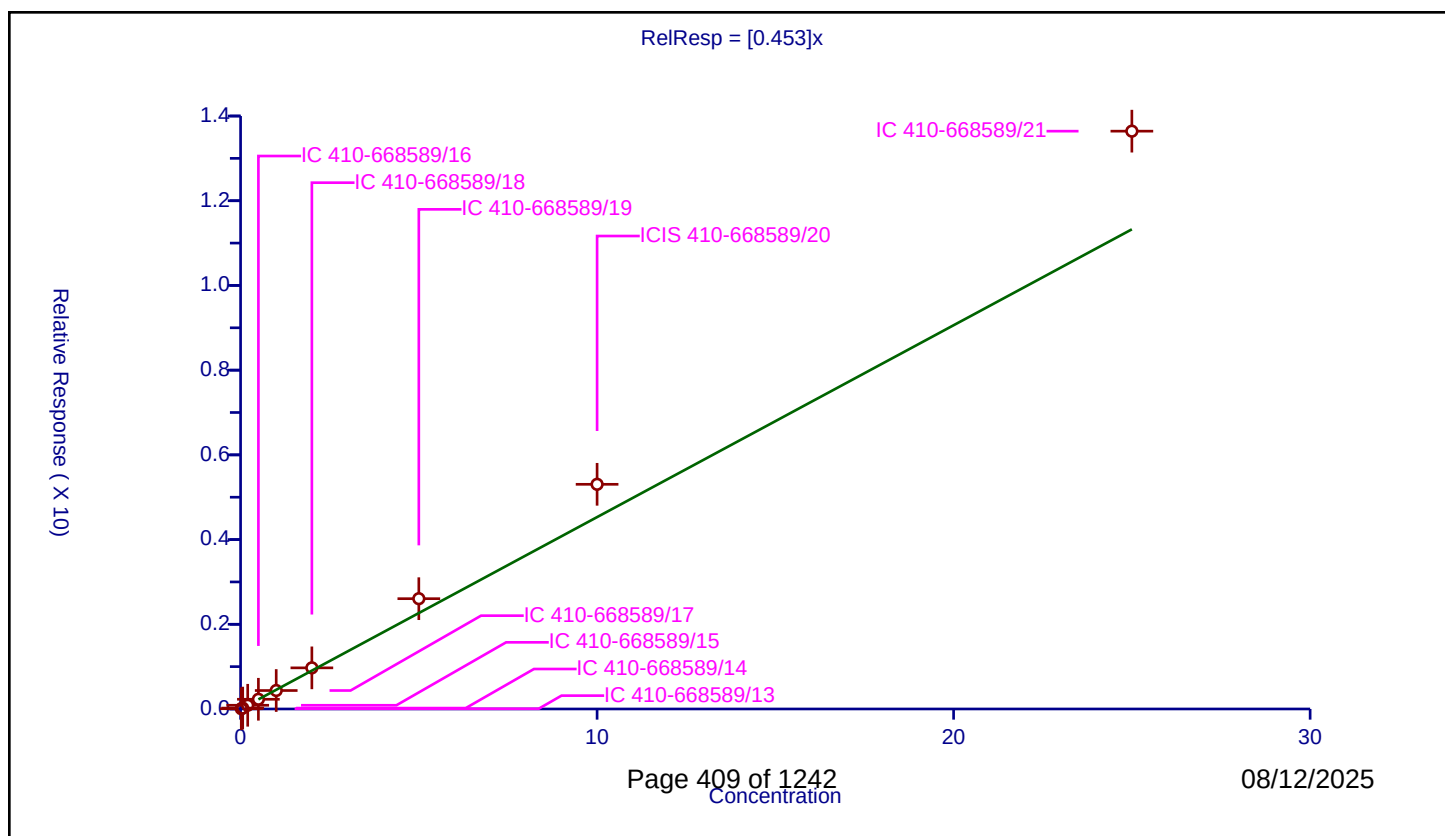
Curve Coefficients

Intercept: 0
Slope: 0.453

Error Coefficients

Relative Standard Deviation: 17.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.006171	10.0	735717.0	0.308543	Y
2	IC 410-668589/14	0.06	0.021076	10.0	739240.0	0.351262	Y
3	IC 410-668589/15	0.2	0.08795	10.0	743381.0	0.439748	Y
4	IC 410-668589/16	0.5	0.229409	10.0	746831.0	0.458819	Y
5	IC 410-668589/17	1.0	0.435914	10.0	755195.0	0.435914	Y
6	IC 410-668589/18	2.0	0.97126	10.0	762844.0	0.48563	Y
7	IC 410-668589/19	5.0	2.6043	10.0	766613.0	0.52086	Y
8	ICIS 410-668589/20	10.0	5.304844	10.0	775184.0	0.530484	Y
9	IC 410-668589/21	25.0	13.642133	10.0	787338.0	0.545685	Y



Calibration

/ 1,2,4-Trimethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

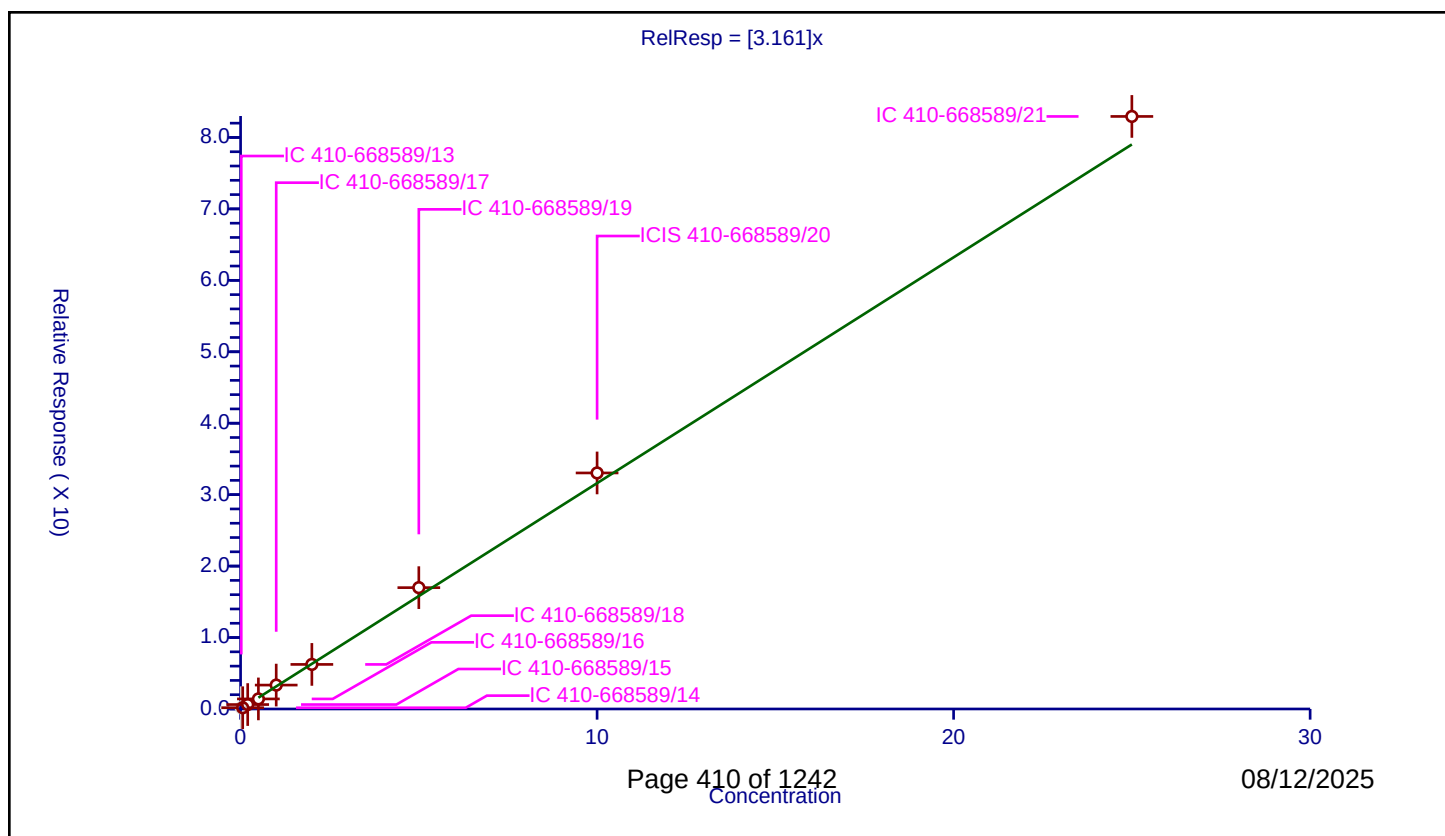
Curve Coefficients

Intercept: 0
Slope: 3.161

Error Coefficients

Relative Standard Deviation: 7.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.175176	10.0	735717.0	8.758803	N
2	IC 410-668589/14	0.06	0.17215	10.0	739240.0	2.869163	Y
3	IC 410-668589/15	0.2	0.622776	10.0	743381.0	3.113881	Y
4	IC 410-668589/16	0.5	1.409984	10.0	746831.0	2.819969	Y
5	IC 410-668589/17	1.0	3.346103	10.0	755195.0	3.346103	Y
6	IC 410-668589/18	2.0	6.239008	10.0	762844.0	3.119504	Y
7	IC 410-668589/19	5.0	16.986002	10.0	766613.0	3.3972	Y
8	ICIS 410-668589/20	10.0	33.039046	10.0	775184.0	3.303905	Y
9	IC 410-668589/21	25.0	82.939106	10.0	787338.0	3.317564	Y



Calibration

/ sec-Butylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

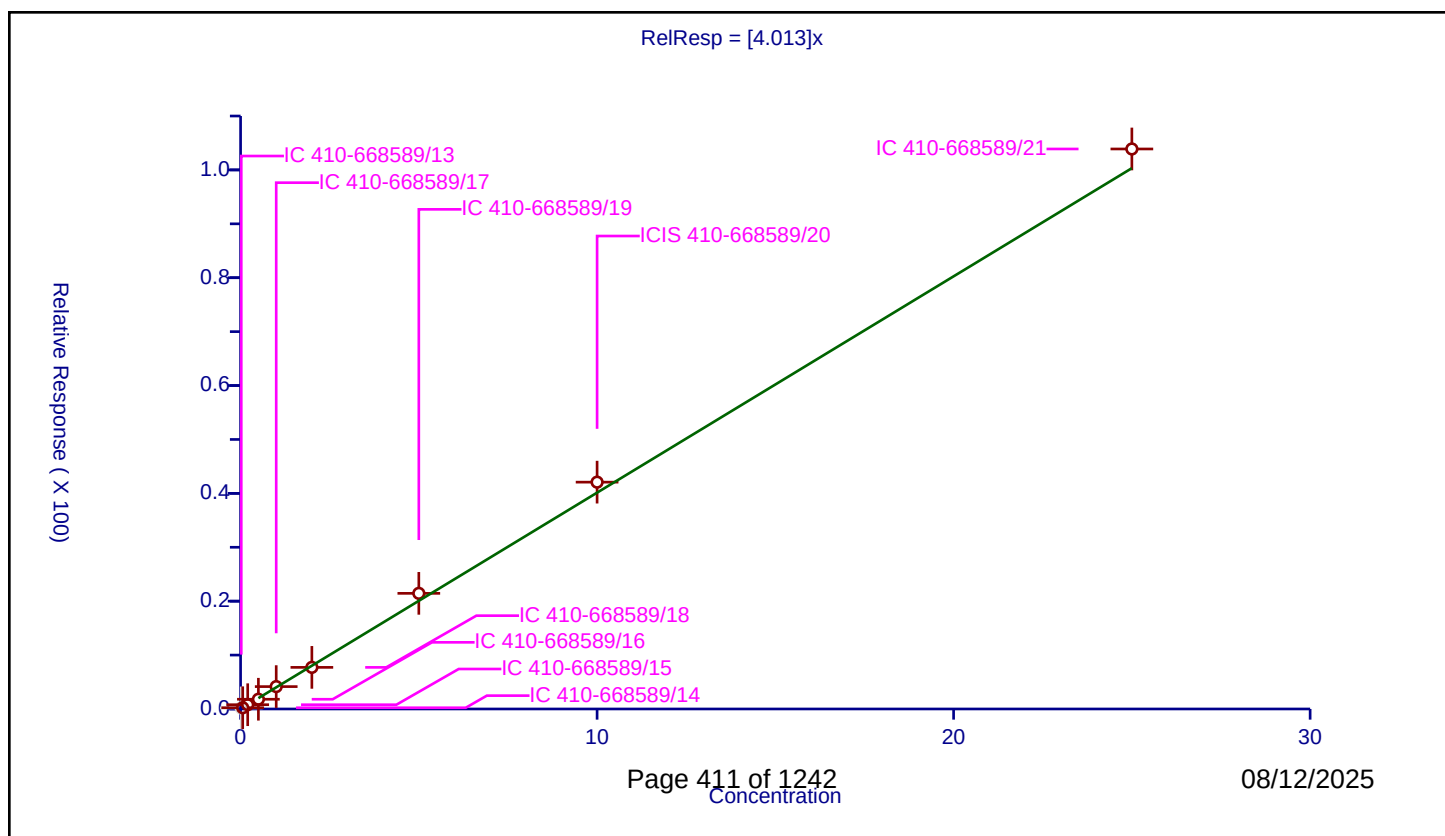
Curve Coefficients

Intercept: 0
Slope: 4.013

Error Coefficients

Relative Standard Deviation: 5.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.193159	10.0	735717.0	9.657926	N
2	IC 410-668589/14	0.06	0.231251	10.0	739240.0	3.854184	Y
3	IC 410-668589/15	0.2	0.792151	10.0	743381.0	3.960755	Y
4	IC 410-668589/16	0.5	1.810155	10.0	746831.0	3.62031	Y
5	IC 410-668589/17	1.0	4.154874	10.0	755195.0	4.154874	Y
6	IC 410-668589/18	2.0	7.719927	10.0	762844.0	3.859964	Y
7	IC 410-668589/19	5.0	21.450471	10.0	766613.0	4.290094	Y
8	ICIS 410-668589/20	10.0	42.07801	10.0	775184.0	4.207801	Y
9	IC 410-668589/21	25.0	103.886412	10.0	787338.0	4.155456	Y



Calibration

/ 1,3-Dichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

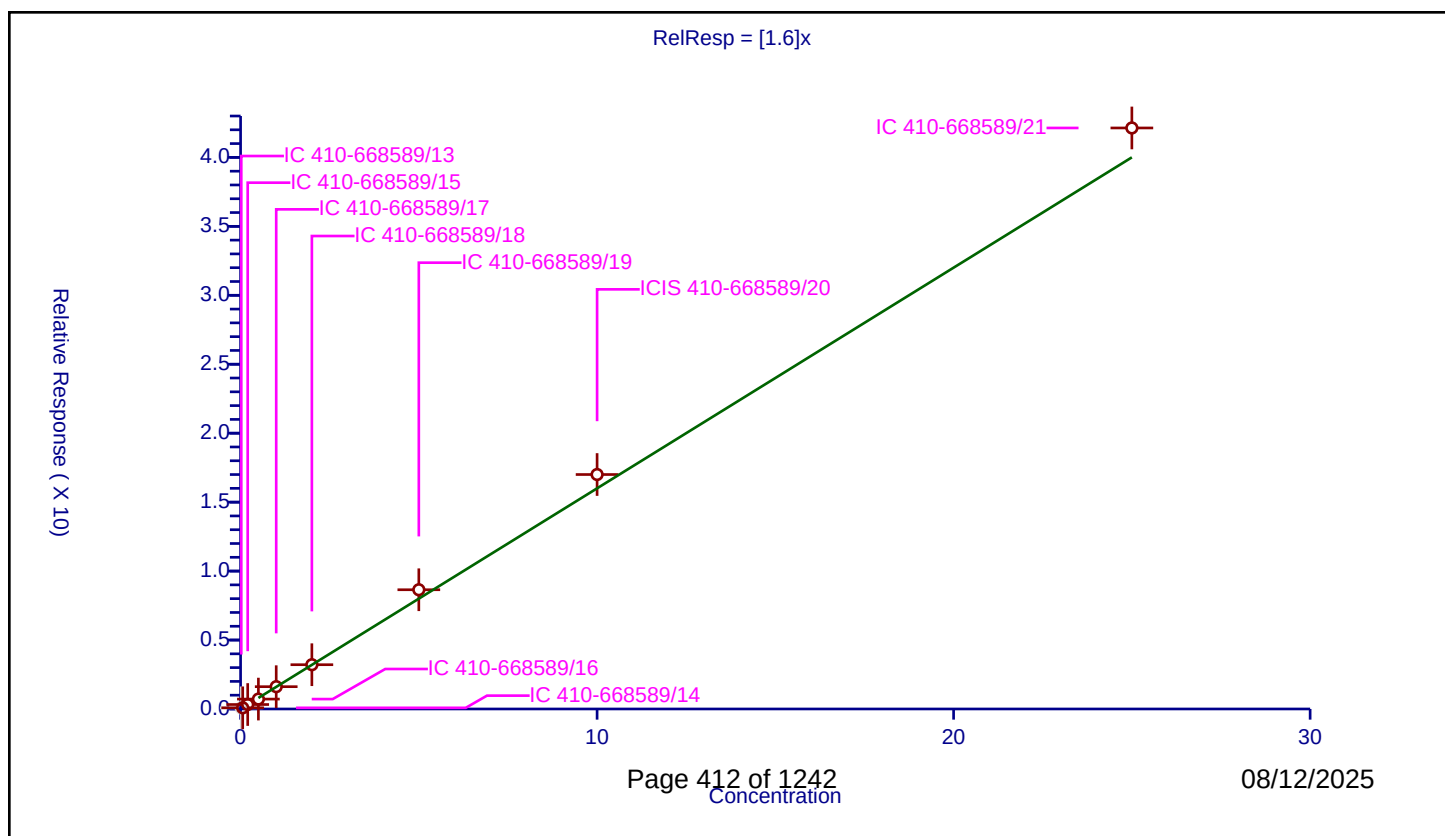
Curve Coefficients

Intercept: 0
Slope: 1.6

Error Coefficients

Relative Standard Deviation: 7.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.082858	10.0	735717.0	4.142897	N
2	IC 410-668589/14	0.06	0.084438	10.0	739240.0	1.407301	Y
3	IC 410-668589/15	0.2	0.324275	10.0	743381.0	1.621376	Y
4	IC 410-668589/16	0.5	0.717525	10.0	746831.0	1.43505	Y
5	IC 410-668589/17	1.0	1.617106	10.0	755195.0	1.617106	Y
6	IC 410-668589/18	2.0	3.210198	10.0	762844.0	1.605099	Y
7	IC 410-668589/19	5.0	8.646475	10.0	766613.0	1.729295	Y
8	ICIS 410-668589/20	10.0	17.002776	10.0	775184.0	1.700278	Y
9	IC 410-668589/21	25.0	42.134179	10.0	787338.0	1.685367	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

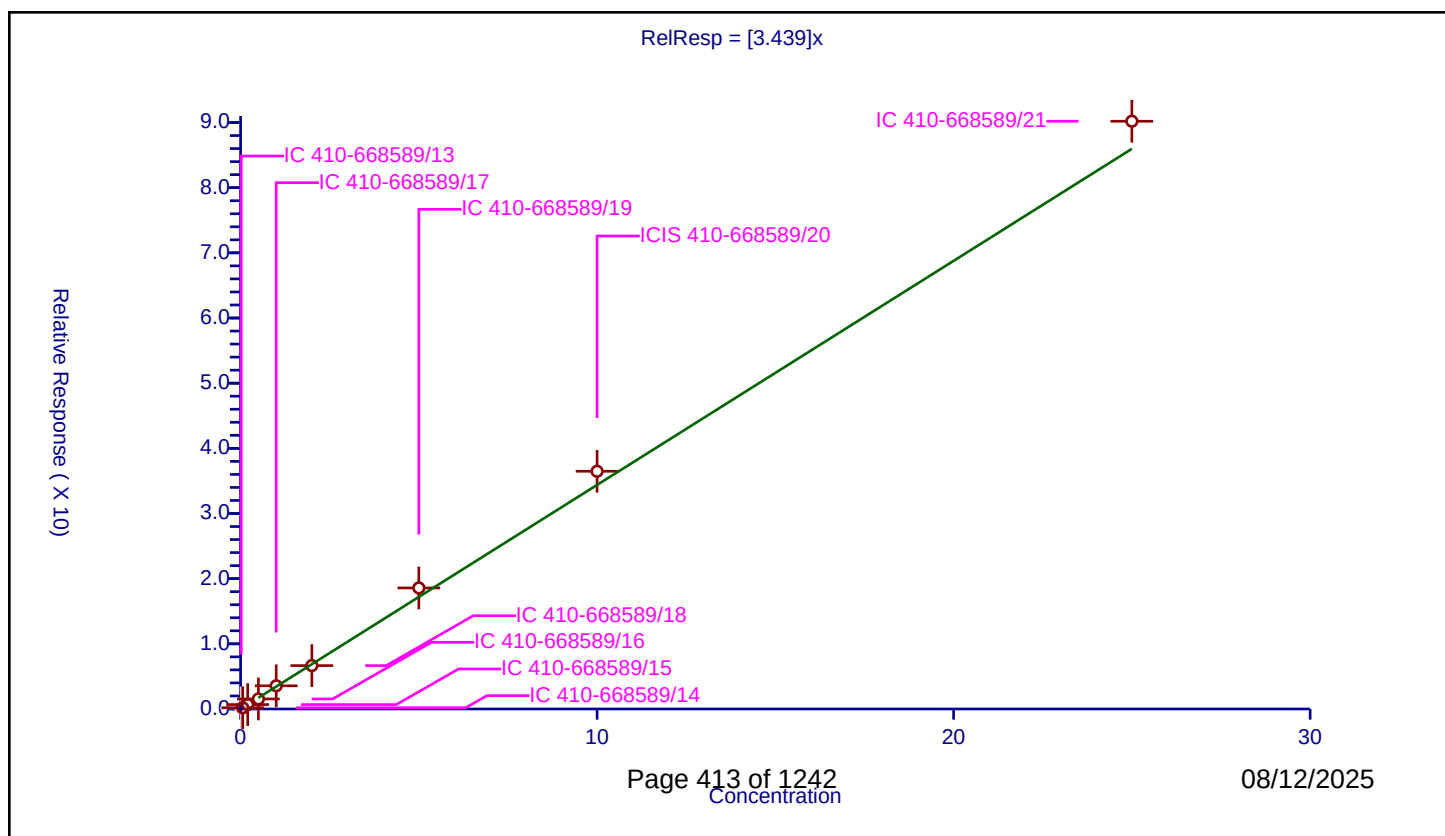
Curve Coefficients

Intercept: 0
Slope: 3.439

Error Coefficients

Relative Standard Deviation: 6.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.174143	10.0	735717.0	8.707152	N
2	IC 410-668589/14	0.06	0.190655	10.0	739240.0	3.177588	Y
3	IC 410-668589/15	0.2	0.678185	10.0	743381.0	3.390926	Y
4	IC 410-668589/16	0.5	1.541567	10.0	746831.0	3.083134	Y
5	IC 410-668589/17	1.0	3.557042	10.0	755195.0	3.557042	Y
6	IC 410-668589/18	2.0	6.656236	10.0	762844.0	3.328118	Y
7	IC 410-668589/19	5.0	18.578396	10.0	766613.0	3.715679	Y
8	ICIS 410-668589/20	10.0	36.479558	10.0	775184.0	3.647956	Y
9	IC 410-668589/21	25.0	90.198923	10.0	787338.0	3.607957	Y



Calibration

/ 1,4-Dichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

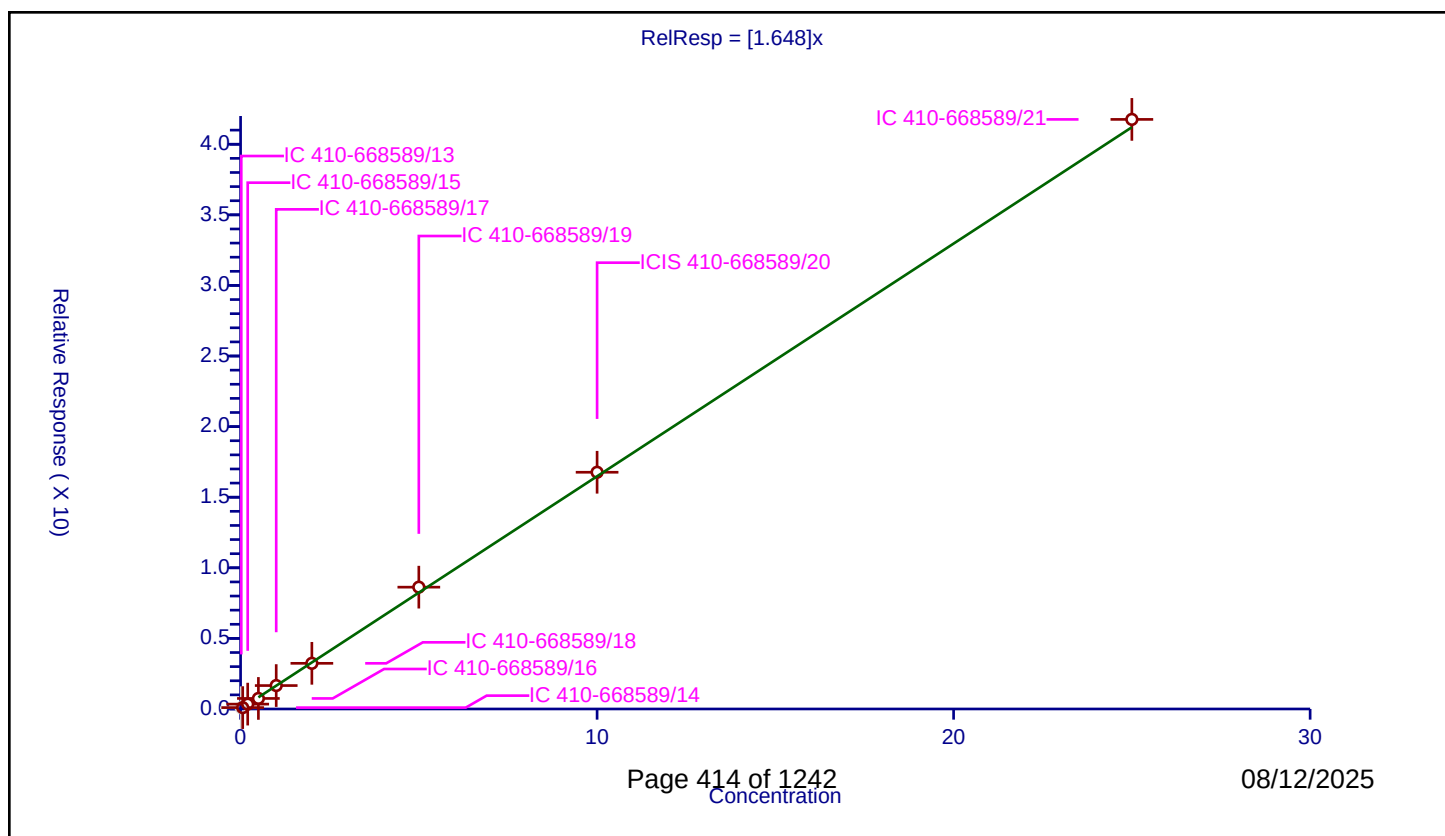
Curve Coefficients

Intercept: 0
Slope: 1.648

Error Coefficients

Relative Standard Deviation: 4.5

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.08824	10.0	735717.0	4.412023	N
2	IC 410-668589/14	0.06	0.097154	10.0	739240.0	1.619231	Y
3	IC 410-668589/15	0.2	0.344803	10.0	743381.0	1.724015	Y
4	IC 410-668589/16	0.5	0.746795	10.0	746831.0	1.493591	Y
5	IC 410-668589/17	1.0	1.658486	10.0	755195.0	1.658486	Y
6	IC 410-668589/18	2.0	3.234292	10.0	762844.0	1.617146	Y
7	IC 410-668589/19	5.0	8.628669	10.0	766613.0	1.725734	Y
8	ICIS 410-668589/20	10.0	16.768535	10.0	775184.0	1.676853	Y
9	IC 410-668589/21	25.0	41.759956	10.0	787338.0	1.670398	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

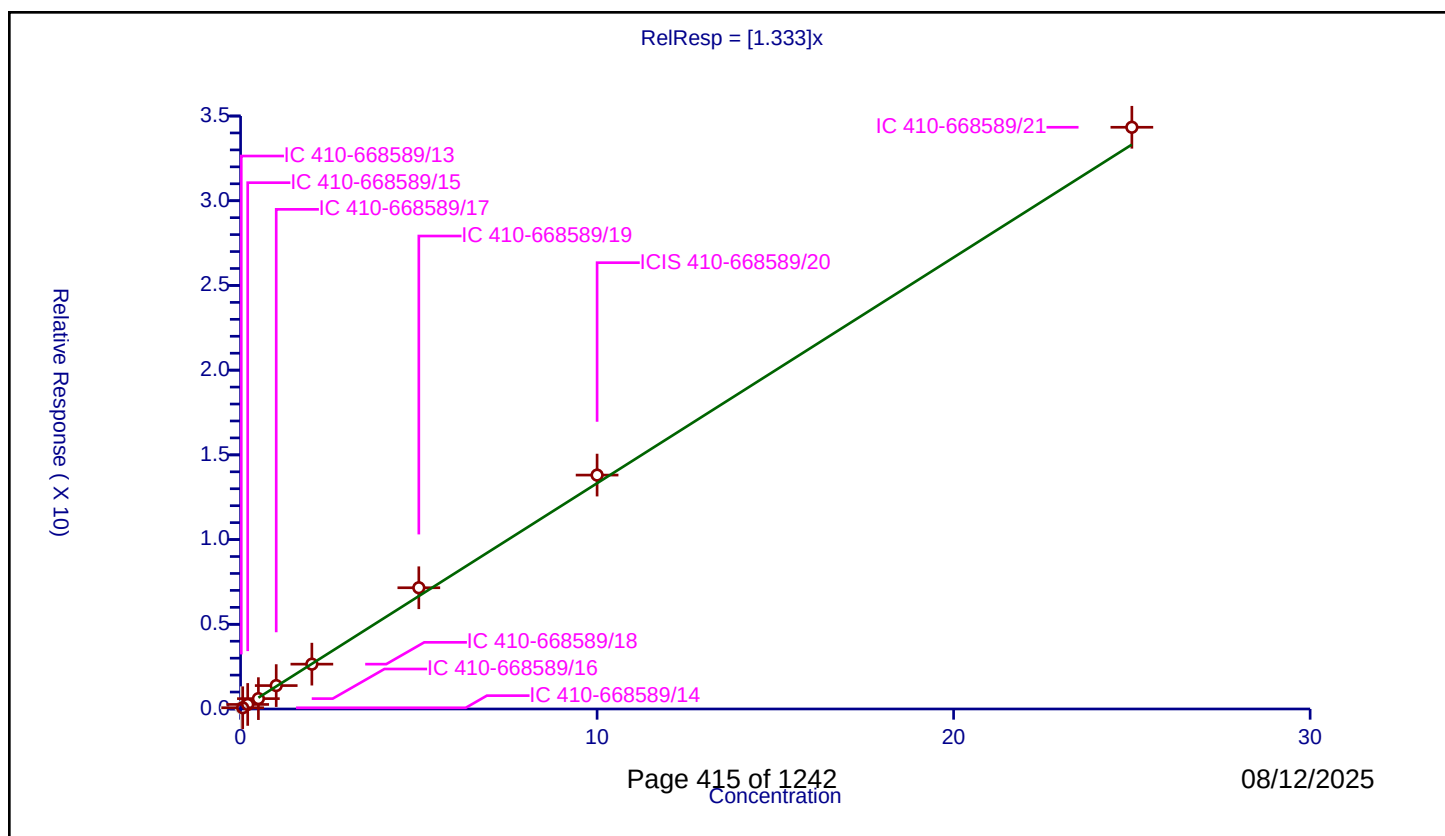
Curve Coefficients

Intercept: 0
Slope: 1.333

Error Coefficients

Relative Standard Deviation: 6.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.073928	10.0	735717.0	3.696394	N
2	IC 410-668589/14	0.06	0.072304	10.0	739240.0	1.205066	Y
3	IC 410-668589/15	0.2	0.268516	10.0	743381.0	1.342582	Y
4	IC 410-668589/16	0.5	0.611142	10.0	746831.0	1.222285	Y
5	IC 410-668589/17	1.0	1.38163	10.0	755195.0	1.38163	Y
6	IC 410-668589/18	2.0	2.64737	10.0	762844.0	1.323685	Y
7	IC 410-668589/19	5.0	7.156584	10.0	766613.0	1.431317	Y
8	ICIS 410-668589/20	10.0	13.805922	10.0	775184.0	1.380592	Y
9	IC 410-668589/21	25.0	34.335978	10.0	787338.0	1.373439	Y



Calibration

/ Benzyl chloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

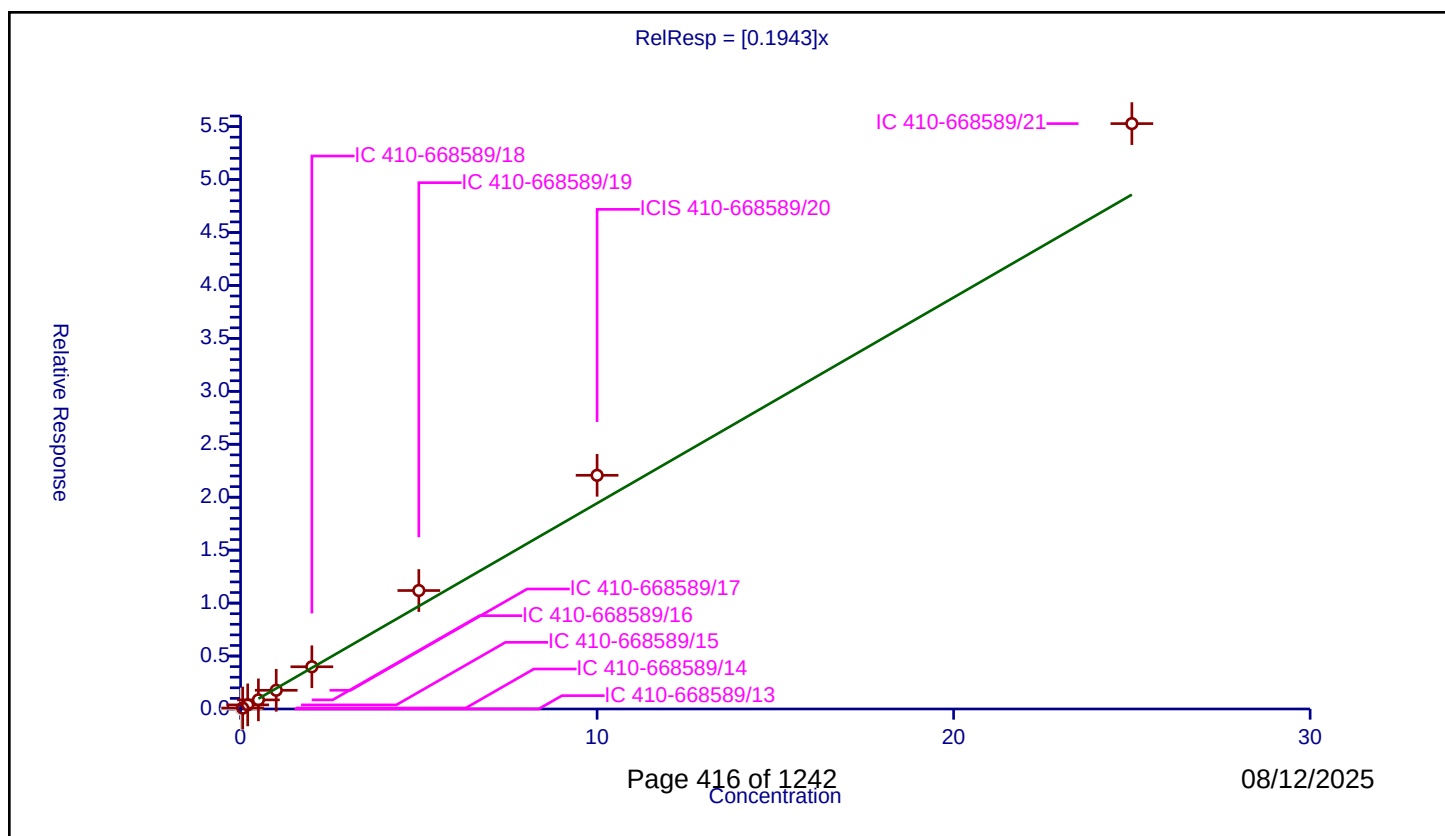
Curve Coefficients

Intercept: 0
Slope: 0.1943

Error Coefficients

Relative Standard Deviation: 14.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	735717.0	0.0	N
2	IC 410-668589/14	0.06	0.00882	10.0	739240.0	0.146998	Y
3	IC 410-668589/15	0.2	0.038782	10.0	743381.0	0.193911	Y
4	IC 410-668589/16	0.5	0.085936	10.0	746831.0	0.171873	Y
5	IC 410-668589/17	1.0	0.176683	10.0	755195.0	0.176683	Y
6	IC 410-668589/18	2.0	0.398784	10.0	762844.0	0.199392	Y
7	IC 410-668589/19	5.0	1.118778	10.0	766613.0	0.223756	Y
8	ICIS 410-668589/20	10.0	2.206857	10.0	775184.0	0.220686	Y
9	IC 410-668589/21	25.0	5.528121	10.0	787338.0	0.221125	Y



Calibration

/ n-Butylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

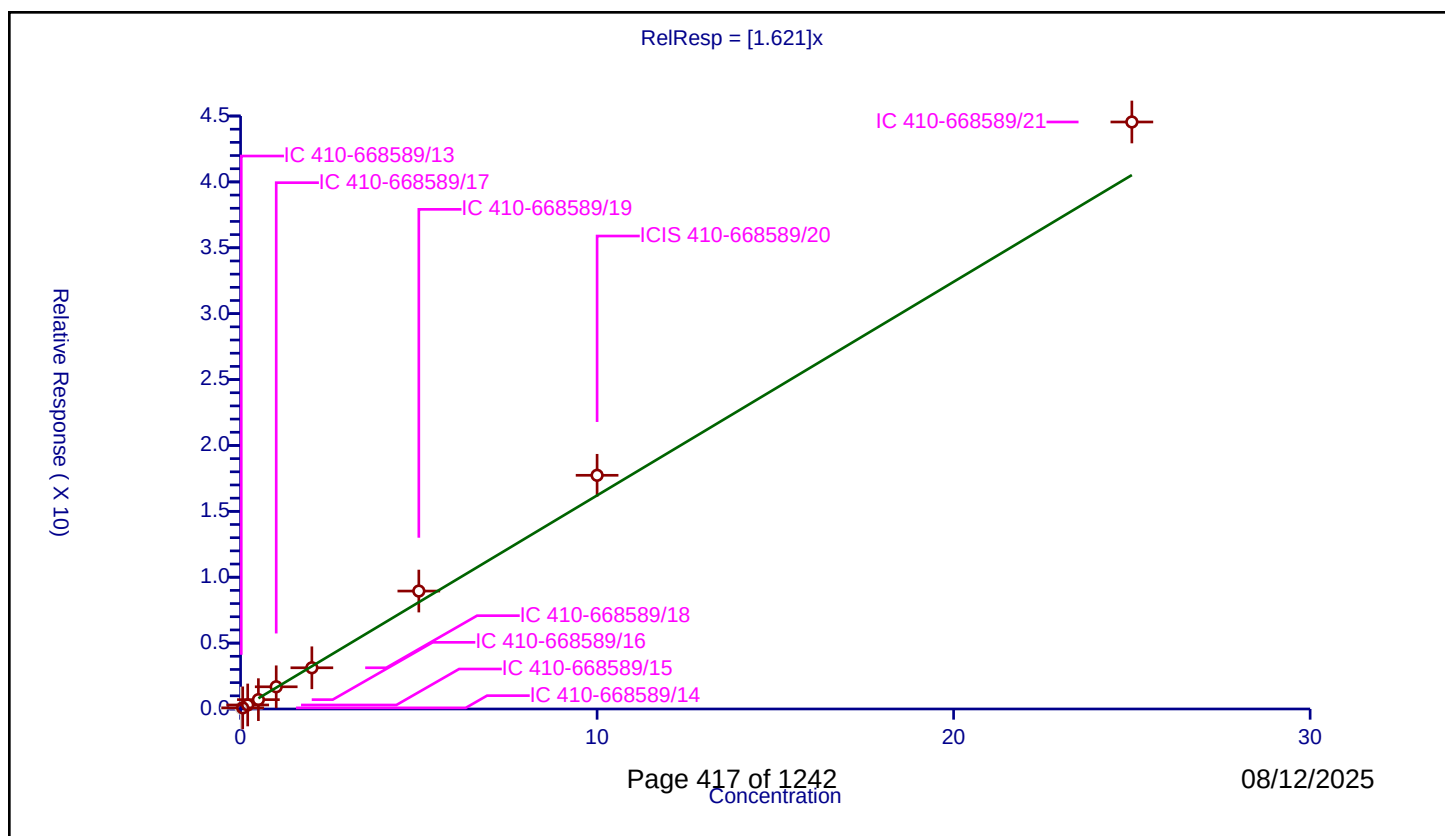
Curve Coefficients

Intercept: 0
Slope: 1.621

Error Coefficients

Relative Standard Deviation: 9.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.066547	10.0	735717.0	3.327366	N
2	IC 410-668589/14	0.06	0.085723	10.0	739240.0	1.42872	Y
3	IC 410-668589/15	0.2	0.304998	10.0	743381.0	1.524992	Y
4	IC 410-668589/16	0.5	0.709237	10.0	746831.0	1.418474	Y
5	IC 410-668589/17	1.0	1.685141	10.0	755195.0	1.685141	Y
6	IC 410-668589/18	2.0	3.127428	10.0	762844.0	1.563714	Y
7	IC 410-668589/19	5.0	8.950227	10.0	766613.0	1.790045	Y
8	ICIS 410-668589/20	10.0	17.735518	10.0	775184.0	1.773552	Y
9	IC 410-668589/21	25.0	44.547031	10.0	787338.0	1.781881	Y



Calibration

/ 1,2-Dichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

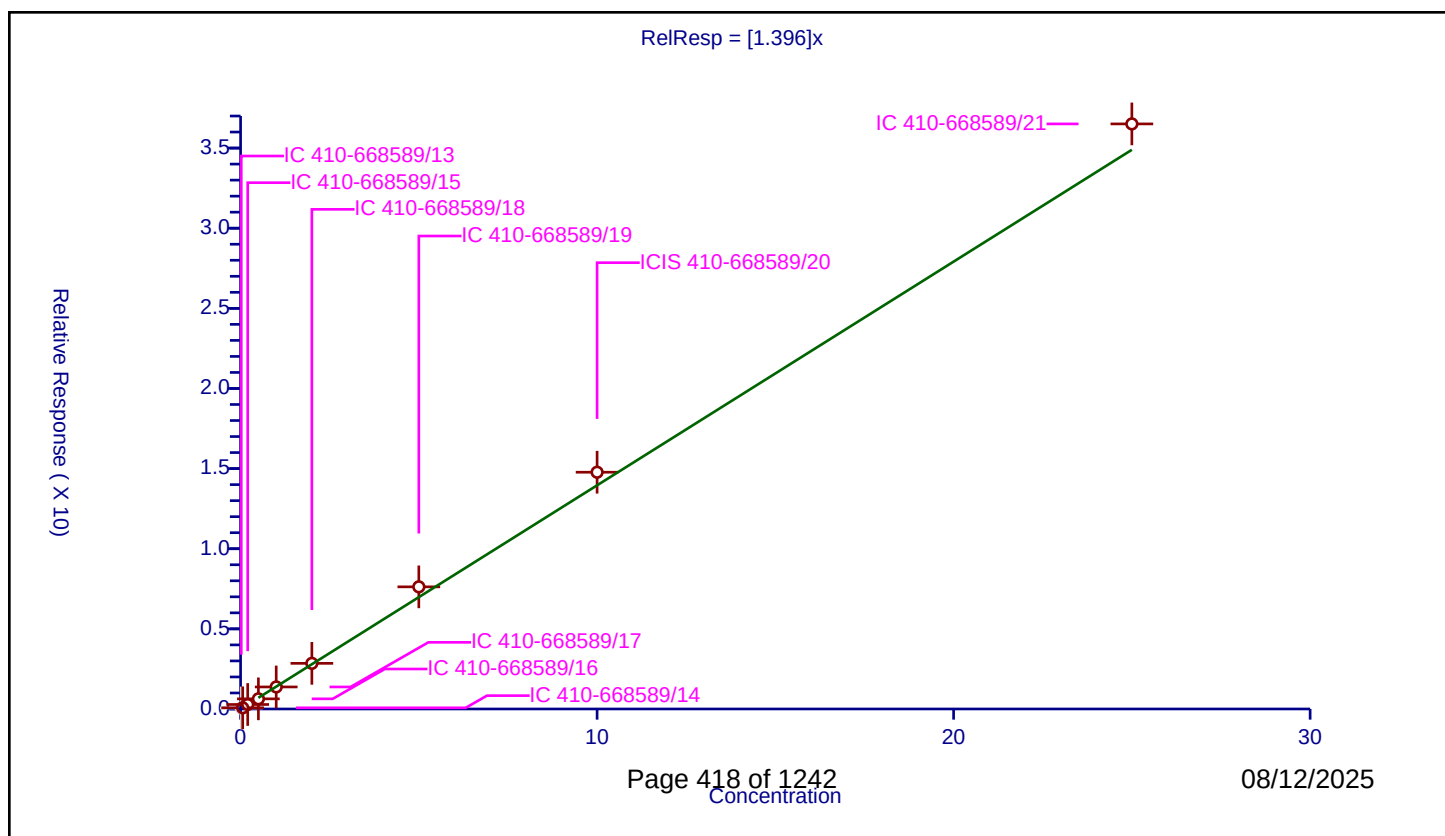
Curve Coefficients

Intercept: 0
Slope: 1.396

Error Coefficients

Relative Standard Deviation: 7.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.060023	10.0	735717.0	3.001154	N
2	IC 410-668589/14	0.06	0.073981	10.0	739240.0	1.233023	Y
3	IC 410-668589/15	0.2	0.28104	10.0	743381.0	1.405201	Y
4	IC 410-668589/16	0.5	0.633088	10.0	746831.0	1.266177	Y
5	IC 410-668589/17	1.0	1.375234	10.0	755195.0	1.375234	Y
6	IC 410-668589/18	2.0	2.848013	10.0	762844.0	1.424007	Y
7	IC 410-668589/19	5.0	7.62082	10.0	766613.0	1.524164	Y
8	ICIS 410-668589/20	10.0	14.773293	10.0	775184.0	1.477329	Y
9	IC 410-668589/21	25.0	36.506735	10.0	787338.0	1.460269	Y



Calibration

/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

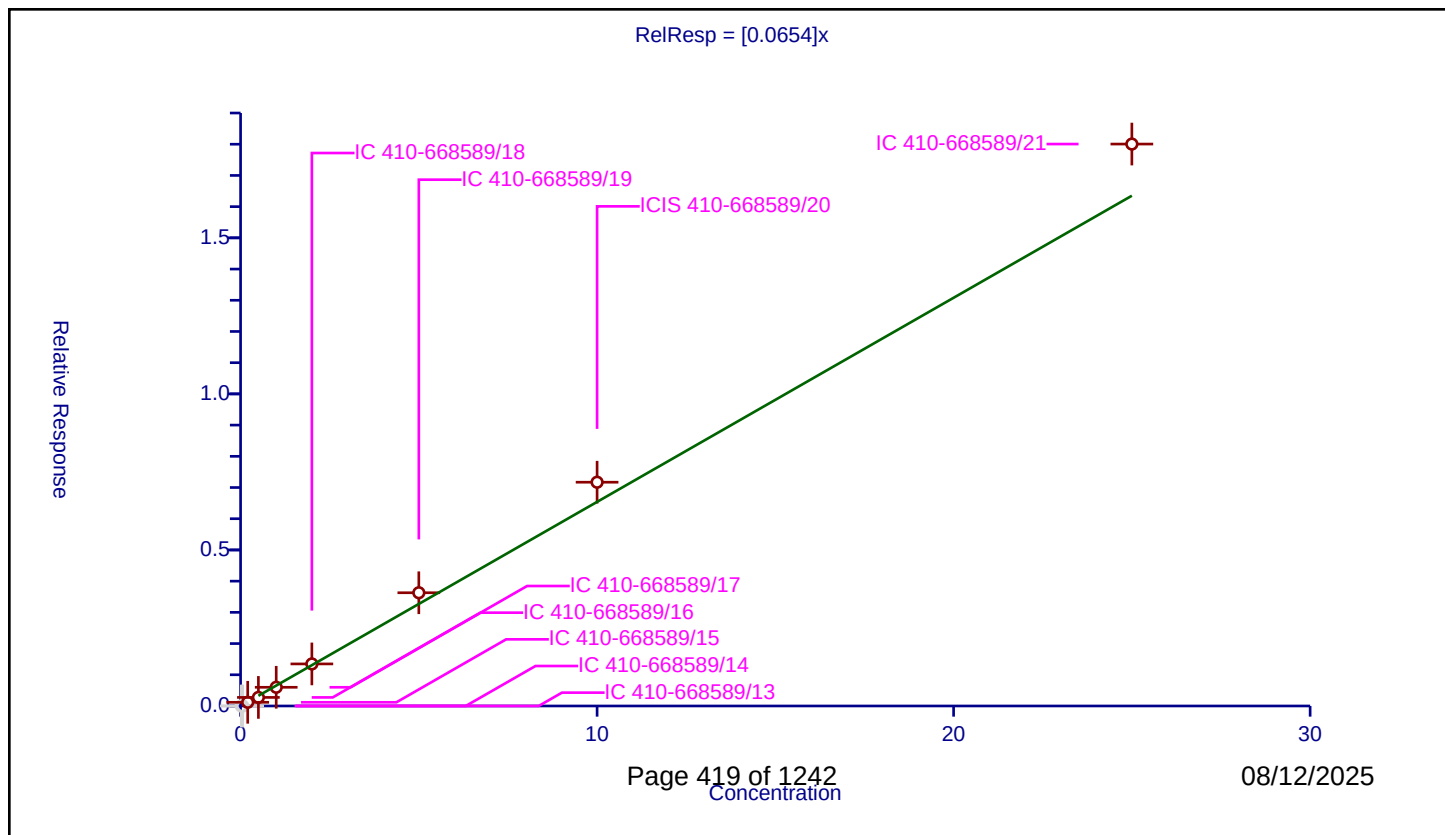
Curve Coefficients

Intercept: 0
Slope: 0.0654

Error Coefficients

Relative Standard Deviation: 11.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.0	10.0	735717.0	0.0	N
2	IC 410-668589/14	0.06	0.0	10.0	739240.0	0.0	N
3	IC 410-668589/15	0.2	0.011838	10.0	743381.0	0.059189	Y
4	IC 410-668589/16	0.5	0.027489	10.0	746831.0	0.054979	Y
5	IC 410-668589/17	1.0	0.059958	10.0	755195.0	0.059958	Y
6	IC 410-668589/18	2.0	0.134759	10.0	762844.0	0.067379	Y
7	IC 410-668589/19	5.0	0.362856	10.0	766613.0	0.072571	Y
8	ICIS 410-668589/20	10.0	0.716978	10.0	775184.0	0.071698	Y
9	IC 410-668589/21	25.0	1.800535	10.0	787338.0	0.072021	Y



Calibration

/ 1,3,5-Trichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

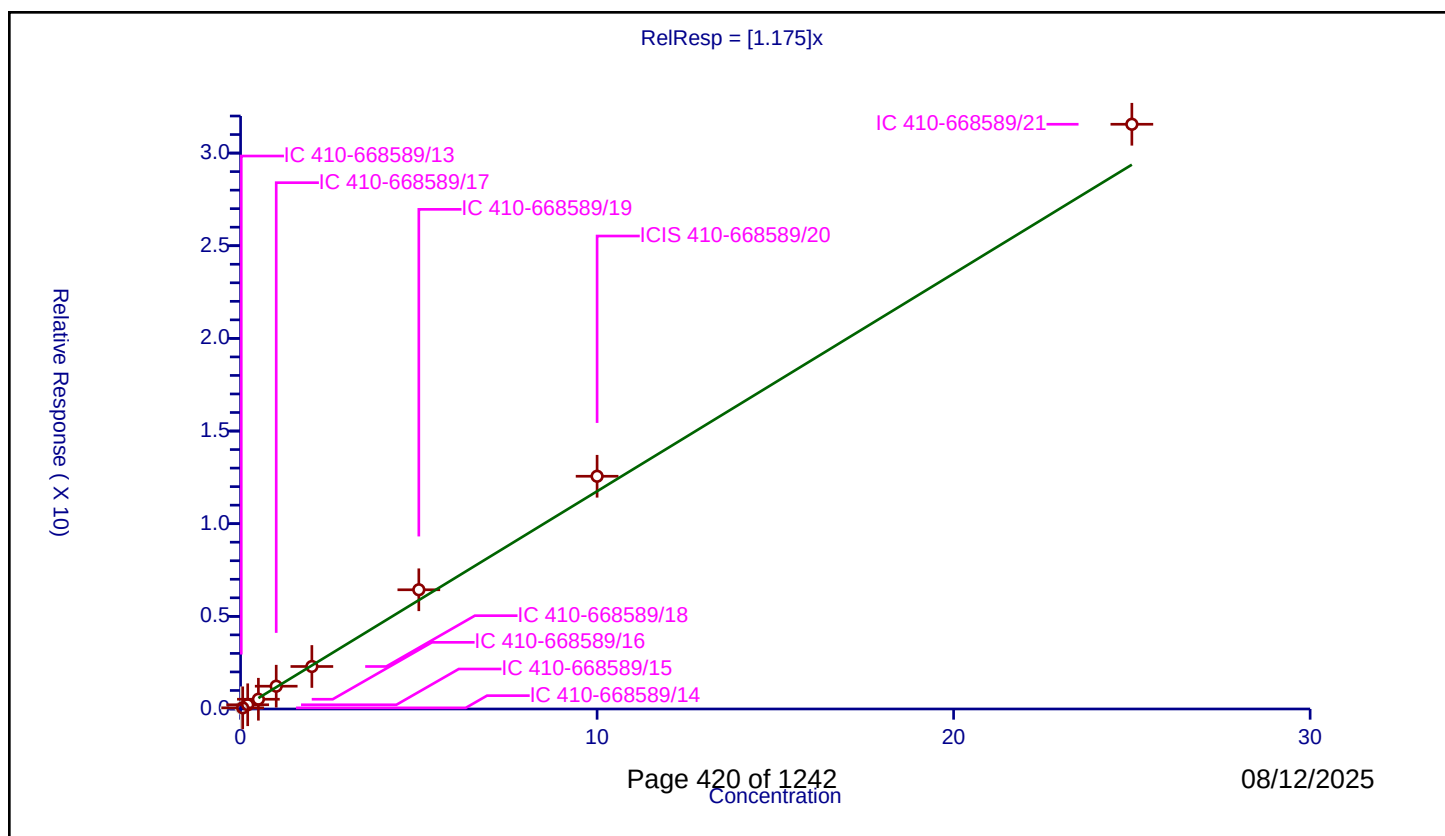
Curve Coefficients

Intercept: 0
Slope: 1.175

Error Coefficients

Relative Standard Deviation: 8.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.061736	10.0	735717.0	3.086785	N
2	IC 410-668589/14	0.06	0.061712	10.0	739240.0	1.028534	Y
3	IC 410-668589/15	0.2	0.227636	10.0	743381.0	1.138178	Y
4	IC 410-668589/16	0.5	0.525956	10.0	746831.0	1.051911	Y
5	IC 410-668589/17	1.0	1.229908	10.0	755195.0	1.229908	Y
6	IC 410-668589/18	2.0	2.292684	10.0	762844.0	1.146342	Y
7	IC 410-668589/19	5.0	6.433416	10.0	766613.0	1.286683	Y
8	ICIS 410-668589/20	10.0	12.560179	10.0	775184.0	1.256018	Y
9	IC 410-668589/21	25.0	31.555723	10.0	787338.0	1.262229	Y



Calibration

/ 1,2,4-Trichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

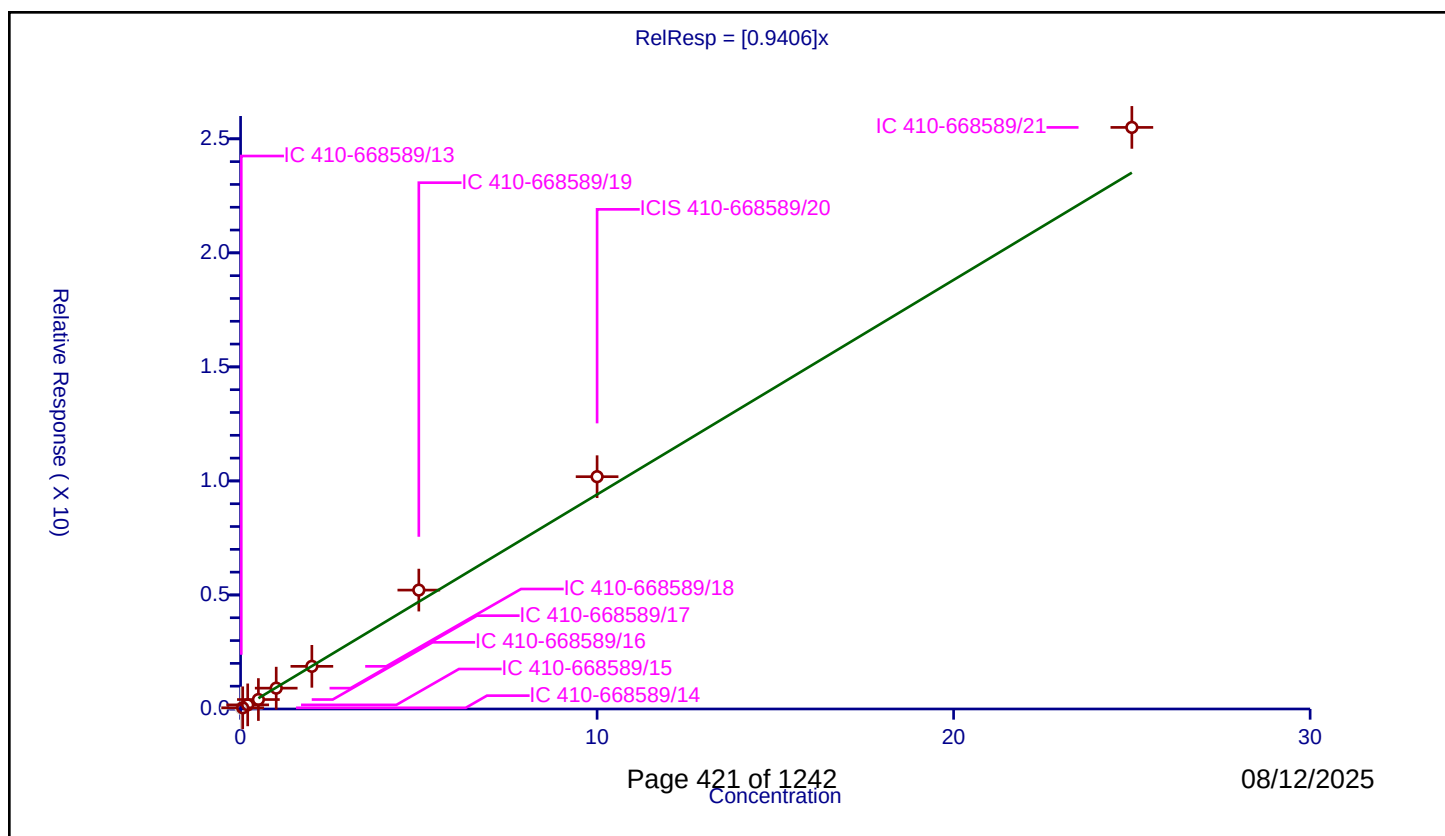
Curve Coefficients

Intercept: 0
Slope: 0.9406

Error Coefficients

Relative Standard Deviation: 8.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.038901	10.0	735717.0	1.945041	N
2	IC 410-668589/14	0.06	0.051729	10.0	739240.0	0.862147	Y
3	IC 410-668589/15	0.2	0.18058	10.0	743381.0	0.902902	Y
4	IC 410-668589/16	0.5	0.414953	10.0	746831.0	0.829907	Y
5	IC 410-668589/17	1.0	0.913473	10.0	755195.0	0.913473	Y
6	IC 410-668589/18	2.0	1.870317	10.0	762844.0	0.935158	Y
7	IC 410-668589/19	5.0	5.213621	10.0	766613.0	1.042724	Y
8	ICIS 410-668589/20	10.0	10.186162	10.0	775184.0	1.018616	Y
9	IC 410-668589/21	25.0	25.500357	10.0	787338.0	1.020014	Y



Calibration

/ Hexachlorobutadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

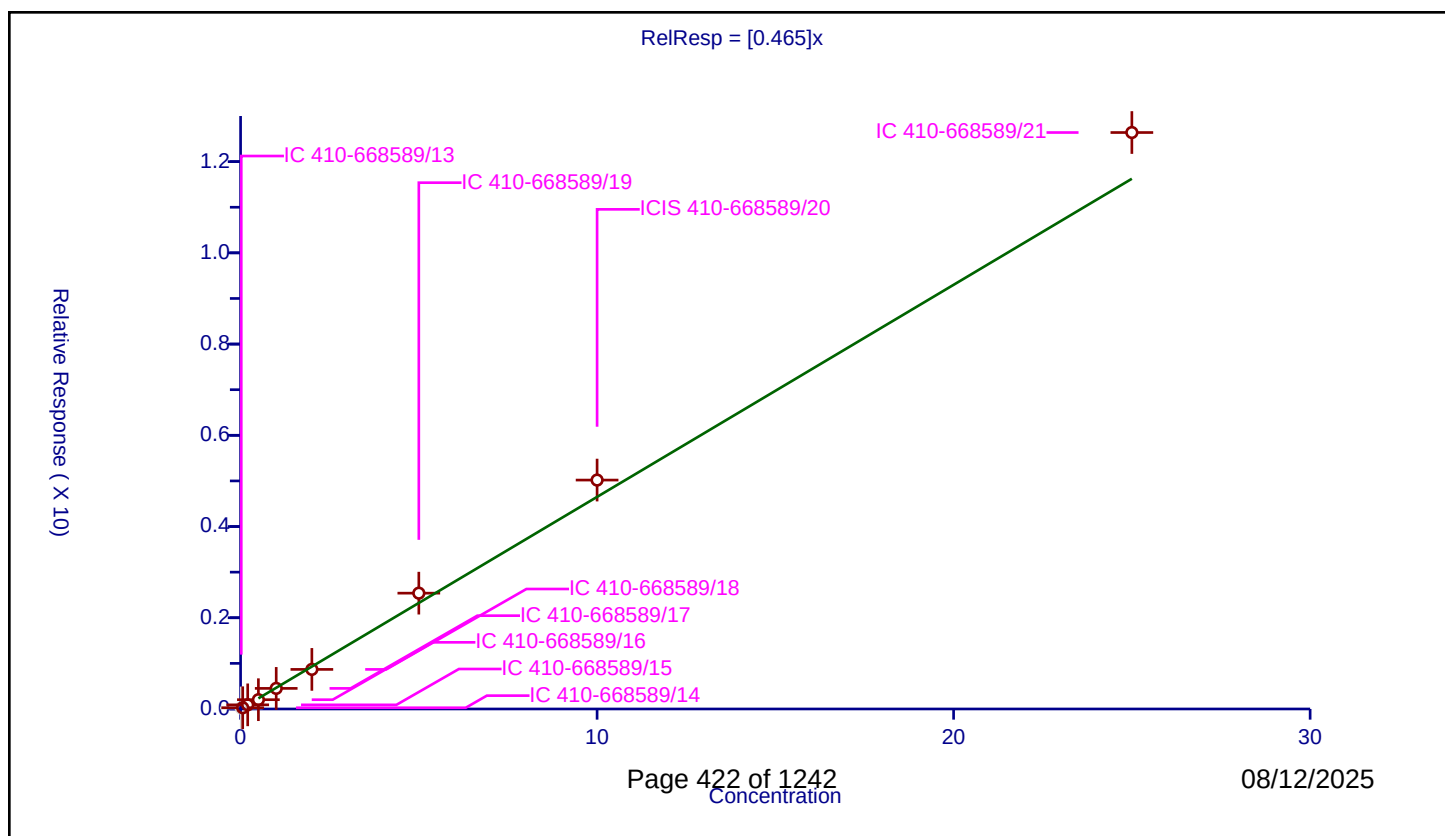
Curve Coefficients

Intercept: 0
Slope: 0.465

Error Coefficients

Relative Standard Deviation: 7.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.022454	10.0	735717.0	1.122714	N
2	IC 410-668589/14	0.06	0.027434	10.0	739240.0	0.457226	Y
3	IC 410-668589/15	0.2	0.090936	10.0	743381.0	0.454679	Y
4	IC 410-668589/16	0.5	0.20362	10.0	746831.0	0.407241	Y
5	IC 410-668589/17	1.0	0.451579	10.0	755195.0	0.451579	Y
6	IC 410-668589/18	2.0	0.867595	10.0	762844.0	0.433798	Y
7	IC 410-668589/19	5.0	2.539117	10.0	766613.0	0.507823	Y
8	ICIS 410-668589/20	10.0	5.018963	10.0	775184.0	0.501896	Y
9	IC 410-668589/21	25.0	12.638155	10.0	787338.0	0.505526	Y



Calibration

/ Naphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

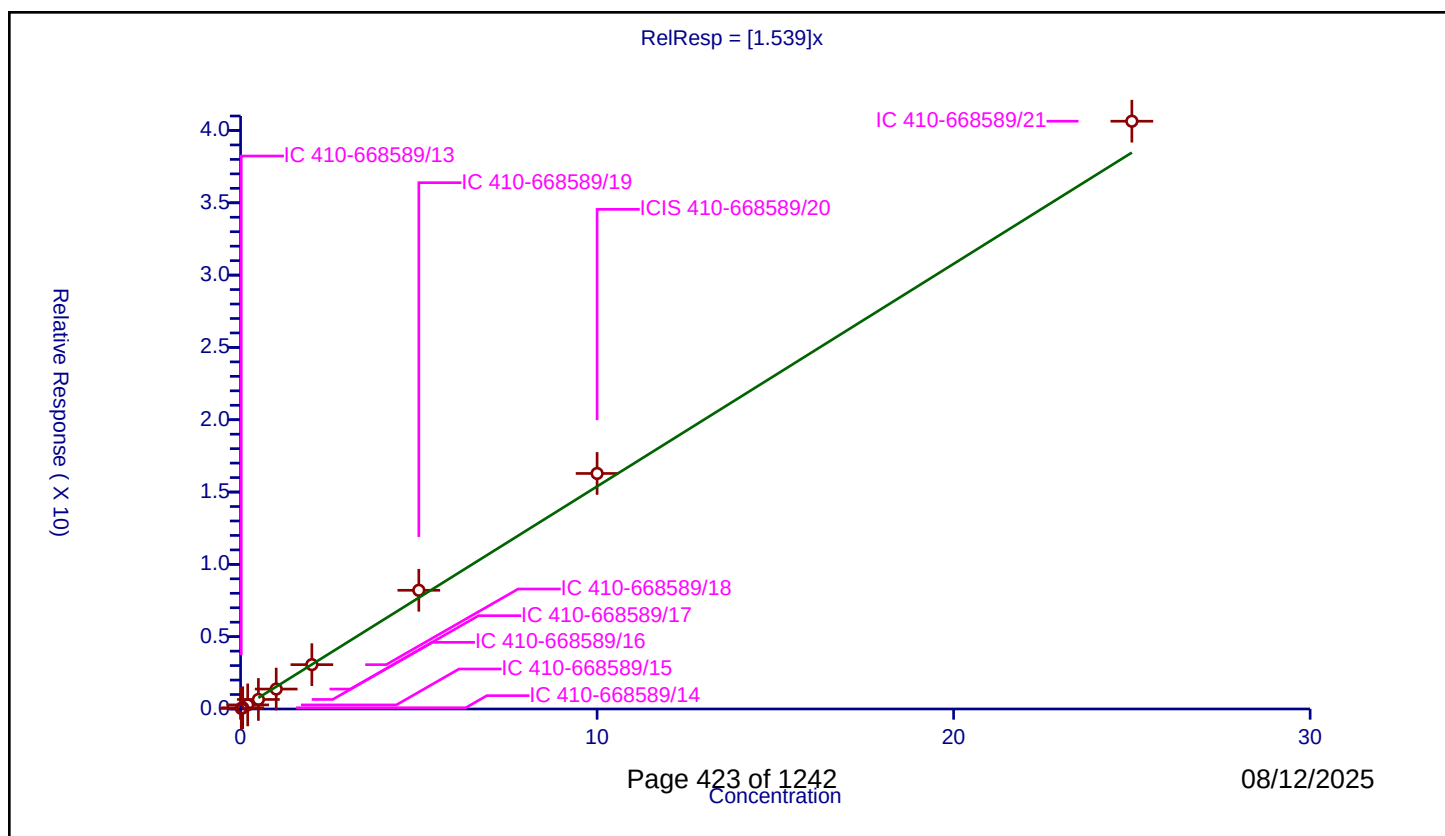
Curve Coefficients

Intercept: 0
Slope: 1.539

Error Coefficients

Relative Standard Deviation: 11.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.037419	10.0	735717.0	1.870964	Y
2	IC 410-668589/14	0.06	0.086156	10.0	739240.0	1.435934	Y
3	IC 410-668589/15	0.2	0.283932	10.0	743381.0	1.419662	Y
4	IC 410-668589/16	0.5	0.658328	10.0	746831.0	1.316657	Y
5	IC 410-668589/17	1.0	1.378809	10.0	755195.0	1.378809	Y
6	IC 410-668589/18	2.0	3.064807	10.0	762844.0	1.532404	Y
7	IC 410-668589/19	5.0	8.20774	10.0	766613.0	1.641548	Y
8	ICIS 410-668589/20	10.0	16.285321	10.0	775184.0	1.628532	Y
9	IC 410-668589/21	25.0	40.640856	10.0	787338.0	1.625634	Y



Calibration

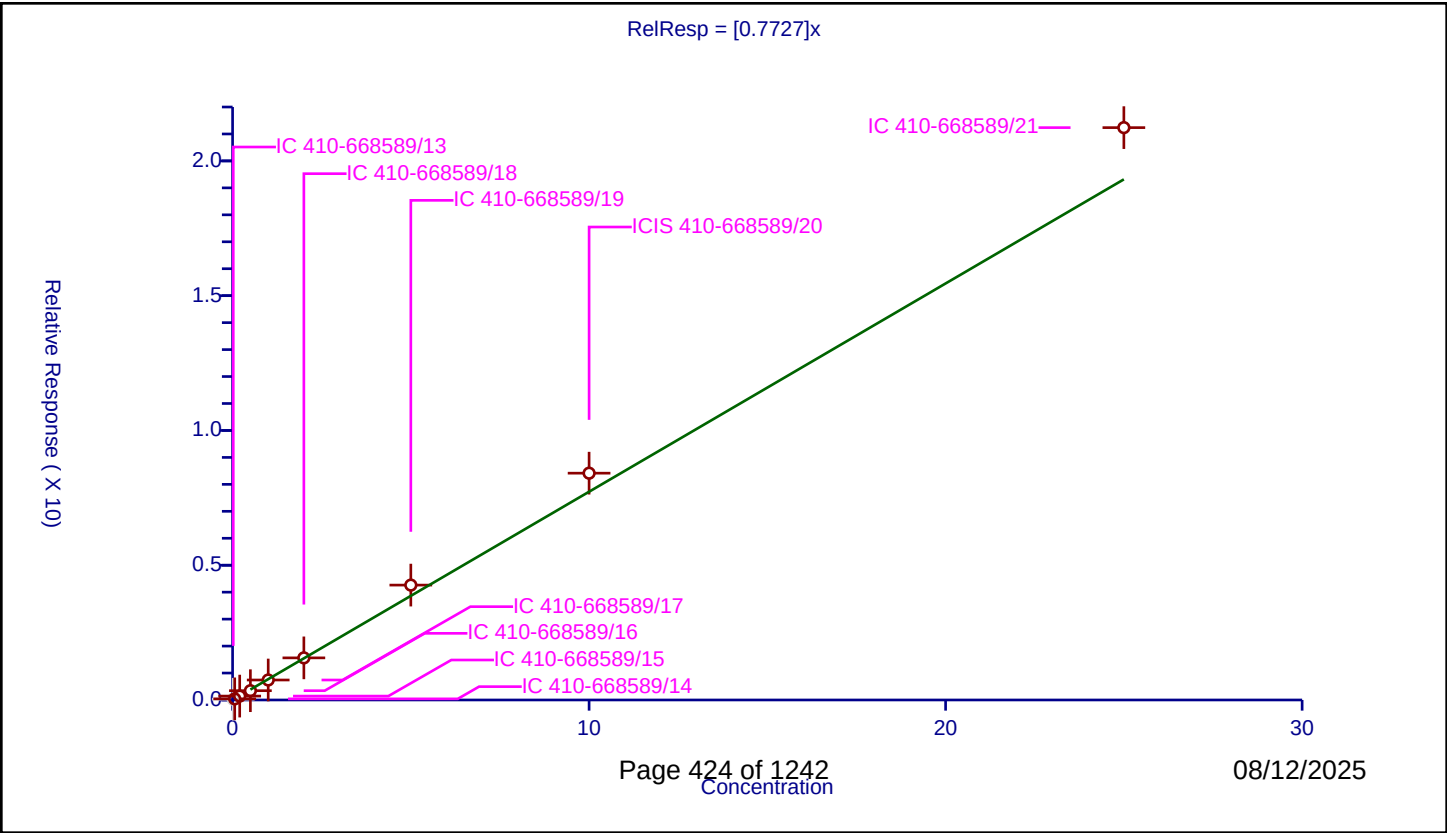
/ 1,2,3-Trichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7727
Error Coefficients	

Relative Standard Deviation: 8.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-668589/13	0.02	0.028258	10.0	735717.0	1.412907	N
2	IC 410-668589/14	0.06	0.041881	10.0	739240.0	0.698014	Y
3	IC 410-668589/15	0.2	0.145349	10.0	743381.0	0.726747	Y
4	IC 410-668589/16	0.5	0.344951	10.0	746831.0	0.689902	Y
5	IC 410-668589/17	1.0	0.741928	10.0	755195.0	0.741928	Y
6	IC 410-668589/18	2.0	1.562469	10.0	762844.0	0.781234	Y
7	IC 410-668589/19	5.0	4.262359	10.0	766613.0	0.852472	Y
8	ICIS 410-668589/20	10.0	8.415228	10.0	775184.0	0.841523	Y
9	IC 410-668589/21	25.0	21.235111	10.0	787338.0	0.849404	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICV 410-668589/23

Calibration Date: 07/09/2025 07:43

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HL08X22.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3244	0.4037	0.1000	6.22	5.00	24.4	30.0
Chloromethane	Ave	0.4285	0.4442	0.1000	5.18	5.00	3.7	30.0
1,3-Butadiene	Ave	0.4119	0.4403		5.34	5.00	6.9	30.0
Vinyl chloride	Ave	0.3874	0.4213	0.1000	5.44	5.00	8.7	30.0
Bromomethane	Ave	0.2752	0.2843	0.1000	5.17	5.00	3.3	30.0
Chloroethane	Ave	0.2433	0.2549	0.1000	5.24	5.00	4.8	30.0
Dichlorofluoromethane	Ave	0.6509	0.6538		5.02	5.00	0.4	30.0
Trichlorofluoromethane	Ave	0.5026	0.5253	0.1000	5.23	5.00	4.5	30.0
Ethyl ether	Ave	0.1705	0.1939		5.64	4.96	13.7	30.0
Freon 123a	Ave	0.3748	0.3837		5.12	5.00	2.4	30.0
Acrolein	Ave	2.895	3.110		39.3	36.6	7.4	30.0
1,1-Dichloroethene	Ave	0.2539	0.2921	0.1000	5.75	5.00	15.0	30.0
Acetone	Ave	3.552	3.276	0.1000	57.6	62.5	-7.8	30.0
Freon 113	Ave	0.2492	0.2974	0.1000	5.97	5.00	19.3	30.0
Methyl iodide	Ave	0.4868	0.4961		5.10	5.00	1.9	30.0
Ethyl bromide	Ave	0.2145	0.1901		4.44	5.01	-11.4	30.0
Carbon disulfide	Ave	0.7785	0.8089	0.1000	5.20	5.00	3.9	30.0
Methyl acetate	Ave	8.490	9.836	0.1000	5.79	5.00	15.9	30.0
Allyl chloride	Ave	0.5013	0.5054		5.04	5.00	0.8	30.0
Methylene Chloride	Ave	0.2663	0.2899	0.1000	5.44	5.00	8.9	30.0
t-Butyl alcohol	Ave	1.088	1.125		51.7	50.0	3.4	30.0
Acrylonitrile	Lin		4.778		26.9	25.0	7.5	30.0
Methyl tertiary butyl ether	Ave	0.5836	0.5953	0.1000	5.10	5.00	2.0	30.0
trans-1,2-Dichloroethene	Ave	0.2813	0.3073	0.1000	5.46	5.00	9.2	30.0
n-Hexane	Ave	0.4269	0.4690		5.49	5.00	9.9	30.0
1,1-Dichloroethane	Ave	0.5435	0.6167	0.2000	5.67	5.00	13.5	30.0
di-Isopropyl ether	Ave	0.9176	0.9587		5.22	5.00	4.5	30.0
2-Chloro-1,3-butadiene	Ave	0.4702	0.5095		5.42	5.00	8.4	30.0
Ethyl t-butyl ether	Ave	0.7956	0.8363		5.26	5.00	5.1	30.0
2-Butanone	Ave	6.083	7.158	0.1000	73.5	62.5	17.7	30.0
cis-1,2-Dichloroethene	Ave	0.3061	0.3374	0.1000	5.51	5.00	10.2	30.0
2,2-Dichloropropane	Ave	0.4753	0.5029		5.29	5.00	5.8	30.0
Propionitrile	Ave	1.516	1.617		40.0	37.5	6.6	30.0
Methacrylonitrile	Ave	6.120	7.521		46.1	37.5	22.9	30.0
Bromochloromethane	Ave	0.1158	0.1279		5.52	5.00	10.4	30.0
Tetrahydrofuran	Ave	1.710	1.866		27.3	25.0	9.1	30.0
Chloroform	Ave	0.5049	0.5499	0.2000	5.45	5.00	8.9	30.0
1,1,1-Trichloroethane	Ave	0.4721	0.5155	0.1000	5.46	5.00	9.2	30.0
Cyclohexane	Ave	0.5801	0.6093	0.1000	5.25	5.00	5.0	30.0
1,1-Dichloropropene	Ave	0.4357	0.4729		5.43	5.00	8.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.: _____

Lab Sample ID: ICV 410-668589/23

Calibration Date: 07/09/2025 07:43

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HL08X22.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3988	0.4502	0.1000	5.64	5.00	12.9	30.0
Isobutyl alcohol	Ave	0.4249	0.3733		110	125	-12.1	30.0
Benzene	Ave	1.239	1.304	0.5000	5.26	5.00	5.2	30.0
1,2-Dichloroethane	Ave	0.2783	0.2978	0.1000	5.35	5.00	7.0	30.0
t-Amyl methyl ether	Ave	0.6885	0.7068		5.13	5.00	2.7	30.0
n-Heptane	Ave	0.4514	0.4881		5.41	5.00	8.1	30.0
n-Butanol	Lin		0.3013		236	250	-5.5	30.0
Trichloroethene	Ave	0.3245	0.3437	0.2000	5.30	5.00	5.9	30.0
Methylcyclohexane	Ave	0.5648	0.5977	0.1000	5.29	5.00	5.8	30.0
1,2-Dichloropropane	Ave	0.2978	0.3318	0.1000	5.57	5.00	11.4	30.0
1,4-Dioxane	Linl		0.0618	0.0050	129	125	2.9	30.0
Methyl methacrylate	Ave	12.48	13.53		5.42	5.00	8.4	30.0
Dibromomethane	Ave	0.1103	0.1250		5.67	5.00	13.3	30.0
Bromodichloromethane	Ave	0.3322	0.3597	0.2000	5.41	5.00	8.3	30.0
2-Nitropropane	Ave	3.867	3.908		5.05	5.00	1.0	30.0
1-Bromo-2-chloroethane	Ave	0.2658	0.2631		4.95	5.00	-1.0	30.0
cis-1,3-Dichloropropene	Ave	0.4066	0.4297	0.2000	5.28	5.00	5.7	30.0
4-Methyl-2-pentanone	Ave	17.33	19.02	0.1000	68.6	62.5	9.8	30.0
Toluene	Ave	1.078	1.160	0.4000	5.38	5.00	7.6	30.0
trans-1,3-Dichloropropene	Ave	0.4270	0.4757	0.1000	5.57	5.00	11.4	30.0
Ethyl methacrylate	Ave	0.3018	0.3423		5.67	5.00	13.4	30.0
1,1,2-Trichloroethane	Ave	0.2394	0.2477	0.1000	5.17	5.00	3.5	30.0
Tetrachloroethene	Ave	0.5092	0.5503	0.2000	5.40	5.00	8.1	30.0
1,3-Dichloropropane	Ave	0.4165	0.4436		5.33	5.00	6.5	30.0
2-Hexanone	Ave	11.07	13.28	0.1000	74.9	62.5	19.9	30.0
Dibromochloromethane	Ave	0.2957	0.3156		5.34	5.00	6.7	30.0
1,2-Dibromoethane	Ave	0.2077	0.2328	0.1000	5.60	5.00	12.1	30.0
1-Chlorohexane	Ave	0.6787	0.6671		4.91	5.00	-1.7	30.0
Chlorobenzene	Ave	1.140	1.210	0.5000	5.30	5.00	6.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3755	0.4089		5.44	5.00	8.9	30.0
Ethylbenzene	Ave	2.128	2.276	0.1000	5.35	5.00	7.0	30.0
m&p-Xylene	Ave	0.8089	0.8761	0.1000	10.8	10.0	8.3	30.0
o-Xylene	Ave	0.7665	0.8336	0.3000	5.44	5.00	8.8	30.0
Styrene	Ave	1.230	1.336	0.3000	5.43	5.00	8.6	30.0
Bromoform	Ave	0.1528	0.1747	0.1000	5.72	5.00	14.3	30.0
Isopropylbenzene	Ave	1.874	2.289	0.1000	6.11	5.00	22.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4928	0.5182	0.3000	5.26	5.00	5.1	30.0
Bromobenzene	Ave	0.7999	0.8697		5.44	5.00	8.7	30.0
trans-1,4-Dichloro-2-butene	Ave	6.404	7.277		28.4	25.0	13.6	30.0
1,2,3-Trichloropropane	Ave	0.1235	0.1396		5.65	5.00	13.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICV 410-668589/23

Calibration Date: 07/09/2025 07:43

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HL08X22.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	4.450	4.848		5.45	5.00	9.0	30.0
2-Chlorotoluene	Ave	0.8495	0.9206		5.42	5.00	8.4	30.0
1,3,5-Trimethylbenzene	Ave	3.114	3.412		5.48	5.00	9.6	30.0
4-Chlorotoluene	Ave	0.8557	0.9363		5.47	5.00	9.4	30.0
tert-Butylbenzene	Ave	0.6874	0.7418		5.40	5.00	7.9	30.0
Pentachloroethane	Ave	0.4530	0.5273		5.82	5.00	16.4	30.0
1,2,4-Trimethylbenzene	Ave	3.161	3.409		5.39	5.00	7.9	30.0
sec-Butylbenzene	Ave	4.013	4.377		5.45	5.00	9.1	30.0
1,3-Dichlorobenzene	Ave	1.600	1.751	0.6000	5.47	5.00	9.4	30.0
p-Isopropyltoluene	Ave	3.439	3.692		5.37	5.00	7.4	30.0
1,4-Dichlorobenzene	Ave	1.648	1.755	0.5000	5.32	5.00	6.5	30.0
1,2,3-Trimethylbenzene	Ave	1.333	1.450		5.44	5.00	8.8	30.0
Benzyl chloride	Ave	0.1943	0.2141		5.51	5.00	10.2	30.0
n-Butylbenzene	Ave	1.621	1.826		5.63	5.00	12.7	30.0
1,2-Dichlorobenzene	Ave	1.396	1.531	0.4000	5.48	5.00	9.7	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0654	0.0723	0.0500	5.53	5.00	10.6	30.0
1,3,5-Trichlorobenzene	Ave	1.175	1.297		5.52	5.00	10.4	30.0
1,2,4-Trichlorobenzene	Ave	0.9406	1.052	0.2000	5.59	5.00	11.8	30.0
Hexachlorobutadiene	Ave	0.4650	0.5424		5.83	5.00	16.7	30.0
Naphthalene	Ave	1.539	1.666		5.41	5.00	8.3	30.0
1,2,3-Trichlorobenzene	Ave	0.7727	0.8515		5.51	5.00	10.2	30.0
Pentane	None					5.00		30.0
Dibromofluoromethane (Surr)	Ave	0.2321	0.2348		10.1	10.0	1.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0421	0.0422		10.0	10.0	0.2	30.0
Toluene-d8 (Surr)	Ave	1.391	1.389		9.99	10.0	-0.1	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5024	0.4991		9.93	10.0	-0.7	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 09-Jul-2025 07:43:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0152824-023
 Misc. Info.: ICV
 Operator ID: gaw91131 Instrument ID: 19094
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 16-Jul-2025 14:53:25 Calib Date: 09-Jul-2025 07:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1623

First Level Reviewer: JS6E

Date: 11-Jul-2025 02:11:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.825	1.831	-0.006	99	378630	5.00	6.22	
5 Chloromethane	50	2.014	2.013	0.001	99	416548	5.00	5.18	
7 Butadiene	39	2.105	2.105	0.000	92	412885	5.00	5.34	
6 Vinyl chloride	62	2.123	2.123	0.000	98	395091	5.00	5.44	
9 Bromomethane	94	2.398	2.391	0.007	91	266598	5.00	5.17	M
10 Chloroethane	64	2.477	2.477	0.000	100	239077	5.00	5.24	
11 Dichlorofluoromethane	67	2.690	2.690	0.000	97	613132	5.00	5.02	
12 Trichlorofluoromethane	101	2.788	2.788	0.000	53	492663	5.00	5.23	
14 Ethyl ether	59	2.971	2.971	0.000	92	180517	4.96	5.64	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.050	3.050	0.000	94	359881	5.00	5.12	
16 Acrolein	56	3.148	3.117	0.031	98	161056	36.6	39.3	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	96	273925	5.00	5.75	
19 Acetone	43	3.282	3.275	0.007	60	289744	62.5	57.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.294	3.294	0.000	93	278862	5.00	5.97	
21 Iodomethane	142	3.434	3.434	0.000	99	465271	5.00	5.10	
22 Ethyl bromide	108	3.458	3.458	0.000	98	178581	5.01	4.44	
23 Carbon disulfide	76	3.538	3.531	0.007	99	758627	5.00	5.20	
24 Methyl acetate	43	3.672	3.660	0.012	92	69607	5.00	5.79	M
26 3-Chloro-1-propene	41	3.684	3.684	0.000	92	473982	5.00	5.04	
27 Methylene Chloride	84	3.855	3.855	0.000	94	271894	5.00	5.44	
* 28 t-Butyl alcohol-d10 (IS)	65	3.843	3.891	-0.048	85	70766	50.0	50.0	
29 2-Methyl-2-propanol	59	3.971	3.995	-0.024	91	79612	50.0	51.7	
31 Acrylonitrile	53	4.196	4.184	0.012	95	169054	25.0	26.9	M
32 Methyl tert-butyl ether	73	4.227	4.214	0.013	96	558248	5.00	5.10	
33 trans-1,2-Dichloroethene	96	4.239	4.239	0.000	97	288166	5.00	5.46	
34 Hexane	57	4.659	4.659	0.000	93	439847	5.00	5.49	
36 1,1-Dichloroethane	63	4.885	4.891	-0.006	96	578306	5.00	5.67	
37 Isopropyl ether	45	4.952	4.952	0.000	95	899091	5.00	5.22	
38 2-Chloro-1,3-butadiene	53	5.001	5.001	0.000	92	477849	5.00	5.42	
40 Tert-butyl ethyl ether	59	5.489	5.495	-0.005	98	784256	5.00	5.26	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.696	5.690	0.006	100	633164	62.5	73.5	
42 cis-1,2-Dichloroethene	96	5.739	5.732	0.006	84	316444	5.00	5.51	
43 2,2-Dichloropropane	77	5.751	5.744	0.007	87	471583	5.00	5.29	
44 Propionitrile	54	5.799	5.775	0.024	95	85800	37.5	40.0	M
47 Methacrylonitrile	67	5.995	5.988	0.007	93	399197	37.5	46.1	
48 Chlorobromomethane	128	6.074	6.068	0.006	97	119935	5.00	5.52	
49 Tetrahydrofuran	71	6.080	6.080	0.000	79	66007	25.0	27.3	
50 Chloroform	83	6.220	6.226	-0.006	94	515722	5.00	5.45	
\$ 52 Dibromofluoromethane (Surr)	113	6.446	6.446	0.000	94	440462	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.458	6.458	0.000	99	483404	5.00	5.46	
54 Cyclohexane	56	6.562	6.561	0.001	91	571411	5.00	5.25	
56 Carbon tetrachloride	117	6.677	6.677	0.000	87	422224	5.00	5.64	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	95	443516	5.00	5.43	
57 Isobutyl alcohol	41	6.830	6.824	0.006	96	66050	125.0	109.8	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.897	6.897	0.000	81	79133	10.0	10.0	
59 Benzene	78	6.933	6.939	-0.006	97	1222982	5.00	5.26	
60 1,2-Dichloroethane	62	7.007	7.006	0.001	97	279235	5.00	5.35	
63 Tert-amyl methyl ether	73	7.141	7.141	0.000	98	662839	5.00	5.13	
* 64 Fluorobenzene (IS)	96	7.348	7.354	-0.006	98	1875622	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	457718	5.00	5.41	
67 n-Butanol	56	7.763	7.732	0.030	87	106610	250.0	236.4	
68 Trichloroethene	95	7.842	7.842	0.000	98	322330	5.00	5.30	
69 Methylcyclohexane	83	8.159	8.159	0.000	93	560563	5.00	5.29	
70 1,2-Dichloropropane	63	8.171	8.177	-0.006	97	311163	5.00	5.57	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	435645	5.00	5.15	
72 Methyl methacrylate	69	8.281	8.268	0.013	90	95746	5.00	5.42	
73 1,4-Dioxane	88	8.281	8.287	-0.006	29	10937	125.0	128.7	
74 Dibromomethane	93	8.287	8.287	0.000	96	117272	5.00	5.67	
76 Dichlorobromomethane	83	8.531	8.531	0.001	99	337349	5.00	5.41	
77 2-Nitropropane	41	8.805	8.793	0.012	98	27652	5.00	5.05	M
79 1-Bromo-2-chloroethane	63	8.933	8.927	0.006	98	246744	5.00	4.95	
80 cis-1,3-Dichloropropene	75	9.098	9.097	0.001	95	402995	5.00	5.28	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	1682507	62.5	68.6	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1879768	10.0	9.99	
84 Toluene	92	9.506	9.506	0.000	98	785021	5.00	5.38	
85 trans-1,3-Dichloropropene	75	9.786	9.786	0.000	94	321836	5.00	5.57	
104 Ethyl methacrylate	69	9.860	9.860	0.000	90	231598	5.00	5.67	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	167590	5.00	5.17	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	372340	5.00	5.40	
108 1,3-Dichloropropane	76	10.164	10.164	0.000	91	300150	5.00	5.33	
109 2-Hexanone	43	10.225	10.219	0.006	98	1174400	62.5	74.9	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	213522	5.00	5.34	
112 Ethylene Dibromide	107	10.500	10.500	0.000	99	157482	5.00	5.60	
* 113 Chlorobenzene-d5 (IS)	117	10.945	10.951	-0.006	87	1353183	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	451328	5.00	4.91	
115 Chlorobenzene	112	10.975	10.975	0.000	94	818409	5.00	5.30	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.060	0.001	96	276628	5.00	5.44	
117 Ethylbenzene	91	11.067	11.067	0.000	98	1539802	5.00	5.35	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	1185499	10.0	10.8	
120 o-Xylene	106	11.524	11.518	0.006	96	564023	5.00	5.44	
121 Styrene	104	11.536	11.536	0.000	94	904172	5.00	5.43	
122 Bromoform	173	11.695	11.695	0.000	97	118206	5.00	5.72	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.829	11.829	0.000	96	1548832	5.00	6.11	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	675362	10.0	9.93	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.079	0.000	93	193007	5.00	5.26	
128 Bromobenzene	156	12.091	12.091	0.000	97	323944	5.00	5.44	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	93	257496	25.0	28.4	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	84	51992	5.00	5.65	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1805799	5.00	5.45	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	342894	5.00	5.42	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	1271038	5.00	5.48	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	348774	5.00	5.47	
135 tert-Butylbenzene	134	12.542	12.542	0.000	93	276320	5.00	5.40	
136 Pentachloroethane	167	12.573	12.572	0.001	91	196427	5.00	5.82	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	97	1269980	5.00	5.39	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	1630251	5.00	5.45	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	652087	5.00	5.47	
140 4-Isopropyltoluene	119	12.822	12.822	0.000	97	1375040	5.00	5.37	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	744969	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	94	653555	5.00	5.32	
143 1,2,3-Trimethylbenzene	120	12.890	12.889	0.001	99	540250	5.00	5.44	
144 Benzyl chloride	126	12.957	12.956	0.001	99	79761	5.00	5.51	
145 p-Diethylbenzene	119	13.097	13.097	0.000	95	828773	5.00	5.52	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	680122	5.00	5.63	
147 1,2-Dichlorobenzene	146	13.140	13.139	0.001	98	570291	5.00	5.48	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	86	26949	5.00	5.53	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	483185	5.00	5.52	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	391824	5.00	5.59	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	202047	5.00	5.83	
153 Naphthalene	128	14.414	14.414	0.000	97	620527	5.00	5.41	
154 1,2,3-Trichlorobenzene	180	14.560	14.560	0.000	96	317159	5.00	5.51	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00227	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00057	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00268	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00011	Amount Added: 12.50	Units: uL	
LCS_ETBR_00010	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00235	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00016	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D

Injection Date: 09-Jul-2025 07:43:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: ICV

Worklist Smp#: 23

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

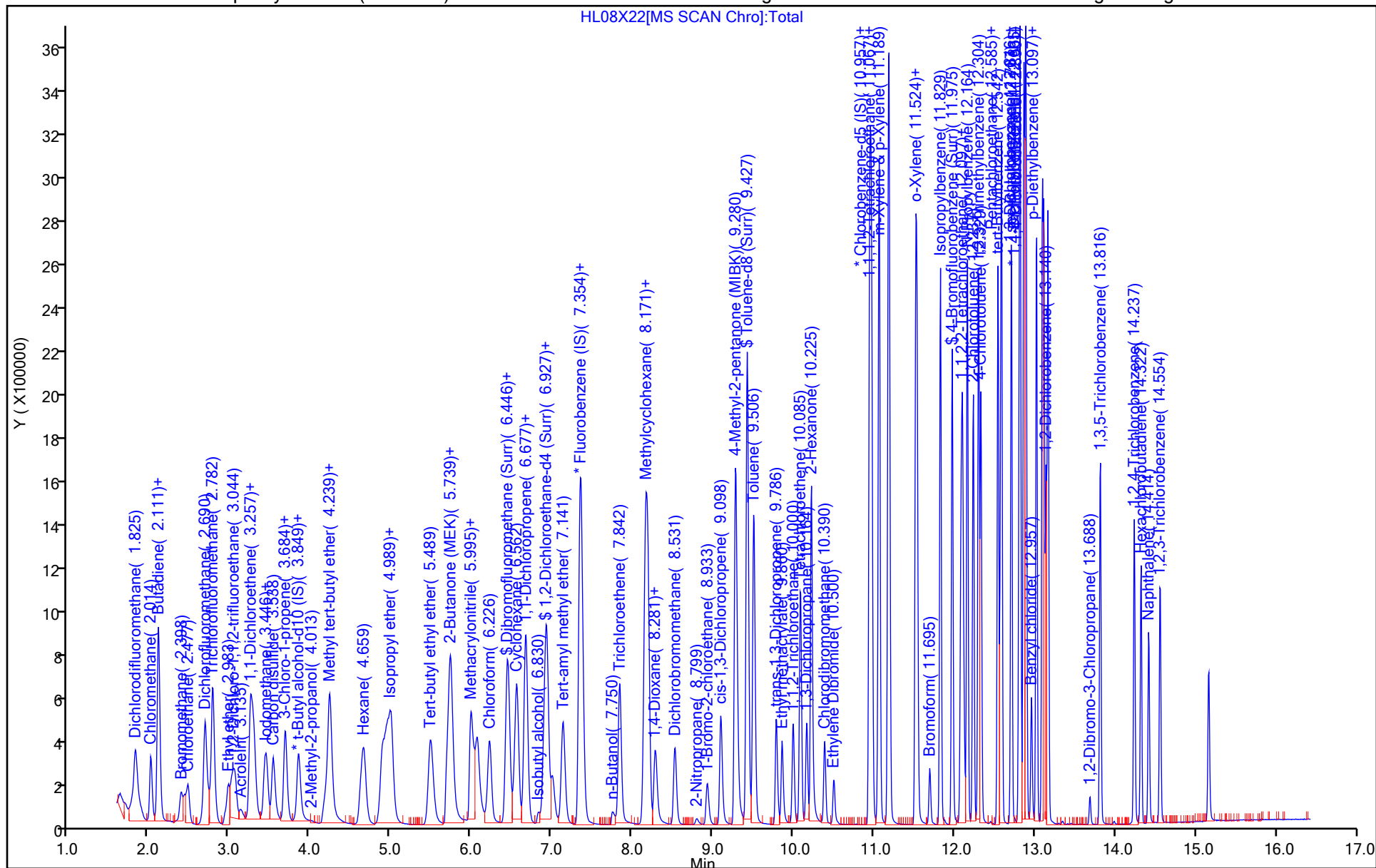
ALS Bottle#: 22

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

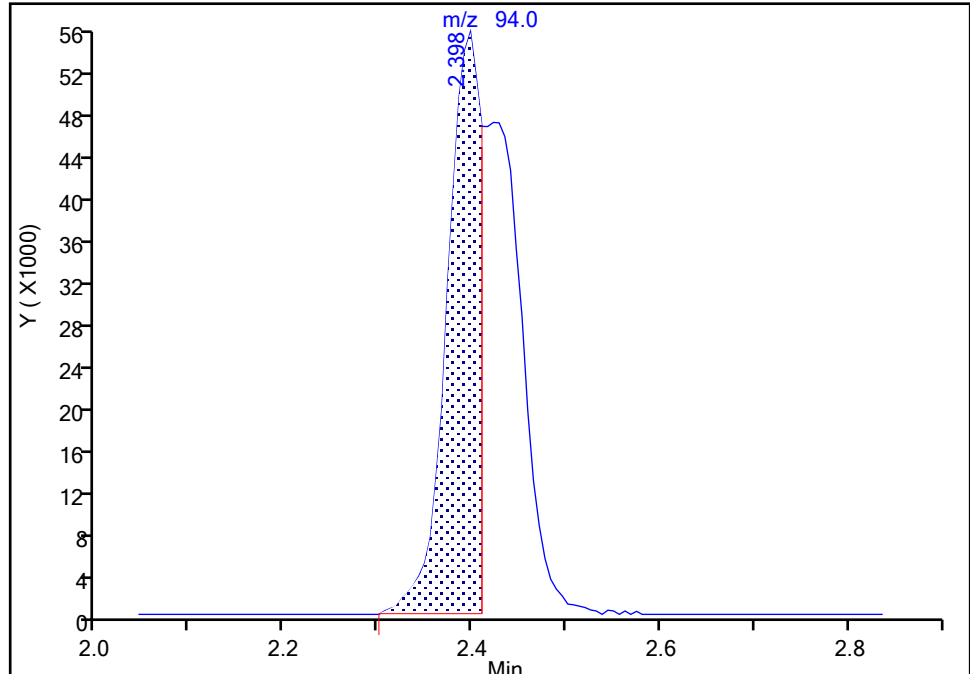
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
Injection Date: 09-Jul-2025 07:43:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: gaw91131 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

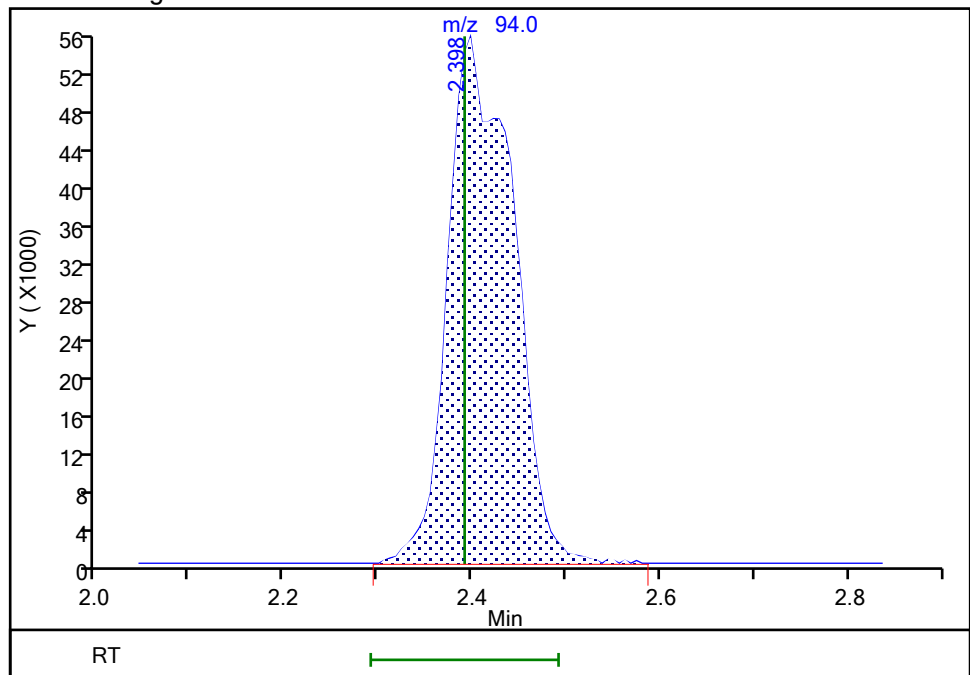
RT: 2.40
Area: 139644
Amount: 2.705454
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 266598
Amount: 5.165053
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 02:10:12 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

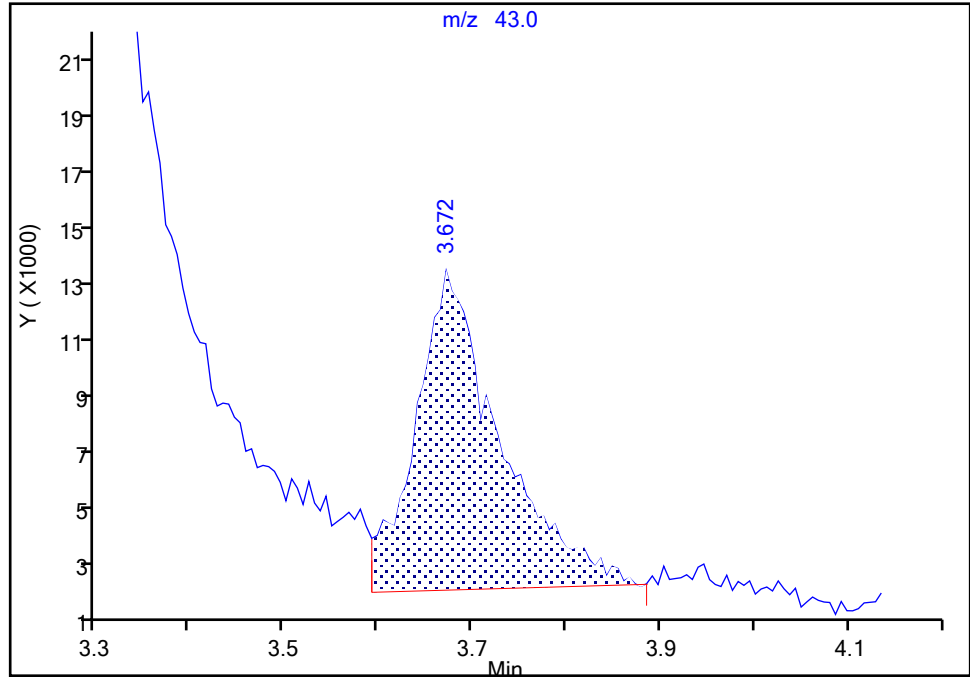
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
Injection Date: 09-Jul-2025 07:43:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: gaw91131 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Methyl acetate, CAS: 79-20-9

Signal: 1

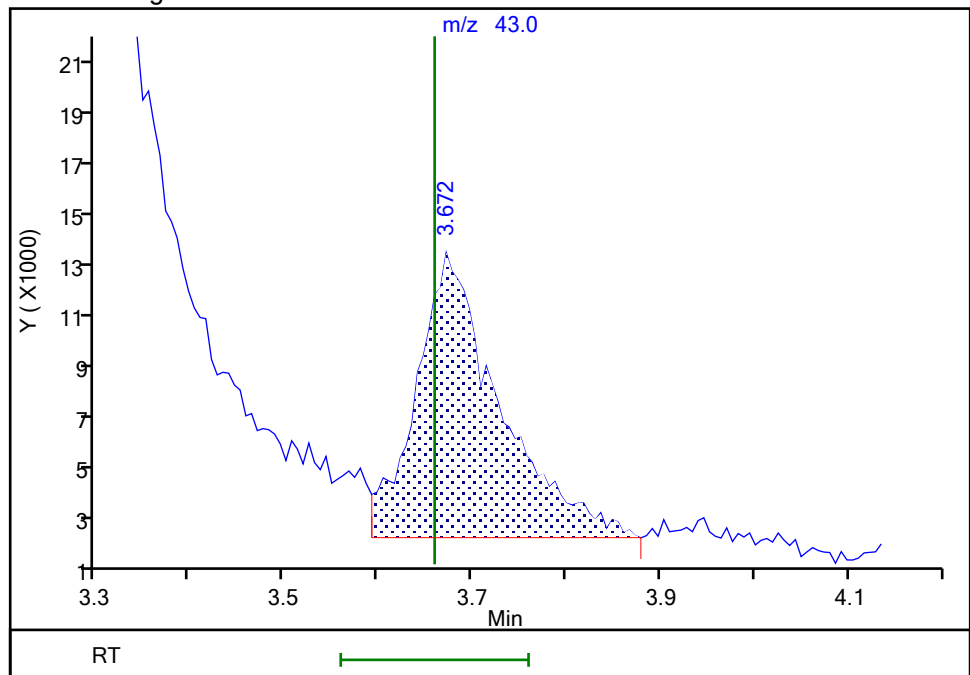
RT: 3.67
Area: 70244
Amount: 5.845678
Amount Units: ug/l

Processing Integration Results



RT: 3.67
Area: 69607
Amount: 5.792667
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 02:10:32 -04:00:00 (UTC)

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

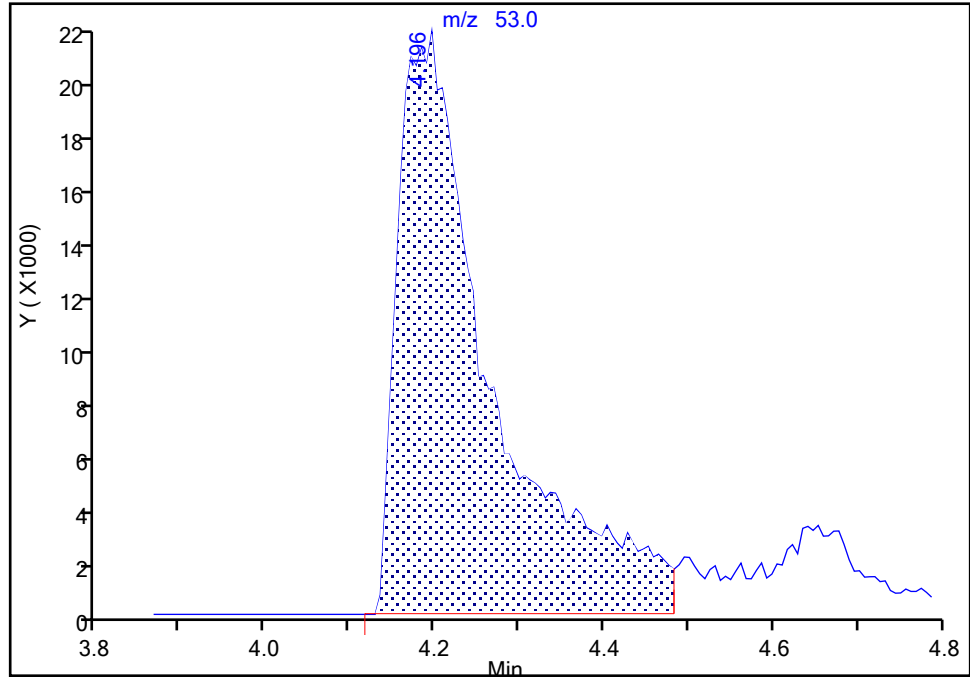
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
Injection Date: 09-Jul-2025 07:43:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: gaw91131 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

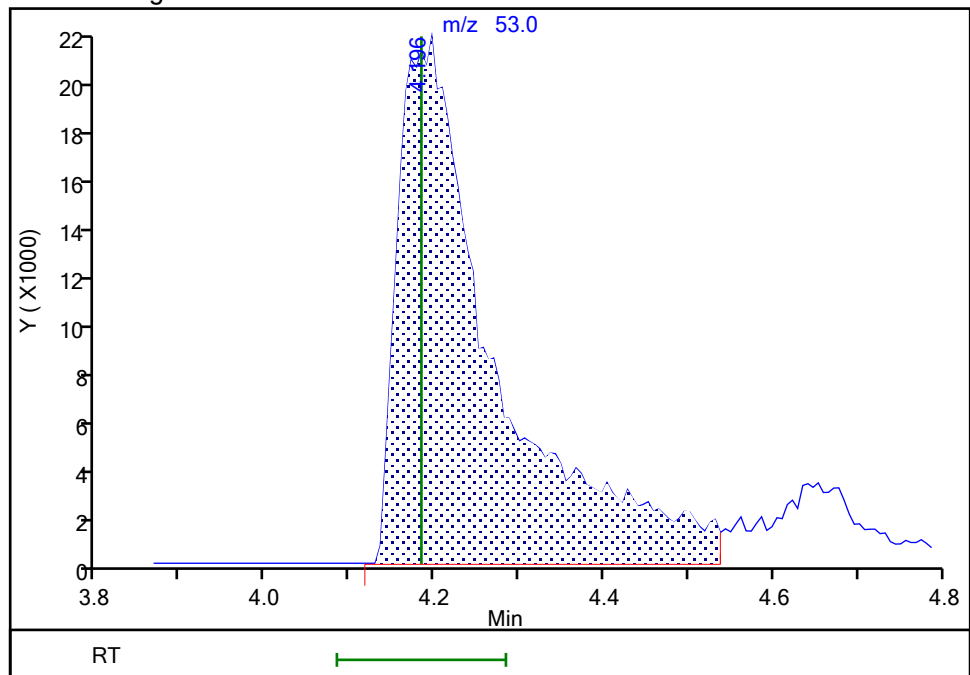
RT: 4.20
Area: 163521
Amount: 26.007567
Amount Units: ug/l

Processing Integration Results



RT: 4.20
Area: 169054
Amount: 26.872052
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 02:10:46 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

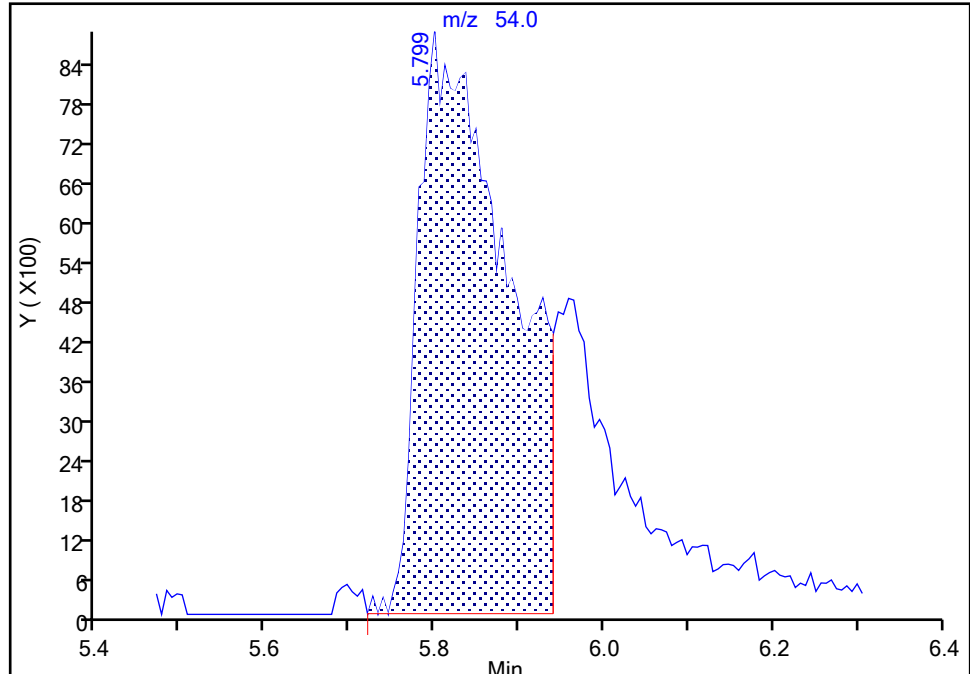
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
Injection Date: 09-Jul-2025 07:43:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: gaw91131 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

44 Propionitrile, CAS: 107-12-0

Signal: 1

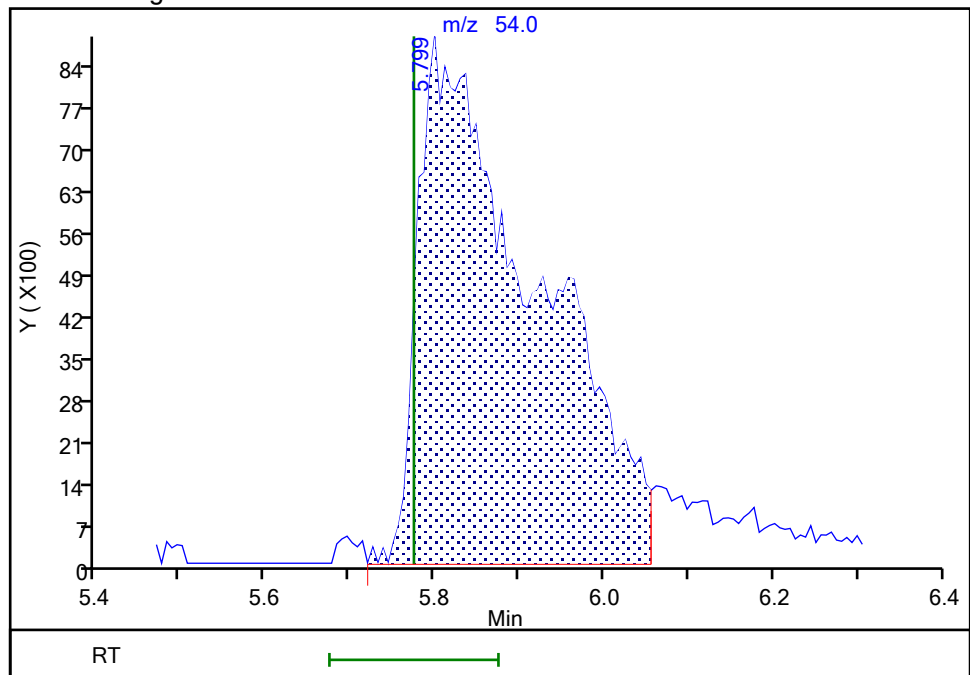
RT: 5.80
Area: 65567
Amount: 30.556488
Amount Units: ug/l

Processing Integration Results



RT: 5.80
Area: 85800
Amount: 39.985765
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 02:11:07 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

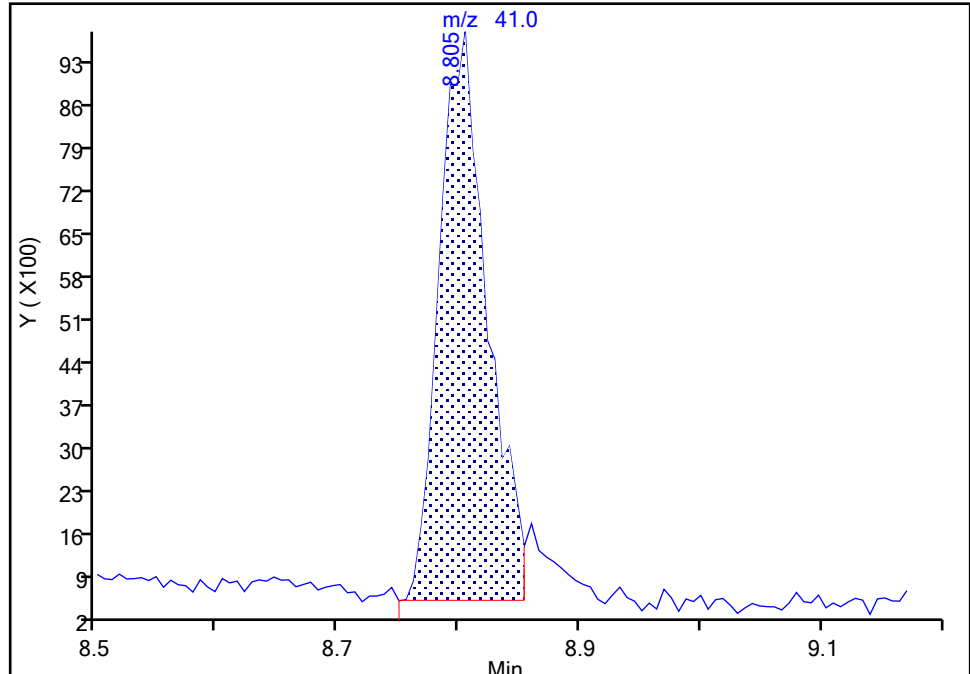
Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X22.D
Injection Date: 09-Jul-2025 07:43:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: gaw91131 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

77 2-Nitropropane, CAS: 79-46-9

Signal: 1

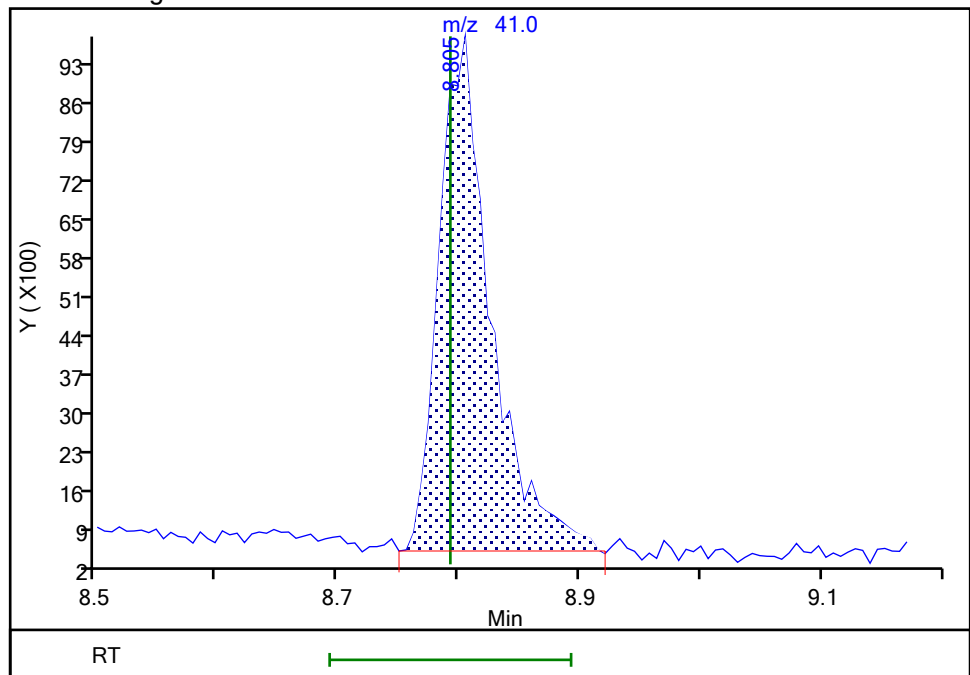
RT: 8.80
Area: 25742
Amount: 4.703338
Amount Units: ug/l

Processing Integration Results



RT: 8.80
Area: 27652
Amount: 5.052316
Amount Units: ug/l

Manual Integration Results



Reviewer: JS6E, 11-Jul-2025 02:11:34 -04:00:00 (UTC)

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: CCVIS 410-679324/3

Calibration Date: 08/01/2025 11:09

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25(mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HG01X02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3244	0.4132	0.1000	12.7	10.0	27.4*	20.0
Chloromethane	Ave	0.4285	0.4156	0.1000	9.70	10.0	-3.0	20.0
1,3-Butadiene	Ave	0.4119	0.4425		10.7	10.0	7.4	20.0
Vinyl chloride	Ave	0.3874	0.3952	0.1000	10.2	10.0	2.0	20.0
Bromomethane	Ave	0.2752	0.2563	0.1000	9.31	10.0	-6.9	20.0
Chloroethane	Ave	0.2433	0.2453	0.1000	10.1	10.0	0.8	20.0
Dichlorofluoromethane	Ave	0.6509	0.6064		9.32	10.0	-6.8	20.0
Trichlorofluoromethane	Ave	0.5026	0.5185	0.1000	10.3	10.0	3.2	20.0
Ethyl ether	Ave	0.1705	0.1901		11.2	10.0	11.5	20.0
Freon 123a	Ave	0.3748	0.3757		10.0	10.0	0.2	20.0
Acrolein	Ave	2.895	1.632		275	488	-43.6*	20.0
1,1-Dichloroethene	Ave	0.2539	0.2591	0.1000	10.2	10.0	2.0	20.0
Acetone	Ave	3.552	2.772	0.1000	78.0	100	-22.0*	20.0
Freon 113	Ave	0.2492	0.2779	0.1000	11.2	10.0	11.5	20.0
Methyl iodide	Ave	0.4868	0.4883		10.0	10.0	0.3	20.0
Ethyl bromide	Ave	0.2145	0.2243		10.4	9.99	4.5	20.0
Carbon disulfide	Ave	0.7785	0.7844	0.1000	10.1	10.0	0.8	20.0
Methyl acetate	Ave	8.490	6.854	0.1000	8.07	10.0	-19.3	20.0
Allyl chloride	Ave	0.5013	0.5113		10.2	10.0	2.0	20.0
Methylene Chloride	Ave	0.2663	0.2790	0.1000	10.5	10.0	4.8	20.0
t-Butyl alcohol	Ave	1.088	1.063		195	200	-2.3	20.0
Acrylonitrile	Lin		3.251		18.4	25.0	-26.3*	20.0
Methyl tertiary butyl ether	Ave	0.5836	0.6251	0.1000	10.7	10.0	7.1	20.0
trans-1,2-Dichloroethene	Ave	0.2813	0.3006	0.1000	10.7	10.0	6.9	20.0
n-Hexane	Ave	0.4269	0.4836		11.3	10.0	13.3	20.0
1,1-Dichloroethane	Ave	0.5435	0.5903	0.2000	10.9	10.0	8.6	20.0
di-Isopropyl ether	Ave	0.9176	1.002		10.9	10.0	9.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4702	0.4988		10.6	10.0	6.1	20.0
Ethyl t-butyl ether	Ave	0.7956	0.8599		10.8	10.0	8.1	20.0
2-Butanone	Ave	6.083	4.770	0.1000	78.4	100	-21.6*	20.0
cis-1,2-Dichloroethene	Ave	0.3061	0.3293	0.1000	10.8	10.0	7.6	20.0
2,2-Dichloropropane	Ave	0.4753	0.4887		10.3	10.0	2.8	20.0
Propionitrile	Ave	1.516	1.259		166	200	-16.9	20.0
Methacrylonitrile	Ave	6.120	5.014		81.9	100	-18.1	20.0
Bromochloromethane	Ave	0.1158	0.1297		11.2	10.0	12.0	20.0
Tetrahydrofuran	Ave	1.710	1.418		41.5	50.0	-17.1	20.0
Chloroform	Ave	0.5049	0.5445	0.2000	10.8	10.0	7.8	20.0
1,1,1-Trichloroethane	Ave	0.4721	0.4834	0.1000	10.2	10.0	2.4	20.0
Cyclohexane	Ave	0.5801	0.6029	0.1000	10.4	10.0	3.9	20.0
1,1-Dichloropropene	Ave	0.4357	0.4653		10.7	10.0	6.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.: _____

Lab Sample ID: CCVIS 410-679324/3

Calibration Date: 08/01/2025 11:09

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HG01X02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3988	0.4231	0.1000	10.6	10.0	6.1	20.0
Isobutyl alcohol	Ave	0.4249	0.3696		435	500	-13.0	20.0
Benzene	Ave	1.239	1.322	0.5000	10.7	10.0	6.7	20.0
1,2-Dichloroethane	Ave	0.2783	0.2894	0.1000	10.4	10.0	4.0	20.0
t-Amyl methyl ether	Ave	0.6885	0.7192		10.4	10.0	4.5	20.0
n-Heptane	Ave	0.4514	0.5094		11.3	10.0	12.8	20.0
n-Butanol	Lin		0.3023		739	875	-15.6	20.0
Trichloroethene	Ave	0.3245	0.3454	0.2000	10.6	10.0	6.5	20.0
Methylcyclohexane	Ave	0.5648	0.6041	0.1000	10.7	10.0	7.0	20.0
1,2-Dichloropropane	Ave	0.2978	0.3448	0.1000	11.6	10.0	15.8	20.0
1,4-Dioxane	Linl		0.0721	0.0050	513	500	2.7	20.0
Methyl methacrylate	Ave	12.48	9.337		7.48	10.0	-25.2*	20.0
Dibromomethane	Ave	0.1103	0.1319		12.0	10.0	19.6	20.0
Bromodichloromethane	Ave	0.3322	0.3758	0.2000	11.3	10.0	13.1	20.0
2-Nitropropane	Ave	3.867	2.758		35.7	50.0	-28.7*	20.0
1-Bromo-2-chloroethane	Ave	0.2658	0.2902		10.9	10.0	9.2	20.0
cis-1,3-Dichloropropene	Ave	0.4066	0.4648	0.2000	11.4	10.0	14.3	20.0
4-Methyl-2-pentanone	Ave	17.33	12.83	0.1000	74.0	100	-26.0*	20.0
Toluene	Ave	1.078	1.062	0.4000	9.85	10.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.4270	0.4484	0.1000	10.5	10.0	5.0	20.0
Ethyl methacrylate	Ave	0.3018	0.3299		10.9	10.0	9.3	20.0
1,1,2-Trichloroethane	Ave	0.2394	0.2426	0.1000	10.1	10.0	1.3	20.0
Tetrachloroethene	Ave	0.5092	0.4988	0.2000	9.80	10.0	-2.0	20.0
1,3-Dichloropropane	Ave	0.4165	0.4369		10.5	10.0	4.9	20.0
2-Hexanone	Ave	11.07	8.633	0.1000	78.0	100	-22.0*	20.0
Dibromochloromethane	Ave	0.2957	0.3142		10.6	10.0	6.3	20.0
1,2-Dibromoethane	Ave	0.2077	0.2284	0.1000	11.0	10.0	10.0	20.0
1-Chlorohexane	Ave	0.6787	0.6021		8.87	10.0	-11.3	20.0
Chlorobenzene	Ave	1.140	1.125	0.5000	9.87	10.0	-1.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3755	0.3732		9.94	10.0	-0.6	20.0
Ethylbenzene	Ave	2.128	2.091	0.1000	9.83	10.0	-1.7	20.0
m&p-Xylene	Ave	0.8089	0.8068	0.1000	19.9	20.0	-0.3	20.0
o-Xylene	Ave	0.7665	0.7634	0.3000	9.96	10.0	-0.4	20.0
Styrene	Ave	1.230	1.228	0.3000	9.98	10.0	-0.2	20.0
Bromoform	Ave	0.1528	0.1714	0.1000	11.2	10.0	12.2	20.0
Isopropylbenzene	Ave	1.874	2.076	0.1000	11.1	10.0	10.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4928	0.5071	0.3000	10.3	10.0	2.9	20.0
Bromobenzene	Ave	0.7999	0.7862		9.83	10.0	-1.7	20.0
trans-1,4-Dichloro-2-butene	Ave	6.404	4.286		66.9	100	-33.1*	20.0
1,2,3-Trichloropropane	Ave	0.1235	0.1314		10.6	10.0	6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: CCVIS 410-679324/3

Calibration Date: 08/01/2025 11:09

Instrument ID: 19094

Calib Start Date: 07/09/2025 04:17

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Calib End Date: 07/09/2025 07:02

Lab File ID: HG01X02.D

Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
N-Propylbenzene	Ave	4.450	4.330		9.73	10.0	-2.7	20.0
2-Chlorotoluene	Ave	0.8495	0.8220		9.68	10.0	-3.2	20.0
1,3,5-Trimethylbenzene	Ave	3.114	2.973		9.55	10.0	-4.5	20.0
4-Chlorotoluene	Ave	0.8557	0.8400		9.82	10.0	-1.8	20.0
tert-Butylbenzene	Ave	0.6874	0.6755		9.83	10.0	-1.7	20.0
Pentachloroethane	Ave	0.4530	0.4317		9.53	10.0	-4.7	20.0
1,2,4-Trimethylbenzene	Ave	3.161	3.085		9.76	10.0	-2.4	20.0
sec-Butylbenzene	Ave	4.013	3.906		9.73	10.0	-2.7	20.0
1,3-Dichlorobenzene	Ave	1.600	1.577	0.6000	9.86	10.0	-1.4	20.0
p-Isopropyltoluene	Ave	3.439	3.371		9.80	10.0	-2.0	20.0
1,4-Dichlorobenzene	Ave	1.648	1.583	0.5000	9.60	10.0	-4.0	20.0
1,2,3-Trimethylbenzene	Ave	1.333	1.254		9.41	10.0	-5.9	20.0
Benzyl chloride	Ave	0.1943	0.2110		10.9	10.0	8.6	20.0
n-Butylbenzene	Ave	1.621	1.661		10.2	10.0	2.5	20.0
1,2-Dichlorobenzene	Ave	1.396	1.396	0.4000	10.0	10.0	0.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0654	0.0701	0.0500	10.7	10.0	7.2	20.0
1,3,5-Trichlorobenzene	Ave	1.175	1.189		10.1	10.0	1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.9406	0.9905	0.2000	10.5	10.0	5.3	20.0
Hexachlorobutadiene	Ave	0.4650	0.5061		10.9	10.0	8.8	20.0
Naphthalene	Ave	1.539	1.630		10.6	10.0	5.9	20.0
1,2,3-Trichlorobenzene	Ave	0.7727	0.8320		10.8	10.0	7.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2321	0.2438		10.5	10.0	5.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0421	0.0457		10.9	10.0	8.6	20.0
Toluene-d8 (Surr)	Ave	1.391	1.338		9.62	10.0	-3.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5024	0.5072		10.1	10.0	1.0	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X02.D
 Lims ID: CCVIS VSTD10
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 01-Aug-2025 11:09:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-003
 Misc. Info.: CCVIS VSTD10
 Operator ID: ecr105096 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 11:45:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.825	1.825	0.000	99	479650	10.0	12.7	
5 Chloromethane	50	2.014	2.014	0.000	99	482478	10.0	9.70	
7 Butadiene	39	2.099	2.099	0.000	91	513673	10.0	10.7	
6 Vinyl chloride	62	2.117	2.117	0.000	98	458784	10.0	10.2	
9 Bromomethane	94	2.392	2.392	0.000	90	297533	10.0	9.31	
10 Chloroethane	64	2.471	2.471	0.000	100	284791	10.0	10.1	
11 Dichlorofluoromethane	67	2.684	2.684	0.000	97	703939	10.0	9.32	
12 Trichlorofluoromethane	101	2.696	2.696	0.000	98	601923	10.0	10.3	
14 Ethyl ether	59	2.971	2.971	0.000	94	220762	10.0	11.2	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.032	3.032	0.000	94	436094	10.0	10.0	
16 Acrolein	56	3.123	3.123	0.000	99	1123009	487.9	275.1	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	97	300774	10.0	10.2	
19 Acetone	43	3.282	3.282	0.000	97	390862	100.0	78.0	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.288	3.288	0.000	92	322578	10.0	11.2	
21 Iodomethane	142	3.422	3.422	0.000	98	566810	10.0	10.0	
22 Ethyl bromide	108	3.452	3.452	0.000	98	260078	9.99	10.4	
23 Carbon disulfide	76	3.532	3.532	0.000	99	910585	10.0	10.1	
24 Methyl acetate	43	3.666	3.666	0.000	98	96628	10.0	8.07	
26 3-Chloro-1-propene	41	3.678	3.678	0.000	93	593553	10.0	10.2	
27 Methylene Chloride	84	3.849	3.849	0.000	95	323887	10.0	10.5	
* 28 t-Butyl alcohol-d10 (IS)	65	3.867	3.867	0.000	97	70494	50.0	50.0	
29 2-Methyl-2-propanol	59	3.970	3.970	0.000	100	299767	200.0	195.5	
31 Acrylonitrile	53	4.184	4.184	0.000	98	114585	25.0	18.4	
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	95	725645	10.0	10.7	
33 trans-1,2-Dichloroethene	96	4.233	4.233	0.000	97	348994	10.0	10.7	
34 Hexane	57	4.647	4.647	0.000	93	561438	10.0	11.3	
36 1,1-Dichloroethane	63	4.885	4.885	0.000	96	685218	10.0	10.9	
37 Isopropyl ether	45	4.946	4.946	0.000	95	1163763	10.0	10.9	
38 2-Chloro-1,3-butadiene	53	4.995	4.995	0.000	91	579078	10.0	10.6	
40 Tert-butyl ethyl ether	59	5.488	5.488	0.000	99	998269	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.696	5.696	0.000	100	672565	100.0	78.4	
42 cis-1,2-Dichloroethene	96	5.732	5.732	0.000	84	382235	10.0	10.8	
43 2,2-Dichloropropane	77	5.738	5.738	0.000	87	567306	10.0	10.3	
44 Propionitrile	54	5.787	5.787	0.000	99	355052	200.0	166.1	
47 Methacrylonitrile	67	5.994	5.994	0.000	93	706882	100.0	81.9	
48 Chlorobromomethane	128	6.068	6.068	0.000	97	150537	10.0	11.2	
49 Tetrahydrofuran	71	6.080	6.080	0.000	81	99958	50.0	41.5	
50 Chloroform	83	6.226	6.226	0.000	94	632053	10.0	10.8	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	93	283071	10.0	10.5	
53 1,1,1-Trichloroethane	97	6.458	6.458	0.000	99	561132	10.0	10.2	
54 Cyclohexane	56	6.555	6.555	0.000	91	699906	10.0	10.4	
55 1,1-Dichloropropene	75	6.677	6.677	0.000	96	540182	10.0	10.7	
56 Carbon tetrachloride	117	6.677	6.677	0.000	91	491176	10.0	10.6	
57 Isobutyl alcohol	41	6.830	6.830	0.000	96	260513	500.0	434.9	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	97	53055	10.0	10.9	
59 Benzene	78	6.933	6.933	0.000	97	1534410	10.0	10.7	
60 1,2-Dichloroethane	62	7.006	7.006	0.000	97	335995	10.0	10.4	
63 Tert-amyl methyl ether	73	7.135	7.135	0.000	99	834934	10.0	10.4	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	99	1160877	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	93	591299	10.0	11.3	
67 n-Butanol	56	7.738	7.738	0.000	89	372932	875.0	738.8	
68 Trichloroethene	95	7.842	7.842	0.000	98	400992	10.0	10.6	
69 Methylcyclohexane	83	8.159	8.159	0.000	93	701269	10.0	10.7	
70 1,2-Dichloropropane	63	8.171	8.171	0.000	98	400310	10.0	11.6	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	92	563389	10.0	10.8	
72 Methyl methacrylate	69	8.281	8.281	0.000	94	131638	10.0	7.48	
73 1,4-Dioxane	88	8.281	8.281	0.000	38	50857	500.0	513.3	
74 Dibromomethane	93	8.287	8.287	0.000	95	153152	10.0	12.0	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	436216	10.0	11.3	
77 2-Nitropropane	41	8.799	8.799	0.000	99	194448	50.0	35.7	
79 1-Bromo-2-chloroethane	63	8.927	8.927	0.000	99	336864	10.0	10.9	
80 cis-1,3-Dichloropropene	75	9.098	9.098	0.000	96	539632	10.0	11.4	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	1809021	100.0	74.0	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1242282	10.0	9.62	
84 Toluene	92	9.512	9.512	0.000	98	985747	10.0	9.85	
85 trans-1,3-Dichloropropene	75	9.786	9.786	0.000	93	416375	10.0	10.5	
104 Ethyl methacrylate	69	9.860	9.860	0.000	90	306266	10.0	10.9	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	90	225213	10.0	10.1	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	463167	10.0	9.80	
108 1,3-Dichloropropane	76	10.164	10.164	0.000	91	405654	10.0	10.5	
109 2-Hexanone	43	10.225	10.225	0.000	97	1217145	100.0	78.0	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	291686	10.0	10.6	
112 Ethylene Dibromide	107	10.506	10.506	0.000	99	212071	10.0	11.0	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	928479	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	97	559008	10.0	8.87	
115 Chlorobenzene	112	10.975	10.975	0.000	94	1044624	10.0	9.87	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	96	346495	10.0	9.94	
117 Ethylbenzene	91	11.067	11.067	0.000	98	1941066	10.0	9.83	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	1498226	20.0	19.9	
120 o-Xylene	106	11.524	11.524	0.000	96	708760	10.0	9.96	
121 Styrene	104	11.536	11.536	0.000	94	1140301	10.0	9.98	
122 Bromoform	173	11.695	11.695	0.000	97	159169	10.0	11.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 Isopropylbenzene	105	11.829	11.829	0.000	96	1927442	10.0	11.1	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	470927	10.0	10.1	
127 1,1,2,2-Tetrachloroethane	83	12.073	12.073	0.000	92	270941	10.0	10.3	
128 Bromobenzene	156	12.091	12.091	0.000	96	420105	10.0	9.83	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	91	604293	100.0	66.9	
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	80	70212	10.0	10.6	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	2313957	10.0	9.73	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	439238	10.0	9.68	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	1588674	10.0	9.55	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	448822	10.0	9.82	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	360964	10.0	9.83	
136 Pentachloroethane	167	12.572	12.572	0.000	90	230653	10.0	9.53	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	97	1648471	10.0	9.76	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	2086916	10.0	9.73	
139 1,3-Dichlorobenzene	146	12.804	12.804	0.000	98	842747	10.0	9.86	
140 4-Isopropyltoluene	119	12.816	12.816	0.000	97	1801433	10.0	9.80	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	534342	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	94	845638	10.0	9.60	
143 1,2,3-Trimethylbenzene	120	12.889	12.889	0.000	99	670150	10.0	9.41	
144 Benzyl chloride	126	12.957	12.957	0.000	99	112742	10.0	10.9	
145 p-Diethylbenzene	119	13.091	13.091	0.000	95	1074117	10.0	9.97	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	887320	10.0	10.2	
147 1,2-Dichlorobenzene	146	13.139	13.139	0.000	99	746179	10.0	10.0	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	88	37456	10.0	10.7	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	635134	10.0	10.1	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	529250	10.0	10.5	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	270406	10.0	10.9	
153 Naphthalene	128	14.414	14.414	0.000	97	870871	10.0	10.6	
154 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	95	444562	10.0	10.8	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_LL_#1_826_00172	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00187	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00282	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00017	Amount Added: 5.00	Units: uL	Run Reagent

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X02.D

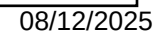
Operator ID: ecr105096

Worklist Smp#: 3

ALS Bottle#: 2

Limit Group: MSV - 8260C D

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08T01.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 09-Jul-2025 03:43:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 410-0152824-001
Misc. Info.: BFB
Operator ID: gaw91131 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 11-Jul-2025 03:34:43 Calib Date: 09-Jul-2025 07:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08X20.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1701

First Level Reviewer: JS6E

Date: 09-Jul-2025 15:38:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

\$ 166 BFB	95	5.008	5.008	0.000	86	309484	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00019

Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08T01.D

Injection Date: 09-Jul-2025 03:43:30

Instrument ID: 19094

Lims ID: bfb

Client ID:

Operator ID: gaw91131

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 uL

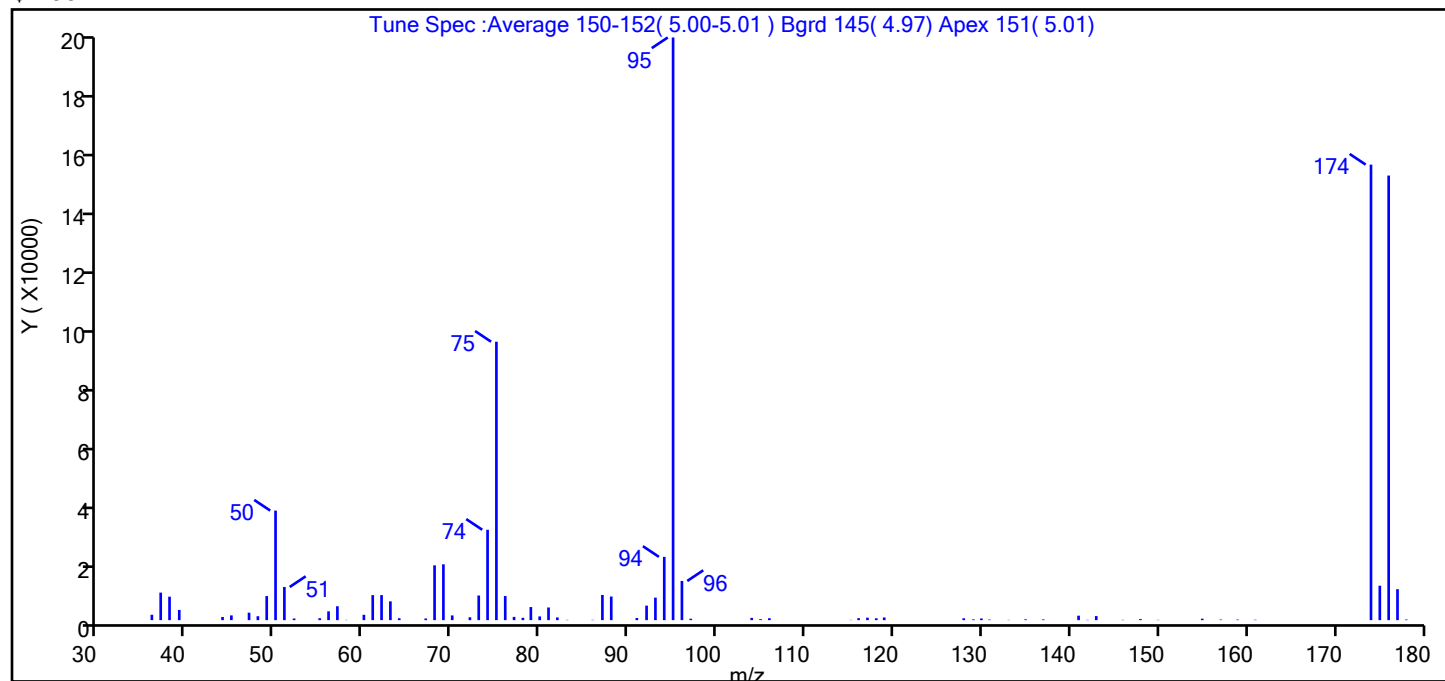
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Tune Method: BFB Method 8260

\$ 166 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.8
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	78.2
175	5 to 9% of m/z 174	5.9 (7.6)
176	Greater than 95% but less than 101% of m/z 174	76.3 (97.6)
177	5 to 9% of m/z 176	5.3 (7.0)

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08T01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 09-Jul-2025 03:43:30
Spectrum: Tune Spec :Average 150-152(5.00-5.01) Bgrd 145(4.97) Apex 151(5.01)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1829	63.00	6381	88.00	8006	133.00	88
37.00	9343	64.00	642	91.00	733	135.00	268
38.00	7964	67.00	564	92.00	4925	137.00	240
39.00	3468	68.00	18592	93.00	7646	141.00	1514
40.00	14	69.00	18944	94.00	21472	142.00	104
44.00	1071	70.00	1602	95.00	197696	143.00	1377
45.00	1609	72.00	974	96.00	13292	146.00	109
47.00	2533	73.00	8357	97.00	478	148.00	363
48.00	1331	74.00	30664	104.00	767	150.00	99
49.00	8164	75.00	94472	105.00	330	155.00	495
50.00	37168	76.00	8177	106.00	653	157.00	192
51.00	11252	77.00	1105	115.00	83	159.00	189
52.00	561	78.00	798	116.00	665	161.00	139
55.00	649	79.00	4439	117.00	840	174.00	154560
56.00	2986	80.00	1267	118.00	632	175.00	11683
57.00	4713	81.00	4296	119.00	912	176.00	150848
58.00	87	82.00	925	128.00	628	177.00	10498
60.00	1815	83.00	104	129.00	261	178.00	216
61.00	8485	86.00	112	130.00	573		
62.00	8499	87.00	8541	131.00	190		

Report Date: 11-Jul-2025 03:34:44

Chrom Revision: 2.3 14-Jun-2025 12:06:34

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250709-152824.b\HL08T01.D

Injection Date: 09-Jul-2025 03:43:30

Instrument ID: 19094

Operator ID: gaw91131

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

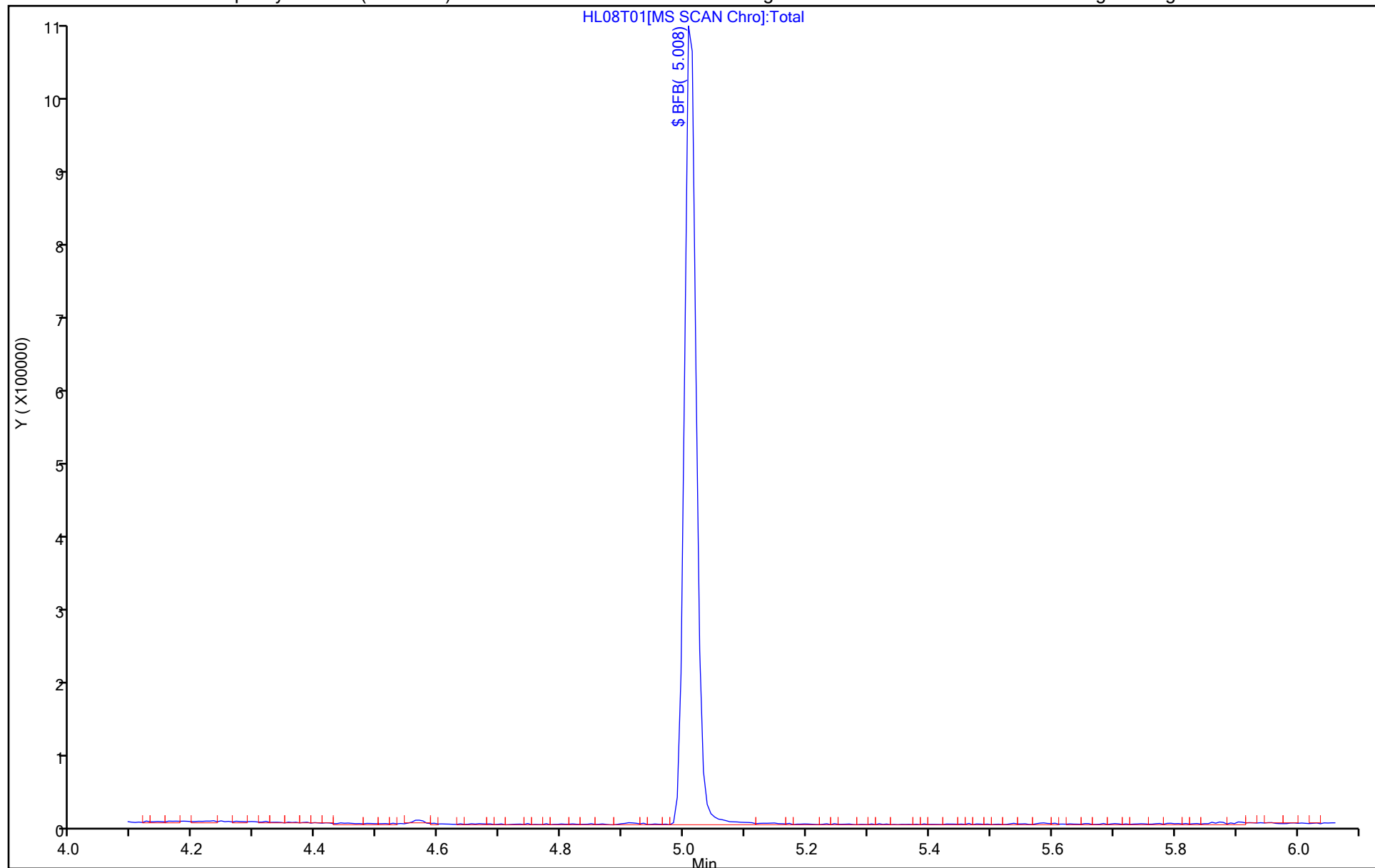
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01T01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Aug-2025 10:34:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 410-0155244-001
Misc. Info.: BFB
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:55:50 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:55:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

\$ 166 BFB	95	5.008	5.008	0.000	88	275015	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00019

Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01T01.D

Injection Date: 01-Aug-2025 10:34:30

Instrument ID: 19094

Lims ID: BFB

Client ID:

Operator ID: ecr105096

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 uL

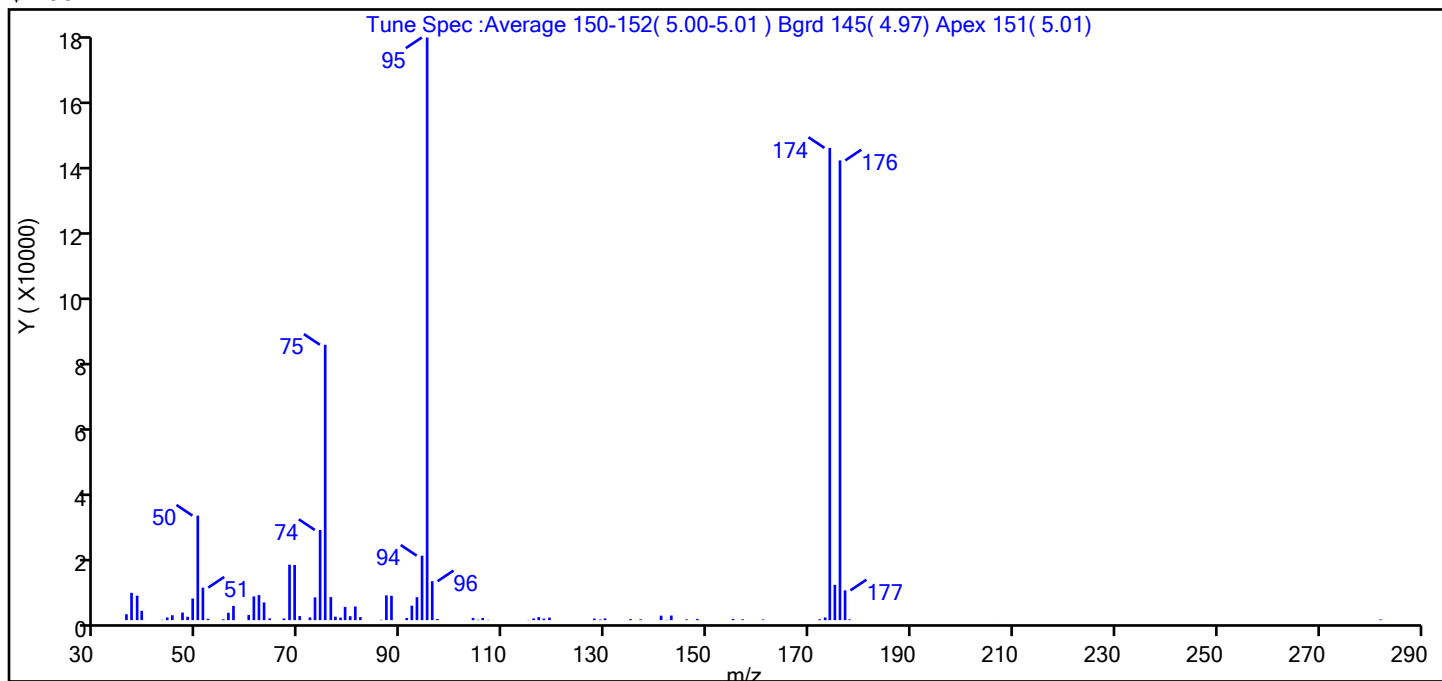
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Tune Method: BFB Method 8260

\$ 166 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.9
75	30 to 60% of m/z 95	47.3
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	6.1 (7.5)
176	Greater than 95% but less than 101% of m/z 174	78.9 (97.4)
177	5 to 9% of m/z 176	5.1 (6.5)

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01T01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 01-Aug-2025 10:34:30
Spectrum: Tune Spec :Average 150-152(5.00-5.01) Bgrd 145(4.97) Apex 151(5.01)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1759	64.00	528	92.00	4313	141.00	1336
37.00	8137	67.00	513	93.00	6834	142.00	95
38.00	7288	68.00	16520	94.00	19208	143.00	1375
39.00	2786	69.00	16424	95.00	173568	146.00	223
43.00	94	70.00	1222	96.00	11597	148.00	365
44.00	788	72.00	817	97.00	340	155.00	360
45.00	1462	73.00	6783	104.00	638	157.00	245
47.00	2259	74.00	26856	105.00	123	161.00	194
48.00	1006	75.00	82032	106.00	655	172.00	280
49.00	6437	76.00	6862	107.00	87	173.00	810
50.00	31136	77.00	1029	115.00	84	174.00	140672
51.00	9688	78.00	757	116.00	505	175.00	10519
52.00	407	79.00	3936	117.00	901	176.00	136960
55.00	255	80.00	1176	118.00	458	177.00	8868
56.00	2202	81.00	4061	119.00	759	178.00	226
57.00	4234	82.00	901	128.00	473	207.00	15
60.00	1528	86.00	118	129.00	188	282.00	200
61.00	7069	87.00	7378	130.00	519		
62.00	7462	88.00	7273	135.00	305		
63.00	5268	91.00	649	137.00	234		

Report Date: 04-Aug-2025 09:55:51

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01T01.D

Injection Date: 01-Aug-2025 10:34:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

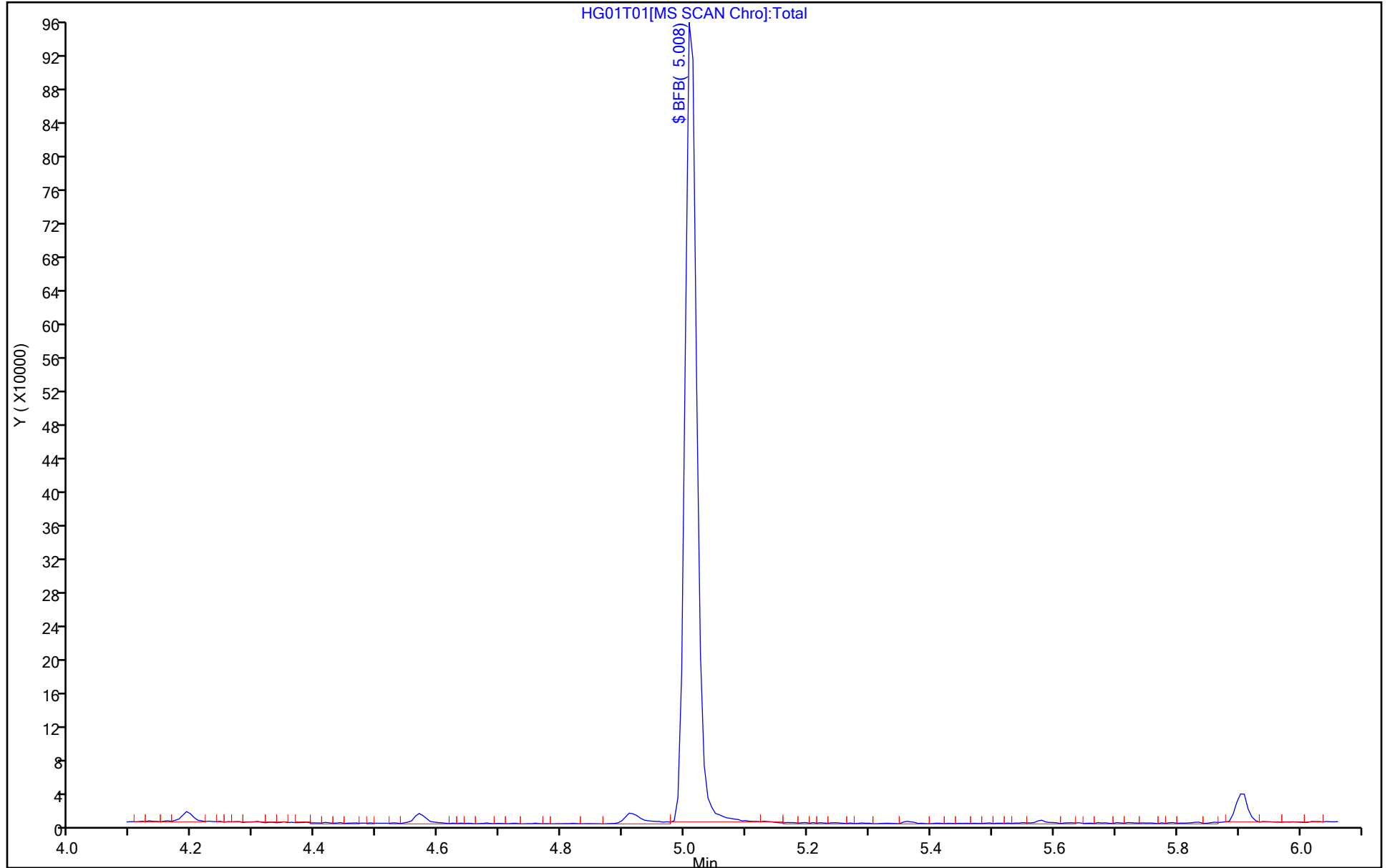
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-679324/7

Matrix: Water

Lab File ID: HG01X06.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 12:32

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.80
79-01-6	Trichloroethene	ND		1.0	0.30
75-01-4	Vinyl chloride	ND		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X06.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 01-Aug-2025 12:32:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-007
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:57:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.782					ND	
2 Dichlorodifluoromethane	85		1.825					ND	
3 Chlorodifluoromethane	51		1.837					ND	7
4 Dimethyl ether	45		1.892					ND	
5 Chloromethane	50		2.014					ND	
7 Butadiene	39		2.099					ND	7
6 Vinyl chloride	62		2.117					ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.160					ND	
9 Bromomethane	94		2.392					ND	
10 Chloroethane	64		2.471					ND	
11 Dichlorofluoromethane	67		2.684					ND	
12 Trichlorofluoromethane	101		2.696					ND	
14 Ethyl ether	59		2.971					ND	
15 1,2-Dichloro-1,1,2-trifluoroetha	67		3.032					ND	
13 Ethanol	45		3.111					ND	
16 Acrolein	56		3.123					ND	
17 1,1-Dichloroethene	96		3.251					ND	
19 Acetone	43		3.282					ND	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.288					ND	
21 Iodomethane	142		3.422					ND	
22 Ethyl bromide	108		3.452					ND	
23 Carbon disulfide	76		3.532					ND	7
24 Methyl acetate	43		3.666					ND	
26 3-Chloro-1-propene	41		3.678					ND	
25 Acetonitrile	41		3.696					ND	
27 Methylene Chloride	84		3.849					ND	
* 28 t-Butyl alcohol-d10 (IS)	65	3.867	3.867	0.000	97	69793	50.0	50.0	
29 2-Methyl-2-propanol	59		3.970					ND	
31 Acrylonitrile	53		4.184					ND	
32 Methyl tert-butyl ether	73		4.214					ND	
33 trans-1,2-Dichloroethene	96		4.233					ND	
34 Hexane	57		4.647					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43		4.885					ND	
36 1,1-Dichloroethane	63		4.885					ND	
37 Isopropyl ether	45		4.946					ND	
38 2-Chloro-1,3-butadiene	53		4.995					ND	
40 Tert-butyl ethyl ether	59		5.488					ND	
41 2-Butanone (MEK)	43		5.696					ND	
42 cis-1,2-Dichloroethene	96		5.732					ND	
43 2,2-Dichloropropane	77		5.738					ND	
44 Propionitrile	54		5.787					ND	
45 Ethyl acetate	43		5.793					ND	
47 Methacrylonitrile	67		5.994					ND	
48 Chlorobromomethane	128		6.068					ND	
49 Tetrahydrofuran	71		6.080					ND	
S 46 1,2-Dichloroethene, Total	100		6.155					ND	7
50 Chloroform	83		6.226					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	283027	10.0	10.3	
53 1,1,1-Trichloroethane	97		6.458					ND	
51 Methyl acrylate	55		6.482					ND	
54 Cyclohexane	56		6.555					ND	
55 1,1-Dichloropropene	75		6.677					ND	
56 Carbon tetrachloride	117		6.677					ND	
57 Isobutyl alcohol	41		6.830					ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	46	52319	10.0	10.5	
59 Benzene	78		6.933					ND	7
60 1,2-Dichloroethane	62		7.006					ND	
61 Isopropyl acetate	43		7.031					ND	
63 Tert-amyl methyl ether	73		7.135					ND	
62 1-Chlorobutane	56	7.348	7.250	0.098	20	4449		NC	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1184505	10.0	10.0	
65 n-Heptane	43		7.372					ND	7
67 n-Butanol	56		7.738					ND	
66 t-Amyl alcohol	73		7.842					ND	
68 Trichloroethene	95		7.842					ND	
69 Methylcyclohexane	83		8.159					ND	
70 1,2-Dichloropropane	63		8.171					ND	
71 2-ethoxy-2-methyl butane	87		8.195					ND	
72 Methyl methacrylate	69		8.281					ND	
73 1,4-Dioxane	88		8.281					ND	
74 Dibromomethane	93		8.287					ND	
75 n-Propyl acetate	61		8.366					ND	
76 Dichlorobromomethane	83		8.531					ND	
77 2-Nitropropane	41		8.799					ND	
78 2-Chloroethyl vinyl ether	63		8.908					ND	
79 1-Bromo-2-chloroethane	63		8.927					ND	
80 cis-1,3-Dichloropropene	75		9.098					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.280					ND	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1241167	10.0	9.53	
81 Chloroacetonitrile	75		9.427					ND	
84 Toluene	92		9.512					ND	
85 trans-1,3-Dichloropropene	75		9.786					ND	
104 Ethyl methacrylate	69		9.860					ND	
106 1,1,2-Trichloroethane	97		10.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 105 1,3-Dichloropropene, Total	100		10.060					ND	7
107 Tetrachloroethene	166		10.091					ND	
108 1,3-Dichloropropane	76		10.164					ND	
109 2-Hexanone	43		10.225					ND	
110 n-Butyl acetate	43		10.359					ND	
111 Chlorodibromomethane	129		10.390					ND	
112 Ethylene Dibromide	107		10.506					ND	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	936555	10.0	10.0	
114 1-Chlorohexane	91		10.963					ND	7
115 Chlorobenzene	112		10.975					ND	
116 1,1,1,2-Tetrachloroethane	131		11.061					ND	
117 Ethylbenzene	91		11.067					ND	
119 m-Xylene & p-Xylene	106		11.189					ND	
S 118 Xylenes, Total	106		11.245					ND	7
120 o-Xylene	106		11.524					ND	
121 Styrene	104		11.536					ND	
122 Bromoform	173		11.695					ND	
123 Isopropylbenzene	105		11.829					ND	
124 cis-1,4-Dichloro-2-butene	88		11.871					ND	
125 Cyclohexanone	55		11.902					ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	463837	10.0	9.86	
127 1,1,2,2-Tetrachloroethane	83		12.073					ND	
128 Bromobenzene	156		12.091					ND	
129 trans-1,4-Dichloro-2-butene	53		12.103					ND	
130 1,2,3-Trichloropropane	110		12.121					ND	
131 N-Propylbenzene	91		12.164					ND	
132 2-Chlorotoluene	126		12.237					ND	
133 1,3,5-Trimethylbenzene	105		12.304					ND	
134 4-Chlorotoluene	126		12.329					ND	
135 tert-Butylbenzene	134		12.542					ND	
136 Pentachloroethane	167		12.572					ND	
137 1,2,4-Trimethylbenzene	105		12.585					ND	
138 sec-Butylbenzene	105		12.707					ND	7
139 1,3-Dichlorobenzene	146		12.804					ND	7
140 4-Isopropyltoluene	119		12.816					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	525710	10.0	10.0	
142 1,4-Dichlorobenzene	146		12.883					ND	7
143 1,2,3-Trimethylbenzene	120		12.889					ND	7
144 Benzyl chloride	126		12.957					ND	
145 p-Diethylbenzene	119		13.091					ND	U
146 n-Butylbenzene	92		13.115					ND	
147 1,2-Dichlorobenzene	146		13.139					ND	
148 Hexachloroethane	201		13.682					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.688					ND	
150 1,3,5-Trichlorobenzene	180		13.816					ND	
151 1,2,4-Trichlorobenzene	180		14.237					ND	7
152 Hexachlorobutadiene	225	14.322	14.322	0.000	82	1299		0.0531	
153 Naphthalene	128		14.414					ND	7
154 1,2,3-Trichlorobenzene	180		14.554					ND	7
155 tert-Butyl Formate	1		0.000					ND	
156 Dodecane	57		0.000					ND	
157 Pentane	43		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
158 1,1-Dichloroacetone	1		0.000					ND	
159 n-Decane	57		0.000					ND	
160 1-Bromo-3-Chloropropane	1		0.000					ND	
161 1-Chloropropane	1		0.000					ND	
162 Propene oxide	1		0.000					ND	
163 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
164 Methylal	1		0.000					ND	
165 2-Bromo-1-chloropropane	1		0.000					ND	
209 1,1-Dichloro-1-fluoroethane TIC1			0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 01-Aug-2025 15:52:57

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X06.D

Injection Date: 01-Aug-2025 12:32:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

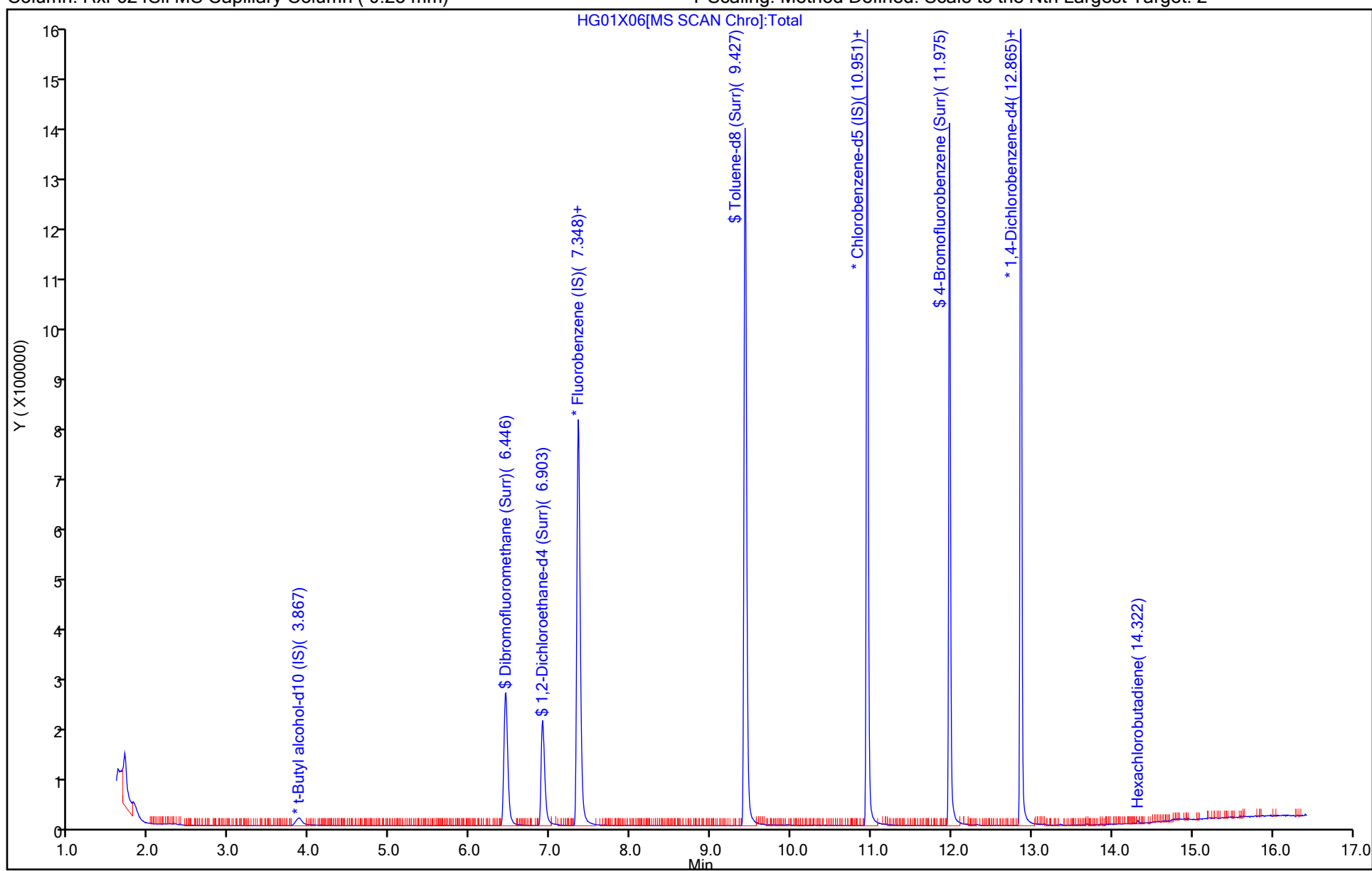
ALS Bottle#: 6

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Aug-2025 12:32:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-007
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:57:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	102.95
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.95
\$ 83 Toluene-d8 (Surr)	10.0	9.53	95.26
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.86	98.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-679324/4

Matrix: Water

Lab File ID: HG01X03.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 11:30

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.26		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	5.10		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	5.16		1.0	0.80
79-01-6	Trichloroethene	4.93		1.0	0.30
75-01-4	Vinyl chloride	4.37		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 01-Aug-2025 11:30:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-004
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:19:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.819	1.825	-0.006	99	151613	5.00	3.97	
5 Chloromethane	50	2.008	2.014	-0.006	99	207462	5.00	4.11	
7 Butadiene	39	2.093	2.099	-0.006	91	235116	5.00	4.85	
6 Vinyl chloride	62	2.117	2.117	0.000	98	199337	5.00	4.37	
9 Bromomethane	94	2.386	2.392	-0.006	90	148611	5.00	4.59	
10 Chloroethane	64	2.465	2.471	-0.006	100	138164	5.00	4.82	
11 Dichlorofluoromethane	67	2.678	2.684	-0.006	97	368643	5.00	4.81	
12 Trichlorofluoromethane	101	2.690	2.696	-0.006	93	267824	5.00	4.52	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.026	3.032	-0.006	94	218799	5.00	4.96	
17 1,1-Dichloroethene	96	3.245	3.251	-0.006	97	157376	5.00	5.26	
19 Acetone	43	3.282	3.282	0.000	100	218753	62.5	45.6	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.276	3.288	-0.012	90	147061	5.00	5.01	
21 Iodomethane	142	3.422	3.422	0.000	99	265000	5.00	4.62	
23 Carbon disulfide	76	3.526	3.532	-0.006	99	424244	5.00	4.63	
24 Methyl acetate	43	3.666	3.666	0.000	25	37115	5.00	3.23	M
26 3-Chloro-1-propene	41	3.678	3.678	0.000	93	277698	5.00	4.70	
27 Methylene Chloride	84	3.836	3.849	-0.013	98	159050	5.00	5.07	
* 28 t-Butyl alcohol-d10 (IS)	65	3.849	3.867	-0.018	96	67581	50.0	50.0	
29 2-Methyl-2-propanol	59	3.964	3.970	-0.006	100	70063	50.0	47.7	
31 Acrylonitrile	53	4.172	4.184	-0.012	100	105271	25.0	17.7	
32 Methyl tert-butyl ether	73	4.208	4.214	-0.006	95	333916	5.00	4.86	
33 trans-1,2-Dichloroethene	96	4.233	4.233	0.000	97	170770	5.00	5.16	
34 Hexane	57	4.647	4.647	0.000	93	245287	5.00	4.88	
36 1,1-Dichloroethane	63	4.879	4.885	-0.006	96	338049	5.00	5.28	
37 Isopropyl ether	45	4.946	4.946	0.000	98	542544	5.00	5.02	
38 2-Chloro-1,3-butadiene	53	4.995	4.995	0.000	91	269693	5.00	4.87	
40 Tert-butyl ethyl ether	59	5.482	5.488	-0.006	99	466061	5.00	4.97	
41 2-Butanone (MEK)	43	5.696	5.696	0.000	100	389994	62.5	47.4	
42 cis-1,2-Dichloroethene	96	5.726	5.732	-0.006	85	183799	5.00	5.10	
43 2,2-Dichloropropane	77	5.739	5.738	0.000	89	271787	5.00	4.85	
44 Propionitrile	54	5.818	5.787	0.031	97	49943	37.5	24.4	
47 Methacrylonitrile	67	5.995	5.994	0.001	92	255026	37.5	30.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 Chlorobromomethane	128	6.062	6.068	-0.006	97	71225	5.00	5.22	
49 Tetrahydrofuran	71	6.080	6.080	0.000	80	44870	25.0	19.4	
50 Chloroform	83	6.214	6.226	-0.012	93	303693	5.00	5.11	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	285137	10.0	10.4	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	98	276124	5.00	4.97	
54 Cyclohexane	56	6.555	6.555	0.000	92	317676	5.00	4.65	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	96	255596	5.00	4.98	
56 Carbon tetrachloride	117	6.665	6.677	-0.012	95	237078	5.00	5.05	
57 Isobutyl alcohol	41	6.836	6.830	0.006	95	52607	125.0	91.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	83	51914	10.0	10.5	
59 Benzene	78	6.927	6.933	-0.006	97	738343	5.00	5.06	
60 1,2-Dichloroethane	62	7.007	7.006	0.001	97	162090	5.00	4.95	
63 Tert-amyl methyl ether	73	7.135	7.135	0.001	98	393879	5.00	4.86	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1177718	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	94	261462	5.00	4.92	
67 n-Butanol	56	7.756	7.738	0.018	90	89122	250.0	211.4	
68 Trichloroethene	95	7.842	7.842	0.000	99	188393	5.00	4.93	
69 Methylcyclohexane	83	8.153	8.159	-0.006	93	314201	5.00	4.72	
70 1,2-Dichloropropane	63	8.177	8.171	0.006	98	188067	5.00	5.36	
71 2-ethoxy-2-methyl butane	87	8.189	8.195	-0.006	91	259265	5.00	4.89	
72 Methyl methacrylate	69	8.281	8.281	0.000	95	60427	5.00	3.58	
73 1,4-Dioxane	88	8.275	8.281	-0.006	31	13326	125.0	157.6	
74 Dibromomethane	93	8.293	8.287	0.006	97	71647	5.00	5.51	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	201196	5.00	5.14	
77 2-Nitropropane	41	8.805	8.799	0.006	97	15299	5.00	2.93	
79 1-Bromo-2-chloroethane	63	8.933	8.927	0.006	99	172249	5.00	5.50	
80 cis-1,3-Dichloropropene	75	9.098	9.098	0.000	96	233188	5.00	4.87	
82 4-Methyl-2-pentanone (MIBK)	43	9.281	9.280	0.000	97	1073964	62.5	45.8	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1246432	10.0	9.54	
84 Toluene	92	9.506	9.512	-0.006	98	466087	5.00	4.60	
85 trans-1,3-Dichloropropene	75	9.793	9.786	0.007	94	183165	5.00	4.57	
104 Ethyl methacrylate	69	9.866	9.860	0.006	90	137398	5.00	4.85	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	90	106932	5.00	4.76	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	212685	5.00	4.45	
108 1,3-Dichloropropane	76	10.171	10.164	0.007	92	189120	5.00	4.84	
109 2-Hexanone	43	10.225	10.225	0.000	97	729455	62.5	48.7	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	126417	5.00	4.55	
112 Ethylene Dibromide	107	10.506	10.506	0.000	98	95734	5.00	4.91	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	938889	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	267205	5.00	4.19	
115 Chlorobenzene	112	10.975	10.975	0.000	94	488244	5.00	4.56	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	96	161779	5.00	4.59	
117 Ethylbenzene	91	11.067	11.067	0.000	98	906076	5.00	4.54	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	699050	10.0	9.20	
120 o-Xylene	106	11.518	11.524	-0.006	98	332618	5.00	4.62	
121 Styrene	104	11.536	11.536	0.000	93	526604	5.00	4.56	
122 Bromoform	173	11.695	11.695	0.000	97	69924	5.00	4.87	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	911654	5.00	5.18	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	468159	10.0	9.93	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.073	0.006	93	122869	5.00	4.70	
128 Bromobenzene	156	12.091	12.091	0.000	96	192929	5.00	4.55	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	92	135275	25.0	15.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	81	32100	5.00	4.90	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1078926	5.00	4.58	
132 2-Chlorotoluene	126	12.237	12.237	0.000	97	203196	5.00	4.51	
133 1,3,5-Trimethylbenzene	105	12.298	12.304	-0.006	94	745538	5.00	4.52	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	206302	5.00	4.55	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	155697	5.00	4.27	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	98	742360	5.00	4.43	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	970826	5.00	4.56	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	393077	5.00	4.64	
140 4-Isopropyltoluene	119	12.816	12.816	0.000	97	816911	5.00	4.48	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	529984	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	388130	5.00	4.44	
143 1,2,3-Trimethylbenzene	120	12.890	12.889	0.001	98	315996	5.00	4.47	
144 Benzyl chloride	126	12.963	12.957	0.006	98	47858	5.00	4.65	
145 p-Diethylbenzene	119	13.091	13.091	0.000	94	502110	5.00	4.70	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	411715	5.00	4.79	
147 1,2-Dichlorobenzene	146	13.140	13.139	0.001	99	344591	5.00	4.66	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	86	15870	5.00	4.58	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	294685	5.00	4.73	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	239764	5.00	4.81	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	127221	5.00	5.16	
153 Naphthalene	128	14.414	14.414	0.000	97	383532	5.00	4.70	
154 1,2,3-Trichlorobenzene	180	14.560	14.554	0.006	96	201574	5.00	4.92	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00231

Amount Added: 12.50

Units: uL

MSV_QC_Gas826_00272

Amount Added: 12.50

Units: uL

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X03.D

Injection Date: 01-Aug-2025 11:30:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

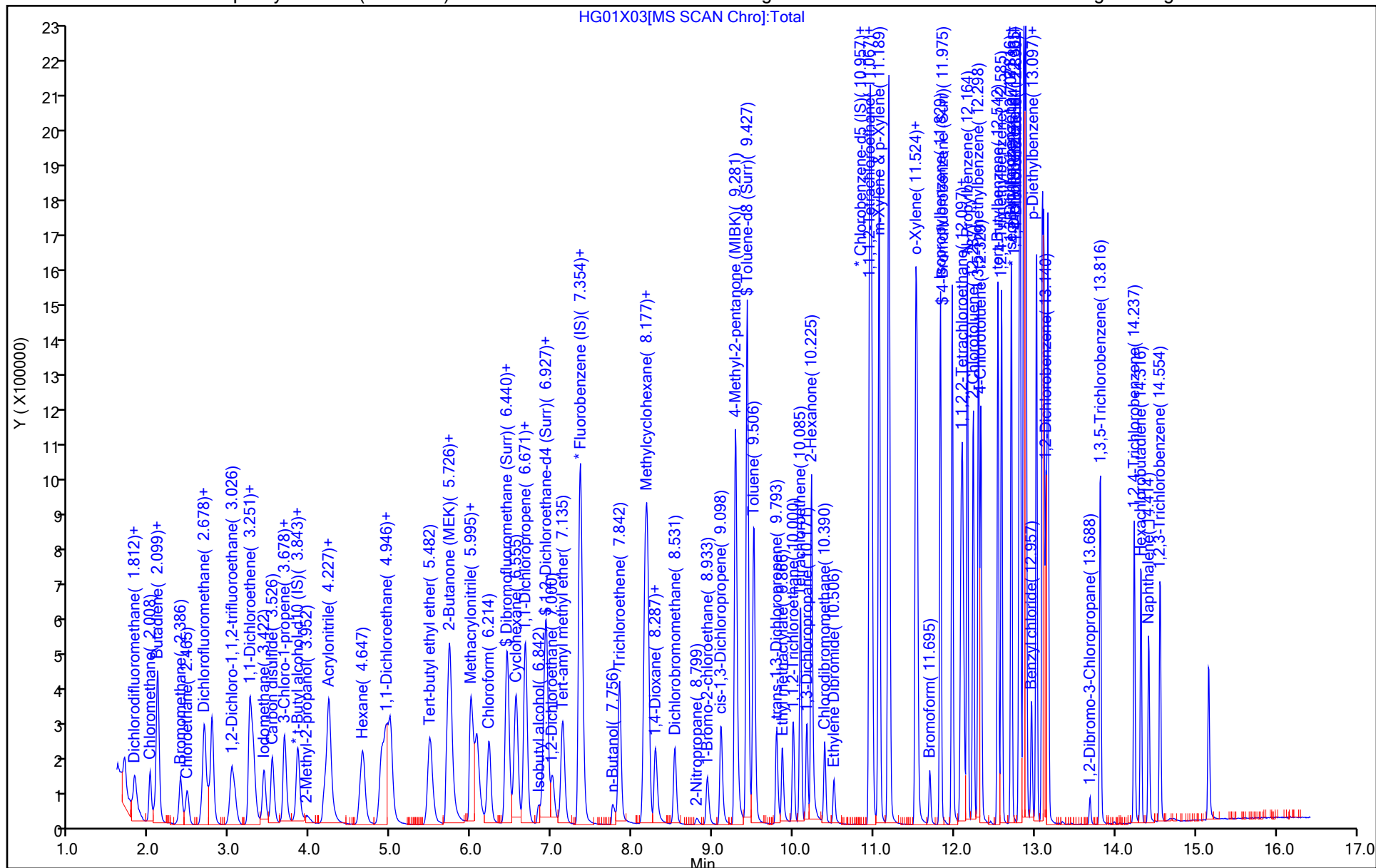
ALS Bottle#: 3

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Aug-2025 11:30:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-004
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:19:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.4	104.31
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.73
\$ 83 Toluene-d8 (Surr)	10.0	9.54	95.43
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.93	99.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 410-679324/5

Matrix: Water Lab File ID: HG01X04.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 08/01/2025 11:51

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH: _____

% Moisture: _____ % Solids: _____ Level: (low/med) Low

Analysis Batch No.: 679324 Units: ug/L

Preparation Batch No.: _____ Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.20		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	5.14		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	5.07		1.0	0.80
79-01-6	Trichloroethene	4.89		1.0	0.30
75-01-4	Vinyl chloride	4.25		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X04.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 01-Aug-2025 11:51:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-005
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:21:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.825	1.825	0.000	99	151563	5.00	3.91	
5 Chloromethane	50	2.014	2.014	0.000	99	209175	5.00	4.08	
7 Butadiene	39	2.099	2.099	0.000	91	242294	5.00	4.92	
6 Vinyl chloride	62	2.117	2.117	0.000	98	196962	5.00	4.25	
9 Bromomethane	94	2.385	2.392	-0.007	91	150605	5.00	4.57	
10 Chloroethane	64	2.465	2.471	-0.006	100	140663	5.00	4.83	
11 Dichlorofluoromethane	67	2.684	2.684	0.000	97	372436	5.00	4.78	
12 Trichlorofluoromethane	101	2.696	2.696	0.000	98	270947	5.00	4.51	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.032	3.032	0.000	94	219665	5.00	4.90	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	97	157970	5.00	5.20	
19 Acetone	43	3.282	3.282	0.000	100	222020	62.5	43.7	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.288	3.288	0.000	89	149839	5.00	5.03	
21 Iodomethane	142	3.428	3.422	0.006	98	270863	5.00	4.65	
23 Carbon disulfide	76	3.532	3.532	0.000	99	428898	5.00	4.60	
24 Methyl acetate	43	3.678	3.666	0.012	25	38425	5.00	3.16	M
26 3-Chloro-1-propene	41	3.678	3.678	0.000	93	279566	5.00	4.66	
27 Methylene Chloride	84	3.843	3.849	-0.007	94	163754	5.00	5.14	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	41	71534	50.0	50.0	
29 2-Methyl-2-propanol	59	3.958	3.970	-0.012	100	75259	50.0	48.4	
31 Acrylonitrile	53	4.172	4.184	-0.012	99	102805	25.0	16.3	
32 Methyl tert-butyl ether	73	4.208	4.214	-0.006	95	342187	5.00	4.90	
33 trans-1,2-Dichloroethene	96	4.233	4.233	0.000	97	170672	5.00	5.07	
34 Hexane	57	4.647	4.647	0.000	93	249295	5.00	4.88	
36 1,1-Dichloroethane	63	4.879	4.885	-0.006	96	343885	5.00	5.29	
37 Isopropyl ether	45	4.946	4.946	0.000	95	557893	5.00	5.08	
38 2-Chloro-1,3-butadiene	53	4.995	4.995	0.000	91	273500	5.00	4.86	
40 Tert-butyl ethyl ether	59	5.489	5.488	0.001	99	472948	5.00	4.97	
41 2-Butanone (MEK)	43	5.696	5.696	0.000	100	395714	62.5	45.5	
42 cis-1,2-Dichloroethene	96	5.732	5.732	0.000	84	188305	5.00	5.14	
43 2,2-Dichloropropane	77	5.738	5.738	0.000	87	279096	5.00	4.91	
44 Propionitrile	54	5.812	5.787	0.025	97	49290	37.5	22.7	
47 Methacrylonitrile	67	5.995	5.994	0.001	93	250851	37.5	28.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 Chlorobromomethane	128	6.062	6.068	-0.006	97	71964	5.00	5.19	
49 Tetrahydrofuran	71	6.080	6.080	0.000	80	45564	25.0	18.6	
50 Chloroform	83	6.220	6.226	-0.006	94	308285	5.00	5.10	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	285278	10.0	10.3	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	280184	5.00	4.96	
54 Cyclohexane	56	6.555	6.555	0.000	92	325635	5.00	4.69	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	96	260170	5.00	4.99	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	93	239564	5.00	5.02	
57 Isobutyl alcohol	41	6.842	6.830	0.012	94	61228	125.0	100.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	83	53754	10.0	10.7	
59 Benzene	78	6.933	6.933	0.000	97	745093	5.00	5.03	
60 1,2-Dichloroethane	62	7.007	7.006	0.001	97	161464	5.00	4.85	
63 Tert-amyl methyl ether	73	7.135	7.135	0.001	99	402113	5.00	4.88	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1196336	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	94	266425	5.00	4.93	
67 n-Butanol	56	7.756	7.738	0.018	89	89588	250.0	202.6	
68 Trichloroethene	95	7.842	7.842	0.000	99	189958	5.00	4.89	
69 Methylcyclohexane	83	8.153	8.159	-0.006	93	312834	5.00	4.63	
70 1,2-Dichloropropane	63	8.171	8.171	0.000	98	188715	5.00	5.30	
71 2-ethoxy-2-methyl butane	87	8.189	8.195	-0.006	92	261875	5.00	4.86	
72 Methyl methacrylate	69	8.287	8.281	0.006	93	60416	5.00	3.38	
73 1,4-Dioxane	88	8.287	8.281	0.006	31	12579	125.0	143.1	
74 Dibromomethane	93	8.293	8.287	0.006	95	72629	5.00	5.50	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	202284	5.00	5.09	
77 2-Nitropropane	41	8.805	8.799	0.006	98	15734	5.00	2.84	
79 1-Bromo-2-chloroethane	63	8.933	8.927	0.006	98	172547	5.00	5.43	
80 cis-1,3-Dichloropropene	75	9.104	9.098	0.006	96	241844	5.00	4.97	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	1093153	62.5	44.1	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1251762	10.0	9.49	
84 Toluene	92	9.512	9.512	0.000	98	475002	5.00	4.65	
85 trans-1,3-Dichloropropene	75	9.793	9.786	0.007	93	188576	5.00	4.66	
104 Ethyl methacrylate	69	9.866	9.860	0.006	90	137942	5.00	4.82	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	90	105528	5.00	4.65	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	215819	5.00	4.47	
108 1,3-Dichloropropane	76	10.171	10.164	0.007	91	192363	5.00	4.87	
109 2-Hexanone	43	10.225	10.225	0.000	97	728667	62.5	46.0	
111 Chlorodibromomethane	129	10.390	10.390	0.000	91	126919	5.00	4.53	
112 Ethylene Dibromide	107	10.506	10.506	0.000	98	97673	5.00	4.96	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	947878	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	269083	5.00	4.18	
115 Chlorobenzene	112	10.975	10.975	0.000	94	499614	5.00	4.62	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	96	164609	5.00	4.63	
117 Ethylbenzene	91	11.067	11.067	0.000	99	927743	5.00	4.60	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	707817	10.0	9.23	
120 o-Xylene	106	11.518	11.524	-0.006	98	335192	5.00	4.61	
121 Styrene	104	11.542	11.536	0.006	96	541709	5.00	4.64	
122 Bromoform	173	11.695	11.695	0.000	97	69978	5.00	4.83	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	924031	5.00	5.20	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	474573	10.0	9.97	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.073	0.006	93	126564	5.00	4.82	
128 Bromobenzene	156	12.091	12.091	0.000	96	195822	5.00	4.60	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	93	136387	25.0	14.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	81	32221	5.00	4.90	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1096279	5.00	4.63	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	205538	5.00	4.55	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	749638	5.00	4.52	
134 4-Chlorotoluene	126	12.329	12.329	0.000	98	209158	5.00	4.59	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	156286	5.00	4.27	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	98	761377	5.00	4.53	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	992461	5.00	4.65	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	398703	5.00	4.68	
140 4-Isopropyltoluene	119	12.816	12.816	0.000	97	824334	5.00	4.50	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	95	532314	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	401437	5.00	4.58	
143 1,2,3-Trimethylbenzene	120	12.890	12.889	0.001	99	323937	5.00	4.57	
144 Benzyl chloride	126	12.963	12.957	0.006	98	49258	5.00	4.76	
145 p-Diethylbenzene	119	13.091	13.091	0.000	95	509499	5.00	4.75	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	417049	5.00	4.83	
147 1,2-Dichlorobenzene	146	13.139	13.139	0.000	98	349722	5.00	4.71	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	85	16542	5.00	4.75	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	298144	5.00	4.77	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	245496	5.00	4.90	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	129722	5.00	5.24	
153 Naphthalene	128	14.414	14.414	0.000	97	390228	5.00	4.76	
154 1,2,3-Trichlorobenzene	180	14.560	14.554	0.006	96	202190	5.00	4.92	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00231

Amount Added: 12.50

Units: uL

MSV_QC_Gas826_00272

Amount Added: 12.50

Units: uL

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 01-Aug-2025 15:52:34

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X04.D

Injection Date: 01-Aug-2025 11:51:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

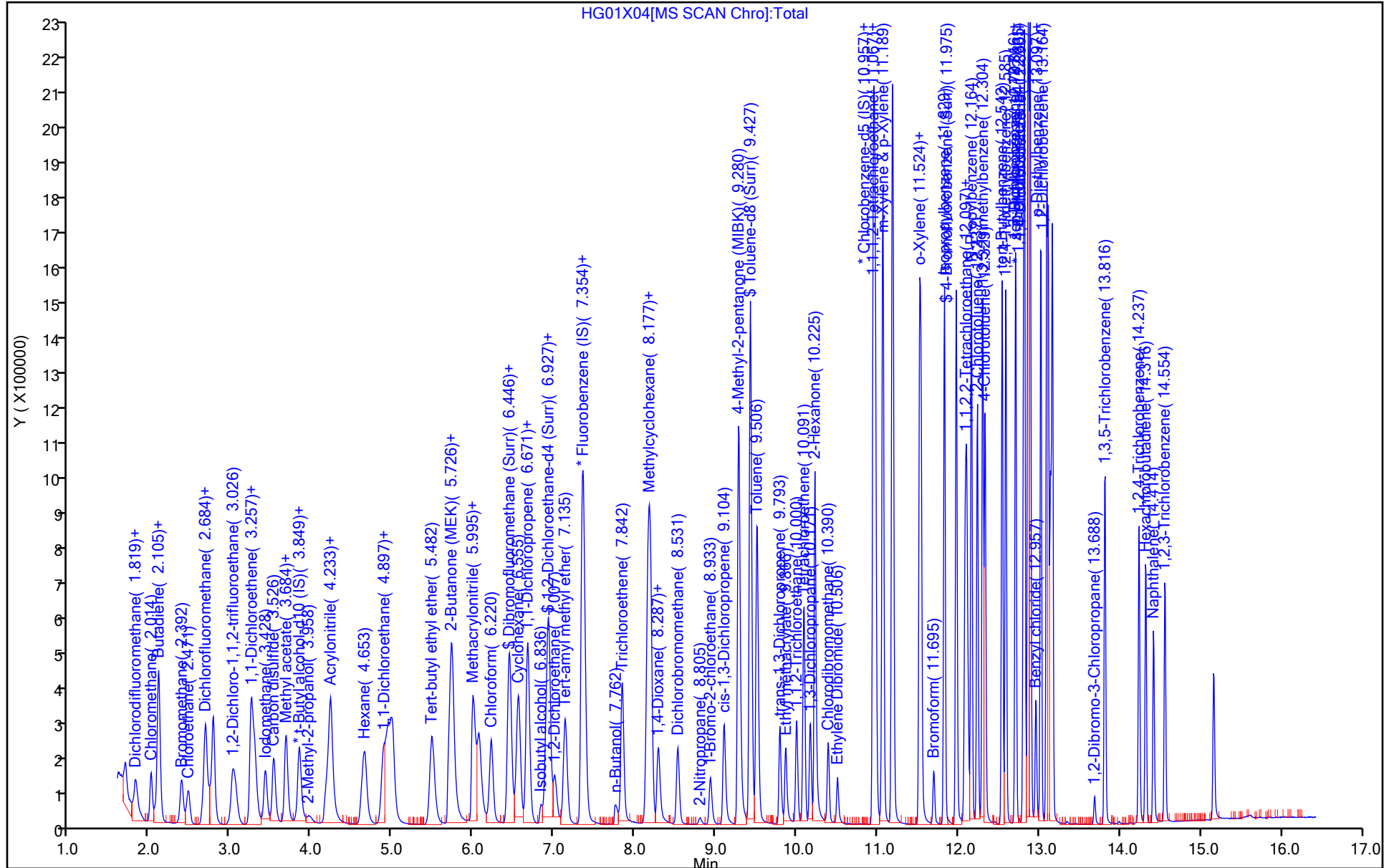
ALS Bottle#: 4

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Aug-2025 11:51:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-005
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Aug-2025 15:52:11 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1729

First Level Reviewer: N7YK

Date: 01-Aug-2025 12:21:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	102.74
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.76
\$ 83 Toluene-d8 (Surr)	10.0	9.49	94.93
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.97	99.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Client Sample ID: 5W7B MS

Lab Sample ID: 410-234463-3 MS

Matrix: Water

Lab File ID: HG01X19.D

Analysis Method: 8260D

Date Collected: 07/28/2025 12:00

Sample wt/vol: 25 (mL)

Date Analyzed: 08/01/2025 17:33

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 679324

Units: ug/L

Preparation Batch No.:

Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.87		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	5.41		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	5.52		1.0	0.80
79-01-6	Trichloroethene	5.48		1.0	0.30
75-01-4	Vinyl chloride	4.51		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X19.D
 Lims ID: 410-234463-A-3 MS
 Client ID: 5W7B
 Sample Type: MS
 Inject. Date: 01-Aug-2025 17:33:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-020
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:48:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.825	1.825	0.000	99	183713	5.00	4.47	
5 Chloromethane	50	2.014	2.014	0.000	99	214799	5.00	3.95	
7 Butadiene	39	2.105	2.099	0.006	92	284470	5.00	5.45	
6 Vinyl chloride	62	2.117	2.117	0.000	98	221543	5.00	4.51	
9 Bromomethane	94	2.392	2.392	0.000	90	157252	5.00	4.51	
10 Chloroethane	64	2.477	2.471	0.006	100	148989	5.00	4.83	
11 Dichlorofluoromethane	67	2.684	2.684	0.000	97	391018	5.00	4.74	
12 Trichlorofluoromethane	101	2.703	2.696	0.006	96	306850	5.00	4.82	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.032	3.032	0.000	94	243013	5.00	5.11	
17 1,1-Dichloroethene	96	3.251	3.251	0.000	97	188869	5.00	5.87	
19 Acetone	43	3.288	3.282	0.006	86	224394	62.6	48.8	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.288	3.288	0.000	93	192610	5.00	6.10	
21 Iodomethane	142	3.428	3.422	0.006	99	307377	5.00	4.98	
23 Carbon disulfide	76	3.532	3.532	0.000	99	494812	5.00	5.01	
24 Methyl acetate	43	3.684	3.666	0.018	27	59794	5.00	5.44	
26 3-Chloro-1-propene	41	3.684	3.678	0.006	93	317511	5.00	5.00	
27 Methylene Chloride	84	3.849	3.849	0.000	94	182350	5.00	5.40	
* 28 t-Butyl alcohol-d10 (IS)	65	3.867	3.867	0.000	93	64739	50.0	50.0	
29 2-Methyl-2-propanol	59	3.971	3.970	0.001	99	61028	50.0	43.3	
31 Acrylonitrile	53	4.178	4.184	-0.006	98	99946	25.0	17.5	
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	96	359467	5.00	4.86	
33 trans-1,2-Dichloroethene	96	4.239	4.233	0.006	97	196829	5.00	5.52	
34 Hexane	57	4.653	4.647	0.006	93	309498	5.00	5.72	
36 1,1-Dichloroethane	63	4.885	4.885	0.000	96	387450	5.00	5.62	
37 Isopropyl ether	45	4.946	4.946	0.000	95	606159	5.00	5.21	
38 2-Chloro-1,3-butadiene	53	5.001	4.995	0.006	91	318993	5.00	5.35	
40 Tert-butyl ethyl ether	59	5.489	5.488	0.001	99	503966	5.00	5.00	
41 2-Butanone (MEK)	43	5.696	5.696	0.000	100	406017	62.6	51.5	
42 cis-1,2-Dichloroethene	96	5.732	5.732	0.000	84	209715	5.00	5.41	
43 2,2-Dichloropropane	77	5.739	5.738	0.000	87	316577	5.00	5.25	
44 Propionitrile	54	5.818	5.787	0.031	97	49701	37.5	25.3	
47 Methacrylonitrile	67	6.001	5.994	0.007	93	265559	37.5	33.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 Chlorobromomethane	128	6.074	6.068	0.006	97	78785	5.00	5.37	
49 Tetrahydrofuran	71	6.086	6.080	0.006	81	46890	25.0	21.2	
50 Chloroform	83	6.226	6.226	0.000	94	391105	5.00	6.11	
\$ 52 Dibromofluoromethane (Surr)	113	6.440	6.440	0.000	94	309786	10.0	10.5	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	320669	5.00	5.36	
54 Cyclohexane	56	6.555	6.555	0.000	92	402318	5.00	5.47	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	95	300345	5.00	5.44	
56 Carbon tetrachloride	117	6.671	6.677	-0.006	84	278715	5.00	5.51	
57 Isobutyl alcohol	41	6.842	6.830	0.012	94	54744	125.1	99.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.909	6.903	0.006	92	57627	10.0	10.8	
59 Benzene	78	6.933	6.933	0.000	97	832504	5.00	5.30	
60 1,2-Dichloroethane	62	7.007	7.006	0.001	97	179348	5.00	5.08	
63 Tert-amyl methyl ether	73	7.135	7.135	0.001	98	422519	5.00	4.84	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1267610	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	94	332482	5.00	5.81	
67 n-Butanol	56	7.763	7.738	0.024	90	79608	250.2	199.6	
68 Trichloroethene	95	7.842	7.842	0.000	98	225431	5.00	5.48	
69 Methylcyclohexane	83	8.153	8.159	-0.006	94	388579	5.00	5.43	
70 1,2-Dichloropropane	63	8.177	8.171	0.006	98	208509	5.00	5.52	
71 2-ethoxy-2-methyl butane	87	8.195	8.195	0.000	91	280616	5.00	4.91	
72 Methyl methacrylate	69	8.281	8.281	0.000	93	62282	5.00	3.85	
73 1,4-Dioxane	88	8.281	8.281	0.000	30	9555	125.1	123.9	
74 Dibromomethane	93	8.293	8.287	0.006	95	76936	5.00	5.50	
76 Dichlorobromomethane	83	8.531	8.531	0.000	99	217487	5.00	5.16	
77 2-Nitropropane	41	8.805	8.799	0.006	97	14889	5.00	2.97	
79 1-Bromo-2-chloroethane	63	8.933	8.927	0.006	98	170160	5.00	5.05	
80 cis-1,3-Dichloropropene	75	9.104	9.098	0.006	96	251798	5.00	4.89	
82 4-Methyl-2-pentanone (MIBK)	43	9.281	9.280	0.000	97	1126742	62.6	50.2	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1349419	10.0	9.65	
84 Toluene	92	9.512	9.512	0.000	98	524573	5.00	4.84	
85 trans-1,3-Dichloropropene	75	9.793	9.786	0.007	94	193699	5.00	4.51	
104 Ethyl methacrylate	69	9.866	9.860	0.006	91	141650	5.00	4.67	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	90	113200	5.00	4.71	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	241232	5.00	4.71	
108 1,3-Dichloropropane	76	10.171	10.164	0.007	92	201679	5.00	4.82	
109 2-Hexanone	43	10.225	10.225	0.000	97	749676	62.6	52.3	
111 Chlorodibromomethane	129	10.390	10.390	0.000	90	135776	5.00	4.57	
112 Ethylene Dibromide	107	10.506	10.506	0.000	99	102130	5.00	4.89	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	86	1004882	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	98	306482	5.00	4.49	
115 Chlorobenzene	112	10.975	10.975	0.000	94	545168	5.00	4.76	
116 1,1,1,2-Tetrachloroethane	131	11.061	11.061	0.000	96	177833	5.00	4.71	
117 Ethylbenzene	91	11.067	11.067	0.000	99	1016761	5.00	4.76	
119 m-Xylene & p-Xylene	106	11.189	11.189	0.000	100	777293	10.0	9.56	
120 o-Xylene	106	11.524	11.524	0.000	96	361840	5.00	4.70	
121 Styrene	104	11.536	11.536	0.000	93	566088	5.00	4.58	
122 Bromoform	173	11.695	11.695	0.000	97	73159	5.00	4.76	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	1003066	5.00	5.33	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	502267	10.0	9.95	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.073	0.006	93	130797	5.00	4.65	
128 Bromobenzene	156	12.091	12.091	0.000	96	212407	5.00	4.65	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	92	130734	25.0	15.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	81	33867	5.00	4.81	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1203442	5.00	4.74	
132 2-Chlorotoluene	126	12.237	12.237	0.000	96	223290	5.00	4.61	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	820607	5.00	4.62	
134 4-Chlorotoluene	126	12.335	12.329	0.006	97	222246	5.00	4.55	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	173132	5.00	4.42	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	98	813147	5.00	4.51	
138 sec-Butylbenzene	105	12.707	12.707	0.000	94	1090991	5.00	4.77	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	424392	5.00	4.65	
140 4-Isopropyltoluene	119	12.816	12.816	0.000	97	900056	5.00	4.59	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	570424	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	424634	5.00	4.52	
143 1,2,3-Trimethylbenzene	120	12.890	12.889	0.001	99	347047	5.00	4.57	
144 Benzyl chloride	126	12.963	12.957	0.006	99	48939	5.00	4.42	
145 p-Diethylbenzene	119	13.091	13.091	0.000	94	555232	5.00	4.83	
146 n-Butylbenzene	92	13.115	13.115	0.000	98	451633	5.00	4.88	
147 1,2-Dichlorobenzene	146	13.140	13.139	0.001	98	369077	5.00	4.64	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	85	15763	5.00	4.23	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	314138	5.00	4.69	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	252191	5.00	4.70	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	95	138226	5.00	5.21	
153 Naphthalene	128	14.414	14.414	0.000	97	396873	5.00	4.52	
154 1,2,3-Trichlorobenzene	180	14.560	14.554	0.006	95	204628	5.00	4.64	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_LCS_VOC#1_00231

Amount Added: 5.38

Units: uL

MSV_QC_Gas826_00272

Amount Added: 5.38

Units: uL

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X19.D

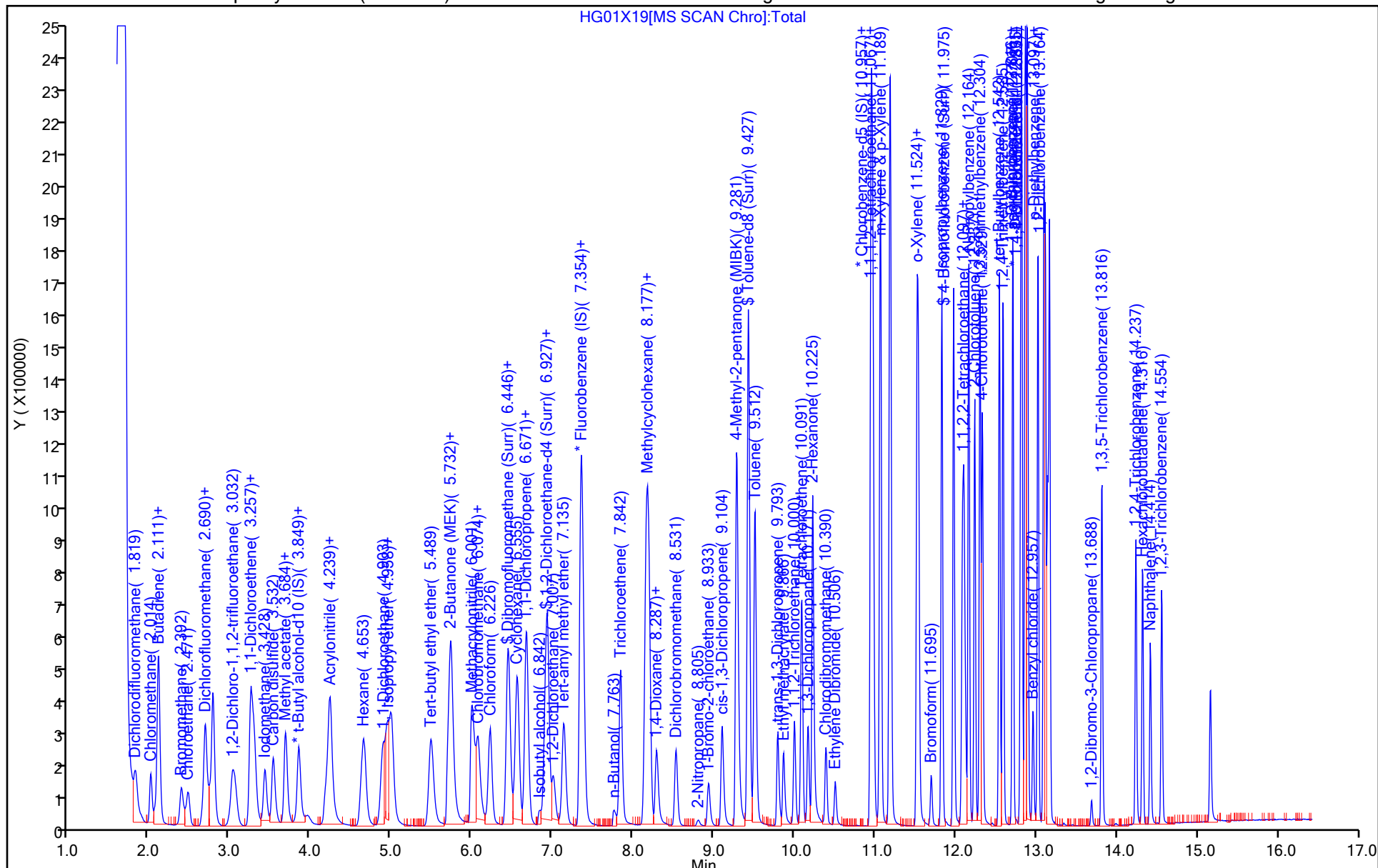
Operator ID: ecr105096

Worklist Smp#: 20

ALS Bottle#: 19

Limit Group: MSV - 8260C D

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X19.D
Lims ID: 410-234463-A-3 MS
Client ID: 5W7B
Sample Type: MS
Inject. Date: 01-Aug-2025 17:33:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-020
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:48:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.5	105.29
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.02
\$ 83 Toluene-d8 (Surr)	10.0	9.65	96.53
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.95	99.50

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG No.:	
Client Sample ID: 5W7B MSD	Lab Sample ID: 410-234463-3 MSD
Matrix: Water	Lab File ID: HG01X20.D
Analysis Method: 8260D	Date Collected: 07/28/2025 12:00
Sample wt/vol: 25 (mL)	Date Analyzed: 08/01/2025 17:54
Soil Aliquot Vol:	Dilution Factor: 1
Soil Extract Vol.:	GC Column: R-624SilMS 30m ID: 0.25 (mm)
Purge Volume: 25.0 (mL)	Heated Purge: (Y/N) N pH:
% Moisture: % Solids:	Level: (low/med) Low
Analysis Batch No.: 679324	Units: ug/L
Preparation Batch No.:	Instrument ID: 19094

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	5.62		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	5.23		1.0	0.10
156-60-5	trans-1,2-Dichloroethene	5.28		1.0	0.80
79-01-6	Trichloroethene	5.29		1.0	0.30
75-01-4	Vinyl chloride	4.96		1.0	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X20.D
 Lims ID: 410-234463-A-3 MSD
 Client ID: 5W7B
 Sample Type: MSD
 Inject. Date: 01-Aug-2025 17:54:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0155244-021
 Operator ID: ecr105096 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:50:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.824	1.825	-0.001	100	202762	5.00	4.94	
5 Chloromethane	50	2.007	2.014	-0.007	99	239599	5.00	4.42	
7 Butadiene	39	2.099	2.099	0.000	91	305064	5.00	5.85	
6 Vinyl chloride	62	2.117	2.117	0.000	98	243398	5.00	4.96	
9 Bromomethane	94	2.391	2.392	-0.001	90	177275	5.00	5.09	
10 Chloroethane	64	2.471	2.471	0.000	100	166971	5.00	5.42	
11 Dichlorofluoromethane	67	2.684	2.684	0.000	97	437777	5.00	5.31	
12 Trichlorofluoromethane	101	2.696	2.696	0.000	98	346412	5.00	5.44	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.025	3.032	-0.007	94	272732	5.00	5.75	
17 1,1-Dichloroethene	96	3.245	3.251	-0.006	97	180523	5.00	5.62	
19 Acetone	43	3.288	3.282	0.006	90	218712	62.6	42.7	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.282	3.288	-0.006	92	188154	5.00	5.96	
21 Iodomethane	142	3.428	3.422	0.006	98	296043	5.00	4.80	
23 Carbon disulfide	76	3.531	3.532	-0.001	99	474047	5.00	4.81	
24 Methyl acetate	43	3.684	3.666	0.018	27	37789	5.00	3.09	
26 3-Chloro-1-propene	41	3.684	3.678	0.006	93	305554	5.00	4.81	
27 Methylene Chloride	84	3.848	3.849	-0.001	94	177596	5.00	5.27	
* 28 t-Butyl alcohol-d10 (IS)	65	3.855	3.867	-0.012	94	72126	50.0	50.0	
29 2-Methyl-2-propanol	59	3.964	3.970	-0.006	99	61502	50.0	39.2	
31 Acrylonitrile	53	4.184	4.184	0.000	94	109253	25.0	17.2	
32 Methyl tert-butyl ether	73	4.214	4.214	0.000	96	349333	5.00	4.73	
33 trans-1,2-Dichloroethene	96	4.239	4.233	0.006	97	187854	5.00	5.28	
34 Hexane	57	4.653	4.647	0.006	93	309270	5.00	5.72	
36 1,1-Dichloroethane	63	4.879	4.885	-0.006	96	367500	5.00	5.34	
37 Isopropyl ether	45	4.946	4.946	0.000	97	581601	5.00	5.01	
38 2-Chloro-1,3-butadiene	53	5.001	4.995	0.006	91	306318	5.00	5.15	
40 Tert-butyl ethyl ether	59	5.488	5.488	0.000	98	488752	5.00	4.85	
41 2-Butanone (MEK)	43	5.696	5.696	0.000	100	384937	62.6	43.9	
42 cis-1,2-Dichloroethene	96	5.726	5.732	-0.006	84	202786	5.00	5.23	
43 2,2-Dichloropropane	77	5.738	5.738	0.000	88	303809	5.00	5.05	
44 Propionitrile	54	5.805	5.787	0.018	95	46293	37.5	21.2	
47 Methacrylonitrile	67	6.000	5.994	0.006	92	258897	37.5	29.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 Chlorobromomethane	128	6.068	6.068	0.000	97	76827	5.00	5.24	
49 Tetrahydrofuran	71	6.080	6.080	0.000	81	46108	25.0	18.7	
50 Chloroform	83	6.220	6.226	-0.006	94	378550	5.00	5.92	
\$ 52 Dibromofluoromethane (Surr)	113	6.439	6.440	-0.001	94	308670	10.0	10.5	
53 1,1,1-Trichloroethane	97	6.452	6.458	-0.006	99	309380	5.00	5.18	
54 Cyclohexane	56	6.555	6.555	0.000	92	392992	5.00	5.35	
55 1,1-Dichloropropene	75	6.671	6.677	-0.006	96	289052	5.00	5.24	
56 Carbon tetrachloride	117	6.677	6.677	0.000	85	270974	5.00	5.37	
57 Isobutyl alcohol	41	6.842	6.830	0.012	96	48599	125.1	79.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.903	6.903	0.000	83	57104	10.0	10.7	
59 Benzene	78	6.933	6.933	0.000	97	802054	5.00	5.11	
60 1,2-Dichloroethane	62	7.012	7.006	0.006	97	173080	5.00	4.91	
63 Tert-amyl methyl ether	73	7.134	7.135	0.000	99	414189	5.00	4.75	
* 64 Fluorobenzene (IS)	96	7.348	7.348	0.000	98	1265988	10.0	10.0	
65 n-Heptane	43	7.372	7.372	0.000	94	331281	5.00	5.80	
67 n-Butanol	56	7.756	7.738	0.018	90	79975	250.2	183.5	
68 Trichloroethene	95	7.842	7.842	0.000	98	217136	5.00	5.29	
69 Methylcyclohexane	83	8.153	8.159	-0.007	94	382999	5.00	5.36	
70 1,2-Dichloropropane	63	8.177	8.171	0.006	87	202376	5.00	5.37	
71 2-ethoxy-2-methyl butane	87	8.189	8.195	-0.006	90	273426	5.00	4.79	
72 Methyl methacrylate	69	8.287	8.281	0.006	92	63723	5.00	3.54	
73 1,4-Dioxane	88	8.287	8.281	0.006	33	11338	125.1	130.5	
74 Dibromomethane	93	8.293	8.287	0.006	95	74080	5.00	5.30	
76 Dichlorobromomethane	83	8.530	8.531	-0.001	99	208085	5.00	4.95	
77 2-Nitropropane	41	8.805	8.799	0.006	97	15618	5.00	2.80	
79 1-Bromo-2-chloroethane	63	8.933	8.927	0.006	98	192828	5.00	5.73	
80 cis-1,3-Dichloropropene	75	9.104	9.098	0.006	96	244852	5.00	4.76	
82 4-Methyl-2-pentanone (MIBK)	43	9.280	9.280	0.000	97	1086621	62.6	43.5	
\$ 83 Toluene-d8 (Surr)	98	9.427	9.427	0.000	94	1347237	10.0	9.59	
84 Toluene	92	9.506	9.512	-0.006	98	514521	5.00	4.73	
85 trans-1,3-Dichloropropene	75	9.792	9.786	0.006	93	191057	5.00	4.43	
104 Ethyl methacrylate	69	9.866	9.860	0.006	91	141851	5.00	4.66	
106 1,1,2-Trichloroethane	97	10.000	10.000	0.000	91	109797	5.00	4.54	
107 Tetrachloroethene	166	10.091	10.091	0.000	98	234246	5.00	4.56	
108 1,3-Dichloropropane	76	10.170	10.164	0.006	91	196882	5.00	4.68	
109 2-Hexanone	43	10.225	10.225	0.000	97	741096	62.6	46.4	
111 Chlorodibromomethane	129	10.390	10.390	0.000	89	133172	5.00	4.46	
112 Ethylene Dibromide	107	10.506	10.506	0.000	99	97486	5.00	4.65	
* 113 Chlorobenzene-d5 (IS)	117	10.951	10.951	0.000	87	1009409	10.0	10.0	
114 1-Chlorohexane	91	10.963	10.963	0.000	97	300172	5.00	4.38	
115 Chlorobenzene	112	10.975	10.975	0.000	94	531216	5.00	4.61	
116 1,1,1,2-Tetrachloroethane	131	11.060	11.061	-0.001	95	172019	5.00	4.54	
117 Ethylbenzene	91	11.067	11.067	0.000	99	999748	5.00	4.65	
119 m-Xylene & p-Xylene	106	11.189	11.189	-0.001	100	755430	10.0	9.25	
120 o-Xylene	106	11.524	11.524	0.000	96	356404	5.00	4.61	
121 Styrene	104	11.536	11.536	0.000	95	557004	5.00	4.48	
122 Bromoform	173	11.694	11.695	-0.001	97	68397	5.00	4.43	
123 Isopropylbenzene	105	11.829	11.829	0.000	96	988584	5.00	5.23	
\$ 126 4-Bromofluorobenzene (Surr)	95	11.975	11.975	0.000	91	501723	10.0	9.89	
127 1,1,2,2-Tetrachloroethane	83	12.079	12.073	0.006	93	127534	5.00	4.54	
128 Bromobenzene	156	12.091	12.091	0.000	96	207933	5.00	4.56	
129 trans-1,4-Dichloro-2-butene	53	12.103	12.103	0.000	93	133848	25.0	14.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 1,2,3-Trichloropropane	110	12.121	12.121	0.000	81	32644	5.00	4.64	
131 N-Propylbenzene	91	12.164	12.164	0.000	99	1178801	5.00	4.65	
132 2-Chlorotoluene	126	12.237	12.237	0.000	97	221503	5.00	4.58	
133 1,3,5-Trimethylbenzene	105	12.304	12.304	0.000	94	809148	5.00	4.56	
134 4-Chlorotoluene	126	12.335	12.329	0.006	97	213433	5.00	4.38	
135 tert-Butylbenzene	134	12.542	12.542	0.000	94	170121	5.00	4.35	
137 1,2,4-Trimethylbenzene	105	12.585	12.585	0.000	98	800568	5.00	4.45	
138 sec-Butylbenzene	105	12.706	12.707	-0.001	94	1080668	5.00	4.73	
139 1,3-Dichlorobenzene	146	12.810	12.804	0.006	98	417730	5.00	4.58	
140 4-Isopropyltoluene	119	12.816	12.816	0.000	97	890593	5.00	4.55	
* 141 1,4-Dichlorobenzene-d4	152	12.865	12.865	0.000	94	569559	10.0	10.0	
142 1,4-Dichlorobenzene	146	12.883	12.883	0.000	95	419931	5.00	4.47	
143 1,2,3-Trimethylbenzene	120	12.889	12.889	0.000	99	343183	5.00	4.52	
144 Benzyl chloride	126	12.963	12.957	0.006	98	48711	5.00	4.40	
145 p-Diethylbenzene	119	13.097	13.091	0.006	95	548080	5.00	4.78	
146 n-Butylbenzene	92	13.115	13.115	0.000	97	449570	5.00	4.87	
147 1,2-Dichlorobenzene	146	13.139	13.139	0.000	99	366347	5.00	4.61	
149 1,2-Dibromo-3-Chloropropane	155	13.688	13.688	0.000	85	16140	5.00	4.33	
150 1,3,5-Trichlorobenzene	180	13.816	13.816	0.000	98	316975	5.00	4.74	
151 1,2,4-Trichlorobenzene	180	14.237	14.237	0.000	94	255299	5.00	4.77	
152 Hexachlorobutadiene	225	14.322	14.322	0.000	96	140792	5.00	5.32	
153 Naphthalene	128	14.413	14.414	-0.001	97	389273	5.00	4.44	
154 1,2,3-Trichlorobenzene	180	14.554	14.554	0.000	95	209126	5.00	4.75	
157 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_LCS_VOC#1_00231

Amount Added: 5.38

Units: uL

MSV_QC_Gas826_00272

Amount Added: 5.38

Units: uL

MSV_LLcentISS_00017

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Aug-2025 09:50:21

Chrom Revision: 2.3 25-Jul-2025 13:52:40

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X20.D

Injection Date: 01-Aug-2025 17:54:30

Instrument ID: 19094

Operator ID: ecr105096

Lims ID: 410-234463-A-3 MSD

Worklist Smp#: 21

Client ID: 5W7B

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

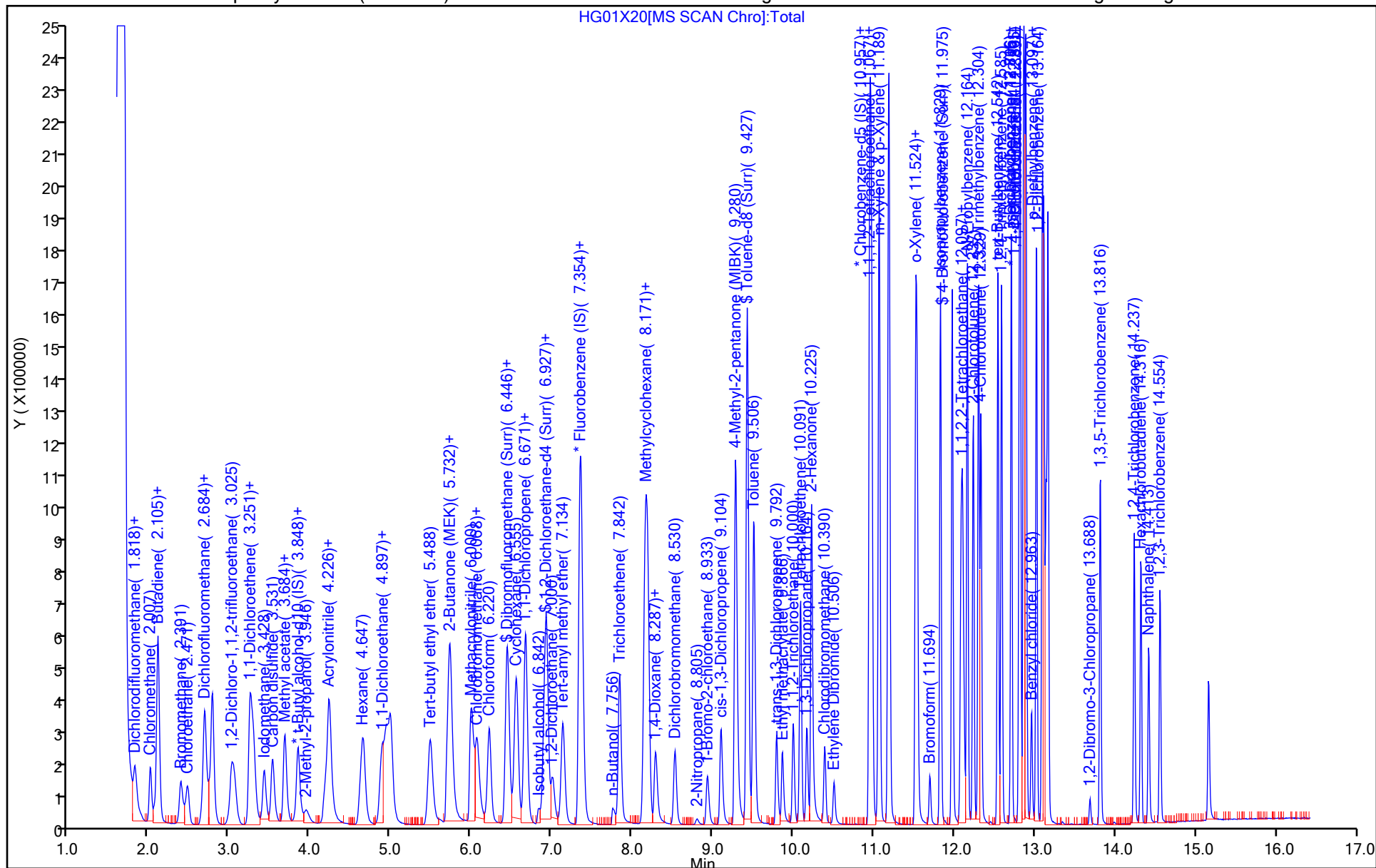
ALS Bottle#: 20

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\HG01X20.D
Lims ID: 410-234463-A-3 MSD
Client ID: 5W7B
Sample Type: MSD
Inject. Date: 01-Aug-2025 17:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0155244-021
Operator ID: ecr105096 Instrument ID: 19094
Method: \\chromfs\Lancaster\ChromData\19094\20250801-155244.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2025 09:46:34 Calib Date: 10-Jul-2025 06:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20250710-152965.b\HL09X08.D
Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1679

First Level Reviewer: FQ4L

Date: 04-Aug-2025 09:50:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.5	105.05
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.17
\$ 83 Toluene-d8 (Surr)	10.0	9.59	95.94
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.89	98.94

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Start Date: 07/09/2025 03:43

Analysis Batch Number: 668589

End Date: 07/09/2025 07:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-668589/1		07/09/2025 03:43	1	HL08T01.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/13		07/09/2025 04:17	1	HL08X12.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/14		07/09/2025 04:37	1	HL08X13.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/15		07/09/2025 04:58	1	HL08X14.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/16		07/09/2025 05:18	1	HL08X15.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/17		07/09/2025 05:39	1	HL08X16.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/18		07/09/2025 06:00	1	HL08X17.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/19		07/09/2025 06:21	1	HL08X18.D	R-624SiIMS 30m 0.25 (mm)
ICIS 410-668589/20		07/09/2025 06:41	1	HL08X19.D	R-624SiIMS 30m 0.25 (mm)
IC 410-668589/21		07/09/2025 07:02	1	HL08X20.D	R-624SiIMS 30m 0.25 (mm)
ICV 410-668589/23		07/09/2025 07:43	1	HL08X22.D	R-624SiIMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: 19094

Start Date: 08/01/2025 10:34

Analysis Batch Number: 679324

End Date: 08/01/2025 20:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-679324/1		08/01/2025 10:34	1	HG01T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-679324/3		08/01/2025 11:09	1	HG01X02.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-679324/4		08/01/2025 11:30	1	HG01X03.D	R-624Si1MS 30m 0.25 (mm)
LCSD 410-679324/5		08/01/2025 11:51	1	HG01X04.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ (QC)		08/01/2025 12:11	1		R-624Si1MS 30m 0.25 (mm)
MB 410-679324/7		08/01/2025 12:32	1	HG01X06.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ (QC)		08/01/2025 13:21	1		R-624Si1MS 30m 0.25 (mm)
410-234463-9	Trip Blank 1	08/01/2025 14:07	1	HG01X09.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 14:28	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 14:48	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 15:09	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 15:29	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 15:50	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 16:11	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 16:31	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ (Client)		08/01/2025 16:52	1		R-624Si1MS 30m 0.25 (mm)
410-234463-3	5W7B	08/01/2025 17:13	1	HG01X18.D	R-624Si1MS 30m 0.25 (mm)
410-234463-3 MS	5W7B MS	08/01/2025 17:33	1	HG01X19.D	R-624Si1MS 30m 0.25 (mm)
410-234463-3 MSD	5W7B MSD	08/01/2025 17:54	1	HG01X20.D	R-624Si1MS 30m 0.25 (mm)
410-234463-1	5W8B	08/01/2025 18:15	1	HG01X21.D	R-624Si1MS 30m 0.25 (mm)
410-234463-2	5W5B	08/01/2025 18:35	1	HG01X22.D	R-624Si1MS 30m 0.25 (mm)
410-234463-4	5WC21	08/01/2025 18:56	1	HG01X23.D	R-624Si1MS 30m 0.25 (mm)
410-234463-5	5WDUP	08/01/2025 19:17	1	HG01X24.D	R-624Si1MS 30m 0.25 (mm)
410-234463-6	5WC22	08/01/2025 19:37	1	HG01X25.D	R-624Si1MS 30m 0.25 (mm)
410-234463-7	5WC23	08/01/2025 19:58	1	HG01X26.D	R-624Si1MS 30m 0.25 (mm)
410-234463-8	5W12A	08/01/2025 20:18	1	HG01X27.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 668589 Batch Start Date: 07/09/25 03:43 Batch Analyst: Riehl, ChelseaBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00010	MSV_LCS_ACROL 00235	MSV_LCS_EE 00011
BFB 410-668589/1		8260D			1 uL	1 uL				
IC 410-668589/13		8260D			25 mL	25 mL	431127			
IC 410-668589/14		8260D			25 mL	25 mL	431127			
IC 410-668589/15		8260D			25 mL	25 mL	431127			
IC 410-668589/16		8260D			25 mL	25 mL	431127			
IC 410-668589/17		8260D			25 mL	25 mL	431127			
IC 410-668589/18		8260D			25 mL	25 mL	431127			
IC 410-668589/19		8260D			25 mL	25 mL	431127			
ICIS 410-668589/20		8260D			25 mL	25 mL	431127			
IC 410-668589/21		8260D			25 mL	25 mL	431127			
ICV 410-668589/23		8260D			25 mL	25 mL	431127	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_LCS_Penta 00057	MSV_LCS_VOC#1 00227	MSV_LL_#1_826 00171	MSV_LL_#2_826 00185	MSV_LL_GAS826 00279	MSV_LLcentISS 00016
BFB 410-668589/1		8260D								
IC 410-668589/13		8260D					0.4 uL	0.4 uL	0.4 uL	5 uL
IC 410-668589/14		8260D					1.2 uL	1.2 uL	1.2 uL	5 uL
IC 410-668589/15		8260D					2 uL	2 uL	2 uL	5 uL
IC 410-668589/16		8260D					2 uL	2 uL	2 uL	5 uL
IC 410-668589/17		8260D					2 uL	2 uL	2 uL	5 uL
IC 410-668589/18		8260D					2 uL	2 uL	2 uL	5 uL
IC 410-668589/19		8260D					5 uL	5 uL	5 uL	5 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 668589 Batch Start Date: 07/09/25 03:43 Batch Analyst: Riehl, ChelseaBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_LCS_Penta 00057	MSV_LCS_VOC#1 00227	MSV_LL_#1_826 00171	MSV_LL_#2_826 00185	MSV_LL_GAS826 00279	MSV_LLcentISS 00016
ICIS 410-668589/20		8260D					10 uL	10 uL	10 uL	5 uL
IC 410-668589/21		8260D					25 uL	25 uL	25 uL	5 uL
ICV 410-668589/23		8260D			12.5 uL	12.5 uL				5 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_QC_Gas826 00268	MSV_V_BFB 00019				
BFB 410-668589/1		8260D				1 uL				
IC 410-668589/13		8260D								
IC 410-668589/14		8260D								
IC 410-668589/15		8260D								
IC 410-668589/16		8260D								
IC 410-668589/17		8260D								
IC 410-668589/18		8260D								
IC 410-668589/19		8260D								
ICIS 410-668589/20		8260D								
IC 410-668589/21		8260D								
ICV 410-668589/23		8260D			12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 679324 Batch Start Date: 08/01/25 10:34 Batch Analyst: Ressler, EricBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCh eck	Headspace	Lot#Vial
BFB 410-679324/1		8260D			1 uL	1 uL				
CCVIS 410-679324/3		8260D			25 mL	25 mL				2810
LCS 410-679324/4		8260D			25 mL	25 mL				2810
LCSD 410-679324/5		8260D			25 mL	25 mL				2810
MB 410-679324/7		8260D			25 mL	25 mL				2810
410-234463-A-9	Trip Blank 1	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-B-3	5W7B	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-A-3 MS	5W7B	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-A-3 MSD	5W7B	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-B-1	5W8B	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-A-2	5W5B	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-B-4	5WC21	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-A-5	5WDUP	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-B-6	5WC22	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-A-7	5WC23	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	
410-234463-B-8	5W12A	8260D	Water	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_LCS_VOC#1 00231	MSV_LL_#1_826 00172	MSV_LL_#2_826 00187	MSV_LL_GAS826 00282	MSV_LLcentISS 00017	MSV_QC_Gas826 00272
BFB 410-679324/1		8260D								
CCVIS 410-679324/3		8260D				20 uL	20 uL	20 uL	5 uL	
LCS 410-679324/4		8260D			12.5 uL				5 uL	12.5 uL
LCSD 410-679324/5		8260D			12.5 uL				5 uL	12.5 uL
MB 410-679324/7		8260D							5 uL	
410-234463-A-9	Trip Blank 1	8260D	Water	T					5 uL	
410-234463-B-3	5W7B	8260D	Water	T					5 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D

Page 1 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 679324 Batch Start Date: 08/01/25 10:34 Batch Analyst: Ressler, EricBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_LCS_VOC#1 00231	MSV_LL_#1_826 00172	MSV_LL_#2_826 00187	MSV_LL_GAS826 00282	MSV_LLcentISS 00017	MSV_QC_Gas826 00272
410-234463-A-3 MS	5W7B	8260D	Water	T	5.38 uL				5 uL	5.38 uL
410-234463-A-3 MSD	5W7B	8260D	Water	T	5.38 uL				5 uL	5.38 uL
410-234463-B-1	5W8B	8260D	Water	T					5 uL	
410-234463-A-2	5W5B	8260D	Water	T					5 uL	
410-234463-B-4	5WC21	8260D	Water	T					5 uL	
410-234463-A-5	5WDUP	8260D	Water	T					5 uL	
410-234463-B-6	5WC22	8260D	Water	T					5 uL	
410-234463-A-7	5WC23	8260D	Water	T					5 uL	
410-234463-B-8	5W12A	8260D	Water	T					5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_V_BFB 00019					
BFB 410-679324/1		8260D			1 uL					
CCVIS 410-679324/3		8260D								
LCS 410-679324/4		8260D								
LCSD 410-679324/5		8260D								
MB 410-679324/7		8260D								
410-234463-A-9	Trip Blank 1	8260D	Water	T						
410-234463-B-3	5W7B	8260D	Water	T						
410-234463-A-3 MS	5W7B	8260D	Water	T						
410-234463-A-3 MSD	5W7B	8260D	Water	T						
410-234463-B-1	5W8B	8260D	Water	T						
410-234463-A-2	5W5B	8260D	Water	T						
410-234463-B-4	5WC21	8260D	Water	T						
410-234463-A-5	5WDUP	8260D	Water	T						
410-234463-B-6	5WC22	8260D	Water	T						
410-234463-A-7	5WC23	8260D	Water	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D

Page 2 of 3

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 679324 Batch Start Date: 08/01/25 10:34 Batch Analyst: Ressler, EricBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	MSV_V_BFB 000I9					
410-234463-B-8	5W12A	8260D	Water	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE

METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job Number: 410-234463-1

SDG No. :

Project: 3Q 2025 GWCorrective Action Monitoring Event-HWMU5

Client Sample ID

5W8B

5W5B

5W7B

5WC21

5WDUP

5WC22

5WC23

5W12A

Lab Sample ID

410-234463-1

410-234463-2

410-234463-3

410-234463-4

410-234463-5

410-234463-6

410-234463-7

410-234463-8

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5W8B	Lab Sample ID: 410-234463-1
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG ID.:	
Matrix: Water	Date Sampled: 07/28/2025 10:30
Reporting Basis: WET	Date Received: 07/29/2025 09:35
Preparation Batch Number: 681215	Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5W5B	Lab Sample ID: 410-234463-2
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG ID.:	
Matrix: Water	Date Sampled: 07/28/2025 12:50
Reporting Basis: WET	Date Received: 07/29/2025 09:35
Preparation Batch Number: 681215	Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID:	5W7B	Lab Sample ID:	410-234463-3
Lab Name:	Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.:	410-234463-1
SDG ID.:			
Matrix:	Water	Date Sampled:	07/28/2025 12:00
Reporting Basis:	WET	Date Received:	07/29/2025 09:35
Preparation Batch Number:	681215	Instrument ID:	E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	7.7	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5WC21	Lab Sample ID: 410-234463-4
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG ID.:	
Matrix: Water	Date Sampled: 07/28/2025 14:45
Reporting Basis: WET	Date Received: 07/29/2025 09:35
Preparation Batch Number: 681215	Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	14	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID:	5WDUP	Lab Sample ID:	410-234463-5
Lab Name:	Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.:	410-234463-1
SDG ID.:			
Matrix:	Water	Date Sampled:	07/28/2025 10:40
Reporting Basis:	WET	Date Received:	07/29/2025 09:35
Preparation Batch Number:	681215	Instrument ID:	E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	14	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5WC22	Lab Sample ID: 410-234463-6
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC	Job No.: 410-234463-1
SDG ID.:	
Matrix: Water	Date Sampled: 07/28/2025 13:35
Reporting Basis: WET	Date Received: 07/29/2025 09:35
Preparation Batch Number: 681215	Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	4.9	5.0	1.0	ug/L	J		1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5WC23
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
SDG ID.:
Matrix: Water
Reporting Basis: WET
Preparation Batch Number: 681215

Lab Sample ID: 410-234463-7
Job No.: 410-234463-1
Date Sampled: 07/28/2025 14:10
Date Received: 07/29/2025 09:35
Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 5W12A
Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
SDG ID.:
Matrix: Water
Reporting Basis: WET
Preparation Batch Number: 681215

Lab Sample ID: 410-234463-8
Job No.: 410-234463-1
Date Sampled: 07/28/2025 11:20
Date Received: 07/29/2025 09:35
Instrument ID: E08 - 30647

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-48-4	Cobalt	ND	5.0	1.0	ug/L			1	6020B

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

ICV Source: MT_MJ_ICV_00142

Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00231

Analyte	ICV 410-684021/4 08/11/2025 09:15				CCV 410-684021/12 08/11/2025 18:04				CCV 410-684021/22 08/11/2025 18:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Cobalt	238		250	95	246		250	98	247		250	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

ICV Source: MT_MJ_ICV_00142

Concentration Units: ug/L

CCV Source: MT_MJ_CCV_00231

Analyte	CCV 410-684021/49 08/11/2025 19:45				CCV 410-684021/55 08/11/2025 20:00				CCV 410-684021/64 08/11/2025 20:19			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Cobalt	244		250	98	243		250	97	245		250	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.:

Method: 6020B Instrument ID: E08 - 30647

Lab Sample ID: CRI 410-684021/6 Concentration Units: ug/L

CRQL Check Standard Source: MT_MJ_CRI-V_00220

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	0.504	0.482	J	96	80-120

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 410-684021/5 08/11/2025 09:20		CCB 410-684021/13 08/11/2025 18:08		CCB 410-684021/23 08/11/2025 18:37		CCB 410-684021/50 08/11/2025 19:49	
		Found	C	Found	C	Found	C	Found	C
Cobalt	0.50	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Environment
Testing, LLC

Job No.: 410-234463-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 410-684021/56 08/11/2025 20:04		CCB 410-684021/65 08/11/2025 20:24					
		Found	C	Found	C	Found	C	Found	C
Cobalt	0.50	ND		ND					

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICSA 410-684021/7

Instrument ID: E08 - 30647

Lab File ID: 026ICSA.d

ICS Source: MT_MJ_ICSA_00143

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Cobalt	0.220	0.260	
Aluminum	100000	91388	91
Antimony	0.140	0.234	
Arsenic	8.50	-0.0740	
Barium	0.390	0.449	
Beryllium	0.0200	0.0160	
Cadmium	0.480	0.164	
Calcium	300000	268255	89
Chromium	3.20	3.53	
Copper	0.860	0.0620	
Iron	250000	215315	86
Lead	0.120	0.110	
Magnesium	100000	88930	89
Manganese	0.500	0.650	
Molybdenum	2000	1986	99
Nickel	1.20	0.272	
Potassium	100000	89957	90
Selenium	0.580	0.0380	
Silver	0.200	0.0050	
Sodium	250000	222617	89
Strontium	1.70	2.59	
Thallium	0.0100	0.0080	
Tin	0.0600	0.341	
Titanium	2000	1866	93
Uranium	0.120	-0.0040	
Vanadium	0.460	-0.106	
Zinc	0.450	1.54	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICSAB 410-684021/8

Instrument ID: E08 - 30647

Lab File ID: 027ICSB.d

ICS Source: MT_MJ_ICSAB_00125

Concentration Units: ug/L

Analyte	True Solution AB	Found	
		Solution AB	Percent Recovery
Cobalt	200	182	91
Aluminum	100000	90031	90
Antimony		0.201	
Arsenic	100	89.1	89
Barium		0.326	
Beryllium		0.0090	
Cadmium	100	99.2	99
Calcium	300000	266516	89
Chromium	200	185	92
Copper	200	181	90
Iron	250000	211570	85
Lead		0.111	
Magnesium	100000	87733	88
Manganese	200	183	92
Molybdenum	2000	2014	101
Nickel	200	180	90
Potassium	100000	88639	89
Selenium	100	93.9	94
Silver	50.0	50.1	100
Sodium	250000	220646	88
Strontium	2.80	2.41	
Thallium		-0.0050	
Tin		0.941	
Titanium	2000	1839	92
Uranium		-0.0020	
Vanadium	200	186	93
Zinc	100	92.6	93

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICSA 410-684021/10

Instrument ID: E08 - 30647

Lab File ID: 135ICSA.d

ICS Source: MT_MJ_ICSA_00143

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Cobalt	0.220	0.248	
Aluminum	100000	91820	92
Antimony	0.140	0.216	
Arsenic	8.50	0.0680	
Barium	0.390	0.221	
Beryllium	0.0200	0.0090	
Cadmium	0.480	0.157	
Calcium	300000	268876	90
Chromium	3.20	3.15	
Copper	0.860	0.0320	
Iron	250000	216078	86
Lead	0.120	0.0840	
Magnesium	100000	90537	91
Manganese	0.500	0.727	
Molybdenum	2000	2070	103
Nickel	1.20	0.306	
Potassium	100000	90175	90
Selenium	0.580	0.0340	
Silver	0.200	0.0130	
Sodium	250000	229428	92
Strontium	1.70	2.74	
Thallium	0.0100	-0.0110	
Tin	0.0600	0.668	
Titanium	2000	1847	92
Uranium	0.120	-0.0020	
Vanadium	0.460	-0.0490	
Zinc	0.450	1.15	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Lab Sample ID: ICSAB 410-684021/11

Instrument ID: E08 - 30647

Lab File ID: 136ICSB.d

ICS Source: MT_MJ_ICSAB_00125

Concentration Units: ug/L

Analyte	True Solution AB	Found	
		Solution AB	Percent Recovery
Cobalt	200	184	92
Aluminum	100000	90464	90
Antimony		0.155	
Arsenic	100	89.0	89
Barium		0.285	
Beryllium		0.0130	
Cadmium	100	100	100
Calcium	300000	267246	89
Chromium	200	188	94
Copper	200	181	90
Iron	250000	212469	85
Lead		0.101	
Magnesium	100000	89689	90
Manganese	200	183	92
Molybdenum	2000	2089	104
Nickel	200	182	91
Potassium	100000	90454	90
Selenium	100	96.2	96
Silver	50.0	51.0	102
Sodium	250000	227380	91
Thallium		-0.0120	
Tin		0.230	
Titanium	2000	1849	92
Uranium		-0.0040	
Vanadium	200	188	94
Zinc	100	91.8	92

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

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: 5W7B MS Lab ID: 410-234463-3 MS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Cobalt	482	7.7	500	95	80-125		6020B

SSR = Spiked Sample Result

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

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: 5W7B MSD Lab ID: 410-234463-3 MSD
Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC
SDG No.:
Matrix: Water Concentration Units: ug/L
% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Cobalt	481	500	95	80-125	0	20		6020B

SDR = Sample Duplicate Result

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

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: 5W7B DU Lab ID: 410-234463-3 DU
Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1
Environment Testing, LLC
SDG No.: _____
% Solids for Sample: _____ % Solids for Duplicate: _____
Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	Method
Cobalt	5.0	7.7	7.84	2		6020B

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

7A-IN
LINEAR RANGE CHECK STANDARD
METALS

Lab ID: LRC 410-684021/9

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Sample Matrix: _____

LCS Source: MT_MJ_LRC_00129

Analyte	(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Cobalt	2000	1830		91	90	110		6020B

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-681215/2-A

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

Sample Matrix: Water

LCS Source: MT_LCS-SPK-A_00055

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Cobalt	500	484		97	85	112		6020B

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job Number: 410-234463-1

SDG Number:

Matrix: Water

Instrument ID: E08 - 30647

Method: 6020B

MDL Date: 10/11/2021 12:05

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Cobalt	59	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job Number: 410-234463-1

SDG Number:

Matrix: Water

Instrument ID: E08 - 30647

Method: 6020B

XMDL Date: 04/09/2025 09:22

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Cobalt	59	0.5	0.156

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No: 410-234463-1

SDG No.:

Instrument ID: E08 - 30647

Date: 11/26/2024 16:40

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cobalt		2000	6020B

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-681215/1-A	08/07/2025 22:00	681215		50	50
LCS 410-681215/2-A	08/07/2025 22:00	681215		50	50
410-234463-3	08/07/2025 22:00	681215		50	50
410-234463-3 DU	08/07/2025 22:00	681215		50	50
410-234463-3 MS	08/07/2025 22:00	681215		50	50
410-234463-3 MSD	08/07/2025 22:00	681215		50	50
410-234463-1	08/07/2025 22:00	681215		50	50
410-234463-2	08/07/2025 22:00	681215		50	50
410-234463-4	08/07/2025 22:00	681215		50	50
410-234463-8	08/07/2025 22:00	681215		50	50
410-234463-5	08/07/2025 22:00	681215		50	50
410-234463-6	08/07/2025 22:00	681215		50	50
410-234463-7	08/07/2025 22:00	681215		50	50

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

SDG No. :

Analysis Method: 6020B

End Date: 08/11/2025 23:49

[illegible]

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

SDG No. :

Analysis Method: 6020B

End Date: 08/11/2025 23:49

[illegible]

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: E08 - 30647

Analysis Method: 6020B

Start Date: 08/11/2025 08:13

End Date: 08/11/2025 23:49

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				C	o																								
ZZZZZZ (Client)			20:58																										
ZZZZZZ (Client)			21:00																										
ZZZZZZ (Client)			21:01																										
CCV 410-684021/86			21:05																										
CCB 410-684021/87			21:09																										
ZZZZZZ (Client)			21:12																										
ZZZZZZ (Client)			21:13																										
ZZZZZZ (Client)			21:15																										
ZZZZZZ (Client)			21:16																										
ZZZZZZ (Client)			21:18																										
ZZZZZZ (Client)			21:19																										
ZZZZZZ (Client)			21:21																										
ZZZZZZ (Client)			21:22																										
ZZZZZZ (Client)			21:24																										
CCV 410-684021/97			21:28																										
CCB 410-684021/98			21:32																										
ZZZZZZ (Client)			21:34																										
ZZZZZZ (QC)			21:36																										
ZZZZZZ (QC)			21:37																										
ZZZZZZ (QC)			21:39																										
ZZZZZZ (Client)			21:40																										
ZZZZZZ (Client)			21:42																										
ZZZZZZ (Client)			21:43																										
ZZZZZZ (Client)			21:45																										
CCV 410-684021/107			21:49																										
CCB 410-684021/108			21:53																										
ZZZZZZ (Client)			21:55																										
ZZZZZZ (Client)			21:57																										
ZZZZZZ (Client)			21:58																										
ZZZZZZ (Client)			22:00																										
ZZZZZZ (Client)			22:01																										
ZZZZZZ (Client)			22:03																										
ZZZZZZ (Client)			22:04																										
CCV 410-684021/116			22:08																										
CCB 410-684021/117			22:12																										
ZZZZZZ (Client)			22:15																										
ZZZZZZ (QC)			22:17																										
ZZZZZZ (QC)			22:19																										
ZZZZZZ (QC)			22:21																										
ZZZZZZ (QC)			22:24																										
CCV 410-684021/123			22:28																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Instrument ID: E08 - 30647

Analysis Method: 6020B

Start Date: 08/11/2025 08:13

End Date: 08/11/2025 23:49

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				C	o																								
CCB 410-684021/124			22:32																										
ZZZZZZ (Client)			22:35																										
ZZZZZZ (QC)			22:37																										
ZZZZZZ (QC)			22:39																										
ZZZZZZ (QC)			22:41																										
ZZZZZZ (Client)			22:43																										
ZZZZZZ (QC)			22:46																										
CCV 410-684021/131			22:50																										
CCB 410-684021/132			22:54																										
ZZZZZZ (Client)			22:57																										
ZZZZZZ (QC)			22:59																										
ZZZZZZ (QC)			23:01																										
ZZZZZZ (QC)			23:03																										
ZZZZZZ (QC)			23:05																										
ZZZZZZ (Client)			23:08																										
ZZZZZZ (Client)			23:10																										
ZZZZZZ (QC)			23:12																										
ZZZZZZ (QC)			23:14																										
CCV 410-684021/142			23:19																										
CCB 410-684021/143			23:23																										
ZZZZZZ (Client)			23:25																										
ZZZZZZ (Client)			23:27																										
ZZZZZZ (Client)			23:30																										
ZZZZZZ (Client)			23:32																										
ZZZZZZ (Client)			23:34																										
ZZZZZZ (Client)			23:36																										
ZZZZZZ (Client)			23:38																										
ZZZZZZ (Client)			23:41																										
CCV 410-684021/152			23:45																										
CCB 410-684021/153			23:49																										

Prep Types:

R = Total Recoverable

14-IN
ICP-MS TUNE
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

ICP-MS Instrument ID: E08 - 30647

Analysis Date: 08/11/25

Lab ID: ITUNE 410-684021/1

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	% RSD	Q
Be-9	9	0.7987	0.595	
Mg-24	24	0.7715	0.391	
Co-59	59	0.7985	0.355	
In-115	115	0.7158	0.245	
Pb-208	208	0.7478	0.631	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Analysis Batch No.: 684021

ICP-MS Instrument ID: E08 - 30647

Start Date: 08/11/2025 End Date: 08/11/2025

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45/1	Q	Element Sc-45/2	Q	Element Sc-45/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-684021/3	09:13	100		101		97		99		97	
IC											
ICV 410-684021/4	09:15	98		100		94		98		101	
ICB 410-684021/5	09:20	97		101		96		99		101	
CRI 410-684021/6	09:23	100		99		97		101		99	
ICSA 410-684021/7	09:25	98		99		95		102		101	
ICSAB 410-684021/8	09:28	99		99		95		102		102	
LRC 410-684021/9	09:36	105		102		101		101		100	
ICSA 410-684021/10	17:44	99		98		90		100		98	
ICSAB 410-684021/11	17:46	99		99		97		100		100	
CCV 410-684021/12	18:04	99		105		97		97		100	
CCB 410-684021/13	18:08	96		105		95		97		103	
MB 410-681215/1-A	18:19	97		106		97		97		106	
LCS 410-681215/2-A	18:21	99		106		100		100		106	
CCV 410-684021/22	18:32	97		107		98		96		102	
CCB 410-684021/23	18:37	95		103		95		97		105	
CCV 410-684021/49	19:45	93		106		96		94		102	
CCB 410-684021/50	19:49	93		103		95		95		101	
410-234463-3	19:52	94		108		97		97		107	
410-234463-3 DU	19:53	94		105		99		98		105	
410-234463-3 MS	19:55	93		107		99		95		105	
410-234463-3 MSD	19:56	94		106		96		96		105	
CCV 410-684021/55	20:00	95		104		97		95		101	
CCB 410-684021/56	20:04	94		103		93		95		100	
410-234463-1	20:07	90		106		97		95		104	
410-234463-2	20:08	96		105		95		101		106	
410-234463-4	20:10	98		106		96		103		106	
410-234463-8	20:11	89		105		97		94		107	
410-234463-5	20:13	94		105		95		98		106	
410-234463-6	20:14	89		107		97		93		105	
410-234463-7	20:16	94		107		93		95		105	
CCV 410-684021/64	20:19	95		105		97		95		100	
CCB 410-684021/65	20:24	93		104		96		94		102	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Analysis Batch No.: 684021

ICP-MS Instrument ID: E08 - 30647

Start Date: 08/11/2025 End Date: 08/11/2025

Analyte	Mass	Internal Standard Used:				
		Element In-115/2 115	Element In-115/3 115	Element Tb-159 159	Element Bi-209 209	Element Sc-45/1 45
Cobalt	59					
Aluminum	27					
Antimony	121		X			
Arsenic	75					
Barium	137		X			
Beryllium	9					
Cadmium	111		X			
Calcium	44					
Chromium	52					
Copper	63					
Iron	57					
Lead	208			X		
Magnesium	24					
Manganese	55					
Molybdenum	98		X			
Nickel	60					
Potassium	39					
Selenium	78					
Silver	107		X			
Sodium	23					
Strontium	88		X			
Thallium	205			X		
Tin	120		X			
Titanium	47					
Uranium	238			X		
Vanadium	51					
Zinc	66					
Internal Standard Name on Instrument		In-115 (IS)	In-115 (IS)	Tb-159 (IS)	Bi-209 (IS)	Sc-45 (IS)

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Analysis Batch No.: 684021

ICP-MS Instrument ID: E08 - 30647

Start Date: 08/11/2025 End Date: 08/11/2025

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In-115/ 2	Q	Element In-115/ 3	Q	Element Tb-159	Q	Element Bi-209	Q
STD1 410-684021/3	09:13	95		101		100		101		99	
IC											
ICV 410-684021/4	09:15	96		101		100		99		101	
ICB 410-684021/5	09:20	100		99		99		100		100	
CRI 410-684021/6	09:23	98		100		100		100		101	
ICSA 410-684021/7	09:25	98		97		98		99		97	
ICSAB 410-684021/8	09:28	100		96		97		99		96	
LRC 410-684021/9	09:36	98		127		102		100		97	
ICSA 410-684021/10	17:44	93		94		89		92		90	
ICSAB 410-684021/11	17:46	96		96		89		93		91	
CCV 410-684021/12	18:04	95		104		95		96		95	
CCB 410-684021/13	18:08	96		103		93		94		95	
MB 410-681215/1-A	18:19	98		106		96		95		97	
LCS 410-681215/2-A	18:21	99		107		97		95		96	
CCV 410-684021/22	18:32	95		105		93		94		96	
CCB 410-684021/23	18:37	94		104		94		92		94	
CCV 410-684021/49	19:45	95		104		93		92		93	
CCB 410-684021/50	19:49	96		102		91		91		92	
410-234463-3	19:52	98		106		94		91		96	
410-234463-3 DU	19:53	96		104		93		92		95	
410-234463-3 MS	19:55	97		106		94		92		95	
410-234463-3 MSD	19:56	97		106		94		92		95	
CCV 410-684021/55	20:00	95		103		91		92		93	
CCB 410-684021/56	20:04	92		100		90		91		91	
410-234463-1	20:07	96		104		93		91		94	
410-234463-2	20:08	98		104		93		91		96	
410-234463-4	20:10	96		103		93		92		94	
410-234463-8	20:11	96		103		90		92		94	
410-234463-5	20:13	97		104		92		92		93	
410-234463-6	20:14	97		102		93		93		92	
410-234463-7	20:16	93		105		91		92		91	
CCV 410-684021/64	20:19	93		104		91		93		93	
CCB 410-684021/65	20:24	94		103		92		91		93	
IS Name on Instrument											

15A-IN
ICP-MS INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-234463-1

SDG No.:

Analysis Batch No.: 684021

ICP-MS Instrument ID: E08 - 30647

Start Date: 08/11/2025 End Date: 08/11/2025

Analyte	Mass	Internal Standard Used:				
		Element Sc-45/2 45	Element Sc-45/3 45	Element Ge/1 72	Element Ge/2 72	Element Ge/3 72
Cobalt	59					X
Aluminum	27					X
Antimony	121					
Arsenic	75					X
Barium	137					
Beryllium	9			X		
Cadmium	111					
Calcium	44					X
Chromium	52					X
Copper	63					X
Iron	57					X
Lead	208					
Magnesium	24					X
Manganese	55					X
Molybdenum	98					
Nickel	60					X
Potassium	39					X
Selenium	78				X	
Silver	107					
Sodium	23					X
Strontium	88					
Thallium	205					
Tin	120					
Titanium	47					X
Uranium	238					
Vanadium	51					X
Zinc	66					X
Internal Standard Name on Instrument		Sc-45 (IS)	Sc-45 (IS)	Ge Internal Standard	Ge Internal Standard	Ge Internal Standard

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-234463-1

SDG No.: _____

Batch Number: 681215 Batch Start Date: 08/07/25 22:00 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 08/08/25 02:00

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00053	MP_1:1HNO3 00088	MT_LCS-SPK-A 00055	MT_LCS-SPK-B 00055
MB 410-681215/1		3005A, 6020B			50 mL	50 mL	5 mL	2 mL		
LCS 410-681215/2		3005A, 6020B			50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-234463-E-3	5W7B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-3 DU	5W7B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-3 MS	5W7B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-234463-E-3 MSD	5W7B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
410-234463-E-1	5W8B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-2	5W5B	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-4	5WC21	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-8	5W12A	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-5	5WDUP	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-6	5WC22	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		
410-234463-E-7	5WC23	3005A, 6020B	Water	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Tube/Cup ID	2408204
Pipette/Syringe/Dispenser ID	G20054G
Pipette Tip Lot ID	L208595R
Digestion Unit ID	14
Thermometer ID	3906
Temperature - Uncorrected - Start	96 Degrees C
Temperature - Corrected - Start	95 Degrees C
Temperature - Uncorrected - End	96 Degrees C
Temperature - Corrected - End	95 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Quantitation Report

Data File Name 021CALB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:11:15 AM
Sample Name ICIS 8061842
Sample Type CalBik
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

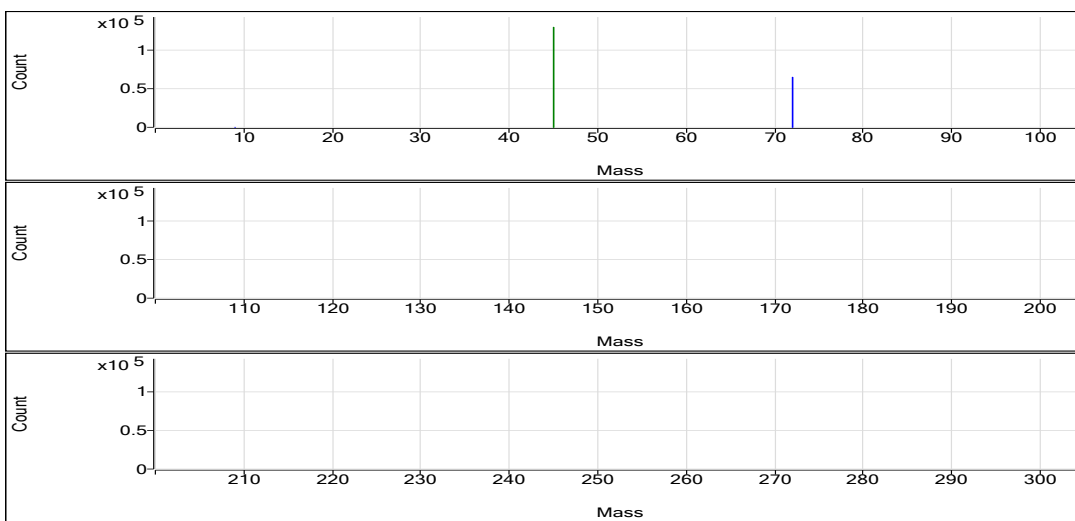
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.000	ppb	N/A	51.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.000	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	0.000	ppb	N/A	8218.93	0.1731	Pulse	0.1000	3
Mg	24	72	He	0.000	ppb	N/A	310.01	0.0065	Pulse	0.1000	3
Al	27	72	He	0.000	ppb	N/A	110.00	0.0023	Pulse	0.1000	3
K	39	72	He	0.000	ppb	N/A	16507.14	0.3475	Pulse	0.5000	3
Ca	44	72	He	0.000	ppb	N/A	133.33	0.0028	Pulse	0.5000	3
Ti	47	72	He	0.000	ppb	N/A	5.33	0.0001	Pulse	0.5000	3
V	51	72	He	0.000	ppb	N/A	394.68	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.000	ppb	N/A	1023.40	0.0216	Pulse	0.1000	3
Mn	55	72	He	0.000	ppb	N/A	110.00	0.0023	Pulse	0.5000	3
Fe	57	72	He	0.000	ppb	N/A	130.01	0.0027	Pulse	0.1000	3
Co	59	72	He	0.000	ppb	N/A	91.33	0.0019	Pulse	0.5000	3
Ni	60	72	He	0.000	ppb	N/A	149.33	0.0031	Pulse	0.5000	3
Cu	63	72	He	0.000	ppb	N/A	177.33	0.0037	Pulse	0.5000	3
Zn	66	72	He	0.000	ppb	N/A	96.67	0.0020	Pulse	0.5000	3
As	75	72	He	0.000	ppb	N/A	36.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	166.68	0.0041	Pulse	0.1000	3
Mo	98	115	He	0.000	ppb	N/A	160.01	0.0039	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	2493.62	0.0609	Pulse	0.1000	3
Sb	121	115	He	0.000	ppb	N/A	22.22	0.0005	Pulse	0.3000	3
Ba	137	115	He	0.000	ppb	N/A	46.67	0.0011	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	93.34	0.0006	Pulse	0.1000	3
Pb	208	159	He	0.000	ppb	N/A	270.01	0.0017	Pulse	0.1000	3
U	238	159	He	0.000	ppb	N/A	126.67	0.0008	Pulse	0.1000	3

ISTD Table:

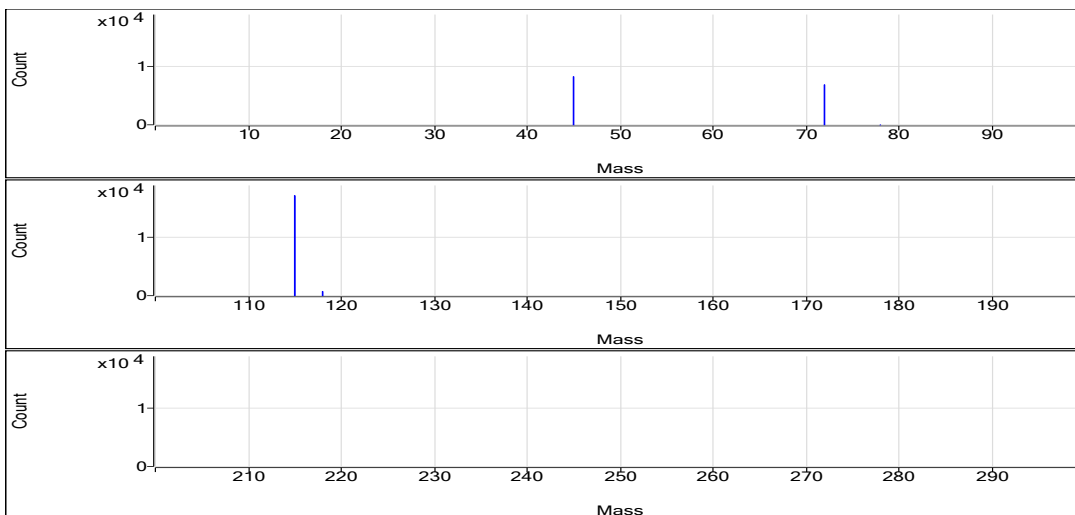
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1307129.88	1.3	100.0	Analog	0.1000	3
No Gas	Ge	72	655293.32	0.2	100.0	Pulse	0.1000	3
H2	Sc	45	82152.61	1.9	100.0	Pulse	0.1000	3
H2	Ge	72	68338.75	0.9	100.0	Pulse	0.1000	3
H2	In	115	170600.08	0.4	100.0	Pulse	0.1000	3
He	Sc	45	25610.70	3.6	100.0	Pulse	0.1000	3
He	Ge	72	47511.31	1.0	100.0	Pulse	0.1000	3
He	In	115	40944.11	1.4	100.0	Pulse	0.1000	3
He	Tb	159	159440.36	0.9	100.0	Pulse	0.1000	3
He	Bi	209	116957.24	1.0	100.0	Pulse	0.1000	3

No Gas

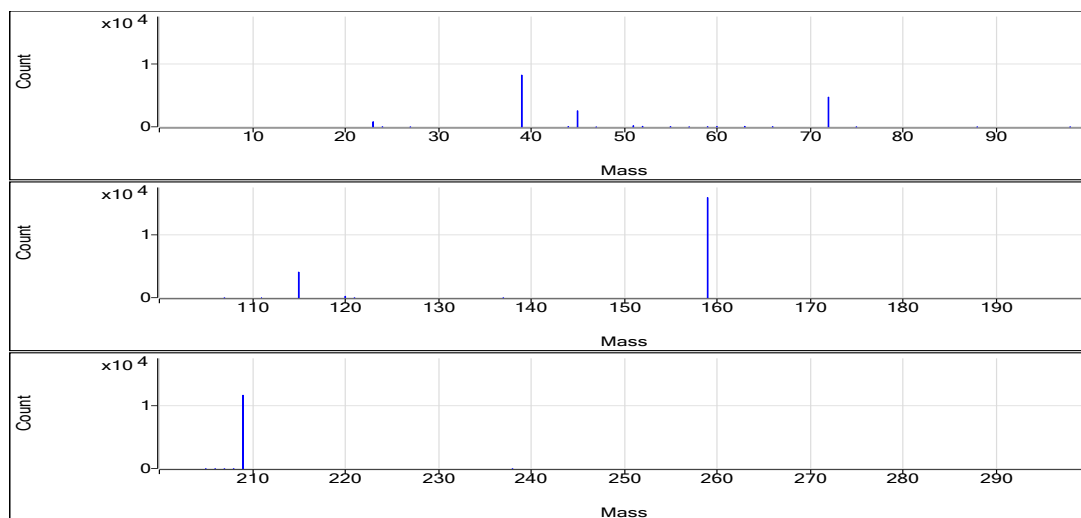


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.01	0.0001	44.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.011	0.0001	44.00	0.0011	7.835E-05
Be	9	1	No Gas	0.021	0.0001	66.00	0.0011	7.835E-05
Se	78	2	H2	-0.012	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.025	0	2.67	0.0005	2.594E-05
Na	23	3	He	-4.303	0.1652	7872.07	0.0018	0.1731
Na	23	3	He	6.382	0.1846	8672.49	0.0018	0.1731
Na	23	3	He	-2.079	0.1693	8112.23	0.0018	0.1731
Mg	24	3	He	-1.407	0.0052	250.01	0.0009	0.006537
Mg	24	3	He	2.393	0.0087	410.02	0.0009	0.006537
Mg	24	3	He	-0.985	0.0056	270.01	0.0009	0.006537
Al	27	3	He	-2.172	0.0017	80.00	0.0003	0.00231
Al	27	3	He	-2.089	0.0017	80.00	0.0003	0.00231
Al	27	3	He	4.261	0.0035	170.01	0.0003	0.00231
K	39	3	He	91.874	0.4162	19825.96	0.0007	0.3475
K	39	3	He	-17.821	0.3342	15695.49	0.0007	0.3475
K	39	3	He	-74.052	0.2921	13999.96	0.0007	0.3475
Ca	44	3	He	11.664	0.0033	156.00	0	0.002807
Ca	44	3	He	-2.034	0.0027	128.00	0	0.002807
Ca	44	3	He	-9.63	0.0024	116.00	0	0.002807
Ti	47	3	He	0.314	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	-0.087	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.227	0	2.00	0.0003	0.0001123
V	51	3	He	0.025	0.0086	412.01	0.0137	0.008308
V	51	3	He	0	0.0083	390.01	0.0137	0.008308
V	51	3	He	-0.025	0.008	382.01	0.0137	0.008308
Cr	52	3	He	-0.021	0.0212	1010.06	0.0171	0.02156
Cr	52	3	He	0.171	0.0245	1150.07	0.0171	0.02156
Cr	52	3	He	-0.15	0.019	910.06	0.0171	0.02156
Mn	55	3	He	0.057	0.0027	130.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.002	0.0023	108.00	0.0073	0.002316
Mn	55	3	He	-0.054	0.0019	92.00	0.0073	0.002316
Fe	57	3	He	-5.853	0.0008	40.00	0.0003	0.002736
Fe	57	3	He	1.414	0.0032	150.01	0.0003	0.002736
Fe	57	3	He	4.439	0.0042	200.01	0.0003	0.002736
Co	59	3	He	0.008	0.0022	104.00	0.0332	0.001922
Co	59	3	He	-0.005	0.0017	82.00	0.0332	0.001922
Co	59	3	He	-0.003	0.0018	88.00	0.0332	0.001922
Ni	60	3	He	-0.004	0.0031	148.00	0.0093	0.003141
Ni	60	3	He	-0.031	0.0029	134.00	0.0093	0.003141
Ni	60	3	He	0.035	0.0035	166.00	0.0093	0.003141
Cu	63	3	He	0.017	0.0042	200.00	0.027	0.003732
Cu	63	3	He	-0.006	0.0036	168.00	0.027	0.003732
Cu	63	3	He	-0.011	0.0034	164.00	0.027	0.003732
Zn	66	3	He	0.075	0.0023	108.00	0.0031	0.002032
Zn	66	3	He	-0.147	0.0016	74.00	0.0031	0.002032
Zn	66	3	He	0.071	0.0023	108.00	0.0031	0.002032
As	75	3	He	-0.023	0.0007	34.00	0.0025	0.0007733
As	75	3	He	0.098	0.001	48.00	0.0025	0.0007733
As	75	3	He	-0.074	0.0006	28.00	0.0025	0.0007733
Sr	88	3	He	-0.041	0.0036	150.01	0.0105	0.004071
Sr	88	3	He	0.014	0.0042	170.01	0.0105	0.004071
Sr	88	3	He	0.026	0.0043	180.01	0.0105	0.004071
Mo	98	3	He	0.03	0.0046	190.01	0.0234	0.003908
Mo	98	3	He	-0.008	0.0037	150.01	0.0234	0.003908
Mo	98	3	He	-0.023	0.0034	140.01	0.0234	0.003908
Ag	107	3	He	0.01	0.001	40.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.237	0.0569	2340.27	0.0169	0.0609
Sn	120	3	He	0.054	0.0618	2490.27	0.0169	0.0609
Sn	120	3	He	0.183	0.064	2650.31	0.0169	0.0609
Sb	121	3	He	0.007	0.0006	26.67	0.0161	0.0005433
Sb	121	3	He	0.002	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	-0.009	0.0004	16.67	0.0161	0.0005433
Ba	137	3	He	0.014	0.0012	50.00	0.0053	0.001141
Ba	137	3	He	0.019	0.0012	50.00	0.0053	0.001141
Ba	137	3	He	-0.033	0.001	40.00	0.0053	0.001141
Tl	205	3	He	-0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.001	0.0006	90.01	0.0248	0.0005854
Tl	205	3	He	0.002	0.0006	100.00	0.0248	0.0005854
Pb	208	3	He	0.002	0.0018	130.01	0.0332	0.001693
Pb	208	3	He	0.003	0.0018	200.01	0.0332	0.001693
Pb	208	3	He	-0.006	0.0015	100.00	0.0332	0.001693
U	238	3	He	-0.001	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.005	0.0006	100.00	0.0338	0.0007949
U	238	3	He	0.006	0.001	160.01	0.0338	0.0007949
Sc	45	1	No Gas			1321346.54		
Sc	45	1	No Gas			1311775.45		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1288267.64		
Ge	72	1	No Gas			654567.06		
Ge	72	1	No Gas			656786.40		
Ge	72	1	No Gas			654526.51		
Sc	45	2	H2			82588.03		
Sc	45	2	H2			83412.64		
Sc	45	2	H2			80457.15		
Ge	72	2	H2			67742.68		
Ge	72	2	H2			68344.97		
Ge	72	2	H2			68928.59		
In	115	2	H2			170010.08		
In	115	2	H2			170535.84		
In	115	2	H2			171254.31		
Sc	45	3	He			26282.00		
Sc	45	3	He			25981.14		
Sc	45	3	He			24568.95		
Ge	72	3	He			47641.27		
Ge	72	3	He			46969.61		
Ge	72	3	He			47923.04		
In	115	3	He			41145.12		
In	115	3	He			40303.33		
In	115	3	He			41436.24		
Tb	159	3	He			157980.46		
Tb	159	3	He			160942.65		
Tb	159	3	He			159397.96		
Bi	209	3	He			115838.75		
Bi	209	3	He			116826.71		
Bi	209	3	He			118206.27		

Quantitation Report

Data File Name 022CAL.S.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:13:27 AM
Sample Name STD1 8216503
Sample Type CalStd
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

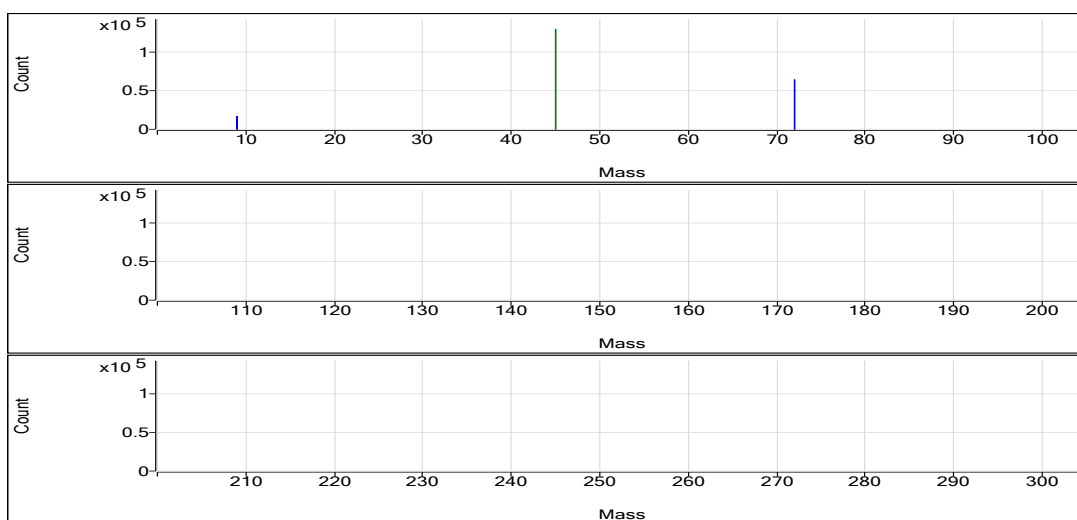
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.000	ppb	4.6	34394.98	0.0532	Pulse	0.5000	3
Se	78	72	H2	50.000	ppb	2.8	1688.76	0.0254	Pulse	1.5000	3
Na	23	72	He	5000.000	ppb	2.6	417156.29	9.2533	Pulse	0.1000	3
Mg	24	72	He	5000.000	ppb	2.2	206833.78	4.5877	Pulse	0.1000	3
Al	27	72	He	5000.000	ppb	3.5	65570.29	1.4545	Pulse	0.1000	3
K	39	72	He	5000.000	ppb	4.3	184091.24	4.0846	Pulse	0.5000	3
Ca	44	72	He	5000.000	ppb	1.8	9167.27	0.2033	Pulse	0.5000	3
Ti	47	72	He	5000.000	ppb	2.6	70104.77	1.5551	Pulse	0.5000	3
V	51	72	He	500.000	ppb	2.9	308249.80	6.8380	Pulse	0.5000	3
Cr	52	72	He	500.000	ppb	2.7	386098.18	8.5647	Pulse	0.1000	3
Mn	55	72	He	500.000	ppb	2.7	164562.96	3.6504	Pulse	0.5000	3
Fe	57	72	He	5000.000	ppb	4.3	73114.82	1.6223	Pulse	0.1000	3
Co	59	72	He	500.000	ppb	2.5	748983.17	16.6135	Pulse	0.5000	3
Ni	60	72	He	500.000	ppb	2.7	210396.00	4.6672	Pulse	0.5000	3
Cu	63	72	He	500.000	ppb	2.9	609117.50	13.5124	Pulse	0.5000	3
Zn	66	72	He	500.000	ppb	2.7	70317.91	1.5598	Pulse	0.5000	3
As	75	72	He	500.000	ppb	3.4	57503.74	1.2757	Pulse	0.5000	3
Sr	88	115	He	50.000	ppb	2.1	21605.28	0.5271	Pulse	0.1000	3
Mo	98	115	He	50.000	ppb	1.3	48100.97	1.1737	Pulse	0.1000	3
Ag	107	115	He	50.000	ppb	1.6	101039.13	2.4657	Pulse	0.1000	3
Cd	111	115	He	50.000	ppb	0.9	11496.92	0.2806	Pulse	0.5000	3
Sn	120	115	He	50.000	ppb	2.3	37078.75	0.9048	Pulse	0.1000	3
Sb	121	115	He	50.000	ppb	2.1	33053.02	0.8067	Pulse	0.3000	3
Ba	137	115	He	500.000	ppb	0.5	108234.68	2.6411	Pulse	0.1000	3
Tl	205	159	He	50.000	ppb	1.0	198783.48	1.2394	Pulse	0.1000	3
Pb	208	159	He	50.000	ppb	1.0	266732.58	1.6631	Pulse	0.1000	3
U	238	159	He	50.000	ppb	0.5	270817.40	1.6885	Pulse	0.1000	3

ISTD Table:

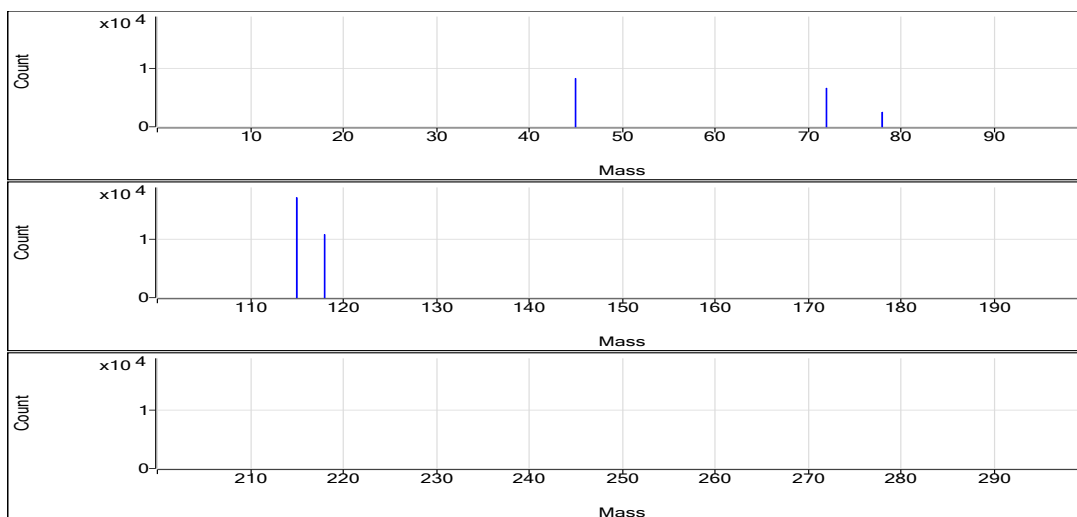
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1302646.96	1.0	99.7	Analog	0.1000	3
No Gas	Ge	72	646528.48	1.1	98.7	Pulse	0.1000	3
H2	Sc	45	83127.56	0.5	101.2	Pulse	0.1000	3
H2	Ge	72	66568.60	2.0	97.4	Pulse	0.1000	3
H2	In	115	171914.51	0.2	100.8	Pulse	0.1000	3
He	Sc	45	24953.13	1.4	97.4	Pulse	0.1000	3
He	Ge	72	45100.72	2.6	94.9	Pulse	0.1000	3
He	In	115	40982.50	1.8	100.1	Pulse	0.1000	3
He	Tb	159	160392.23	0.9	100.6	Pulse	0.1000	3
He	Bi	209	116215.30	1.3	99.4	Pulse	0.1000	3

No Gas

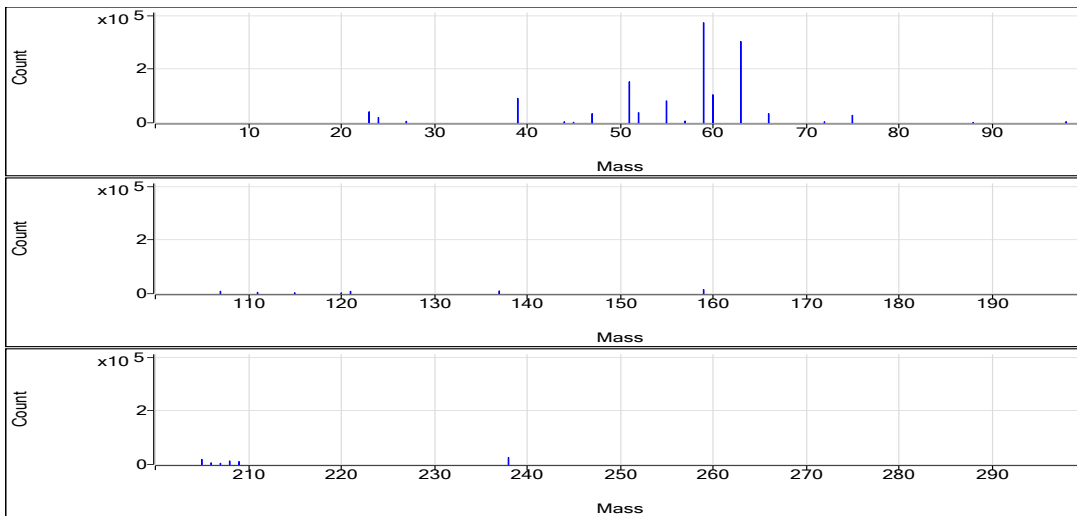


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.746	0.0508	32463.12	0.0011	7.835E-05
Be	9	1	No Gas	49.902	0.0531	34641.40	0.0011	7.835E-05
Be	9	1	No Gas	52.352	0.0557	36080.41	0.0011	7.835E-05
Se	78	2	H2	50.967	0.0259	1704.76	0.0005	2.594E-05
Se	78	2	H2	50.621	0.0257	1748.10	0.0005	2.594E-05
Se	78	2	H2	48.411	0.0246	1613.42	0.0005	2.594E-05
Na	23	3	He	5112.443	9.4575	414811.56	0.0018	0.1731
Na	23	3	He	4858.972	8.9972	415556.60	0.0018	0.1731
Na	23	3	He	5028.584	9.3052	421100.70	0.0018	0.1731
Mg	24	3	He	5092.068	4.672	204917.07	0.0009	0.006537
Mg	24	3	He	4881.637	4.4792	206882.95	0.0009	0.006537
Mg	24	3	He	5026.294	4.6117	208701.31	0.0009	0.006537
Al	27	3	He	5084.918	1.4792	64877.80	0.0003	0.00231
Al	27	3	He	4799.139	1.3962	64485.93	0.0003	0.00231
Al	27	3	He	5115.944	1.4882	67347.15	0.0003	0.00231
K	39	3	He	5228.055	4.255	186628.44	0.0007	0.3475
K	39	3	He	4795.925	3.9321	181611.38	0.0007	0.3475
K	39	3	He	4976.02	4.0667	184033.91	0.0007	0.3475
Ca	44	3	He	5100.478	0.2074	9094.56	0	0.002807
Ca	44	3	He	4932.916	0.2006	9266.66	0	0.002807
Ca	44	3	He	4966.605	0.202	9140.59	0	0.002807
Ti	47	3	He	5111.203	1.5897	69723.30	0.0003	0.0001123
Ti	47	3	He	4853.397	1.5095	69719.02	0.0003	0.0001123
Ti	47	3	He	5035.4	1.5661	70871.99	0.0003	0.0001123
V	51	3	He	512.93	7.0146	307663.53	0.0137	0.008308
V	51	3	He	484.626	6.628	306128.56	0.0137	0.008308
V	51	3	He	502.443	6.8713	310957.31	0.0137	0.008308
Cr	52	3	He	512.46	8.7776	384990.85	0.0171	0.02156
Cr	52	3	He	485.42	8.3156	384075.38	0.0171	0.02156
Cr	52	3	He	502.119	8.6009	389228.31	0.0171	0.02156
Mn	55	3	He	511.056	3.731	163645.36	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	485.03	3.5411	163556.33	0.0073	0.002316
Mn	55	3	He	503.914	3.6789	166487.19	0.0073	0.002316
Fe	57	3	He	5195.883	1.6858	73938.80	0.0003	0.002736
Fe	57	3	He	4766.515	1.5467	71437.56	0.0003	0.002736
Fe	57	3	He	5037.602	1.6345	73968.10	0.0003	0.002736
Co	59	3	He	510.285	16.9552	743665.56	0.0332	0.001922
Co	59	3	He	486.392	16.1614	746454.69	0.0332	0.001922
Co	59	3	He	503.323	16.7239	756829.25	0.0332	0.001922
Ni	60	3	He	512.697	4.7856	209898.98	0.0093	0.003141
Ni	60	3	He	485.719	4.5339	209410.97	0.0093	0.003141
Ni	60	3	He	501.585	4.6819	211878.06	0.0093	0.003141
Cu	63	3	He	514.205	13.8961	609492.25	0.027	0.003732
Cu	63	3	He	485.587	13.1229	606114.19	0.027	0.003732
Cu	63	3	He	500.208	13.518	611746.06	0.027	0.003732
Zn	66	3	He	510.614	1.5929	69864.20	0.0031	0.002032
Zn	66	3	He	484.589	1.5118	69825.59	0.0031	0.002032
Zn	66	3	He	504.796	1.5747	71263.95	0.0031	0.002032
As	75	3	He	514.049	1.3115	57524.56	0.0025	0.0007733
As	75	3	He	481.029	1.2273	56687.37	0.0025	0.0007733
As	75	3	He	504.922	1.2883	58299.29	0.0025	0.0007733
Sr	88	3	He	50.547	0.5329	21565.26	0.0105	0.004071
Sr	88	3	He	48.815	0.5147	20934.43	0.0105	0.004071
Sr	88	3	He	50.638	0.5338	22316.14	0.0105	0.004071
Mo	98	3	He	49.314	1.1576	46850.54	0.0234	0.003908
Mo	98	3	He	50.663	1.1892	48364.66	0.0234	0.003908
Mo	98	3	He	50.022	1.1742	49087.70	0.0234	0.003908
Ag	107	3	He	50.906	2.5104	101599.66	0.0493	0.0004851
Ag	107	3	He	49.578	2.4449	99435.45	0.0493	0.0004851
Ag	107	3	He	49.516	2.4418	102082.27	0.0493	0.0004851
Cd	111	3	He	50.147	0.2814	11388.16	0.0056	0
Cd	111	3	He	50.376	0.2827	11496.27	0.0056	0
Cd	111	3	He	49.477	0.2776	11606.34	0.0056	0
Sn	120	3	He	49.259	0.8923	36113.05	0.0169	0.0609
Sn	120	3	He	51.322	0.9271	37706.87	0.0169	0.0609
Sn	120	3	He	49.419	0.895	37416.33	0.0169	0.0609
Sb	121	3	He	50.424	0.8135	32924.97	0.0161	0.0005433
Sb	121	3	He	50.748	0.8188	33299.11	0.0161	0.0005433
Sb	121	3	He	48.828	0.7878	32934.98	0.0161	0.0005433
Ba	137	3	He	502.5	2.6543	107424.57	0.0053	0.001141
Ba	137	3	He	499.857	2.6404	107385.31	0.0053	0.001141
Ba	137	3	He	497.643	2.6287	109894.16	0.0053	0.001141
Tl	205	3	He	50.089	1.2416	199125.11	0.0248	0.0005854
Tl	205	3	He	50.437	1.2503	198668.86	0.0248	0.0005854
Tl	205	3	He	49.474	1.2264	198556.48	0.0248	0.0005854
Pb	208	3	He	50.024	1.6639	140797.06	0.0332	0.001693
Pb	208	3	He	50.474	1.6788	140359.59	0.0332	0.001693
Pb	208	3	He	49.503	1.6466	140180.36	0.0332	0.001693
U	238	3	He	49.73	1.6794	269326.79	0.0338	0.0007949
U	238	3	He	50.174	1.6944	269232.96	0.0338	0.0007949
U	238	3	He	50.096	1.6917	273892.46	0.0338	0.0007949
Sc	45	1	No Gas			1288022.25		
Sc	45	1	No Gas			1307868.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1312050.61		
Ge	72	1	No Gas			639105.19		
Ge	72	1	No Gas			652565.11		
Ge	72	1	No Gas			647915.15		
Sc	45	2	H2			83160.38		
Sc	45	2	H2			83513.40		
Sc	45	2	H2			82708.91		
Ge	72	2	H2			65936.25		
Ge	72	2	H2			68074.67		
Ge	72	2	H2			65694.89		
In	115	2	H2			172355.04		
In	115	2	H2			171527.13		
In	115	2	H2			171861.36		
Sc	45	3	He			25130.20		
Sc	45	3	He			24559.09		
Sc	45	3	He			25170.10		
Ge	72	3	He			43860.55		
Ge	72	3	He			46187.36		
Ge	72	3	He			45254.26		
In	115	3	He			40724.21		
In	115	3	He			40934.35		
In	115	3	He			42067.58		
Tb	159	3	He			160373.81		
Tb	159	3	He			158900.38		
Tb	159	3	He			161902.51		
Bi	209	3	He			115032.15		
Bi	209	3	He			117975.90		
Bi	209	3	He			115637.84		

Quantitation Report

Data File Name 023_ICV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:15:39 AM
Sample Name ICV 8178652
Sample Type ICV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

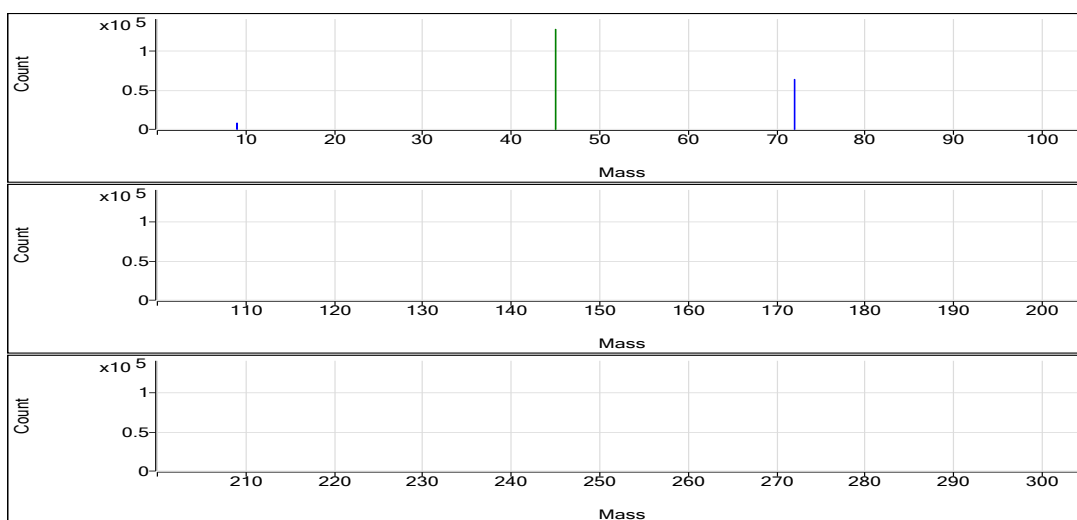
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.044	ppb	5.9	16417.36	0.0256	Pulse	0.5000	3
Se	78	72	H2	24.296	ppb	4.1	851.36	0.0123	Pulse	1.5000	3
Na	23	72	He	2387.328	ppb	0.2	206459.26	4.5086	Pulse	0.1000	3
Mg	24	72	He	2370.805	ppb	1.3	99770.97	2.1787	Pulse	0.1000	3
Al	27	72	He	2350.475	ppb	1.4	31366.95	0.6850	Pulse	0.1000	3
K	39	72	He	2375.265	ppb	2.9	97208.87	2.1228	Pulse	0.5000	3
Ca	44	72	He	2384.769	ppb	0.8	4507.97	0.0984	Pulse	0.5000	3
Ti	47	72	He	2358.103	ppb	0.9	33586.95	0.7335	Pulse	0.5000	3
V	51	72	He	236.080	ppb	0.8	148046.06	3.2330	Pulse	0.5000	3
Cr	52	72	He	233.661	ppb	1.2	183809.17	4.0140	Pulse	0.1000	3
Mn	55	72	He	235.843	ppb	0.5	78903.28	1.7231	Pulse	0.5000	3
Fe	57	72	He	2386.528	ppb	2.9	35523.02	0.7758	Pulse	0.1000	3
Co	59	72	He	238.151	ppb	0.5	362404.19	7.9141	Pulse	0.5000	3
Ni	60	72	He	237.868	ppb	1.5	101748.45	2.2220	Pulse	0.5000	3
Cu	63	72	He	237.563	ppb	0.5	294079.79	6.4220	Pulse	0.5000	3
Zn	66	72	He	237.668	ppb	0.6	34000.97	0.7425	Pulse	0.5000	3
As	75	72	He	231.371	ppb	1.6	27052.08	0.5907	Pulse	0.5000	3
Sr	88	115	He	24.798	ppb	0.7	10783.98	0.2635	Pulse	0.1000	3
Mo	98	115	He	24.339	ppb	3.0	23454.78	0.5733	Pulse	0.1000	3
Ag	107	115	He	24.370	ppb	2.7	49177.88	1.2020	Pulse	0.1000	3
Cd	111	115	He	25.741	ppb	4.3	5908.49	0.1444	Pulse	0.5000	3
Sn	120	115	He	24.727	ppb	3.5	19566.20	0.4783	Pulse	0.1000	3
Sb	121	115	He	25.563	ppb	5.0	16878.17	0.4127	Pulse	0.3000	3
Ba	137	115	He	243.106	ppb	4.1	52551.01	1.2847	Pulse	0.1000	3
Tl	205	159	He	24.340	ppb	0.8	95468.21	0.6037	Pulse	0.1000	3
Pb	208	159	He	24.299	ppb	1.6	127942.95	0.8091	Pulse	0.1000	3
U	238	159	He	25.107	ppb	1.2	134136.14	0.8483	Pulse	0.1000	3

ISTD Table:

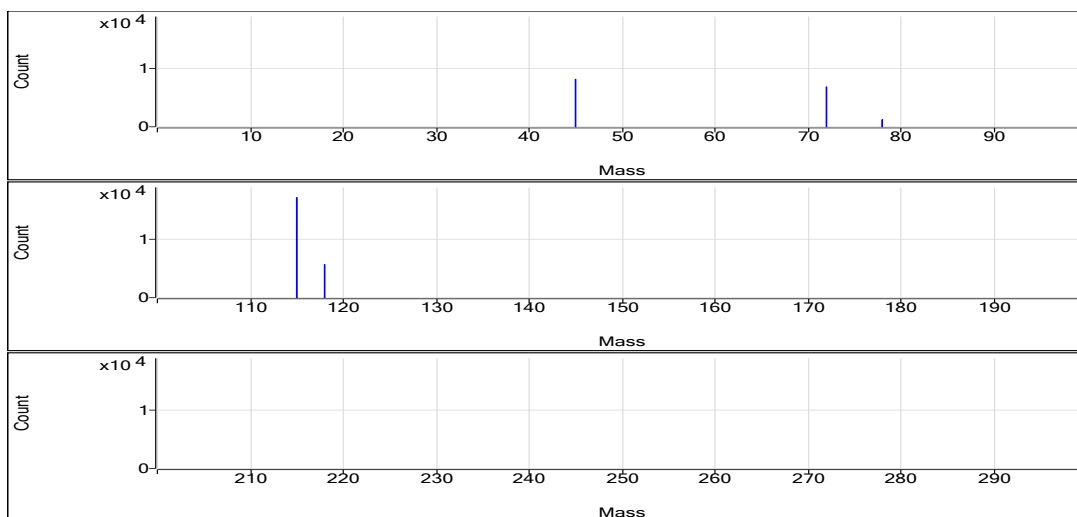
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1282619.38	1.0	98.1	Analog	0.1000	3
No Gas	Ge	72	640761.52	0.4	97.8	Pulse	0.1000	3
H2	Sc	45	82317.15	2.6	100.2	Pulse	0.1000	3
H2	Ge	72	69002.42	2.4	101.0	Pulse	0.1000	3
H2	In	115	172831.66	1.0	101.3	Pulse	0.1000	3
He	Sc	45	24028.24	1.3	93.8	Pulse	0.1000	3
He	Ge	72	45792.61	0.2	96.4	Pulse	0.1000	3
He	In	115	40931.56	2.6	100.0	Pulse	0.1000	3
He	Tb	159	158142.19	0.9	99.2	Pulse	0.1000	3
He	Bi	209	117965.25	0.3	100.9	Pulse	0.1000	3

No Gas

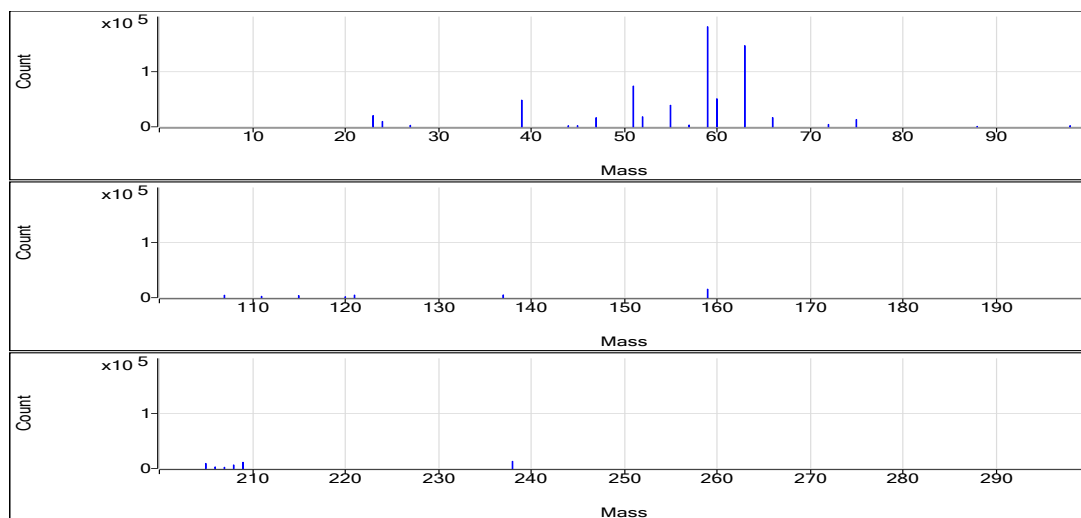


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	22.648	0.0241	15421.05	0.0011	7.835E-05
Be	9	1	No Gas	23.996	0.0256	16357.96	0.0011	7.835E-05
Be	9	1	No Gas	25.488	0.0272	17473.06	0.0011	7.835E-05
Se	78	2	H2	23.749	0.0121	852.69	0.0005	2.594E-05
Se	78	2	H2	25.447	0.0129	890.69	0.0005	2.594E-05
Se	78	2	H2	23.69	0.012	810.69	0.0005	2.594E-05
Na	23	3	He	2385.328	4.5049	206531.89	0.0018	0.1731
Na	23	3	He	2383.538	4.5017	205572.91	0.0018	0.1731
Na	23	3	He	2393.119	4.5191	207272.99	0.0018	0.1731
Mg	24	3	He	2358.409	2.1674	99364.68	0.0009	0.006537
Mg	24	3	He	2348.52	2.1583	98560.98	0.0009	0.006537
Mg	24	3	He	2405.484	2.2105	101387.26	0.0009	0.006537
Al	27	3	He	2312.597	0.674	30899.37	0.0003	0.00231
Al	27	3	He	2373.112	0.6916	31580.74	0.0003	0.00231
Al	27	3	He	2365.714	0.6894	31620.75	0.0003	0.00231
K	39	3	He	2448.429	2.1775	99828.70	0.0007	0.3475
K	39	3	He	2366.962	2.1166	96656.33	0.0007	0.3475
K	39	3	He	2310.405	2.0743	95141.57	0.0007	0.3475
Ca	44	3	He	2402.957	0.0992	4546.65	0	0.002807
Ca	44	3	He	2384.3	0.0984	4494.64	0	0.002807
Ca	44	3	He	2367.049	0.0977	4482.63	0	0.002807
Ti	47	3	He	2335.619	0.7265	33305.69	0.0003	0.0001123
Ti	47	3	He	2375.728	0.7389	33744.60	0.0003	0.0001123
Ti	47	3	He	2362.962	0.735	33710.56	0.0003	0.0001123
V	51	3	He	234.005	3.2047	146920.09	0.0137	0.008308
V	51	3	He	237.705	3.2552	148651.31	0.0137	0.008308
V	51	3	He	236.529	3.2391	148566.78	0.0137	0.008308
Cr	52	3	He	230.66	3.9627	181672.40	0.0171	0.02156
Cr	52	3	He	234.178	4.0228	183704.00	0.0171	0.02156
Cr	52	3	He	236.144	4.0564	186051.11	0.0171	0.02156
Mn	55	3	He	235.083	1.7175	78740.41	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	235.287	1.719	78499.49	0.0073	0.002316
Mn	55	3	He	237.158	1.7326	79469.95	0.0073	0.002316
Fe	57	3	He	2338.88	0.7603	34858.31	0.0003	0.002736
Fe	57	3	He	2466.674	0.8017	36611.83	0.0003	0.002736
Fe	57	3	He	2354.03	0.7652	35098.93	0.0003	0.002736
Co	59	3	He	236.678	7.8651	360582.22	0.0332	0.001922
Co	59	3	He	238.887	7.9385	362519.78	0.0332	0.001922
Co	59	3	He	238.887	7.9385	364110.56	0.0332	0.001922
Ni	60	3	He	234.597	2.1915	100469.91	0.0093	0.003141
Ni	60	3	He	241.476	2.2556	103005.70	0.0093	0.003141
Ni	60	3	He	237.531	2.2188	101769.74	0.0093	0.003141
Cu	63	3	He	236.675	6.398	293322.78	0.027	0.003732
Cu	63	3	He	238.934	6.4591	294958.97	0.027	0.003732
Cu	63	3	He	237.082	6.409	293957.63	0.027	0.003732
Zn	66	3	He	236.583	0.7391	33885.39	0.0031	0.002032
Zn	66	3	He	237.067	0.7406	33821.25	0.0031	0.002032
Zn	66	3	He	239.353	0.7477	34296.27	0.0031	0.002032
As	75	3	He	230.136	0.5876	26938.51	0.0025	0.0007733
As	75	3	He	228.36	0.5831	26626.03	0.0025	0.0007733
As	75	3	He	235.618	0.6016	27591.69	0.0025	0.0007733
Sr	88	3	He	24.873	0.2643	10813.95	0.0105	0.004071
Sr	88	3	He	24.918	0.2647	10553.88	0.0105	0.004071
Sr	88	3	He	24.604	0.2615	10984.11	0.0105	0.004071
Mo	98	3	He	24.107	0.5679	23237.87	0.0234	0.003908
Mo	98	3	He	25.168	0.5927	23628.18	0.0234	0.003908
Mo	98	3	He	23.742	0.5593	23498.28	0.0234	0.003908
Ag	107	3	He	24.514	1.2091	49478.39	0.0493	0.0004851
Ag	107	3	He	24.945	1.2304	49047.93	0.0493	0.0004851
Ag	107	3	He	23.65	1.1666	49007.33	0.0493	0.0004851
Cd	111	3	He	26.494	0.1487	6083.21	0.0056	0
Cd	111	3	He	26.274	0.1474	5877.14	0.0056	0
Cd	111	3	He	24.457	0.1372	5765.11	0.0056	0
Sn	120	3	He	24.354	0.472	19312.55	0.0169	0.0609
Sn	120	3	He	25.72	0.495	19733.18	0.0169	0.0609
Sn	120	3	He	24.108	0.4678	19652.86	0.0169	0.0609
Sb	121	3	He	25.292	0.4083	16709.12	0.0161	0.0005433
Sb	121	3	He	26.96	0.4352	17349.80	0.0161	0.0005433
Sb	121	3	He	24.438	0.3946	16575.58	0.0161	0.0005433
Ba	137	3	He	239.062	1.2634	51697.71	0.0053	0.001141
Ba	137	3	He	254.507	1.3449	53615.19	0.0053	0.001141
Ba	137	3	He	235.749	1.2459	52340.14	0.0053	0.001141
Tl	205	3	He	24.15	0.5989	93780.65	0.0248	0.0005854
Tl	205	3	He	24.326	0.6033	95571.63	0.0248	0.0005854
Tl	205	3	He	24.545	0.6087	97052.36	0.0248	0.0005854
Pb	208	3	He	24.733	0.8235	68019.86	0.0332	0.001693
Pb	208	3	He	24.151	0.8042	68119.78	0.0332	0.001693
Pb	208	3	He	24.014	0.7996	67808.31	0.0332	0.001693
U	238	3	He	25.443	0.8596	134590.70	0.0338	0.0007949
U	238	3	He	25.053	0.8464	134084.01	0.0338	0.0007949
U	238	3	He	24.827	0.8388	133733.72	0.0338	0.0007949
Sc	45	1	No Gas			1292307.64		
Sc	45	1	No Gas			1288121.39		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1267429.12		
Ge	72	1	No Gas			638952.69		
Ge	72	1	No Gas			639808.43		
Ge	72	1	No Gas			643523.43		
Sc	45	2	H2			84498.22		
Sc	45	2	H2			80246.80		
Sc	45	2	H2			82206.42		
Ge	72	2	H2			70696.35		
Ge	72	2	H2			68928.58		
Ge	72	2	H2			67382.32		
In	115	2	H2			173730.45		
In	115	2	H2			173944.27		
In	115	2	H2			170820.27		
Sc	45	3	He			24348.77		
Sc	45	3	He			23707.74		
Sc	45	3	He			24028.20		
Ge	72	3	He			45845.77		
Ge	72	3	He			45665.85		
Ge	72	3	He			45866.21		
In	115	3	He			41055.22		
In	115	3	He			40002.62		
In	115	3	He			42147.74		
Tb	159	3	He			156576.94		
Tb	159	3	He			158414.44		
Tb	159	3	He			159435.20		
Bi	209	3	He			117561.93		
Bi	209	3	He			118267.64		
Bi	209	3	He			118066.17		

Quantitation Report

Data File Name 024_ICB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:20:41 AM
Sample Name ICB 8061842
Sample Type ICB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

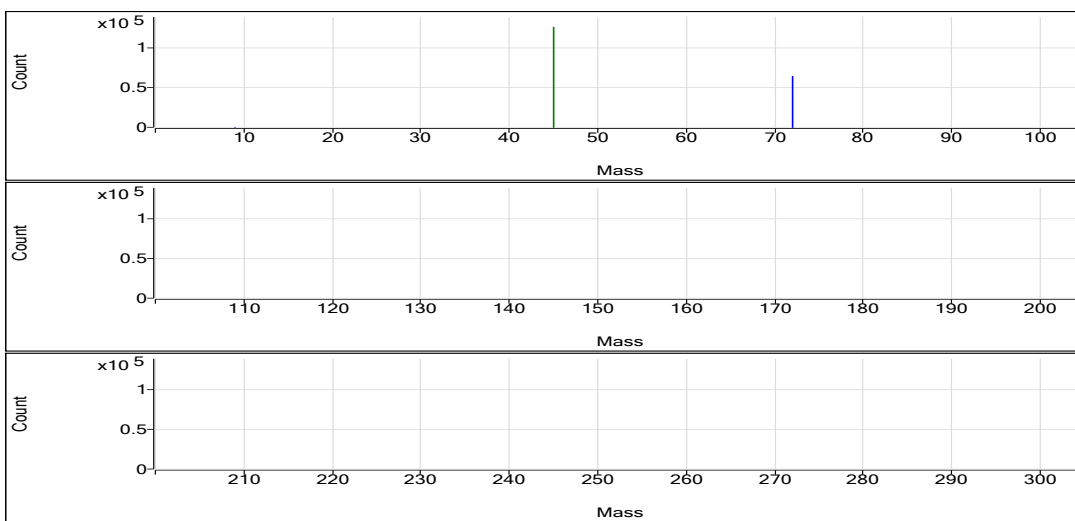
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.024	ppb	52.5	67.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.007	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	72	He	-0.438	ppb	N/A	8208.95	0.1723	Pulse	0.1000	3
Mg	24	72	He	1.873	ppb	38.1	393.35	0.0083	Pulse	0.1000	3
Al	27	72	He	-4.582	ppb	N/A	46.67	0.0010	Pulse	0.1000	3
K	39	72	He	1.842	ppb	4724.7	16601.91	0.3489	Pulse	0.5000	3
Ca	44	72	He	-23.527	ppb	N/A	88.67	0.0019	Pulse	0.5000	3
Ti	47	72	He	0.856	ppb	32.8	18.00	0.0004	Pulse	0.5000	3
V	51	72	He	-0.011	ppb	N/A	388.68	0.0082	Pulse	0.5000	3
Cr	52	72	He	0.077	ppb	153.3	1090.07	0.0229	Pulse	0.1000	3
Mn	55	72	He	0.051	ppb	148.1	128.00	0.0027	Pulse	0.5000	3
Fe	57	72	He	0.202	ppb	525.8	133.33	0.0028	Pulse	0.1000	3
Co	59	72	He	0.018	ppb	6.9	120.67	0.0025	Pulse	0.5000	3
Ni	60	72	He	0.064	ppb	19.0	178.00	0.0037	Pulse	0.5000	3
Cu	63	72	He	0.011	ppb	94.5	192.00	0.0040	Pulse	0.5000	3
Zn	66	72	He	-0.144	ppb	N/A	75.33	0.0016	Pulse	0.5000	3
As	75	72	He	-0.078	ppb	N/A	27.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.013	ppb	N/A	160.01	0.0039	Pulse	0.1000	3
Mo	98	115	He	-0.031	ppb	N/A	130.00	0.0032	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.148	ppb	141.0	2576.97	0.0634	Pulse	0.1000	3
Sb	121	115	He	0.061	ppb	60.5	62.22	0.0015	Pulse	0.3000	3
Ba	137	115	He	-0.076	ppb	N/A	30.00	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.024	ppb	49.7	186.68	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.008	ppb	92.9	313.35	0.0020	Pulse	0.1000	3
U	238	159	He	0.004	ppb	54.9	146.67	0.0009	Pulse	0.1000	3

ISTD Table:

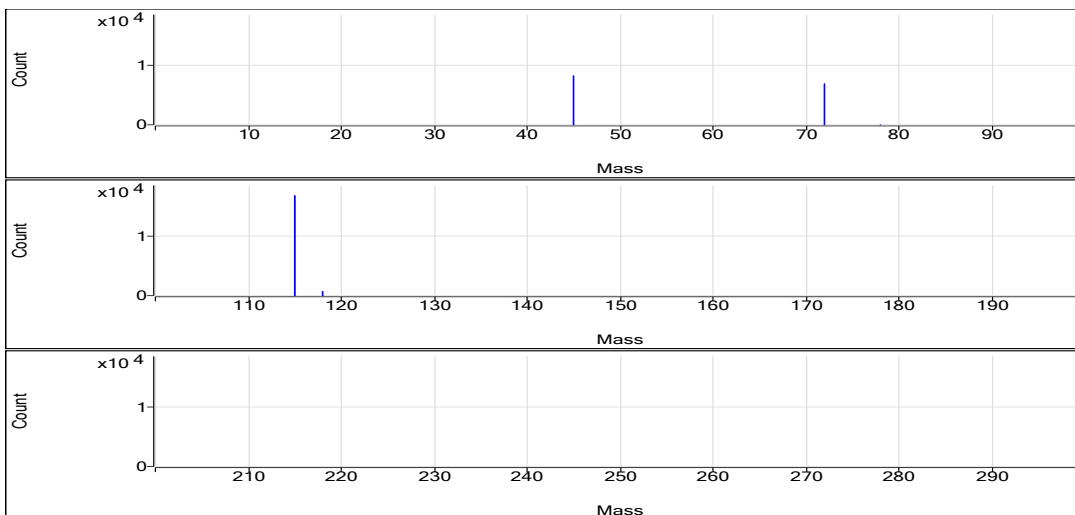
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1268096.65	0.8	97.0	Analog	0.1000	3
No Gas	Ge	72	646379.57	1.3	98.6	Pulse	0.1000	3
H2	Sc	45	82638.52	1.0	100.6	Pulse	0.1000	3
H2	Ge	72	69236.38	1.8	101.3	Pulse	0.1000	3
H2	In	115	168898.98	0.3	99.0	Pulse	0.1000	3
He	Sc	45	24455.52	3.4	95.5	Pulse	0.1000	3
He	Ge	72	47634.52	1.1	100.3	Pulse	0.1000	3
He	In	115	40645.82	0.5	99.3	Pulse	0.1000	3
He	Tb	159	158610.38	0.2	99.5	Pulse	0.1000	3
He	Bi	209	116695.15	1.8	99.8	Pulse	0.1000	3

No Gas

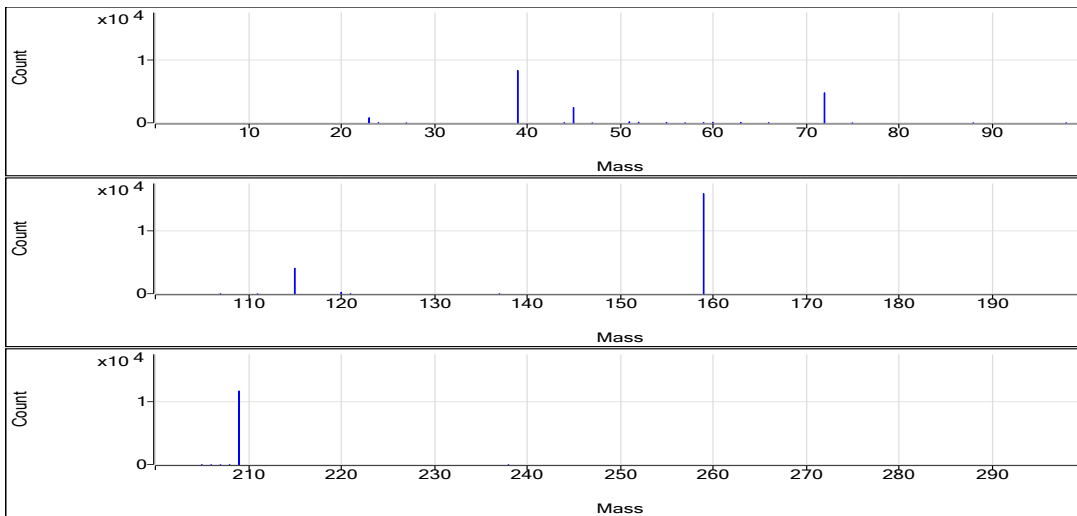


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.038	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.023	0.0001	66.00	0.0011	7.835E-05
Be	9	1	No Gas	0.012	0.0001	60.00	0.0011	7.835E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.005	0	2.00	0.0005	2.594E-05
Na	23	3	He	-1.843	0.1697	8032.16	0.0018	0.1731
Na	23	3	He	-5.566	0.1629	7712.05	0.0018	0.1731
Na	23	3	He	6.097	0.1841	8882.65	0.0018	0.1731
Mg	24	3	He	1.167	0.0076	360.01	0.0009	0.006537
Mg	24	3	He	1.859	0.0082	390.02	0.0009	0.006537
Mg	24	3	He	2.594	0.0089	430.02	0.0009	0.006537
Al	27	3	He	-5.771	0.0006	30.00	0.0003	0.00231
Al	27	3	He	-3.589	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-4.385	0.001	50.00	0.0003	0.00231
K	39	3	He	99.378	0.4218	19962.14	0.0007	0.3475
K	39	3	He	-26.036	0.328	15525.32	0.0007	0.3475
K	39	3	He	-67.818	0.2968	14318.26	0.0007	0.3475
Ca	44	3	He	-22.572	0.0019	90.00	0	0.002807
Ca	44	3	He	-17.303	0.0021	100.00	0	0.002807
Ca	44	3	He	-30.705	0.0016	76.00	0	0.002807
Ti	47	3	He	0.862	0.0004	18.00	0.0003	0.0001123
Ti	47	3	He	1.134	0.0005	22.00	0.0003	0.0001123
Ti	47	3	He	0.572	0.0003	14.00	0.0003	0.0001123
V	51	3	He	0.032	0.0087	414.01	0.0137	0.008308
V	51	3	He	-0.017	0.0081	382.01	0.0137	0.008308
V	51	3	He	-0.047	0.0077	370.01	0.0137	0.008308
Cr	52	3	He	0.185	0.0247	1170.08	0.0171	0.02156
Cr	52	3	He	-0.05	0.0207	980.06	0.0171	0.02156
Cr	52	3	He	0.097	0.0232	1120.08	0.0171	0.02156
Mn	55	3	He	0.129	0.0033	154.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.022	0.0022	102.00	0.0073	0.002316
Mn	55	3	He	0.046	0.0027	128.00	0.0073	0.002316
Fe	57	3	He	1.338	0.0032	150.00	0.0003	0.002736
Fe	57	3	He	0.034	0.0027	130.00	0.0003	0.002736
Fe	57	3	He	-0.766	0.0025	120.00	0.0003	0.002736
Co	59	3	He	0.02	0.0026	122.00	0.0332	0.001922
Co	59	3	He	0.017	0.0025	118.00	0.0332	0.001922
Co	59	3	He	0.018	0.0025	122.00	0.0332	0.001922
Ni	60	3	He	0.071	0.0038	180.00	0.0093	0.003141
Ni	60	3	He	0.071	0.0038	180.00	0.0093	0.003141
Ni	60	3	He	0.05	0.0036	174.00	0.0093	0.003141
Cu	63	3	He	0.023	0.0044	206.00	0.027	0.003732
Cu	63	3	He	0.007	0.0039	186.00	0.027	0.003732
Cu	63	3	He	0.003	0.0038	184.00	0.027	0.003732
Zn	66	3	He	-0.137	0.0016	76.00	0.0031	0.002032
Zn	66	3	He	-0.123	0.0016	78.00	0.0031	0.002032
Zn	66	3	He	-0.173	0.0015	72.00	0.0031	0.002032
As	75	3	He	-0.138	0.0004	20.00	0.0025	0.0007733
As	75	3	He	-0.005	0.0008	36.00	0.0025	0.0007733
As	75	3	He	-0.092	0.0005	26.00	0.0025	0.0007733
Sr	88	3	He	0.008	0.0042	170.01	0.0105	0.004071
Sr	88	3	He	-0.011	0.004	160.01	0.0105	0.004071
Sr	88	3	He	-0.036	0.0037	150.01	0.0105	0.004071
Mo	98	3	He	0.011	0.0042	170.01	0.0234	0.003908
Mo	98	3	He	-0.093	0.0017	70.00	0.0234	0.003908
Mo	98	3	He	-0.009	0.0037	150.00	0.0234	0.003908
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0002	10.00	0.0493	0.0004851
Cd	111	3	He	0.009	0	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	0.046	0.0617	2520.29	0.0169	0.0609
Sn	120	3	He	0.01	0.0611	2470.29	0.0169	0.0609
Sn	120	3	He	0.388	0.0675	2740.32	0.0169	0.0609
Sb	121	3	He	0.103	0.0022	90.00	0.0161	0.0005433
Sb	121	3	He	0.048	0.0013	53.33	0.0161	0.0005433
Sb	121	3	He	0.032	0.0011	43.33	0.0161	0.0005433
Ba	137	3	He	-0.077	0.0007	30.00	0.0053	0.001141
Ba	137	3	He	-0.076	0.0007	30.00	0.0053	0.001141
Ba	137	3	He	-0.076	0.0007	30.00	0.0053	0.001141
Tl	205	3	He	0.038	0.0015	240.01	0.0248	0.0005854
Tl	205	3	He	0.017	0.001	160.01	0.0248	0.0005854
Tl	205	3	He	0.017	0.001	160.01	0.0248	0.0005854
Pb	208	3	He	0.006	0.0019	180.01	0.0332	0.001693
Pb	208	3	He	0.017	0.0023	200.01	0.0332	0.001693
Pb	208	3	He	0.002	0.0018	170.01	0.0332	0.001693
U	238	3	He	0.003	0.0009	140.00	0.0338	0.0007949
U	238	3	He	0.003	0.0009	140.01	0.0338	0.0007949
U	238	3	He	0.006	0.001	160.01	0.0338	0.0007949
Sc	45	1	No Gas			1262123.73		
Sc	45	1	No Gas			1262116.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1280049.90		
Ge	72	1	No Gas			641240.07		
Ge	72	1	No Gas			641451.08		
Ge	72	1	No Gas			656447.57		
Sc	45	2	H2			81743.75		
Sc	45	2	H2			82879.72		
Sc	45	2	H2			83292.09		
Ge	72	2	H2			69038.38		
Ge	72	2	H2			68105.43		
Ge	72	2	H2			70565.33		
In	115	2	H2			168515.08		
In	115	2	H2			168806.76		
In	115	2	H2			169375.10		
Sc	45	3	He			23888.20		
Sc	45	3	He			25420.19		
Sc	45	3	He			24058.16		
Ge	72	3	He			47330.57		
Ge	72	3	He			47329.96		
Ge	72	3	He			48243.04		
In	115	3	He			40884.49		
In	115	3	He			40463.45		
In	115	3	He			40643.62		
Tb	159	3	He			158182.63		
Tb	159	3	He			158728.90		
Tb	159	3	He			158919.60		
Bi	209	3	He			115575.91		
Bi	209	3	He			115456.10		
Bi	209	3	He			119053.45		

Quantitation Report

Data File Name 025_LLC.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:23:28 AM
Sample Name CRI 8216529
Sample Type CRI
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

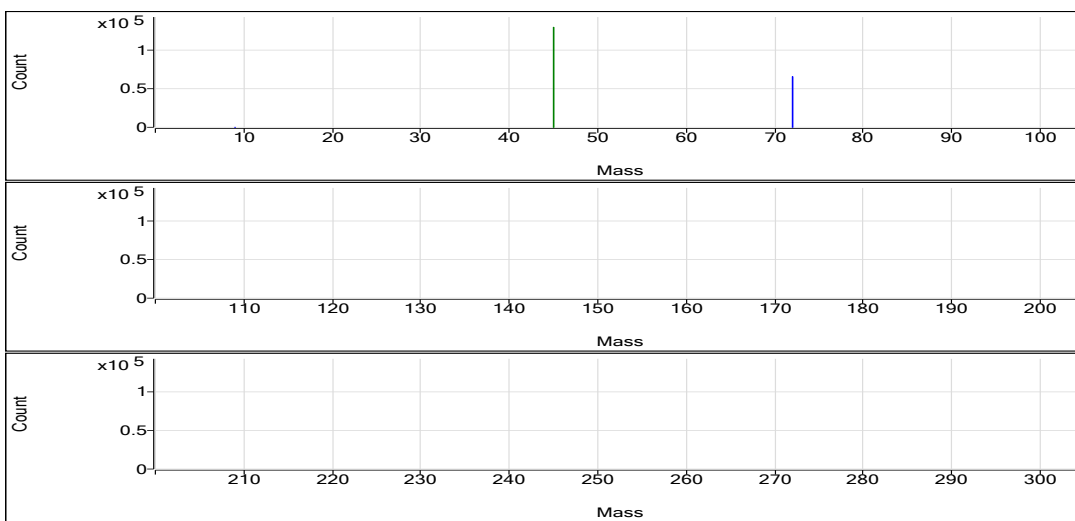
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.555	ppb	13.1	440.68	0.0007	Pulse	0.5000	3
Se	78	72	H2	0.859	ppb	6.9	31.11	0.0005	Pulse	1.5000	3
Na	23	72	He	198.222	ppb	3.8	24905.84	0.5330	Pulse	0.1000	3
Mg	24	72	He	45.815	ppb	7.5	2266.89	0.0485	Pulse	0.1000	3
Al	27	72	He	20.532	ppb	31.8	386.68	0.0083	Pulse	0.1000	3
K	39	72	He	201.118	ppb	42.9	23261.28	0.4978	Pulse	0.5000	3
Ca	44	72	He	85.918	ppb	29.7	292.00	0.0063	Pulse	0.5000	3
Ti	47	72	He	10.275	ppb	19.5	154.67	0.0033	Pulse	0.5000	3
V	51	72	He	1.772	ppb	3.4	1519.42	0.0325	Pulse	0.5000	3
Cr	52	72	He	2.000	ppb	7.1	2603.62	0.0557	Pulse	0.1000	3
Mn	55	72	He	1.994	ppb	5.2	788.03	0.0169	Pulse	0.5000	3
Fe	57	72	He	43.569	ppb	25.1	786.71	0.0168	Pulse	0.1000	3
Co	59	72	He	0.482	ppb	4.7	838.03	0.0179	Pulse	0.5000	3
Ni	60	72	He	0.970	ppb	1.0	569.34	0.0122	Pulse	0.5000	3
Cu	63	72	He	1.000	ppb	1.6	1436.74	0.0308	Pulse	0.5000	3
Zn	66	72	He	9.337	ppb	3.8	1454.08	0.0311	Pulse	0.5000	3
As	75	72	He	2.019	ppb	5.3	276.67	0.0059	Pulse	0.5000	3
Sr	88	115	He	1.109	ppb	21.0	640.04	0.0157	Pulse	0.1000	3
Mo	98	115	He	0.513	ppb	17.0	650.03	0.0159	Pulse	0.1000	3
Ag	107	115	He	0.515	ppb	3.5	1056.74	0.0259	Pulse	0.1000	3
Cd	111	115	He	0.495	ppb	4.8	113.33	0.0028	Pulse	0.5000	3
Sn	120	115	He	1.523	ppb	20.2	3533.86	0.0866	Pulse	0.1000	3
Sb	121	115	He	1.018	ppb	5.0	692.25	0.0170	Pulse	0.3000	3
Ba	137	115	He	1.903	ppb	4.3	456.69	0.0112	Pulse	0.1000	3
Tl	205	159	He	0.516	ppb	0.3	2123.56	0.0134	Pulse	0.1000	3
Pb	208	159	He	0.520	ppb	3.3	3013.55	0.0190	Pulse	0.1000	3
U	238	159	He	1.012	ppb	4.1	5547.94	0.0349	Pulse	0.1000	3

ISTD Table:

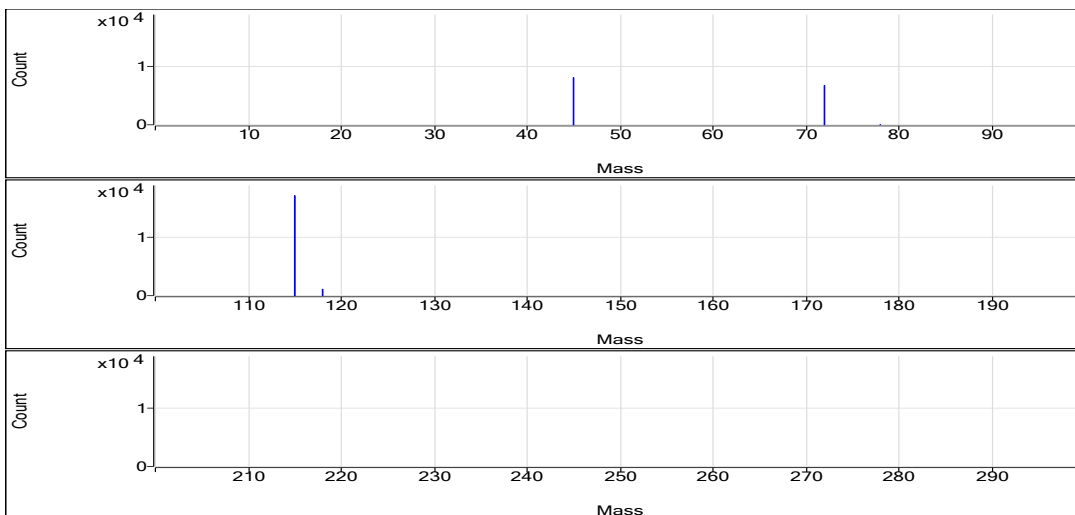
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1302628.39	0.9	99.7	Analog	0.1000	3
No Gas	Ge	72	660361.11	0.8	100.8	Pulse	0.1000	3
H2	Sc	45	80889.66	1.2	98.5	Pulse	0.1000	3
H2	Ge	72	67472.40	0.5	98.7	Pulse	0.1000	3
H2	In	115	171324.97	1.5	100.4	Pulse	0.1000	3
He	Sc	45	24829.30	1.1	96.9	Pulse	0.1000	3
He	Ge	72	46725.12	0.7	98.3	Pulse	0.1000	3
He	In	115	40823.07	1.5	99.7	Pulse	0.1000	3
He	Tb	159	158776.88	1.0	99.6	Pulse	0.1000	3
He	Bi	209	117599.51	1.5	100.5	Pulse	0.1000	3

No Gas

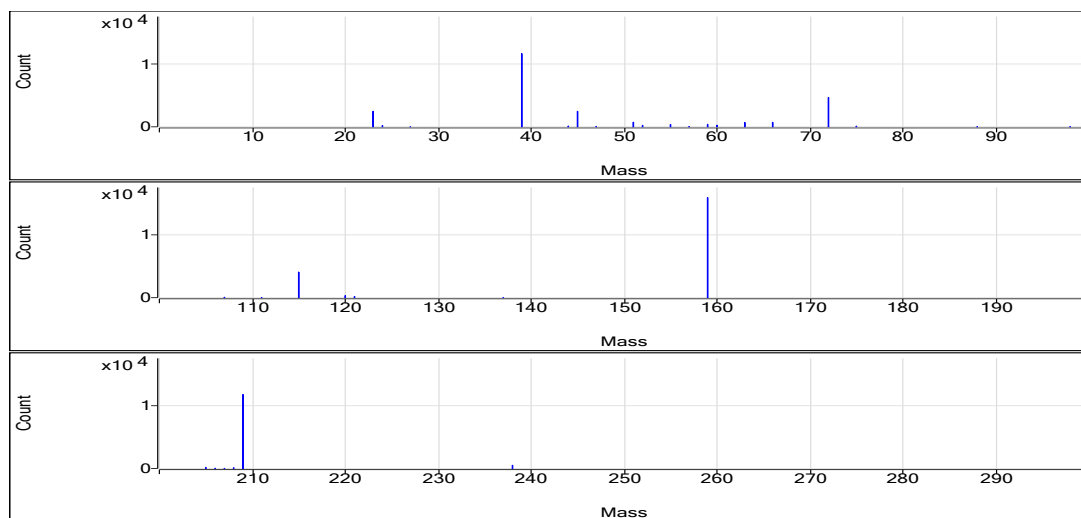


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.471	0.0006	384.01	0.0011	7.835E-05
Be	9	1	No Gas	0.604	0.0007	478.01	0.0011	7.835E-05
Be	9	1	No Gas	0.588	0.0007	460.01	0.0011	7.835E-05
Se	78	2	H2	0.898	0.0005	32.67	0.0005	2.594E-05
Se	78	2	H2	0.886	0.0005	32.00	0.0005	2.594E-05
Se	78	2	H2	0.791	0.0004	28.67	0.0005	2.594E-05
Na	23	3	He	189.889	0.5179	24268.12	0.0018	0.1731
Na	23	3	He	199.992	0.5362	24859.07	0.0018	0.1731
Na	23	3	He	204.784	0.5449	25590.33	0.0018	0.1731
Mg	24	3	He	42.249	0.0452	2120.19	0.0009	0.006537
Mg	24	3	He	46.08	0.0488	2260.23	0.0009	0.006537
Mg	24	3	He	49.117	0.0515	2420.26	0.0009	0.006537
Al	27	3	He	28.052	0.0105	490.02	0.0003	0.00231
Al	27	3	He	17.3	0.0073	340.02	0.0003	0.00231
Al	27	3	He	16.243	0.007	330.01	0.0003	0.00231
K	39	3	He	297.204	0.5696	26691.66	0.0007	0.3475
K	39	3	He	175.779	0.4789	22198.93	0.0007	0.3475
K	39	3	He	130.371	0.4449	20893.24	0.0007	0.3475
Ca	44	3	He	57.727	0.0051	240.00	0	0.002807
Ca	44	3	He	107.519	0.0071	330.00	0	0.002807
Ca	44	3	He	92.507	0.0065	306.01	0	0.002807
Ti	47	3	He	10.069	0.0032	152.00	0.0003	0.0001123
Ti	47	3	He	8.379	0.0027	126.00	0.0003	0.0001123
Ti	47	3	He	12.375	0.004	186.00	0.0003	0.0001123
V	51	3	He	1.842	0.0335	1568.09	0.0137	0.008308
V	51	3	He	1.745	0.0321	1490.08	0.0137	0.008308
V	51	3	He	1.73	0.0319	1500.08	0.0137	0.008308
Cr	52	3	He	1.836	0.0529	2480.28	0.0171	0.02156
Cr	52	3	He	2.097	0.0574	2660.30	0.0171	0.02156
Cr	52	3	He	2.066	0.0569	2670.29	0.0171	0.02156
Mn	55	3	He	1.888	0.0161	754.02	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2.095	0.0176	816.03	0.0073	0.002316
Mn	55	3	He	2	0.0169	794.03	0.0073	0.002316
Fe	57	3	He	48.877	0.0186	870.06	0.0003	0.002736
Fe	57	3	He	50.828	0.0192	890.05	0.0003	0.002736
Fe	57	3	He	31.002	0.0128	600.03	0.0003	0.002736
Co	59	3	He	0.48	0.0179	838.03	0.0332	0.001922
Co	59	3	He	0.506	0.0187	868.03	0.0332	0.001922
Co	59	3	He	0.46	0.0172	808.03	0.0332	0.001922
Ni	60	3	He	0.981	0.0123	576.01	0.0093	0.003141
Ni	60	3	He	0.963	0.0121	562.01	0.0093	0.003141
Ni	60	3	He	0.965	0.0121	570.01	0.0093	0.003141
Cu	63	3	He	0.99	0.0305	1428.07	0.027	0.003732
Cu	63	3	He	1.018	0.0312	1448.07	0.027	0.003732
Cu	63	3	He	0.992	0.0305	1434.07	0.027	0.003732
Zn	66	3	He	8.924	0.0298	1398.08	0.0031	0.002032
Zn	66	3	He	9.54	0.0318	1472.08	0.0031	0.002032
Zn	66	3	He	9.546	0.0318	1492.08	0.0031	0.002032
As	75	3	He	2.141	0.0062	292.00	0.0025	0.0007733
As	75	3	He	1.947	0.0057	266.00	0.0025	0.0007733
As	75	3	He	1.968	0.0058	272.00	0.0025	0.0007733
Sr	88	3	He	0.888	0.0134	550.03	0.0105	0.004071
Sr	88	3	He	1.088	0.0154	620.03	0.0105	0.004071
Sr	88	3	He	1.352	0.0182	750.05	0.0105	0.004071
Mo	98	3	He	0.529	0.0163	670.04	0.0234	0.003908
Mo	98	3	He	0.419	0.0137	550.02	0.0234	0.003908
Mo	98	3	He	0.591	0.0177	730.04	0.0234	0.003908
Ag	107	3	He	0.503	0.0253	1040.07	0.0493	0.0004851
Ag	107	3	He	0.536	0.0269	1080.07	0.0493	0.0004851
Ag	107	3	He	0.507	0.0255	1050.07	0.0493	0.0004851
Cd	111	3	He	0.468	0.0026	108.00	0.0056	0
Cd	111	3	He	0.506	0.0028	114.00	0.0056	0
Cd	111	3	He	0.511	0.0029	118.00	0.0056	0
Sn	120	3	He	1.56	0.0872	3590.54	0.0169	0.0609
Sn	120	3	He	1.81	0.0915	3670.56	0.0169	0.0609
Sn	120	3	He	1.199	0.0811	3340.48	0.0169	0.0609
Sb	121	3	He	1.076	0.0179	736.69	0.0161	0.0005433
Sb	121	3	He	0.997	0.0166	666.69	0.0161	0.0005433
Sb	121	3	He	0.981	0.0164	673.36	0.0161	0.0005433
Ba	137	3	He	1.947	0.0114	470.02	0.0053	0.001141
Ba	137	3	He	1.955	0.0115	460.02	0.0053	0.001141
Ba	137	3	He	1.808	0.0107	440.02	0.0053	0.001141
Tl	205	3	He	0.517	0.0134	2110.22	0.0248	0.0005854
Tl	205	3	He	0.514	0.0133	2140.22	0.0248	0.0005854
Tl	205	3	He	0.517	0.0134	2120.24	0.0248	0.0005854
Pb	208	3	He	0.501	0.0183	1510.13	0.0332	0.001693
Pb	208	3	He	0.534	0.0194	1590.13	0.0332	0.001693
Pb	208	3	He	0.526	0.0192	1550.14	0.0332	0.001693
U	238	3	He	1.029	0.0355	5601.28	0.0338	0.0007949
U	238	3	He	1.042	0.036	5771.37	0.0338	0.0007949
U	238	3	He	0.964	0.0333	5271.17	0.0338	0.0007949
Sc	45	1	No Gas			1306466.46		
Sc	45	1	No Gas			1312338.11		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1289080.61		
Ge	72	1	No Gas			663061.40		
Ge	72	1	No Gas			663525.38		
Ge	72	1	No Gas			654496.55		
Sc	45	2	H2			79814.43		
Sc	45	2	H2			81632.86		
Sc	45	2	H2			81221.68		
Ge	72	2	H2			67883.78		
Ge	72	2	H2			67342.25		
Ge	72	2	H2			67191.18		
In	115	2	H2			170716.72		
In	115	2	H2			174063.42		
In	115	2	H2			169194.78		
Sc	45	3	He			24559.08		
Sc	45	3	He			25089.77		
Sc	45	3	He			24839.06		
Ge	72	3	He			46858.77		
Ge	72	3	He			46357.53		
Ge	72	3	He			46959.06		
In	115	3	He			41185.10		
In	115	3	He			40162.62		
In	115	3	He			41195.68		
Tb	159	3	He			157618.44		
Tb	159	3	He			160519.23		
Tb	159	3	He			158192.97		
Bi	209	3	He			115616.90		
Bi	209	3	He			118258.61		
Bi	209	3	He			118923.03		

Quantitation Report

Data File Name 026\ICSA.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:25:54 AM
Sample Name ICSA 8183842
Sample Type ICSA
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

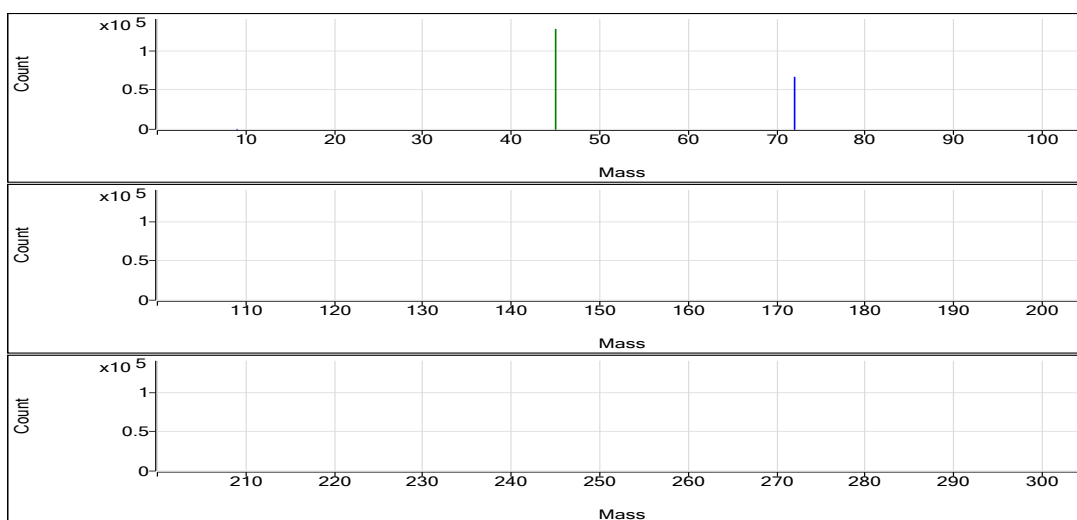
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.016	ppb	183.8	63.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.038	ppb	80.0	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	222616.854	ppb	2.0	18901755.97	404.4566	Analog	0.1000	3
Mg	24	72	He	88930.299	ppb	2.0	3808226.92	81.4866	Analog	0.1000	3
Al	27	72	He	91387.650	ppb	0.4	1240741.91	26.5451	Analog	0.1000	3
K	39	72	He	89957.267	ppb	1.2	3158653.25	67.5834	Analog	0.5000	3
Ca	44	72	He	268255.451	ppb	2.1	502882.32	10.7607	Pulse	0.5000	3
Ti	47	72	He	1866.055	ppb	2.0	27126.41	0.5804	Pulse	0.5000	3
V	51	72	He	-0.106	ppb	N/A	320.67	0.0069	Pulse	0.5000	3
Cr	52	72	He	3.525	ppb	2.7	3823.91	0.0818	Pulse	0.1000	3
Mn	55	72	He	0.650	ppb	5.6	330.01	0.0071	Pulse	0.5000	3
Fe	57	72	He	215315.070	ppb	2.7	3259332.35	69.7469	Analog	0.1000	3
Co	59	72	He	0.260	ppb	11.3	492.68	0.0105	Pulse	0.5000	3
Ni	60	72	He	0.272	ppb	4.0	265.33	0.0057	Pulse	0.5000	3
Cu	63	72	He	0.062	ppb	39.6	252.67	0.0054	Pulse	0.5000	3
Zn	66	72	He	1.542	ppb	17.9	319.34	0.0068	Pulse	0.5000	3
As	75	72	He	-0.074	ppb	N/A	27.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	2.594	ppb	6.5	1246.76	0.0312	Pulse	0.1000	3
Mo	98	115	He	1986.134	ppb	2.6	1856293.67	46.4698	Analog	0.1000	3
Ag	107	115	He	0.005	ppb	189.4	30.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.164	ppb	32.2	36.67	0.0009	Pulse	0.5000	3
Sn	120	115	He	0.341	ppb	74.1	2663.65	0.0667	Pulse	0.1000	3
Sb	121	115	He	0.234	ppb	16.1	172.23	0.0043	Pulse	0.3000	3
Ba	137	115	He	0.449	ppb	29.8	140.01	0.0035	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	132.9	123.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.110	ppb	6.8	843.38	0.0053	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	106.67	0.0007	Pulse	0.1000	3

ISTD Table:

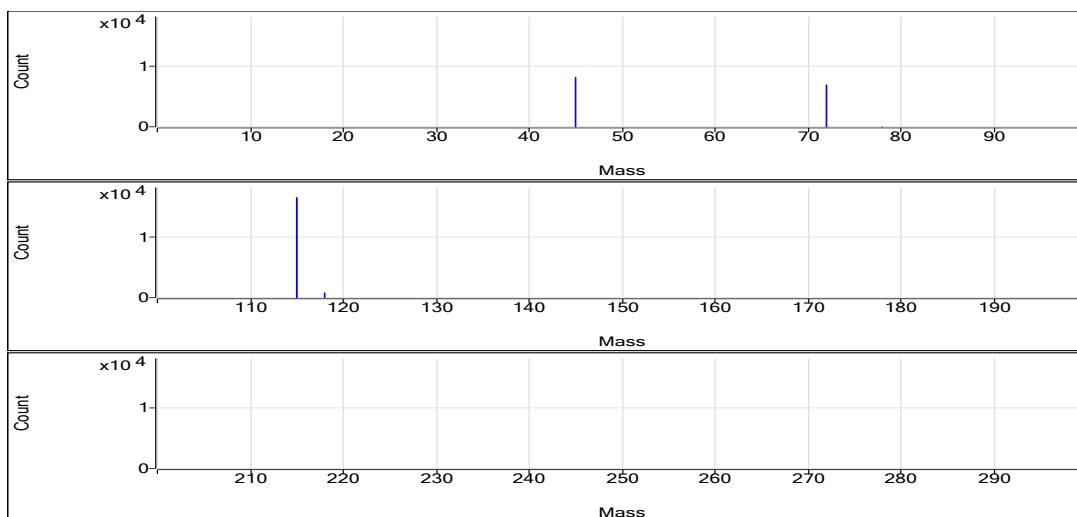
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1274490.14	2.6	97.5	Analog	0.1000	3
No Gas	Ge	72	665371.95	1.5	101.5	Pulse	0.1000	3
H2	Sc	45	81455.76	1.4	99.2	Pulse	0.1000	3
H2	Ge	72	69219.88	1.5	101.3	Pulse	0.1000	3
H2	In	115	165169.10	0.4	96.8	Pulse	0.1000	3
He	Sc	45	24228.63	2.4	94.6	Pulse	0.1000	3
He	Ge	72	46742.13	1.4	98.4	Pulse	0.1000	3
He	In	115	39956.86	1.5	97.6	Pulse	0.1000	3
He	Tb	159	157776.32	1.4	99.0	Pulse	0.1000	3
He	Bi	209	113783.02	1.2	97.3	Pulse	0.1000	3

No Gas

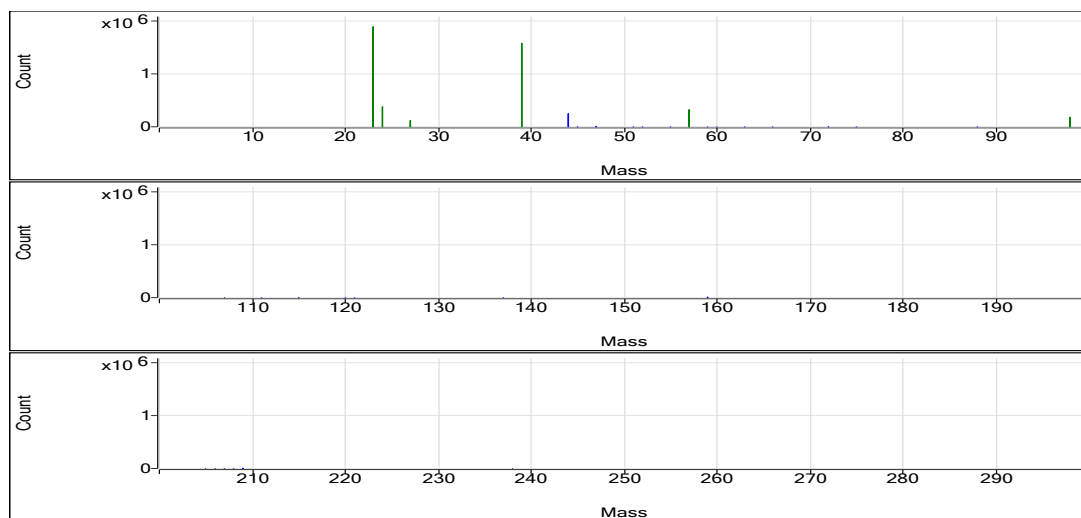


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.014	0.0001	42.00	0.0011	7.835E-05
Be	9	1	No Gas	0.018	0.0001	64.00	0.0011	7.835E-05
Be	9	1	No Gas	0.043	0.0001	84.00	0.0011	7.835E-05
Se	78	2	H2	0.043	0	3.33	0.0005	2.594E-05
Se	78	2	H2	0.065	0.0001	4.00	0.0005	2.594E-05
Se	78	2	H2	0.005	0	2.00	0.0005	2.594E-05
Na	23	3	He	217832.731	395.7684	18775677.22	0.0018	0.1731
Na	23	3	He	226572.918	411.641	19016507.22	0.0018	0.1731
Na	23	3	He	223444.915	405.9604	18913083.47	0.0018	0.1731
Mg	24	3	He	86872.306	79.601	3776358.69	0.0009	0.006537
Mg	24	3	He	89728.157	82.2176	3798193.69	0.0009	0.006537
Mg	24	3	He	90190.433	82.6412	3850128.38	0.0009	0.006537
Al	27	3	He	91193.992	26.4889	1256660.45	0.0003	0.00231
Al	27	3	He	91846.897	26.6785	1232462.01	0.0003	0.00231
Al	27	3	He	91122.062	26.468	1233103.26	0.0003	0.00231
K	39	3	He	88850.41	66.7562	3166983.25	0.0007	0.3475
K	39	3	He	91036.847	68.3903	3159416.25	0.0007	0.3475
K	39	3	He	89984.545	67.6038	3149560.25	0.0007	0.3475
Ca	44	3	He	261635.728	10.4952	497903.97	0	0.002807
Ca	44	3	He	271949.772	10.9088	503953.47	0	0.002807
Ca	44	3	He	271180.854	10.878	506789.53	0	0.002807
Ti	47	3	He	1823.031	0.5671	26902.00	0.0003	0.0001123
Ti	47	3	He	1887.065	0.587	27116.40	0.0003	0.0001123
Ti	47	3	He	1888.068	0.5873	27360.83	0.0003	0.0001123
V	51	3	He	-0.136	0.0065	306.00	0.0137	0.008308
V	51	3	He	-0.082	0.0072	332.01	0.0137	0.008308
V	51	3	He	-0.099	0.007	324.01	0.0137	0.008308
Cr	52	3	He	3.637	0.0837	3970.61	0.0171	0.02156
Cr	52	3	He	3.464	0.0808	3730.55	0.0171	0.02156
Cr	52	3	He	3.475	0.0809	3770.57	0.0171	0.02156
Mn	55	3	He	0.671	0.0072	342.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.608	0.0068	312.01	0.0073	0.002316
Mn	55	3	He	0.671	0.0072	336.01	0.0073	0.002316
Fe	57	3	He	208778.577	67.6297	3208423.08	0.0003	0.002736
Fe	57	3	He	219711.641	71.1711	3287876.51	0.0003	0.002736
Fe	57	3	He	217454.993	70.4401	3281697.45	0.0003	0.002736
Co	59	3	He	0.226	0.0094	448.01	0.0332	0.001922
Co	59	3	He	0.271	0.0109	504.01	0.0332	0.001922
Co	59	3	He	0.282	0.0113	526.01	0.0332	0.001922
Ni	60	3	He	0.26	0.0056	264.00	0.0093	0.003141
Ni	60	3	He	0.281	0.0058	266.00	0.0093	0.003141
Ni	60	3	He	0.275	0.0057	266.00	0.0093	0.003141
Cu	63	3	He	0.09	0.0062	292.00	0.027	0.003732
Cu	63	3	He	0.045	0.0049	228.00	0.027	0.003732
Cu	63	3	He	0.051	0.0051	238.00	0.027	0.003732
Zn	66	3	He	1.337	0.0062	294.00	0.0031	0.002032
Zn	66	3	He	1.432	0.0065	300.00	0.0031	0.002032
Zn	66	3	He	1.856	0.0078	364.01	0.0031	0.002032
As	75	3	He	-0.072	0.0006	28.00	0.0025	0.0007733
As	75	3	He	-0.133	0.0004	20.00	0.0025	0.0007733
As	75	3	He	-0.017	0.0007	34.00	0.0025	0.0007733
Sr	88	3	He	2.681	0.0321	1300.09	0.0105	0.004071
Sr	88	3	He	2.702	0.0323	1270.11	0.0105	0.004071
Sr	88	3	He	2.399	0.0292	1170.09	0.0105	0.004071
Mo	98	3	He	1947.273	45.5606	1844010.13	0.0234	0.003908
Mo	98	3	He	2045.191	47.8514	1879673.57	0.0234	0.003908
Mo	98	3	He	1965.937	45.9973	1845197.32	0.0234	0.003908
Ag	107	3	He	-0.005	0.0002	10.00	0.0493	0.0004851
Ag	107	3	He	0.016	0.0013	50.00	0.0493	0.0004851
Ag	107	3	He	0.005	0.0007	30.00	0.0493	0.0004851
Cd	111	3	He	0.106	0.0006	24.00	0.0056	0
Cd	111	3	He	0.209	0.0012	46.00	0.0056	0
Cd	111	3	He	0.178	0.001	40.00	0.0056	0
Sn	120	3	He	0.535	0.0699	2830.36	0.0169	0.0609
Sn	120	3	He	0.434	0.0682	2680.31	0.0169	0.0609
Sn	120	3	He	0.055	0.0618	2480.29	0.0169	0.0609
Sb	121	3	He	0.191	0.0036	146.67	0.0161	0.0005433
Sb	121	3	He	0.261	0.0048	186.67	0.0161	0.0005433
Sb	121	3	He	0.25	0.0046	183.34	0.0161	0.0005433
Ba	137	3	He	0.299	0.0027	110.00	0.0053	0.001141
Ba	137	3	He	0.555	0.0041	160.01	0.0053	0.001141
Ba	137	3	He	0.492	0.0037	150.01	0.0053	0.001141
Tl	205	3	He	0	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	0.02	0.0011	170.01	0.0248	0.0005854
Pb	208	3	He	0.102	0.0051	440.02	0.0332	0.001693
Pb	208	3	He	0.117	0.0056	530.03	0.0332	0.001693
Pb	208	3	He	0.111	0.0054	410.02	0.0332	0.001693
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	140.01	0.0338	0.0007949
U	238	3	He	-0.005	0.0006	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1257084.83		
Sc	45	1	No Gas			1254269.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1312116.39		
Ge	72	1	No Gas			665026.01		
Ge	72	1	No Gas			655672.18		
Ge	72	1	No Gas			675417.65		
Sc	45	2	H2			81884.81		
Sc	45	2	H2			82316.51		
Sc	45	2	H2			80165.95		
Ge	72	2	H2			69742.61		
Ge	72	2	H2			68004.33		
Ge	72	2	H2			69912.70		
In	115	2	H2			165754.70		
In	115	2	H2			164532.58		
In	115	2	H2			165220.02		
Sc	45	3	He			23607.62		
Sc	45	3	He			24769.53		
Sc	45	3	He			24308.73		
Ge	72	3	He			47441.07		
Ge	72	3	He			46196.82		
Ge	72	3	He			46588.49		
In	115	3	He			40493.58		
In	115	3	He			39300.21		
In	115	3	He			40132.73		
Tb	159	3	He			155386.65		
Tb	159	3	He			159577.52		
Tb	159	3	He			158364.78		
Bi	209	3	He			113369.45		
Bi	209	3	He			115304.45		
Bi	209	3	He			112675.15		

Quantitation Report

Data File Name 027\CSB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:28:03 AM
Sample Name ICSAB 8053045
Sample Type ICSAB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

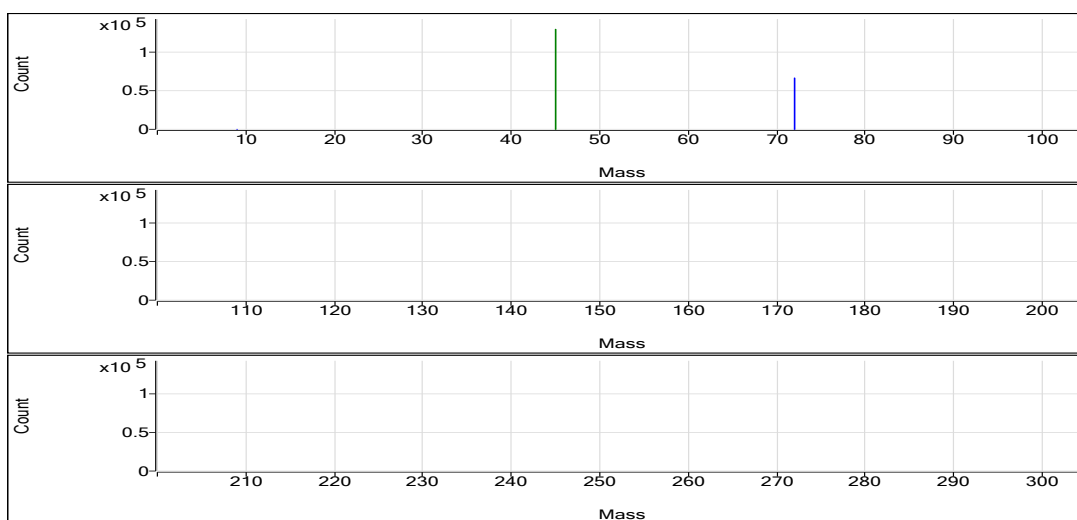
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.009	ppb	207.9	58.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	93.914	ppb	2.4	3325.68	0.0476	Pulse	1.5000	3
Na	23	72	He	220646.215	ppb	2.0	18991787.64	400.8778	Analog	0.1000	3
Mg	24	72	He	87732.535	ppb	2.4	3808291.19	80.3892	Analog	0.1000	3
Al	27	72	He	90031.252	ppb	2.9	1238801.42	26.1512	Analog	0.1000	3
K	39	72	He	88639.309	ppb	2.1	3155092.25	66.5984	Analog	0.5000	3
Ca	44	72	He	266515.735	ppb	2.1	506479.30	10.6909	Pulse	0.5000	3
Ti	47	72	He	1839.408	ppb	1.2	27107.71	0.5722	Pulse	0.5000	3
V	51	72	He	185.795	ppb	2.5	120618.14	2.5461	Pulse	0.5000	3
Cr	52	72	He	184.755	ppb	2.2	150572.83	3.1783	Pulse	0.1000	3
Mn	55	72	He	183.144	ppb	2.3	63413.85	1.3386	Pulse	0.5000	3
Fe	57	72	He	211570.457	ppb	2.4	3246665.26	68.5340	Analog	0.1000	3
Co	59	72	He	182.458	ppb	2.3	287266.63	6.0638	Pulse	0.5000	3
Ni	60	72	He	179.941	ppb	2.1	79666.35	1.6816	Pulse	0.5000	3
Cu	63	72	He	180.590	ppb	2.0	231322.73	4.8828	Pulse	0.5000	3
Zn	66	72	He	92.573	ppb	3.6	13757.90	0.2904	Pulse	0.5000	3
As	75	72	He	89.116	ppb	1.6	10802.34	0.2280	Pulse	0.5000	3
Sr	88	115	He	2.413	ppb	5.4	1156.75	0.0293	Pulse	0.1000	3
Mo	98	115	He	2014.454	ppb	2.2	1860773.41	47.1323	Analog	0.1000	3
Ag	107	115	He	50.148	ppb	0.2	97665.02	2.4730	Pulse	0.1000	3
Cd	111	115	He	99.203	ppb	1.9	21977.48	0.5566	Pulse	0.5000	3
Sn	120	115	He	0.941	ppb	90.2	3037.98	0.0768	Pulse	0.1000	3
Sb	121	115	He	0.201	ppb	29.3	150.00	0.0038	Pulse	0.3000	3
Ba	137	115	He	0.326	ppb	30.5	113.34	0.0029	Pulse	0.1000	3
Tl	205	159	He	-0.005	ppb	N/A	73.33	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.111	ppb	18.1	850.04	0.0054	Pulse	0.1000	3
U	238	159	He	-0.002	ppb	N/A	116.67	0.0007	Pulse	0.1000	3

ISTD Table:

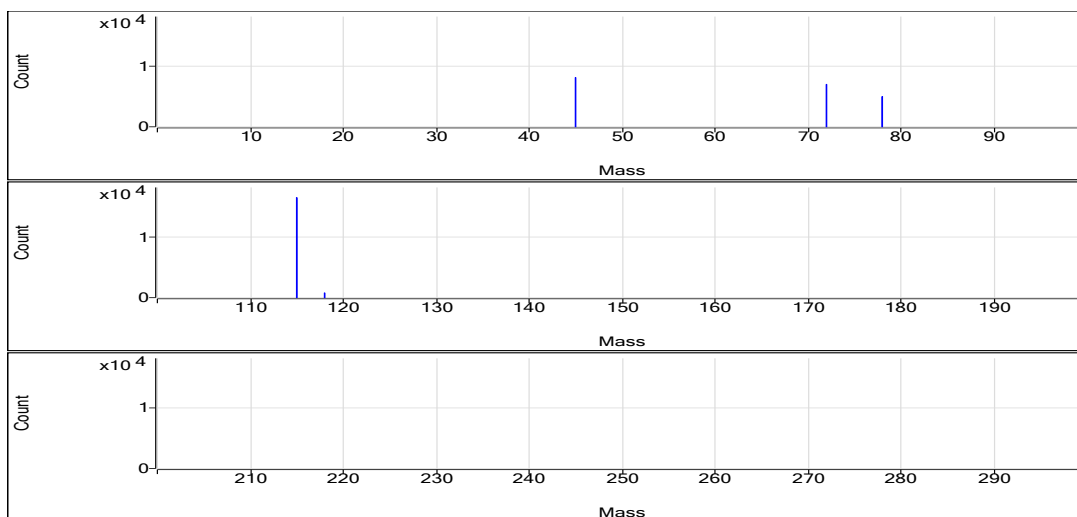
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1295733.42	1.6	99.1	Analog	0.1000	3
No Gas	Ge	72	665273.95	1.7	101.5	Pulse	0.1000	3
H2	Sc	45	81074.43	1.2	98.7	Pulse	0.1000	3
H2	Ge	72	69855.96	1.8	102.2	Pulse	0.1000	3
H2	In	115	164458.06	0.2	96.4	Pulse	0.1000	3
He	Sc	45	24358.69	1.9	95.1	Pulse	0.1000	3
He	Ge	72	47383.87	1.4	99.7	Pulse	0.1000	3
He	In	115	39493.11	2.3	96.5	Pulse	0.1000	3
He	Tb	159	157790.29	0.1	99.0	Pulse	0.1000	3
He	Bi	209	112200.40	0.2	95.9	Pulse	0.1000	3

No Gas

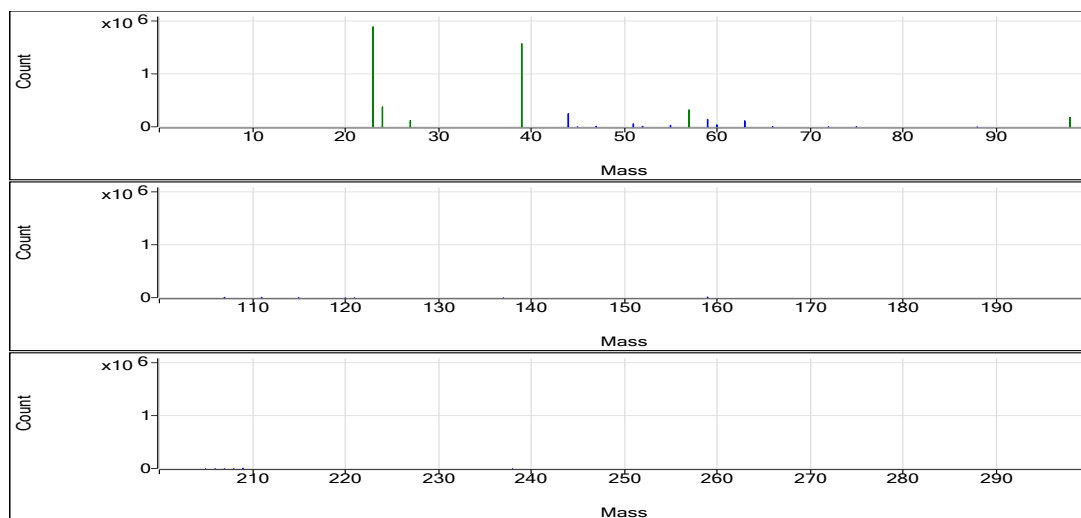


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.007	0.0001	46.00	0.0011	7.835E-05
Be	9	1	No Gas	0.005	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	0.03	0.0001	74.00	0.0011	7.835E-05
Se	78	2	H2	91.798	0.0465	3275.68	0.0005	2.594E-05
Se	78	2	H2	93.74	0.0475	3365.02	0.0005	2.594E-05
Se	78	2	H2	96.205	0.0488	3336.35	0.0005	2.594E-05
Na	23	3	He	216213.126	392.8271	18809203.47	0.0018	0.1731
Na	23	3	He	224983.931	408.7554	19051388.47	0.0018	0.1731
Na	23	3	He	220741.589	401.0511	19114770.97	0.0018	0.1731
Mg	24	3	He	86337.028	79.1106	3787944.94	0.0009	0.006537
Mg	24	3	He	90116.017	82.573	3848586.82	0.0009	0.006537
Mg	24	3	He	86744.561	79.484	3788341.82	0.0009	0.006537
Al	27	3	He	87788.87	25.4999	1220975.92	0.0003	0.00231
Al	27	3	He	92915.907	26.989	1257910.61	0.0003	0.00231
Al	27	3	He	89388.98	25.9646	1237517.72	0.0003	0.00231
K	39	3	He	86883.994	65.2864	3126019.75	0.0007	0.3475
K	39	3	He	90544.832	68.0226	3170417.00	0.0007	0.3475
K	39	3	He	88489.102	66.4861	3168840.00	0.0007	0.3475
Ca	44	3	He	261627.24	10.4949	502511.44	0	0.002807
Ca	44	3	He	272420.713	10.9277	509322.38	0	0.002807
Ca	44	3	He	265499.252	10.6501	507604.09	0	0.002807
Ti	47	3	He	1822.266	0.5668	27140.43	0.0003	0.0001123
Ti	47	3	He	1865.012	0.5801	27038.27	0.0003	0.0001123
Ti	47	3	He	1830.946	0.5695	27144.43	0.0003	0.0001123
V	51	3	He	181.782	2.4913	119288.39	0.0137	0.008308
V	51	3	He	190.803	2.6145	121859.44	0.0137	0.008308
V	51	3	He	184.802	2.5326	120706.58	0.0137	0.008308
Cr	52	3	He	183.213	3.152	150922.07	0.0171	0.02156
Cr	52	3	He	189.356	3.257	151800.92	0.0171	0.02156
Cr	52	3	He	181.698	3.1261	148995.49	0.0171	0.02156
Mn	55	3	He	178.572	1.3052	62494.94	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	186.955	1.3664	63683.80	0.0073	0.002316
Mn	55	3	He	183.906	1.3441	64062.81	0.0073	0.002316
Fe	57	3	He	208670.081	67.5945	3236535.26	0.0003	0.002736
Fe	57	3	He	217474.655	70.4465	3283389.01	0.0003	0.002736
Fe	57	3	He	208566.637	67.561	3220071.51	0.0003	0.002736
Co	59	3	He	178.339	5.9269	283790.81	0.0332	0.001922
Co	59	3	He	186.558	6.2	288969.84	0.0332	0.001922
Co	59	3	He	182.477	6.0644	289039.25	0.0332	0.001922
Ni	60	3	He	176.747	1.6518	79092.90	0.0093	0.003141
Ni	60	3	He	184.196	1.7213	80228.39	0.0093	0.003141
Ni	60	3	He	178.879	1.6717	79677.76	0.0093	0.003141
Cu	63	3	He	177.291	4.7937	229528.03	0.027	0.003732
Cu	63	3	He	184.382	4.9852	232352.55	0.027	0.003732
Cu	63	3	He	180.098	4.8695	232087.61	0.027	0.003732
Zn	66	3	He	90.822	0.285	13645.80	0.0031	0.002032
Zn	66	3	He	96.367	0.3023	14088.19	0.0031	0.002032
Zn	66	3	He	90.529	0.2841	13539.71	0.0031	0.002032
As	75	3	He	87.594	0.2241	10731.61	0.0025	0.0007733
As	75	3	He	90.518	0.2316	10793.69	0.0025	0.0007733
As	75	3	He	89.235	0.2283	10881.72	0.0025	0.0007733
Sr	88	3	He	2.512	0.0304	1170.08	0.0105	0.004071
Sr	88	3	He	2.264	0.0278	1120.09	0.0105	0.004071
Sr	88	3	He	2.461	0.0298	1180.09	0.0105	0.004071
Mo	98	3	He	2056.935	48.1262	1855227.16	0.0234	0.003908
Mo	98	3	He	1967.056	46.0234	1857360.75	0.0234	0.003908
Mo	98	3	He	2019.371	47.2474	1869732.32	0.0234	0.003908
Ag	107	3	He	50.211	2.4761	95451.76	0.0493	0.0004851
Ag	107	3	He	50.029	2.4671	99565.87	0.0493	0.0004851
Ag	107	3	He	50.206	2.4758	97977.42	0.0493	0.0004851
Cd	111	3	He	101.158	0.5676	21881.36	0.0056	0
Cd	111	3	He	97.494	0.5471	22077.61	0.0056	0
Cd	111	3	He	98.955	0.5553	21973.46	0.0056	0
Sn	120	3	He	0.742	0.0734	2830.37	0.0169	0.0609
Sn	120	3	He	1.873	0.0925	3733.29	0.0169	0.0609
Sn	120	3	He	0.21	0.0644	2550.28	0.0169	0.0609
Sb	121	3	He	0.175	0.0034	130.00	0.0161	0.0005433
Sb	121	3	He	0.269	0.0049	196.67	0.0161	0.0005433
Sb	121	3	He	0.16	0.0031	123.34	0.0161	0.0005433
Ba	137	3	He	0.275	0.0026	100.00	0.0053	0.001141
Ba	137	3	He	0.441	0.0035	140.01	0.0053	0.001141
Ba	137	3	He	0.263	0.0025	100.00	0.0053	0.001141
Tl	205	3	He	0.004	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	-0.008	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.011	0.0003	50.00	0.0248	0.0005854
Pb	208	3	He	0.102	0.0051	520.03	0.0332	0.001693
Pb	208	3	He	0.098	0.0049	430.02	0.0332	0.001693
Pb	208	3	He	0.134	0.0062	570.03	0.0332	0.001693
U	238	3	He	-0.005	0.0006	100.00	0.0338	0.0007949
U	238	3	He	-0.001	0.0008	120.00	0.0338	0.0007949
U	238	3	He	0.001	0.0008	130.01	0.0338	0.0007949
Sc	45	1	No Gas			1277711.39		
Sc	45	1	No Gas			1290417.79		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1319071.07		
Ge	72	1	No Gas			652796.40		
Ge	72	1	No Gas			669427.57		
Ge	72	1	No Gas			673597.88		
Sc	45	2	H2			81363.18		
Sc	45	2	H2			79995.39		
Sc	45	2	H2			81864.71		
Ge	72	2	H2			70374.63		
Ge	72	2	H2			70797.04		
Ge	72	2	H2			68396.22		
In	115	2	H2			164563.02		
In	115	2	H2			164025.92		
In	115	2	H2			164785.25		
Sc	45	3	He			24288.85		
Sc	45	3	He			24849.20		
Sc	45	3	He			23938.03		
Ge	72	3	He			47881.63		
Ge	72	3	He			46608.29		
Ge	72	3	He			47661.69		
In	115	3	He			38569.04		
In	115	3	He			40382.98		
In	115	3	He			39591.11		
Tb	159	3	He			157860.10		
Tb	159	3	He			157982.71		
Tb	159	3	He			157528.05		
Bi	209	3	He			112381.66		
Bi	209	3	He			112259.51		
Bi	209	3	He			111960.04		

Quantitation Report

Data File Name 030_LRC.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:36:04 AM
Sample Name LRC 8160221
Sample Type LRC
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

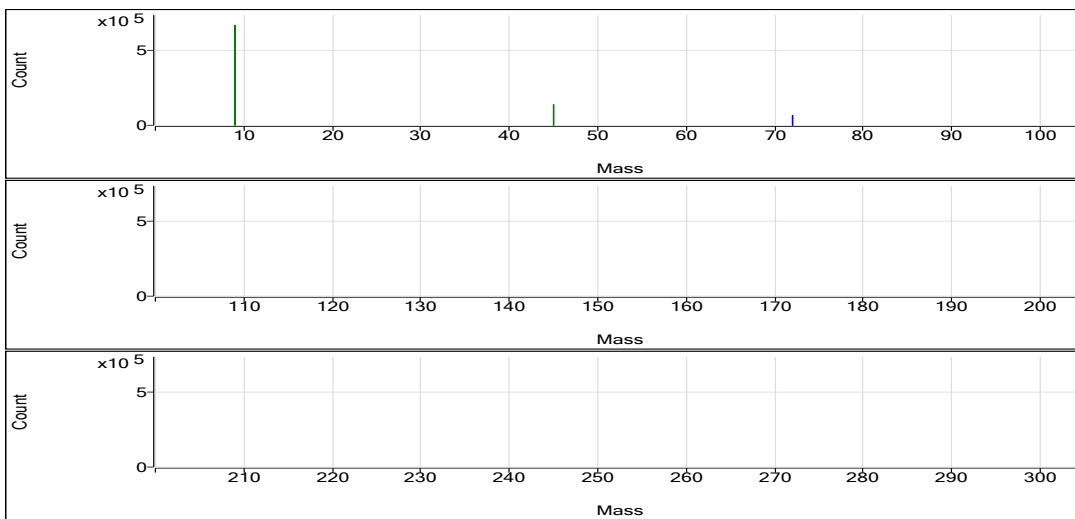
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	1882.869	ppb	4.7	1328642.38	2.0001	Analog	0.5000	3
Se	78	72	H2	1912.115	ppb	1.0	66502.31	0.9690	Pulse	1.5000	3
Na	23	72	He	182151.656	ppb	0.5	15340103.52	330.9698	Analog	0.1000	3
Mg	24	72	He	181648.435	ppb	0.5	7714481.14	166.4372	Analog	0.1000	3
Al	27	72	He	184617.712	ppb	1.6	2485056.42	53.6230	Analog	0.1000	3
K	39	72	He	182170.157	ppb	0.6	6326760.00	136.5053	Analog	0.5000	3
Ca	44	72	He	190468.378	ppb	0.4	354161.46	7.6412	Pulse	0.5000	3
Ti	47	72	He	1952.728	ppb	1.3	28149.47	0.6074	Pulse	0.5000	3
V	51	72	He	1882.409	ppb	0.7	1192090.29	25.7207	Pulse	0.5000	3
Cr	52	72	He	1815.170	ppb	0.8	1438463.62	31.0361	Analog	0.1000	3
Mn	55	72	He	5567.616	ppb	0.2	1882946.54	40.6243	Analog	0.5000	3
Fe	57	72	He	140466.166	ppb	0.2	2109021.85	45.5021	Analog	0.1000	3
Co	59	72	He	1826.260	ppb	0.5	2812338.75	60.6762	Analog	0.5000	3
Ni	60	72	He	1818.162	ppb	0.5	786217.92	16.9630	Pulse	0.5000	3
Cu	63	72	He	1837.269	ppb	1.2	2300643.33	49.6417	Analog	0.5000	3
Zn	66	72	He	1869.034	ppb	0.9	269984.18	5.8251	Pulse	0.5000	3
As	75	72	He	1922.782	ppb	0.5	227274.20	4.9036	Pulse	0.5000	3
Sr	88	115	He	1919.496	ppb	0.7	840844.91	20.0843	Pulse	0.1000	3
Mo	98	115	He	1915.738	ppb	1.6	1876234.34	44.8228	Analog	0.1000	3
Ag	107	115	He	1876.836	ppb	1.8	3873459.21	92.5371	Analog	0.1000	3
Cd	111	115	He	1869.980	ppb	1.4	439242.87	10.4929	Pulse	0.5000	3
Sn	120	115	He	1905.579	ppb	0.3	1349105.03	32.2238	Pulse	0.1000	3
Sb	121	115	He	1887.224	ppb	1.0	1273826.89	30.4285	Pulse	0.3000	3
Ba	137	115	He	1911.907	ppb	1.8	422621.05	10.0960	Pulse	0.1000	3
Tl	205	159	He	1912.178	ppb	1.1	7513084.26	47.3785	Analog	0.1000	3
Pb	208	159	He	1929.510	ppb	0.8	10167845.21	64.1158	Analog	0.1000	3
U	238	159	He	0.075	ppb	25.4	526.69	0.0033	Pulse	0.1000	3

ISTD Table:

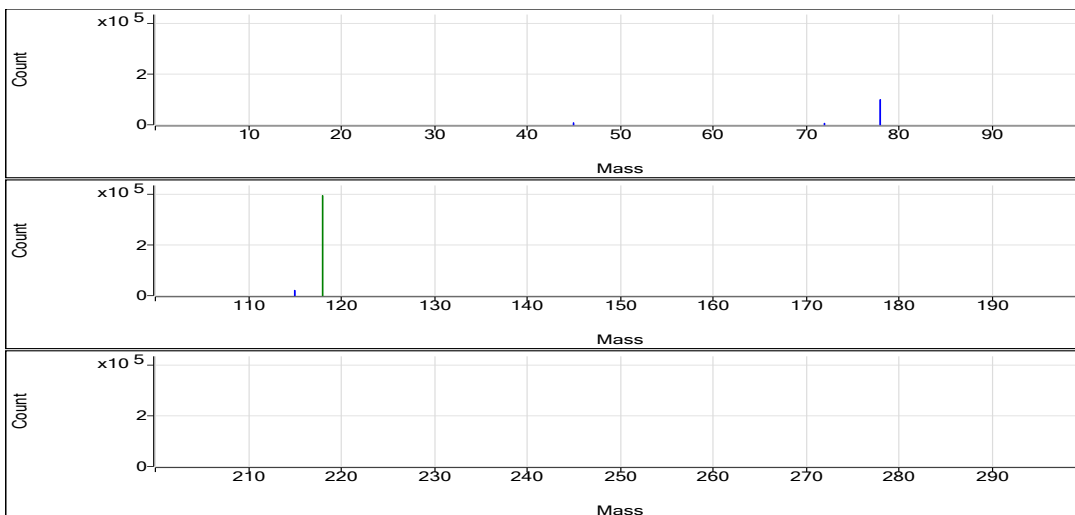
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1378248.89	2.6	105.4	Analog	0.1000	3
No Gas	Ge	72	664119.99	1.7	101.3	Pulse	0.1000	3
H2	Sc	45	83402.04	0.6	101.5	Pulse	0.1000	3
H2	Ge	72	68633.81	1.5	100.4	Pulse	0.1000	3
H2	In	115	216573.84	1.8	126.9	Pulse	0.1000	3
He	Sc	45	25907.82	2.2	101.2	Pulse	0.1000	3
He	Ge	72	46350.82	1.6	97.6	Pulse	0.1000	3
He	In	115	41868.46	2.2	102.3	Pulse	0.1000	3
He	Tb	159	158597.72	1.9	99.5	Pulse	0.1000	3
He	Bi	209	113843.21	1.8	97.3	Pulse	0.1000	3

No Gas

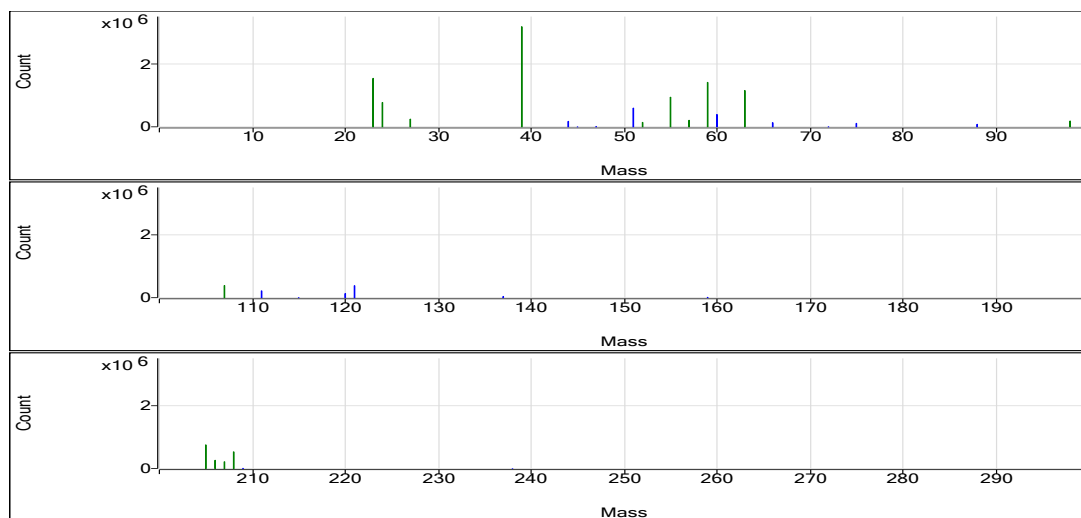


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	1788.319	1.8996	1258536.50	0.0011	7.835E-05
Be	9	1	No Gas	1895.624	2.0136	1316857.38	0.0011	7.835E-05
Be	9	1	No Gas	1964.665	2.087	1410533.25	0.0011	7.835E-05
Se	78	2	H2	1929.759	0.978	65945.83	0.0005	2.594E-05
Se	78	2	H2	1890.389	0.958	66380.93	0.0005	2.594E-05
Se	78	2	H2	1916.196	0.9711	67180.17	0.0005	2.594E-05
Na	23	3	He	182984.332	332.4819	15126306.02	0.0018	0.1731
Na	23	3	He	182258.832	331.1644	15507968.52	0.0018	0.1731
Na	23	3	He	181211.805	329.2629	15386036.02	0.0018	0.1731
Mg	24	3	He	181633.192	166.4233	7571446.14	0.0009	0.006537
Mg	24	3	He	180798.96	165.6589	7757576.76	0.0009	0.006537
Mg	24	3	He	182513.153	167.2295	7814420.51	0.0009	0.006537
Al	27	3	He	187917.614	54.5815	2483190.59	0.0003	0.00231
Al	27	3	He	182423.489	52.9857	2481248.87	0.0003	0.00231
Al	27	3	He	183512.032	53.3019	2490729.81	0.0003	0.00231
K	39	3	He	183331.097	137.373	6249801.50	0.0007	0.3475
K	39	3	He	181558.989	136.0485	6370962.00	0.0007	0.3475
K	39	3	He	181620.386	136.0944	6359516.50	0.0007	0.3475
Ca	44	3	He	191240.91	7.6722	349045.81	0	0.002807
Ca	44	3	He	189973.773	7.6213	356896.91	0	0.002807
Ca	44	3	He	190190.45	7.63	356541.66	0	0.002807
Ti	47	3	He	1981.168	0.6162	28035.95	0.0003	0.0001123
Ti	47	3	He	1932.444	0.6011	28148.11	0.0003	0.0001123
Ti	47	3	He	1944.574	0.6049	28264.35	0.0003	0.0001123
V	51	3	He	1896.96	25.9195	1179210.00	0.0137	0.008308
V	51	3	He	1872.059	25.5794	1197845.50	0.0137	0.008308
V	51	3	He	1878.208	25.6633	1199215.38	0.0137	0.008308
Cr	52	3	He	1827.492	31.2466	1421569.51	0.0171	0.02156
Cr	52	3	He	1817.712	31.0795	1455411.07	0.0171	0.02156
Cr	52	3	He	1800.307	30.7821	1438410.29	0.0171	0.02156
Mn	55	3	He	5573.508	40.6673	1850161.63	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5553.221	40.5192	1897459.50	0.0073	0.002316
Mn	55	3	He	5576.118	40.6863	1901218.50	0.0073	0.002316
Fe	57	3	He	140751.57	45.5946	2074329.66	0.0003	0.002736
Fe	57	3	He	140476.276	45.5054	2130953.72	0.0003	0.002736
Fe	57	3	He	140170.65	45.4064	2121782.16	0.0003	0.002736
Co	59	3	He	1829.243	60.7753	2764978.25	0.0332	0.001922
Co	59	3	He	1816.015	60.3358	2825442.00	0.0332	0.001922
Co	59	3	He	1833.523	60.9175	2846596.00	0.0332	0.001922
Ni	60	3	He	1825.976	17.0359	775051.38	0.0093	0.003141
Ni	60	3	He	1808.986	16.8774	790347.44	0.0093	0.003141
Ni	60	3	He	1819.524	16.9757	793254.94	0.0093	0.003141
Cu	63	3	He	1862.183	50.3148	2289076.75	0.027	0.003732
Cu	63	3	He	1823.901	49.2805	2307738.00	0.027	0.003732
Cu	63	3	He	1825.723	49.3297	2305115.25	0.027	0.003732
Zn	66	3	He	1877.861	5.8526	266263.97	0.0031	0.002032
Zn	66	3	He	1850.285	5.7667	270045.09	0.0031	0.002032
Zn	66	3	He	1878.958	5.856	273643.47	0.0031	0.002032
As	75	3	He	1934.468	4.9334	224446.56	0.0025	0.0007733
As	75	3	He	1917.219	4.8894	228965.55	0.0025	0.0007733
As	75	3	He	1916.659	4.888	228410.48	0.0025	0.0007733
Sr	88	3	He	1920.489	20.0947	823052.41	0.0105	0.004071
Sr	88	3	He	1932.564	20.221	845455.07	0.0105	0.004071
Sr	88	3	He	1905.436	19.9372	854027.25	0.0105	0.004071
Mo	98	3	He	1947.322	45.5618	1866153.25	0.0234	0.003908
Mo	98	3	He	1911.61	44.7263	1870039.50	0.0234	0.003908
Mo	98	3	He	1888.281	44.1805	1892510.28	0.0234	0.003908
Ag	107	3	He	1896.274	93.4955	3829459.01	0.0493	0.0004851
Ag	107	3	He	1896.279	93.4957	3909127.75	0.0493	0.0004851
Ag	107	3	He	1837.955	90.6201	3881790.88	0.0493	0.0004851
Cd	111	3	He	1881.398	10.5569	432398.91	0.0056	0
Cd	111	3	He	1889.462	10.6022	443285.47	0.0056	0
Cd	111	3	He	1839.081	10.3195	442044.22	0.0056	0
Sn	120	3	He	1910.502	32.3069	1323250.14	0.0169	0.0609
Sn	120	3	He	1906.317	32.2363	1347822.64	0.0169	0.0609
Sn	120	3	He	1899.918	32.1283	1376242.32	0.0169	0.0609
Sb	121	3	He	1896.862	30.5839	1252679.64	0.0161	0.0005433
Sb	121	3	He	1900.331	30.6399	1281075.99	0.0161	0.0005433
Sb	121	3	He	1864.48	30.0618	1287725.05	0.0161	0.0005433
Ba	137	3	He	1921.602	10.1472	415615.62	0.0053	0.001141
Ba	137	3	He	1939.781	10.2432	428274.17	0.0053	0.001141
Ba	137	3	He	1874.338	9.8976	423973.35	0.0053	0.001141
Tl	205	3	He	1936.079	47.9707	7447110.51	0.0248	0.0005854
Tl	205	3	He	1892.984	46.903	7537215.51	0.0248	0.0005854
Tl	205	3	He	1907.472	47.2619	7554926.76	0.0248	0.0005854
Pb	208	3	He	1941.382	64.5103	5226623.05	0.0332	0.001693
Pb	208	3	He	1911.154	63.5059	5341044.92	0.0332	0.001693
Pb	208	3	He	1935.996	64.3313	5389026.79	0.0332	0.001693
U	238	3	He	0.053	0.0026	400.02	0.0338	0.0007949
U	238	3	He	0.087	0.0037	600.03	0.0338	0.0007949
U	238	3	He	0.084	0.0036	580.03	0.0338	0.0007949
Sc	45	1	No Gas			1392948.42		
Sc	45	1	No Gas			1336929.20		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1404869.04		
Ge	72	1	No Gas			662510.30		
Ge	72	1	No Gas			653972.10		
Ge	72	1	No Gas			675877.57		
Sc	45	2	H2			83693.80		
Sc	45	2	H2			82839.13		
Sc	45	2	H2			83673.19		
Ge	72	2	H2			67431.52		
Ge	72	2	H2			69290.03		
Ge	72	2	H2			69179.88		
In	115	2	H2			213224.72		
In	115	2	H2			215585.88		
In	115	2	H2			220910.93		
Sc	45	3	He			25240.27		
Sc	45	3	He			26261.59		
Sc	45	3	He			26221.59		
Ge	72	3	He			45495.12		
Ge	72	3	He			46828.61		
Ge	72	3	He			46728.72		
In	115	3	He			50221.50		
In	115	3	He			51245.52		
In	115	3	He			52469.58		
Tb	159	3	He			155242.81		
Tb	159	3	He			160698.10		
Tb	159	3	He			159852.26		
Bi	209	3	He			112674.34		
Bi	209	3	He			112582.68		
Bi	209	3	He			116272.62		

Quantitation Report

Data File Name 135ICSA.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 5:44:32 PM
Sample Name ICSA 8183842
Sample Type ICSA
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

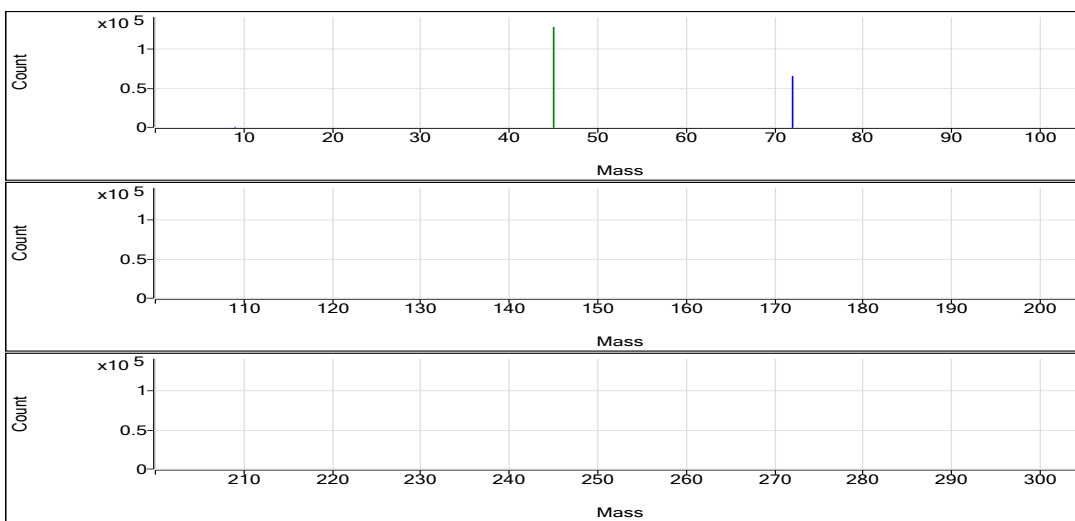
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.009	ppb	204.2	57.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.034	ppb	86.7	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	229428.013	ppb	1.6	18492365.56	416.8260	Analog	0.1000	3
Mg	24	72	He	90536.706	ppb	0.5	3680697.03	82.9585	Analog	0.1000	3
Al	27	72	He	91819.867	ppb	1.3	1183348.37	26.6707	Analog	0.1000	3
K	39	72	He	90175.295	ppb	1.6	3005545.58	67.7464	Analog	0.5000	3
Ca	44	72	He	268875.625	ppb	1.5	478505.47	10.7856	Pulse	0.5000	3
Ti	47	72	He	1846.579	ppb	1.9	25482.43	0.5744	Pulse	0.5000	3
V	51	72	He	-0.049	ppb	N/A	338.68	0.0076	Pulse	0.5000	3
Cr	52	72	He	3.145	ppb	6.0	3340.47	0.0753	Pulse	0.1000	3
Mn	55	72	He	0.727	ppb	5.0	338.01	0.0076	Pulse	0.5000	3
Fe	57	72	He	216078.419	ppb	1.4	3105299.33	69.9942	Analog	0.1000	3
Co	59	72	He	0.248	ppb	5.8	450.01	0.0101	Pulse	0.5000	3
Ni	60	72	He	0.306	ppb	18.7	266.00	0.0060	Pulse	0.5000	3
Cu	63	72	He	0.032	ppb	37.5	203.33	0.0046	Pulse	0.5000	3
Zn	66	72	He	1.147	ppb	10.9	248.67	0.0056	Pulse	0.5000	3
As	75	72	He	0.068	ppb	110.3	42.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	2.740	ppb	10.8	1186.75	0.0327	Pulse	0.1000	3
Mo	98	115	He	2070.461	ppb	2.7	1757642.74	48.4426	Analog	0.1000	3
Ag	107	115	He	0.013	ppb	48.5	40.00	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.157	ppb	7.2	32.00	0.0009	Pulse	0.5000	3
Sn	120	115	He	0.668	ppb	44.3	2616.96	0.0722	Pulse	0.1000	3
Sb	121	115	He	0.216	ppb	31.0	145.56	0.0040	Pulse	0.3000	3
Ba	137	115	He	0.221	ppb	99.5	83.34	0.0023	Pulse	0.1000	3
Tl	205	159	He	-0.011	ppb	N/A	46.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.084	ppb	13.4	653.37	0.0045	Pulse	0.1000	3
U	238	159	He	-0.002	ppb	N/A	106.67	0.0007	Pulse	0.1000	3

ISTD Table:

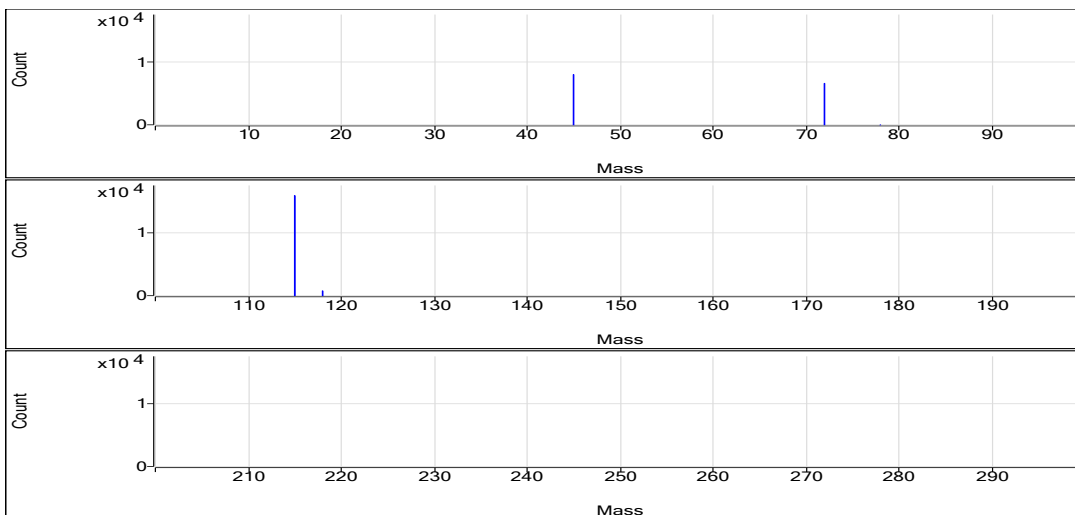
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1287044.43	1.4	98.5	Analog	0.1000	3
No Gas	Ge	72	655480.43	1.7	100.0	Pulse	0.1000	3
H2	Sc	45	80756.12	1.8	98.3	Pulse	0.1000	3
H2	Ge	72	66648.48	1.1	97.5	Pulse	0.1000	3
H2	In	115	160739.48	0.6	94.2	Pulse	0.1000	3
He	Sc	45	22916.66	0.9	89.5	Pulse	0.1000	3
He	Ge	72	44368.95	0.9	93.4	Pulse	0.1000	3
He	In	115	36301.53	2.8	88.7	Pulse	0.1000	3
He	Tb	159	146168.42	0.7	91.7	Pulse	0.1000	3
He	Bi	209	105068.38	0.6	89.8	Pulse	0.1000	3

No Gas

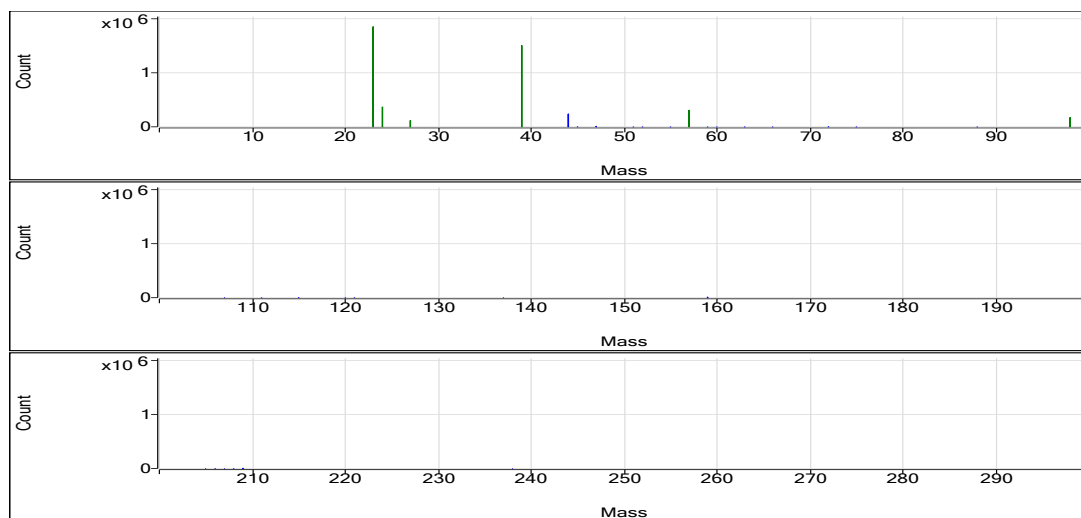


H2



Quantitation Report

He



Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.685	0.0073	328.01	0.0073	0.002316
Mn	55	3	He	0.754	0.0078	344.01	0.0073	0.002316
Fe	57	3	He	216801.972	70.2286	3107772.77	0.0003	0.002736
Fe	57	3	He	212798.507	68.9318	3090422.45	0.0003	0.002736
Fe	57	3	He	218634.777	70.8222	3117702.77	0.0003	0.002736
Co	59	3	He	0.243	0.01	442.01	0.0332	0.001922
Co	59	3	He	0.236	0.0098	438.01	0.0332	0.001922
Co	59	3	He	0.264	0.0107	470.01	0.0332	0.001922
Ni	60	3	He	0.24	0.0054	238.00	0.0093	0.003141
Ni	60	3	He	0.338	0.0063	282.00	0.0093	0.003141
Ni	60	3	He	0.34	0.0063	278.00	0.0093	0.003141
Cu	63	3	He	0.024	0.0044	194.00	0.027	0.003732
Cu	63	3	He	0.025	0.0044	198.00	0.027	0.003732
Cu	63	3	He	0.045	0.005	218.00	0.027	0.003732
Zn	66	3	He	1.147	0.0056	248.00	0.0031	0.002032
Zn	66	3	He	1.023	0.0052	234.00	0.0031	0.002032
Zn	66	3	He	1.273	0.006	264.00	0.0031	0.002032
As	75	3	He	0.104	0.001	46.00	0.0025	0.0007733
As	75	3	He	0.117	0.0011	48.00	0.0025	0.0007733
As	75	3	He	-0.018	0.0007	32.00	0.0025	0.0007733
Sr	88	3	He	2.698	0.0323	1150.08	0.0105	0.004071
Sr	88	3	He	3.054	0.036	1290.10	0.0105	0.004071
Sr	88	3	He	2.468	0.0299	1120.07	0.0105	0.004071
Mo	98	3	He	2110.848	49.3875	1758819.04	0.0234	0.003908
Mo	98	3	He	2094.41	49.0029	1754952.01	0.0234	0.003908
Mo	98	3	He	2006.127	46.9375	1759157.16	0.0234	0.003908
Ag	107	3	He	0.019	0.0014	50.00	0.0493	0.0004851
Ag	107	3	He	0.013	0.0011	40.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Cd	111	3	He	0.17	0.001	34.00	0.0056	0
Cd	111	3	He	0.149	0.0008	30.00	0.0056	0
Cd	111	3	He	0.152	0.0009	32.00	0.0056	0
Sn	120	3	He	0.867	0.0755	2690.31	0.0169	0.0609
Sn	120	3	He	0.809	0.0746	2670.31	0.0169	0.0609
Sn	120	3	He	0.328	0.0664	2490.27	0.0169	0.0609
Sb	121	3	He	0.274	0.005	176.67	0.0161	0.0005433
Sb	121	3	He	0.232	0.0043	153.34	0.0161	0.0005433
Sb	121	3	He	0.143	0.0028	106.67	0.0161	0.0005433
Ba	137	3	He	0.475	0.0037	130.01	0.0053	0.001141
Ba	137	3	He	0.101	0.0017	60.00	0.0053	0.001141
Ba	137	3	He	0.087	0.0016	60.00	0.0053	0.001141
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	0.094	0.0048	340.02	0.0332	0.001693
Pb	208	3	He	0.086	0.0045	430.02	0.0332	0.001693
Pb	208	3	He	0.072	0.0041	380.02	0.0332	0.001693
U	238	3	He	0.001	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.001	0.0008	110.00	0.0338	0.0007949
U	238	3	He	-0.005	0.0006	90.00	0.0338	0.0007949
Sc	45	1	No Gas			1284486.54		
Sc	45	1	No Gas			1306656.07		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1269990.68		
Ge	72	1	No Gas			662875.22		
Ge	72	1	No Gas			660720.69		
Ge	72	1	No Gas			642845.38		
Sc	45	2	H2			79242.60		
Sc	45	2	H2			80869.40		
Sc	45	2	H2			82156.35		
Ge	72	2	H2			65835.42		
Ge	72	2	H2			67009.90		
Ge	72	2	H2			67100.13		
In	115	2	H2			160107.84		
In	115	2	H2			160186.29		
In	115	2	H2			161924.32		
Sc	45	3	He			22896.64		
Sc	45	3	He			23137.00		
Sc	45	3	He			22716.33		
Ge	72	3	He			44252.26		
Ge	72	3	He			44833.06		
Ge	72	3	He			44021.52		
In	115	3	He			35631.49		
In	115	3	He			35831.92		
In	115	3	He			37496.13		
Tb	159	3	He			145629.71		
Tb	159	3	He			145467.51		
Tb	159	3	He			147408.03		
Bi	209	3	He			104898.02		
Bi	209	3	He			105802.36		
Bi	209	3	He			104504.77		

Quantitation Report

Data File Name 136ICSB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 5:46:40 PM
Sample Name ICSAB 8053045
Sample Type ICSAB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

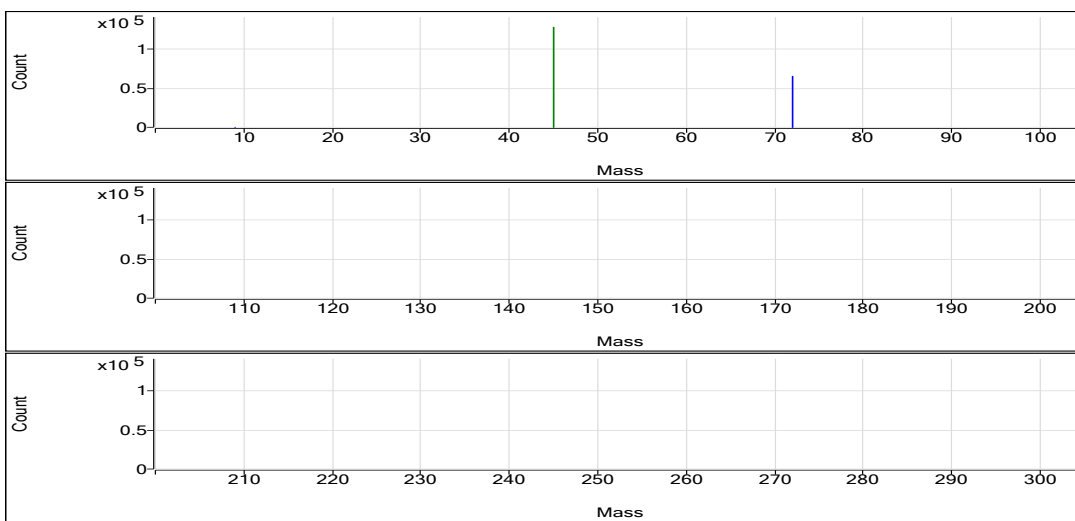
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	149.7	60.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	96.170	ppb	0.2	3319.01	0.0488	Pulse	1.5000	3
Na	23	72	He	227379.962	ppb	3.3	18815278.05	413.1067	Analog	0.1000	3
Mg	24	72	He	89689.140	ppb	3.3	3743095.78	82.1819	Analog	0.1000	3
Al	27	72	He	90463.973	ppb	4.1	1196583.68	26.2768	Analog	0.1000	3
K	39	72	He	90453.911	ppb	2.9	3095294.00	67.9546	Analog	0.5000	3
Ca	44	72	He	267245.572	ppb	3.4	488248.65	10.7202	Pulse	0.5000	3
Ti	47	72	He	1849.130	ppb	3.4	26196.22	0.5752	Pulse	0.5000	3
V	51	72	He	188.208	ppb	3.5	117461.82	2.5791	Pulse	0.5000	3
Cr	52	72	He	188.187	ppb	3.6	147421.54	3.2370	Pulse	0.1000	3
Mn	55	72	He	183.476	ppb	3.5	61072.35	1.3410	Pulse	0.5000	3
Fe	57	72	He	212469.368	ppb	2.8	3135166.62	68.8252	Analog	0.1000	3
Co	59	72	He	184.170	ppb	3.4	278759.34	6.1206	Pulse	0.5000	3
Ni	60	72	He	182.005	ppb	3.9	77458.54	1.7009	Pulse	0.5000	3
Cu	63	72	He	180.992	ppb	3.6	222867.07	4.8936	Pulse	0.5000	3
Zn	66	72	He	91.847	ppb	4.3	13122.70	0.2882	Pulse	0.5000	3
As	75	72	He	89.040	ppb	4.8	10374.06	0.2278	Pulse	0.5000	3
Sr	88	115	He	2.618	ppb	24.1	1150.08	0.0315	Pulse	0.1000	3
Mo	98	115	He	2088.984	ppb	1.2	1785238.57	48.8760	Analog	0.1000	3
Ag	107	115	He	51.016	ppb	1.9	91886.24	2.5158	Pulse	0.1000	3
Cd	111	115	He	100.482	ppb	1.6	20592.94	0.5638	Pulse	0.5000	3
Sn	120	115	He	0.230	ppb	61.8	2366.92	0.0648	Pulse	0.1000	3
Sb	121	115	He	0.155	ppb	6.0	111.11	0.0030	Pulse	0.3000	3
Ba	137	115	He	0.285	ppb	42.1	96.67	0.0026	Pulse	0.1000	3
Tl	205	159	He	-0.012	ppb	N/A	43.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.101	ppb	15.0	750.04	0.0051	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	100.00	0.0007	Pulse	0.1000	3

ISTD Table:

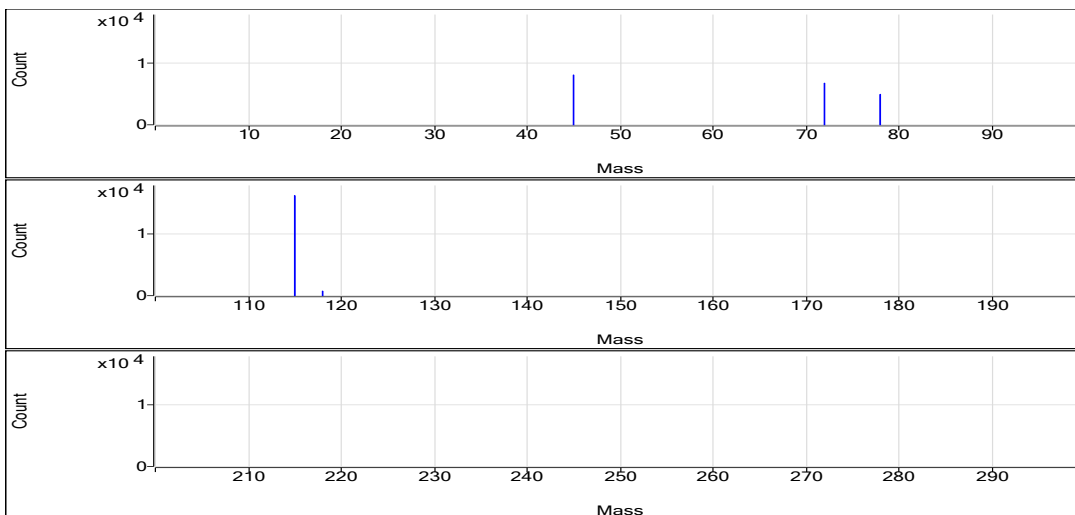
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1287482.74	1.2	98.5	Analog	0.1000	3
No Gas	Ge	72	656785.63	0.9	100.2	Pulse	0.1000	3
H2	Sc	45	81285.45	0.6	98.9	Pulse	0.1000	3
H2	Ge	72	68065.11	1.0	99.6	Pulse	0.1000	3
H2	In	115	163050.45	0.9	95.6	Pulse	0.1000	3
He	Sc	45	24779.28	0.3	96.8	Pulse	0.1000	3
He	Ge	72	45578.68	3.3	95.9	Pulse	0.1000	3
He	In	115	36527.34	1.0	89.2	Pulse	0.1000	3
He	Tb	159	148328.21	1.2	93.0	Pulse	0.1000	3
He	Bi	209	105890.39	0.3	90.5	Pulse	0.1000	3

No Gas

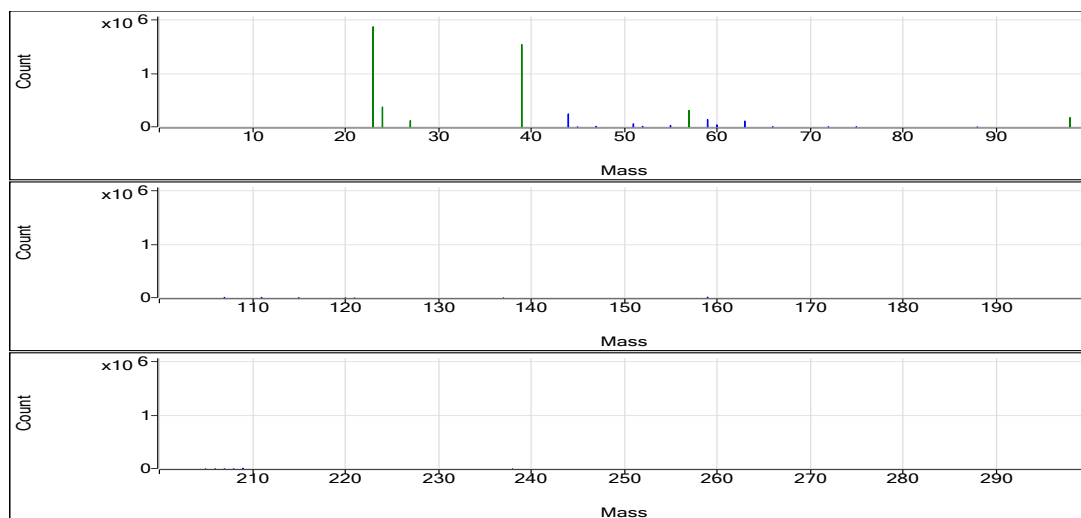


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.003	0.0001	54.00	0.0011	7.835E-05
Be	9	1	No Gas	0.001	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.036	0.0001	76.00	0.0011	7.835E-05
Se	78	2	H2	95.924	0.0486	3283.67	0.0005	2.594E-05
Se	78	2	H2	96.213	0.0488	3355.69	0.0005	2.594E-05
Se	78	2	H2	96.374	0.0489	3317.68	0.0005	2.594E-05
Na	23	3	He	219484.358	398.7679	18821958.47	0.0018	0.1731
Na	23	3	He	234227.819	425.5427	18813942.22	0.0018	0.1731
Na	23	3	He	228427.709	415.0094	18809933.47	0.0018	0.1731
Mg	24	3	He	86349.204	79.1218	3734570.26	0.0009	0.006537
Mg	24	3	He	91845.897	84.158	3720761.82	0.0009	0.006537
Mg	24	3	He	90872.32	83.266	3773955.26	0.0009	0.006537
Al	27	3	He	86668.903	25.1746	1188248.26	0.0003	0.00231
Al	27	3	He	94093.025	27.3309	1208342.72	0.0003	0.00231
Al	27	3	He	90629.993	26.3251	1193160.06	0.0003	0.00231
K	39	3	He	87506.448	65.7516	3103496.75	0.0007	0.3475
K	39	3	He	92658.85	69.6027	3077247.75	0.0007	0.3475
K	39	3	He	91196.433	68.5096	3105137.50	0.0007	0.3475
Ca	44	3	He	256844.973	10.3031	486308.63	0	0.002807
Ca	44	3	He	274119.67	10.9959	486144.75	0	0.002807
Ca	44	3	He	270772.072	10.8616	492292.59	0	0.002807
Ti	47	3	He	1779.93	0.5537	26132.79	0.0003	0.0001123
Ti	47	3	He	1902.609	0.5918	26164.87	0.0003	0.0001123
Ti	47	3	He	1864.85	0.5801	26291.01	0.0003	0.0001123
V	51	3	He	181.287	2.4846	117272.19	0.0137	0.008308
V	51	3	He	194.354	2.6631	117738.06	0.0137	0.008308
V	51	3	He	188.983	2.5897	117375.22	0.0137	0.008308
Cr	52	3	He	180.396	3.1039	146502.88	0.0171	0.02156
Cr	52	3	He	193.331	3.3249	146997.66	0.0171	0.02156
Cr	52	3	He	190.835	3.2822	148764.07	0.0171	0.02156
Mn	55	3	He	176.823	1.2924	61003.39	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	189.806	1.3872	61328.61	0.0073	0.002316
Mn	55	3	He	183.798	1.3433	60885.06	0.0073	0.002316
Fe	57	3	He	205627.335	66.6089	3143959.95	0.0003	0.002736
Fe	57	3	He	215861.074	69.9238	3091445.58	0.0003	0.002736
Fe	57	3	He	215919.695	69.9428	3170094.33	0.0003	0.002736
Co	59	3	He	177.171	5.8881	277920.41	0.0332	0.001922
Co	59	3	He	189.534	6.2989	278483.31	0.0332	0.001922
Co	59	3	He	185.805	6.175	279874.31	0.0332	0.001922
Ni	60	3	He	174.141	1.6275	76820.17	0.0093	0.003141
Ni	60	3	He	187.758	1.7546	77571.77	0.0093	0.003141
Ni	60	3	He	184.115	1.7206	77983.67	0.0093	0.003141
Cu	63	3	He	173.701	4.6966	221683.06	0.027	0.003732
Cu	63	3	He	186.548	5.0437	222991.92	0.027	0.003732
Cu	63	3	He	182.729	4.9406	223926.23	0.027	0.003732
Zn	66	3	He	87.569	0.2749	12973.25	0.0031	0.002032
Zn	66	3	He	95.407	0.2993	13231.46	0.0031	0.002032
Zn	66	3	He	92.567	0.2904	13163.40	0.0031	0.002032
As	75	3	He	84.207	0.2155	10171.26	0.0025	0.0007733
As	75	3	He	90.826	0.2324	10273.34	0.0025	0.0007733
As	75	3	He	92.087	0.2356	10677.58	0.0025	0.0007733
Sr	88	3	He	3.221	0.0378	1380.10	0.0105	0.004071
Sr	88	3	He	1.963	0.0246	890.06	0.0105	0.004071
Sr	88	3	He	2.671	0.032	1180.08	0.0105	0.004071
Mo	98	3	He	2064.537	48.304	1765396.85	0.0234	0.003908
Mo	98	3	He	2113.137	49.441	1788137.94	0.0234	0.003908
Mo	98	3	He	2089.279	48.8829	1802180.91	0.0234	0.003908
Ag	107	3	He	50.236	2.4774	90541.63	0.0493	0.0004851
Ag	107	3	He	52.13	2.5707	92975.80	0.0493	0.0004851
Ag	107	3	He	50.681	2.4993	92141.30	0.0493	0.0004851
Cd	111	3	He	100.468	0.5637	20603.62	0.0056	0
Cd	111	3	He	102.146	0.5732	20729.74	0.0056	0
Cd	111	3	He	98.832	0.5546	20445.45	0.0056	0
Sn	120	3	He	0.218	0.0646	2360.26	0.0169	0.0609
Sn	120	3	He	0.094	0.0625	2260.23	0.0169	0.0609
Sn	120	3	He	0.378	0.0673	2480.28	0.0169	0.0609
Sb	121	3	He	0.164	0.0032	116.67	0.0161	0.0005433
Sb	121	3	He	0.155	0.003	110.00	0.0161	0.0005433
Sb	121	3	He	0.146	0.0029	106.67	0.0161	0.0005433
Ba	137	3	He	0.147	0.0019	70.00	0.0053	0.001141
Ba	137	3	He	0.36	0.003	110.00	0.0053	0.001141
Ba	137	3	He	0.349	0.003	110.00	0.0053	0.001141
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	0.119	0.0056	400.02	0.0332	0.001693
Pb	208	3	He	0.094	0.0048	300.01	0.0332	0.001693
Pb	208	3	He	0.091	0.0047	480.03	0.0332	0.001693
U	238	3	He	-0.011	0.0004	60.00	0.0338	0.0007949
U	238	3	He	-0.005	0.0006	90.00	0.0338	0.0007949
U	238	3	He	0.006	0.001	150.01	0.0338	0.0007949
Sc	45	1	No Gas			1301035.92		
Sc	45	1	No Gas			1290469.82		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1270942.48		
Ge	72	1	No Gas			661384.37		
Ge	72	1	No Gas			658760.54		
Ge	72	1	No Gas			650211.98		
Sc	45	2	H2			81845.10		
Sc	45	2	H2			81041.33		
Sc	45	2	H2			80969.92		
Ge	72	2	H2			67513.41		
Ge	72	2	H2			68787.23		
Ge	72	2	H2			67894.69		
In	115	2	H2			161390.34		
In	115	2	H2			163431.11		
In	115	2	H2			164329.90		
Sc	45	3	He			24728.98		
Sc	45	3	He			24859.58		
Sc	45	3	He			24749.29		
Ge	72	3	He			47200.29		
Ge	72	3	He			44211.64		
Ge	72	3	He			45324.11		
In	115	3	He			36564.13		
In	115	3	He			36182.90		
In	115	3	He			36884.70		
Tb	159	3	He			147233.23		
Tb	159	3	He			147314.89		
Tb	159	3	He			150436.50		
Bi	209	3	He			105532.06		
Bi	209	3	He			105983.79		
Bi	209	3	He			106155.33		

Quantitation Report

Data File Name 144_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:04:16 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

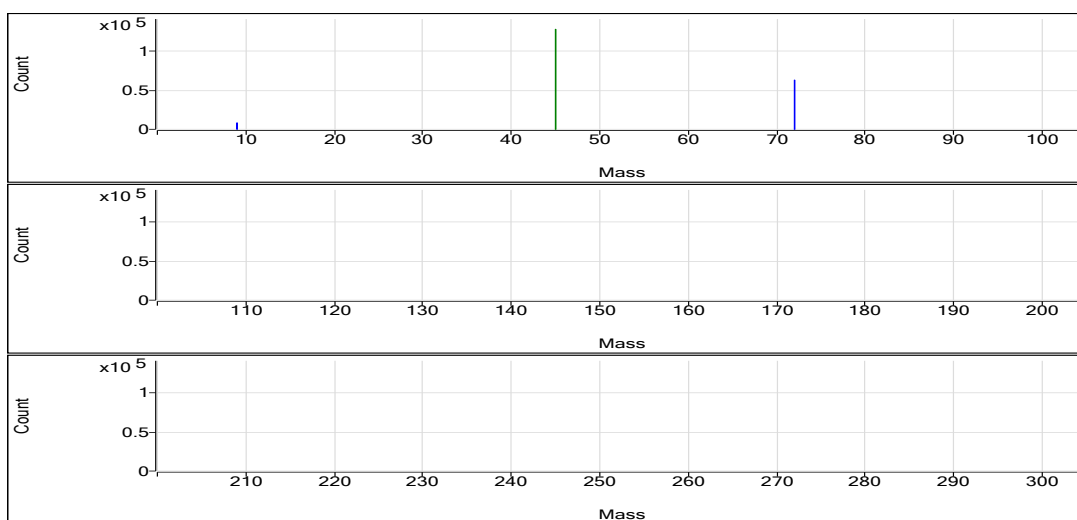
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.964	ppb	6.9	16911.23	0.0266	Pulse	0.5000	3
Se	78	72	H2	24.874	ppb	0.6	865.14	0.0126	Pulse	1.5000	3
Na	23	72	He	2502.954	ppb	0.4	212568.86	4.7185	Pulse	0.1000	3
Mg	24	72	He	2504.899	ppb	0.5	103685.45	2.3016	Pulse	0.1000	3
Al	27	72	He	2464.461	ppb	1.9	32348.74	0.7181	Pulse	0.1000	3
K	39	72	He	2470.557	ppb	3.2	98832.49	2.1940	Pulse	0.5000	3
Ca	44	72	He	2514.884	ppb	1.1	4670.02	0.1037	Pulse	0.5000	3
Ti	47	72	He	2444.906	ppb	0.1	34259.02	0.7605	Pulse	0.5000	3
V	51	72	He	245.995	ppb	0.4	151747.67	3.3684	Pulse	0.5000	3
Cr	52	72	He	244.319	ppb	1.0	189030.99	4.1961	Pulse	0.1000	3
Mn	55	72	He	243.150	ppb	0.8	80023.47	1.7764	Pulse	0.5000	3
Fe	57	72	He	2441.246	ppb	4.3	35743.42	0.7935	Pulse	0.1000	3
Co	59	72	He	245.553	ppb	0.4	367605.22	8.1600	Pulse	0.5000	3
Ni	60	72	He	244.643	ppb	0.5	102947.04	2.2852	Pulse	0.5000	3
Cu	63	72	He	244.508	ppb	0.7	297758.40	6.6097	Pulse	0.5000	3
Zn	66	72	He	243.961	ppb	1.4	34331.03	0.7621	Pulse	0.5000	3
As	75	72	He	242.118	ppb	1.5	27846.10	0.6181	Pulse	0.5000	3
Sr	88	115	He	25.351	ppb	4.2	10457.13	0.2693	Pulse	0.1000	3
Mo	98	115	He	25.310	ppb	2.0	23160.90	0.5960	Pulse	0.1000	3
Ag	107	115	He	25.586	ppb	1.1	49034.37	1.2620	Pulse	0.1000	3
Cd	111	115	He	24.939	ppb	1.0	5436.98	0.1399	Pulse	0.5000	3
Sn	120	115	He	24.269	ppb	1.0	18281.26	0.4705	Pulse	0.1000	3
Sb	121	115	He	24.838	ppb	1.2	15577.95	0.4010	Pulse	0.3000	3
Ba	137	115	He	247.637	ppb	0.4	50842.00	1.3087	Pulse	0.1000	3
Tl	205	159	He	24.629	ppb	0.7	92998.87	0.6108	Pulse	0.1000	3
Pb	208	159	He	24.753	ppb	1.1	125484.12	0.8242	Pulse	0.1000	3
U	238	159	He	24.736	ppb	1.4	127234.40	0.8357	Pulse	0.1000	3

ISTD Table:

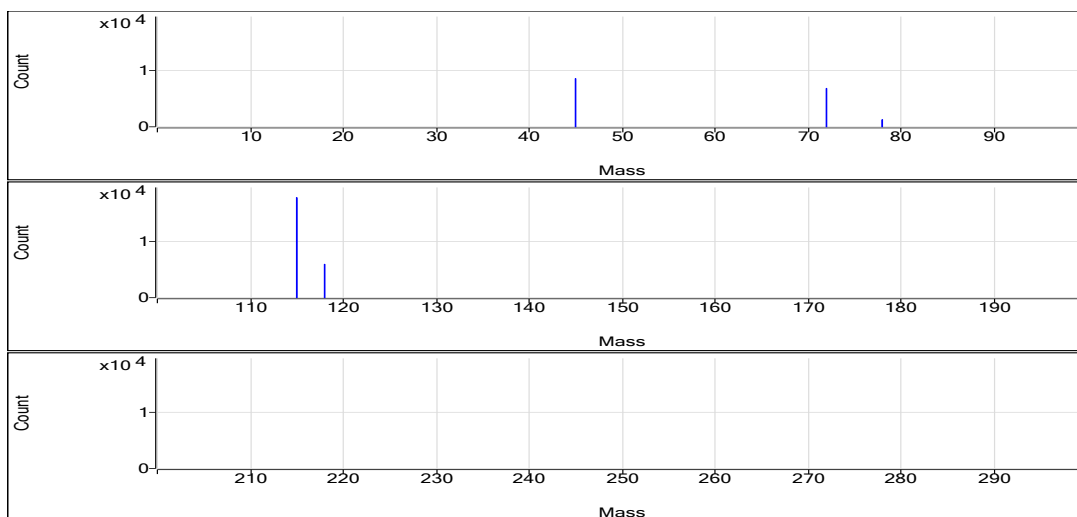
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1289411.44	1.7	98.6	Analog	0.1000	3
No Gas	Ge	72	635468.62	1.4	97.0	Pulse	0.1000	3
H2	Sc	45	85915.49	1.1	104.6	Pulse	0.1000	3
H2	Ge	72	68490.29	1.3	100.2	Pulse	0.1000	3
H2	In	115	178147.18	1.0	104.4	Pulse	0.1000	3
He	Sc	45	24846.32	1.9	97.0	Pulse	0.1000	3
He	Ge	72	45050.72	0.8	94.8	Pulse	0.1000	3
He	In	115	38851.50	1.6	94.9	Pulse	0.1000	3
He	Tb	159	152256.02	1.0	95.5	Pulse	0.1000	3
He	Bi	209	111579.96	0.5	95.4	Pulse	0.1000	3

No Gas

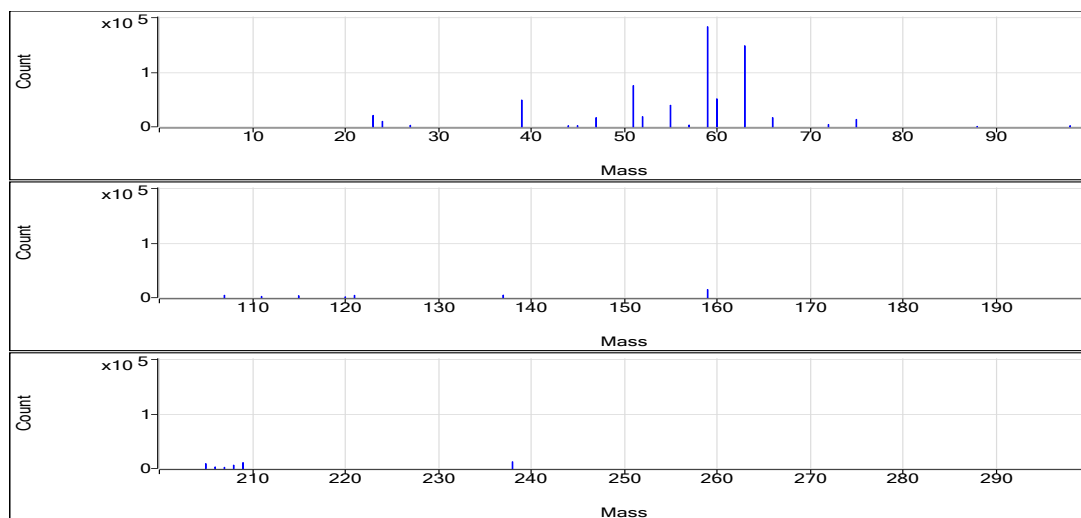


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.096	0.0246	15423.09	0.0011	7.835E-05
Be	9	1	No Gas	25.279	0.0269	17106.72	0.0011	7.835E-05
Be	9	1	No Gas	26.516	0.0282	18203.87	0.0011	7.835E-05
Se	78	2	H2	24.755	0.0126	848.69	0.0005	2.594E-05
Se	78	2	H2	24.835	0.0126	873.36	0.0005	2.594E-05
Se	78	2	H2	25.032	0.0127	873.36	0.0005	2.594E-05
Na	23	3	He	2505.881	4.7239	211930.04	0.0018	0.1731
Na	23	3	He	2512.125	4.7352	212152.48	0.0018	0.1731
Na	23	3	He	2490.856	4.6966	213624.06	0.0018	0.1731
Mg	24	3	He	2507.878	2.3043	103380.27	0.0009	0.006537
Mg	24	3	He	2514.938	2.3108	103530.75	0.0009	0.006537
Mg	24	3	He	2491.88	2.2897	104145.33	0.0009	0.006537
Al	27	3	He	2437.193	0.7102	31861.04	0.0003	0.00231
Al	27	3	He	2517.497	0.7335	32863.07	0.0003	0.00231
Al	27	3	He	2438.692	0.7106	32322.10	0.0003	0.00231
K	39	3	He	2558.953	2.2601	101396.48	0.0007	0.3475
K	39	3	He	2449.529	2.1783	97595.59	0.0007	0.3475
K	39	3	He	2403.19	2.1437	97505.40	0.0007	0.3475
Ca	44	3	He	2542.703	0.1048	4700.69	0	0.002807
Ca	44	3	He	2489.449	0.1026	4598.67	0	0.002807
Ca	44	3	He	2512.501	0.1036	4710.70	0	0.002807
Ti	47	3	He	2446.509	0.761	34139.46	0.0003	0.0001123
Ti	47	3	He	2446.928	0.7611	34099.29	0.0003	0.0001123
Ti	47	3	He	2441.281	0.7593	34538.32	0.0003	0.0001123
V	51	3	He	245.539	3.3622	150841.30	0.0137	0.008308
V	51	3	He	247.161	3.3844	151630.53	0.0137	0.008308
V	51	3	He	245.283	3.3587	152771.19	0.0137	0.008308
Cr	52	3	He	242.569	4.1662	186910.06	0.0171	0.02156
Cr	52	3	He	247.204	4.2454	190205.86	0.0171	0.02156
Cr	52	3	He	243.185	4.1767	189977.05	0.0171	0.02156
Mn	55	3	He	242.943	1.7749	79626.78	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	245.123	1.7908	80231.93	0.0073	0.002316
Mn	55	3	He	241.383	1.7635	80211.71	0.0073	0.002316
Fe	57	3	He	2370.252	0.7705	34567.54	0.0003	0.002736
Fe	57	3	He	2562.665	0.8328	37313.37	0.0003	0.002736
Fe	57	3	He	2390.822	0.7772	35349.35	0.0003	0.002736
Co	59	3	He	245.353	8.1533	365789.22	0.0332	0.001922
Co	59	3	He	246.738	8.1993	367357.44	0.0332	0.001922
Co	59	3	He	244.568	8.1273	369669.00	0.0332	0.001922
Ni	60	3	He	243.942	2.2786	102228.64	0.0093	0.003141
Ni	60	3	He	246.174	2.2995	103023.59	0.0093	0.003141
Ni	60	3	He	243.811	2.2774	103588.88	0.0093	0.003141
Cu	63	3	He	244.747	6.6161	296823.50	0.027	0.003732
Cu	63	3	He	246.179	6.6548	298157.28	0.027	0.003732
Cu	63	3	He	242.598	6.5581	298294.41	0.027	0.003732
Zn	66	3	He	243.239	0.7599	34089.82	0.0031	0.002032
Zn	66	3	He	247.775	0.774	34677.11	0.0031	0.002032
Zn	66	3	He	240.869	0.7525	34226.16	0.0031	0.002032
As	75	3	He	240.784	0.6147	27579.65	0.0025	0.0007733
As	75	3	He	246.195	0.6285	28160.64	0.0025	0.0007733
As	75	3	He	239.374	0.6111	27798.01	0.0025	0.0007733
Sr	88	3	He	26.587	0.2822	10764.03	0.0105	0.004071
Sr	88	3	He	24.746	0.2629	10283.70	0.0105	0.004071
Sr	88	3	He	24.721	0.2627	10323.66	0.0105	0.004071
Mo	98	3	He	24.763	0.5832	22246.27	0.0234	0.003908
Mo	98	3	He	25.755	0.6065	23718.39	0.0234	0.003908
Mo	98	3	He	25.411	0.5984	23518.05	0.0234	0.003908
Ag	107	3	He	25.367	1.2512	47723.69	0.0493	0.0004851
Ag	107	3	He	25.504	1.2579	49198.18	0.0493	0.0004851
Ag	107	3	He	25.887	1.2768	50181.23	0.0493	0.0004851
Cd	111	3	He	24.861	0.1395	5320.95	0.0056	0
Cd	111	3	He	25.213	0.1415	5533.01	0.0056	0
Cd	111	3	He	24.745	0.1388	5456.99	0.0056	0
Sn	120	3	He	24.073	0.4672	17820.72	0.0169	0.0609
Sn	120	3	He	24.541	0.4751	18581.63	0.0169	0.0609
Sn	120	3	He	24.192	0.4692	18441.43	0.0169	0.0609
Sb	121	3	He	25.177	0.4065	15504.53	0.0161	0.0005433
Sb	121	3	He	24.723	0.3992	15611.29	0.0161	0.0005433
Sb	121	3	He	24.613	0.3974	15618.02	0.0161	0.0005433
Ba	137	3	He	248.263	1.312	50042.40	0.0053	0.001141
Ba	137	3	He	248.145	1.3113	51286.53	0.0053	0.001141
Ba	137	3	He	246.503	1.3027	51197.07	0.0053	0.001141
Tl	205	3	He	24.605	0.6102	92391.42	0.0248	0.0005854
Tl	205	3	He	24.804	0.6152	93117.49	0.0248	0.0005854
Tl	205	3	He	24.479	0.6071	93487.69	0.0248	0.0005854
Pb	208	3	He	24.521	0.8165	65648.40	0.0332	0.001693
Pb	208	3	He	25.051	0.8341	67346.79	0.0332	0.001693
Pb	208	3	He	24.686	0.822	66392.12	0.0332	0.001693
U	238	3	He	24.871	0.8403	127223.10	0.0338	0.0007949
U	238	3	He	24.989	0.8443	127801.17	0.0338	0.0007949
U	238	3	He	24.348	0.8226	126678.93	0.0338	0.0007949
Sc	45	1	No Gas			1269901.47		
Sc	45	1	No Gas			1284657.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1313675.29		
Ge	72	1	No Gas			626662.76		
Ge	72	1	No Gas			635225.46		
Ge	72	1	No Gas			644517.65		
Sc	45	2	H2			85091.14		
Sc	45	2	H2			85654.02		
Sc	45	2	H2			87001.30		
Ge	72	2	H2			67512.96		
Ge	72	2	H2			69250.32		
Ge	72	2	H2			68707.59		
In	115	2	H2			176247.36		
In	115	2	H2			178695.93		
In	115	2	H2			179498.24		
Sc	45	3	He			24298.94		
Sc	45	3	He			25119.84		
Sc	45	3	He			25120.19		
Ge	72	3	He			44863.76		
Ge	72	3	He			44803.30		
Ge	72	3	He			45485.10		
In	115	3	He			38267.78		
In	115	3	He			39240.05		
In	115	3	He			39430.59		
Tb	159	3	He			151403.75		
Tb	159	3	He			151373.46		
Tb	159	3	He			153990.84		
Bi	209	3	He			111546.35		
Bi	209	3	He			112130.62		
Bi	209	3	He			111062.91		

Quantitation Report

Data File Name 146_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:08:43 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

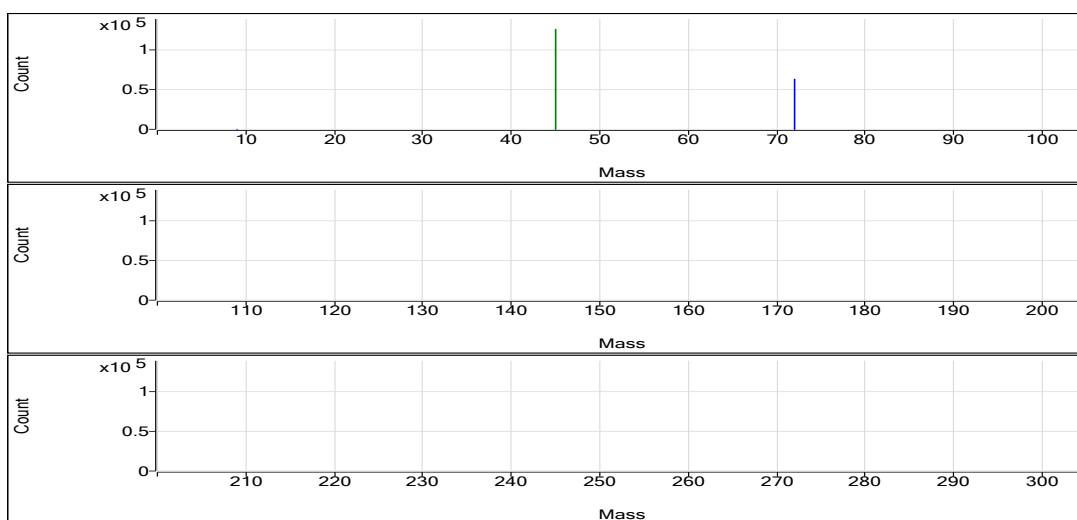
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.034	ppb	34.7	72.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.026	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	-1.088	ppb	N/A	7795.39	0.1711	Pulse	0.1000	3
Mg	24	72	He	5.130	ppb	82.0	510.03	0.0112	Pulse	0.1000	3
Al	27	72	He	-0.934	ppb	N/A	93.33	0.0020	Pulse	0.1000	3
K	39	72	He	9.491	ppb	899.5	16122.73	0.3546	Pulse	0.5000	3
Ca	44	72	He	1.915	ppb	311.7	131.33	0.0029	Pulse	0.5000	3
Ti	47	72	He	0.525	ppb	151.4	12.67	0.0003	Pulse	0.5000	3
V	51	72	He	-0.032	ppb	N/A	358.01	0.0079	Pulse	0.5000	3
Cr	52	72	He	-0.223	ppb	N/A	806.71	0.0178	Pulse	0.1000	3
Mn	55	72	He	-0.001	ppb	N/A	105.33	0.0023	Pulse	0.5000	3
Fe	57	72	He	2.815	ppb	125.9	166.67	0.0036	Pulse	0.1000	3
Co	59	72	He	-0.003	ppb	N/A	82.67	0.0018	Pulse	0.5000	3
Ni	60	72	He	-0.019	ppb	N/A	135.33	0.0030	Pulse	0.5000	3
Cu	63	72	He	-0.018	ppb	N/A	147.33	0.0032	Pulse	0.5000	3
Zn	66	72	He	-0.220	ppb	N/A	61.33	0.0013	Pulse	0.5000	3
As	75	72	He	-0.039	ppb	N/A	30.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.163	ppb	N/A	90.00	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.047	ppb	63.9	190.01	0.0050	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.183	ppb	N/A	2193.57	0.0578	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	120.0	31.11	0.0008	Pulse	0.3000	3
Ba	137	115	He	-0.050	ppb	N/A	33.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	-0.003	ppb	N/A	76.67	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.020	ppb	N/A	153.34	0.0010	Pulse	0.1000	3
U	238	159	He	0.003	ppb	298.8	133.34	0.0009	Pulse	0.1000	3

ISTD Table:

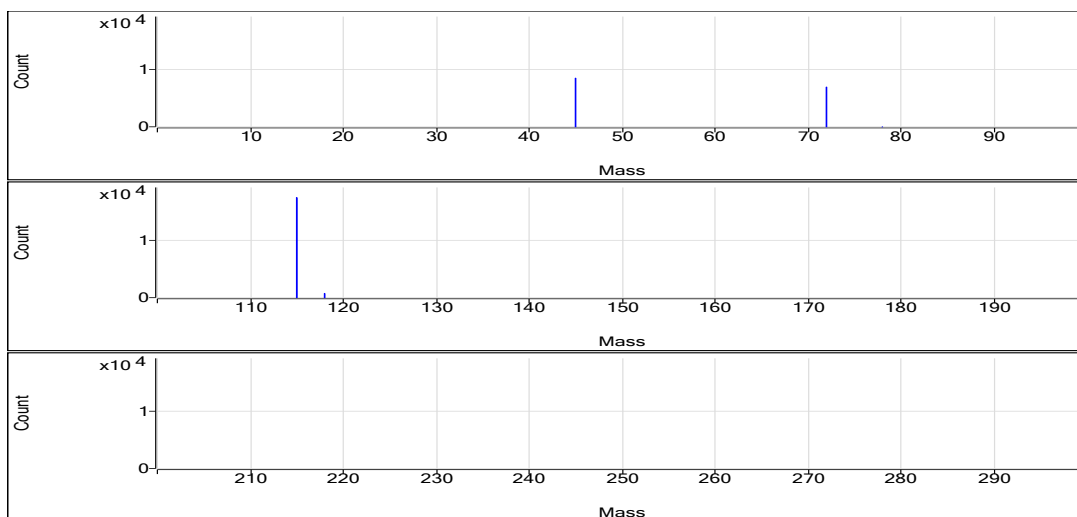
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1259993.81	0.2	96.4	Analog	0.1000	3
No Gas	Ge	72	632856.62	0.8	96.6	Pulse	0.1000	3
H2	Sc	45	85881.38	0.1	104.5	Pulse	0.1000	3
H2	Ge	72	70143.88	0.4	102.6	Pulse	0.1000	3
H2	In	115	176225.35	1.4	103.3	Pulse	0.1000	3
He	Sc	45	24285.21	0.6	94.8	Pulse	0.1000	3
He	Ge	72	45568.83	1.8	95.9	Pulse	0.1000	3
He	In	115	37945.24	0.2	92.7	Pulse	0.1000	3
He	Tb	159	150375.93	0.7	94.3	Pulse	0.1000	3
He	Bi	209	111022.76	1.3	94.9	Pulse	0.1000	3

No Gas

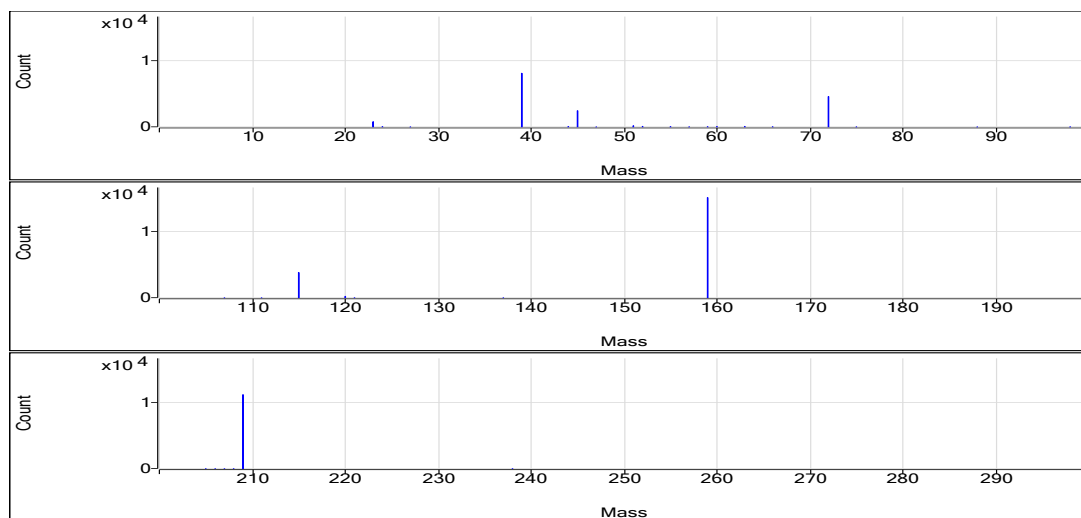


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.043	0.0001	78.00	0.0011	7.835E-05
Be	9	1	No Gas	0.021	0.0001	64.00	0.0011	7.835E-05
Be	9	1	No Gas	0.039	0.0001	76.00	0.0011	7.835E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Na	23	3	He	-2.472	0.1686	7531.91	0.0018	0.1731
Na	23	3	He	2.99	0.1785	8152.23	0.0018	0.1731
Na	23	3	He	-3.784	0.1662	7702.04	0.0018	0.1731
Mg	24	3	He	9.964	0.0157	700.04	0.0009	0.006537
Mg	24	3	He	3.141	0.0094	430.02	0.0009	0.006537
Mg	24	3	He	2.285	0.0086	400.02	0.0009	0.006537
Al	27	3	He	-4.101	0.0011	50.00	0.0003	0.00231
Al	27	3	He	0.338	0.0024	110.00	0.0003	0.00231
Al	27	3	He	0.961	0.0026	120.00	0.0003	0.00231
K	39	3	He	105.832	0.4266	19061.12	0.0007	0.3475
K	39	3	He	-20.577	0.3321	15168.98	0.0007	0.3475
K	39	3	He	-56.78	0.305	14138.09	0.0007	0.3475
Ca	44	3	He	2.559	0.0029	130.00	0	0.002807
Ca	44	3	He	7.534	0.0031	142.00	0	0.002807
Ca	44	3	He	-4.35	0.0026	122.00	0	0.002807
Ti	47	3	He	0.071	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.061	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	1.443	0.0006	26.00	0.0003	0.0001123
V	51	3	He	0.018	0.0085	382.01	0.0137	0.008308
V	51	3	He	-0.012	0.0081	372.01	0.0137	0.008308
V	51	3	He	-0.103	0.0069	320.00	0.0137	0.008308
Cr	52	3	He	0.048	0.0224	1000.06	0.0171	0.02156
Cr	52	3	He	-0.314	0.0162	740.04	0.0171	0.02156
Cr	52	3	He	-0.403	0.0147	680.04	0.0171	0.02156
Mn	55	3	He	0.008	0.0024	106.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.041	0.002	92.00	0.0073	0.002316
Mn	55	3	He	0.032	0.0025	118.00	0.0073	0.002316
Fe	57	3	He	1.227	0.0031	140.00	0.0003	0.002736
Fe	57	3	He	0.341	0.0028	130.00	0.0003	0.002736
Fe	57	3	He	6.875	0.005	230.01	0.0003	0.002736
Co	59	3	He	-0.007	0.0017	76.00	0.0332	0.001922
Co	59	3	He	0.004	0.0021	94.00	0.0332	0.001922
Co	59	3	He	-0.007	0.0017	78.00	0.0332	0.001922
Ni	60	3	He	-0.044	0.0027	122.00	0.0093	0.003141
Ni	60	3	He	-0.05	0.0027	122.00	0.0093	0.003141
Ni	60	3	He	0.038	0.0035	162.00	0.0093	0.003141
Cu	63	3	He	-0.002	0.0037	164.00	0.027	0.003732
Cu	63	3	He	-0.021	0.0032	144.00	0.027	0.003732
Cu	63	3	He	-0.031	0.0029	134.00	0.027	0.003732
Zn	66	3	He	-0.178	0.0015	66.00	0.0031	0.002032
Zn	66	3	He	-0.273	0.0012	54.00	0.0031	0.002032
Zn	66	3	He	-0.209	0.0014	64.00	0.0031	0.002032
As	75	3	He	-0.022	0.0007	32.00	0.0025	0.0007733
As	75	3	He	-0.046	0.0007	30.00	0.0025	0.0007733
As	75	3	He	-0.049	0.0006	30.00	0.0025	0.0007733
Sr	88	3	He	-0.238	0.0016	60.00	0.0105	0.004071
Sr	88	3	He	-0.187	0.0021	80.00	0.0105	0.004071
Sr	88	3	He	-0.062	0.0034	130.00	0.0105	0.004071
Mo	98	3	He	0.036	0.0047	180.01	0.0234	0.003908
Mo	98	3	He	0.081	0.0058	220.01	0.0234	0.003908
Mo	98	3	He	0.024	0.0045	170.01	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.278	0.0562	2130.24	0.0169	0.0609
Sn	120	3	He	-0.076	0.0596	2260.25	0.0169	0.0609
Sn	120	3	He	-0.195	0.0576	2190.22	0.0169	0.0609
Sb	121	3	He	-0.006	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	0.026	0.001	36.67	0.0161	0.0005433
Sb	121	3	He	0.032	0.0011	40.00	0.0161	0.0005433
Ba	137	3	He	-0.066	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	0.034	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	-0.116	0.0005	20.00	0.0053	0.001141
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Tl	205	3	He	-0.008	0.0004	60.00	0.0248	0.0005854
Pb	208	3	He	-0.029	0.0007	70.00	0.0332	0.001693
Pb	208	3	He	-0.029	0.0007	40.00	0.0332	0.001693
Pb	208	3	He	-0.003	0.0016	150.01	0.0332	0.001693
U	238	3	He	0	0.0008	120.00	0.0338	0.0007949
U	238	3	He	0.012	0.0012	180.01	0.0338	0.0007949
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1257939.90		
Sc	45	1	No Gas			1259350.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1262691.31		
Ge	72	1	No Gas			627111.16		
Ge	72	1	No Gas			637032.02		
Ge	72	1	No Gas			634426.67		
Sc	45	2	H2			85864.77		
Sc	45	2	H2			85944.86		
Sc	45	2	H2			85834.51		
Ge	72	2	H2			69852.21		
Ge	72	2	H2			70274.86		
Ge	72	2	H2			70304.57		
In	115	2	H2			173721.17		
In	115	2	H2			178634.90		
In	115	2	H2			176319.98		
Sc	45	3	He			24198.32		
Sc	45	3	He			24458.81		
Sc	45	3	He			24198.49		
Ge	72	3	He			44683.19		
Ge	72	3	He			45675.57		
Ge	72	3	He			46347.74		
In	115	3	He			37917.71		
In	115	3	He			37926.91		
In	115	3	He			38037.16		
Tb	159	3	He			149306.08		
Tb	159	3	He			151365.29		
Tb	159	3	He			150456.42		
Bi	209	3	He			112623.94		
Bi	209	3	He			110790.97		
Bi	209	3	He			109653.36		

Quantitation Report

Data File Name 147SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:13:00 PM
Sample Name MB 410-682117/1-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

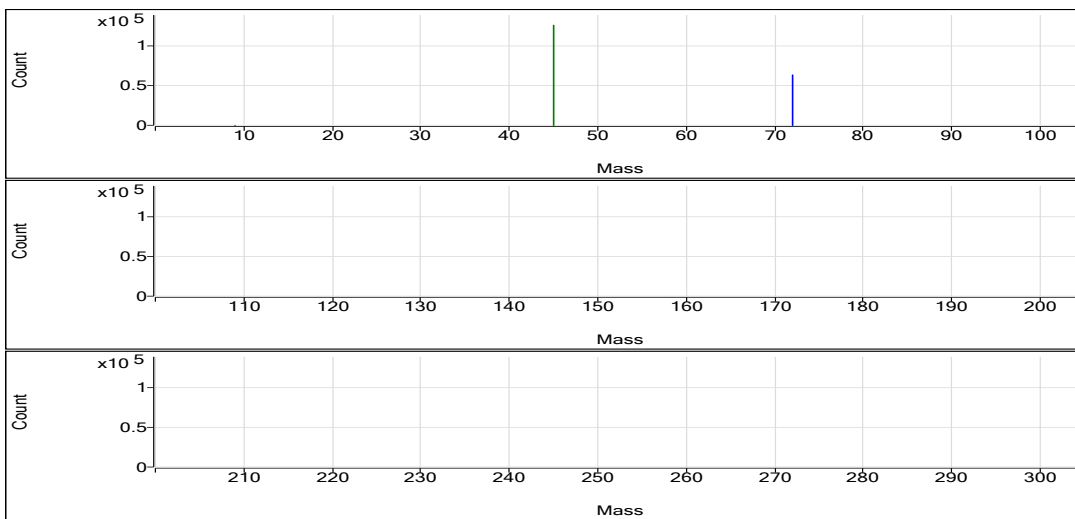
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	106.2	58.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.020	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	72	He	1.068	ppb	350.6	8008.86	0.1750	Pulse	0.1000	3
Mg	24	72	He	5.489	ppb	39.1	530.03	0.0116	Pulse	0.1000	3
Al	27	72	He	-1.431	ppb	N/A	86.67	0.0019	Pulse	0.1000	3
K	39	72	He	18.318	ppb	425.0	16542.52	0.3612	Pulse	0.5000	3
Ca	44	72	He	-11.182	ppb	N/A	108.00	0.0024	Pulse	0.5000	3
Ti	47	72	He	-0.033	ppb	N/A	4.67	0.0001	Pulse	0.5000	3
V	51	72	He	-0.061	ppb	N/A	342.01	0.0075	Pulse	0.5000	3
Cr	52	72	He	-0.333	ppb	N/A	726.71	0.0159	Pulse	0.1000	3
Mn	55	72	He	0.551	ppb	20.0	290.00	0.0063	Pulse	0.5000	3
Fe	57	72	He	-0.579	ppb	N/A	116.67	0.0025	Pulse	0.1000	3
Co	59	72	He	-0.018	ppb	N/A	60.67	0.0013	Pulse	0.5000	3
Ni	60	72	He	-0.021	ppb	N/A	134.67	0.0029	Pulse	0.5000	3
Cu	63	72	He	0.097	ppb	15.4	290.67	0.0064	Pulse	0.5000	3
Zn	66	72	He	0.432	ppb	12.7	154.67	0.0034	Pulse	0.5000	3
As	75	72	He	-0.053	ppb	N/A	29.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.130	ppb	N/A	106.67	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.018	ppb	N/A	136.67	0.0035	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	272.8	23.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.180	ppb	N/A	2276.90	0.0579	Pulse	0.1000	3
Sb	121	115	He	0.003	ppb	825.9	23.34	0.0006	Pulse	0.3000	3
Ba	137	115	He	-0.006	ppb	N/A	43.33	0.0011	Pulse	0.1000	3
Tl	205	159	He	-0.015	ppb	N/A	33.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.007	ppb	220.8	286.67	0.0019	Pulse	0.1000	3
U	238	159	He	0.001	ppb	1176.2	123.34	0.0008	Pulse	0.1000	3

ISTD Table:

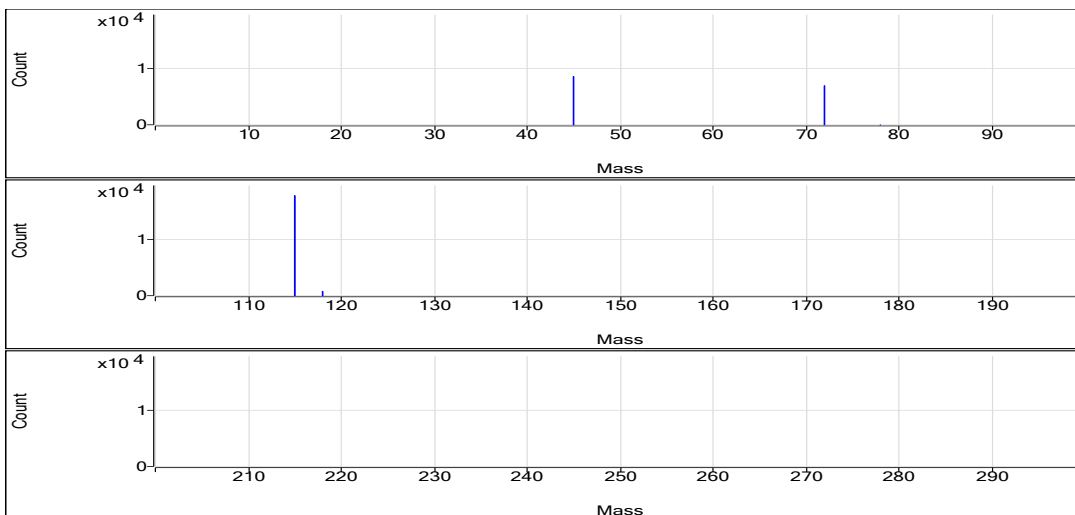
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1262606.65	1.9	96.6	Analog	0.1000	3
No Gas	Ge	72	635805.45	0.9	97.0	Pulse	0.1000	3
H2	Sc	45	85315.17	1.0	103.8	Pulse	0.1000	3
H2	Ge	72	69065.73	2.5	101.1	Pulse	0.1000	3
H2	In	115	176710.65	0.6	103.6	Pulse	0.1000	3
He	Sc	45	25129.88	0.5	98.1	Pulse	0.1000	3
He	Ge	72	45772.58	1.0	96.3	Pulse	0.1000	3
He	In	115	39361.33	2.1	96.1	Pulse	0.1000	3
He	Tb	159	149802.39	0.2	94.0	Pulse	0.1000	3
He	Bi	209	112492.61	0.7	96.2	Pulse	0.1000	3

No Gas

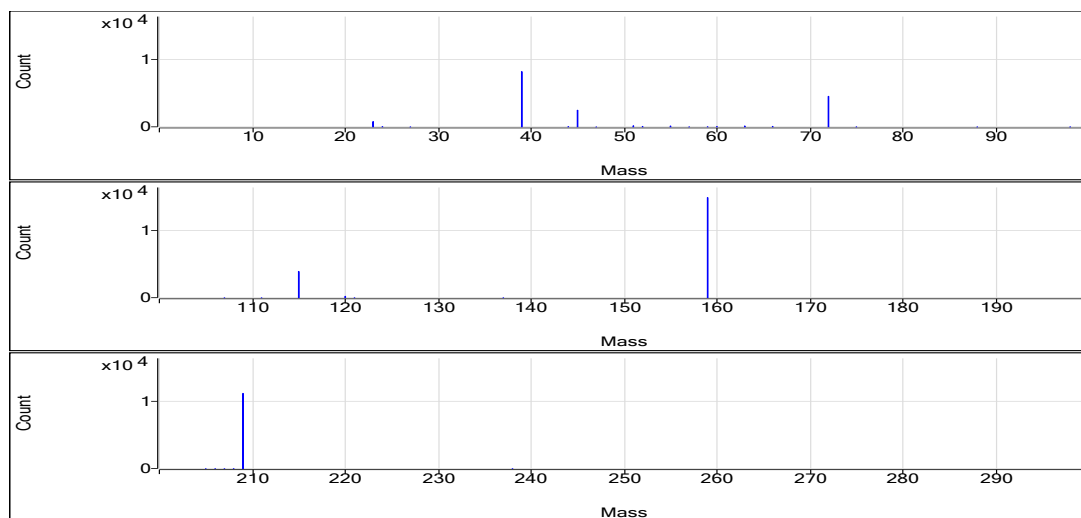


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.006	0.0001	54.00	0.0011	7.835E-05
Be	9	1	No Gas	0.004	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.029	0.0001	70.00	0.0011	7.835E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Na	23	3	He	-2.79	0.168	7762.07	0.0018	0.1731
Na	23	3	He	1.304	0.1754	7942.06	0.0018	0.1731
Na	23	3	He	4.691	0.1816	8322.45	0.0018	0.1731
Mg	24	3	He	7.747	0.0136	630.04	0.0009	0.006537
Mg	24	3	He	3.473	0.0097	440.02	0.0009	0.006537
Mg	24	3	He	5.248	0.0113	520.02	0.0009	0.006537
Al	27	3	He	-1.992	0.0017	80.00	0.0003	0.00231
Al	27	3	He	-1.109	0.002	90.00	0.0003	0.00231
Al	27	3	He	-1.193	0.002	90.00	0.0003	0.00231
K	39	3	He	104.053	0.4253	19649.85	0.0007	0.3475
K	39	3	He	-1.142	0.3466	15693.49	0.0007	0.3475
K	39	3	He	-47.957	0.3116	14284.21	0.0007	0.3475
Ca	44	3	He	-10.626	0.0024	110.00	0	0.002807
Ca	44	3	He	-18.216	0.0021	94.00	0	0.002807
Ca	44	3	He	-4.705	0.0026	120.00	0	0.002807
Ti	47	3	He	-0.222	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.2	0.0002	8.00	0.0003	0.0001123
V	51	3	He	-0.069	0.0074	340.01	0.0137	0.008308
V	51	3	He	0.029	0.0087	394.01	0.0137	0.008308
V	51	3	He	-0.142	0.0064	292.00	0.0137	0.008308
Cr	52	3	He	-0.312	0.0162	750.04	0.0171	0.02156
Cr	52	3	He	-0.473	0.0135	610.03	0.0171	0.02156
Cr	52	3	He	-0.215	0.0179	820.05	0.0171	0.02156
Mn	55	3	He	0.466	0.0057	264.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.512	0.0061	274.00	0.0073	0.002316
Mn	55	3	He	0.675	0.0072	332.01	0.0073	0.002316
Fe	57	3	He	0.909	0.003	140.01	0.0003	0.002736
Fe	57	3	He	-0.263	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	-2.384	0.002	90.00	0.0003	0.002736
Co	59	3	He	-0.019	0.0013	60.00	0.0332	0.001922
Co	59	3	He	-0.026	0.0011	48.00	0.0332	0.001922
Co	59	3	He	-0.009	0.0016	74.00	0.0332	0.001922
Ni	60	3	He	-0.012	0.003	140.00	0.0093	0.003141
Ni	60	3	He	-0.029	0.0029	130.00	0.0093	0.003141
Ni	60	3	He	-0.023	0.0029	134.00	0.0093	0.003141
Cu	63	3	He	0.093	0.0062	288.00	0.027	0.003732
Cu	63	3	He	0.114	0.0068	308.01	0.027	0.003732
Cu	63	3	He	0.085	0.006	276.00	0.027	0.003732
Zn	66	3	He	0.473	0.0035	162.00	0.0031	0.002032
Zn	66	3	He	0.454	0.0034	156.00	0.0031	0.002032
Zn	66	3	He	0.37	0.0032	146.00	0.0031	0.002032
As	75	3	He	0.036	0.0009	40.00	0.0025	0.0007733
As	75	3	He	-0.147	0.0004	18.00	0.0025	0.0007733
As	75	3	He	-0.047	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	-0.092	0.0031	120.01	0.0105	0.004071
Sr	88	3	He	-0.128	0.0027	110.00	0.0105	0.004071
Sr	88	3	He	-0.17	0.0023	90.00	0.0105	0.004071
Mo	98	3	He	-0.012	0.0036	140.01	0.0234	0.003908
Mo	98	3	He	-0.04	0.003	120.00	0.0234	0.003908
Mo	98	3	He	-0.004	0.0038	150.01	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	0.005	0.0007	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.08	0.0596	2300.23	0.0169	0.0609
Sn	120	3	He	-0.22	0.0572	2300.24	0.0169	0.0609
Sn	120	3	He	-0.24	0.0568	2230.23	0.0169	0.0609
Sb	121	3	He	-0.023	0.0002	6.67	0.0161	0.0005433
Sb	121	3	He	0.007	0.0007	26.67	0.0161	0.0005433
Sb	121	3	He	0.024	0.0009	36.67	0.0161	0.0005433
Ba	137	3	He	0.078	0.0016	60.00	0.0053	0.001141
Ba	137	3	He	-0.122	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	0.025	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	-0.003	0.0016	150.01	0.0332	0.001693
Pb	208	3	He	0.024	0.0025	180.01	0.0332	0.001693
Pb	208	3	He	-0.001	0.0017	120.00	0.0332	0.001693
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.01	0.0338	0.0007949
U	238	3	He	0.01	0.0011	170.01	0.0338	0.0007949
Sc	45	1	No Gas			1235546.15		
Sc	45	1	No Gas			1270444.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1281829.51		
Ge	72	1	No Gas			634768.74		
Ge	72	1	No Gas			630959.48		
Ge	72	1	No Gas			641688.12		
Sc	45	2	H2			84529.12		
Sc	45	2	H2			85261.16		
Sc	45	2	H2			86155.23		
Ge	72	2	H2			67813.88		
Ge	72	2	H2			68315.52		
Ge	72	2	H2			71067.78		
In	115	2	H2			175844.98		
In	115	2	H2			176328.83		
In	115	2	H2			177958.14		
Sc	45	3	He			24989.62		
Sc	45	3	He			25250.07		
Sc	45	3	He			25149.96		
Ge	72	3	He			46207.33		
Ge	72	3	He			45274.55		
Ge	72	3	He			45835.85		
In	115	3	He			38638.77		
In	115	3	He			40243.01		
In	115	3	He			39250.01		
Tb	159	3	He			150060.29		
Tb	159	3	He			149397.40		
Tb	159	3	He			149949.47		
Bi	209	3	He			111646.62		
Bi	209	3	He			112854.36		
Bi	209	3	He			112976.84		

Quantitation Report

Data File Name 148SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:15:12 PM
Sample Name MB 410-681246/1-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

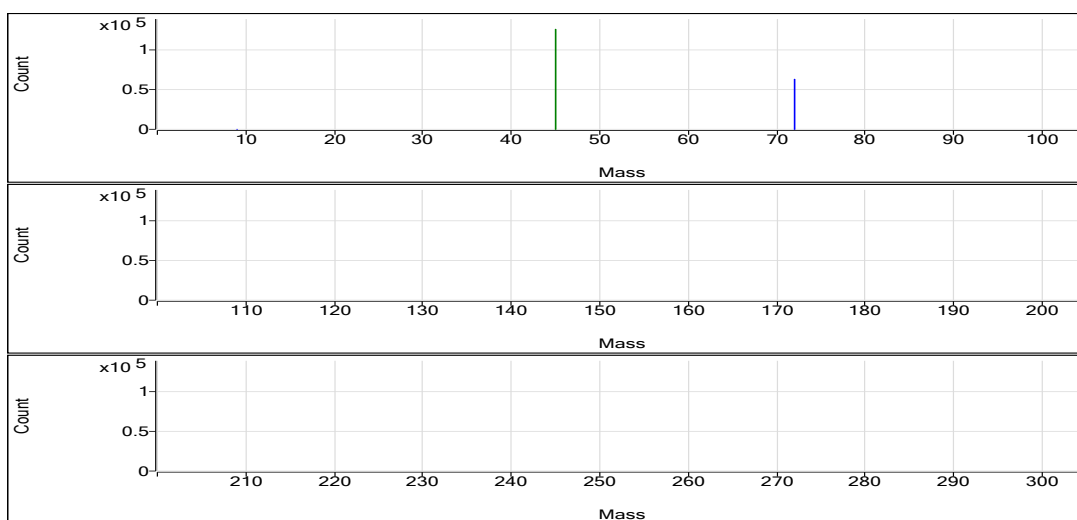
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	115.5	58.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.013	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	72	He	4.295	ppb	91.5	8275.69	0.1809	Pulse	0.1000	3
Mg	24	72	He	2.478	ppb	58.3	403.35	0.0088	Pulse	0.1000	3
Al	27	72	He	-1.924	ppb	N/A	80.00	0.0018	Pulse	0.1000	3
K	39	72	He	17.612	ppb	513.3	16473.79	0.3606	Pulse	0.5000	3
Ca	44	72	He	-6.070	ppb	N/A	117.33	0.0026	Pulse	0.5000	3
Ti	47	72	He	-0.128	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.042	ppb	N/A	354.01	0.0077	Pulse	0.5000	3
Cr	52	72	He	-0.256	ppb	N/A	786.71	0.0172	Pulse	0.1000	3
Mn	55	72	He	0.068	ppb	85.8	128.67	0.0028	Pulse	0.5000	3
Fe	57	72	He	3.021	ppb	153.7	170.00	0.0037	Pulse	0.1000	3
Co	59	72	He	-0.010	ppb	N/A	73.33	0.0016	Pulse	0.5000	3
Ni	60	72	He	-0.023	ppb	N/A	134.00	0.0029	Pulse	0.5000	3
Cu	63	72	He	0.018	ppb	77.2	193.33	0.0042	Pulse	0.5000	3
Zn	66	72	He	0.055	ppb	304.0	100.67	0.0022	Pulse	0.5000	3
As	75	72	He	-0.028	ppb	N/A	32.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.045	ppb	251.9	176.68	0.0045	Pulse	0.1000	3
Mo	98	115	He	0.012	ppb	459.0	163.34	0.0042	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	13.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.7	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.304	ppb	132.7	2570.30	0.0660	Pulse	0.1000	3
Sb	121	115	He	-0.020	ppb	N/A	8.89	0.0002	Pulse	0.3000	3
Ba	137	115	He	0.823	ppb	28.8	213.34	0.0055	Pulse	0.1000	3
Tl	205	159	He	-0.009	ppb	N/A	53.33	0.0004	Pulse	0.1000	3
Pb	208	159	He	-0.015	ppb	N/A	180.00	0.0012	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	100.00	0.0007	Pulse	0.1000	3

ISTD Table:

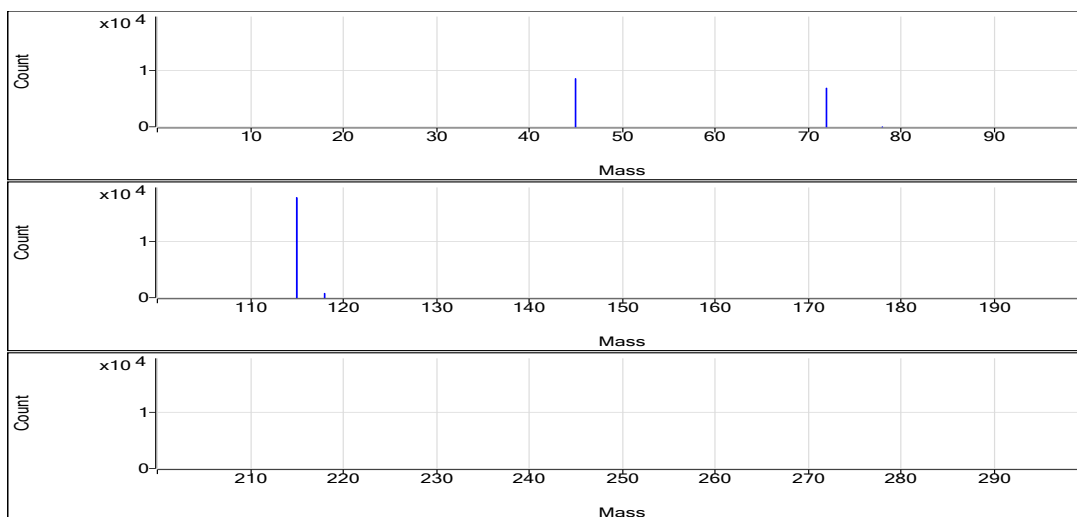
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1268637.01	0.7	97.1	Analog	0.1000	3
No Gas	Ge	72	636308.63	0.9	97.1	Pulse	0.1000	3
H2	Sc	45	86561.80	1.0	105.4	Pulse	0.1000	3
H2	Ge	72	69745.17	0.7	102.1	Pulse	0.1000	3
H2	In	115	179801.22	0.8	105.4	Pulse	0.1000	3
He	Sc	45	24498.89	0.5	95.7	Pulse	0.1000	3
He	Ge	72	45745.72	1.2	96.3	Pulse	0.1000	3
He	In	115	38978.03	2.1	95.2	Pulse	0.1000	3
He	Tb	159	149913.92	0.7	94.0	Pulse	0.1000	3
He	Bi	209	111606.29	0.7	95.4	Pulse	0.1000	3

No Gas

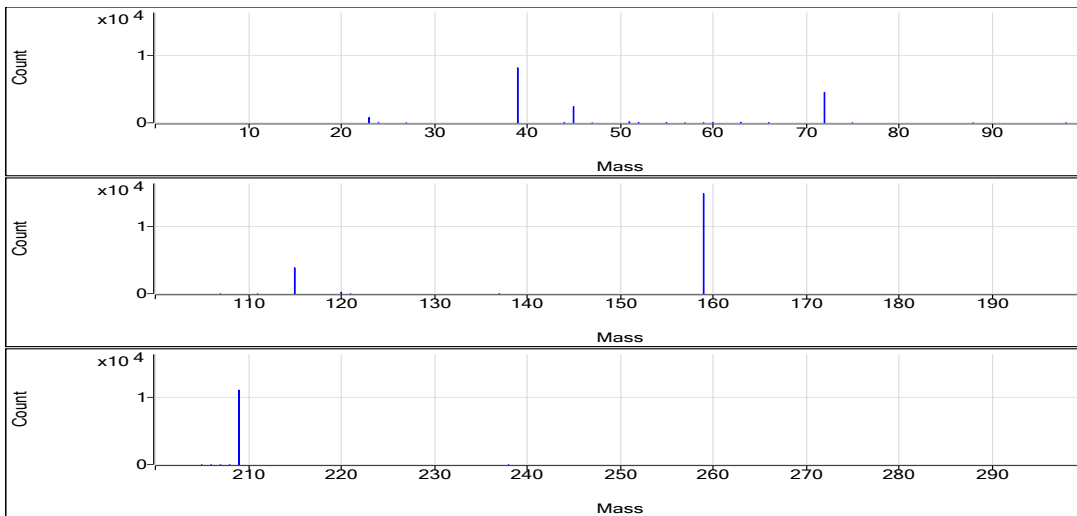


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0.0001	54.00	0.0011	7.835E-05
Be	9	1	No Gas	0.002	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.03	0.0001	70.00	0.0011	7.835E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Na	23	3	He	0.221	0.1735	7832.09	0.0018	0.1731
Na	23	3	He	4.603	0.1814	8322.45	0.0018	0.1731
Na	23	3	He	8.06	0.1877	8672.52	0.0018	0.1731
Mg	24	3	He	1.084	0.0075	340.01	0.0009	0.006537
Mg	24	3	He	2.382	0.0087	400.02	0.0009	0.006537
Mg	24	3	He	3.967	0.0102	470.02	0.0009	0.006537
Al	27	3	He	-1.091	0.002	90.00	0.0003	0.00231
Al	27	3	He	-1.199	0.002	90.00	0.0003	0.00231
Al	27	3	He	-3.483	0.0013	60.00	0.0003	0.00231
K	39	3	He	117.977	0.4357	19671.86	0.0007	0.3475
K	39	3	He	-7.691	0.3417	15677.47	0.0007	0.3475
K	39	3	He	-57.449	0.3045	14072.03	0.0007	0.3475
Ca	44	3	He	-9.242	0.0024	110.00	0	0.002807
Ca	44	3	He	-12.372	0.0023	106.00	0	0.002807
Ca	44	3	He	3.405	0.0029	136.00	0	0.002807
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	0.06	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.083	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.018	0.0081	364.01	0.0137	0.008308
V	51	3	He	-0.062	0.0075	342.01	0.0137	0.008308
V	51	3	He	-0.044	0.0077	356.01	0.0137	0.008308
Cr	52	3	He	-0.341	0.0157	710.03	0.0171	0.02156
Cr	52	3	He	-0.19	0.0183	840.05	0.0171	0.02156
Cr	52	3	He	-0.236	0.0175	810.05	0.0171	0.02156
Mn	55	3	He	0.059	0.0027	124.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.131	0.0033	150.00	0.0073	0.002316
Mn	55	3	He	0.015	0.0024	112.00	0.0073	0.002316
Fe	57	3	He	0.443	0.0029	130.00	0.0003	0.002736
Fe	57	3	He	8.379	0.0054	250.01	0.0003	0.002736
Fe	57	3	He	0.24	0.0028	130.00	0.0003	0.002736
Co	59	3	He	0.001	0.0019	88.00	0.0332	0.001922
Co	59	3	He	-0.008	0.0017	76.00	0.0332	0.001922
Co	59	3	He	-0.021	0.0012	56.00	0.0332	0.001922
Ni	60	3	He	-0.009	0.0031	138.00	0.0093	0.003141
Ni	60	3	He	0.004	0.0032	146.00	0.0093	0.003141
Ni	60	3	He	-0.063	0.0026	118.00	0.0093	0.003141
Cu	63	3	He	0.009	0.004	180.00	0.027	0.003732
Cu	63	3	He	0.035	0.0047	214.00	0.027	0.003732
Cu	63	3	He	0.011	0.004	186.00	0.027	0.003732
Zn	66	3	He	0.158	0.0025	114.00	0.0031	0.002032
Zn	66	3	He	0.145	0.0025	114.00	0.0031	0.002032
Zn	66	3	He	-0.138	0.0016	74.00	0.0031	0.002032
As	75	3	He	0.079	0.001	44.00	0.0025	0.0007733
As	75	3	He	-0.115	0.0005	22.00	0.0025	0.0007733
As	75	3	He	-0.049	0.0006	30.00	0.0025	0.0007733
Sr	88	3	He	0.062	0.0047	180.01	0.0105	0.004071
Sr	88	3	He	0.148	0.0056	220.01	0.0105	0.004071
Sr	88	3	He	-0.076	0.0033	130.01	0.0105	0.004071
Mo	98	3	He	-0.044	0.0029	110.00	0.0234	0.003908
Mo	98	3	He	0.062	0.0054	210.01	0.0234	0.003908
Mo	98	3	He	0.016	0.0043	170.01	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	0.762	0.0738	2810.34	0.0169	0.0609
Sn	120	3	He	0.007	0.061	2390.26	0.0169	0.0609
Sn	120	3	He	0.141	0.0633	2510.29	0.0169	0.0609
Sb	121	3	He	-0.028	0.0001	3.33	0.0161	0.0005433
Sb	121	3	He	-0.028	0.0001	3.33	0.0161	0.0005433
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Ba	137	3	He	1.077	0.0068	260.01	0.0053	0.001141
Ba	137	3	He	0.606	0.0043	170.01	0.0053	0.001141
Ba	137	3	He	0.787	0.0053	210.01	0.0053	0.001141
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Pb	208	3	He	-0.005	0.0015	110.00	0.0332	0.001693
Pb	208	3	He	-0.027	0.0008	80.00	0.0332	0.001693
Pb	208	3	He	-0.013	0.0013	100.00	0.0332	0.001693
U	238	3	He	0	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
Sc	45	1	No Gas			1278427.72		
Sc	45	1	No Gas			1266636.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1260847.32		
Ge	72	1	No Gas			633217.76		
Ge	72	1	No Gas			643012.49		
Ge	72	1	No Gas			632695.65		
Sc	45	2	H2			86929.61		
Sc	45	2	H2			85543.01		
Sc	45	2	H2			87212.78		
Ge	72	2	H2			70243.83		
Ge	72	2	H2			69691.66		
Ge	72	2	H2			69300.03		
In	115	2	H2			181344.86		
In	115	2	H2			179331.60		
In	115	2	H2			178727.20		
Sc	45	3	He			24378.78		
Sc	45	3	He			24508.73		
Sc	45	3	He			24609.17		
Ge	72	3	He			45154.06		
Ge	72	3	He			45876.24		
Ge	72	3	He			46206.87		
In	115	3	He			38117.21		
In	115	3	He			39189.87		
In	115	3	He			39680.98		
Tb	159	3	He			149234.28		
Tb	159	3	He			151133.51		
Tb	159	3	He			149373.97		
Bi	209	3	He			111203.84		
Bi	209	3	He			111062.44		
Bi	209	3	He			112552.60		

Quantitation Report

Data File Name 149SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:17:25 PM
Sample Name MB 410-681888/1-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

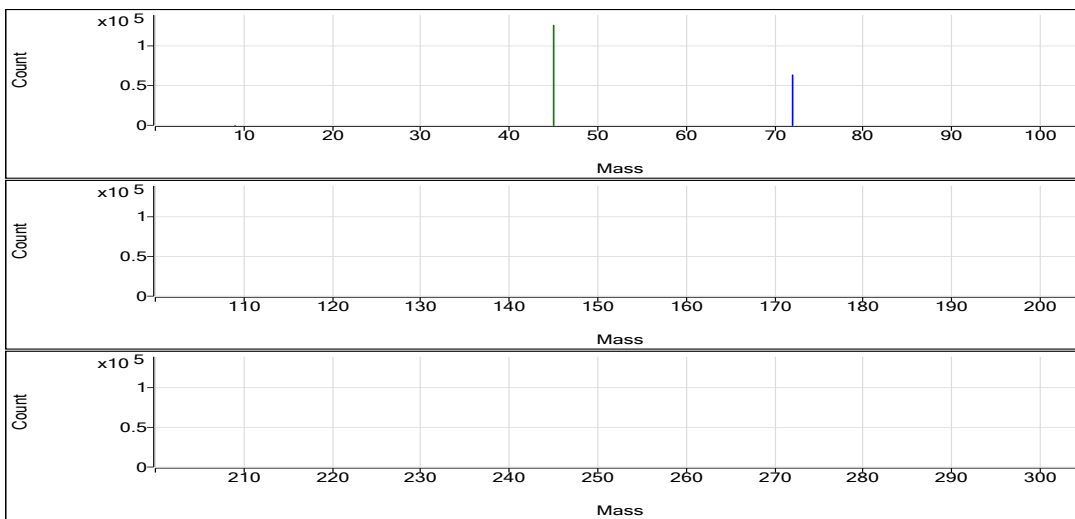
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.004	ppb	444.9	52.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.001	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	1.639	ppb	85.5	7998.83	0.1760	Pulse	0.1000	3
Mg	24	72	He	5.586	ppb	21.3	530.03	0.0117	Pulse	0.1000	3
Al	27	72	He	-1.393	ppb	N/A	86.67	0.0019	Pulse	0.1000	3
K	39	72	He	17.124	ppb	482.8	16354.28	0.3603	Pulse	0.5000	3
Ca	44	72	He	-6.730	ppb	N/A	115.33	0.0025	Pulse	0.5000	3
Ti	47	72	He	0.017	ppb	966.4	5.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.076	ppb	N/A	330.68	0.0073	Pulse	0.5000	3
Cr	52	72	He	-0.214	ppb	N/A	813.38	0.0179	Pulse	0.1000	3
Mn	55	72	He	0.018	ppb	213.3	111.33	0.0025	Pulse	0.5000	3
Fe	57	72	He	2.886	ppb	40.2	166.68	0.0037	Pulse	0.1000	3
Co	59	72	He	-0.010	ppb	N/A	72.67	0.0016	Pulse	0.5000	3
Ni	60	72	He	-0.028	ppb	N/A	130.67	0.0029	Pulse	0.5000	3
Cu	63	72	He	0.071	ppb	12.1	256.67	0.0056	Pulse	0.5000	3
Zn	66	72	He	0.200	ppb	75.7	120.67	0.0027	Pulse	0.5000	3
As	75	72	He	-0.021	ppb	N/A	32.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.135	ppb	N/A	103.33	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.084	ppb	N/A	76.67	0.0019	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.588	ppb	N/A	1996.87	0.0510	Pulse	0.1000	3
Sb	121	115	He	-0.004	ppb	N/A	18.89	0.0005	Pulse	0.3000	3
Ba	137	115	He	-0.055	ppb	N/A	33.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	-0.015	ppb	N/A	33.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	-0.019	ppb	N/A	160.01	0.0011	Pulse	0.1000	3
U	238	159	He	-0.009	ppb	N/A	73.33	0.0005	Pulse	0.1000	3

ISTD Table:

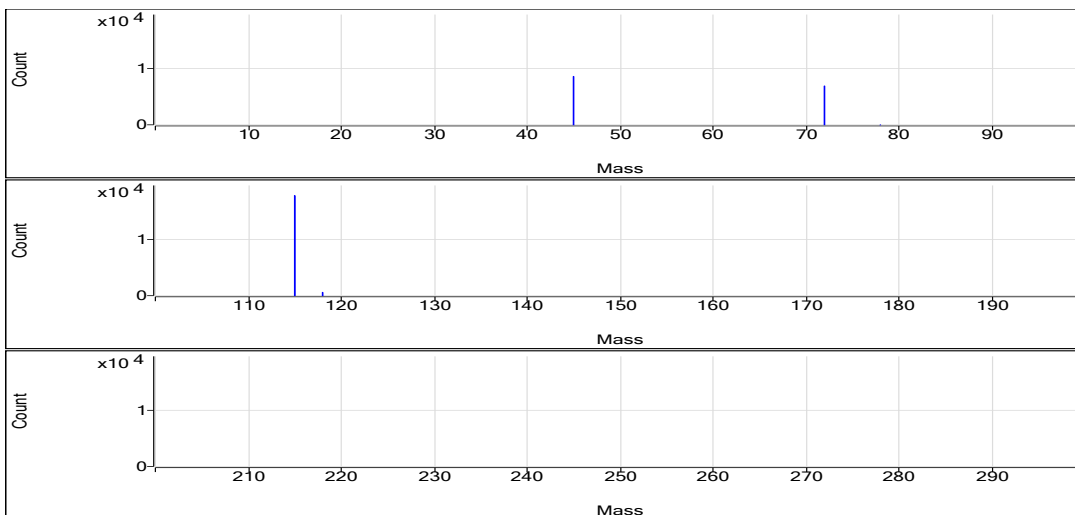
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1258983.42	1.1	96.3	Analog	0.1000	3
No Gas	Ge	72	634297.90	1.6	96.8	Pulse	0.1000	3
H2	Sc	45	86713.40	1.9	105.6	Pulse	0.1000	3
H2	Ge	72	69684.97	1.2	102.0	Pulse	0.1000	3
H2	In	115	179274.19	0.6	105.1	Pulse	0.1000	3
He	Sc	45	24445.65	1.5	95.5	Pulse	0.1000	3
He	Ge	72	45445.03	1.1	95.7	Pulse	0.1000	3
He	In	115	39126.34	2.3	95.6	Pulse	0.1000	3
He	Tb	159	150303.86	0.4	94.3	Pulse	0.1000	3
He	Bi	209	112458.01	1.5	96.2	Pulse	0.1000	3

No Gas

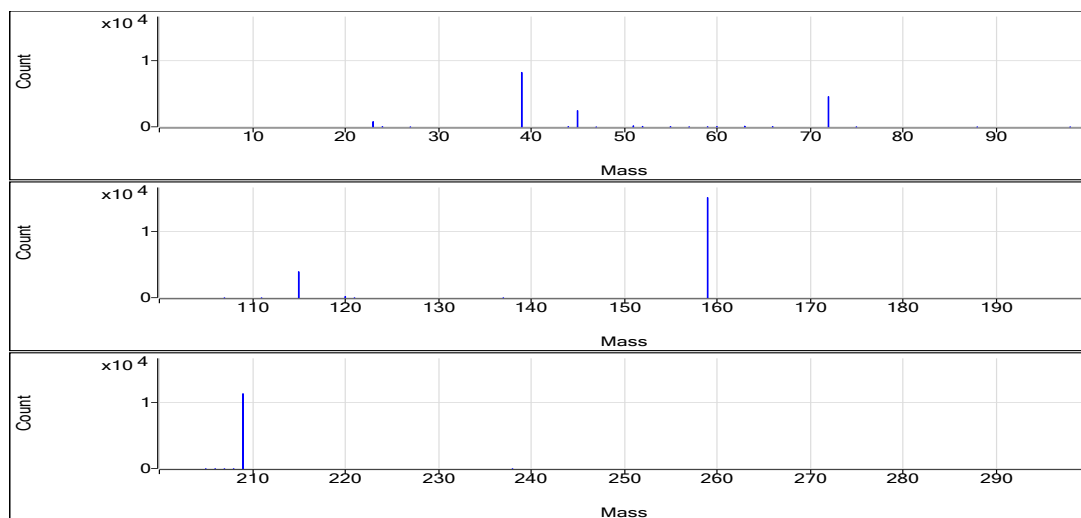


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.018	0.0001	38.00	0.0011	7.835E-05
Be	9	1	No Gas	0.011	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	0.02	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	0.042	0	3.33	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Na	23	3	He	3.234	0.1789	8052.21	0.0018	0.1731
Na	23	3	He	1.077	0.175	7932.13	0.0018	0.1731
Na	23	3	He	0.606	0.1742	8012.15	0.0018	0.1731
Mg	24	3	He	4.507	0.0107	480.03	0.0009	0.006537
Mg	24	3	He	5.387	0.0115	520.02	0.0009	0.006537
Mg	24	3	He	6.863	0.0128	590.03	0.0009	0.006537
Al	27	3	He	-0.303	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-4.155	0.0011	50.00	0.0003	0.00231
Al	27	3	He	0.279	0.0024	110.00	0.0003	0.00231
K	39	3	He	109.624	0.4294	19325.38	0.0007	0.3475
K	39	3	He	-8.688	0.341	15455.26	0.0007	0.3475
K	39	3	He	-49.563	0.3104	14282.21	0.0007	0.3475
Ca	44	3	He	-6.822	0.0025	114.00	0	0.002807
Ca	44	3	He	-11.671	0.0023	106.00	0	0.002807
Ca	44	3	He	-1.695	0.0027	126.00	0	0.002807
Ti	47	3	He	0.211	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.081	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.075	0.0073	328.01	0.0137	0.008308
V	51	3	He	-0.117	0.0067	304.01	0.0137	0.008308
V	51	3	He	-0.035	0.0078	360.01	0.0137	0.008308
Cr	52	3	He	-0.247	0.0173	780.04	0.0171	0.02156
Cr	52	3	He	-0.125	0.0194	880.05	0.0171	0.02156
Cr	52	3	He	-0.269	0.017	780.05	0.0171	0.02156
Mn	55	3	He	-0.007	0.0023	102.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.064	0.0028	126.00	0.0073	0.002316
Mn	55	3	He	-0.002	0.0023	106.00	0.0073	0.002316
Fe	57	3	He	3.903	0.004	180.01	0.0003	0.002736
Fe	57	3	He	3.134	0.0038	170.01	0.0003	0.002736
Fe	57	3	He	1.621	0.0033	150.01	0.0003	0.002736
Co	59	3	He	-0.003	0.0018	82.00	0.0332	0.001922
Co	59	3	He	0.003	0.002	92.00	0.0332	0.001922
Co	59	3	He	-0.029	0.001	44.00	0.0332	0.001922
Ni	60	3	He	-0.056	0.0026	118.00	0.0093	0.003141
Ni	60	3	He	0.037	0.0035	158.00	0.0093	0.003141
Ni	60	3	He	-0.066	0.0025	116.00	0.0093	0.003141
Cu	63	3	He	0.067	0.0056	250.00	0.027	0.003732
Cu	63	3	He	0.081	0.0059	268.00	0.027	0.003732
Cu	63	3	He	0.065	0.0055	252.00	0.027	0.003732
Zn	66	3	He	0.261	0.0028	128.00	0.0031	0.002032
Zn	66	3	He	0.028	0.0021	96.00	0.0031	0.002032
Zn	66	3	He	0.311	0.003	138.00	0.0031	0.002032
As	75	3	He	-0.024	0.0007	32.00	0.0025	0.0007733
As	75	3	He	0.077	0.001	44.00	0.0025	0.0007733
As	75	3	He	-0.116	0.0005	22.00	0.0025	0.0007733
Sr	88	3	He	-0.091	0.0031	120.00	0.0105	0.004071
Sr	88	3	He	-0.27	0.0012	50.00	0.0105	0.004071
Sr	88	3	He	-0.044	0.0036	140.00	0.0105	0.004071
Mo	98	3	He	-0.134	0.0008	30.00	0.0234	0.003908
Mo	98	3	He	-0.061	0.0025	100.00	0.0234	0.003908
Mo	98	3	He	-0.057	0.0026	100.00	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0002	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.802	0.0474	1820.18	0.0169	0.0609
Sn	120	3	He	-0.333	0.0553	2220.23	0.0169	0.0609
Sn	120	3	He	-0.63	0.0503	1950.20	0.0169	0.0609
Sb	121	3	He	-0.018	0.0003	10.00	0.0161	0.0005433
Sb	121	3	He	0.007	0.0007	26.67	0.0161	0.0005433
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Ba	137	3	He	0.03	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	-0.027	0.001	40.00	0.0053	0.001141
Ba	137	3	He	-0.167	0.0003	10.00	0.0053	0.001141
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	-0.011	0.0013	80.00	0.0332	0.001693
Pb	208	3	He	-0.013	0.0013	130.01	0.0332	0.001693
Pb	208	3	He	-0.033	0.0006	20.00	0.0332	0.001693
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	-0.012	0.0004	60.00	0.0338	0.0007949
Sc	45	1	No Gas			1243504.83		
Sc	45	1	No Gas			1263050.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1270394.67		
Ge	72	1	No Gas			637234.60		
Ge	72	1	No Gas			623276.87		
Ge	72	1	No Gas			642382.22		
Sc	45	2	H2			84890.36		
Sc	45	2	H2			87927.05		
Sc	45	2	H2			87322.78		
Ge	72	2	H2			70596.04		
Ge	72	2	H2			69571.18		
Ge	72	2	H2			68887.70		
In	115	2	H2			178746.91		
In	115	2	H2			178473.61		
In	115	2	H2			180602.05		
Sc	45	3	He			24088.33		
Sc	45	3	He			24819.71		
Sc	45	3	He			24428.90		
Ge	72	3	He			45003.65		
Ge	72	3	He			45324.85		
Ge	72	3	He			46006.60		
In	115	3	He			38438.57		
In	115	3	He			40172.95		
In	115	3	He			38809.43		
Tb	159	3	He			150446.57		
Tb	159	3	He			149677.13		
Tb	159	3	He			150787.87		
Bi	209	3	He			114274.72		
Bi	209	3	He			112068.49		
Bi	209	3	He			111030.83		

Quantitation Report

Data File Name 150SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:19:36 PM
Sample Name MB 410-681215/1-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

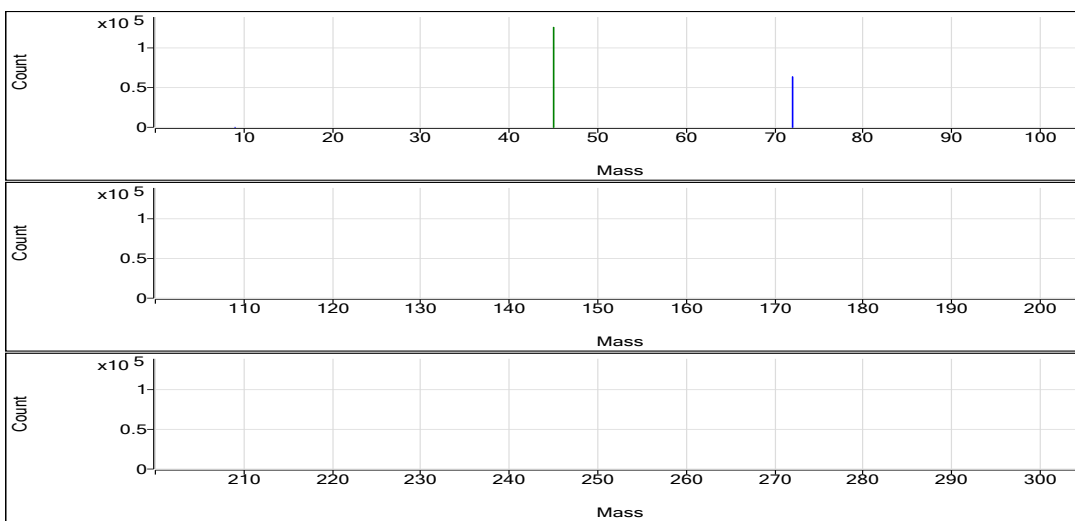
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.021	ppb	126.2	64.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.021	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	72	He	-4.651	ppb	N/A	7641.97	0.1646	Pulse	0.1000	3
Mg	24	72	He	5.790	ppb	43.8	550.03	0.0118	Pulse	0.1000	3
Al	27	72	He	0.199	ppb	963.7	110.00	0.0024	Pulse	0.1000	3
K	39	72	He	24.353	ppb	353.8	16975.63	0.3657	Pulse	0.5000	3
Ca	44	72	He	-14.440	ppb	N/A	103.33	0.0022	Pulse	0.5000	3
Ti	47	72	He	-0.084	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.094	ppb	N/A	326.01	0.0070	Pulse	0.5000	3
Cr	52	72	He	-0.337	ppb	N/A	733.38	0.0158	Pulse	0.1000	3
Mn	55	72	He	0.029	ppb	66.3	117.33	0.0025	Pulse	0.5000	3
Fe	57	72	He	1.088	ppb	93.4	143.34	0.0031	Pulse	0.1000	3
Co	59	72	He	-0.022	ppb	N/A	55.33	0.0012	Pulse	0.5000	3
Ni	60	72	He	-0.026	ppb	N/A	134.67	0.0029	Pulse	0.5000	3
Cu	63	72	He	-0.005	ppb	N/A	166.67	0.0036	Pulse	0.5000	3
Zn	66	72	He	-0.080	ppb	N/A	82.67	0.0018	Pulse	0.5000	3
As	75	72	He	-0.078	ppb	N/A	26.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.137	ppb	N/A	103.34	0.0026	Pulse	0.1000	3
Mo	98	115	He	-0.010	ppb	N/A	143.34	0.0037	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	44.9	2.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.307	ppb	N/A	2176.89	0.0557	Pulse	0.1000	3
Sb	121	115	He	-0.002	ppb	N/A	20.00	0.0005	Pulse	0.3000	3
Ba	137	115	He	-0.119	ppb	N/A	20.00	0.0005	Pulse	0.1000	3
Tl	205	159	He	-0.007	ppb	N/A	63.33	0.0004	Pulse	0.1000	3
Pb	208	159	He	-0.022	ppb	N/A	146.67	0.0010	Pulse	0.1000	3
U	238	159	He	-0.012	ppb	N/A	56.67	0.0004	Pulse	0.1000	3

ISTD Table:

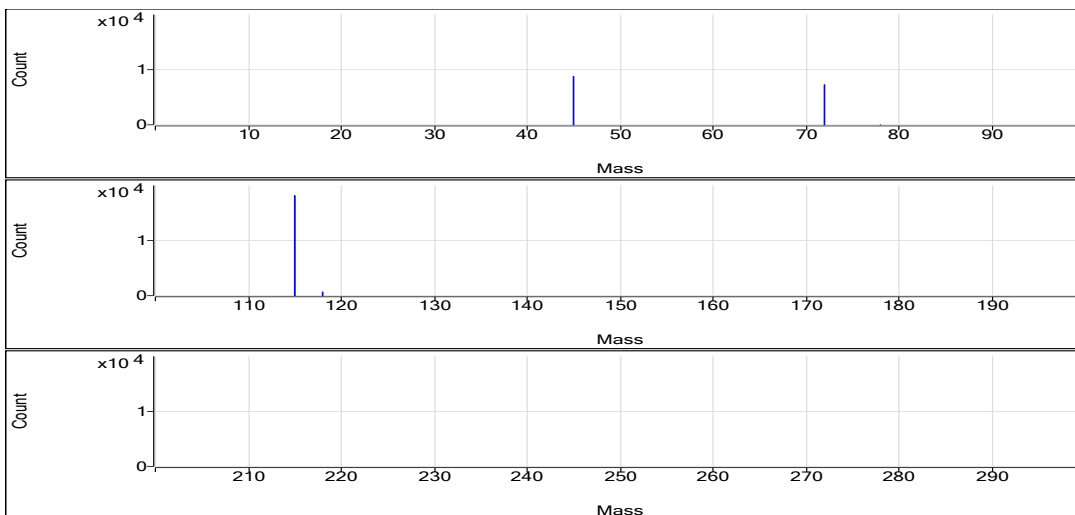
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1262101.86	1.5	96.6	Analog	0.1000	3
No Gas	Ge	72	637628.75	0.8	97.3	Pulse	0.1000	3
H2	Sc	45	87433.32	1.0	106.4	Pulse	0.1000	3
H2	Ge	72	72400.35	0.9	105.9	Pulse	0.1000	3
H2	In	115	180684.44	1.2	105.9	Pulse	0.1000	3
He	Sc	45	24926.29	1.7	97.3	Pulse	0.1000	3
He	Ge	72	46421.22	0.6	97.7	Pulse	0.1000	3
He	In	115	39091.60	1.7	95.5	Pulse	0.1000	3
He	Tb	159	151599.11	0.4	95.1	Pulse	0.1000	3
He	Bi	209	113299.50	0.2	96.9	Pulse	0.1000	3

No Gas

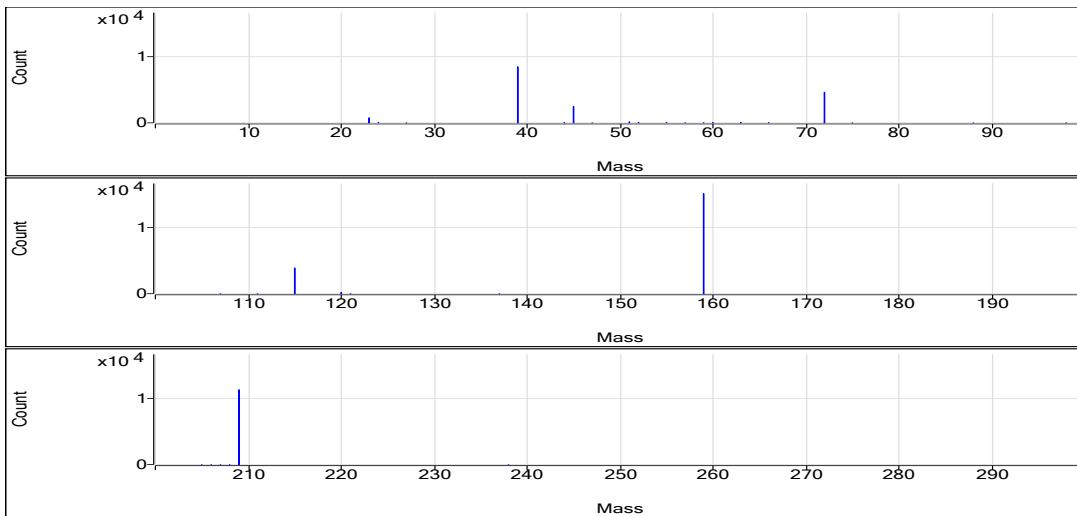


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.039	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.009	0.0001	44.00	0.0011	7.835E-05
Be	9	1	No Gas	0.032	0.0001	72.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.004	0	2.00	0.0005	2.594E-05
Na	23	3	He	-5.185	0.1636	7612.00	0.0018	0.1731
Na	23	3	He	-7.01	0.1603	7391.83	0.0018	0.1731
Na	23	3	He	-1.756	0.1699	7922.09	0.0018	0.1731
Mg	24	3	He	8.351	0.0142	660.04	0.0009	0.006537
Mg	24	3	He	3.281	0.0095	440.02	0.0009	0.006537
Mg	24	3	He	5.737	0.0118	550.02	0.0009	0.006537
Al	27	3	He	-0.552	0.0021	100.00	0.0003	0.00231
Al	27	3	He	-1.233	0.002	90.00	0.0003	0.00231
Al	27	3	He	2.383	0.003	140.01	0.0003	0.00231
K	39	3	He	119.483	0.4368	20318.59	0.0007	0.3475
K	39	3	He	1.989	0.349	16089.88	0.0007	0.3475
K	39	3	He	-48.414	0.3113	14518.41	0.0007	0.3475
Ca	44	3	He	-27.105	0.0017	80.00	0	0.002807
Ca	44	3	He	-0.762	0.0028	128.00	0	0.002807
Ca	44	3	He	-15.452	0.0022	102.00	0	0.002807
Ti	47	3	He	-0.084	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.222	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.053	0.0001	6.00	0.0003	0.0001123
V	51	3	He	-0.108	0.0068	318.01	0.0137	0.008308
V	51	3	He	-0.094	0.007	324.01	0.0137	0.008308
V	51	3	He	-0.081	0.0072	336.01	0.0137	0.008308
Cr	52	3	He	-0.381	0.015	700.04	0.0171	0.02156
Cr	52	3	He	-0.348	0.0156	720.04	0.0171	0.02156
Cr	52	3	He	-0.283	0.0167	780.05	0.0171	0.02156
Mn	55	3	He	0.048	0.0027	124.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.01	0.0024	110.00	0.0073	0.002316
Mn	55	3	He	0.029	0.0025	118.00	0.0073	0.002316
Fe	57	3	He	2.174	0.0034	160.01	0.0003	0.002736
Fe	57	3	He	0.929	0.003	140.01	0.0003	0.002736
Fe	57	3	He	0.16	0.0028	130.00	0.0003	0.002736
Co	59	3	He	-0.022	0.0012	56.00	0.0332	0.001922
Co	59	3	He	-0.034	0.0008	36.00	0.0332	0.001922
Co	59	3	He	-0.01	0.0016	74.00	0.0332	0.001922
Ni	60	3	He	-0.06	0.0026	120.00	0.0093	0.003141
Ni	60	3	He	-0.03	0.0029	132.00	0.0093	0.003141
Ni	60	3	He	0.013	0.0033	152.00	0.0093	0.003141
Cu	63	3	He	-0.014	0.0034	156.00	0.027	0.003732
Cu	63	3	He	0.005	0.0039	178.00	0.027	0.003732
Cu	63	3	He	-0.006	0.0036	166.00	0.027	0.003732
Zn	66	3	He	-0.086	0.0018	82.00	0.0031	0.002032
Zn	66	3	He	-0.026	0.002	90.00	0.0031	0.002032
Zn	66	3	He	-0.129	0.0016	76.00	0.0031	0.002032
As	75	3	He	-0.05	0.0006	30.00	0.0025	0.0007733
As	75	3	He	-0.116	0.0005	22.00	0.0025	0.0007733
As	75	3	He	-0.068	0.0006	28.00	0.0025	0.0007733
Sr	88	3	He	-0.125	0.0028	110.00	0.0105	0.004071
Sr	88	3	He	-0.047	0.0036	140.01	0.0105	0.004071
Sr	88	3	He	-0.24	0.0016	60.00	0.0105	0.004071
Mo	98	3	He	-0.06	0.0025	100.00	0.0234	0.003908
Mo	98	3	He	-0.014	0.0036	140.01	0.0234	0.003908
Mo	98	3	He	0.044	0.0049	190.01	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.019	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.33	0.0553	2200.23	0.0169	0.0609
Sn	120	3	He	-0.56	0.0515	2010.20	0.0169	0.0609
Sn	120	3	He	-0.032	0.0604	2320.25	0.0169	0.0609
Sb	121	3	He	-0.013	0.0003	13.33	0.0161	0.0005433
Sb	121	3	He	0.025	0.0009	36.67	0.0161	0.0005433
Sb	121	3	He	-0.018	0.0003	10.00	0.0161	0.0005433
Ba	137	3	He	-0.168	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	-0.119	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	-0.068	0.0008	30.00	0.0053	0.001141
Tl	205	3	He	0	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Pb	208	3	He	-0.027	0.0008	60.00	0.0332	0.001693
Pb	208	3	He	-0.027	0.0008	80.00	0.0332	0.001693
Pb	208	3	He	-0.011	0.0013	80.00	0.0332	0.001693
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	-0.016	0.0003	40.00	0.0338	0.0007949
U	238	3	He	-0.018	0.0002	30.00	0.0338	0.0007949
Sc	45	1	No Gas			1240534.28		
Sc	45	1	No Gas			1275457.17		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1270314.12		
Ge	72	1	No Gas			632566.32		
Ge	72	1	No Gas			642302.10		
Ge	72	1	No Gas			638017.84		
Sc	45	2	H2			86377.49		
Sc	45	2	H2			87976.49		
Sc	45	2	H2			87945.98		
Ge	72	2	H2			72553.57		
Ge	72	2	H2			72976.83		
Ge	72	2	H2			71670.64		
In	115	2	H2			179055.17		
In	115	2	H2			183057.24		
In	115	2	H2			179940.90		
Sc	45	3	He			25360.47		
Sc	45	3	He			24889.41		
Sc	45	3	He			24529.00		
Ge	72	3	He			46518.37		
Ge	72	3	He			46106.83		
Ge	72	3	He			46638.46		
In	115	3	He			39781.85		
In	115	3	He			39080.11		
In	115	3	He			38458.54		
Tb	159	3	He			150970.12		
Tb	159	3	He			151626.66		
Tb	159	3	He			152200.54		
Bi	209	3	He			113370.80		
Bi	209	3	He			113047.18		
Bi	209	3	He			113480.51		

Quantitation Report

Data File Name 151SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:21:48 PM
Sample Name LCS 410-681215/2-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

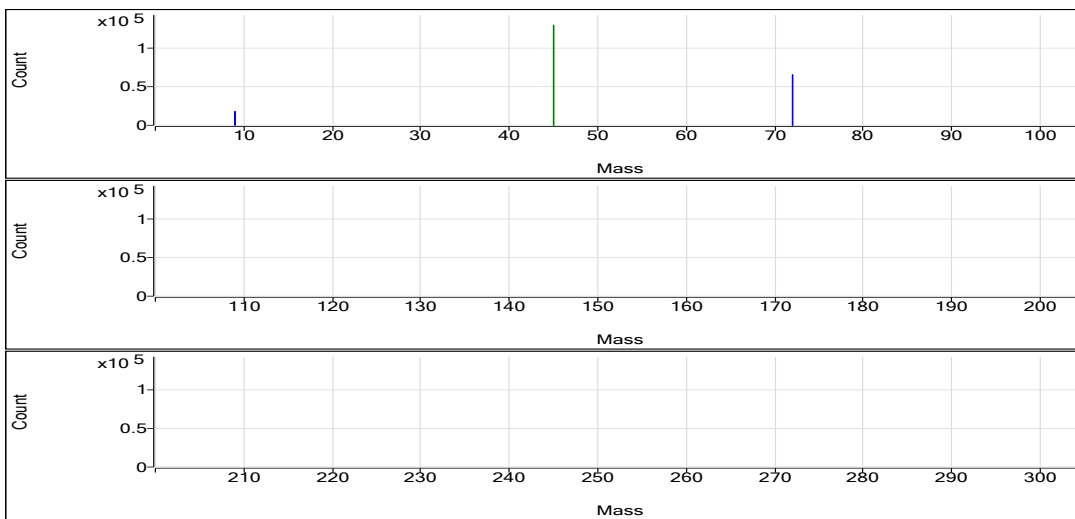
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.846	ppb	3.4	36187.29	0.0551	Pulse	0.5000	3
Se	78	72	H2	99.245	ppb	2.4	3653.75	0.0503	Pulse	1.5000	3
Na	23	72	He	4909.630	ppb	1.7	428093.83	9.0892	Pulse	0.1000	3
Mg	24	72	He	4875.069	ppb	2.7	210656.76	4.4732	Pulse	0.1000	3
Al	27	72	He	4887.880	ppb	1.5	66982.66	1.4220	Pulse	0.1000	3
K	39	72	He	4861.259	ppb	0.8	187522.73	3.9809	Pulse	0.5000	3
Ca	44	72	He	4937.743	ppb	1.8	9458.77	0.2008	Pulse	0.5000	3
Ti	47	72	He	491.966	ppb	0.7	7213.63	0.1531	Pulse	0.5000	3
V	51	72	He	484.241	ppb	2.0	311915.52	6.6227	Pulse	0.5000	3
Cr	52	72	He	485.016	ppb	1.9	391324.35	8.3087	Pulse	0.1000	3
Mn	55	72	He	480.468	ppb	1.8	165218.50	3.5079	Pulse	0.5000	3
Fe	57	72	He	4839.003	ppb	1.6	73955.58	1.5702	Pulse	0.1000	3
Co	59	72	He	483.817	ppb	2.1	757128.81	16.0759	Pulse	0.5000	3
Ni	60	72	He	481.977	ppb	2.2	211889.16	4.4990	Pulse	0.5000	3
Cu	63	72	He	482.316	ppb	1.8	613909.77	13.0346	Pulse	0.5000	3
Zn	66	72	He	479.988	ppb	1.8	70528.67	1.4975	Pulse	0.5000	3
As	75	72	He	478.178	ppb	2.1	57465.53	1.2201	Pulse	0.5000	3
Sr	88	115	He	51.043	ppb	2.1	21304.85	0.5380	Pulse	0.1000	3
Mo	98	115	He	49.912	ppb	0.3	46392.48	1.1716	Pulse	0.1000	3
Ag	107	115	He	51.333	ppb	0.3	100233.33	2.5314	Pulse	0.1000	3
Cd	111	115	He	50.764	ppb	2.2	11277.45	0.2848	Pulse	0.5000	3
Sn	120	115	He	99.580	ppb	1.5	68957.57	1.7416	Pulse	0.1000	3
Sb	121	115	He	100.421	ppb	0.8	64128.54	1.6196	Pulse	0.3000	3
Ba	137	115	He	495.971	ppb	1.3	103727.63	2.6199	Pulse	0.1000	3
Tl	205	159	He	98.139	ppb	1.0	369455.74	2.4322	Pulse	0.1000	3
Pb	208	159	He	50.608	ppb	1.0	255697.22	1.6833	Pulse	0.1000	3
U	238	159	He	51.164	ppb	1.0	262457.39	1.7278	Pulse	0.1000	3

ISTD Table:

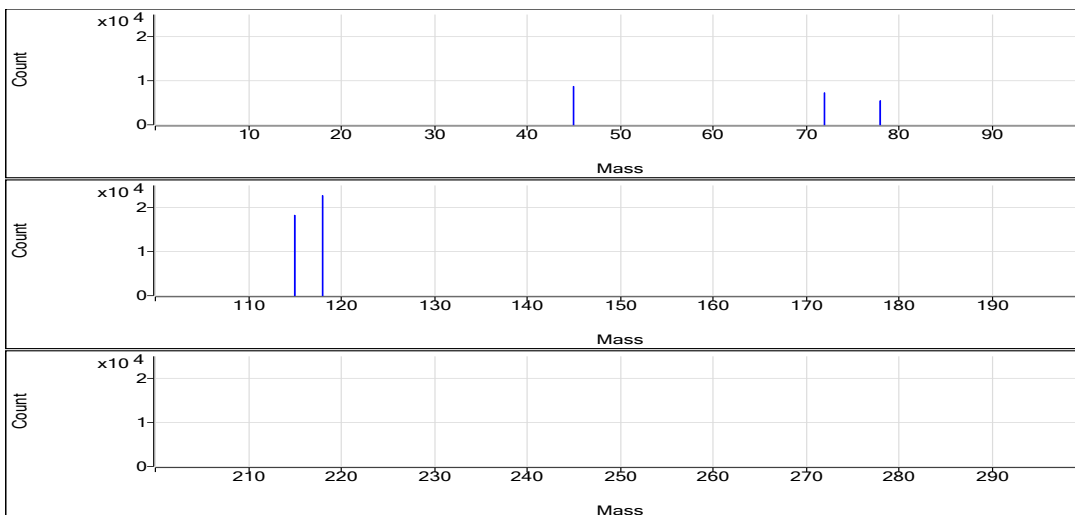
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1297557.66	0.6	99.3	Analog	0.1000	3
No Gas	Ge	72	656190.45	0.8	100.1	Pulse	0.1000	3
H2	Sc	45	87077.82	1.9	106.0	Pulse	0.1000	3
H2	Ge	72	72618.02	0.7	106.3	Pulse	0.1000	3
H2	In	115	182324.78	0.4	106.9	Pulse	0.1000	3
He	Sc	45	25630.54	1.7	100.1	Pulse	0.1000	3
He	Ge	72	47109.83	2.0	99.2	Pulse	0.1000	3
He	In	115	39596.31	1.0	96.7	Pulse	0.1000	3
He	Tb	159	151909.06	0.6	95.3	Pulse	0.1000	3
He	Bi	209	112065.92	1.5	95.8	Pulse	0.1000	3

No Gas

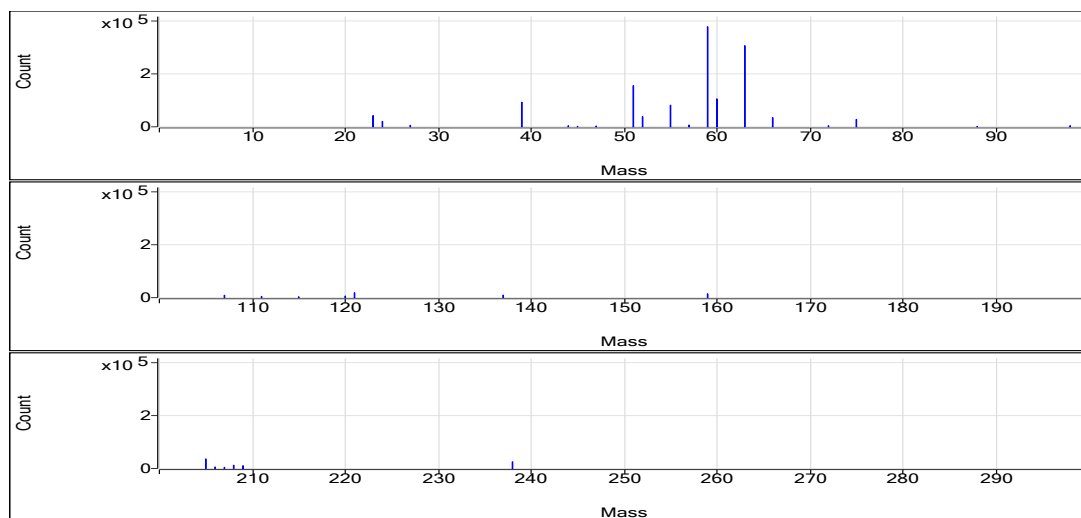


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.848	0.053	34801.66	0.0011	7.835E-05
Be	9	1	No Gas	52.483	0.0558	36906.14	0.0011	7.835E-05
Be	9	1	No Gas	53.207	0.0566	36854.06	0.0011	7.835E-05
Se	78	2	H2	101.648	0.0515	3719.10	0.0005	2.594E-05
Se	78	2	H2	99.131	0.0503	3645.75	0.0005	2.594E-05
Se	78	2	H2	96.955	0.0492	3596.41	0.0005	2.594E-05
Na	23	3	He	4830.473	8.9454	429670.19	0.0018	0.1731
Na	23	3	He	5000.729	9.2546	427258.31	0.0018	0.1731
Na	23	3	He	4897.688	9.0675	427353.00	0.0018	0.1731
Mg	24	3	He	4758.681	4.3666	209735.84	0.0009	0.006537
Mg	24	3	He	5019.686	4.6057	212631.01	0.0009	0.006537
Mg	24	3	He	4846.84	4.4473	209603.43	0.0009	0.006537
Al	27	3	He	4819.629	1.4021	67347.69	0.0003	0.00231
Al	27	3	He	4882.14	1.4203	65570.43	0.0003	0.00231
Al	27	3	He	4961.872	1.4434	68029.86	0.0003	0.00231
K	39	3	He	4837.116	3.9628	190344.67	0.0007	0.3475
K	39	3	He	4906.651	4.0148	185351.97	0.0007	0.3475
K	39	3	He	4840.01	3.965	186871.55	0.0007	0.3475
Ca	44	3	He	4874.767	0.1983	9524.81	0	0.002807
Ca	44	3	He	5041.037	0.205	9462.75	0	0.002807
Ca	44	3	He	4897.426	0.1992	9388.74	0	0.002807
Ti	47	3	He	495.547	0.1542	7407.72	0.0003	0.0001123
Ti	47	3	He	488.826	0.1521	7023.55	0.0003	0.0001123
Ti	47	3	He	491.524	0.153	7209.63	0.0003	0.0001123
V	51	3	He	473.7	6.4787	311188.03	0.0137	0.008308
V	51	3	He	492.435	6.7346	310917.88	0.0137	0.008308
V	51	3	He	486.589	6.6548	313640.66	0.0137	0.008308
Cr	52	3	He	475.13	8.1398	390972.53	0.0171	0.02156
Cr	52	3	He	493.358	8.4512	390167.61	0.0171	0.02156
Cr	52	3	He	486.56	8.3351	392832.92	0.0171	0.02156
Mn	55	3	He	470.921	3.4382	165145.17	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	487.006	3.5556	164149.78	0.0073	0.002316
Mn	55	3	He	483.476	3.5298	166360.55	0.0073	0.002316
Fe	57	3	He	4752.283	1.5421	74069.72	0.0003	0.002736
Fe	57	3	He	4900.947	1.5902	73416.37	0.0003	0.002736
Fe	57	3	He	4863.777	1.5782	74380.64	0.0003	0.002736
Co	59	3	He	473.013	15.717	754922.00	0.0332	0.001922
Co	59	3	He	492.748	16.3726	755873.56	0.0332	0.001922
Co	59	3	He	485.689	16.1381	760590.88	0.0332	0.001922
Ni	60	3	He	470.473	4.3917	210945.45	0.0093	0.003141
Ni	60	3	He	491.315	4.5861	211728.63	0.0093	0.003141
Ni	60	3	He	484.144	4.5193	212993.42	0.0093	0.003141
Cu	63	3	He	474.085	12.8122	615399.94	0.027	0.003732
Cu	63	3	He	491.519	13.2832	613246.56	0.027	0.003732
Cu	63	3	He	481.343	13.0083	613082.81	0.027	0.003732
Zn	66	3	He	469.978	1.4663	70428.20	0.0031	0.002032
Zn	66	3	He	486.786	1.5186	70110.77	0.0031	0.002032
Zn	66	3	He	483.201	1.5075	71047.05	0.0031	0.002032
As	75	3	He	466.802	1.1911	57209.38	0.0025	0.0007733
As	75	3	He	481.701	1.229	56741.51	0.0025	0.0007733
As	75	3	He	486.031	1.2401	58445.71	0.0025	0.0007733
Sr	88	3	He	50.472	0.5321	21254.96	0.0105	0.004071
Sr	88	3	He	52.258	0.5507	21845.48	0.0105	0.004071
Sr	88	3	He	50.398	0.5313	20814.12	0.0105	0.004071
Mo	98	3	He	49.963	1.1728	46850.64	0.0234	0.003908
Mo	98	3	He	50.039	1.1746	46589.48	0.0234	0.003908
Mo	98	3	He	49.735	1.1675	45737.31	0.0234	0.003908
Ag	107	3	He	51.139	2.5219	100743.60	0.0493	0.0004851
Ag	107	3	He	51.447	2.5371	100632.90	0.0493	0.0004851
Ag	107	3	He	51.411	2.5353	99323.49	0.0493	0.0004851
Cd	111	3	He	50.162	0.2815	11244.08	0.0056	0
Cd	111	3	He	50.052	0.2809	11140.02	0.0056	0
Cd	111	3	He	52.078	0.2922	11448.24	0.0056	0
Sn	120	3	He	99.317	1.7372	69396.87	0.0169	0.0609
Sn	120	3	He	98.263	1.7194	68200.71	0.0169	0.0609
Sn	120	3	He	101.159	1.7683	69275.12	0.0169	0.0609
Sb	121	3	He	99.719	1.6083	64248.88	0.0161	0.0005433
Sb	121	3	He	100.226	1.6165	64118.71	0.0161	0.0005433
Sb	121	3	He	101.318	1.6341	64018.04	0.0161	0.0005433
Ba	137	3	He	489.767	2.5871	103348.55	0.0053	0.001141
Ba	137	3	He	495.083	2.6152	103730.99	0.0053	0.001141
Ba	137	3	He	503.063	2.6573	104103.36	0.0053	0.001141
Tl	205	3	He	99.195	2.4583	371133.31	0.0248	0.0005854
Tl	205	3	He	97.425	2.4145	368704.45	0.0248	0.0005854
Tl	205	3	He	97.797	2.4237	368529.45	0.0248	0.0005854
Pb	208	3	He	51.144	1.7011	136213.77	0.0332	0.001693
Pb	208	3	He	50.147	1.668	134970.21	0.0332	0.001693
Pb	208	3	He	50.532	1.6808	133739.78	0.0332	0.001693
U	238	3	He	51.622	1.7432	263175.05	0.0338	0.0007949
U	238	3	He	51.278	1.7316	264425.78	0.0338	0.0007949
U	238	3	He	50.591	1.7084	259771.34	0.0338	0.0007949
Sc	45	1	No Gas			1288764.59		
Sc	45	1	No Gas			1298513.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1305394.43		
Ge	72	1	No Gas			656297.02		
Ge	72	1	No Gas			661089.37		
Ge	72	1	No Gas			651184.95		
Sc	45	2	H2			86227.26		
Sc	45	2	H2			86014.23		
Sc	45	2	H2			88991.97		
Ge	72	2	H2			72162.33		
Ge	72	2	H2			72534.34		
Ge	72	2	H2			73157.40		
In	115	2	H2			182481.81		
In	115	2	H2			182924.92		
In	115	2	H2			181567.61		
Sc	45	3	He			25510.30		
Sc	45	3	He			25260.01		
Sc	45	3	He			26121.32		
Ge	72	3	He			48032.33		
Ge	72	3	He			46166.98		
Ge	72	3	He			47130.18		
In	115	3	He			40433.39		
In	115	3	He			40142.43		
In	115	3	He			39661.23		
Tb	159	3	He			150969.23		
Tb	159	3	He			152705.50		
Tb	159	3	He			152052.45		
Bi	209	3	He			112130.09		
Bi	209	3	He			113680.50		
Bi	209	3	He			110387.16		

Quantitation Report

Data File Name 152SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:24:01 PM
Sample Name LCS 410-681888/2-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

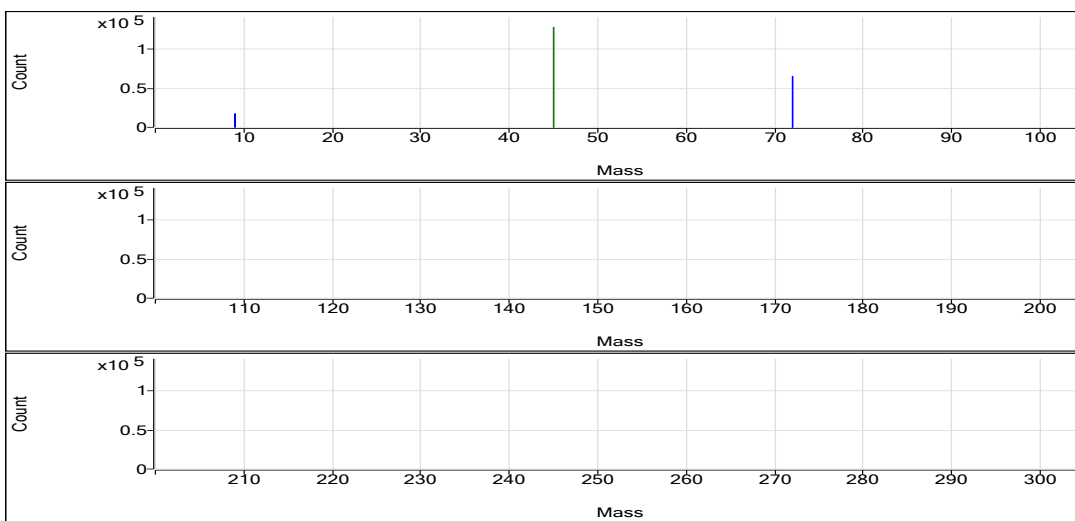
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.239	ppb	5.4	35150.54	0.0534	Pulse	0.5000	3
Se	78	72	H2	97.615	ppb	0.9	3564.18	0.0495	Pulse	1.5000	3
Na	23	72	He	4872.827	ppb	0.8	420539.04	9.0224	Pulse	0.1000	3
Mg	24	72	He	4859.614	ppb	0.6	207838.11	4.4590	Pulse	0.1000	3
Al	27	72	He	4729.120	ppb	1.1	64127.62	1.3758	Pulse	0.1000	3
K	39	72	He	4850.644	ppb	2.1	185168.69	3.9730	Pulse	0.5000	3
Ca	44	72	He	4797.693	ppb	0.9	9099.22	0.1952	Pulse	0.5000	3
Ti	47	72	He	489.374	ppb	1.7	7098.90	0.1523	Pulse	0.5000	3
V	51	72	He	478.238	ppb	0.3	304870.19	6.5407	Pulse	0.5000	3
Cr	52	72	He	478.933	ppb	0.8	382423.91	8.2048	Pulse	0.1000	3
Mn	55	72	He	476.689	ppb	0.7	162221.09	3.4803	Pulse	0.5000	3
Fe	57	72	He	4853.349	ppb	1.7	73403.24	1.5748	Pulse	0.1000	3
Co	59	72	He	481.678	ppb	0.5	745996.73	16.0048	Pulse	0.5000	3
Ni	60	72	He	477.740	ppb	0.4	207862.37	4.4595	Pulse	0.5000	3
Cu	63	72	He	479.480	ppb	0.6	603978.06	12.9580	Pulse	0.5000	3
Zn	66	72	He	479.416	ppb	0.8	69713.82	1.4957	Pulse	0.5000	3
As	75	72	He	475.453	ppb	1.3	56546.38	1.2131	Pulse	0.5000	3
Sr	88	115	He	49.678	ppb	0.9	20560.66	0.5238	Pulse	0.1000	3
Mo	98	115	He	50.854	ppb	1.4	46857.15	1.1936	Pulse	0.1000	3
Ag	107	115	He	51.307	ppb	1.1	99324.80	2.5301	Pulse	0.1000	3
Cd	111	115	He	49.079	ppb	1.9	10809.11	0.2754	Pulse	0.5000	3
Sn	120	115	He	99.862	ppb	1.3	68548.78	1.7464	Pulse	0.1000	3
Sb	121	115	He	98.362	ppb	2.0	62264.38	1.5865	Pulse	0.3000	3
Ba	137	115	He	498.388	ppb	0.7	103352.36	2.6326	Pulse	0.1000	3
Tl	205	159	He	98.572	ppb	1.2	370125.78	2.4429	Pulse	0.1000	3
Pb	208	159	He	49.844	ppb	1.4	251190.16	1.6579	Pulse	0.1000	3
U	238	159	He	50.598	ppb	0.4	258893.09	1.7087	Pulse	0.1000	3

ISTD Table:

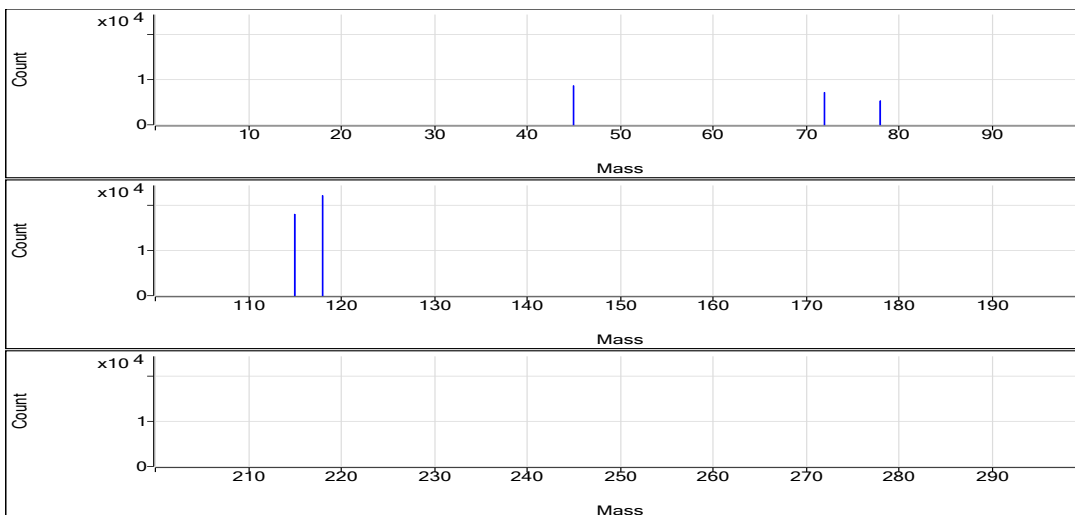
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1288937.64	0.6	98.6	Analog	0.1000	3
No Gas	Ge	72	657594.19	0.9	100.4	Pulse	0.1000	3
H2	Sc	45	86926.80	2.2	105.8	Pulse	0.1000	3
H2	Ge	72	72012.12	0.1	105.4	Pulse	0.1000	3
H2	In	115	181142.82	1.9	106.2	Pulse	0.1000	3
He	Sc	45	24862.70	2.3	97.1	Pulse	0.1000	3
He	Ge	72	46611.79	0.8	98.1	Pulse	0.1000	3
He	In	115	39258.33	2.1	95.9	Pulse	0.1000	3
He	Tb	159	151517.02	0.6	95.0	Pulse	0.1000	3
He	Bi	209	112298.38	1.3	96.0	Pulse	0.1000	3

No Gas

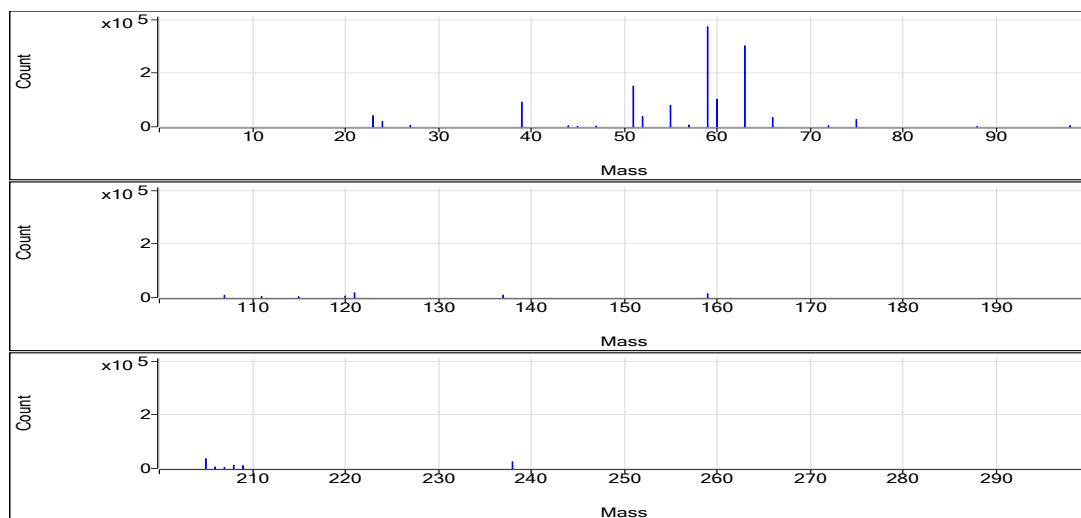


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.416	0.0504	33098.25	0.0011	7.835E-05
Be	9	1	No Gas	50.481	0.0537	35054.29	0.0011	7.835E-05
Be	9	1	No Gas	52.821	0.0562	37299.09	0.0011	7.835E-05
Se	78	2	H2	96.858	0.0491	3535.06	0.0005	2.594E-05
Se	78	2	H2	98.631	0.05	3597.74	0.0005	2.594E-05
Se	78	2	H2	97.357	0.0494	3559.73	0.0005	2.594E-05
Na	23	3	He	4885.858	9.046	418080.97	0.0018	0.1731
Na	23	3	He	4830.292	8.9451	419606.05	0.0018	0.1731
Na	23	3	He	4902.331	9.0759	423930.11	0.0018	0.1731
Mg	24	3	He	4881.533	4.4791	207011.81	0.0009	0.006537
Mg	24	3	He	4824.951	4.4273	207679.00	0.0009	0.006537
Mg	24	3	He	4872.359	4.4707	208823.51	0.0009	0.006537
Al	27	3	He	4767.63	1.387	64104.52	0.0003	0.00231
Al	27	3	He	4669.925	1.3587	63733.01	0.0003	0.00231
Al	27	3	He	4749.806	1.3819	64545.32	0.0003	0.00231
K	39	3	He	4963.95	4.0576	187532.58	0.0007	0.3475
K	39	3	He	4770.145	3.9128	183545.06	0.0007	0.3475
K	39	3	He	4817.836	3.9484	184428.42	0.0007	0.3475
Ca	44	3	He	4764.5	0.1939	8960.48	0	0.002807
Ca	44	3	He	4781.484	0.1946	9126.57	0	0.002807
Ca	44	3	He	4847.096	0.1972	9210.61	0	0.002807
Ti	47	3	He	490.939	0.1528	7061.55	0.0003	0.0001123
Ti	47	3	He	480.401	0.1495	7013.53	0.0003	0.0001123
Ti	47	3	He	496.782	0.1546	7221.62	0.0003	0.0001123
V	51	3	He	479.323	6.5555	302978.06	0.0137	0.008308
V	51	3	He	476.535	6.5175	305727.19	0.0137	0.008308
V	51	3	He	478.855	6.5491	305905.31	0.0137	0.008308
Cr	52	3	He	482.506	8.2658	382021.24	0.0171	0.02156
Cr	52	3	He	475.027	8.138	381745.97	0.0171	0.02156
Cr	52	3	He	479.267	8.2105	383504.53	0.0171	0.02156
Mn	55	3	He	476.711	3.4805	160856.44	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	473.458	3.4567	162151.19	0.0073	0.002316
Mn	55	3	He	479.899	3.5037	163655.64	0.0073	0.002316
Fe	57	3	He	4905.047	1.5916	73557.48	0.0003	0.002736
Fe	57	3	He	4896.031	1.5886	74521.65	0.0003	0.002736
Fe	57	3	He	4758.969	1.5442	72130.58	0.0003	0.002736
Co	59	3	He	483.389	16.0617	742323.69	0.0332	0.001922
Co	59	3	He	478.711	15.9062	746146.06	0.0332	0.001922
Co	59	3	He	482.933	16.0465	749520.44	0.0332	0.001922
Ni	60	3	He	479.424	4.4752	206832.25	0.0093	0.003141
Ni	60	3	He	475.33	4.437	208137.28	0.0093	0.003141
Ni	60	3	He	478.467	4.4663	208617.58	0.0093	0.003141
Cu	63	3	He	481.717	13.0184	601673.19	0.027	0.003732
Cu	63	3	He	476.053	12.8654	603502.19	0.027	0.003732
Cu	63	3	He	480.67	12.9901	606758.81	0.027	0.003732
Zn	66	3	He	481.753	1.503	69462.21	0.0031	0.002032
Zn	66	3	He	474.76	1.4812	69480.05	0.0031	0.002032
Zn	66	3	He	481.735	1.5029	70199.21	0.0031	0.002032
As	75	3	He	472.051	1.2044	55665.93	0.0025	0.0007733
As	75	3	He	471.864	1.204	56476.92	0.0025	0.0007733
As	75	3	He	482.443	1.2309	57496.30	0.0025	0.0007733
Sr	88	3	He	49.512	0.522	20193.47	0.0105	0.004071
Sr	88	3	He	50.165	0.5289	20574.02	0.0105	0.004071
Sr	88	3	He	49.356	0.5204	20914.48	0.0105	0.004071
Mo	98	3	He	51.635	1.2119	46880.26	0.0234	0.003908
Mo	98	3	He	50.263	1.1798	45897.66	0.0234	0.003908
Mo	98	3	He	50.664	1.1892	47793.53	0.0234	0.003908
Ag	107	3	He	51.937	2.5612	99074.00	0.0493	0.0004851
Ag	107	3	He	50.782	2.5043	97421.83	0.0493	0.0004851
Ag	107	3	He	51.202	2.525	101478.58	0.0493	0.0004851
Cd	111	3	He	49.258	0.2764	10691.70	0.0056	0
Cd	111	3	He	49.887	0.2799	10889.83	0.0056	0
Cd	111	3	He	48.094	0.2699	10845.80	0.0056	0
Sn	120	3	He	100.758	1.7615	68140.36	0.0169	0.0609
Sn	120	3	He	100.443	1.7562	68321.01	0.0169	0.0609
Sn	120	3	He	98.384	1.7215	69184.98	0.0169	0.0609
Sb	121	3	He	99.584	1.6062	62130.60	0.0161	0.0005433
Sb	121	3	He	99.406	1.6033	62371.48	0.0161	0.0005433
Sb	121	3	He	96.097	1.5499	62291.07	0.0161	0.0005433
Ba	137	3	He	501.399	2.6485	102452.07	0.0053	0.001141
Ba	137	3	He	494.854	2.614	101689.79	0.0053	0.001141
Ba	137	3	He	498.911	2.6354	105915.23	0.0053	0.001141
Tl	205	3	He	97.91	2.4265	369492.34	0.0248	0.0005854
Tl	205	3	He	99.963	2.4774	373081.28	0.0248	0.0005854
Tl	205	3	He	97.844	2.4248	367803.71	0.0248	0.0005854
Pb	208	3	He	49.452	1.6449	133527.46	0.0332	0.001693
Pb	208	3	He	50.659	1.685	134103.17	0.0332	0.001693
Pb	208	3	He	49.421	1.6439	131822.69	0.0332	0.001693
U	238	3	He	50.833	1.7166	261391.03	0.0338	0.0007949
U	238	3	He	50.498	1.7053	256809.45	0.0338	0.0007949
U	238	3	He	50.463	1.7041	258478.79	0.0338	0.0007949
Sc	45	1	No Gas			1280425.45		
Sc	45	1	No Gas			1290347.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1296040.37		
Ge	72	1	No Gas			656143.19		
Ge	72	1	No Gas			652782.84		
Ge	72	1	No Gas			663856.55		
Sc	45	2	H2			87875.42		
Sc	45	2	H2			88156.89		
Sc	45	2	H2			84748.08		
Ge	72	2	H2			71981.97		
Ge	72	2	H2			71942.01		
Ge	72	2	H2			72112.37		
In	115	2	H2			181467.05		
In	115	2	H2			184415.70		
In	115	2	H2			177545.70		
Sc	45	3	He			24689.14		
Sc	45	3	He			25490.34		
Sc	45	3	He			24408.62		
Ge	72	3	He			46217.12		
Ge	72	3	He			46909.00		
Ge	72	3	He			46709.25		
In	115	3	He			39159.70		
In	115	3	He			39380.81		
In	115	3	He			40673.99		
Tb	159	3	He			152274.14		
Tb	159	3	He			150595.90		
Tb	159	3	He			151681.02		
Bi	209	3	He			110629.23		
Bi	209	3	He			112844.95		
Bi	209	3	He			113420.95		

Quantitation Report

Data File Name 153SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:26:14 PM
Sample Name LCS 410-681246/2-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

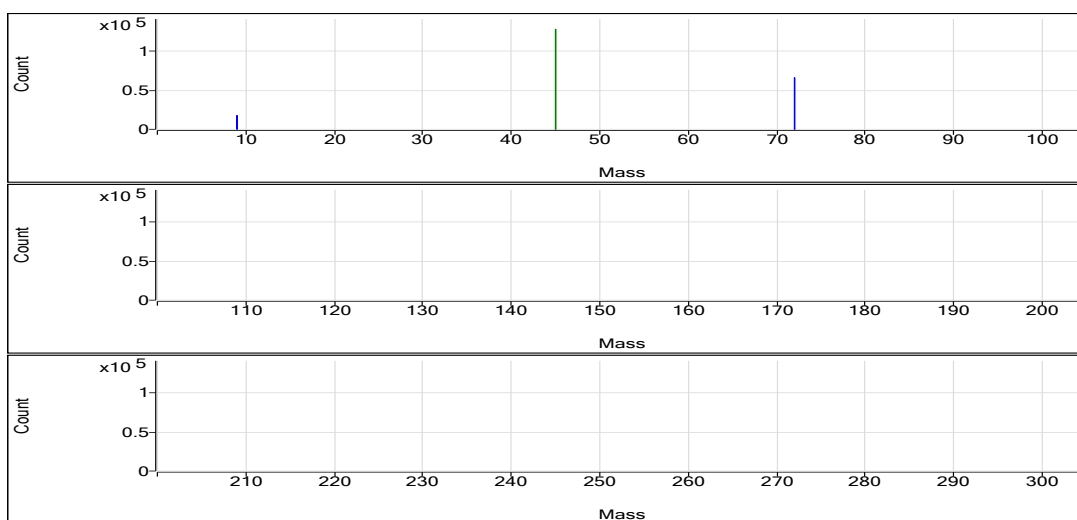
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.760	ppb	3.6	35916.10	0.0540	Pulse	0.5000	3
Se	78	72	H2	98.407	ppb	2.0	3622.19	0.0499	Pulse	1.5000	3
Na	23	72	He	4838.738	ppb	0.6	422359.23	8.9604	Pulse	0.1000	3
Mg	24	72	He	4797.864	ppb	1.0	207511.30	4.4025	Pulse	0.1000	3
Al	27	72	He	4741.445	ppb	0.9	65021.03	1.3794	Pulse	0.1000	3
K	39	72	He	4790.342	ppb	2.5	185140.10	3.9279	Pulse	0.5000	3
Ca	44	72	He	4752.725	ppb	1.3	9116.56	0.1934	Pulse	0.5000	3
Ti	47	72	He	489.276	ppb	0.9	7177.61	0.1523	Pulse	0.5000	3
V	51	72	He	473.272	ppb	0.1	305109.18	6.4729	Pulse	0.5000	3
Cr	52	72	He	475.609	ppb	1.1	384055.89	8.1480	Pulse	0.1000	3
Mn	55	72	He	471.708	ppb	0.3	162334.73	3.4439	Pulse	0.5000	3
Fe	57	72	He	4688.147	ppb	0.2	71708.89	1.5213	Pulse	0.1000	3
Co	59	72	He	476.779	ppb	0.4	746732.65	15.8421	Pulse	0.5000	3
Ni	60	72	He	474.391	ppb	0.5	208731.54	4.4283	Pulse	0.5000	3
Cu	63	72	He	478.217	ppb	0.5	609178.10	12.9238	Pulse	0.5000	3
Zn	66	72	He	476.752	ppb	0.3	70109.55	1.4874	Pulse	0.5000	3
As	75	72	He	473.706	ppb	0.6	56972.40	1.2087	Pulse	0.5000	3
Sr	88	115	He	50.412	ppb	4.1	20583.87	0.5314	Pulse	0.1000	3
Mo	98	115	He	51.242	ppb	1.4	46599.68	1.2027	Pulse	0.1000	3
Ag	107	115	He	51.921	ppb	2.3	99190.61	2.5604	Pulse	0.1000	3
Cd	111	115	He	51.274	ppb	2.3	11146.03	0.2877	Pulse	0.5000	3
Sn	120	115	He	99.826	ppb	3.0	67624.88	1.7458	Pulse	0.1000	3
Sb	121	115	He	100.599	ppb	1.8	62860.16	1.6225	Pulse	0.3000	3
Ba	137	115	He	501.917	ppb	2.1	102713.91	2.6513	Pulse	0.1000	3
Tl	205	159	He	97.357	ppb	1.0	365620.41	2.4128	Pulse	0.1000	3
Pb	208	159	He	50.293	ppb	1.0	253491.62	1.6728	Pulse	0.1000	3
U	238	159	He	50.205	ppb	0.6	256918.80	1.6954	Pulse	0.1000	3

ISTD Table:

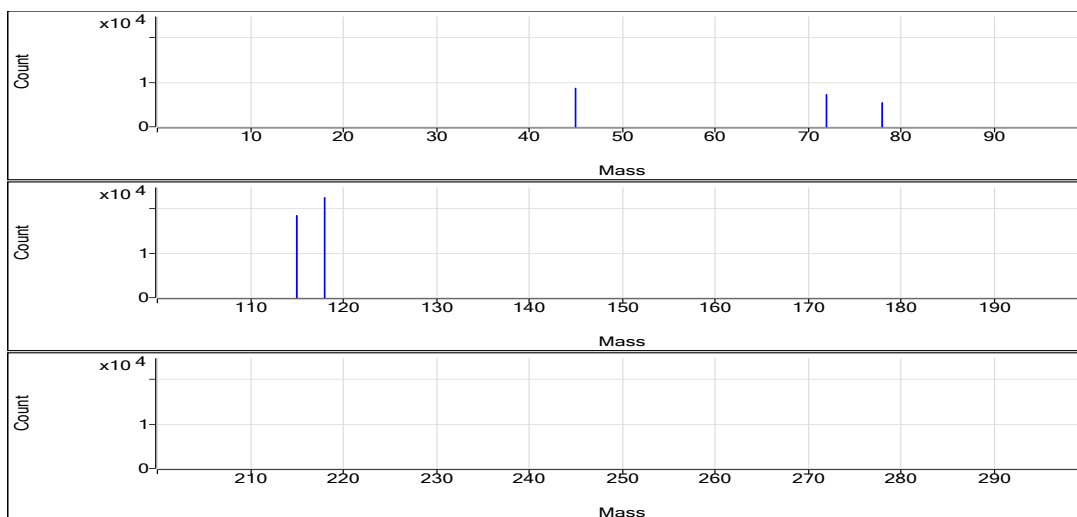
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1288546.86	0.4	98.6	Analog	0.1000	3
No Gas	Ge	72	665137.15	0.7	101.5	Pulse	0.1000	3
H2	Sc	45	87091.41	2.4	106.0	Pulse	0.1000	3
H2	Ge	72	72591.36	0.5	106.2	Pulse	0.1000	3
H2	In	115	184544.02	1.2	108.2	Pulse	0.1000	3
He	Sc	45	25670.68	0.5	100.2	Pulse	0.1000	3
He	Ge	72	47136.60	0.4	99.2	Pulse	0.1000	3
He	In	115	38753.57	2.4	94.6	Pulse	0.1000	3
He	Tb	159	151545.89	1.2	95.0	Pulse	0.1000	3
He	Bi	209	112317.80	1.1	96.0	Pulse	0.1000	3

No Gas

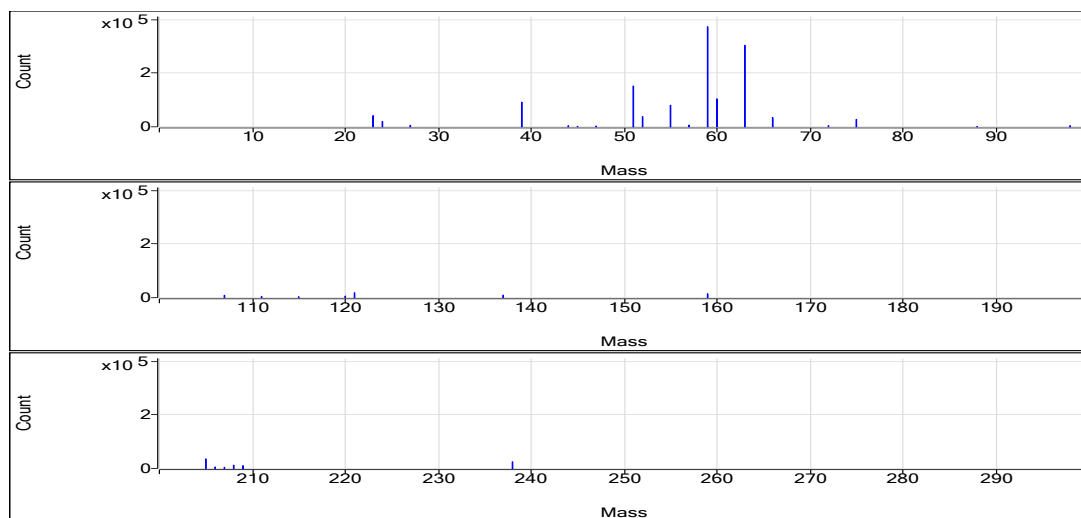


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.823	0.0519	34382.91	0.0011	7.835E-05
Be	9	1	No Gas	51.062	0.0543	36431.09	0.0011	7.835E-05
Be	9	1	No Gas	52.395	0.0557	36934.31	0.0011	7.835E-05
Se	78	2	H2	96.409	0.0489	3536.39	0.0005	2.594E-05
Se	78	2	H2	98.519	0.05	3617.75	0.0005	2.594E-05
Se	78	2	H2	100.292	0.0509	3712.43	0.0005	2.594E-05
Na	23	3	He	4830.782	8.946	420997.77	0.0018	0.1731
Na	23	3	He	4871.113	9.0192	423811.01	0.0018	0.1731
Na	23	3	He	4814.32	8.9161	422268.90	0.0018	0.1731
Mg	24	3	He	4822.642	4.4252	208247.50	0.0009	0.006537
Mg	24	3	He	4826.596	4.4288	208106.87	0.0009	0.006537
Mg	24	3	He	4744.354	4.3534	206179.53	0.0009	0.006537
Al	27	3	He	4792.25	1.3942	65610.00	0.0003	0.00231
Al	27	3	He	4710.444	1.3704	64395.59	0.0003	0.00231
Al	27	3	He	4721.641	1.3737	65057.49	0.0003	0.00231
K	39	3	He	4921.703	4.0261	189466.33	0.0007	0.3475
K	39	3	He	4760.539	3.9056	183523.25	0.0007	0.3475
K	39	3	He	4688.785	3.852	182430.73	0.0007	0.3475
Ca	44	3	He	4812.577	0.1958	9214.61	0	0.002807
Ca	44	3	He	4689.27	0.1909	8968.49	0	0.002807
Ca	44	3	He	4756.329	0.1936	9166.59	0	0.002807
Ti	47	3	He	494.309	0.1538	7239.63	0.0003	0.0001123
Ti	47	3	He	486.56	0.1514	7115.58	0.0003	0.0001123
Ti	47	3	He	486.961	0.1516	7177.61	0.0003	0.0001123
V	51	3	He	473.641	6.4779	304850.22	0.0137	0.008308
V	51	3	He	473.053	6.4699	304018.06	0.0137	0.008308
V	51	3	He	473.121	6.4708	306459.25	0.0137	0.008308
Cr	52	3	He	476.593	8.1648	384233.35	0.0171	0.02156
Cr	52	3	He	480.082	8.2244	386460.81	0.0171	0.02156
Cr	52	3	He	470.152	8.0547	381473.51	0.0171	0.02156
Mn	55	3	He	472.036	3.4463	162184.61	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	472.851	3.4523	162221.98	0.0073	0.002316
Mn	55	3	He	470.236	3.4332	162597.61	0.0073	0.002316
Fe	57	3	He	4683.262	1.5197	71518.03	0.0003	0.002736
Fe	57	3	He	4699.524	1.525	71658.80	0.0003	0.002736
Fe	57	3	He	4681.654	1.5192	71949.83	0.0003	0.002736
Co	59	3	He	476.6	15.8361	745245.25	0.0332	0.001922
Co	59	3	He	478.931	15.9135	747771.69	0.0332	0.001922
Co	59	3	He	474.807	15.7765	747181.00	0.0332	0.001922
Ni	60	3	He	474.403	4.4284	208399.97	0.0093	0.003141
Ni	60	3	He	476.525	4.4482	209018.77	0.0093	0.003141
Ni	60	3	He	472.244	4.4083	208775.89	0.0093	0.003141
Cu	63	3	He	479.877	12.9687	610305.31	0.027	0.003732
Cu	63	3	He	479.287	12.9527	608645.06	0.027	0.003732
Cu	63	3	He	475.488	12.8501	608583.94	0.027	0.003732
Zn	66	3	He	478.47	1.4927	70247.45	0.0031	0.002032
Zn	66	3	He	475.756	1.4843	69745.26	0.0031	0.002032
Zn	66	3	He	476.031	1.4851	70335.93	0.0031	0.002032
As	75	3	He	476.519	1.2158	57217.15	0.0025	0.0007733
As	75	3	He	471.153	1.2022	56488.79	0.0025	0.0007733
As	75	3	He	473.446	1.208	57211.27	0.0025	0.0007733
Sr	88	3	He	52.562	0.5539	20884.31	0.0105	0.004071
Sr	88	3	He	48.454	0.511	20033.11	0.0105	0.004071
Sr	88	3	He	50.221	0.5294	20834.19	0.0105	0.004071
Mo	98	3	He	52.074	1.2222	46078.30	0.0234	0.003908
Mo	98	3	He	50.953	1.196	46890.19	0.0234	0.003908
Mo	98	3	He	50.701	1.1901	46830.54	0.0234	0.003908
Ag	107	3	He	53.293	2.6281	99083.14	0.0493	0.0004851
Ag	107	3	He	51.226	2.5261	99043.58	0.0493	0.0004851
Ag	107	3	He	51.245	2.5271	99445.12	0.0493	0.0004851
Cd	111	3	He	52.507	0.2946	11108.00	0.0056	0
Cd	111	3	He	51.146	0.287	11252.09	0.0056	0
Cd	111	3	He	50.17	0.2815	11077.99	0.0056	0
Sn	120	3	He	103.236	1.8034	67989.77	0.0169	0.0609
Sn	120	3	He	98.754	1.7277	67738.76	0.0169	0.0609
Sn	120	3	He	97.487	1.7063	67146.10	0.0169	0.0609
Sb	121	3	He	102.727	1.6568	62465.32	0.0161	0.0005433
Sb	121	3	He	99.421	1.6035	62870.00	0.0161	0.0005433
Sb	121	3	He	99.648	1.6072	63245.17	0.0161	0.0005433
Ba	137	3	He	513.69	2.7134	102301.04	0.0053	0.001141
Ba	137	3	He	492.504	2.6016	102000.12	0.0053	0.001141
Ba	137	3	He	499.558	2.6388	103840.58	0.0053	0.001141
Tl	205	3	He	98.4	2.4386	364961.09	0.0248	0.0005854
Tl	205	3	He	97.06	2.4054	365164.92	0.0248	0.0005854
Tl	205	3	He	96.609	2.3943	366735.23	0.0248	0.0005854
Pb	208	3	He	50.774	1.6888	133719.97	0.0332	0.001693
Pb	208	3	He	50.306	1.6733	134558.41	0.0332	0.001693
Pb	208	3	He	49.798	1.6564	134546.75	0.0332	0.001693
U	238	3	He	50.547	1.707	255458.79	0.0338	0.0007949
U	238	3	He	50.008	1.6887	256362.46	0.0338	0.0007949
U	238	3	He	50.059	1.6905	258935.15	0.0338	0.0007949
Sc	45	1	No Gas			1285195.45		
Sc	45	1	No Gas			1285573.42		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1294871.70		
Ge	72	1	No Gas			661990.93		
Ge	72	1	No Gas			670712.02		
Ge	72	1	No Gas			662708.51		
Sc	45	2	H2			84729.49		
Sc	45	2	H2			88448.69		
Sc	45	2	H2			88096.05		
Ge	72	2	H2			72343.72		
Ge	72	2	H2			72423.94		
Ge	72	2	H2			73006.43		
In	115	2	H2			183714.10		
In	115	2	H2			182872.40		
In	115	2	H2			187045.56		
Sc	45	3	He			25530.59		
Sc	45	3	He			25740.74		
Sc	45	3	He			25740.70		
Ge	72	3	He			47059.90		
Ge	72	3	He			46989.65		
Ge	72	3	He			47360.26		
In	115	3	He			38177.82		
In	115	3	He			39681.52		
In	115	3	He			39821.48		
Tb	159	3	He			149657.95		
Tb	159	3	He			151807.46		
Tb	159	3	He			153172.27		
Bi	209	3	He			113570.54		
Bi	209	3	He			111031.64		
Bi	209	3	He			112351.21		

Quantitation Report

Data File Name 154SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:28:26 PM
Sample Name LCS 410-682117/2-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

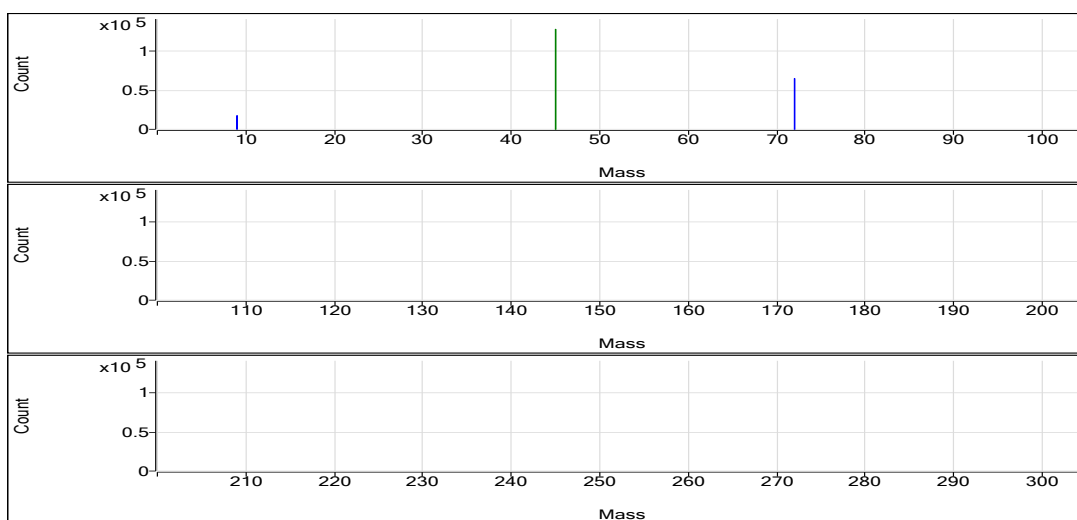
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.931	ppb	4.5	35473.87	0.0542	Pulse	0.5000	3
Se	78	72	H2	97.979	ppb	0.9	3621.75	0.0497	Pulse	1.5000	3
Na	23	72	He	4870.044	ppb	1.4	419949.62	9.0173	Pulse	0.1000	3
Mg	24	72	He	4828.223	ppb	2.6	206287.44	4.4303	Pulse	0.1000	3
Al	27	72	He	4762.487	ppb	2.9	64512.50	1.3855	Pulse	0.1000	3
K	39	72	He	4864.127	ppb	1.9	185500.19	3.9830	Pulse	0.5000	3
Ca	44	72	He	4812.977	ppb	3.4	9117.23	0.1958	Pulse	0.5000	3
Ti	47	72	He	489.454	ppb	2.5	7093.57	0.1523	Pulse	0.5000	3
V	51	72	He	477.998	ppb	2.2	304422.29	6.5374	Pulse	0.5000	3
Cr	52	72	He	477.960	ppb	2.4	381280.60	8.1881	Pulse	0.1000	3
Mn	55	72	He	475.440	ppb	2.4	161632.97	3.4712	Pulse	0.5000	3
Fe	57	72	He	4773.585	ppb	3.6	72113.68	1.5490	Pulse	0.1000	3
Co	59	72	He	480.661	ppb	2.7	743643.56	15.9710	Pulse	0.5000	3
Ni	60	72	He	481.385	ppb	2.8	209227.14	4.4935	Pulse	0.5000	3
Cu	63	72	He	479.430	ppb	2.4	603320.19	12.9566	Pulse	0.5000	3
Zn	66	72	He	481.656	ppb	2.2	69972.38	1.5027	Pulse	0.5000	3
As	75	72	He	476.438	ppb	2.5	56603.86	1.2156	Pulse	0.5000	3
Sr	88	115	He	50.002	ppb	2.0	20867.62	0.5272	Pulse	0.1000	3
Mo	98	115	He	49.371	ppb	1.6	45877.71	1.1589	Pulse	0.1000	3
Ag	107	115	He	50.702	ppb	1.5	98972.75	2.5003	Pulse	0.1000	3
Cd	111	115	He	49.444	ppb	1.0	10982.57	0.2774	Pulse	0.5000	3
Sn	120	115	He	97.999	ppb	2.2	67885.91	1.7149	Pulse	0.1000	3
Sb	121	115	He	97.333	ppb	1.3	62142.80	1.5699	Pulse	0.3000	3
Ba	137	115	He	491.425	ppb	1.8	102753.54	2.5959	Pulse	0.1000	3
Tl	205	159	He	95.581	ppb	2.7	362238.38	2.3688	Pulse	0.1000	3
Pb	208	159	He	49.206	ppb	3.7	250254.19	1.6367	Pulse	0.1000	3
U	238	159	He	49.409	ppb	2.6	255154.21	1.6685	Pulse	0.1000	3

ISTD Table:

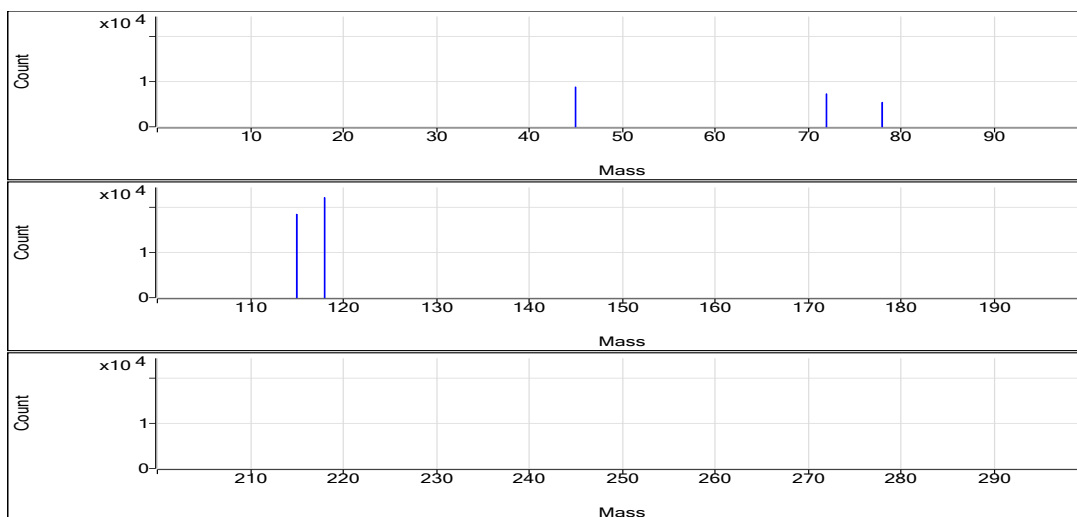
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1288074.69	4.0	98.5	Analog	0.1000	3
No Gas	Ge	72	654454.44	1.7	99.9	Pulse	0.1000	3
H2	Sc	45	88160.89	2.3	107.3	Pulse	0.1000	3
H2	Ge	72	72896.25	1.8	106.7	Pulse	0.1000	3
H2	In	115	184606.14	1.3	108.2	Pulse	0.1000	3
He	Sc	45	25306.90	2.2	98.8	Pulse	0.1000	3
He	Ge	72	46581.79	2.4	98.0	Pulse	0.1000	3
He	In	115	39587.13	0.8	96.7	Pulse	0.1000	3
He	Tb	159	152963.03	1.7	95.9	Pulse	0.1000	3
He	Bi	209	112351.32	0.4	96.1	Pulse	0.1000	3

No Gas

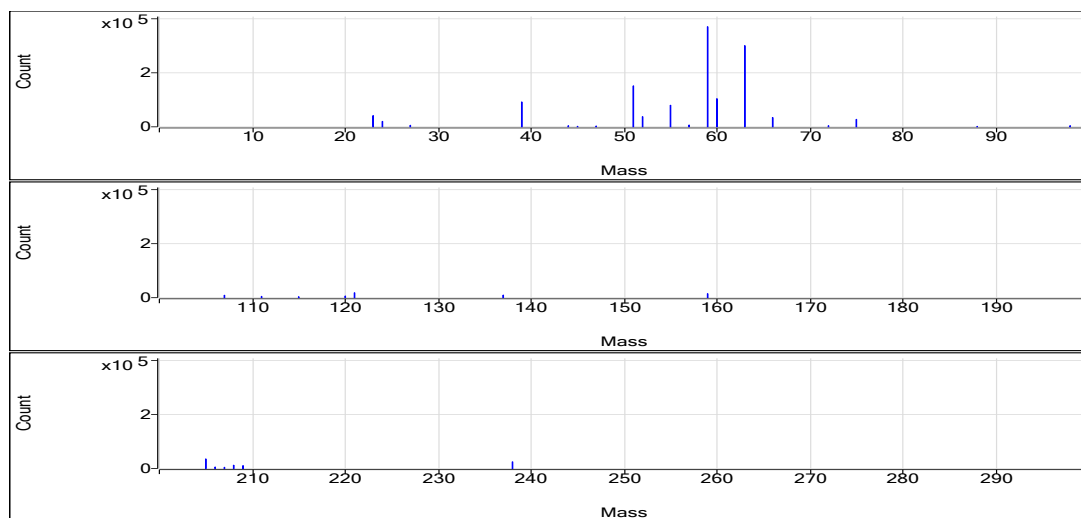


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.496	0.0516	33240.62	0.0011	7.835E-05
Be	9	1	No Gas	51.315	0.0546	35611.34	0.0011	7.835E-05
Be	9	1	No Gas	52.982	0.0564	37569.66	0.0011	7.835E-05
Se	78	2	H2	97.256	0.0493	3522.39	0.0005	2.594E-05
Se	78	2	H2	97.703	0.0495	3625.08	0.0005	2.594E-05
Se	78	2	H2	98.978	0.0502	3717.77	0.0005	2.594E-05
Na	23	3	He	4798.934	8.8882	422821.13	0.0018	0.1731
Na	23	3	He	4871.144	9.0193	421823.08	0.0018	0.1731
Na	23	3	He	4940.054	9.1444	415204.64	0.0018	0.1731
Mg	24	3	He	4714.816	4.3264	205810.74	0.0009	0.006537
Mg	24	3	He	4810.142	4.4137	206424.39	0.0009	0.006537
Mg	24	3	He	4959.711	4.5507	206627.20	0.0009	0.006537
Al	27	3	He	4661.47	1.3562	64516.00	0.0003	0.00231
Al	27	3	He	4709.016	1.37	64073.74	0.0003	0.00231
Al	27	3	He	4916.974	1.4304	64947.77	0.0003	0.00231
K	39	3	He	4848.352	3.9712	188917.11	0.0007	0.3475
K	39	3	He	4781.312	3.9211	183387.41	0.0007	0.3475
K	39	3	He	4962.718	4.0567	184196.05	0.0007	0.3475
Ca	44	3	He	4710.787	0.1917	9120.55	0	0.002807
Ca	44	3	He	4727.734	0.1924	8998.51	0	0.002807
Ca	44	3	He	5000.41	0.2033	9232.62	0	0.002807
Ti	47	3	He	475.06	0.1479	7033.53	0.0003	0.0001123
Ti	47	3	He	496.836	0.1546	7231.63	0.0003	0.0001123
Ti	47	3	He	496.467	0.1545	7015.54	0.0003	0.0001123
V	51	3	He	469.557	6.4221	305508.84	0.0137	0.008308
V	51	3	He	474.778	6.4934	303691.81	0.0137	0.008308
V	51	3	He	489.661	6.6967	304066.22	0.0137	0.008308
Cr	52	3	He	470.835	8.0664	383728.08	0.0171	0.02156
Cr	52	3	He	471.629	8.08	377890.85	0.0171	0.02156
Cr	52	3	He	491.417	8.4181	382222.88	0.0171	0.02156
Mn	55	3	He	465.845	3.4012	161798.23	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	472.332	3.4485	161282.97	0.0073	0.002316
Mn	55	3	He	488.143	3.5639	161817.70	0.0073	0.002316
Fe	57	3	He	4623.014	1.5002	71366.82	0.0003	0.002736
Fe	57	3	He	4736.958	1.5371	71889.33	0.0003	0.002736
Fe	57	3	He	4960.783	1.6096	73084.90	0.0003	0.002736
Co	59	3	He	469.841	15.6115	742661.38	0.0332	0.001922
Co	59	3	He	476.946	15.8476	741176.50	0.0332	0.001922
Co	59	3	He	495.196	16.4539	747092.81	0.0332	0.001922
Ni	60	3	He	471.375	4.4001	209320.64	0.0093	0.003141
Ni	60	3	He	476.234	4.4455	207910.16	0.0093	0.003141
Ni	60	3	He	496.547	4.635	210450.61	0.0093	0.003141
Cu	63	3	He	470.156	12.7061	604443.19	0.027	0.003732
Cu	63	3	He	476.132	12.8675	601800.06	0.027	0.003732
Cu	63	3	He	492.001	13.2962	603717.31	0.027	0.003732
Zn	66	3	He	472.616	1.4745	70143.17	0.0031	0.002032
Zn	66	3	He	479.231	1.4951	69924.02	0.0031	0.002032
Zn	66	3	He	493.121	1.5384	69849.95	0.0031	0.002032
As	75	3	He	464.959	1.1864	56436.69	0.0025	0.0007733
As	75	3	He	475.347	1.2128	56723.59	0.0025	0.0007733
As	75	3	He	489.009	1.2477	56651.29	0.0025	0.0007733
Sr	88	3	He	48.852	0.5151	20433.59	0.0105	0.004071
Sr	88	3	He	50.413	0.5315	21184.77	0.0105	0.004071
Sr	88	3	He	50.741	0.5349	20984.51	0.0105	0.004071
Mo	98	3	He	50.122	1.1765	46670.18	0.0234	0.003908
Mo	98	3	He	48.533	1.1393	45416.60	0.0234	0.003908
Mo	98	3	He	49.457	1.161	45546.35	0.0234	0.003908
Ag	107	3	He	50.317	2.4813	98428.78	0.0493	0.0004851
Ag	107	3	He	50.195	2.4753	98670.55	0.0493	0.0004851
Ag	107	3	He	51.595	2.5443	99818.93	0.0493	0.0004851
Cd	111	3	He	49.078	0.2754	10923.87	0.0056	0
Cd	111	3	He	49.268	0.2765	11019.92	0.0056	0
Cd	111	3	He	49.986	0.2805	11003.92	0.0056	0
Sn	120	3	He	95.587	1.6742	66413.25	0.0169	0.0609
Sn	120	3	He	98.536	1.724	68723.08	0.0169	0.0609
Sn	120	3	He	99.873	1.7466	68521.40	0.0169	0.0609
Sb	121	3	He	96.206	1.5517	61551.67	0.0161	0.0005433
Sb	121	3	He	97.158	1.567	62464.94	0.0161	0.0005433
Sb	121	3	He	98.635	1.5908	62411.79	0.0161	0.0005433
Ba	137	3	He	494.184	2.6104	103549.58	0.0053	0.001141
Ba	137	3	He	481.441	2.5431	101374.53	0.0053	0.001141
Ba	137	3	He	498.649	2.634	103336.52	0.0053	0.001141
Tl	205	3	He	98.537	2.442	366826.21	0.0248	0.0005854
Tl	205	3	He	93.954	2.3285	357267.81	0.0248	0.0005854
Tl	205	3	He	94.251	2.3358	362621.13	0.0248	0.0005854
Pb	208	3	He	51.254	1.7048	137363.06	0.0332	0.001693
Pb	208	3	He	48.688	1.6195	130723.69	0.0332	0.001693
Pb	208	3	He	47.677	1.5859	130217.80	0.0332	0.001693
U	238	3	He	50.894	1.7186	258161.79	0.0338	0.0007949
U	238	3	He	48.704	1.6447	252357.75	0.0338	0.0007949
U	238	3	He	48.63	1.6422	254943.10	0.0338	0.0007949
Sc	45	1	No Gas			1238778.18		
Sc	45	1	No Gas			1283242.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1342203.57		
Ge	72	1	No Gas			644313.35		
Ge	72	1	No Gas			652400.07		
Ge	72	1	No Gas			666649.91		
Sc	45	2	H2			85805.79		
Sc	45	2	H2			89011.75		
Sc	45	2	H2			89665.12		
Ge	72	2	H2			71430.26		
Ge	72	2	H2			73176.79		
Ge	72	2	H2			74081.71		
In	115	2	H2			183160.74		
In	115	2	H2			187405.93		
In	115	2	H2			183251.74		
Sc	45	3	He			25941.20		
Sc	45	3	He			25079.95		
Sc	45	3	He			24899.56		
Ge	72	3	He			47571.28		
Ge	72	3	He			46768.95		
Ge	72	3	He			45405.14		
In	115	3	He			40132.56		
In	115	3	He			40343.01		
In	115	3	He			39711.42		
Tb	159	3	He			150212.78		
Tb	159	3	He			153433.26		
Tb	159	3	He			155243.04		
Bi	209	3	He			112512.22		
Bi	209	3	He			112644.68		
Bi	209	3	He			111897.05		

Quantitation Report

Data File Name 156_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:32:51 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

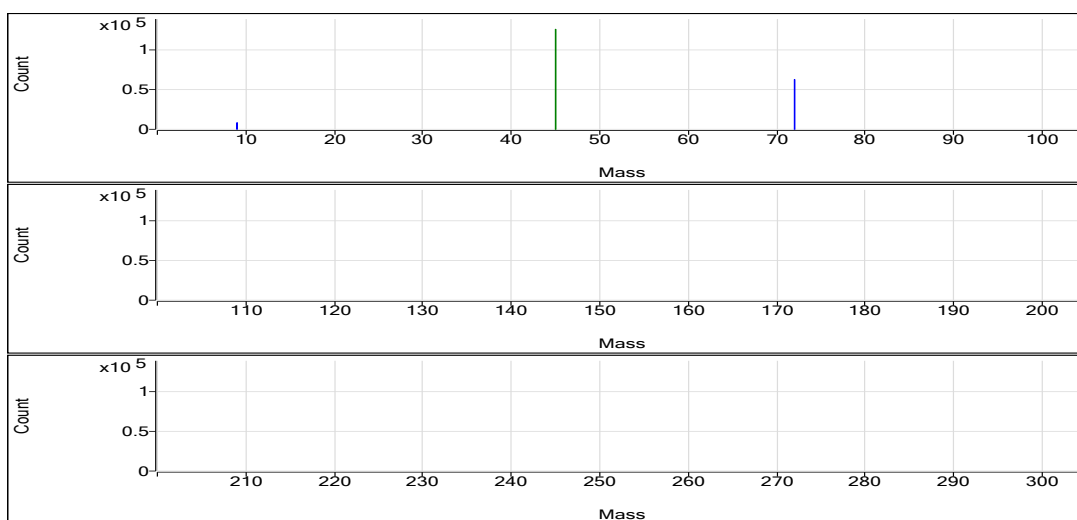
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.152	ppb	5.7	16864.50	0.0268	Pulse	0.5000	3
Se	78	72	H2	25.070	ppb	2.4	890.03	0.0127	Pulse	1.5000	3
Na	23	72	He	2516.328	ppb	0.7	214342.48	4.7428	Pulse	0.1000	3
Mg	24	72	He	2506.739	ppb	4.4	104040.40	2.3033	Pulse	0.1000	3
Al	27	72	He	2471.774	ppb	0.6	32549.26	0.7202	Pulse	0.1000	3
K	39	72	He	2500.879	ppb	5.4	100122.15	2.2167	Pulse	0.5000	3
Ca	44	72	He	2539.205	ppb	3.6	4730.04	0.1046	Pulse	0.5000	3
Ti	47	72	He	2482.638	ppb	1.3	34894.38	0.7722	Pulse	0.5000	3
V	51	72	He	247.588	ppb	2.1	153180.06	3.3902	Pulse	0.5000	3
Cr	52	72	He	246.950	ppb	0.8	191675.28	4.2410	Pulse	0.1000	3
Mn	55	72	He	243.711	ppb	1.8	80450.23	1.7805	Pulse	0.5000	3
Fe	57	72	He	2442.113	ppb	2.2	35867.08	0.7938	Pulse	0.1000	3
Co	59	72	He	247.055	ppb	2.1	370949.73	8.2099	Pulse	0.5000	3
Ni	60	72	He	247.145	ppb	2.1	104306.31	2.3085	Pulse	0.5000	3
Cu	63	72	He	245.769	ppb	2.0	300191.73	6.6437	Pulse	0.5000	3
Zn	66	72	He	244.664	ppb	2.4	34531.47	0.7643	Pulse	0.5000	3
As	75	72	He	243.832	ppb	1.6	28129.26	0.6225	Pulse	0.5000	3
Sr	88	115	He	26.295	ppb	8.6	10610.60	0.2791	Pulse	0.1000	3
Mo	98	115	He	25.476	ppb	5.9	22800.47	0.5999	Pulse	0.1000	3
Ag	107	115	He	26.616	ppb	1.5	49903.81	1.3128	Pulse	0.1000	3
Cd	111	115	He	25.342	ppb	2.8	5404.97	0.1422	Pulse	0.5000	3
Sn	120	115	He	25.194	ppb	3.7	18478.19	0.4861	Pulse	0.1000	3
Sb	121	115	He	25.590	ppb	1.9	15703.61	0.4131	Pulse	0.3000	3
Ba	137	115	He	252.394	ppb	3.6	50694.88	1.3338	Pulse	0.1000	3
Tl	205	159	He	25.351	ppb	0.6	93824.27	0.6287	Pulse	0.1000	3
Pb	208	159	He	25.311	ppb	1.4	125750.68	0.8427	Pulse	0.1000	3
U	238	159	He	25.340	ppb	1.7	127744.53	0.8561	Pulse	0.1000	3

ISTD Table:

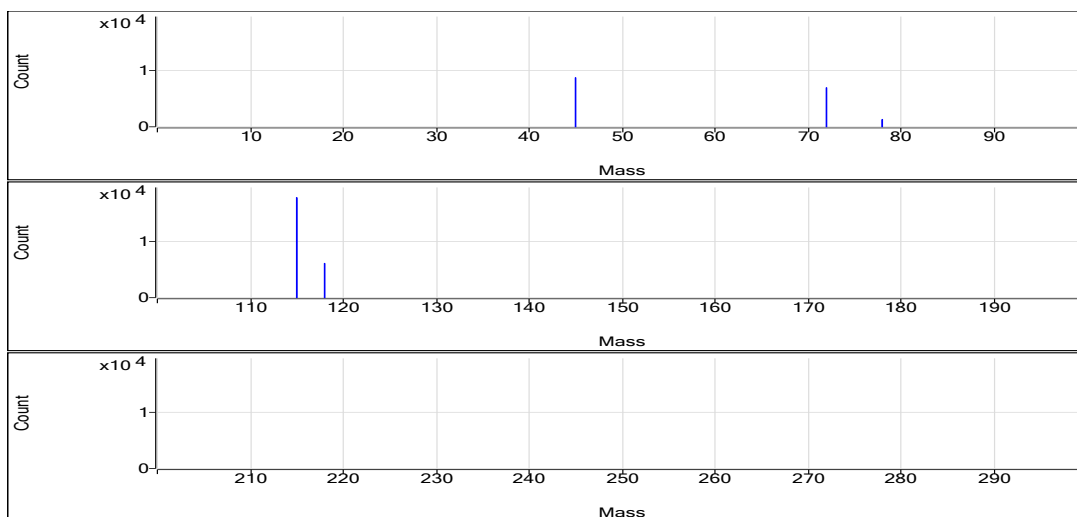
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1262798.34	1.8	96.6	Analog	0.1000	3
No Gas	Ge	72	628890.00	2.1	96.0	Pulse	0.1000	3
H2	Sc	45	87835.22	1.5	106.9	Pulse	0.1000	3
H2	Ge	72	69929.38	2.0	102.3	Pulse	0.1000	3
H2	In	115	178717.85	2.4	104.8	Pulse	0.1000	3
He	Sc	45	25109.79	2.1	98.0	Pulse	0.1000	3
He	Ge	72	45197.53	2.3	95.1	Pulse	0.1000	3
He	In	115	38011.61	0.5	92.8	Pulse	0.1000	3
He	Tb	159	149244.13	1.7	93.6	Pulse	0.1000	3
He	Bi	209	111790.35	0.5	95.6	Pulse	0.1000	3

No Gas

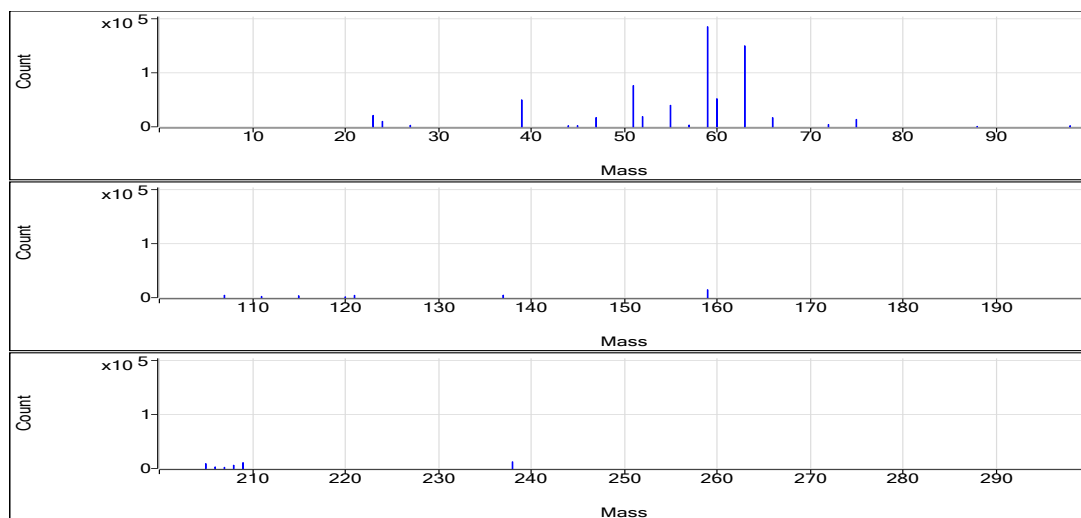


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.572	0.0251	15411.08	0.0011	7.835E-05
Be	9	1	No Gas	25.487	0.0272	17268.85	0.0011	7.835E-05
Be	9	1	No Gas	26.398	0.0281	17913.56	0.0011	7.835E-05
Se	78	2	H2	24.865	0.0126	876.69	0.0005	2.594E-05
Se	78	2	H2	24.609	0.0125	894.03	0.0005	2.594E-05
Se	78	2	H2	25.737	0.0131	899.36	0.0005	2.594E-05
Na	23	3	He	2533.39	4.7738	211103.32	0.0018	0.1731
Na	23	3	He	2516.929	4.7439	213876.13	0.0018	0.1731
Na	23	3	He	2498.664	4.7108	218048.00	0.0018	0.1731
Mg	24	3	He	2632.076	2.4181	106931.36	0.0009	0.006537
Mg	24	3	He	2459.759	2.2602	101900.65	0.0009	0.006537
Mg	24	3	He	2428.383	2.2315	103289.19	0.0009	0.006537
Al	27	3	He	2485.996	0.7243	32031.43	0.0003	0.00231
Al	27	3	He	2471.151	0.72	32462.27	0.0003	0.00231
Al	27	3	He	2458.175	0.7163	33154.07	0.0003	0.00231
K	39	3	He	2645.876	2.3251	102816.90	0.0007	0.3475
K	39	3	He	2474.957	2.1973	99064.37	0.0007	0.3475
K	39	3	He	2381.805	2.1277	98485.19	0.0007	0.3475
Ca	44	3	He	2456.591	0.1013	4480.64	0	0.002807
Ca	44	3	He	2636.159	0.1085	4892.76	0	0.002807
Ca	44	3	He	2524.864	0.1041	4816.73	0	0.002807
Ti	47	3	He	2518.792	0.7834	34644.46	0.0003	0.0001123
Ti	47	3	He	2475.853	0.7701	34718.66	0.0003	0.0001123
Ti	47	3	He	2453.268	0.7631	35320.01	0.0003	0.0001123
V	51	3	He	252.933	3.4632	153146.63	0.0137	0.008308
V	51	3	He	247.208	3.385	152609.88	0.0137	0.008308
V	51	3	He	242.623	3.3224	153783.67	0.0137	0.008308
Cr	52	3	He	248.818	4.2729	188953.63	0.0171	0.02156
Cr	52	3	He	245.014	4.2079	189711.72	0.0171	0.02156
Cr	52	3	He	247.02	4.2422	196360.49	0.0171	0.02156
Mn	55	3	He	247.93	1.8112	80095.08	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	244.058	1.783	80384.80	0.0073	0.002316
Mn	55	3	He	239.146	1.7471	80870.82	0.0073	0.002316
Fe	57	3	He	2461.516	0.8001	35379.61	0.0003	0.002736
Fe	57	3	He	2483.515	0.8072	36391.46	0.0003	0.002736
Fe	57	3	He	2381.309	0.7741	35830.16	0.0003	0.002736
Co	59	3	He	251.398	8.3542	369430.44	0.0332	0.001922
Co	59	3	He	248.334	8.2524	372052.00	0.0332	0.001922
Co	59	3	He	241.432	8.0231	371366.75	0.0332	0.001922
Ni	60	3	He	251.649	2.3505	103943.17	0.0093	0.003141
Ni	60	3	He	248.223	2.3186	104531.05	0.0093	0.003141
Ni	60	3	He	241.562	2.2564	104444.72	0.0093	0.003141
Cu	63	3	He	250.968	6.7842	300004.31	0.027	0.003732
Cu	63	3	He	245.065	6.6247	298669.66	0.027	0.003732
Cu	63	3	He	241.276	6.5223	301901.22	0.027	0.003732
Zn	66	3	He	250.857	0.7836	34651.05	0.0031	0.002032
Zn	66	3	He	244.129	0.7626	34382.40	0.0031	0.002032
Zn	66	3	He	239.005	0.7467	34560.95	0.0031	0.002032
As	75	3	He	246.722	0.6299	27854.13	0.0025	0.0007733
As	75	3	He	245.513	0.6268	28258.81	0.0025	0.0007733
As	75	3	He	239.26	0.6109	28274.83	0.0025	0.0007733
Sr	88	3	He	24.574	0.2611	9973.45	0.0105	0.004071
Sr	88	3	He	25.466	0.2705	10223.69	0.0105	0.004071
Sr	88	3	He	28.845	0.3058	11634.67	0.0105	0.004071
Mo	98	3	He	23.744	0.5594	21364.91	0.0234	0.003908
Mo	98	3	He	26.315	0.6195	23418.24	0.0234	0.003908
Mo	98	3	He	26.369	0.6208	23618.27	0.0234	0.003908
Ag	107	3	He	26.794	1.3215	50472.38	0.0493	0.0004851
Ag	107	3	He	26.157	1.2902	48767.06	0.0493	0.0004851
Ag	107	3	He	26.898	1.3267	50471.99	0.0493	0.0004851
Cd	111	3	He	24.586	0.138	5268.92	0.0056	0
Cd	111	3	He	25.417	0.1426	5390.97	0.0056	0
Cd	111	3	He	26.022	0.146	5555.01	0.0056	0
Sn	120	3	He	24.332	0.4716	18010.97	0.0169	0.0609
Sn	120	3	He	25.047	0.4836	18281.37	0.0169	0.0609
Sn	120	3	He	26.203	0.5032	19142.24	0.0169	0.0609
Sb	121	3	He	25.053	0.4045	15447.80	0.0161	0.0005433
Sb	121	3	He	25.702	0.4149	15684.67	0.0161	0.0005433
Sb	121	3	He	26.016	0.42	15978.36	0.0161	0.0005433
Ba	137	3	He	242.174	1.2798	48878.72	0.0053	0.001141
Ba	137	3	He	256.055	1.3531	51146.28	0.0053	0.001141
Ba	137	3	He	258.954	1.3684	52059.64	0.0053	0.001141
Tl	205	3	He	25.541	0.6334	93016.19	0.0248	0.0005854
Tl	205	3	He	25.249	0.6262	93327.94	0.0248	0.0005854
Tl	205	3	He	25.262	0.6265	95128.69	0.0248	0.0005854
Pb	208	3	He	25.679	0.855	66090.45	0.0332	0.001693
Pb	208	3	He	25.297	0.8423	65568.08	0.0332	0.001693
Pb	208	3	He	24.956	0.8309	67015.05	0.0332	0.001693
U	238	3	He	25.745	0.8698	127728.86	0.0338	0.0007949
U	238	3	He	25.402	0.8582	127908.37	0.0338	0.0007949
U	238	3	He	24.873	0.8403	127596.36	0.0338	0.0007949
Sc	45	1	No Gas			1236737.09		
Sc	45	1	No Gas			1276307.32		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1275350.61		
Ge	72	1	No Gas			613576.75		
Ge	72	1	No Gas			636025.38		
Ge	72	1	No Gas			637067.88		
Sc	45	2	H2			89051.61		
Sc	45	2	H2			88076.87		
Sc	45	2	H2			86377.18		
Ge	72	2	H2			69430.56		
Ge	72	2	H2			71539.69		
Ge	72	2	H2			68817.88		
In	115	2	H2			176714.59		
In	115	2	H2			183612.17		
In	115	2	H2			175826.79		
Sc	45	3	He			24999.58		
Sc	45	3	He			24638.94		
Sc	45	3	He			25690.86		
Ge	72	3	He			44221.07		
Ge	72	3	He			45084.23		
Ge	72	3	He			46287.30		
In	115	3	He			38318.01		
In	115	3	He			37927.05		
In	115	3	He			38177.83		
Tb	159	3	He			146851.33		
Tb	159	3	He			149041.71		
Tb	159	3	He			151839.34		
Bi	209	3	He			111948.34		
Bi	209	3	He			112290.04		
Bi	209	3	He			111132.67		

Quantitation Report

Data File Name 158_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:37:16 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

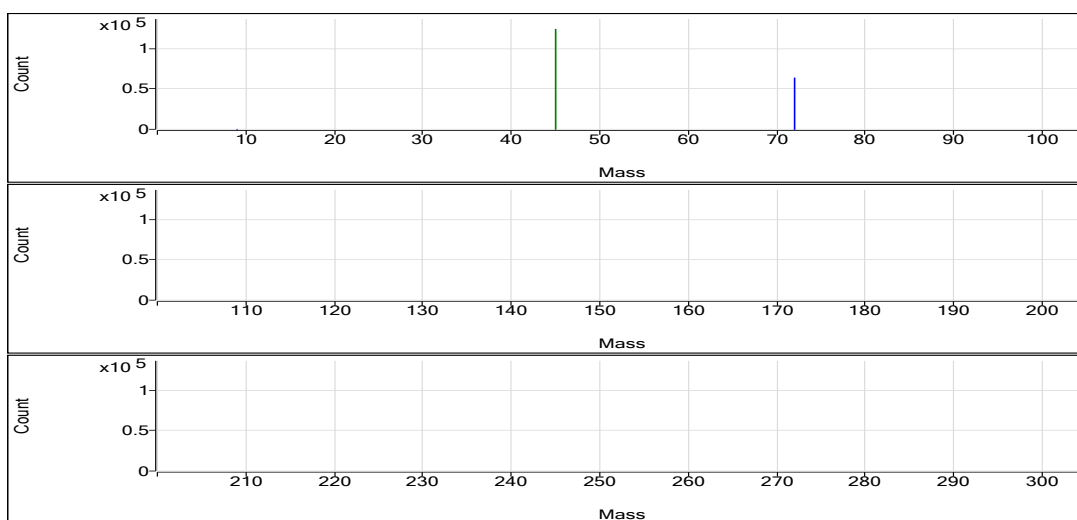
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.047	ppb	19.8	81.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.002	ppb	N/A	1.78	0.0000	Pulse	1.5000	3
Na	23	72	He	-13.853	ppb	N/A	6618.19	0.1479	Pulse	0.1000	3
Mg	24	72	He	1.480	ppb	30.3	353.35	0.0079	Pulse	0.1000	3
Al	27	72	He	-4.344	ppb	N/A	46.67	0.0010	Pulse	0.1000	3
K	39	72	He	34.810	ppb	255.7	16675.95	0.3735	Pulse	0.5000	3
Ca	44	72	He	-15.082	ppb	N/A	98.67	0.0022	Pulse	0.5000	3
Ti	47	72	He	0.505	ppb	59.4	12.00	0.0003	Pulse	0.5000	3
V	51	72	He	-0.028	ppb	N/A	354.01	0.0079	Pulse	0.5000	3
Cr	52	72	He	-0.112	ppb	N/A	880.05	0.0196	Pulse	0.1000	3
Mn	55	72	He	0.015	ppb	207.9	108.67	0.0024	Pulse	0.5000	3
Fe	57	72	He	0.530	ppb	240.2	130.01	0.0029	Pulse	0.1000	3
Co	59	72	He	0.042	ppb	40.1	148.00	0.0033	Pulse	0.5000	3
Ni	60	72	He	0.011	ppb	247.4	145.33	0.0032	Pulse	0.5000	3
Cu	63	72	He	-0.010	ppb	N/A	154.67	0.0035	Pulse	0.5000	3
Zn	66	72	He	-0.162	ppb	N/A	68.00	0.0015	Pulse	0.5000	3
As	75	72	He	-0.099	ppb	N/A	23.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	-0.134	ppb	N/A	103.34	0.0027	Pulse	0.1000	3
Mo	98	115	He	0.026	ppb	310.3	173.34	0.0045	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.172	ppb	N/A	2240.23	0.0580	Pulse	0.1000	3
Sb	121	115	He	0.045	ppb	20.0	48.89	0.0013	Pulse	0.3000	3
Ba	137	115	He	-0.134	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.044	ppb	19.0	246.68	0.0017	Pulse	0.1000	3
Pb	208	159	He	-0.025	ppb	N/A	126.67	0.0009	Pulse	0.1000	3
U	238	159	He	0.001	ppb	1526.1	120.01	0.0008	Pulse	0.1000	3

ISTD Table:

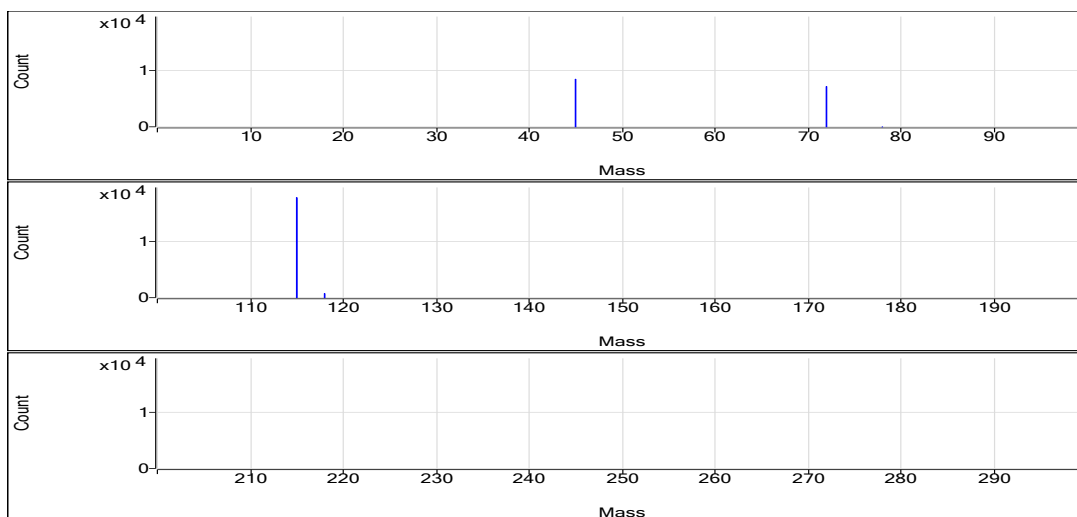
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1238418.81	0.6	94.7	Analog	0.1000	3
No Gas	Ge	72	636088.26	2.3	97.1	Pulse	0.1000	3
H2	Sc	45	84712.48	1.9	103.1	Pulse	0.1000	3
H2	Ge	72	71623.75	4.1	104.8	Pulse	0.1000	3
H2	In	115	177625.45	1.0	104.1	Pulse	0.1000	3
He	Sc	45	24438.97	1.3	95.4	Pulse	0.1000	3
He	Ge	72	44763.11	2.5	94.2	Pulse	0.1000	3
He	In	115	38636.48	2.2	94.4	Pulse	0.1000	3
He	Tb	159	146890.90	0.7	92.1	Pulse	0.1000	3
He	Bi	209	109349.60	0.6	93.5	Pulse	0.1000	3

No Gas

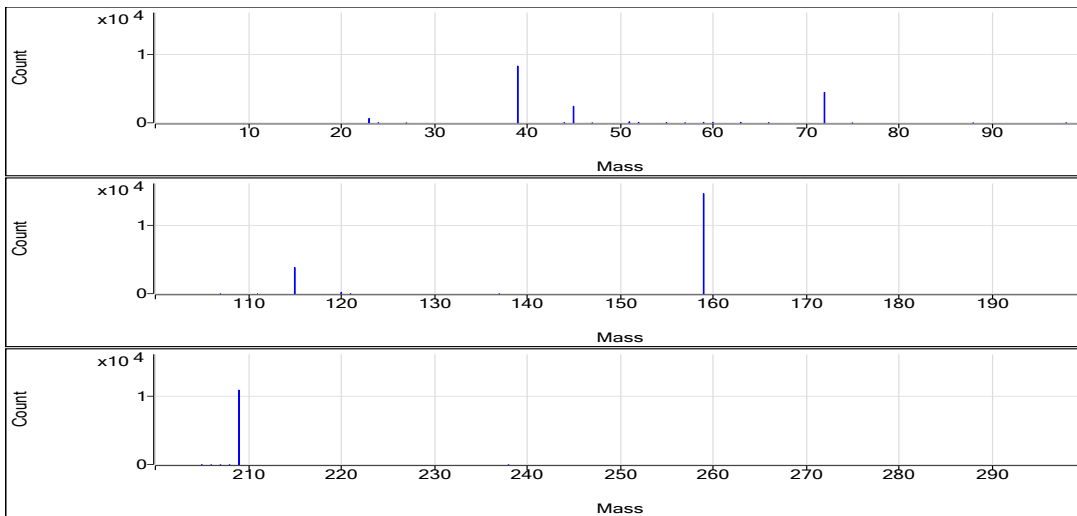


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.053	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.036	0.0001	74.00	0.0011	7.835E-05
Be	9	1	No Gas	0.051	0.0001	86.00	0.0011	7.835E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.022	0	2.67	0.0005	2.594E-05
Na	23	3	He	-13.754	0.1481	6491.55	0.0018	0.1731
Na	23	3	He	-11.971	0.1513	6721.52	0.0018	0.1731
Na	23	3	He	-15.834	0.1443	6641.49	0.0018	0.1731
Mg	24	3	He	1.828	0.0082	360.02	0.0009	0.006537
Mg	24	3	He	0.973	0.0074	330.01	0.0009	0.006537
Mg	24	3	He	1.639	0.008	370.01	0.0009	0.006537
Al	27	3	He	-5.597	0.0007	30.00	0.0003	0.00231
Al	27	3	He	-0.978	0.002	90.00	0.0003	0.00231
Al	27	3	He	-6.457	0.0004	20.00	0.0003	0.00231
K	39	3	He	134.466	0.448	19639.80	0.0007	0.3475
K	39	3	He	6.734	0.3525	15659.47	0.0007	0.3475
K	39	3	He	-36.771	0.32	14728.59	0.0007	0.3475
Ca	44	3	He	-15.384	0.0022	96.00	0	0.002807
Ca	44	3	He	-19.468	0.002	90.00	0	0.002807
Ca	44	3	He	-10.394	0.0024	110.00	0	0.002807
Ti	47	3	He	0.519	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	0.797	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.198	0.0002	8.00	0.0003	0.0001123
V	51	3	He	0.043	0.0089	390.01	0.0137	0.008308
V	51	3	He	-0.018	0.0081	358.01	0.0137	0.008308
V	51	3	He	-0.109	0.0068	314.01	0.0137	0.008308
Cr	52	3	He	-0.047	0.0208	910.05	0.0171	0.02156
Cr	52	3	He	-0.26	0.0171	760.04	0.0171	0.02156
Cr	52	3	He	-0.028	0.0211	970.06	0.0171	0.02156
Mn	55	3	He	0.033	0.0026	112.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	-0.021	0.0022	96.00	0.0073	0.002316
Mn	55	3	He	0.034	0.0026	118.00	0.0073	0.002316
Fe	57	3	He	0.005	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	1.98	0.0034	150.01	0.0003	0.002736
Fe	57	3	He	-0.396	0.0026	120.01	0.0003	0.002736
Co	59	3	He	0.06	0.0039	172.00	0.0332	0.001922
Co	59	3	He	0.038	0.0032	142.00	0.0332	0.001922
Co	59	3	He	0.027	0.0028	130.00	0.0332	0.001922
Ni	60	3	He	0.015	0.0033	144.00	0.0093	0.003141
Ni	60	3	He	-0.018	0.003	132.00	0.0093	0.003141
Ni	60	3	He	0.036	0.0035	160.00	0.0093	0.003141
Cu	63	3	He	-0.005	0.0036	158.00	0.027	0.003732
Cu	63	3	He	-0.003	0.0036	162.00	0.027	0.003732
Cu	63	3	He	-0.022	0.0031	144.00	0.027	0.003732
Zn	66	3	He	-0.008	0.002	88.00	0.0031	0.002032
Zn	66	3	He	-0.161	0.0015	68.00	0.0031	0.002032
Zn	66	3	He	-0.317	0.001	48.00	0.0031	0.002032
As	75	3	He	-0.106	0.0005	22.00	0.0025	0.0007733
As	75	3	He	-0.144	0.0004	18.00	0.0025	0.0007733
As	75	3	He	-0.048	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	-0.099	0.003	120.01	0.0105	0.004071
Sr	88	3	He	-0.111	0.0029	110.00	0.0105	0.004071
Sr	88	3	He	-0.191	0.0021	80.00	0.0105	0.004071
Mo	98	3	He	-0.005	0.0038	150.00	0.0234	0.003908
Mo	98	3	He	0.116	0.0066	250.01	0.0234	0.003908
Mo	98	3	He	-0.034	0.0031	120.00	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.337	0.0552	2180.22	0.0169	0.0609
Sn	120	3	He	-0.175	0.0579	2190.24	0.0169	0.0609
Sn	120	3	He	-0.003	0.0609	2350.24	0.0169	0.0609
Sb	121	3	He	0.045	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.054	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	0.036	0.0011	43.33	0.0161	0.0005433
Ba	137	3	He	-0.168	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	-0.066	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	-0.167	0.0003	10.00	0.0053	0.001141
Tl	205	3	He	0.048	0.0018	260.01	0.0248	0.0005854
Tl	205	3	He	0.035	0.0014	210.01	0.0248	0.0005854
Tl	205	3	He	0.05	0.0018	270.01	0.0248	0.0005854
Pb	208	3	He	-0.02	0.001	50.00	0.0332	0.001693
Pb	208	3	He	-0.03	0.0007	50.00	0.0332	0.001693
Pb	208	3	He	-0.024	0.0009	80.00	0.0332	0.001693
U	238	3	He	-0.005	0.0006	90.00	0.0338	0.0007949
U	238	3	He	0.013	0.0012	180.01	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.01	0.0338	0.0007949
Sc	45	1	No Gas			1230595.22		
Sc	45	1	No Gas			1239234.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1245426.93		
Ge	72	1	No Gas			622555.62		
Ge	72	1	No Gas			634251.75		
Ge	72	1	No Gas			651457.41		
Sc	45	2	H2			82859.31		
Sc	45	2	H2			85764.75		
Sc	45	2	H2			85513.38		
Ge	72	2	H2			68577.62		
Ge	72	2	H2			74442.44		
Ge	72	2	H2			71851.20		
In	115	2	H2			175502.11		
In	115	2	H2			178636.81		
In	115	2	H2			178737.42		
Sc	45	3	He			24238.59		
Sc	45	3	He			24258.74		
Sc	45	3	He			24819.59		
Ge	72	3	He			43840.25		
Ge	72	3	He			44422.08		
Ge	72	3	He			46026.99		
In	115	3	He			39501.06		
In	115	3	He			37816.84		
In	115	3	He			38638.59		
Tb	159	3	He			147052.59		
Tb	159	3	He			145790.17		
Tb	159	3	He			147829.93		
Bi	209	3	He			110015.00		
Bi	209	3	He			108644.46		
Bi	209	3	He			109389.34		

Quantitation Report

Data File Name 159SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:39:28 PM
Sample Name MB 410-682490/1-A
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

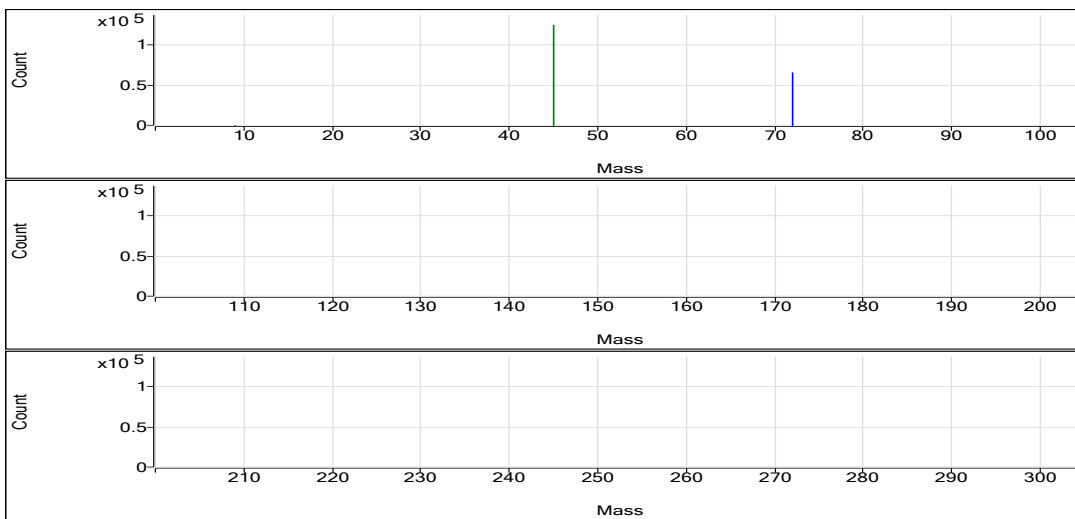
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.015	ppb	63.2	62.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.033	ppb	N/A	0.67	0.0000	Pulse	1.5000	3
Na	23	72	He	293726.643	ppb	2.3	24840437.13	533.5956	Analog	0.1000	3
Mg	24	72	He	3.037	ppb	52.2	433.35	0.0093	Pulse	0.1000	3
Al	27	72	He	-1.538	ppb	N/A	86.67	0.0019	Pulse	0.1000	3
K	39	72	He	43.375	ppb	236.3	17650.35	0.3799	Pulse	0.5000	3
Ca	44	72	He	-10.012	ppb	N/A	112.00	0.0024	Pulse	0.5000	3
Ti	47	72	He	0.054	ppb	264.3	6.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.117	ppb	N/A	312.67	0.0067	Pulse	0.5000	3
Cr	52	72	He	-0.210	ppb	N/A	836.71	0.0180	Pulse	0.1000	3
Mn	55	72	He	0.077	ppb	46.1	134.00	0.0029	Pulse	0.5000	3
Fe	57	72	He	-1.139	ppb	N/A	110.00	0.0024	Pulse	0.1000	3
Co	59	72	He	0.016	ppb	55.0	114.00	0.0024	Pulse	0.5000	3
Ni	60	72	He	0.087	ppb	47.7	184.00	0.0039	Pulse	0.5000	3
Cu	63	72	He	-0.007	ppb	N/A	164.67	0.0035	Pulse	0.5000	3
Zn	66	72	He	0.106	ppb	122.6	110.00	0.0024	Pulse	0.5000	3
As	75	72	He	-0.001	ppb	N/A	36.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.112	ppb	N/A	110.00	0.0029	Pulse	0.1000	3
Mo	98	115	He	-0.073	ppb	N/A	83.33	0.0022	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.593	ppb	N/A	1933.51	0.0509	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	88.9	35.55	0.0009	Pulse	0.3000	3
Ba	137	115	He	0.233	ppb	59.0	90.00	0.0024	Pulse	0.1000	3
Tl	205	159	He	-0.002	ppb	N/A	80.00	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.004	ppb	257.1	270.01	0.0018	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	96.67	0.0007	Pulse	0.1000	3

ISTD Table:

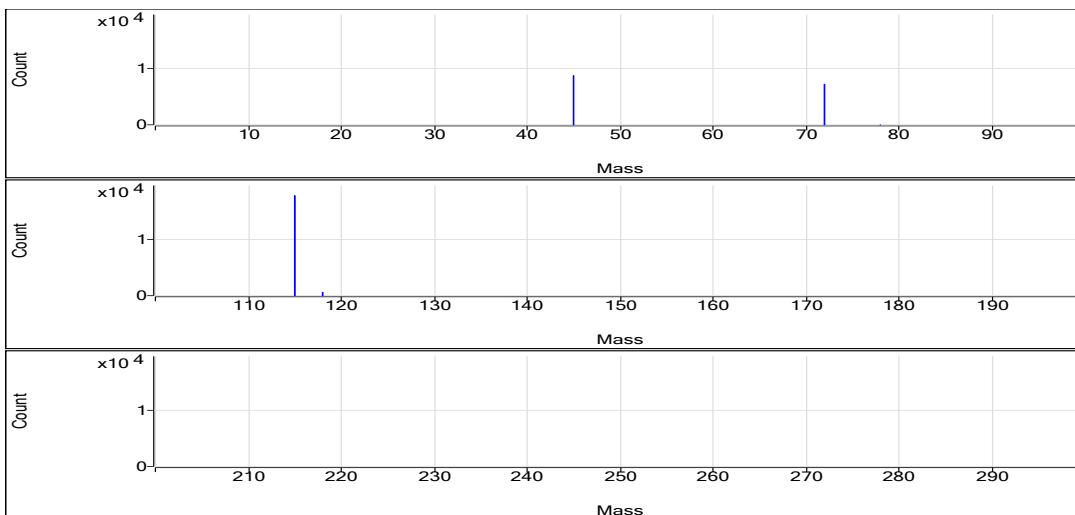
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1253285.61	2.0	95.9	Analog	0.1000	3
No Gas	Ge	72	657464.42	2.0	100.3	Pulse	0.1000	3
H2	Sc	45	87037.60	1.6	105.9	Pulse	0.1000	3
H2	Ge	72	71881.80	1.2	105.2	Pulse	0.1000	3
H2	In	115	176857.30	2.0	103.7	Pulse	0.1000	3
He	Sc	45	24578.92	2.4	96.0	Pulse	0.1000	3
He	Ge	72	46564.83	1.7	98.0	Pulse	0.1000	3
He	In	115	38013.83	1.1	92.8	Pulse	0.1000	3
He	Tb	159	147906.81	1.1	92.8	Pulse	0.1000	3
He	Bi	209	108883.16	0.8	93.1	Pulse	0.1000	3

No Gas

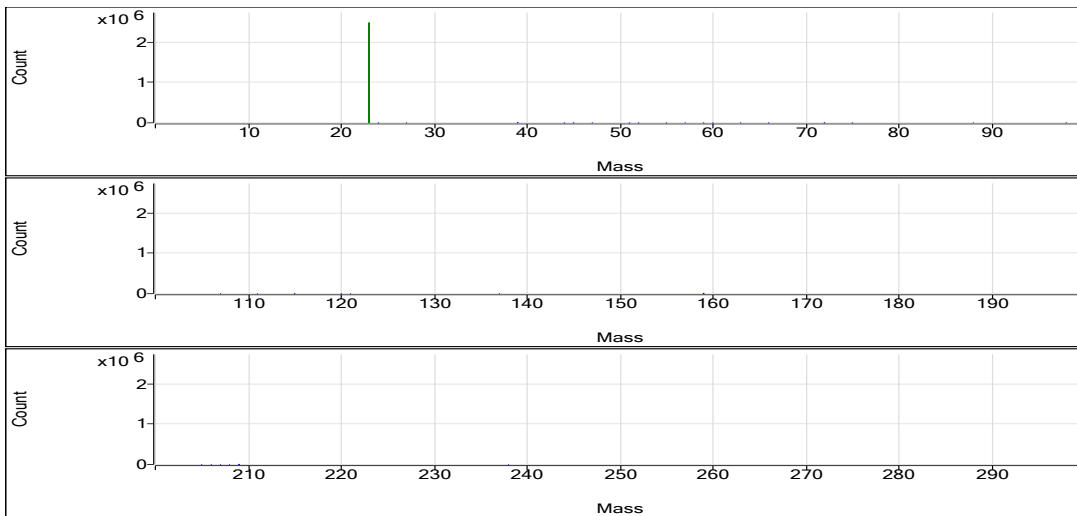


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0.0001	68.00	0.0011	7.835E-05
Be	9	1	No Gas	0.007	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	0.013	0.0001	62.00	0.0011	7.835E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Na	23	3	He	301496.674	547.7064	25038754.63	0.0018	0.1731
Na	23	3	He	290982.259	528.6117	24701332.13	0.0018	0.1731
Na	23	3	He	288700.996	524.4688	24781224.63	0.0018	0.1731
Mg	24	3	He	4.803	0.0109	500.02	0.0009	0.006537
Mg	24	3	He	1.741	0.0081	380.01	0.0009	0.006537
Mg	24	3	He	2.567	0.0089	420.02	0.0009	0.006537
Al	27	3	He	-0.422	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-2.796	0.0015	70.00	0.0003	0.00231
Al	27	3	He	-1.395	0.0019	90.00	0.0003	0.00231
K	39	3	He	157.815	0.4654	21277.76	0.0007	0.3475
K	39	3	He	12.284	0.3567	16666.45	0.0007	0.3475
K	39	3	He	-39.975	0.3176	15006.84	0.0007	0.3475
Ca	44	3	He	-8.897	0.0024	112.00	0	0.002807
Ca	44	3	He	-13.423	0.0023	106.00	0	0.002807
Ca	44	3	He	-7.715	0.0025	118.00	0	0.002807
Ti	47	3	He	0.202	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.086	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.047	0.0001	6.00	0.0003	0.0001123
V	51	3	He	-0.134	0.0065	296.01	0.0137	0.008308
V	51	3	He	-0.082	0.0072	336.01	0.0137	0.008308
V	51	3	He	-0.134	0.0065	306.00	0.0137	0.008308
Cr	52	3	He	-0.148	0.019	870.05	0.0171	0.02156
Cr	52	3	He	-0.31	0.0163	760.04	0.0171	0.02156
Cr	52	3	He	-0.172	0.0186	880.05	0.0171	0.02156
Mn	55	3	He	0.066	0.0028	128.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.117	0.0032	148.00	0.0073	0.002316
Mn	55	3	He	0.048	0.0027	126.00	0.0073	0.002316
Fe	57	3	He	0.334	0.0028	130.01	0.0003	0.002736
Fe	57	3	He	-1.839	0.0021	100.00	0.0003	0.002736
Fe	57	3	He	-1.912	0.0021	100.00	0.0003	0.002736
Co	59	3	He	0.016	0.0024	112.00	0.0332	0.001922
Co	59	3	He	0.025	0.0027	128.00	0.0332	0.001922
Co	59	3	He	0.007	0.0022	102.00	0.0332	0.001922
Ni	60	3	He	0.081	0.0039	178.00	0.0093	0.003141
Ni	60	3	He	0.049	0.0036	168.00	0.0093	0.003141
Ni	60	3	He	0.131	0.0044	206.00	0.0093	0.003141
Cu	63	3	He	0.008	0.0039	180.00	0.027	0.003732
Cu	63	3	He	-0.01	0.0035	162.00	0.027	0.003732
Cu	63	3	He	-0.019	0.0032	152.00	0.027	0.003732
Zn	66	3	He	0.05	0.0022	100.00	0.0031	0.002032
Zn	66	3	He	0.254	0.0028	132.00	0.0031	0.002032
Zn	66	3	He	0.013	0.0021	98.00	0.0031	0.002032
As	75	3	He	-0.08	0.0006	26.00	0.0025	0.0007733
As	75	3	He	-0.001	0.0008	36.00	0.0025	0.0007733
As	75	3	He	0.079	0.001	46.00	0.0025	0.0007733
Sr	88	3	He	-0.032	0.0037	140.00	0.0105	0.004071
Sr	88	3	He	-0.164	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.139	0.0026	100.00	0.0105	0.004071
Mo	98	3	He	-0.053	0.0027	100.00	0.0234	0.003908
Mo	98	3	He	-0.044	0.0029	110.00	0.0234	0.003908
Mo	98	3	He	-0.122	0.001	40.00	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.386	0.0544	2040.19	0.0169	0.0609
Sn	120	3	He	-0.62	0.0504	1930.18	0.0169	0.0609
Sn	120	3	He	-0.775	0.0478	1830.17	0.0169	0.0609
Sb	121	3	He	0.005	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	0.047	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.02	0.0009	33.33	0.0161	0.0005433
Ba	137	3	He	0.39	0.0032	120.00	0.0053	0.001141
Ba	137	3	He	0.13	0.0018	70.00	0.0053	0.001141
Ba	137	3	He	0.18	0.0021	80.00	0.0053	0.001141
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	0.014	0.0022	110.00	0.0332	0.001693
Pb	208	3	He	-0.007	0.0015	100.01	0.0332	0.001693
Pb	208	3	He	0.005	0.0018	100.00	0.0332	0.001693
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	0	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.007	0.0005	80.00	0.0338	0.0007949
Sc	45	1	No Gas			1234215.14		
Sc	45	1	No Gas			1243373.42		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1282268.26		
Ge	72	1	No Gas			645333.19		
Ge	72	1	No Gas			655565.85		
Ge	72	1	No Gas			671494.21		
Sc	45	2	H2			88579.63		
Sc	45	2	H2			86598.37		
Sc	45	2	H2			85934.80		
Ge	72	2	H2			72585.43		
Ge	72	2	H2			70947.26		
Ge	72	2	H2			72112.71		
In	115	2	H2			175372.30		
In	115	2	H2			180869.90		
In	115	2	H2			174329.70		
Sc	45	3	He			25139.84		
Sc	45	3	He			24638.98		
Sc	45	3	He			23957.94		
Ge	72	3	He			45715.65		
Ge	72	3	He			46728.69		
Ge	72	3	He			47250.14		
In	115	3	He			37526.44		
In	115	3	He			38277.92		
In	115	3	He			38277.74		
Tb	159	3	He			148355.70		
Tb	159	3	He			149211.03		
Tb	159	3	He			146153.69		
Bi	209	3	He			109300.22		
Bi	209	3	He			107889.72		
Bi	209	3	He			109459.55		

Quantitation Report

Data File Name 160SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:41:40 PM
Sample Name MB 410-683164/1-A
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

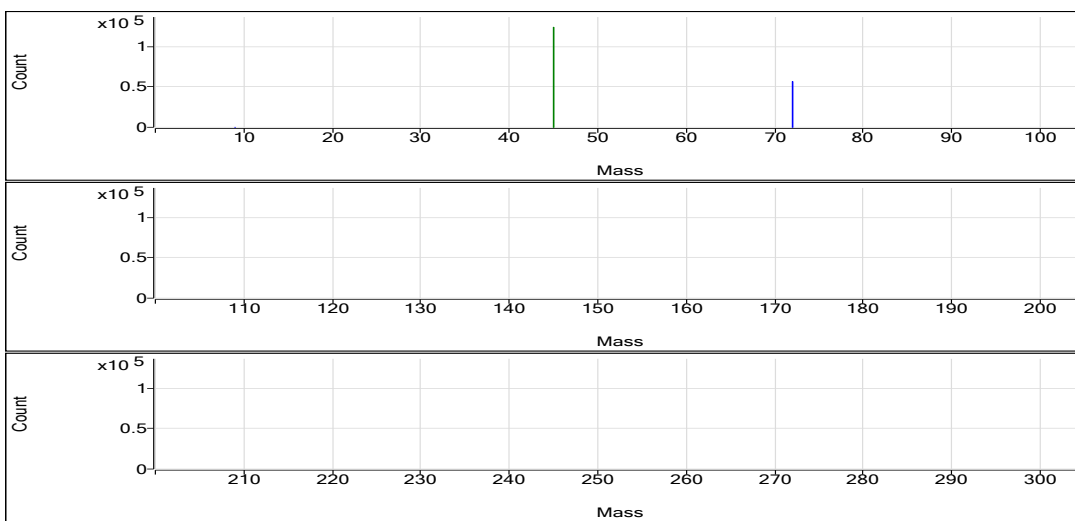
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.020	ppb	20.2	56.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.018	ppb	298.3	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	140199.196	ppb	1.9	10509402.55	254.7820	Analog	0.1000	3
Mg	24	72	He	4.768	ppb	15.0	450.02	0.0109	Pulse	0.1000	3
Al	27	72	He	-4.341	ppb	N/A	43.33	0.0010	Pulse	0.1000	3
K	39	72	He	83.438	ppb	99.0	16924.87	0.4098	Pulse	0.5000	3
Ca	44	72	He	-14.348	ppb	N/A	92.00	0.0022	Pulse	0.5000	3
Ti	47	72	He	-0.153	ppb	N/A	2.67	0.0001	Pulse	0.5000	3
V	51	72	He	0.005	ppb	26.5	345.34	0.0084	Pulse	0.5000	3
Cr	52	72	He	-0.102	ppb	N/A	816.71	0.0198	Pulse	0.1000	3
Mn	55	72	He	0.079	ppb	57.2	119.33	0.0029	Pulse	0.5000	3
Fe	57	72	He	0.808	ppb	627.8	123.34	0.0030	Pulse	0.1000	3
Co	59	72	He	0.028	ppb	20.5	117.33	0.0028	Pulse	0.5000	3
Ni	60	72	He	0.039	ppb	208.2	144.67	0.0035	Pulse	0.5000	3
Cu	63	72	He	0.050	ppb	42.1	210.00	0.0051	Pulse	0.5000	3
Zn	66	72	He	0.059	ppb	248.1	91.33	0.0022	Pulse	0.5000	3
As	75	72	He	-0.025	ppb	N/A	29.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.129	ppb	N/A	106.67	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.120	ppb	N/A	43.33	0.0011	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.866	ppb	N/A	1816.83	0.0463	Pulse	0.1000	3
Sb	121	115	He	0.017	ppb	65.6	32.22	0.0008	Pulse	0.3000	3
Ba	137	115	He	0.009	ppb	323.7	46.67	0.0012	Pulse	0.1000	3
Tl	205	159	He	0.004	ppb	147.2	103.34	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.026	ppb	N/A	126.67	0.0008	Pulse	0.1000	3
U	238	159	He	-0.001	ppb	N/A	113.34	0.0008	Pulse	0.1000	3

ISTD Table:

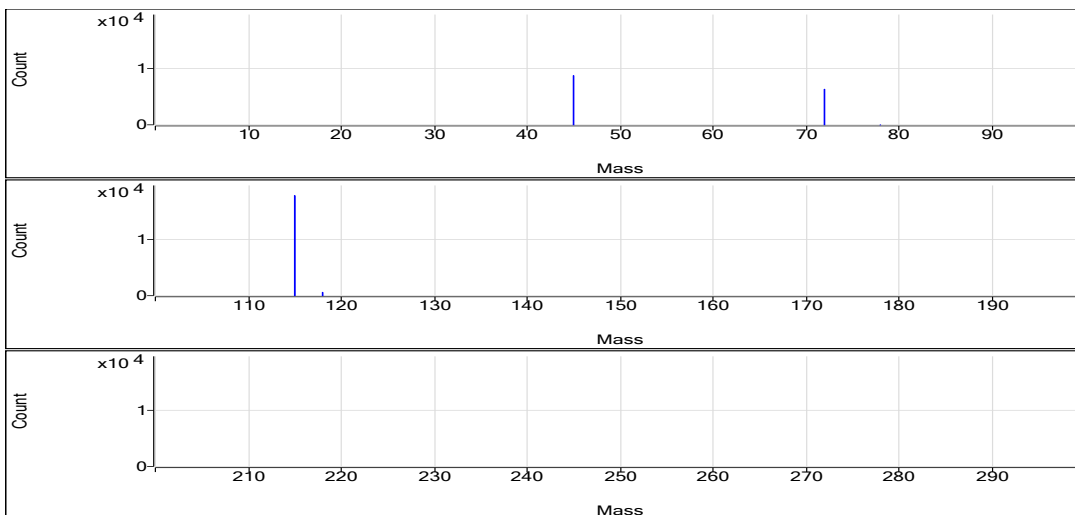
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1243418.03	0.5	95.1	Analog	0.1000	3
No Gas	Ge	72	569392.70	1.4	86.9	Pulse	0.1000	3
H2	Sc	45	88117.57	1.3	107.3	Pulse	0.1000	3
H2	Ge	72	63845.02	1.7	93.4	Pulse	0.1000	3
H2	In	115	179112.56	1.5	105.0	Pulse	0.1000	3
He	Sc	45	24926.33	0.3	97.3	Pulse	0.1000	3
He	Ge	72	41253.82	1.0	86.8	Pulse	0.1000	3
He	In	115	39247.56	1.2	95.9	Pulse	0.1000	3
He	Tb	159	150051.86	0.8	94.1	Pulse	0.1000	3
He	Bi	209	110747.26	1.9	94.7	Pulse	0.1000	3

No Gas

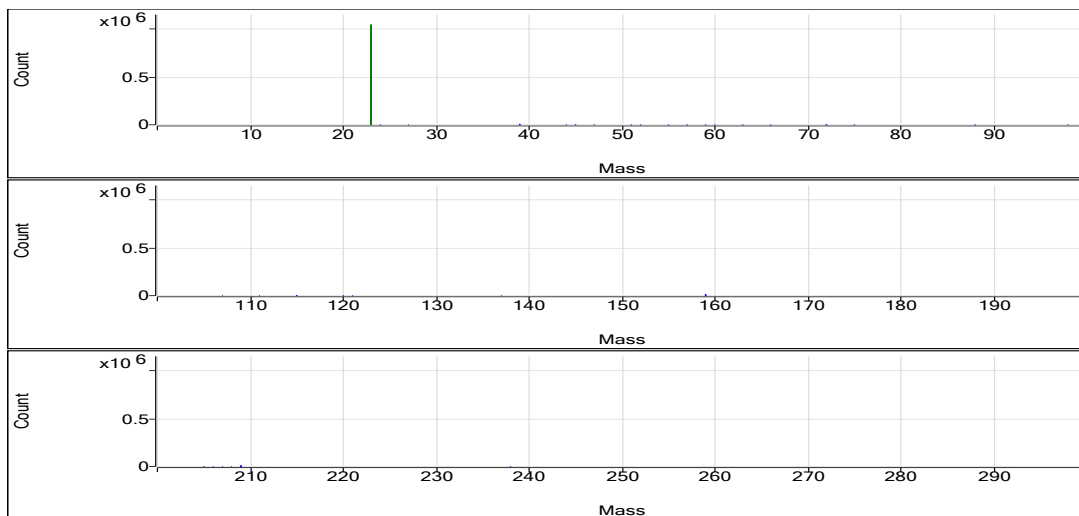


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.02	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	0.024	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	0.016	0.0001	54.00	0.0011	7.835E-05
Se	78	2	H2	0.009	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.073	0.0001	4.00	0.0005	2.594E-05
Se	78	2	H2	-0.03	0	0.67	0.0005	2.594E-05
Na	23	3	He	137371.934	249.6475	10414057.97	0.0018	0.1731
Na	23	3	He	140632.318	255.5685	10515039.84	0.0018	0.1731
Na	23	3	He	142593.336	259.1298	10599109.84	0.0018	0.1731
Mg	24	3	He	5.425	0.0115	480.03	0.0009	0.006537
Mg	24	3	He	4.007	0.0102	420.02	0.0009	0.006537
Mg	24	3	He	4.873	0.011	450.02	0.0009	0.006537
Al	27	3	He	-4.652	0.001	40.00	0.0003	0.00231
Al	27	3	He	-1.259	0.0019	80.00	0.0003	0.00231
Al	27	3	He	-7.112	0.0002	10.00	0.0003	0.00231
K	39	3	He	173.734	0.4773	19912.06	0.0007	0.3475
K	39	3	He	65.016	0.3961	16296.07	0.0007	0.3475
K	39	3	He	11.563	0.3561	14566.48	0.0007	0.3475
Ca	44	3	He	-19.776	0.002	84.00	0	0.002807
Ca	44	3	He	-11.806	0.0023	96.00	0	0.002807
Ca	44	3	He	-11.463	0.0023	96.00	0	0.002807
Ti	47	3	He	-0.207	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.205	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.047	0.0001	4.00	0.0003	0.0001123
V	51	3	He	0.006	0.0084	350.01	0.0137	0.008308
V	51	3	He	0.004	0.0084	344.01	0.0137	0.008308
V	51	3	He	0.004	0.0084	342.01	0.0137	0.008308
Cr	52	3	He	-0.195	0.0182	760.04	0.0171	0.02156
Cr	52	3	He	-0.109	0.0197	810.05	0.0171	0.02156
Cr	52	3	He	-0.003	0.0215	880.05	0.0171	0.02156
Mn	55	3	He	0.051	0.0027	112.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.056	0.0027	112.00	0.0073	0.002316
Mn	55	3	He	0.132	0.0033	134.00	0.0073	0.002316
Fe	57	3	He	-1.785	0.0022	90.00	0.0003	0.002736
Fe	57	3	He	-2.443	0.0019	80.00	0.0003	0.002736
Fe	57	3	He	6.651	0.0049	200.01	0.0003	0.002736
Co	59	3	He	0.024	0.0027	114.00	0.0332	0.001922
Co	59	3	He	0.034	0.0031	126.00	0.0332	0.001922
Co	59	3	He	0.025	0.0027	112.00	0.0332	0.001922
Ni	60	3	He	0.131	0.0044	182.00	0.0093	0.003141
Ni	60	3	He	0.002	0.0032	130.00	0.0093	0.003141
Ni	60	3	He	-0.017	0.003	122.00	0.0093	0.003141
Cu	63	3	He	0.043	0.0049	204.00	0.027	0.003732
Cu	63	3	He	0.074	0.0057	236.00	0.027	0.003732
Cu	63	3	He	0.034	0.0046	190.00	0.027	0.003732
Zn	66	3	He	-0.006	0.002	84.00	0.0031	0.002032
Zn	66	3	He	-0.044	0.0019	78.00	0.0031	0.002032
Zn	66	3	He	0.227	0.0027	112.00	0.0031	0.002032
As	75	3	He	0.016	0.0008	34.00	0.0025	0.0007733
As	75	3	He	-0.094	0.0005	22.00	0.0025	0.0007733
As	75	3	He	0.004	0.0008	32.00	0.0025	0.0007733
Sr	88	3	He	-0.143	0.0026	100.00	0.0105	0.004071
Sr	88	3	He	-0.221	0.0018	70.00	0.0105	0.004071
Sr	88	3	He	-0.022	0.0038	150.01	0.0105	0.004071
Mo	98	3	He	-0.156	0.0003	10.00	0.0234	0.003908
Mo	98	3	He	-0.113	0.0013	50.00	0.0234	0.003908
Mo	98	3	He	-0.09	0.0018	70.00	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.729	0.0486	1890.18	0.0169	0.0609
Sn	120	3	He	-0.838	0.0468	1860.16	0.0169	0.0609
Sn	120	3	He	-1.03	0.0435	1700.16	0.0169	0.0609
Sb	121	3	He	0.03	0.001	40.00	0.0161	0.0005433
Sb	121	3	He	0.013	0.0008	30.00	0.0161	0.0005433
Sb	121	3	He	0.009	0.0007	26.67	0.0161	0.0005433
Ba	137	3	He	0.027	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	-0.026	0.001	40.00	0.0053	0.001141
Ba	137	3	He	0.026	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	0.011	0.0009	130.01	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	0	0.0006	90.00	0.0248	0.0005854
Pb	208	3	He	-0.029	0.0007	10.00	0.0332	0.001693
Pb	208	3	He	-0.033	0.0006	50.00	0.0332	0.001693
Pb	208	3	He	-0.015	0.0012	120.00	0.0332	0.001693
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.01	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
Sc	45	1	No Gas			1243265.61		
Sc	45	1	No Gas			1236661.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1250327.01		
Ge	72	1	No Gas			562934.91		
Ge	72	1	No Gas			578230.34		
Ge	72	1	No Gas			567012.84		
Sc	45	2	H2			88288.33		
Sc	45	2	H2			89152.45		
Sc	45	2	H2			86911.93		
Ge	72	2	H2			65063.53		
Ge	72	2	H2			63415.95		
Ge	72	2	H2			63055.57		
In	115	2	H2			182226.76		
In	115	2	H2			178061.11		
In	115	2	H2			177049.80		
Sc	45	3	He			24899.69		
Sc	45	3	He			24879.39		
Sc	45	3	He			24999.90		
Ge	72	3	He			41715.05		
Ge	72	3	He			41143.72		
Ge	72	3	He			40902.70		
In	115	3	He			38909.38		
In	115	3	He			39791.57		
In	115	3	He			39079.88		
Tb	159	3	He			150617.40		
Tb	159	3	He			148710.66		
Tb	159	3	He			150827.52		
Bi	209	3	He			108332.73		
Bi	209	3	He			112262.41		
Bi	209	3	He			111646.65		

Quantitation Report

Data File Name 161SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:43:53 PM
Sample Name MB 410-683167/1-A
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

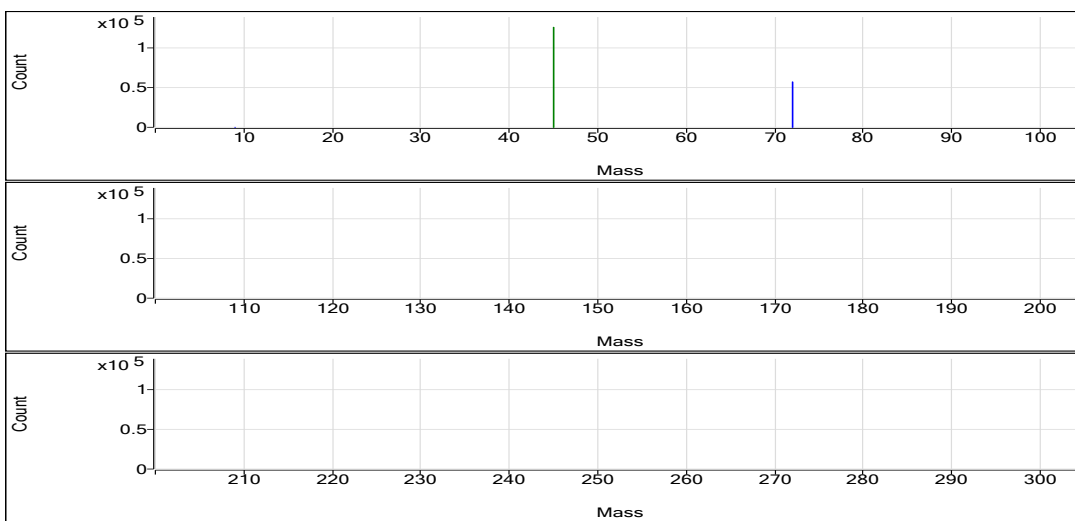
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.023	ppb	46.8	58.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.011	ppb	9.8	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	136038.051	ppb	1.7	10415686.51	247.2251	Analog	0.1000	3
Mg	24	72	He	3.658	ppb	24.1	416.69	0.0099	Pulse	0.1000	3
Al	27	72	He	-1.953	ppb	N/A	73.33	0.0017	Pulse	0.1000	3
K	39	72	He	73.083	ppb	116.0	16938.23	0.4021	Pulse	0.5000	3
Ca	44	72	He	-4.827	ppb	N/A	110.00	0.0026	Pulse	0.5000	3
Ti	47	72	He	-0.107	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.055	ppb	N/A	318.67	0.0076	Pulse	0.5000	3
Cr	52	72	He	-0.336	ppb	N/A	666.71	0.0158	Pulse	0.1000	3
Mn	55	72	He	0.012	ppb	62.7	101.33	0.0024	Pulse	0.5000	3
Fe	57	72	He	-0.871	ppb	N/A	103.33	0.0025	Pulse	0.1000	3
Co	59	72	He	0.011	ppb	78.9	96.67	0.0023	Pulse	0.5000	3
Ni	60	72	He	0.037	ppb	169.2	146.67	0.0035	Pulse	0.5000	3
Cu	63	72	He	0.007	ppb	85.1	164.67	0.0039	Pulse	0.5000	3
Zn	66	72	He	-0.007	ppb	N/A	84.67	0.0020	Pulse	0.5000	3
As	75	72	He	0.063	ppb	111.7	39.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.130	ppb	N/A	106.67	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.101	ppb	N/A	60.00	0.0015	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	13.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.904	ppb	N/A	1793.50	0.0456	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	160.1	27.78	0.0007	Pulse	0.3000	3
Ba	137	115	He	-0.038	ppb	N/A	36.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	-0.013	ppb	N/A	40.00	0.0003	Pulse	0.1000	3
Pb	208	159	He	-0.013	ppb	N/A	193.34	0.0013	Pulse	0.1000	3
U	238	159	He	-0.011	ppb	N/A	66.67	0.0004	Pulse	0.1000	3

ISTD Table:

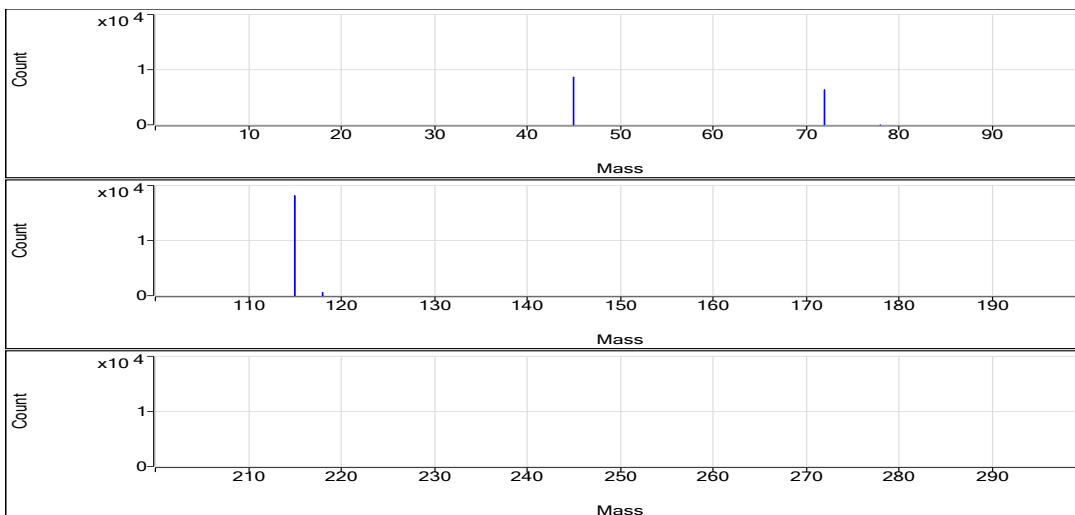
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1254019.69	1.1	95.9	Analog	0.1000	3
No Gas	Ge	72	569640.16	1.0	86.9	Pulse	0.1000	3
H2	Sc	45	86967.84	0.9	105.9	Pulse	0.1000	3
H2	Ge	72	63934.63	1.7	93.6	Pulse	0.1000	3
H2	In	115	182109.15	1.1	106.7	Pulse	0.1000	3
He	Sc	45	25477.15	0.5	99.5	Pulse	0.1000	3
He	Ge	72	42133.14	0.7	88.7	Pulse	0.1000	3
He	In	115	39314.52	2.2	96.0	Pulse	0.1000	3
He	Tb	159	151676.58	0.9	95.1	Pulse	0.1000	3
He	Bi	209	111892.65	1.5	95.7	Pulse	0.1000	3

No Gas

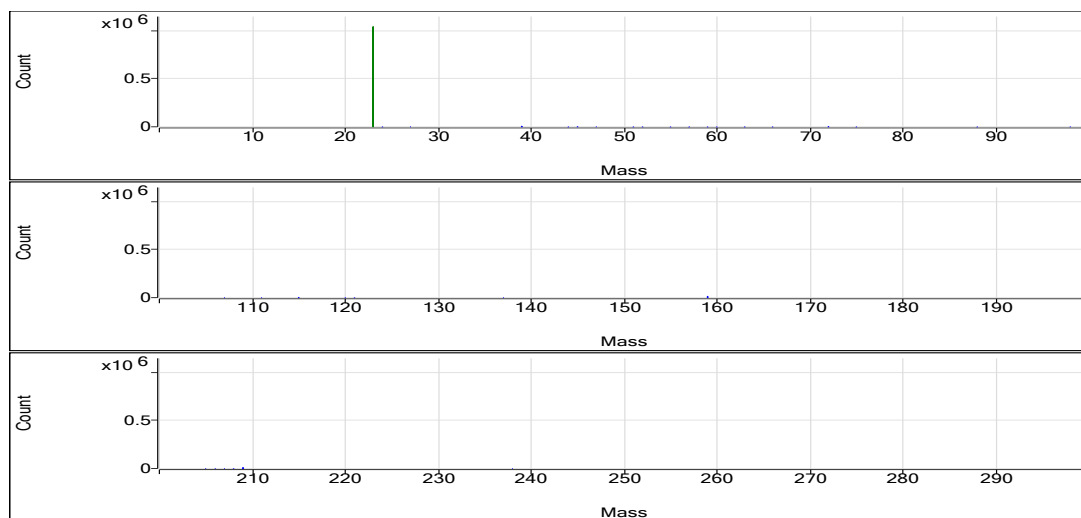


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.033	0.0001	64.00	0.0011	7.835E-05
Be	9	1	No Gas	0.025	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	0.012	0.0001	52.00	0.0011	7.835E-05
Se	78	2	H2	0.01	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.01	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.012	0	2.00	0.0005	2.594E-05
Na	23	3	He	134467.023	244.372	10299337.97	0.0018	0.1731
Na	23	3	He	138647.059	251.9632	10538592.34	0.0018	0.1731
Na	23	3	He	135000.07	245.3401	10409129.22	0.0018	0.1731
Mg	24	3	He	2.706	0.009	380.02	0.0009	0.006537
Mg	24	3	He	3.825	0.01	420.02	0.0009	0.006537
Mg	24	3	He	4.442	0.0106	450.02	0.0009	0.006537
Al	27	3	He	-3.052	0.0014	60.00	0.0003	0.00231
Al	27	3	He	0.278	0.0024	100.00	0.0003	0.00231
Al	27	3	He	-3.084	0.0014	60.00	0.0003	0.00231
K	39	3	He	165.424	0.4711	19856.05	0.0007	0.3475
K	39	3	He	55.093	0.3887	16256.07	0.0007	0.3475
K	39	3	He	-1.268	0.3465	14702.57	0.0007	0.3475
Ca	44	3	He	-12.006	0.0023	98.00	0	0.002807
Ca	44	3	He	11.093	0.0033	136.00	0	0.002807
Ca	44	3	He	-13.566	0.0023	96.00	0	0.002807
Ti	47	3	He	-0.056	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.207	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.058	0.0001	4.00	0.0003	0.0001123
V	51	3	He	0.035	0.0088	370.01	0.0137	0.008308
V	51	3	He	-0.111	0.0068	284.00	0.0137	0.008308
V	51	3	He	-0.087	0.0071	302.00	0.0137	0.008308
Cr	52	3	He	-0.415	0.0145	610.04	0.0171	0.02156
Cr	52	3	He	-0.366	0.0153	640.03	0.0171	0.02156
Cr	52	3	He	-0.227	0.0177	750.05	0.0171	0.02156
Mn	55	3	He	0.014	0.0024	102.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.004	0.0023	98.00	0.0073	0.002316
Mn	55	3	He	0.019	0.0025	104.00	0.0073	0.002316
Fe	57	3	He	1.077	0.0031	130.00	0.0003	0.002736
Fe	57	3	He	-1.064	0.0024	100.00	0.0003	0.002736
Fe	57	3	He	-2.624	0.0019	80.00	0.0003	0.002736
Co	59	3	He	0.021	0.0026	110.00	0.0332	0.001922
Co	59	3	He	0.01	0.0022	94.00	0.0332	0.001922
Co	59	3	He	0.003	0.002	86.00	0.0332	0.001922
Ni	60	3	He	0.024	0.0034	142.00	0.0093	0.003141
Ni	60	3	He	0.104	0.0041	172.00	0.0093	0.003141
Ni	60	3	He	-0.018	0.003	126.00	0.0093	0.003141
Cu	63	3	He	0.013	0.0041	172.00	0.027	0.003732
Cu	63	3	He	0.003	0.0038	160.00	0.027	0.003732
Cu	63	3	He	0.003	0.0038	162.00	0.027	0.003732
Zn	66	3	He	0.048	0.0022	92.00	0.0031	0.002032
Zn	66	3	He	0.084	0.0023	96.00	0.0031	0.002032
Zn	66	3	He	-0.153	0.0016	66.00	0.0031	0.002032
As	75	3	He	0.143	0.0011	48.00	0.0025	0.0007733
As	75	3	He	0.016	0.0008	34.00	0.0025	0.0007733
As	75	3	He	0.029	0.0008	36.00	0.0025	0.0007733
Sr	88	3	He	-0.08	0.0032	130.00	0.0105	0.004071
Sr	88	3	He	-0.194	0.002	80.00	0.0105	0.004071
Sr	88	3	He	-0.116	0.0029	110.00	0.0105	0.004071
Mo	98	3	He	-0.135	0.0007	30.00	0.0234	0.003908
Mo	98	3	He	-0.091	0.0018	70.00	0.0234	0.003908
Mo	98	3	He	-0.078	0.0021	80.00	0.0234	0.003908
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.912	0.0455	1830.17	0.0169	0.0609
Sn	120	3	He	-1.056	0.0431	1690.17	0.0169	0.0609
Sn	120	3	He	-0.745	0.0483	1860.17	0.0169	0.0609
Sb	121	3	He	0.028	0.001	40.00	0.0161	0.0005433
Sb	121	3	He	0.003	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	-0.001	0.0005	20.00	0.0161	0.0005433
Ba	137	3	He	-0.122	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	-0.023	0.001	40.00	0.0053	0.001141
Ba	137	3	He	0.03	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	-0.023	0.0009	60.00	0.0332	0.001693
Pb	208	3	He	-0.007	0.0014	70.00	0.0332	0.001693
Pb	208	3	He	-0.008	0.0014	130.01	0.0332	0.001693
U	238	3	He	-0.012	0.0004	60.00	0.0338	0.0007949
U	238	3	He	-0.012	0.0004	60.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
Sc	45	1	No Gas			1244798.65		
Sc	45	1	No Gas			1247496.54		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1269763.89		
Ge	72	1	No Gas			563329.56		
Ge	72	1	No Gas			572169.29		
Ge	72	1	No Gas			573421.63		
Sc	45	2	H2			87845.99		
Sc	45	2	H2			86287.83		
Sc	45	2	H2			86769.70		
Ge	72	2	H2			64721.35		
Ge	72	2	H2			64359.62		
Ge	72	2	H2			62722.93		
In	115	2	H2			180265.09		
In	115	2	H2			181912.61		
In	115	2	H2			184149.74		
Sc	45	3	He			25560.81		
Sc	45	3	He			25320.15		
Sc	45	3	He			25550.49		
Ge	72	3	He			42146.14		
Ge	72	3	He			41825.92		
Ge	72	3	He			42427.35		
In	115	3	He			40222.72		
In	115	3	He			39250.21		
In	115	3	He			38508.29		
Tb	159	3	He			150283.10		
Tb	159	3	He			151858.20		
Tb	159	3	He			152888.43		
Bi	209	3	He			111364.52		
Bi	209	3	He			110489.80		
Bi	209	3	He			113823.62		

Quantitation Report

Data File Name 162SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:46:05 PM
Sample Name LCS 410-683167/2-A
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

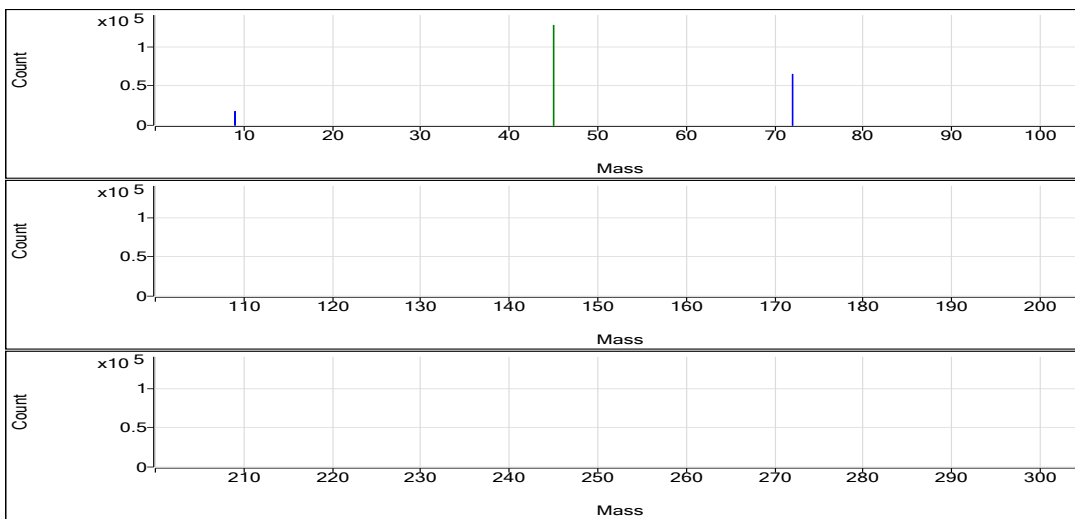
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.630	ppb	3.8	35771.74	0.0549	Pulse	0.5000	3
Se	78	72	H2	97.247	ppb	2.3	3588.85	0.0493	Pulse	1.5000	3
Na	23	72	He	128542.893	ppb	0.7	10912644.42	233.6135	Analog	0.1000	3
Mg	24	72	He	4840.150	ppb	0.9	207456.50	4.4412	Pulse	0.1000	3
Al	27	72	He	4837.732	ppb	1.6	65737.31	1.4074	Pulse	0.1000	3
K	39	72	He	4863.330	ppb	2.2	186006.30	3.9824	Pulse	0.5000	3
Ca	44	72	He	4779.711	ppb	0.3	9085.89	0.1945	Pulse	0.5000	3
Ti	47	72	He	500.213	ppb	1.2	7271.65	0.1557	Pulse	0.5000	3
V	51	72	He	481.249	ppb	1.0	307446.49	6.5818	Pulse	0.5000	3
Cr	52	72	He	478.328	ppb	1.7	382742.21	8.1944	Pulse	0.1000	3
Mn	55	72	He	478.455	ppb	1.2	163168.78	3.4932	Pulse	0.5000	3
Fe	57	72	He	4787.373	ppb	0.9	72565.66	1.5534	Pulse	0.1000	3
Co	59	72	He	479.293	ppb	1.3	743875.86	15.9256	Pulse	0.5000	3
Ni	60	72	He	477.410	ppb	1.4	208157.63	4.4564	Pulse	0.5000	3
Cu	63	72	He	482.709	ppb	1.8	609312.48	13.0452	Pulse	0.5000	3
Zn	66	72	He	487.215	ppb	1.6	70996.78	1.5200	Pulse	0.5000	3
As	75	72	He	479.419	ppb	1.9	57133.10	1.2232	Pulse	0.5000	3
Sr	88	115	He	51.472	ppb	1.8	20894.33	0.5425	Pulse	0.1000	3
Mo	98	115	He	50.228	ppb	1.9	45409.91	1.1790	Pulse	0.1000	3
Ag	107	115	He	51.854	ppb	0.2	98493.42	2.5571	Pulse	0.1000	3
Cd	111	115	He	50.296	ppb	3.2	10869.83	0.2822	Pulse	0.5000	3
Sn	120	115	He	98.848	ppb	0.7	66607.01	1.7293	Pulse	0.1000	3
Sb	121	115	He	101.641	ppb	0.6	63141.38	1.6393	Pulse	0.3000	3
Ba	137	115	He	500.540	ppb	1.0	101832.09	2.6440	Pulse	0.1000	3
Tl	205	159	He	96.781	ppb	0.5	363808.17	2.3985	Pulse	0.1000	3
Pb	208	159	He	49.375	ppb	0.4	249104.14	1.6423	Pulse	0.1000	3
U	238	159	He	50.428	ppb	1.5	258277.12	1.7029	Pulse	0.1000	3

ISTD Table:

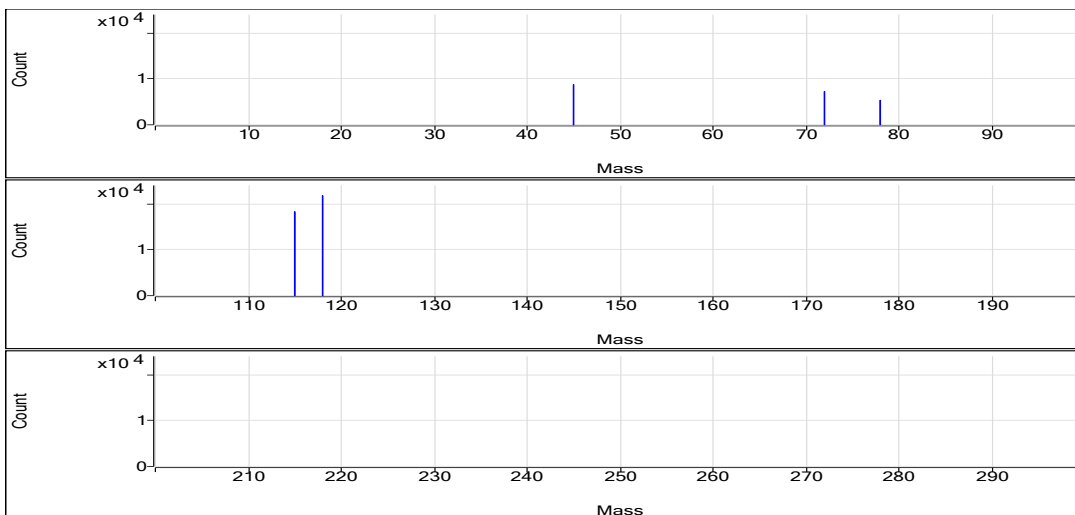
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1274046.02	0.6	97.5	Analog	0.1000	3
No Gas	Ge	72	651640.29	1.9	99.4	Pulse	0.1000	3
H2	Sc	45	87855.12	0.3	106.9	Pulse	0.1000	3
H2	Ge	72	72792.40	1.5	106.5	Pulse	0.1000	3
H2	In	115	183376.41	1.1	107.5	Pulse	0.1000	3
He	Sc	45	25550.57	2.7	99.8	Pulse	0.1000	3
He	Ge	72	46715.63	1.5	98.3	Pulse	0.1000	3
He	In	115	38516.56	0.8	94.1	Pulse	0.1000	3
He	Tb	159	151679.14	1.0	95.1	Pulse	0.1000	3
He	Bi	209	110887.19	1.7	94.8	Pulse	0.1000	3

No Gas

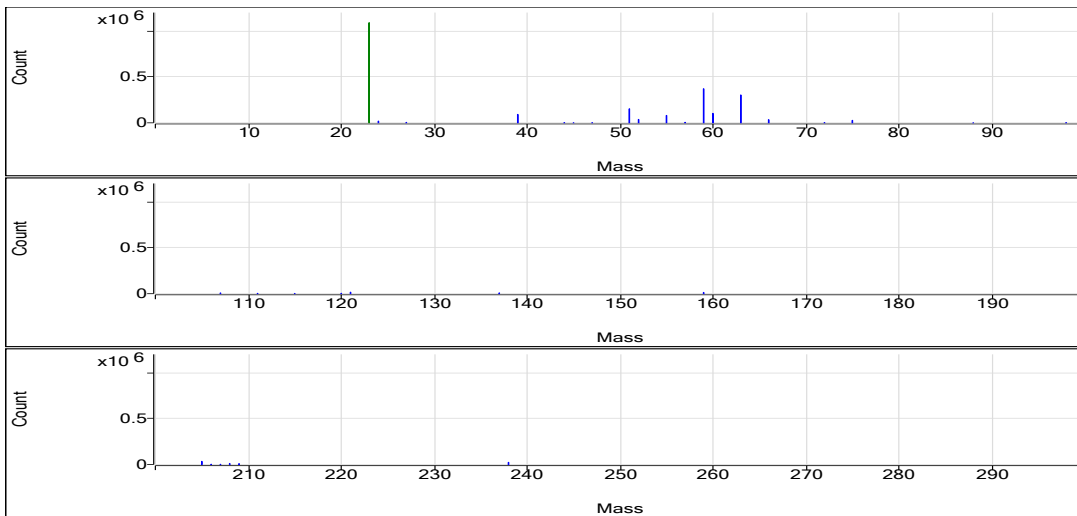


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	49.648	0.0528	34954.01	0.0011	7.835E-05
Be	9	1	No Gas	51.62	0.0549	35960.16	0.0011	7.835E-05
Be	9	1	No Gas	53.622	0.057	36401.05	0.0011	7.835E-05
Se	78	2	H2	99.799	0.0506	3665.76	0.0005	2.594E-05
Se	78	2	H2	96.344	0.0488	3512.39	0.0005	2.594E-05
Se	78	2	H2	95.598	0.0485	3588.41	0.0005	2.594E-05
Na	23	3	He	128933.751	234.3233	10818047.34	0.0018	0.1731
Na	23	3	He	127454.036	231.6361	11005341.09	0.0018	0.1731
Na	23	3	He	129240.892	234.8811	10914544.84	0.0018	0.1731
Mg	24	3	He	4852.115	4.4522	205543.79	0.0009	0.006537
Mg	24	3	He	4790.435	4.3956	208843.22	0.0009	0.006537
Mg	24	3	He	4877.898	4.4758	207982.50	0.0009	0.006537
Al	27	3	He	4867.105	1.4159	65369.11	0.0003	0.00231
Al	27	3	He	4748.847	1.3816	65640.45	0.0003	0.00231
Al	27	3	He	4897.245	1.4247	66202.36	0.0003	0.00231
K	39	3	He	4974.794	4.0657	187704.14	0.0007	0.3475
K	39	3	He	4757.71	3.9035	185460.30	0.0007	0.3475
K	39	3	He	4857.486	3.9781	184854.47	0.0007	0.3475
Ca	44	3	He	4763.243	0.1938	8948.47	0	0.002807
Ca	44	3	He	4793.502	0.195	9266.66	0	0.002807
Ca	44	3	He	4782.389	0.1946	9042.53	0	0.002807
Ti	47	3	He	506.243	0.1576	7273.65	0.0003	0.0001123
Ti	47	3	He	494.619	0.1539	7313.67	0.0003	0.0001123
Ti	47	3	He	499.776	0.1555	7227.64	0.0003	0.0001123
V	51	3	He	483.187	6.6083	305087.19	0.0137	0.008308
V	51	3	He	475.812	6.5076	309183.44	0.0137	0.008308
V	51	3	He	484.749	6.6296	308068.84	0.0137	0.008308
Cr	52	3	He	486.212	8.3291	384532.14	0.0171	0.02156
Cr	52	3	He	469.604	8.0453	382245.35	0.0171	0.02156
Cr	52	3	He	479.169	8.2088	381449.13	0.0171	0.02156
Mn	55	3	He	479.734	3.5025	161700.92	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	472.098	3.4468	163761.97	0.0073	0.002316
Mn	55	3	He	483.532	3.5302	164043.45	0.0073	0.002316
Fe	57	3	He	4838.449	1.57	72482.07	0.0003	0.002736
Fe	57	3	He	4761.332	1.545	73405.58	0.0003	0.002736
Fe	57	3	He	4762.338	1.5453	71809.33	0.0003	0.002736
Co	59	3	He	483.011	16.0491	740941.88	0.0332	0.001922
Co	59	3	He	471.95	15.6816	745055.69	0.0332	0.001922
Co	59	3	He	482.916	16.046	745630.00	0.0332	0.001922
Ni	60	3	He	480.581	4.486	207107.02	0.0093	0.003141
Ni	60	3	He	469.766	4.3851	208343.70	0.0093	0.003141
Ni	60	3	He	481.882	4.4982	209022.16	0.0093	0.003141
Cu	63	3	He	486.11	13.1371	606501.63	0.027	0.003732
Cu	63	3	He	472.86	12.7791	607152.00	0.027	0.003732
Cu	63	3	He	489.157	13.2194	614283.81	0.027	0.003732
Zn	66	3	He	488.993	1.5255	70428.42	0.0031	0.002032
Zn	66	3	He	478.842	1.4939	70976.45	0.0031	0.002032
Zn	66	3	He	493.811	1.5405	71585.48	0.0031	0.002032
As	75	3	He	484.889	1.2372	57117.08	0.0025	0.0007733
As	75	3	He	468.659	1.1958	56813.81	0.0025	0.0007733
As	75	3	He	484.709	1.2367	57468.41	0.0025	0.0007733
Sr	88	3	He	52.553	0.5538	21154.61	0.0105	0.004071
Sr	88	3	He	50.883	0.5364	20804.36	0.0105	0.004071
Sr	88	3	He	50.979	0.5374	20724.02	0.0105	0.004071
Mo	98	3	He	50.04	1.1746	44865.20	0.0234	0.003908
Mo	98	3	He	49.395	1.1595	44974.72	0.0234	0.003908
Mo	98	3	He	51.249	1.2029	46389.82	0.0234	0.003908
Ag	107	3	He	51.775	2.5532	97524.01	0.0493	0.0004851
Ag	107	3	He	52.001	2.5644	99465.93	0.0493	0.0004851
Ag	107	3	He	51.787	2.5538	98490.32	0.0493	0.0004851
Cd	111	3	He	49.969	0.2804	10709.71	0.0056	0
Cd	111	3	He	48.885	0.2743	10639.69	0.0056	0
Cd	111	3	He	52.034	0.292	11260.09	0.0056	0
Sn	120	3	He	98.893	1.73	66081.30	0.0169	0.0609
Sn	120	3	He	99.509	1.7404	67507.96	0.0169	0.0609
Sn	120	3	He	98.143	1.7174	66231.76	0.0169	0.0609
Sb	121	3	He	101.217	1.6325	62354.77	0.0161	0.0005433
Sb	121	3	He	101.391	1.6353	63429.18	0.0161	0.0005433
Sb	121	3	He	102.315	1.6502	63640.19	0.0161	0.0005433
Ba	137	3	He	504.846	2.6667	101859.14	0.0053	0.001141
Ba	137	3	He	494.733	2.6133	101364.86	0.0053	0.001141
Ba	137	3	He	502.04	2.6519	102272.27	0.0053	0.001141
Tl	205	3	He	96.878	2.4009	360539.53	0.0248	0.0005854
Tl	205	3	He	96.277	2.386	362096.83	0.0248	0.0005854
Tl	205	3	He	97.188	2.4086	368788.16	0.0248	0.0005854
Pb	208	3	He	49.36	1.6418	130117.47	0.0332	0.001693
Pb	208	3	He	49.563	1.6486	133730.46	0.0332	0.001693
Pb	208	3	He	49.201	1.6365	133638.81	0.0332	0.001693
U	238	3	He	50.893	1.7186	258080.72	0.0338	0.0007949
U	238	3	He	50.821	1.7162	260442.83	0.0338	0.0007949
U	238	3	He	49.57	1.674	256307.81	0.0338	0.0007949
Sc	45	1	No Gas			1282651.15		
Sc	45	1	No Gas			1271697.17		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1267789.75		
Ge	72	1	No Gas			661816.40		
Ge	72	1	No Gas			654892.37		
Ge	72	1	No Gas			638212.10		
Sc	45	2	H2			88115.81		
Sc	45	2	H2			87714.95		
Sc	45	2	H2			87734.61		
Ge	72	2	H2			72444.75		
Ge	72	2	H2			71901.72		
Ge	72	2	H2			74030.74		
In	115	2	H2			181105.49		
In	115	2	H2			184360.56		
In	115	2	H2			184663.18		
Sc	45	3	He			25410.31		
Sc	45	3	He			24939.73		
Sc	45	3	He			26301.66		
Ge	72	3	He			46167.18		
Ge	72	3	He			47511.34		
Ge	72	3	He			46468.38		
In	115	3	He			38658.99		
In	115	3	He			39260.27		
In	115	3	He			39029.18		
Tb	159	3	He			150166.92		
Tb	159	3	He			151757.23		
Tb	159	3	He			153113.26		
Bi	209	3	He			108835.81		
Bi	209	3	He			112482.64		
Bi	209	3	He			111343.11		

Quantitation Report

Data File Name 163SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:48:17 PM
Sample Name LCS 410-683164/2-A
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

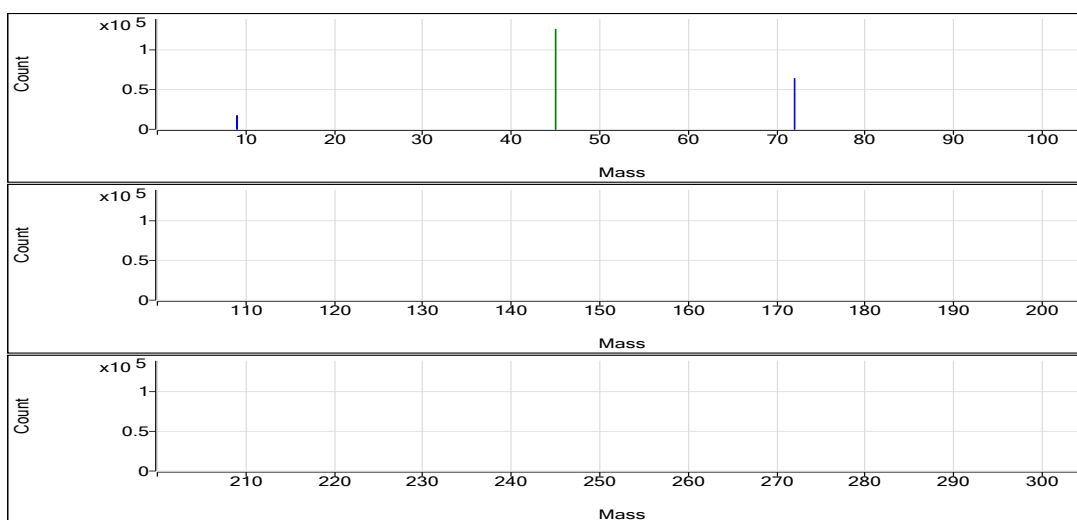
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	51.202	ppb	4.4	35147.11	0.0545	Pulse	0.5000	3
Se	78	72	H2	97.676	ppb	1.8	3609.08	0.0495	Pulse	1.5000	3
Na	23	72	He	128833.599	ppb	1.8	10768572.34	234.1414	Analog	0.1000	3
Mg	24	72	He	4891.733	ppb	1.6	206438.18	4.4885	Pulse	0.1000	3
Al	27	72	He	4831.397	ppb	2.9	64636.15	1.4056	Pulse	0.1000	3
K	39	72	He	4908.134	ppb	1.2	184718.47	4.0159	Pulse	0.5000	3
Ca	44	72	He	4793.678	ppb	2.8	8969.82	0.1950	Pulse	0.5000	3
Ti	47	72	He	497.237	ppb	2.2	7116.92	0.1547	Pulse	0.5000	3
V	51	72	He	482.966	ppb	1.6	303795.85	6.6053	Pulse	0.5000	3
Cr	52	72	He	485.727	ppb	2.0	382682.79	8.3208	Pulse	0.1000	3
Mn	55	72	He	477.126	ppb	1.4	160219.45	3.4835	Pulse	0.5000	3
Fe	57	72	He	4736.898	ppb	0.9	70710.89	1.5371	Pulse	0.1000	3
Co	59	72	He	482.287	ppb	1.4	737051.87	16.0251	Pulse	0.5000	3
Ni	60	72	He	476.538	ppb	1.4	204594.57	4.4483	Pulse	0.5000	3
Cu	63	72	He	484.349	ppb	1.4	602033.06	13.0895	Pulse	0.5000	3
Zn	66	72	He	488.657	ppb	1.3	70116.97	1.5245	Pulse	0.5000	3
As	75	72	He	481.331	ppb	1.7	56483.44	1.2281	Pulse	0.5000	3
Sr	88	115	He	49.623	ppb	5.0	20550.54	0.5232	Pulse	0.1000	3
Mo	98	115	He	50.219	ppb	2.5	46319.08	1.1788	Pulse	0.1000	3
Ag	107	115	He	50.263	ppb	2.4	97399.17	2.4787	Pulse	0.1000	3
Cd	111	115	He	49.225	ppb	4.1	10851.14	0.2762	Pulse	0.5000	3
Sn	120	115	He	97.339	ppb	2.7	66951.91	1.7038	Pulse	0.1000	3
Sb	121	115	He	99.780	ppb	3.0	63230.52	1.6093	Pulse	0.3000	3
Ba	137	115	He	489.399	ppb	2.5	101582.47	2.5852	Pulse	0.1000	3
Tl	205	159	He	96.895	ppb	1.8	361897.27	2.4013	Pulse	0.1000	3
Pb	208	159	He	50.155	ppb	1.4	251420.15	1.6683	Pulse	0.1000	3
U	238	159	He	50.724	ppb	1.3	258154.66	1.7129	Pulse	0.1000	3

ISTD Table:

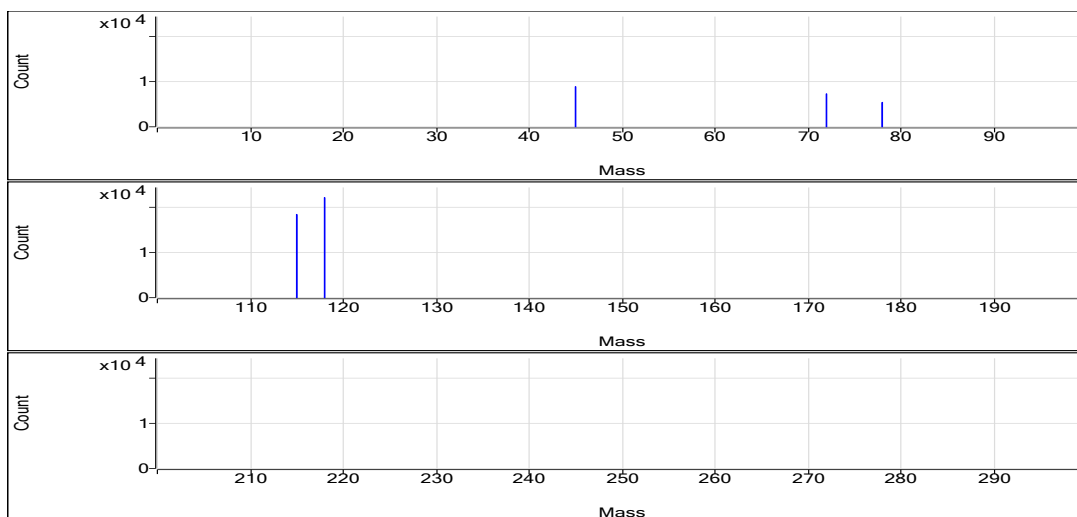
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1271113.08	1.5	97.2	Analog	0.1000	3
No Gas	Ge	72	645177.16	0.8	98.5	Pulse	0.1000	3
H2	Sc	45	88753.24	0.6	108.0	Pulse	0.1000	3
H2	Ge	72	72885.98	1.5	106.7	Pulse	0.1000	3
H2	In	115	183710.88	1.1	107.7	Pulse	0.1000	3
He	Sc	45	24869.48	2.0	97.1	Pulse	0.1000	3
He	Ge	72	46000.24	1.6	96.8	Pulse	0.1000	3
He	In	115	39312.96	2.9	96.0	Pulse	0.1000	3
He	Tb	159	150725.01	1.1	94.5	Pulse	0.1000	3
He	Bi	209	110920.45	1.2	94.8	Pulse	0.1000	3

No Gas

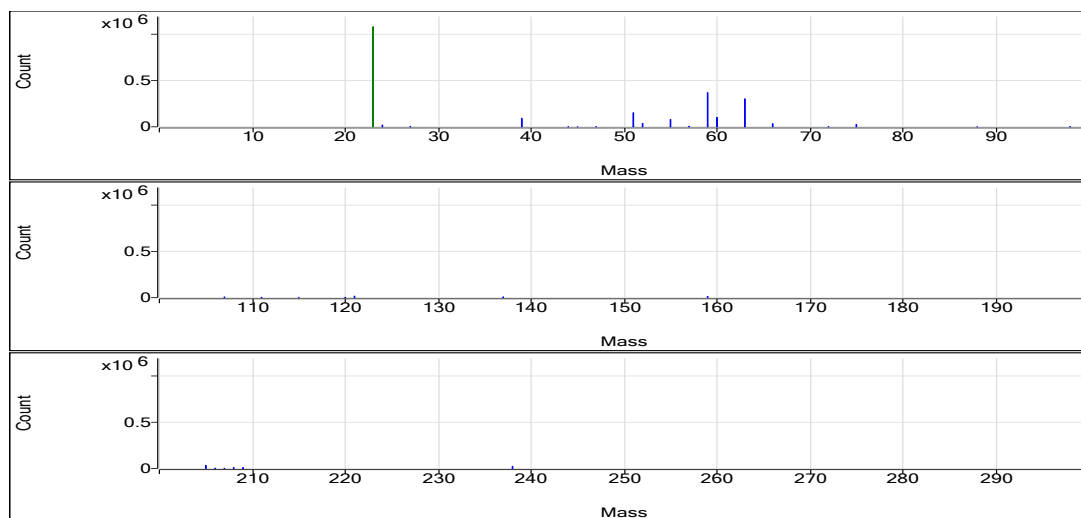


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.713	0.0518	33200.52	0.0011	7.835E-05
Be	9	1	No Gas	51.834	0.0551	35523.14	0.0011	7.835E-05
Be	9	1	No Gas	53.059	0.0564	36717.68	0.0011	7.835E-05
Se	78	2	H2	96.704	0.049	3577.74	0.0005	2.594E-05
Se	78	2	H2	96.618	0.049	3623.75	0.0005	2.594E-05
Se	78	2	H2	99.706	0.0506	3625.75	0.0005	2.594E-05
Na	23	3	He	127633.66	231.9623	10788169.84	0.0018	0.1731
Na	23	3	He	127321.923	231.3962	10715479.84	0.0018	0.1731
Na	23	3	He	131545.213	239.0659	10802067.34	0.0018	0.1731
Mg	24	3	He	4815.749	4.4188	205512.81	0.0009	0.006537
Mg	24	3	He	4887.735	4.4848	207681.75	0.0009	0.006537
Mg	24	3	He	4971.715	4.5617	206119.98	0.0009	0.006537
Al	27	3	He	4732.512	1.3768	64034.01	0.0003	0.00231
Al	27	3	He	4768.682	1.3873	64244.65	0.0003	0.00231
Al	27	3	He	4992.996	1.4525	65629.80	0.0003	0.00231
K	39	3	He	4915.082	4.0211	187015.34	0.0007	0.3475
K	39	3	He	4846.245	3.9697	183827.16	0.0007	0.3475
K	39	3	He	4963.074	4.057	183312.92	0.0007	0.3475
Ca	44	3	He	4673.085	0.1902	8846.43	0	0.002807
Ca	44	3	He	4773.332	0.1942	8994.49	0	0.002807
Ca	44	3	He	4934.616	0.2007	9068.53	0	0.002807
Ti	47	3	He	487.587	0.1517	7057.55	0.0003	0.0001123
Ti	47	3	He	494.978	0.154	7133.59	0.0003	0.0001123
Ti	47	3	He	509.146	0.1585	7159.61	0.0003	0.0001123
V	51	3	He	479.182	6.5536	304796.88	0.0137	0.008308
V	51	3	He	477.839	6.5353	302634.16	0.0137	0.008308
V	51	3	He	491.877	6.727	303956.50	0.0137	0.008308
Cr	52	3	He	480.237	8.227	382624.99	0.0171	0.02156
Cr	52	3	He	480.013	8.2232	380799.49	0.0171	0.02156
Cr	52	3	He	496.933	8.5123	384623.90	0.0171	0.02156
Mn	55	3	He	470.063	3.4319	159614.09	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	477.619	3.4871	161479.34	0.0073	0.002316
Mn	55	3	He	483.695	3.5314	159564.91	0.0073	0.002316
Fe	57	3	He	4784.201	1.5524	72200.37	0.0003	0.002736
Fe	57	3	He	4714.581	1.5299	70845.05	0.0003	0.002736
Fe	57	3	He	4711.912	1.529	69087.24	0.0003	0.002736
Co	59	3	He	476.892	15.8458	736961.06	0.0332	0.001922
Co	59	3	He	480.2	15.9557	738876.63	0.0332	0.001922
Co	59	3	He	489.771	16.2737	735317.94	0.0332	0.001922
Ni	60	3	He	472.457	4.4102	205112.91	0.0093	0.003141
Ni	60	3	He	473.163	4.4168	204534.25	0.0093	0.003141
Ni	60	3	He	483.993	4.5178	204136.56	0.0093	0.003141
Cu	63	3	He	478.139	12.9217	600966.94	0.027	0.003732
Cu	63	3	He	483.021	13.0536	604486.44	0.027	0.003732
Cu	63	3	He	491.888	13.2932	600645.81	0.027	0.003732
Zn	66	3	He	482.349	1.5048	69986.19	0.0031	0.002032
Zn	66	3	He	488.632	1.5244	70591.09	0.0031	0.002032
Zn	66	3	He	494.99	1.5442	69773.64	0.0031	0.002032
As	75	3	He	475	1.212	56366.28	0.0025	0.0007733
As	75	3	He	478.569	1.2211	56544.93	0.0025	0.0007733
As	75	3	He	490.425	1.2513	56539.11	0.0025	0.0007733
Sr	88	3	He	48.662	0.5131	20063.07	0.0105	0.004071
Sr	88	3	He	47.744	0.5035	20413.70	0.0105	0.004071
Sr	88	3	He	52.462	0.5529	21174.85	0.0105	0.004071
Mo	98	3	He	50.624	1.1883	46459.23	0.0234	0.003908
Mo	98	3	He	48.785	1.1452	46429.42	0.0234	0.003908
Mo	98	3	He	51.248	1.2029	46068.59	0.0234	0.003908
Ag	107	3	He	50.465	2.4886	97302.86	0.0493	0.0004851
Ag	107	3	He	48.991	2.4159	97945.40	0.0493	0.0004851
Ag	107	3	He	51.332	2.5314	96949.26	0.0493	0.0004851
Cd	111	3	He	48.396	0.2716	10617.66	0.0056	0
Cd	111	3	He	47.738	0.2679	10859.81	0.0056	0
Cd	111	3	He	51.539	0.2892	11075.95	0.0056	0
Sn	120	3	He	96.45	1.6888	66030.85	0.0169	0.0609
Sn	120	3	He	95.283	1.6691	67668.28	0.0169	0.0609
Sn	120	3	He	100.282	1.7535	67156.61	0.0169	0.0609
Sb	121	3	He	99.825	1.61	62950.49	0.0161	0.0005433
Sb	121	3	He	96.743	1.5603	63258.40	0.0161	0.0005433
Sb	121	3	He	102.773	1.6576	63482.68	0.0161	0.0005433
Ba	137	3	He	493.133	2.6049	101847.64	0.0053	0.001141
Ba	137	3	He	475.954	2.5142	101927.58	0.0053	0.001141
Ba	137	3	He	499.109	2.6364	100972.19	0.0053	0.001141
Tl	205	3	He	95.879	2.3762	362045.46	0.0248	0.0005854
Tl	205	3	He	98.946	2.4522	365225.70	0.0248	0.0005854
Tl	205	3	He	95.86	2.3757	358420.66	0.0248	0.0005854
Pb	208	3	He	49.52	1.6471	133889.95	0.0332	0.001693
Pb	208	3	He	50.947	1.6946	134275.96	0.0332	0.001693
Pb	208	3	He	49.999	1.6631	132922.57	0.0332	0.001693
U	238	3	He	50.164	1.694	258108.34	0.0338	0.0007949
U	238	3	He	51.447	1.7373	258755.27	0.0338	0.0007949
U	238	3	He	50.562	1.7074	257600.37	0.0338	0.0007949
Sc	45	1	No Gas			1249264.98		
Sc	45	1	No Gas			1279686.86		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1284387.40		
Ge	72	1	No Gas			640670.69		
Ge	72	1	No Gas			644273.27		
Ge	72	1	No Gas			650587.53		
Sc	45	2	H2			88498.96		
Sc	45	2	H2			89363.40		
Sc	45	2	H2			88397.36		
Ge	72	2	H2			72966.36		
Ge	72	2	H2			73971.15		
Ge	72	2	H2			71720.44		
In	115	2	H2			182418.83		
In	115	2	H2			186012.36		
In	115	2	H2			182701.44		
Sc	45	3	He			24939.56		
Sc	45	3	He			25320.13		
Sc	45	3	He			24348.74		
Ge	72	3	He			46508.29		
Ge	72	3	He			46307.94		
Ge	72	3	He			45184.48		
In	115	3	He			39561.04		
In	115	3	He			41014.92		
In	115	3	He			38768.93		
Tb	159	3	He			152364.99		
Tb	159	3	He			148940.33		
Tb	159	3	He			150869.70		
Bi	209	3	He			109702.03		
Bi	209	3	He			112400.77		
Bi	209	3	He			110658.54		

Quantitation Report

Data File Name 164SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:50:28 PM
Sample Name LCS 410-682490/2-A
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

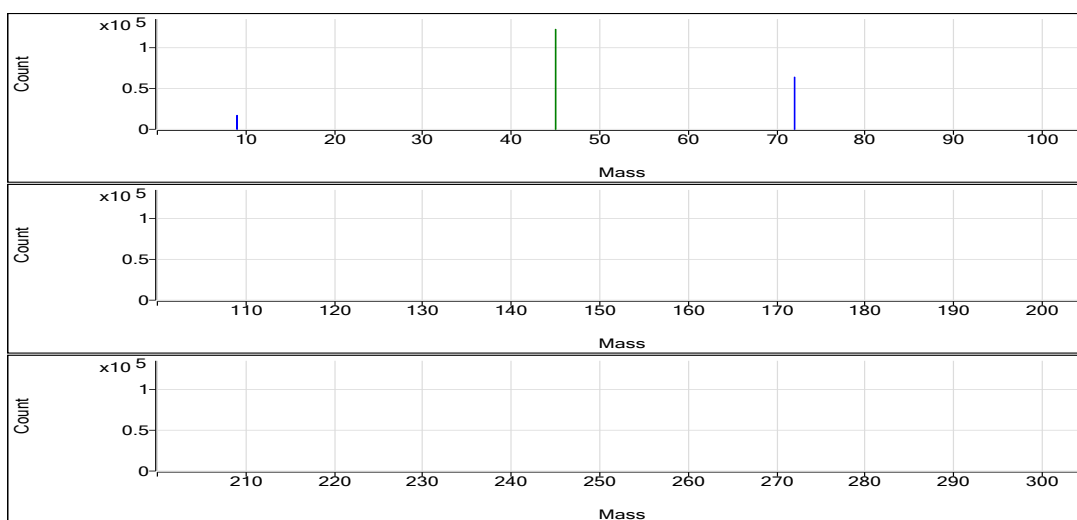
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.479	ppb	4.8	34723.02	0.0537	Pulse	0.5000	3
Se	78	72	H2	95.932	ppb	0.8	3512.61	0.0486	Pulse	1.5000	3
Na	23	72	He	290425.717	ppb	0.8	24464178.80	527.6010	Analog	0.1000	3
Mg	24	72	He	4755.774	ppb	1.4	202342.63	4.3639	Pulse	0.1000	3
Al	27	72	He	4819.965	ppb	1.3	65017.91	1.4022	Pulse	0.1000	3
K	39	72	He	4829.683	ppb	0.9	183513.59	3.9573	Pulse	0.5000	3
Ca	44	72	He	4830.765	ppb	2.9	9111.91	0.1965	Pulse	0.5000	3
Ti	47	72	He	496.383	ppb	1.5	7163.60	0.1545	Pulse	0.5000	3
V	51	72	He	478.266	ppb	0.9	303305.70	6.5411	Pulse	0.5000	3
Cr	52	72	He	475.724	ppb	0.5	377909.25	8.1499	Pulse	0.1000	3
Mn	55	72	He	466.705	ppb	1.0	157997.35	3.4074	Pulse	0.5000	3
Fe	57	72	He	4637.412	ppb	0.5	69780.30	1.5049	Pulse	0.1000	3
Co	59	72	He	475.704	ppb	1.0	732913.19	15.8064	Pulse	0.5000	3
Ni	60	72	He	468.116	ppb	1.0	202617.74	4.3697	Pulse	0.5000	3
Cu	63	72	He	475.430	ppb	1.0	595765.08	12.8485	Pulse	0.5000	3
Zn	66	72	He	477.904	ppb	0.8	69134.04	1.4910	Pulse	0.5000	3
As	75	72	He	475.951	ppb	1.0	56310.22	1.2144	Pulse	0.5000	3
Sr	88	115	He	51.238	ppb	3.4	20604.08	0.5401	Pulse	0.1000	3
Mo	98	115	He	52.382	ppb	1.0	46917.53	1.2294	Pulse	0.1000	3
Ag	107	115	He	50.343	ppb	1.4	94740.75	2.4826	Pulse	0.1000	3
Cd	111	115	He	50.811	ppb	1.5	10881.17	0.2851	Pulse	0.5000	3
Sn	120	115	He	101.662	ppb	2.7	67795.15	1.7768	Pulse	0.1000	3
Sb	121	115	He	102.050	ppb	2.8	62798.69	1.6459	Pulse	0.3000	3
Ba	137	115	He	502.872	ppb	2.2	101354.87	2.6563	Pulse	0.1000	3
Tl	205	159	He	95.983	ppb	1.0	355544.54	2.3787	Pulse	0.1000	3
Pb	208	159	He	49.966	ppb	1.3	248403.39	1.6620	Pulse	0.1000	3
U	238	159	He	51.561	ppb	1.2	260243.01	1.7412	Pulse	0.1000	3

ISTD Table:

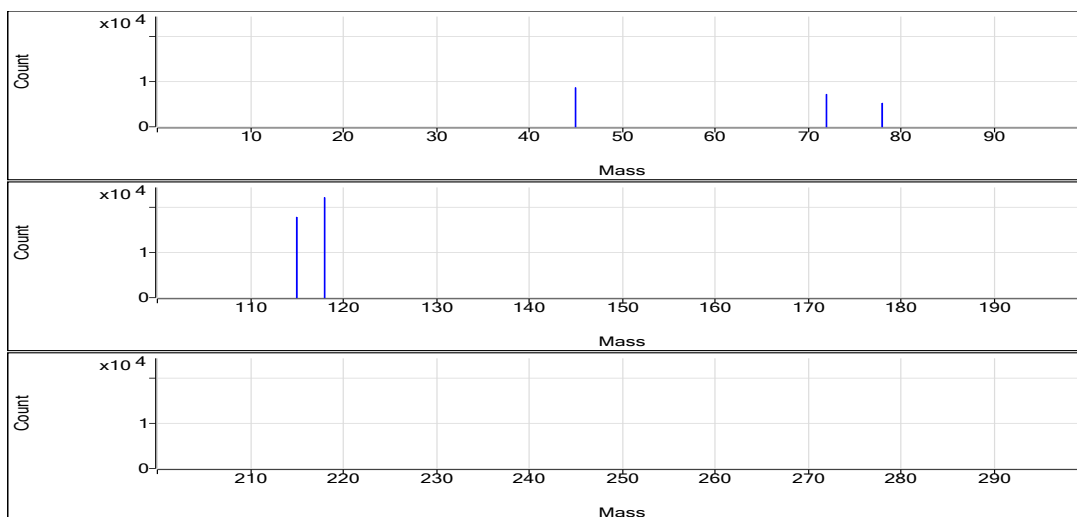
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1236632.17	3.2	94.6	Analog	0.1000	3
No Gas	Ge	72	646266.85	1.8	98.6	Pulse	0.1000	3
H2	Sc	45	86883.47	0.3	105.8	Pulse	0.1000	3
H2	Ge	72	72222.62	2.1	105.7	Pulse	0.1000	3
H2	In	115	178720.92	0.4	104.8	Pulse	0.1000	3
He	Sc	45	24525.60	2.3	95.8	Pulse	0.1000	3
He	Ge	72	46371.11	1.0	97.6	Pulse	0.1000	3
He	In	115	38167.60	2.0	93.2	Pulse	0.1000	3
He	Tb	159	149477.44	1.2	93.8	Pulse	0.1000	3
He	Bi	209	108792.19	0.6	93.0	Pulse	0.1000	3

No Gas

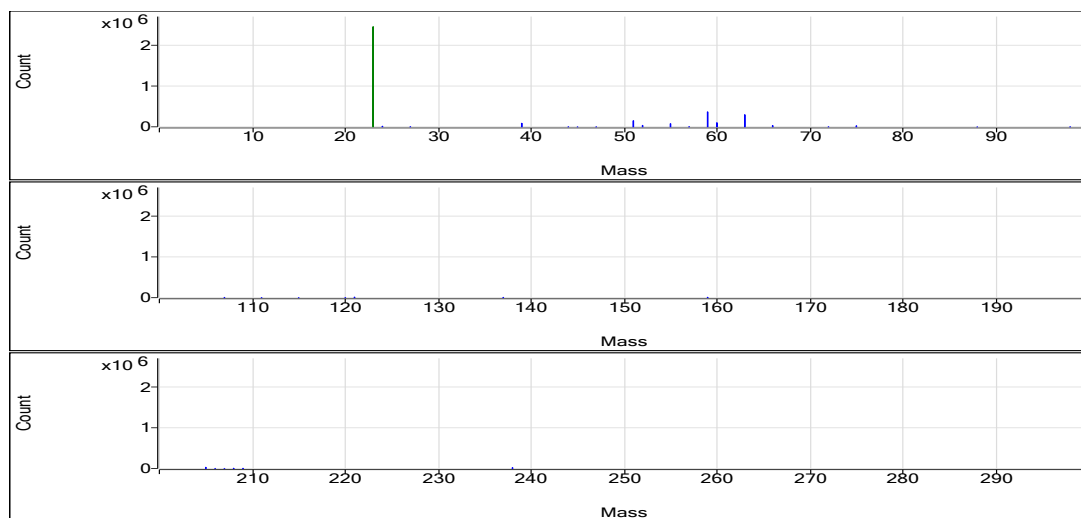


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.936	0.051	32334.87	0.0011	7.835E-05
Be	9	1	No Gas	50.762	0.054	34974.12	0.0011	7.835E-05
Be	9	1	No Gas	52.74	0.0561	36860.06	0.0011	7.835E-05
Se	78	2	H2	96.628	0.049	3469.05	0.0005	2.594E-05
Se	78	2	H2	95.119	0.0482	3561.73	0.0005	2.594E-05
Se	78	2	H2	96.05	0.0487	3507.06	0.0005	2.594E-05
Na	23	3	He	287900.133	523.0144	24518564.63	0.0018	0.1731
Na	23	3	He	290647.894	528.0045	24392307.14	0.0018	0.1731
Na	23	3	He	292729.125	531.7841	24481664.64	0.0018	0.1731
Mg	24	3	He	4682.641	4.2969	201435.13	0.0009	0.006537
Mg	24	3	He	4815.285	4.4184	204118.34	0.0009	0.006537
Mg	24	3	He	4769.396	4.3764	201474.43	0.0009	0.006537
Al	27	3	He	4756.895	1.3839	64876.86	0.0003	0.00231
Al	27	3	He	4825.863	1.4039	64858.19	0.0003	0.00231
Al	27	3	He	4877.136	1.4188	65318.69	0.0003	0.00231
K	39	3	He	4876.826	3.9925	187166.92	0.0007	0.3475
K	39	3	He	4824.049	3.9531	182621.00	0.0007	0.3475
K	39	3	He	4788.174	3.9263	180752.86	0.0007	0.3475
Ca	44	3	He	4671.73	0.1902	8914.46	0	0.002807
Ca	44	3	He	4896.22	0.1992	9200.64	0	0.002807
Ca	44	3	He	4924.346	0.2003	9220.64	0	0.002807
Ti	47	3	He	495.115	0.1541	7223.61	0.0003	0.0001123
Ti	47	3	He	504.383	0.157	7251.65	0.0003	0.0001123
Ti	47	3	He	489.649	0.1524	7015.53	0.0003	0.0001123
V	51	3	He	474.248	6.4862	304069.16	0.0137	0.008308
V	51	3	He	482.558	6.5997	304888.56	0.0137	0.008308
V	51	3	He	477.993	6.5374	300959.38	0.0137	0.008308
Cr	52	3	He	473.198	8.1068	380039.53	0.0171	0.02156
Cr	52	3	He	476.23	8.1586	376902.30	0.0171	0.02156
Cr	52	3	He	477.744	8.1844	376785.93	0.0171	0.02156
Mn	55	3	He	461.623	3.3704	158000.47	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	468.277	3.4189	157944.17	0.0073	0.002316
Mn	55	3	He	470.216	3.4331	158047.41	0.0073	0.002316
Fe	57	3	He	4611.373	1.4964	70151.99	0.0003	0.002736
Fe	57	3	He	4642.687	1.5066	69599.75	0.0003	0.002736
Fe	57	3	He	4658.174	1.5116	69589.17	0.0003	0.002736
Co	59	3	He	470.313	15.6272	732594.38	0.0332	0.001922
Co	59	3	He	478.605	15.9027	734660.81	0.0332	0.001922
Co	59	3	He	478.195	15.8891	731484.38	0.0332	0.001922
Ni	60	3	He	462.954	4.3216	202593.69	0.0093	0.003141
Ni	60	3	He	470.872	4.3955	203057.56	0.0093	0.003141
Ni	60	3	He	470.52	4.3922	202201.98	0.0093	0.003141
Cu	63	3	He	470.18	12.7067	595681.31	0.027	0.003732
Cu	63	3	He	477.882	12.9148	596626.38	0.027	0.003732
Cu	63	3	He	478.229	12.9242	594987.56	0.027	0.003732
Zn	66	3	He	473.358	1.4768	69231.31	0.0031	0.002032
Zn	66	3	He	481.081	1.5009	69335.46	0.0031	0.002032
Zn	66	3	He	479.272	1.4952	68835.35	0.0031	0.002032
As	75	3	He	471.708	1.2036	56422.46	0.0025	0.0007733
As	75	3	He	481.421	1.2283	56745.67	0.0025	0.0007733
As	75	3	He	474.724	1.2113	55762.53	0.0025	0.0007733
Sr	88	3	He	52.89	0.5574	20854.35	0.0105	0.004071
Sr	88	3	He	51.446	0.5423	20674.10	0.0105	0.004071
Sr	88	3	He	49.377	0.5206	20283.78	0.0105	0.004071
Mo	98	3	He	52.679	1.2363	46258.38	0.0234	0.003908
Mo	98	3	He	52.707	1.237	47161.36	0.0234	0.003908
Mo	98	3	He	51.761	1.2149	47332.85	0.0234	0.003908
Ag	107	3	He	50.668	2.4987	93489.18	0.0493	0.0004851
Ag	107	3	He	50.832	2.5068	95572.08	0.0493	0.0004851
Ag	107	3	He	49.528	2.4425	95161.00	0.0493	0.0004851
Cd	111	3	He	50.706	0.2845	10645.68	0.0056	0
Cd	111	3	He	51.623	0.2897	11043.94	0.0056	0
Cd	111	3	He	50.105	0.2811	10953.88	0.0056	0
Sn	120	3	He	102.971	1.7989	67306.28	0.0169	0.0609
Sn	120	3	He	103.546	1.8086	68953.58	0.0169	0.0609
Sn	120	3	He	98.469	1.7229	67125.58	0.0169	0.0609
Sb	121	3	He	104.006	1.6774	62762.85	0.0161	0.0005433
Sb	121	3	He	103.315	1.6663	63529.21	0.0161	0.0005433
Sb	121	3	He	98.83	1.594	62104.02	0.0161	0.0005433
Ba	137	3	He	513.235	2.711	101434.59	0.0053	0.001141
Ba	137	3	He	503.927	2.6619	101486.08	0.0053	0.001141
Ba	137	3	He	491.455	2.596	101143.95	0.0053	0.001141
Tl	205	3	He	96.994	2.4038	356280.50	0.0248	0.0005854
Tl	205	3	He	95.112	2.3572	357056.64	0.0248	0.0005854
Tl	205	3	He	95.841	2.3752	353296.48	0.0248	0.0005854
Pb	208	3	He	50.36	1.6751	131862.64	0.0332	0.001693
Pb	208	3	He	49.219	1.6372	132347.37	0.0332	0.001693
Pb	208	3	He	50.32	1.6737	131401.79	0.0332	0.001693
U	238	3	He	52.04	1.7573	260463.47	0.0338	0.0007949
U	238	3	He	50.885	1.7184	260289.02	0.0338	0.0007949
U	238	3	He	51.759	1.7478	259976.54	0.0338	0.0007949
Sc	45	1	No Gas			1212905.76		
Sc	45	1	No Gas			1214732.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1282258.34		
Ge	72	1	No Gas			634061.05		
Ge	72	1	No Gas			647692.80		
Ge	72	1	No Gas			657046.71		
Sc	45	2	H2			87110.81		
Sc	45	2	H2			86901.39		
Sc	45	2	H2			86638.21		
Ge	72	2	H2			70805.63		
Ge	72	2	H2			73850.10		
Ge	72	2	H2			72012.14		
In	115	2	H2			179214.49		
In	115	2	H2			179140.15		
In	115	2	H2			177808.12		
Sc	45	3	He			23867.91		
Sc	45	3	He			24809.34		
Sc	45	3	He			24899.55		
Ge	72	3	He			46879.33		
Ge	72	3	He			46197.16		
Ge	72	3	He			46036.85		
In	115	3	He			37886.88		
In	115	3	He			38608.56		
In	115	3	He			39431.06		
Tb	159	3	He			148214.89		
Tb	159	3	He			151476.05		
Tb	159	3	He			148741.38		
Bi	209	3	He			109532.27		
Bi	209	3	He			108481.72		
Bi	209	3	He			108362.57		

Quantitation Report

Data File Name 166_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:54:52 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

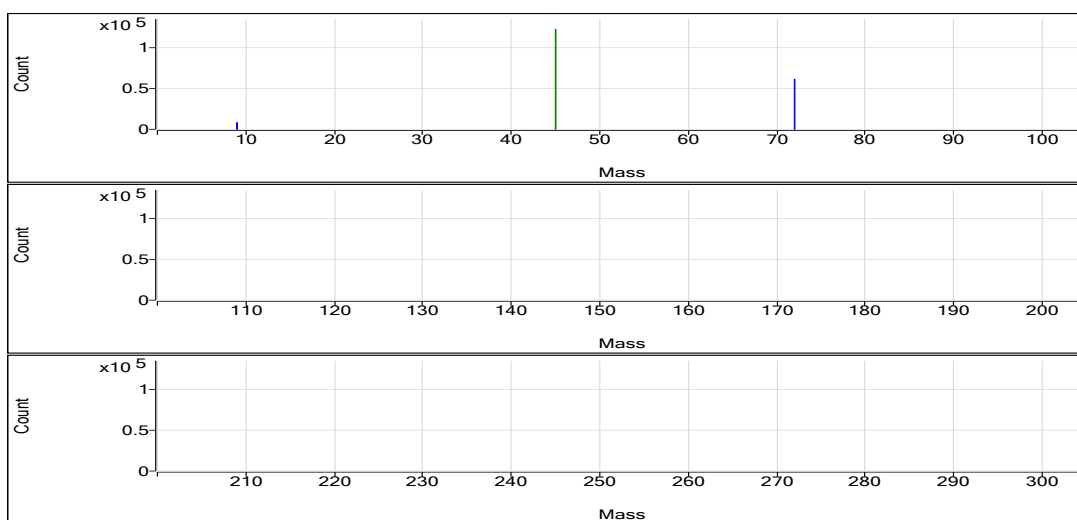
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.312	ppb	4.2	16712.98	0.0270	Pulse	0.5000	3
Se	78	72	H2	25.937	ppb	3.4	914.03	0.0132	Pulse	1.5000	3
Na	23	72	He	2521.521	ppb	1.3	214766.61	4.7523	Pulse	0.1000	3
Mg	24	72	He	2475.803	ppb	0.3	102813.20	2.2749	Pulse	0.1000	3
Al	27	72	He	2417.670	ppb	1.3	31841.45	0.7045	Pulse	0.1000	3
K	39	72	He	2494.679	ppb	4.7	99956.63	2.2121	Pulse	0.5000	3
Ca	44	72	He	2500.539	ppb	1.6	4658.69	0.1031	Pulse	0.5000	3
Ti	47	72	He	2425.558	ppb	0.2	34096.60	0.7544	Pulse	0.5000	3
V	51	72	He	243.855	ppb	0.3	150914.34	3.3392	Pulse	0.5000	3
Cr	52	72	He	244.357	ppb	0.5	189665.13	4.1967	Pulse	0.1000	3
Mn	55	72	He	241.466	ppb	0.6	79726.66	1.7641	Pulse	0.5000	3
Fe	57	72	He	2447.698	ppb	2.5	35957.21	0.7956	Pulse	0.1000	3
Co	59	72	He	244.276	ppb	0.5	366861.07	8.1175	Pulse	0.5000	3
Ni	60	72	He	242.978	ppb	0.5	102573.96	2.2697	Pulse	0.5000	3
Cu	63	72	He	242.600	ppb	0.3	296388.00	6.5581	Pulse	0.5000	3
Zn	66	72	He	242.937	ppb	1.7	34296.31	0.7589	Pulse	0.5000	3
As	75	72	He	239.842	ppb	0.7	27674.47	0.6123	Pulse	0.5000	3
Sr	88	115	He	25.711	ppb	3.9	10443.74	0.2730	Pulse	0.1000	3
Mo	98	115	He	25.338	ppb	1.3	22827.02	0.5967	Pulse	0.1000	3
Ag	107	115	He	25.979	ppb	1.2	49007.39	1.2814	Pulse	0.1000	3
Cd	111	115	He	25.224	ppb	1.5	5412.97	0.1415	Pulse	0.5000	3
Sn	120	115	He	25.284	ppb	0.8	18651.85	0.4877	Pulse	0.1000	3
Sb	121	115	He	25.424	ppb	1.1	15699.17	0.4105	Pulse	0.3000	3
Ba	137	115	He	247.355	ppb	2.1	49989.27	1.3072	Pulse	0.1000	3
Tl	205	159	He	24.554	ppb	2.3	91913.31	0.6090	Pulse	0.1000	3
Pb	208	159	He	24.739	ppb	0.5	124340.21	0.8237	Pulse	0.1000	3
U	238	159	He	24.853	ppb	1.6	126739.41	0.8397	Pulse	0.1000	3

ISTD Table:

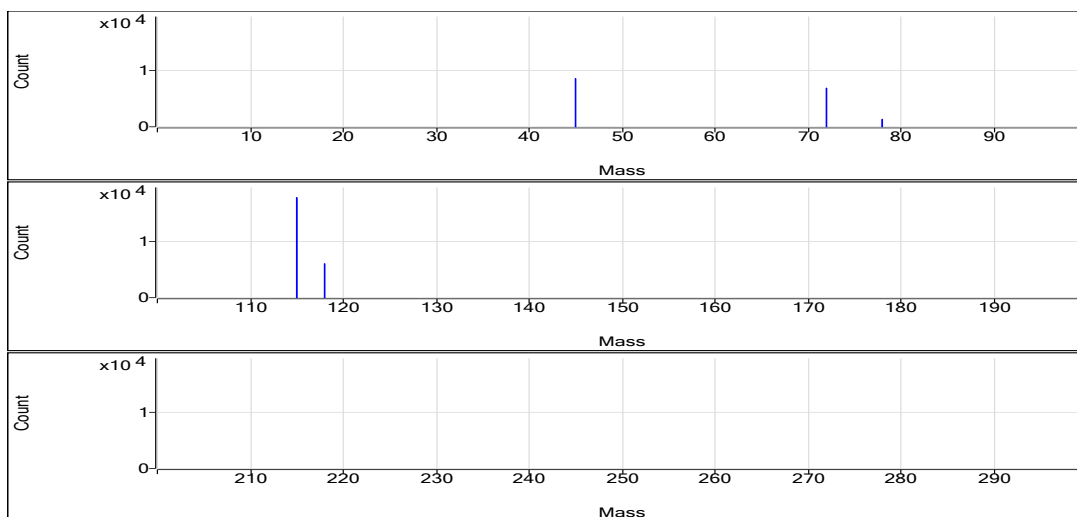
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1234025.97	2.7	94.4	Analog	0.1000	3
No Gas	Ge	72	619690.81	1.4	94.6	Pulse	0.1000	3
H2	Sc	45	86294.04	1.3	105.0	Pulse	0.1000	3
H2	Ge	72	69417.34	2.0	101.6	Pulse	0.1000	3
H2	In	115	178874.25	1.9	104.9	Pulse	0.1000	3
He	Sc	45	24465.41	1.0	95.5	Pulse	0.1000	3
He	Ge	72	45194.56	0.6	95.1	Pulse	0.1000	3
He	In	115	38250.94	1.6	93.4	Pulse	0.1000	3
He	Tb	159	150950.94	0.9	94.7	Pulse	0.1000	3
He	Bi	209	110423.57	1.5	94.4	Pulse	0.1000	3

No Gas

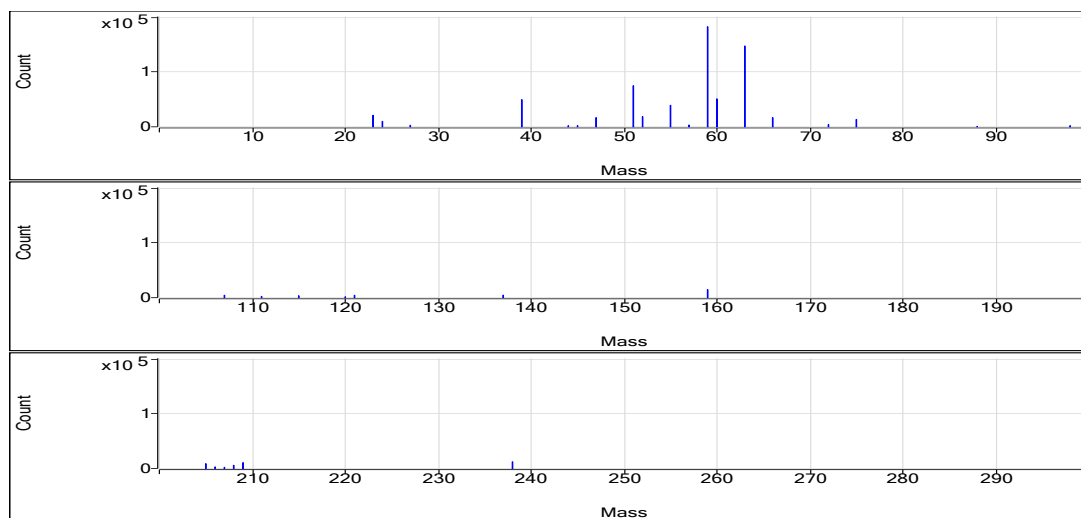


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	24.13	0.0257	15877.49	0.0011	7.835E-05
Be	9	1	No Gas	25.619	0.0273	16702.27	0.0011	7.835E-05
Be	9	1	No Gas	26.186	0.0279	17559.17	0.0011	7.835E-05
Se	78	2	H2	24.954	0.0127	886.69	0.0005	2.594E-05
Se	78	2	H2	26.604	0.0135	916.69	0.0005	2.594E-05
Se	78	2	H2	26.254	0.0133	938.70	0.0005	2.594E-05
Na	23	3	He	2560.15	4.8224	216547.09	0.0018	0.1731
Na	23	3	He	2499.873	4.7129	213045.82	0.0018	0.1731
Na	23	3	He	2504.541	4.7214	214706.93	0.0018	0.1731
Mg	24	3	He	2484.812	2.2832	102524.67	0.0009	0.006537
Mg	24	3	He	2470.713	2.2703	102625.88	0.0009	0.006537
Mg	24	3	He	2471.882	2.2713	103289.05	0.0009	0.006537
Al	27	3	He	2388.14	0.6959	31250.07	0.0003	0.00231
Al	27	3	He	2412.711	0.7031	31781.50	0.0003	0.00231
Al	27	3	He	2452.157	0.7145	32492.79	0.0003	0.00231
K	39	3	He	2602.808	2.2929	102959.97	0.0007	0.3475
K	39	3	He	2509.788	2.2234	100505.20	0.0007	0.3475
K	39	3	He	2371.442	2.1199	96404.72	0.0007	0.3475
Ca	44	3	He	2547.014	0.1049	4712.70	0	0.002807
Ca	44	3	He	2470.05	0.1019	4604.67	0	0.002807
Ca	44	3	He	2484.553	0.1024	4658.69	0	0.002807
Ti	47	3	He	2424.916	0.7542	33868.75	0.0003	0.0001123
Ti	47	3	He	2431.199	0.7562	34183.42	0.0003	0.0001123
Ti	47	3	He	2420.56	0.7529	34237.63	0.0003	0.0001123
V	51	3	He	243.1	3.3289	149481.41	0.0137	0.008308
V	51	3	He	244.711	3.3509	151475.02	0.0137	0.008308
V	51	3	He	243.753	3.3378	151786.59	0.0137	0.008308
Cr	52	3	He	245.304	4.2129	189177.36	0.0171	0.02156
Cr	52	3	He	244.83	4.2048	190075.13	0.0171	0.02156
Cr	52	3	He	242.938	4.1725	189742.91	0.0171	0.02156
Mn	55	3	He	240.712	1.7586	78967.70	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	243.194	1.7767	80314.06	0.0073	0.002316
Mn	55	3	He	240.492	1.757	79898.22	0.0073	0.002316
Fe	57	3	He	2399.117	0.7799	35018.63	0.0003	0.002736
Fe	57	3	He	2515.224	0.8175	36952.73	0.0003	0.002736
Fe	57	3	He	2428.754	0.7895	35900.27	0.0003	0.002736
Co	59	3	He	245.482	8.1576	366313.13	0.0332	0.001922
Co	59	3	He	244.402	8.1217	367138.34	0.0332	0.001922
Co	59	3	He	242.943	8.0733	367131.75	0.0332	0.001922
Ni	60	3	He	243.847	2.2778	102280.98	0.0093	0.003141
Ni	60	3	He	243.528	2.2748	102829.86	0.0093	0.003141
Ni	60	3	He	241.56	2.2564	102611.04	0.0093	0.003141
Cu	63	3	He	243	6.5689	294973.09	0.027	0.003732
Cu	63	3	He	242.902	6.5663	296823.97	0.027	0.003732
Cu	63	3	He	241.897	6.5391	297366.94	0.027	0.003732
Zn	66	3	He	246.429	0.7698	34566.89	0.0031	0.002032
Zn	66	3	He	244.091	0.7625	34468.70	0.0031	0.002032
Zn	66	3	He	238.291	0.7444	33853.33	0.0031	0.002032
As	75	3	He	238.782	0.6096	27375.32	0.0025	0.0007733
As	75	3	He	241.766	0.6172	27902.20	0.0025	0.0007733
As	75	3	He	238.977	0.6101	27745.88	0.0025	0.0007733
Sr	88	3	He	25.306	0.2688	10103.47	0.0105	0.004071
Sr	88	3	He	24.978	0.2654	10303.63	0.0105	0.004071
Sr	88	3	He	26.849	0.2849	10924.11	0.0105	0.004071
Mo	98	3	He	25.029	0.5895	22156.16	0.0234	0.003908
Mo	98	3	He	25.668	0.6044	23467.91	0.0234	0.003908
Mo	98	3	He	25.317	0.5962	22856.99	0.0234	0.003908
Ag	107	3	He	26.342	1.2993	48837.04	0.0493	0.0004851
Ag	107	3	He	25.842	1.2746	49489.06	0.0493	0.0004851
Ag	107	3	He	25.752	1.2702	48696.06	0.0493	0.0004851
Cd	111	3	He	25.579	0.1435	5394.97	0.0056	0
Cd	111	3	He	24.818	0.1393	5406.96	0.0056	0
Cd	111	3	He	25.274	0.1418	5436.98	0.0056	0
Sn	120	3	He	25.524	0.4917	18481.66	0.0169	0.0609
Sn	120	3	He	25.144	0.4853	18842.29	0.0169	0.0609
Sn	120	3	He	25.185	0.486	18631.60	0.0169	0.0609
Sb	121	3	He	25.71	0.4151	15601.28	0.0161	0.0005433
Sb	121	3	He	25.399	0.4101	15921.59	0.0161	0.0005433
Sb	121	3	He	25.163	0.4062	15574.63	0.0161	0.0005433
Ba	137	3	He	252.344	1.3335	50123.46	0.0053	0.001141
Ba	137	3	He	241.928	1.2785	49641.35	0.0053	0.001141
Ba	137	3	He	247.793	1.3095	50203.00	0.0053	0.001141
Tl	205	3	He	25.195	0.6248	93681.65	0.0248	0.0005854
Tl	205	3	He	24.165	0.5993	91406.17	0.0248	0.0005854
Tl	205	3	He	24.302	0.6027	90652.10	0.0248	0.0005854
Pb	208	3	He	24.76	0.8244	64493.21	0.0332	0.001693
Pb	208	3	He	24.602	0.8192	64543.86	0.0332	0.001693
Pb	208	3	He	24.856	0.8276	64593.40	0.0332	0.001693
U	238	3	He	24.833	0.839	125791.20	0.0338	0.0007949
U	238	3	He	24.472	0.8268	126104.27	0.0338	0.0007949
U	238	3	He	25.253	0.8532	128322.76	0.0338	0.0007949
Sc	45	1	No Gas			1212959.04		
Sc	45	1	No Gas			1216742.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1272376.31		
Ge	72	1	No Gas			617570.15		
Ge	72	1	No Gas			612000.50		
Ge	72	1	No Gas			629501.79		
Sc	45	2	H2			85412.32		
Sc	45	2	H2			85865.79		
Sc	45	2	H2			87604.02		
Ge	72	2	H2			69972.84		
Ge	72	2	H2			67863.71		
Ge	72	2	H2			70415.47		
In	115	2	H2			177358.28		
In	115	2	H2			176560.64		
In	115	2	H2			182703.83		
Sc	45	3	He			24288.55		
Sc	45	3	He			24368.65		
Sc	45	3	He			24739.03		
Ge	72	3	He			44904.29		
Ge	72	3	He			45204.37		
Ge	72	3	He			45475.03		
In	115	3	He			37716.93		
In	115	3	He			38959.17		
In	115	3	He			38468.41		
Tb	159	3	He			149930.00		
Tb	159	3	He			152516.14		
Tb	159	3	He			150406.68		
Bi	209	3	He			108613.91		
Bi	209	3	He			110879.70		
Bi	209	3	He			111777.11		

Quantitation Report

Data File Name 168_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 6:59:16 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

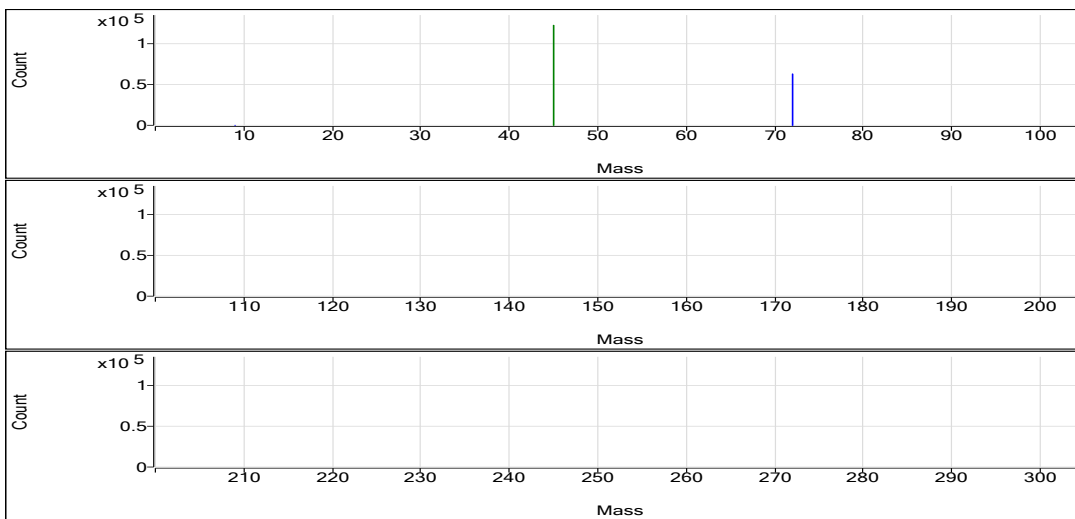
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.039	ppb	64.4	75.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.025	ppb	202.0	2.67	0.0000	Pulse	1.5000	3
Na	23	72	He	13.394	ppb	35.4	8982.66	0.1974	Pulse	0.1000	3
Mg	24	72	He	3.561	ppb	40.5	446.69	0.0098	Pulse	0.1000	3
Al	27	72	He	-1.382	ppb	N/A	86.67	0.0019	Pulse	0.1000	3
K	39	72	He	26.660	ppb	361.7	16684.67	0.3674	Pulse	0.5000	3
Ca	44	72	He	-9.700	ppb	N/A	110.00	0.0024	Pulse	0.5000	3
Ti	47	72	He	0.347	ppb	108.6	10.00	0.0002	Pulse	0.5000	3
V	51	72	He	-0.051	ppb	N/A	346.01	0.0076	Pulse	0.5000	3
Cr	52	72	He	-0.060	ppb	N/A	933.39	0.0205	Pulse	0.1000	3
Mn	55	72	He	0.028	ppb	131.5	114.67	0.0025	Pulse	0.5000	3
Fe	57	72	He	-1.217	ppb	N/A	106.67	0.0023	Pulse	0.1000	3
Co	59	72	He	0.046	ppb	19.3	156.67	0.0034	Pulse	0.5000	3
Ni	60	72	He	-0.011	ppb	N/A	138.00	0.0030	Pulse	0.5000	3
Cu	63	72	He	-0.006	ppb	N/A	162.00	0.0036	Pulse	0.5000	3
Zn	66	72	He	-0.225	ppb	N/A	60.67	0.0013	Pulse	0.5000	3
As	75	72	He	0.047	ppb	82.7	40.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.162	ppb	N/A	90.00	0.0024	Pulse	0.1000	3
Mo	98	115	He	-0.028	ppb	N/A	123.34	0.0032	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	2539.6	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.164	ppb	N/A	2210.23	0.0581	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	31.0	55.56	0.0015	Pulse	0.3000	3
Ba	137	115	He	0.049	ppb	150.0	53.33	0.0014	Pulse	0.1000	3
Tl	205	159	He	0.039	ppb	21.8	226.68	0.0016	Pulse	0.1000	3
Pb	208	159	He	-0.017	ppb	N/A	166.67	0.0011	Pulse	0.1000	3
U	238	159	He	0.008	ppb	133.7	153.34	0.0010	Pulse	0.1000	3

ISTD Table:

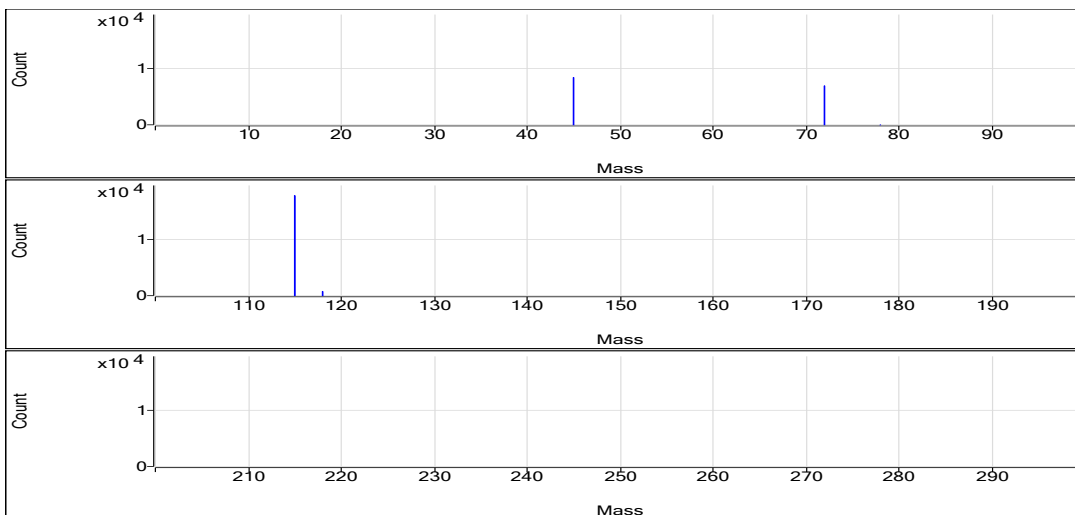
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1223873.78	2.0	93.6	Analog	0.1000	3
No Gas	Ge	72	628803.79	2.3	96.0	Pulse	0.1000	3
H2	Sc	45	84152.50	0.3	102.4	Pulse	0.1000	3
H2	Ge	72	69312.91	1.6	101.4	Pulse	0.1000	3
H2	In	115	177873.73	0.5	104.3	Pulse	0.1000	3
He	Sc	45	24068.24	1.2	94.0	Pulse	0.1000	3
He	Ge	72	45518.64	1.9	95.8	Pulse	0.1000	3
He	In	115	38021.96	2.0	92.9	Pulse	0.1000	3
He	Tb	159	145884.49	0.7	91.5	Pulse	0.1000	3
He	Bi	209	107872.44	0.7	92.2	Pulse	0.1000	3

No Gas

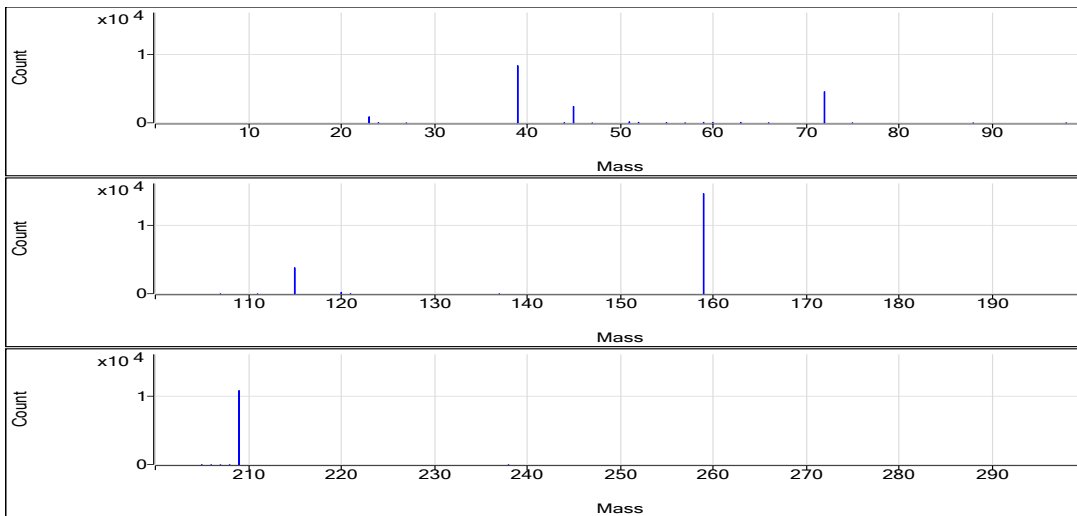


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.062	0.0001	88.00	0.0011	7.835E-05
Be	9	1	No Gas	0.012	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	0.045	0.0001	80.00	0.0011	7.835E-05
Se	78	2	H2	0.007	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.081	0.0001	4.67	0.0005	2.594E-05
Na	23	3	He	17.894	0.2055	9192.78	0.0018	0.1731
Na	23	3	He	8.453	0.1884	8552.44	0.0018	0.1731
Na	23	3	He	13.834	0.1982	9202.76	0.0018	0.1731
Mg	24	3	He	1.895	0.0083	370.02	0.0009	0.006537
Mg	24	3	He	4.406	0.0106	480.02	0.0009	0.006537
Mg	24	3	He	4.382	0.0106	490.03	0.0009	0.006537
Al	27	3	He	-0.255	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-1.127	0.002	90.00	0.0003	0.00231
Al	27	3	He	-2.763	0.0015	70.00	0.0003	0.00231
K	39	3	He	132.392	0.4464	19966.15	0.0007	0.3475
K	39	3	He	4.006	0.3505	15909.72	0.0007	0.3475
K	39	3	He	-56.419	0.3053	14178.14	0.0007	0.3475
Ca	44	3	He	-14.232	0.0022	100.00	0	0.002807
Ca	44	3	He	1.423	0.0029	130.00	0	0.002807
Ca	44	3	He	-16.291	0.0022	100.00	0	0.002807
Ti	47	3	He	0.214	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.772	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.054	0.0001	6.00	0.0003	0.0001123
V	51	3	He	-0.042	0.0077	346.01	0.0137	0.008308
V	51	3	He	-0.031	0.0079	358.01	0.0137	0.008308
V	51	3	He	-0.082	0.0072	334.01	0.0137	0.008308
Cr	52	3	He	0.073	0.0228	1020.06	0.0171	0.02156
Cr	52	3	He	-0.101	0.0198	900.06	0.0171	0.02156
Cr	52	3	He	-0.153	0.019	880.05	0.0171	0.02156
Mn	55	3	He	0.069	0.0028	126.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.021	0.0025	112.00	0.0073	0.002316
Mn	55	3	He	-0.005	0.0023	106.00	0.0073	0.002316
Fe	57	3	He	-2.233	0.002	90.00	0.0003	0.002736
Fe	57	3	He	-0.285	0.0026	120.00	0.0003	0.002736
Fe	57	3	He	-1.133	0.0024	110.00	0.0003	0.002736
Co	59	3	He	0.055	0.0038	168.00	0.0332	0.001922
Co	59	3	He	0.038	0.0032	144.00	0.0332	0.001922
Co	59	3	He	0.045	0.0034	158.00	0.0332	0.001922
Ni	60	3	He	-0.03	0.0029	128.00	0.0093	0.003141
Ni	60	3	He	0.069	0.0038	172.00	0.0093	0.003141
Ni	60	3	He	-0.074	0.0025	114.00	0.0093	0.003141
Cu	63	3	He	-0.007	0.0035	158.00	0.027	0.003732
Cu	63	3	He	0.002	0.0038	172.00	0.027	0.003732
Cu	63	3	He	-0.014	0.0034	156.00	0.027	0.003732
Zn	66	3	He	-0.25	0.0013	56.00	0.0031	0.002032
Zn	66	3	He	-0.214	0.0014	62.00	0.0031	0.002032
Zn	66	3	He	-0.21	0.0014	64.00	0.0031	0.002032
As	75	3	He	0.047	0.0009	40.00	0.0025	0.0007733
As	75	3	He	0.008	0.0008	36.00	0.0025	0.0007733
As	75	3	He	0.085	0.001	46.00	0.0025	0.0007733
Sr	88	3	He	-0.215	0.0018	70.00	0.0105	0.004071
Sr	88	3	He	-0.055	0.0035	130.01	0.0105	0.004071
Sr	88	3	He	-0.215	0.0018	70.00	0.0105	0.004071
Mo	98	3	He	-0.034	0.0031	120.01	0.0234	0.003908
Mo	98	3	He	-0.029	0.0032	120.01	0.0234	0.003908
Mo	98	3	He	-0.023	0.0034	130.01	0.0234	0.003908
Ag	107	3	He	0.022	0.0016	60.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.168	0.0581	2230.23	0.0169	0.0609
Sn	120	3	He	-0.147	0.0584	2170.21	0.0169	0.0609
Sn	120	3	He	-0.176	0.0579	2230.24	0.0169	0.0609
Sb	121	3	He	0.058	0.0015	56.67	0.0161	0.0005433
Sb	121	3	He	0.039	0.0012	43.33	0.0161	0.0005433
Sb	121	3	He	0.074	0.0017	66.67	0.0161	0.0005433
Ba	137	3	He	-0.019	0.001	40.00	0.0053	0.001141
Ba	137	3	He	0.039	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	0.128	0.0018	70.00	0.0053	0.001141
Tl	205	3	He	0.038	0.0015	220.01	0.0248	0.0005854
Tl	205	3	He	0.048	0.0018	260.01	0.0248	0.0005854
Tl	205	3	He	0.031	0.0014	200.01	0.0248	0.0005854
Pb	208	3	He	-0.018	0.0011	90.00	0.0332	0.001693
Pb	208	3	He	-0.022	0.001	50.00	0.0332	0.001693
Pb	208	3	He	-0.01	0.0014	130.01	0.0332	0.001693
U	238	3	He	-0.003	0.0007	100.00	0.0338	0.0007949
U	238	3	He	0.017	0.0014	200.01	0.0338	0.0007949
U	238	3	He	0.009	0.0011	160.01	0.0338	0.0007949
Sc	45	1	No Gas			1196533.58		
Sc	45	1	No Gas			1241799.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1233288.18		
Ge	72	1	No Gas			612269.95		
Ge	72	1	No Gas			638649.80		
Ge	72	1	No Gas			635491.63		
Sc	45	2	H2			84096.10		
Sc	45	2	H2			83924.47		
Sc	45	2	H2			84436.94		
Ge	72	2	H2			68024.03		
Ge	72	2	H2			70153.13		
Ge	72	2	H2			69761.58		
In	115	2	H2			178690.86		
In	115	2	H2			177891.70		
In	115	2	H2			177038.63		
Sc	45	3	He			23807.91		
Sc	45	3	He			24008.16		
Sc	45	3	He			24388.66		
Ge	72	3	He			44723.49		
Ge	72	3	He			45394.55		
Ge	72	3	He			46437.87		
In	115	3	He			38428.62		
In	115	3	He			37165.40		
In	115	3	He			38518.28		
Tb	159	3	He			144722.24		
Tb	159	3	He			146071.87		
Tb	159	3	He			146859.35		
Bi	209	3	He			108583.63		
Bi	209	3	He			107940.46		
Bi	209	3	He			107093.24		

Quantitation Report

Data File Name 169SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:01:29 PM
Sample Name 410-234447-K-8-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

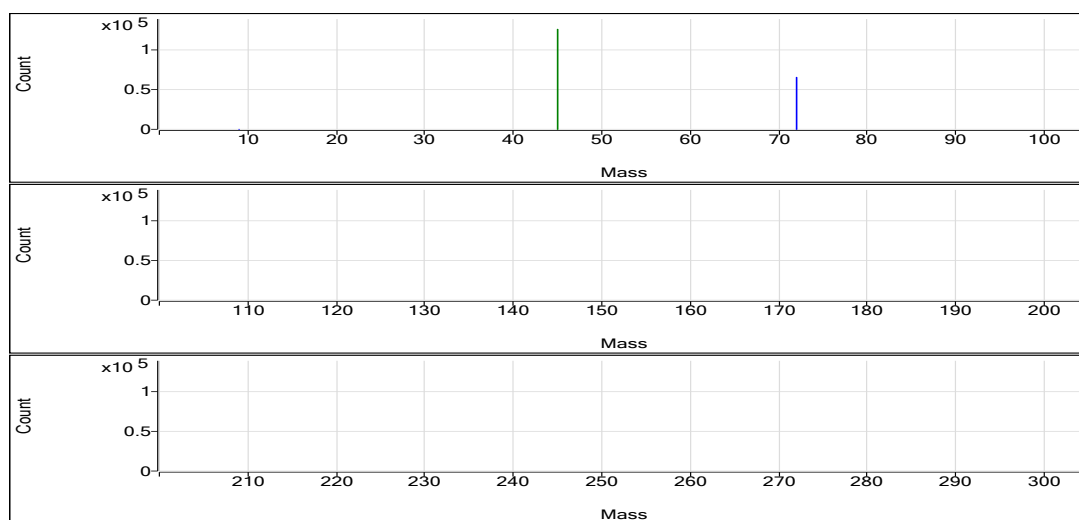
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.039	ppb	42.8	78.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.374	ppb	18.9	15.78	0.0002	Pulse	1.5000	3
Na	23	72	He	10156.869	ppb	1.1	871270.51	18.6184	Pulse	0.1000	3
Mg	24	72	He	1587.782	ppb	1.4	68387.56	1.4613	Pulse	0.1000	3
Al	27	72	He	178.024	ppb	8.5	2526.95	0.0540	Pulse	0.1000	3
K	39	72	He	1133.641	ppb	6.2	55928.28	1.1948	Pulse	0.5000	3
Ca	44	72	He	17525.538	ppb	0.8	33021.72	0.7056	Pulse	0.5000	3
Ti	47	72	He	1.336	ppb	32.3	24.67	0.0005	Pulse	0.5000	3
V	51	72	He	0.642	ppb	12.1	799.36	0.0171	Pulse	0.5000	3
Cr	52	72	He	0.502	ppb	38.8	1410.11	0.0301	Pulse	0.1000	3
Mn	55	72	He	129.909	ppb	2.1	44462.35	0.9501	Pulse	0.5000	3
Fe	57	72	He	101.962	ppb	2.5	1673.47	0.0358	Pulse	0.1000	3
Co	59	72	He	1.199	ppb	2.9	1954.13	0.0418	Pulse	0.5000	3
Ni	60	72	He	1.186	ppb	8.7	664.69	0.0142	Pulse	0.5000	3
Cu	63	72	He	3.349	ppb	3.6	4408.63	0.0942	Pulse	0.5000	3
Zn	66	72	He	124.561	ppb	1.7	18255.01	0.3901	Pulse	0.5000	3
As	75	72	He	0.155	ppb	45.6	54.67	0.0012	Pulse	0.5000	3
Sr	88	115	He	134.806	ppb	2.7	54905.84	1.4143	Pulse	0.1000	3
Mo	98	115	He	0.365	ppb	4.0	483.36	0.0125	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.147	ppb	12.9	32.00	0.0008	Pulse	0.5000	3
Sn	120	115	He	0.081	ppb	190.1	2416.94	0.0623	Pulse	0.1000	3
Sb	121	115	He	0.717	ppb	11.2	470.01	0.0121	Pulse	0.3000	3
Ba	137	115	He	34.399	ppb	2.5	7095.23	0.1828	Pulse	0.1000	3
Tl	205	159	He	0.025	ppb	73.3	183.34	0.0012	Pulse	0.1000	3
Pb	208	159	He	0.586	ppb	8.6	3193.59	0.0212	Pulse	0.1000	3
U	238	159	He	0.060	ppb	12.4	426.69	0.0028	Pulse	0.1000	3

ISTD Table:

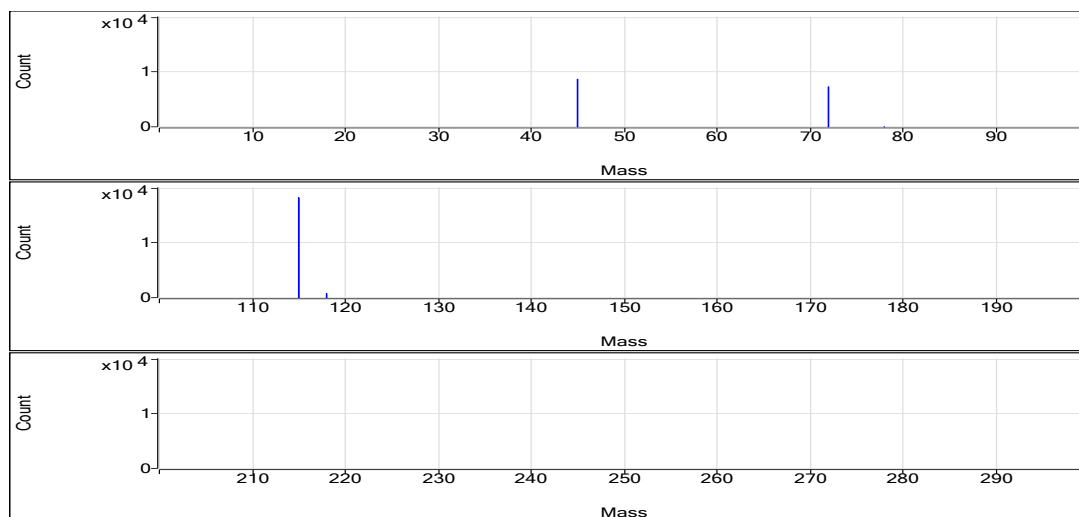
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1258600.48	1.3	96.3	Analog	0.1000	3
No Gas	Ge	72	654693.23	1.3	99.9	Pulse	0.1000	3
H2	Sc	45	87473.12	1.5	106.5	Pulse	0.1000	3
H2	Ge	72	73357.71	0.8	107.3	Pulse	0.1000	3
H2	In	115	183462.42	0.5	107.5	Pulse	0.1000	3
He	Sc	45	25029.77	1.6	97.7	Pulse	0.1000	3
He	Ge	72	46798.95	0.8	98.5	Pulse	0.1000	3
He	In	115	38819.00	0.4	94.8	Pulse	0.1000	3
He	Tb	159	150907.98	0.8	94.6	Pulse	0.1000	3
He	Bi	209	111754.31	0.9	95.6	Pulse	0.1000	3

No Gas

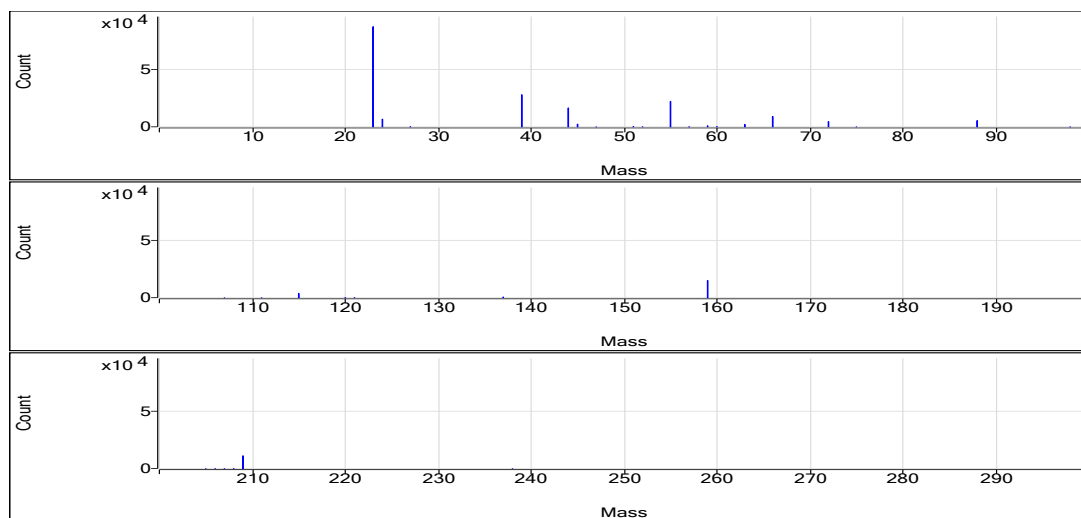


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0.0001	72.00	0.0011	7.835E-05
Be	9	1	No Gas	0.029	0.0001	72.00	0.0011	7.835E-05
Be	9	1	No Gas	0.058	0.0001	90.00	0.0011	7.835E-05
Se	78	2	H2	0.455	0.0003	18.67	0.0005	2.594E-05
Se	78	2	H2	0.326	0.0002	14.00	0.0005	2.594E-05
Se	78	2	H2	0.34	0.0002	14.67	0.0005	2.594E-05
Na	23	3	He	10025.226	18.3794	868242.33	0.0018	0.1731
Na	23	3	He	10216.708	18.7271	873410.92	0.0018	0.1731
Na	23	3	He	10228.672	18.7488	872158.27	0.0018	0.1731
Mg	24	3	He	1592.688	1.4658	69244.27	0.0009	0.006537
Mg	24	3	He	1563.733	1.4393	67125.74	0.0009	0.006537
Mg	24	3	He	1606.925	1.4788	68792.67	0.0009	0.006537
Al	27	3	He	165.529	0.0504	2380.26	0.0003	0.00231
Al	27	3	He	173.672	0.0528	2460.27	0.0003	0.00231
Al	27	3	He	194.872	0.0589	2740.33	0.0003	0.00231
K	39	3	He	1210.889	1.2525	59169.41	0.0007	0.3475
K	39	3	He	1115.671	1.1814	55097.20	0.0007	0.3475
K	39	3	He	1074.364	1.1505	53518.22	0.0007	0.3475
Ca	44	3	He	17377.165	0.6997	33053.14	0	0.002807
Ca	44	3	He	17633.126	0.7099	33111.23	0	0.002807
Ca	44	3	He	17566.321	0.7073	32900.80	0	0.002807
Ti	47	3	He	0.864	0.0004	18.00	0.0003	0.0001123
Ti	47	3	He	1.432	0.0006	26.00	0.0003	0.0001123
Ti	47	3	He	1.713	0.0006	30.00	0.0003	0.0001123
V	51	3	He	0.731	0.0183	864.03	0.0137	0.008308
V	51	3	He	0.588	0.0163	762.02	0.0137	0.008308
V	51	3	He	0.607	0.0166	772.02	0.0137	0.008308
Cr	52	3	He	0.436	0.029	1370.10	0.0171	0.02156
Cr	52	3	He	0.721	0.0339	1580.13	0.0171	0.02156
Cr	52	3	He	0.349	0.0275	1280.10	0.0171	0.02156
Mn	55	3	He	127.438	0.9321	44033.12	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	132.774	0.971	45288.61	0.0073	0.002316
Mn	55	3	He	129.515	0.9473	44065.32	0.0073	0.002316
Fe	57	3	He	99.393	0.0349	1650.13	0.0003	0.002736
Fe	57	3	He	102.108	0.0358	1670.15	0.0003	0.002736
Fe	57	3	He	104.386	0.0365	1700.14	0.0003	0.002736
Co	59	3	He	1.218	0.0424	2002.13	0.0332	0.001922
Co	59	3	He	1.159	0.0404	1886.12	0.0332	0.001922
Co	59	3	He	1.22	0.0424	1974.13	0.0332	0.001922
Ni	60	3	He	1.193	0.0143	674.02	0.0093	0.003141
Ni	60	3	He	1.079	0.0132	616.02	0.0093	0.003141
Ni	60	3	He	1.286	0.0151	704.02	0.0093	0.003141
Cu	63	3	He	3.214	0.0906	4278.59	0.027	0.003732
Cu	63	3	He	3.389	0.0953	4444.63	0.027	0.003732
Cu	63	3	He	3.445	0.0968	4502.66	0.027	0.003732
Zn	66	3	He	122.22	0.3828	18084.13	0.0031	0.002032
Zn	66	3	He	126.216	0.3953	18434.54	0.0031	0.002032
Zn	66	3	He	125.247	0.3922	18246.36	0.0031	0.002032
As	75	3	He	0.128	0.0011	52.00	0.0025	0.0007733
As	75	3	He	0.235	0.0014	64.00	0.0025	0.0007733
As	75	3	He	0.101	0.001	48.00	0.0025	0.0007733
Sr	88	3	He	138.061	1.4484	56461.48	0.0105	0.004071
Sr	88	3	He	130.898	1.3734	53099.28	0.0105	0.004071
Sr	88	3	He	135.459	1.4211	55156.77	0.0105	0.004071
Mo	98	3	He	0.381	0.0128	500.02	0.0234	0.003908
Mo	98	3	He	0.353	0.0122	470.02	0.0234	0.003908
Mo	98	3	He	0.362	0.0124	480.03	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.128	0.0007	28.00	0.0056	0
Cd	111	3	He	0.166	0.0009	36.00	0.0056	0
Cd	111	3	He	0.147	0.0008	32.00	0.0056	0
Sn	120	3	He	-0.036	0.0603	2350.26	0.0169	0.0609
Sn	120	3	He	0.024	0.0613	2370.25	0.0169	0.0609
Sn	120	3	He	0.254	0.0652	2530.30	0.0169	0.0609
Sb	121	3	He	0.735	0.0124	483.35	0.0161	0.0005433
Sb	121	3	He	0.629	0.0107	413.34	0.0161	0.0005433
Sb	121	3	He	0.787	0.0132	513.35	0.0161	0.0005433
Ba	137	3	He	35.211	0.1871	7291.98	0.0053	0.001141
Ba	137	3	He	33.496	0.178	6881.81	0.0053	0.001141
Ba	137	3	He	34.489	0.1832	7111.89	0.0053	0.001141
Tl	205	3	He	0.009	0.0008	120.00	0.0248	0.0005854
Tl	205	3	He	0.022	0.0011	170.01	0.0248	0.0005854
Tl	205	3	He	0.045	0.0017	260.01	0.0248	0.0005854
Pb	208	3	He	0.642	0.023	1800.18	0.0332	0.001693
Pb	208	3	He	0.572	0.0207	1660.15	0.0332	0.001693
Pb	208	3	He	0.544	0.0198	1530.14	0.0332	0.001693
U	238	3	He	0.056	0.0027	400.02	0.0338	0.0007949
U	238	3	He	0.069	0.0031	470.02	0.0338	0.0007949
U	238	3	He	0.056	0.0027	410.02	0.0338	0.0007949
Sc	45	1	No Gas			1265851.54		
Sc	45	1	No Gas			1269908.89		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1240041.00		
Ge	72	1	No Gas			660771.94		
Ge	72	1	No Gas			658338.66		
Ge	72	1	No Gas			644969.09		
Sc	45	2	H2			85935.03		
Sc	45	2	H2			88166.23		
Sc	45	2	H2			88318.11		
Ge	72	2	H2			72835.60		
Ge	72	2	H2			73287.14		
Ge	72	2	H2			73950.39		
In	115	2	H2			183370.17		
In	115	2	H2			182663.36		
In	115	2	H2			184353.73		
Sc	45	3	He			24599.07		
Sc	45	3	He			25079.75		
Sc	45	3	He			25410.49		
Ge	72	3	He			47240.04		
Ge	72	3	He			46638.84		
Ge	72	3	He			46517.98		
In	115	3	He			38999.64		
In	115	3	He			38678.64		
In	115	3	He			38829.47		
Tb	159	3	He			149810.57		
Tb	159	3	He			150708.52		
Tb	159	3	He			152204.85		
Bi	209	3	He			111819.52		
Bi	209	3	He			110667.38		
Bi	209	3	He			112776.02		

Quantitation Report

Data File Name 170SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:03:41 PM
Sample Name 410-234447-K-7-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

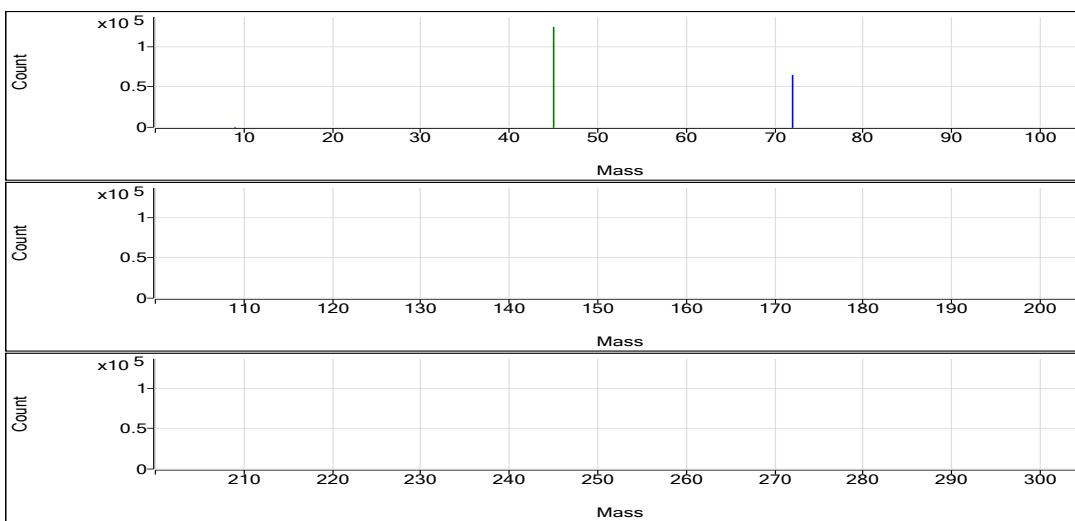
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.050	ppb	56.3	84.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.541	ppb	4.6	21.56	0.0003	Pulse	1.5000	3
Na	23	72	He	6655.083	ppb	1.6	566059.88	12.2590	Pulse	0.1000	3
Mg	24	72	He	2740.580	ppb	2.1	116237.45	2.5175	Pulse	0.1000	3
Al	27	72	He	65.929	ppb	11.5	990.08	0.0215	Pulse	0.1000	3
K	39	72	He	3301.432	ppb	4.9	129936.60	2.8150	Pulse	0.5000	3
Ca	44	72	He	34990.127	ppb	1.3	64923.94	1.4060	Pulse	0.5000	3
Ti	47	72	He	1.586	ppb	15.8	28.00	0.0006	Pulse	0.5000	3
V	51	72	He	0.124	ppb	56.4	461.34	0.0100	Pulse	0.5000	3
Cr	52	72	He	-0.208	ppb	N/A	830.05	0.0180	Pulse	0.1000	3
Mn	55	72	He	388.563	ppb	2.0	131004.19	2.8373	Pulse	0.5000	3
Fe	57	72	He	168.202	ppb	5.1	2643.63	0.0572	Pulse	0.1000	3
Co	59	72	He	1.139	ppb	3.2	1836.12	0.0398	Pulse	0.5000	3
Ni	60	72	He	0.751	ppb	10.2	468.01	0.0101	Pulse	0.5000	3
Cu	63	72	He	0.255	ppb	18.0	490.01	0.0106	Pulse	0.5000	3
Zn	66	72	He	1.236	ppb	18.6	271.33	0.0059	Pulse	0.5000	3
As	75	72	He	0.302	ppb	35.9	71.33	0.0015	Pulse	0.5000	3
Sr	88	115	He	124.250	ppb	1.4	50755.62	1.3039	Pulse	0.1000	3
Mo	98	115	He	0.324	ppb	12.0	446.69	0.0115	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	395.6	26.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.033	ppb	62.7	7.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.054	ppb	214.9	2406.94	0.0618	Pulse	0.1000	3
Sb	121	115	He	0.117	ppb	39.6	94.45	0.0024	Pulse	0.3000	3
Ba	137	115	He	29.923	ppb	2.0	6194.80	0.1591	Pulse	0.1000	3
Tl	205	159	He	0.029	ppb	69.6	196.67	0.0013	Pulse	0.1000	3
Pb	208	159	He	0.097	ppb	10.1	740.04	0.0049	Pulse	0.1000	3
U	238	159	He	0.051	ppb	25.7	376.68	0.0025	Pulse	0.1000	3

ISTD Table:

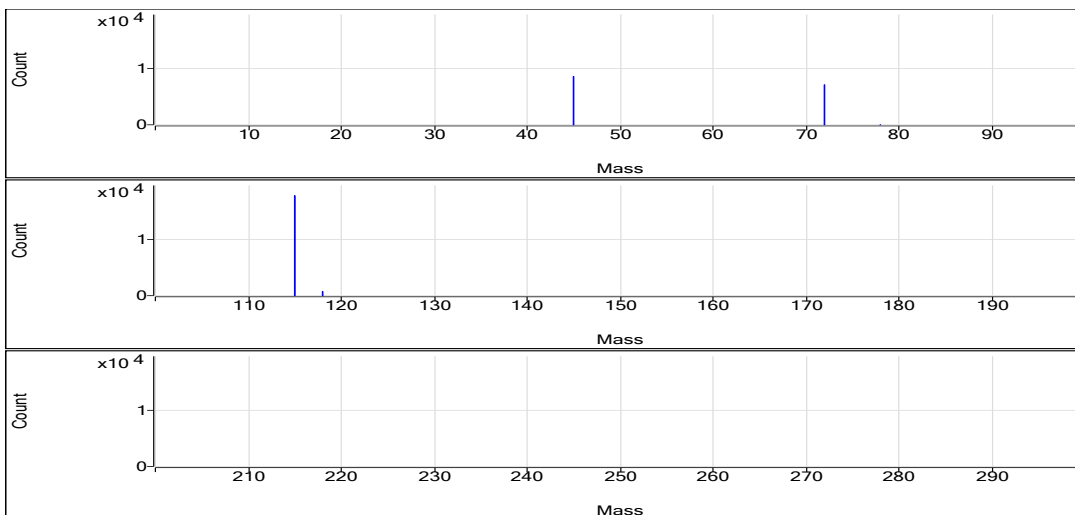
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1240001.39	2.2	94.9	Analog	0.1000	3
No Gas	Ge	72	645592.18	1.4	98.5	Pulse	0.1000	3
H2	Sc	45	86846.64	0.3	105.7	Pulse	0.1000	3
H2	Ge	72	71847.70	0.6	105.1	Pulse	0.1000	3
H2	In	115	179398.67	1.9	105.2	Pulse	0.1000	3
He	Sc	45	24355.46	1.0	95.1	Pulse	0.1000	3
He	Ge	72	46183.70	1.9	97.2	Pulse	0.1000	3
He	In	115	38929.43	0.8	95.1	Pulse	0.1000	3
He	Tb	159	150596.67	0.7	94.5	Pulse	0.1000	3
He	Bi	209	111821.57	0.5	95.6	Pulse	0.1000	3

No Gas

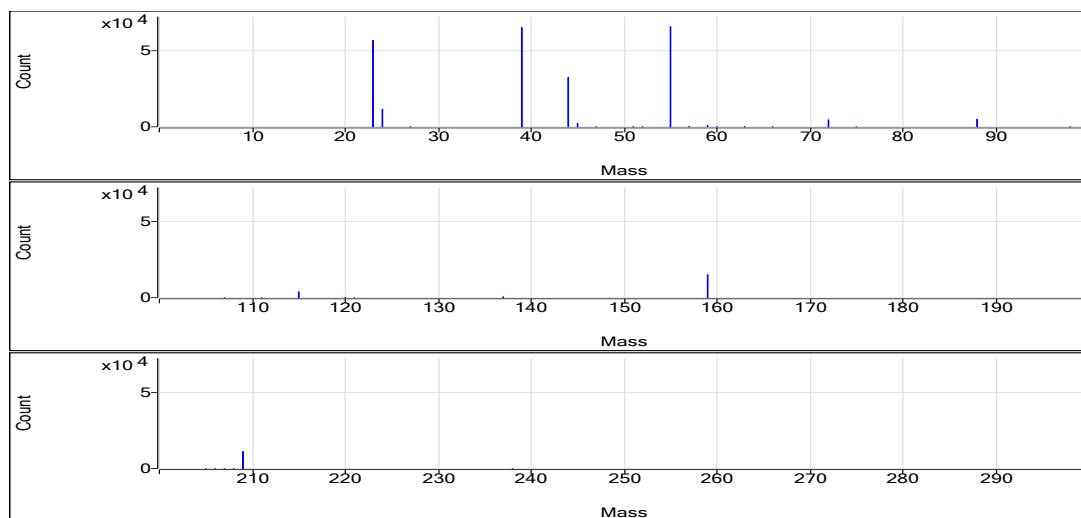


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.045	0.0001	82.00	0.0011	7.835E-05
Be	9	1	No Gas	0.025	0.0001	68.00	0.0011	7.835E-05
Be	9	1	No Gas	0.08	0.0002	104.00	0.0011	7.835E-05
Se	78	2	H2	0.518	0.0003	20.67	0.0005	2.594E-05
Se	78	2	H2	0.567	0.0003	22.67	0.0005	2.594E-05
Se	78	2	H2	0.537	0.0003	21.33	0.0005	2.594E-05
Na	23	3	He	6763.932	12.4567	562474.29	0.0018	0.1731
Na	23	3	He	6644.639	12.2401	570365.50	0.0018	0.1731
Na	23	3	He	6556.678	12.0803	565339.84	0.0018	0.1731
Mg	24	3	He	2804.823	2.5764	116334.98	0.0009	0.006537
Mg	24	3	He	2720.729	2.4993	116464.72	0.0009	0.006537
Mg	24	3	He	2696.187	2.4768	115912.65	0.0009	0.006537
Al	27	3	He	72.878	0.0235	1060.08	0.0003	0.00231
Al	27	3	He	57.812	0.0191	890.08	0.0003	0.00231
Al	27	3	He	67.096	0.0218	1020.09	0.0003	0.00231
K	39	3	He	3485.627	2.9527	133327.92	0.0007	0.3475
K	39	3	He	3241.524	2.7703	129089.63	0.0007	0.3475
K	39	3	He	3177.144	2.7221	127392.25	0.0007	0.3475
Ca	44	3	He	35533.331	1.4278	64471.56	0	0.002807
Ca	44	3	He	34722.328	1.3953	65017.63	0	0.002807
Ca	44	3	He	34714.72	1.395	65282.63	0	0.002807
Ti	47	3	He	1.348	0.0005	24.00	0.0003	0.0001123
Ti	47	3	He	1.847	0.0007	32.00	0.0003	0.0001123
Ti	47	3	He	1.563	0.0006	28.00	0.0003	0.0001123
V	51	3	He	0.186	0.0109	490.01	0.0137	0.008308
V	51	3	He	0.049	0.009	418.01	0.0137	0.008308
V	51	3	He	0.136	0.0102	476.01	0.0137	0.008308
Cr	52	3	He	-0.004	0.0215	970.07	0.0171	0.02156
Cr	52	3	He	-0.332	0.0159	740.04	0.0171	0.02156
Cr	52	3	He	-0.286	0.0167	780.04	0.0171	0.02156
Mn	55	3	He	397.329	2.9013	131005.19	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	385.141	2.8123	131050.44	0.0073	0.002316
Mn	55	3	He	383.218	2.7983	130956.93	0.0073	0.002316
Fe	57	3	He	161.132	0.0549	2480.28	0.0003	0.002736
Fe	57	3	He	177.743	0.0603	2810.33	0.0003	0.002736
Fe	57	3	He	165.73	0.0564	2640.29	0.0003	0.002736
Co	59	3	He	1.181	0.0412	1858.12	0.0332	0.001922
Co	59	3	He	1.122	0.0392	1826.11	0.0332	0.001922
Co	59	3	He	1.115	0.039	1824.12	0.0332	0.001922
Ni	60	3	He	0.836	0.0109	494.01	0.0093	0.003141
Ni	60	3	He	0.689	0.0096	446.01	0.0093	0.003141
Ni	60	3	He	0.726	0.0099	464.01	0.0093	0.003141
Cu	63	3	He	0.308	0.012	544.01	0.027	0.003732
Cu	63	3	He	0.224	0.0098	456.01	0.027	0.003732
Cu	63	3	He	0.234	0.01	470.01	0.027	0.003732
Zn	66	3	He	1.452	0.0066	296.00	0.0031	0.002032
Zn	66	3	He	1.263	0.006	278.00	0.0031	0.002032
Zn	66	3	He	0.994	0.0051	240.00	0.0031	0.002032
As	75	3	He	0.287	0.0015	68.00	0.0025	0.0007733
As	75	3	He	0.202	0.0013	60.00	0.0025	0.0007733
As	75	3	He	0.417	0.0018	86.00	0.0025	0.0007733
Sr	88	3	He	123.503	1.2961	50471.53	0.0105	0.004071
Sr	88	3	He	126.191	1.3242	51143.56	0.0105	0.004071
Sr	88	3	He	123.055	1.2914	50651.78	0.0105	0.004071
Mo	98	3	He	0.338	0.0118	460.02	0.0234	0.003908
Mo	98	3	He	0.353	0.0122	470.03	0.0234	0.003908
Mo	98	3	He	0.28	0.0105	410.02	0.0234	0.003908
Ag	107	3	He	0.021	0.0015	60.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.046	0.0003	10.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.045	0.0003	10.00	0.0056	0
Sn	120	3	He	0.135	0.0632	2460.28	0.0169	0.0609
Sn	120	3	He	-0.08	0.0596	2300.25	0.0169	0.0609
Sn	120	3	He	0.108	0.0627	2460.29	0.0169	0.0609
Sb	121	3	He	0.115	0.0024	93.33	0.0161	0.0005433
Sb	121	3	He	0.164	0.0032	123.34	0.0161	0.0005433
Sb	121	3	He	0.072	0.0017	66.67	0.0161	0.0005433
Ba	137	3	He	30.577	0.1626	6331.52	0.0053	0.001141
Ba	137	3	He	29.752	0.1582	6111.42	0.0053	0.001141
Ba	137	3	He	29.439	0.1566	6141.45	0.0053	0.001141
Tl	205	3	He	0.043	0.0016	250.01	0.0248	0.0005854
Tl	205	3	He	0.006	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	0.038	0.0015	230.01	0.0248	0.0005854
Pb	208	3	He	0.086	0.0046	360.02	0.0332	0.001693
Pb	208	3	He	0.105	0.0052	370.02	0.0332	0.001693
Pb	208	3	He	0.1	0.005	340.02	0.0332	0.001693
U	238	3	He	0.043	0.0022	340.01	0.0338	0.0007949
U	238	3	He	0.043	0.0023	340.02	0.0338	0.0007949
U	238	3	He	0.066	0.003	450.02	0.0338	0.0007949
Sc	45	1	No Gas			1270827.25		
Sc	45	1	No Gas			1224377.79		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1224799.12		
Ge	72	1	No Gas			652291.94		
Ge	72	1	No Gas			649157.57		
Ge	72	1	No Gas			635327.02		
Sc	45	2	H2			86789.58		
Sc	45	2	H2			86598.70		
Sc	45	2	H2			87151.65		
Ge	72	2	H2			71670.21		
Ge	72	2	H2			72373.37		
Ge	72	2	H2			71499.53		
In	115	2	H2			179162.77		
In	115	2	H2			176108.04		
In	115	2	H2			182925.21		
Sc	45	3	He			24118.27		
Sc	45	3	He			24589.11		
Sc	45	3	He			24359.00		
Ge	72	3	He			45154.37		
Ge	72	3	He			46598.28		
Ge	72	3	He			46798.44		
In	115	3	He			38959.49		
In	115	3	He			38638.92		
In	115	3	He			39240.42		
Tb	159	3	He			151625.83		
Tb	159	3	He			150617.36		
Tb	159	3	He			149546.82		
Bi	209	3	He			111525.37		
Bi	209	3	He			111505.09		
Bi	209	3	He			112434.24		

Quantitation Report

Data File Name 171SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:05:53 PM
Sample Name 180-193200-J-8-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

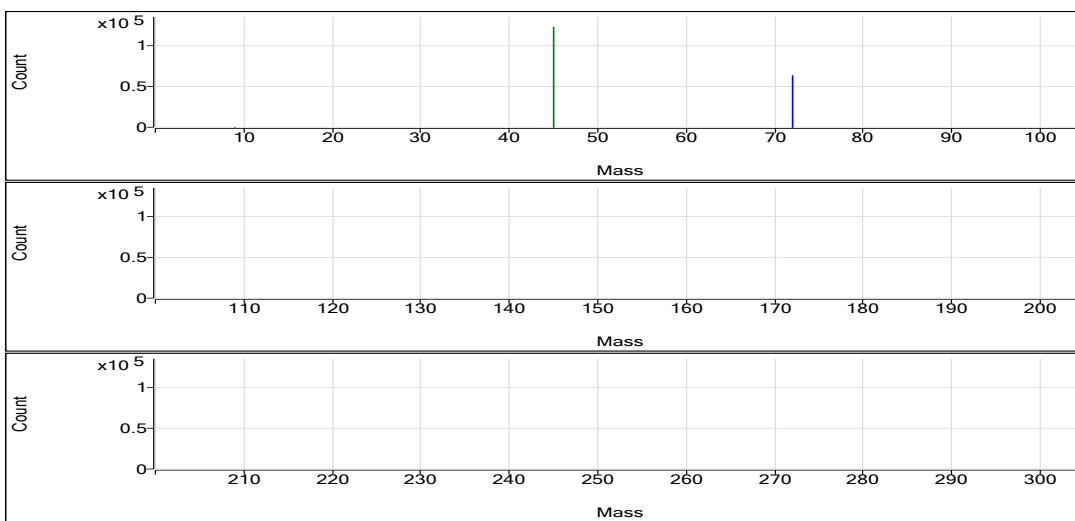
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.050	ppb	54.4	83.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.181	ppb	30.2	8.45	0.0001	Pulse	1.5000	3
Na	23	72	He	53855.824	ppb	1.1	4504182.22	97.9780	Analog	0.1000	3
Mg	24	72	He	29672.382	ppb	1.1	1250106.59	27.1931	Analog	0.1000	3
Al	27	72	He	37.726	ppb	11.8	610.03	0.0133	Pulse	0.1000	3
K	39	72	He	3376.630	ppb	2.4	131996.87	2.8712	Pulse	0.5000	3
Ca	44	72	He	64354.533	ppb	0.3	118776.62	2.5836	Pulse	0.5000	3
Ti	47	72	He	1.365	ppb	16.2	24.67	0.0005	Pulse	0.5000	3
V	51	72	He	0.361	ppb	8.8	608.68	0.0132	Pulse	0.5000	3
Cr	52	72	He	0.229	ppb	110.8	1170.08	0.0255	Pulse	0.1000	3
Mn	55	72	He	1801.492	ppb	0.4	604365.65	13.1462	Pulse	0.5000	3
Fe	57	72	He	11142.655	ppb	0.9	166053.47	3.6120	Pulse	0.1000	3
Co	59	72	He	0.379	ppb	7.0	666.69	0.0145	Pulse	0.5000	3
Ni	60	72	He	3.564	ppb	3.9	1672.76	0.0364	Pulse	0.5000	3
Cu	63	72	He	1.271	ppb	3.3	1750.11	0.0381	Pulse	0.5000	3
Zn	66	72	He	7.009	ppb	0.6	1097.38	0.0239	Pulse	0.5000	3
As	75	72	He	18.849	ppb	5.1	2245.50	0.0488	Pulse	0.5000	3
Sr	88	115	He	134.307	ppb	5.0	53929.15	1.4091	Pulse	0.1000	3
Mo	98	115	He	1.386	ppb	20.3	1386.78	0.0363	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.044	ppb	50.8	9.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.040	ppb	437.7	2356.93	0.0616	Pulse	0.1000	3
Sb	121	115	He	0.329	ppb	5.8	224.45	0.0059	Pulse	0.3000	3
Ba	137	115	He	153.647	ppb	2.9	31105.68	0.8124	Pulse	0.1000	3
Tl	205	159	He	0.010	ppb	71.5	123.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.996	ppb	2.2	5160.53	0.0348	Pulse	0.1000	3
U	238	159	He	0.183	ppb	8.1	1036.74	0.0070	Pulse	0.1000	3

ISTD Table:

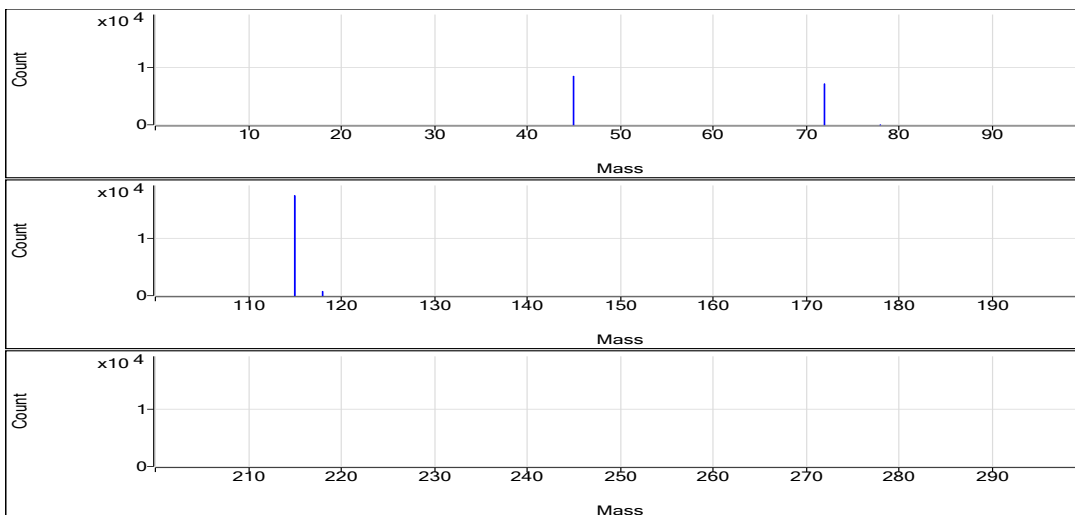
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1226481.62	2.3	93.8	Analog	0.1000	3
No Gas	Ge	72	632172.67	1.1	96.5	Pulse	0.1000	3
H2	Sc	45	85144.27	0.8	103.6	Pulse	0.1000	3
H2	Ge	72	71643.88	0.6	104.8	Pulse	0.1000	3
H2	In	115	174944.95	0.8	102.5	Pulse	0.1000	3
He	Sc	45	24415.54	2.9	95.3	Pulse	0.1000	3
He	Ge	72	45973.29	0.6	96.8	Pulse	0.1000	3
He	In	115	38311.54	3.2	93.6	Pulse	0.1000	3
He	Tb	159	148348.77	0.8	93.0	Pulse	0.1000	3
He	Bi	209	109328.80	0.2	93.5	Pulse	0.1000	3

No Gas

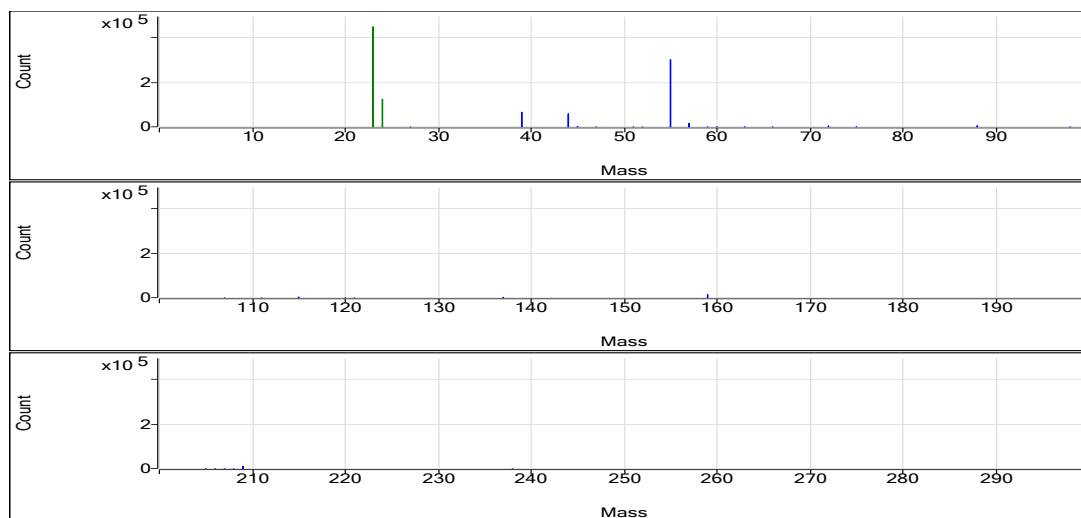


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.065	0.0001	92.00	0.0011	7.835E-05
Be	9	1	No Gas	0.067	0.0002	96.00	0.0011	7.835E-05
Be	9	1	No Gas	0.019	0.0001	62.00	0.0011	7.835E-05
Se	78	2	H2	0.17	0.0001	8.00	0.0005	2.594E-05
Se	78	2	H2	0.133	0.0001	6.67	0.0005	2.594E-05
Se	78	2	H2	0.241	0.0001	10.67	0.0005	2.594E-05
Na	23	3	He	54002.184	98.2438	4501157.43	0.0018	0.1731
Na	23	3	He	53196.778	96.7811	4479772.43	0.0018	0.1731
Na	23	3	He	54368.511	98.909	4531616.81	0.0018	0.1731
Mg	24	3	He	29984.015	27.4786	1258966.07	0.0009	0.006537
Mg	24	3	He	29329.584	26.879	1244166.78	0.0009	0.006537
Mg	24	3	He	29703.548	27.2216	1247186.93	0.0009	0.006537
Al	27	3	He	32.629	0.0118	540.03	0.0003	0.00231
Al	27	3	He	39.654	0.0138	640.03	0.0003	0.00231
Al	27	3	He	40.896	0.0142	650.03	0.0003	0.00231
K	39	3	He	3467.658	2.9393	134666.83	0.0007	0.3475
K	39	3	He	3344.027	2.8469	131775.39	0.0007	0.3475
K	39	3	He	3318.206	2.8276	129548.39	0.0007	0.3475
Ca	44	3	He	64324.869	2.5824	118317.30	0	0.002807
Ca	44	3	He	64192.129	2.5771	119288.41	0	0.002807
Ca	44	3	He	64546.601	2.5913	118724.16	0	0.002807
Ti	47	3	He	1.323	0.0005	24.00	0.0003	0.0001123
Ti	47	3	He	1.167	0.0005	22.00	0.0003	0.0001123
Ti	47	3	He	1.604	0.0006	28.00	0.0003	0.0001123
V	51	3	He	0.363	0.0133	608.02	0.0137	0.008308
V	51	3	He	0.391	0.0137	632.02	0.0137	0.008308
V	51	3	He	0.328	0.0128	586.01	0.0137	0.008308
Cr	52	3	He	0.284	0.0264	1210.07	0.0171	0.02156
Cr	52	3	He	-0.048	0.0207	960.07	0.0171	0.02156
Cr	52	3	He	0.45	0.0292	1340.10	0.0171	0.02156
Mn	55	3	He	1801.205	13.1441	602213.38	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1793.933	13.091	605954.13	0.0073	0.002316
Mn	55	3	He	1809.339	13.2035	604929.44	0.0073	0.002316
Fe	57	3	He	11091.452	3.5954	164729.65	0.0003	0.002736
Fe	57	3	He	11074.726	3.59	166173.98	0.0003	0.002736
Fe	57	3	He	11261.788	3.6506	167256.79	0.0003	0.002736
Co	59	3	He	0.397	0.0151	692.02	0.0332	0.001922
Co	59	3	He	0.391	0.0149	690.02	0.0332	0.001922
Co	59	3	He	0.348	0.0135	618.02	0.0332	0.001922
Ni	60	3	He	3.613	0.0368	1688.10	0.0093	0.003141
Ni	60	3	He	3.406	0.0349	1616.09	0.0093	0.003141
Ni	60	3	He	3.674	0.0374	1714.10	0.0093	0.003141
Cu	63	3	He	1.226	0.0368	1688.10	0.027	0.003732
Cu	63	3	He	1.277	0.0382	1770.11	0.027	0.003732
Cu	63	3	He	1.31	0.0391	1792.11	0.027	0.003732
Zn	66	3	He	6.97	0.0237	1088.04	0.0031	0.002032
Zn	66	3	He	7.004	0.0239	1104.05	0.0031	0.002032
Zn	66	3	He	7.054	0.024	1100.05	0.0031	0.002032
As	75	3	He	17.93	0.0465	2130.15	0.0025	0.0007733
As	75	3	He	19.863	0.0514	2380.19	0.0025	0.0007733
As	75	3	He	18.752	0.0486	2226.17	0.0025	0.0007733
Sr	88	3	He	129.909	1.3631	52808.83	0.0105	0.004071
Sr	88	3	He	142.011	1.4897	54995.98	0.0105	0.004071
Sr	88	3	He	131.002	1.3745	53982.64	0.0105	0.004071
Mo	98	3	He	1.345	0.0354	1370.10	0.0234	0.003908
Mo	98	3	He	1.686	0.0433	1600.15	0.0234	0.003908
Mo	98	3	He	1.128	0.0303	1190.09	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.055	0.0003	12.00	0.0056	0
Cd	111	3	He	0.058	0.0003	12.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	0.016	0.0612	2370.27	0.0169	0.0609
Sn	120	3	He	0.228	0.0647	2390.25	0.0169	0.0609
Sn	120	3	He	-0.123	0.0588	2310.26	0.0169	0.0609
Sb	121	3	He	0.324	0.0058	223.34	0.0161	0.0005433
Sb	121	3	He	0.314	0.0056	206.67	0.0161	0.0005433
Sb	121	3	He	0.351	0.0062	243.34	0.0161	0.0005433
Ba	137	3	He	150.458	0.7956	30821.73	0.0053	0.001141
Ba	137	3	He	158.83	0.8398	31002.30	0.0053	0.001141
Ba	137	3	He	151.654	0.8019	31493.00	0.0053	0.001141
Tl	205	3	He	0.009	0.0008	120.01	0.0248	0.0005854
Tl	205	3	He	0.018	0.001	150.01	0.0248	0.0005854
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	0.972	0.034	2630.33	0.0332	0.001693
Pb	208	3	He	1.015	0.0354	2860.39	0.0332	0.001693
Pb	208	3	He	1.001	0.035	2810.33	0.0332	0.001693
U	238	3	He	0.2	0.0076	1120.08	0.0338	0.0007949
U	238	3	He	0.172	0.0066	970.07	0.0338	0.0007949
U	238	3	He	0.178	0.0068	1020.07	0.0338	0.0007949
Sc	45	1	No Gas			1216369.51		
Sc	45	1	No Gas			1258662.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1204412.95		
Ge	72	1	No Gas			625783.70		
Ge	72	1	No Gas			639878.19		
Ge	72	1	No Gas			630856.12		
Sc	45	2	H2			84547.37		
Sc	45	2	H2			85000.88		
Sc	45	2	H2			85884.56		
Ge	72	2	H2			71369.45		
Ge	72	2	H2			71460.12		
Ge	72	2	H2			72102.06		
In	115	2	H2			174195.15		
In	115	2	H2			176503.63		
In	115	2	H2			174136.07		
Sc	45	3	He			24158.41		
Sc	45	3	He			25220.11		
Sc	45	3	He			23868.10		
Ge	72	3	He			45816.21		
Ge	72	3	He			46287.67		
Ge	72	3	He			45816.00		
In	115	3	He			38758.91		
In	115	3	He			36934.79		
In	115	3	He			39290.40		
Tb	159	3	He			148283.45		
Tb	159	3	He			147144.50		
Tb	159	3	He			149618.35		
Bi	209	3	He			109127.32		
Bi	209	3	He			109338.68		
Bi	209	3	He			109520.41		

Quantitation Report

Data File Name 172SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:08:05 PM
Sample Name 180-193200-G-8-A DU
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

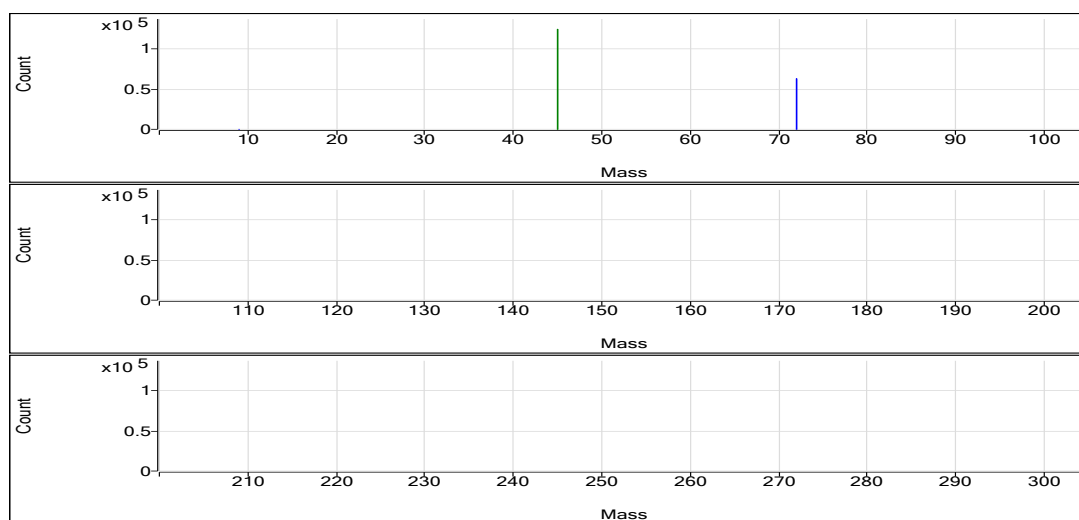
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.041	ppb	79.4	77.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.142	ppb	51.2	7.11	0.0001	Pulse	1.5000	3
Na	23	72	He	55346.848	ppb	1.6	4538568.99	100.6858	Analog	0.1000	3
Mg	24	72	He	30747.705	ppb	1.1	1270243.39	28.1783	Analog	0.1000	3
Al	27	72	He	41.126	ppb	20.5	643.37	0.0143	Pulse	0.1000	3
K	39	72	He	3505.924	ppb	3.6	133762.55	2.9679	Pulse	0.5000	3
Ca	44	72	He	66008.146	ppb	1.3	119454.92	2.6499	Pulse	0.5000	3
Ti	47	72	He	1.536	ppb	26.4	26.67	0.0006	Pulse	0.5000	3
V	51	72	He	0.391	ppb	8.3	615.35	0.0137	Pulse	0.5000	3
Cr	52	72	He	0.458	ppb	48.5	1323.44	0.0294	Pulse	0.1000	3
Mn	55	72	He	1864.119	ppb	1.6	613175.15	13.6031	Pulse	0.5000	3
Fe	57	72	He	11528.161	ppb	0.9	168460.60	3.7369	Pulse	0.1000	3
Co	59	72	He	0.449	ppb	5.8	758.69	0.0168	Pulse	0.5000	3
Ni	60	72	He	3.940	ppb	1.5	1798.11	0.0399	Pulse	0.5000	3
Cu	63	72	He	1.495	ppb	7.0	1987.47	0.0441	Pulse	0.5000	3
Zn	66	72	He	7.731	ppb	7.3	1176.72	0.0261	Pulse	0.5000	3
As	75	72	He	19.381	ppb	2.8	2262.17	0.0502	Pulse	0.5000	3
Sr	88	115	He	137.573	ppb	1.3	55477.76	1.4432	Pulse	0.1000	3
Mo	98	115	He	1.519	ppb	1.7	1516.79	0.0394	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	314.6	26.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.037	ppb	44.4	8.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.010	ppb	1059.9	2346.92	0.0611	Pulse	0.1000	3
Sb	121	115	He	0.282	ppb	14.0	195.56	0.0051	Pulse	0.3000	3
Ba	137	115	He	155.239	ppb	3.4	31553.21	0.8208	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	24.2	120.01	0.0008	Pulse	0.1000	3
Pb	208	159	He	1.083	ppb	1.2	5553.93	0.0377	Pulse	0.1000	3
U	238	159	He	0.225	ppb	8.3	1236.76	0.0084	Pulse	0.1000	3

ISTD Table:

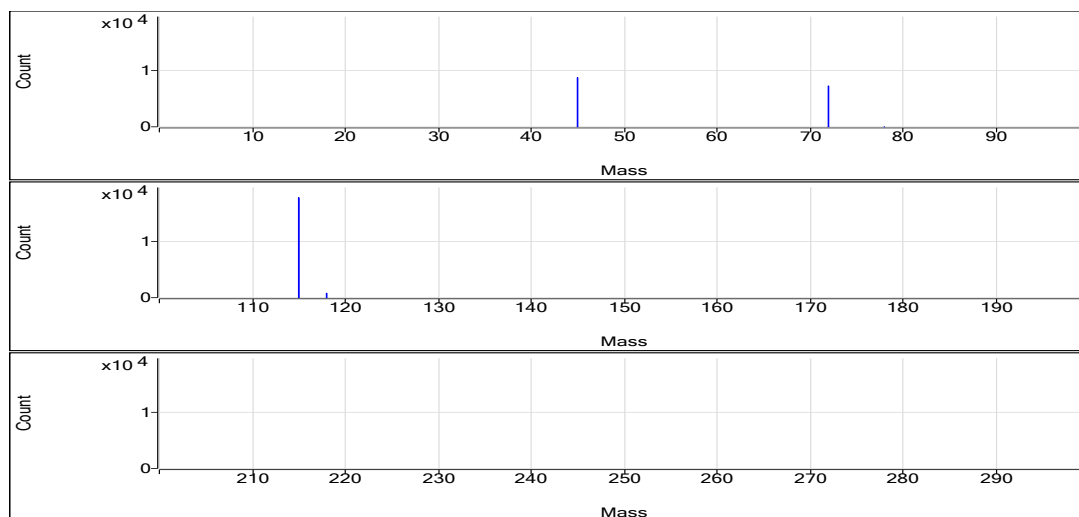
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1248624.67	0.5	95.5	Analog	0.1000	3
No Gas	Ge	72	632246.49	1.1	96.5	Pulse	0.1000	3
H2	Sc	45	87319.35	2.6	106.3	Pulse	0.1000	3
H2	Ge	72	72450.62	1.9	106.0	Pulse	0.1000	3
H2	In	115	177129.26	1.6	103.8	Pulse	0.1000	3
He	Sc	45	25233.52	0.5	98.5	Pulse	0.1000	3
He	Ge	72	45084.11	1.7	94.9	Pulse	0.1000	3
He	In	115	38445.34	1.9	93.9	Pulse	0.1000	3
He	Tb	159	147399.86	1.7	92.4	Pulse	0.1000	3
He	Bi	209	109064.36	0.5	93.3	Pulse	0.1000	3

No Gas

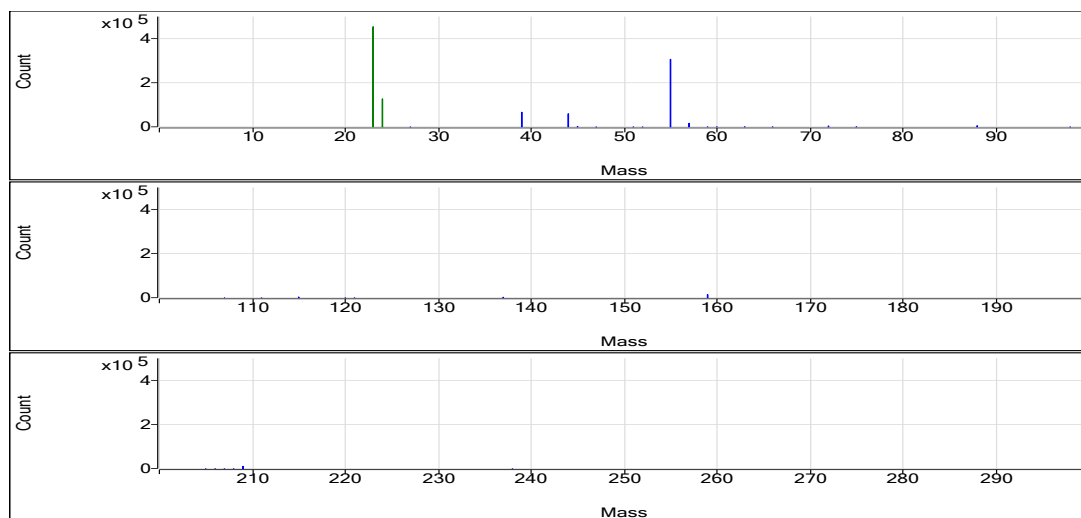


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0.0001	70.00	0.0011	7.835E-05
Be	9	1	No Gas	0.016	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	0.079	0.0002	102.00	0.0011	7.835E-05
Se	78	2	H2	0.167	0.0001	8.00	0.0005	2.594E-05
Se	78	2	H2	0.198	0.0001	9.33	0.0005	2.594E-05
Se	78	2	H2	0.06	0.0001	4.00	0.0005	2.594E-05
Na	23	3	He	56379.456	102.561	4543610.24	0.0018	0.1731
Na	23	3	He	54775.283	99.6478	4568496.18	0.0018	0.1731
Na	23	3	He	54885.804	99.8485	4503600.56	0.0018	0.1731
Mg	24	3	He	31046.205	28.4518	1260459.20	0.0009	0.006537
Mg	24	3	He	30402.512	27.8621	1277376.23	0.0009	0.006537
Mg	24	3	He	30794.397	28.2211	1272894.75	0.0009	0.006537
Al	27	3	He	32.462	0.0117	520.03	0.0003	0.00231
Al	27	3	He	41.615	0.0144	660.04	0.0003	0.00231
Al	27	3	He	49.301	0.0166	750.05	0.0003	0.00231
K	39	3	He	3652.358	3.0773	136330.53	0.0007	0.3475
K	39	3	He	3437.88	2.917	133735.33	0.0007	0.3475
K	39	3	He	3427.534	2.9093	131221.80	0.0007	0.3475
Ca	44	3	He	66969.969	2.6885	119105.10	0	0.002807
Ca	44	3	He	65519.531	2.6303	120591.88	0	0.002807
Ca	44	3	He	65534.938	2.631	118667.77	0	0.002807
Ti	47	3	He	1.091	0.0005	20.00	0.0003	0.0001123
Ti	47	3	He	1.883	0.0007	32.00	0.0003	0.0001123
Ti	47	3	He	1.635	0.0006	28.00	0.0003	0.0001123
V	51	3	He	0.426	0.0141	626.02	0.0137	0.008308
V	51	3	He	0.385	0.0136	622.02	0.0137	0.008308
V	51	3	He	0.362	0.0133	598.02	0.0137	0.008308
Cr	52	3	He	0.495	0.03	1330.11	0.0171	0.02156
Cr	52	3	He	0.219	0.0253	1160.08	0.0171	0.02156
Cr	52	3	He	0.659	0.0328	1480.12	0.0171	0.02156
Mn	55	3	He	1896.907	13.8424	613237.75	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1838.558	13.4166	615105.38	0.0073	0.002316
Mn	55	3	He	1856.892	13.5504	611182.31	0.0073	0.002316
Fe	57	3	He	11649.969	3.7764	167298.44	0.0003	0.002736
Fe	57	3	He	11481.366	3.7217	170628.77	0.0003	0.002736
Fe	57	3	He	11453.147	3.7126	167454.59	0.0003	0.002736
Co	59	3	He	0.456	0.0171	756.02	0.0332	0.001922
Co	59	3	He	0.42	0.0159	728.02	0.0332	0.001922
Co	59	3	He	0.471	0.0176	792.02	0.0332	0.001922
Ni	60	3	He	4	0.0405	1792.11	0.0093	0.003141
Ni	60	3	He	3.882	0.0394	1804.11	0.0093	0.003141
Ni	60	3	He	3.937	0.0399	1798.11	0.0093	0.003141
Cu	63	3	He	1.613	0.0473	2096.15	0.027	0.003732
Cu	63	3	He	1.415	0.042	1924.13	0.027	0.003732
Cu	63	3	He	1.456	0.0431	1942.13	0.027	0.003732
Zn	66	3	He	8.042	0.0271	1200.05	0.0031	0.002032
Zn	66	3	He	7.077	0.0241	1104.04	0.0031	0.002032
Zn	66	3	He	8.073	0.0272	1226.06	0.0031	0.002032
As	75	3	He	19.882	0.0515	2280.17	0.0025	0.0007733
As	75	3	He	18.791	0.0487	2232.17	0.0025	0.0007733
As	75	3	He	19.47	0.0504	2274.18	0.0025	0.0007733
Sr	88	3	He	137.265	1.44	55257.05	0.0105	0.004071
Sr	88	3	He	135.994	1.4267	55918.93	0.0105	0.004071
Sr	88	3	He	139.46	1.463	55257.29	0.0105	0.004071
Mo	98	3	He	1.493	0.0388	1490.12	0.0234	0.003908
Mo	98	3	He	1.545	0.0401	1570.13	0.0234	0.003908
Mo	98	3	He	1.519	0.0395	1490.12	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	0.017	0.0013	50.00	0.0493	0.0004851
Cd	111	3	He	0.046	0.0003	10.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.047	0.0003	10.00	0.0056	0
Sn	120	3	He	-0.026	0.0605	2320.25	0.0169	0.0609
Sn	120	3	He	-0.071	0.0597	2340.25	0.0169	0.0609
Sn	120	3	He	0.125	0.063	2380.27	0.0169	0.0609
Sb	121	3	He	0.327	0.0058	223.34	0.0161	0.0005433
Sb	121	3	He	0.256	0.0047	183.34	0.0161	0.0005433
Sb	121	3	He	0.262	0.0048	180.00	0.0161	0.0005433
Ba	137	3	He	149.438	0.7902	30320.64	0.0053	0.001141
Ba	137	3	He	156.615	0.8281	32454.99	0.0053	0.001141
Ba	137	3	He	159.663	0.8442	31883.99	0.0053	0.001141
Tl	205	3	He	0.007	0.0008	110.01	0.0248	0.0005854
Tl	205	3	He	0.011	0.0009	130.01	0.0248	0.0005854
Tl	205	3	He	0.01	0.0008	120.00	0.0248	0.0005854
Pb	208	3	He	1.081	0.0376	2920.40	0.0332	0.001693
Pb	208	3	He	1.096	0.0381	3040.41	0.0332	0.001693
Pb	208	3	He	1.071	0.0373	2800.36	0.0332	0.001693
U	238	3	He	0.204	0.0077	1120.08	0.0338	0.0007949
U	238	3	He	0.231	0.0086	1290.11	0.0338	0.0007949
U	238	3	He	0.24	0.0089	1300.10	0.0338	0.0007949
Sc	45	1	No Gas			1255763.73		
Sc	45	1	No Gas			1243161.54		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1246948.73		
Ge	72	1	No Gas			639954.95		
Ge	72	1	No Gas			626727.22		
Ge	72	1	No Gas			630057.30		
Sc	45	2	H2			84789.75		
Sc	45	2	H2			89082.62		
Sc	45	2	H2			88085.67		
Ge	72	2	H2			72453.15		
Ge	72	2	H2			73800.65		
Ge	72	2	H2			71098.06		
In	115	2	H2			175502.69		
In	115	2	H2			180343.83		
In	115	2	H2			175541.27		
Sc	45	3	He			25160.07		
Sc	45	3	He			25169.84		
Sc	45	3	He			25370.64		
Ge	72	3	He			44301.53		
Ge	72	3	He			45846.45		
Ge	72	3	He			45104.35		
In	115	3	He			38388.45		
In	115	3	He			39210.05		
In	115	3	He			37786.81		
Tb	159	3	He			145710.61		
Tb	159	3	He			150325.62		
Tb	159	3	He			146163.35		
Bi	209	3	He			109260.10		
Bi	209	3	He			109540.68		
Bi	209	3	He			108392.29		

Quantitation Report

Data File Name 173SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:10:17 PM
Sample Name 180-193200-H-8-A MS
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

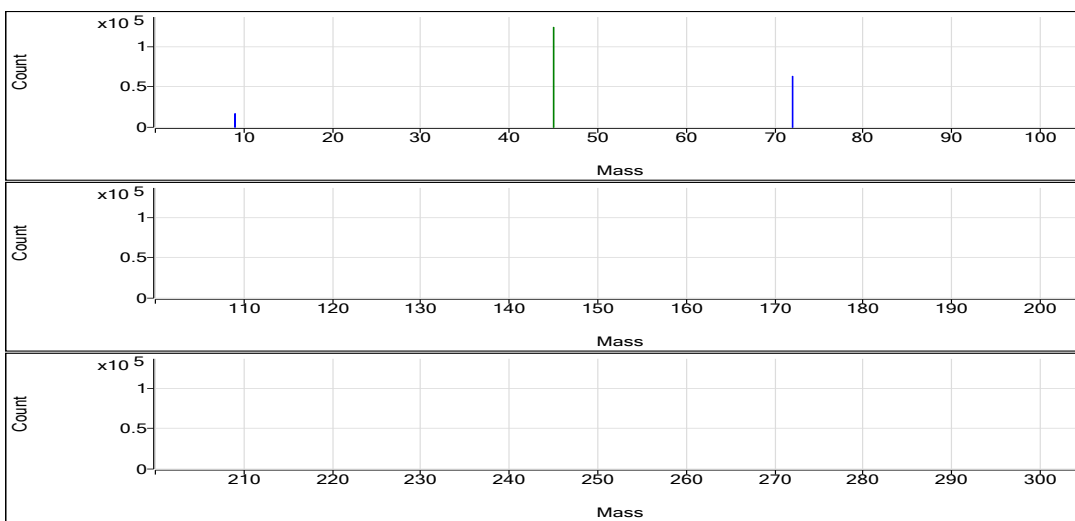
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.537	ppb	3.9	34054.97	0.0538	Pulse	0.5000	3
Se	78	72	H2	95.315	ppb	1.8	3512.84	0.0483	Pulse	1.5000	3
Na	23	72	He	53788.071	ppb	2.3	4577140.35	97.8549	Analog	0.1000	3
Mg	24	72	He	34297.313	ppb	2.3	1470152.63	31.4306	Analog	0.1000	3
Al	27	72	He	4665.473	ppb	2.6	63488.79	1.3574	Pulse	0.1000	3
K	39	72	He	8343.612	ppb	2.3	307972.36	6.5837	Pulse	0.5000	3
Ca	44	72	He	72058.438	ppb	2.5	135296.08	2.8926	Pulse	0.5000	3
Ti	47	72	He	485.203	ppb	3.4	7062.23	0.1510	Pulse	0.5000	3
V	51	72	He	470.615	ppb	1.8	301091.08	6.4366	Pulse	0.5000	3
Cr	52	72	He	465.267	ppb	1.9	372875.35	7.9713	Pulse	0.1000	3
Mn	55	72	He	2627.112	ppb	1.9	896723.42	19.1700	Pulse	0.5000	3
Fe	57	72	He	23521.702	ppb	2.2	356513.50	7.6218	Pulse	0.1000	3
Co	59	72	He	463.703	ppb	1.8	720733.65	15.4076	Pulse	0.5000	3
Ni	60	72	He	463.582	ppb	2.2	202419.40	4.3275	Pulse	0.5000	3
Cu	63	72	He	466.222	ppb	2.1	589369.31	12.5998	Pulse	0.5000	3
Zn	66	72	He	474.585	ppb	1.7	69262.69	1.4806	Pulse	0.5000	3
As	75	72	He	491.440	ppb	2.1	58651.69	1.2539	Pulse	0.5000	3
Sr	88	115	He	196.375	ppb	1.3	79224.55	2.0584	Pulse	0.1000	3
Mo	98	115	He	51.604	ppb	0.5	46623.12	1.2112	Pulse	0.1000	3
Ag	107	115	He	50.849	ppb	0.9	96517.57	2.5076	Pulse	0.1000	3
Cd	111	115	He	49.290	ppb	2.4	10645.00	0.2766	Pulse	0.5000	3
Sn	120	115	He	97.630	ppb	0.9	65777.20	1.7087	Pulse	0.1000	3
Sb	121	115	He	98.026	ppb	0.4	60859.90	1.5810	Pulse	0.3000	3
Ba	137	115	He	668.816	ppb	1.7	135956.40	3.5325	Pulse	0.1000	3
Tl	205	159	He	96.382	ppb	0.5	356263.48	2.3886	Pulse	0.1000	3
Pb	208	159	He	51.328	ppb	0.8	254624.87	1.7072	Pulse	0.1000	3
U	238	159	He	50.153	ppb	2.0	252590.91	1.6936	Pulse	0.1000	3

ISTD Table:

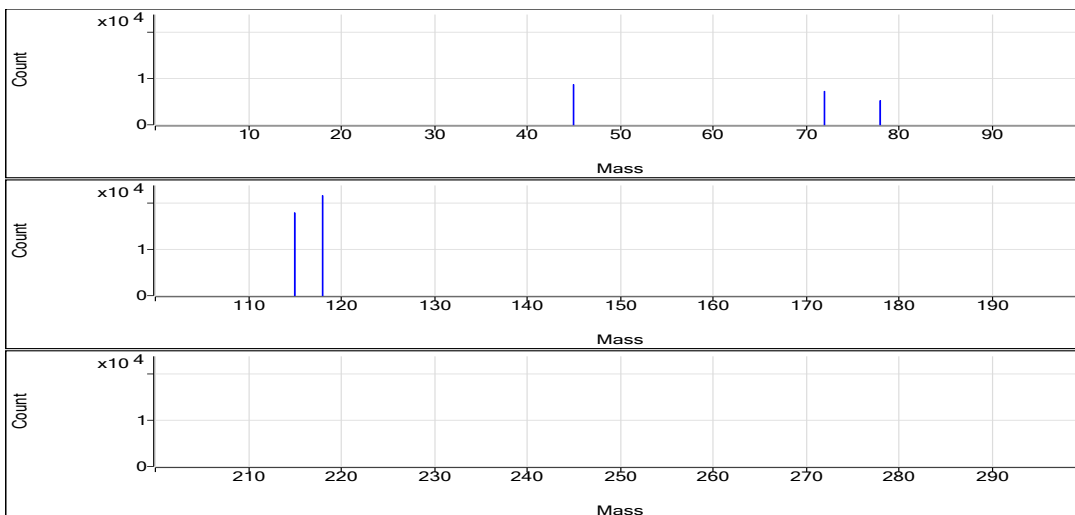
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1239119.41	0.5	94.8	Analog	0.1000	3
No Gas	Ge	72	633519.14	0.9	96.7	Pulse	0.1000	3
H2	Sc	45	87225.64	1.6	106.2	Pulse	0.1000	3
H2	Ge	72	72695.30	1.2	106.4	Pulse	0.1000	3
H2	In	115	179350.29	0.9	105.1	Pulse	0.1000	3
He	Sc	45	24298.56	2.2	94.9	Pulse	0.1000	3
He	Ge	72	46789.32	2.0	98.5	Pulse	0.1000	3
He	In	115	38492.63	1.2	94.0	Pulse	0.1000	3
He	Tb	159	149149.06	0.4	93.5	Pulse	0.1000	3
He	Bi	209	109157.72	0.3	93.3	Pulse	0.1000	3

No Gas

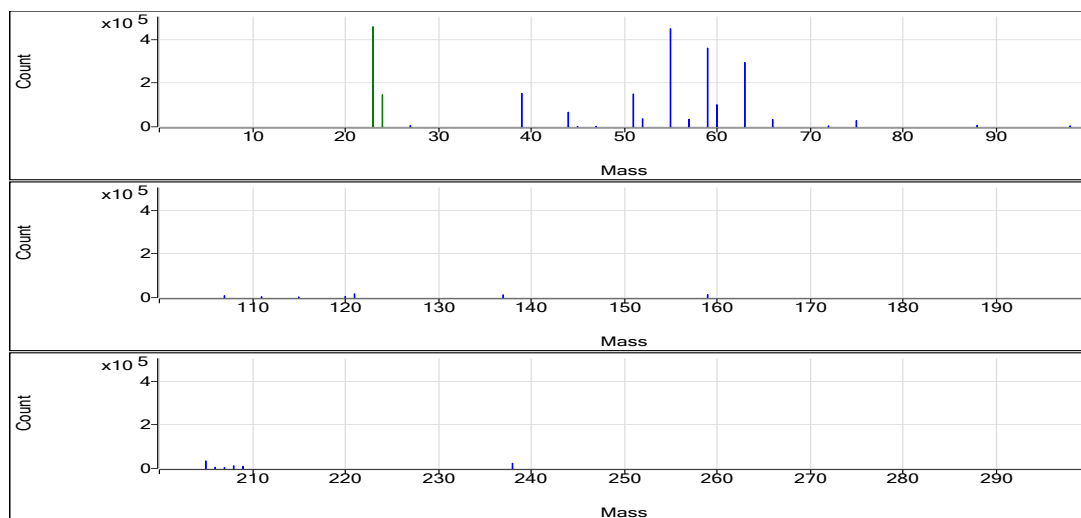


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.712	0.0518	33102.45	0.0011	7.835E-05
Be	9	1	No Gas	50.286	0.0535	33577.33	0.0011	7.835E-05
Be	9	1	No Gas	52.613	0.056	35485.12	0.0011	7.835E-05
Se	78	2	H2	97.251	0.0493	3537.06	0.0005	2.594E-05
Se	78	2	H2	94.635	0.048	3527.73	0.0005	2.594E-05
Se	78	2	H2	94.06	0.0477	3473.72	0.0005	2.594E-05
Na	23	3	He	53104.887	96.6142	4563155.24	0.0018	0.1731
Na	23	3	He	55219.651	100.4548	4590388.68	0.0018	0.1731
Na	23	3	He	53039.676	96.4958	4577877.12	0.0018	0.1731
Mg	24	3	He	33939.492	31.1027	1469002.32	0.0009	0.006537
Mg	24	3	He	35207.341	32.2644	1474354.51	0.0009	0.006537
Mg	24	3	He	33745.107	30.9246	1467101.07	0.0009	0.006537
Al	27	3	He	4572.168	1.3303	62829.05	0.0003	0.00231
Al	27	3	He	4801.718	1.3969	63834.25	0.0003	0.00231
Al	27	3	He	4622.533	1.3449	63803.08	0.0003	0.00231
K	39	3	He	8387.503	6.6165	312500.75	0.0007	0.3475
K	39	3	He	8506.761	6.7056	306420.31	0.0007	0.3475
K	39	3	He	8136.571	6.4289	304996.03	0.0007	0.3475
Ca	44	3	He	71404.295	2.8663	135379.16	0	0.002807
Ca	44	3	He	74085.496	2.9739	135893.95	0	0.002807
Ca	44	3	He	70685.523	2.8375	134615.13	0	0.002807
Ti	47	3	He	478.354	0.1489	7031.55	0.0003	0.0001123
Ti	47	3	He	504.145	0.1569	7169.60	0.0003	0.0001123
Ti	47	3	He	473.11	0.1472	6985.53	0.0003	0.0001123
V	51	3	He	466.124	6.3752	301106.88	0.0137	0.008308
V	51	3	He	480.236	6.568	300131.94	0.0137	0.008308
V	51	3	He	465.484	6.3665	302034.41	0.0137	0.008308
Cr	52	3	He	460.609	7.8917	372728.90	0.0171	0.02156
Cr	52	3	He	475.311	8.1429	372097.38	0.0171	0.02156
Cr	52	3	He	459.881	7.8792	373799.76	0.0171	0.02156
Mn	55	3	He	2603.724	18.9994	897353.44	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2683.788	19.5835	894890.63	0.0073	0.002316
Mn	55	3	He	2593.823	18.9271	897926.19	0.0073	0.002316
Fe	57	3	He	23221.669	7.5246	355393.20	0.0003	0.002736
Fe	57	3	He	24120.116	7.8156	357144.56	0.0003	0.002736
Fe	57	3	He	23223.32	7.5252	357002.73	0.0003	0.002736
Co	59	3	He	461.147	15.3227	723702.75	0.0332	0.001922
Co	59	3	He	473.246	15.7247	718556.38	0.0332	0.001922
Co	59	3	He	456.715	15.1755	719941.81	0.0332	0.001922
Ni	60	3	He	460.23	4.2962	202911.67	0.0093	0.003141
Ni	60	3	He	474.895	4.433	202570.16	0.0093	0.003141
Ni	60	3	He	455.62	4.2532	201776.36	0.0093	0.003141
Cu	63	3	He	460.859	12.4549	588252.06	0.027	0.003732
Cu	63	3	He	477.333	12.9	589477.38	0.027	0.003732
Cu	63	3	He	460.472	12.4444	590378.50	0.027	0.003732
Zn	66	3	He	467.824	1.4596	68935.91	0.0031	0.002032
Zn	66	3	He	483.431	1.5082	68917.92	0.0031	0.002032
Zn	66	3	He	472.5	1.4741	69934.25	0.0031	0.002032
As	75	3	He	486.228	1.2406	58594.05	0.0025	0.0007733
As	75	3	He	503.292	1.2841	58678.50	0.0025	0.0007733
As	75	3	He	484.8	1.237	58682.52	0.0025	0.0007733
Sr	88	3	He	198.236	2.0779	79297.75	0.0105	0.004071
Sr	88	3	He	197.529	2.0705	79328.60	0.0105	0.004071
Sr	88	3	He	193.36	2.0268	79047.30	0.0105	0.004071
Mo	98	3	He	51.723	1.214	46329.13	0.0234	0.003908
Mo	98	3	He	51.294	1.2039	46128.13	0.0234	0.003908
Mo	98	3	He	51.796	1.2157	47412.11	0.0234	0.003908
Ag	107	3	He	50.868	2.5085	95732.71	0.0493	0.0004851
Ag	107	3	He	51.29	2.5293	96909.99	0.0493	0.0004851
Ag	107	3	He	50.388	2.4849	96910.00	0.0493	0.0004851
Cd	111	3	He	48.937	0.2746	10479.54	0.0056	0
Cd	111	3	He	50.634	0.2841	10885.82	0.0056	0
Cd	111	3	He	48.299	0.271	10569.65	0.0056	0
Sn	120	3	He	97.502	1.7066	65128.02	0.0169	0.0609
Sn	120	3	He	96.776	1.6943	64916.78	0.0169	0.0609
Sn	120	3	He	98.612	1.7253	67286.80	0.0169	0.0609
Sb	121	3	He	97.628	1.5746	60092.33	0.0161	0.0005433
Sb	121	3	He	98.006	1.5807	60564.43	0.0161	0.0005433
Sb	121	3	He	98.443	1.5878	61922.94	0.0161	0.0005433
Ba	137	3	He	676.366	3.5723	136332.17	0.0053	0.001141
Ba	137	3	He	674.546	3.5627	136504.55	0.0053	0.001141
Ba	137	3	He	655.536	3.4624	135032.48	0.0053	0.001141
Tl	205	3	He	96.784	2.3986	356641.32	0.0248	0.0005854
Tl	205	3	He	96.466	2.3907	358366.52	0.0248	0.0005854
Tl	205	3	He	95.896	2.3766	353782.61	0.0248	0.0005854
Pb	208	3	He	51.742	1.721	133852.90	0.0332	0.001693
Pb	208	3	He	50.886	1.6925	133558.15	0.0332	0.001693
Pb	208	3	He	51.355	1.7081	134235.19	0.0332	0.001693
U	238	3	He	51.217	1.7296	257165.54	0.0338	0.0007949
U	238	3	He	49.286	1.6644	249490.74	0.0338	0.0007949
U	238	3	He	49.954	1.6869	251116.44	0.0338	0.0007949
Sc	45	1	No Gas			1232683.42		
Sc	45	1	No Gas			1240927.09		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1243747.72		
Ge	72	1	No Gas			638788.15		
Ge	72	1	No Gas			627699.76		
Ge	72	1	No Gas			634069.52		
Sc	45	2	H2			86548.85		
Sc	45	2	H2			86286.66		
Sc	45	2	H2			88841.40		
Ge	72	2	H2			71731.29		
Ge	72	2	H2			73519.04		
Ge	72	2	H2			72835.56		
In	115	2	H2			177482.17		
In	115	2	H2			180466.21		
In	115	2	H2			180102.48		
Sc	45	3	He			23757.70		
Sc	45	3	He			24288.53		
Sc	45	3	He			24849.44		
Ge	72	3	He			47230.67		
Ge	72	3	He			45696.08		
Ge	72	3	He			47441.20		
In	115	3	He			38619.10		
In	115	3	He			38768.97		
In	115	3	He			39471.14		
Tb	159	3	He			148687.97		
Tb	159	3	He			149898.86		
Tb	159	3	He			148860.35		
Bi	209	3	He			108855.60		
Bi	209	3	He			109227.88		
Bi	209	3	He			109389.69		

Quantitation Report

Data File Name 174SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:12:28 PM
Sample Name 180-193200-H-8-B MSD
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

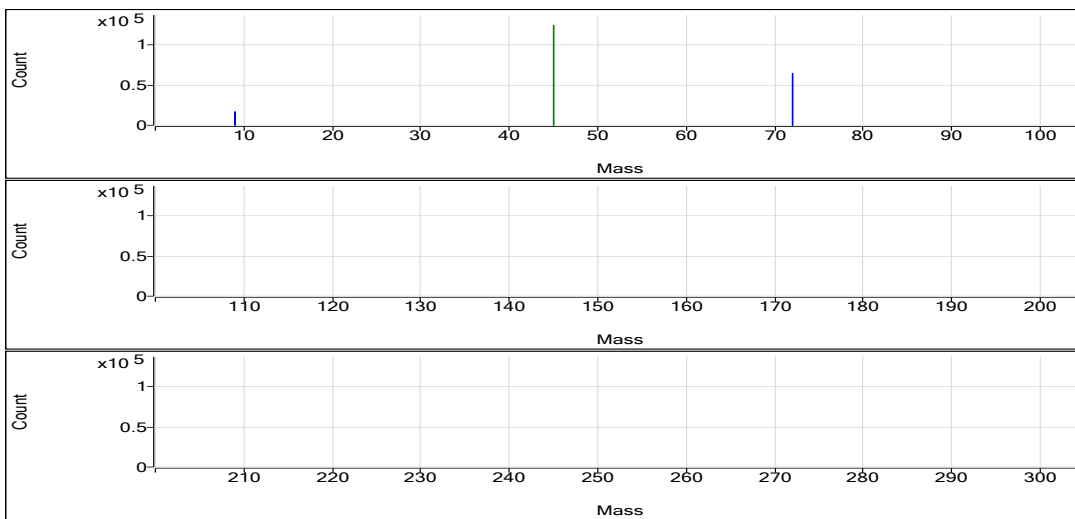
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	49.365	ppb	4.2	34016.82	0.0525	Pulse	0.5000	3
Se	78	72	H2	97.698	ppb	0.6	3521.72	0.0495	Pulse	1.5000	3
Na	23	72	He	56860.760	ppb	3.6	4783062.53	103.4351	Analog	0.1000	3
Mg	24	72	He	35351.357	ppb	4.1	1497963.93	32.3963	Analog	0.1000	3
Al	27	72	He	4736.791	ppb	4.2	63719.39	1.3781	Pulse	0.1000	3
K	39	72	He	8648.284	ppb	2.7	315024.28	6.8114	Pulse	0.5000	3
Ca	44	72	He	76094.826	ppb	3.8	141237.95	3.0544	Pulse	0.5000	3
Ti	47	72	He	498.946	ppb	3.4	7180.95	0.1553	Pulse	0.5000	3
V	51	72	He	478.094	ppb	3.6	302372.15	6.5387	Pulse	0.5000	3
Cr	52	72	He	476.826	ppb	4.4	377727.54	8.1688	Pulse	0.1000	3
Mn	55	72	He	2735.584	ppb	3.6	923095.48	19.9614	Pulse	0.5000	3
Fe	57	72	He	23902.140	ppb	3.5	358160.53	7.7450	Pulse	0.1000	3
Co	59	72	He	471.347	ppb	3.5	724246.98	15.6616	Pulse	0.5000	3
Ni	60	72	He	472.316	ppb	3.8	203876.15	4.4089	Pulse	0.5000	3
Cu	63	72	He	474.115	ppb	3.7	592502.77	12.8130	Pulse	0.5000	3
Zn	66	72	He	483.246	ppb	3.5	69719.25	1.5076	Pulse	0.5000	3
As	75	72	He	503.044	ppb	4.1	59351.62	1.2835	Pulse	0.5000	3
Sr	88	115	He	208.569	ppb	4.0	82709.12	2.1859	Pulse	0.1000	3
Mo	98	115	He	53.073	ppb	4.7	47124.52	1.2456	Pulse	0.1000	3
Ag	107	115	He	51.763	ppb	1.2	96611.28	2.5526	Pulse	0.1000	3
Cd	111	115	He	50.658	ppb	1.2	10758.40	0.2843	Pulse	0.5000	3
Sn	120	115	He	102.042	ppb	3.0	67477.88	1.7832	Pulse	0.1000	3
Sb	121	115	He	101.251	ppb	3.4	61792.67	1.6330	Pulse	0.3000	3
Ba	137	115	He	684.006	ppb	3.1	136703.99	3.6127	Pulse	0.1000	3
Tl	205	159	He	96.342	ppb	3.5	356741.02	2.3876	Pulse	0.1000	3
Pb	208	159	He	50.786	ppb	2.3	252422.53	1.6892	Pulse	0.1000	3
U	238	159	He	50.982	ppb	4.2	257209.08	1.7216	Pulse	0.1000	3

ISTD Table:

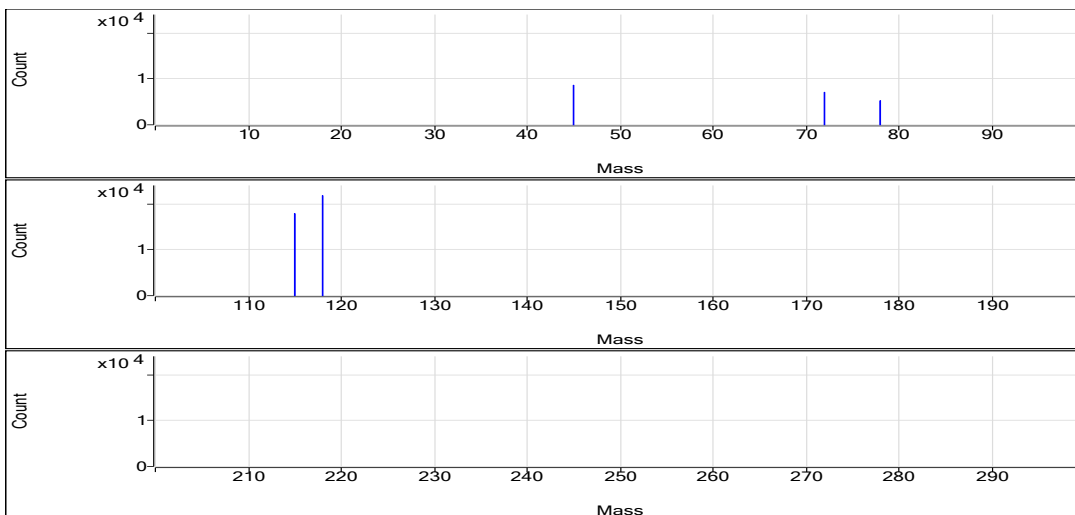
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1246809.98	2.3	95.4	Analog	0.1000	3
No Gas	Ge	72	647758.39	0.1	98.9	Pulse	0.1000	3
H2	Sc	45	86508.46	0.5	105.3	Pulse	0.1000	3
H2	Ge	72	71094.63	0.3	104.0	Pulse	0.1000	3
H2	In	115	178893.07	1.0	104.9	Pulse	0.1000	3
He	Sc	45	24482.43	3.2	95.6	Pulse	0.1000	3
He	Ge	72	46267.43	2.3	97.4	Pulse	0.1000	3
He	In	115	37852.42	1.6	92.4	Pulse	0.1000	3
He	Tb	159	149469.02	1.7	93.7	Pulse	0.1000	3
He	Bi	209	109120.58	0.8	93.3	Pulse	0.1000	3

No Gas

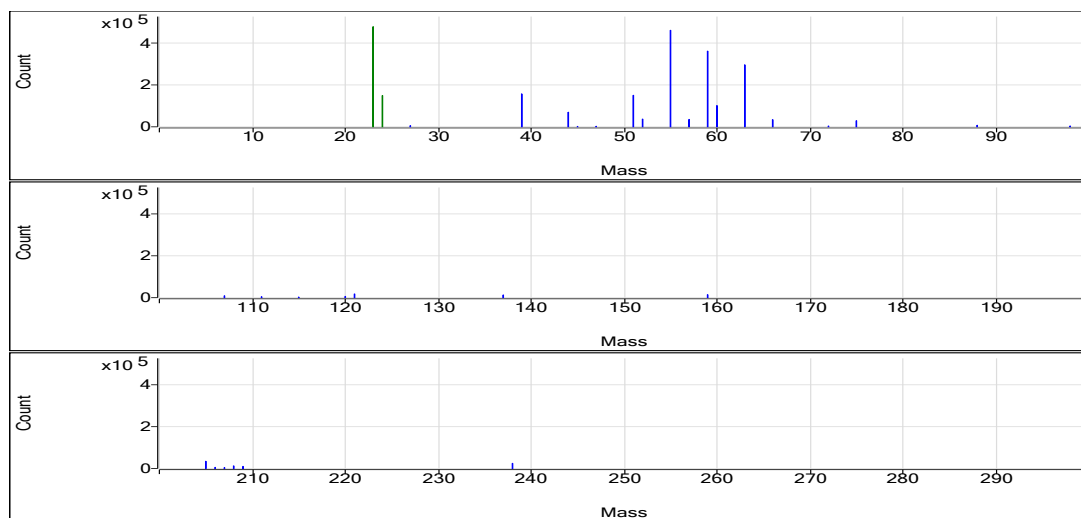


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.099	0.0501	32471.12	0.0011	7.835E-05
Be	9	1	No Gas	49.789	0.053	34264.58	0.0011	7.835E-05
Be	9	1	No Gas	51.208	0.0545	35314.77	0.0011	7.835E-05
Se	78	2	H2	97.16	0.0493	3516.39	0.0005	2.594E-05
Se	78	2	H2	98.36	0.0499	3537.73	0.0005	2.594E-05
Se	78	2	H2	97.575	0.0495	3511.05	0.0005	2.594E-05
Na	23	3	He	57013.143	103.7118	4768301.80	0.0018	0.1731
Na	23	3	He	54756.972	99.6145	4727837.12	0.0018	0.1731
Na	23	3	He	58812.166	106.9789	4853048.68	0.0018	0.1731
Mg	24	3	He	35450.391	32.487	1493638.88	0.0009	0.006537
Mg	24	3	He	33870.3	31.0393	1473167.63	0.0009	0.006537
Mg	24	3	He	36733.379	33.6625	1527085.29	0.0009	0.006537
Al	27	3	He	4740.756	1.3792	63411.84	0.0003	0.00231
Al	27	3	He	4536.071	1.3198	62638.30	0.0003	0.00231
Al	27	3	He	4933.547	1.4352	65108.02	0.0003	0.00231
K	39	3	He	8784.928	6.9135	317859.25	0.0007	0.3475
K	39	3	He	8376.082	6.6079	313621.75	0.0007	0.3475
K	39	3	He	8783.842	6.9127	313591.84	0.0007	0.3475
Ca	44	3	He	76590.389	3.0743	141346.25	0	0.002807
Ca	44	3	He	72975.806	2.9294	139031.44	0	0.002807
Ca	44	3	He	78718.283	3.1597	143336.17	0	0.002807
Ti	47	3	He	495.052	0.1541	7083.58	0.0003	0.0001123
Ti	47	3	He	484.025	0.1506	7149.60	0.0003	0.0001123
Ti	47	3	He	517.76	0.1611	7309.66	0.0003	0.0001123
V	51	3	He	475.326	6.5009	298889.72	0.0137	0.008308
V	51	3	He	462.282	6.3228	300087.06	0.0137	0.008308
V	51	3	He	496.673	6.7925	308139.66	0.0137	0.008308
Cr	52	3	He	469.276	8.0398	369639.45	0.0171	0.02156
Cr	52	3	He	460.632	7.8921	374567.46	0.0171	0.02156
Cr	52	3	He	500.57	8.5744	388975.70	0.0171	0.02156
Mn	55	3	He	2715.826	19.8173	911128.38	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2649.358	19.3323	917538.06	0.0073	0.002316
Mn	55	3	He	2841.567	20.7347	940620.00	0.0073	0.002316
Fe	57	3	He	23802.263	7.7127	354602.18	0.0003	0.002736
Fe	57	3	He	23124.063	7.493	355628.28	0.0003	0.002736
Fe	57	3	He	24780.094	8.0294	364251.13	0.0003	0.002736
Co	59	3	He	469.688	15.6065	717531.00	0.0332	0.001922
Co	59	3	He	455.703	15.1419	718652.88	0.0332	0.001922
Co	59	3	He	488.649	16.2364	736557.06	0.0332	0.001922
Ni	60	3	He	470.495	4.3919	201925.89	0.0093	0.003141
Ni	60	3	He	455.416	4.2513	201771.38	0.0093	0.003141
Ni	60	3	He	491.038	4.5836	207931.19	0.0093	0.003141
Cu	63	3	He	472.43	12.7675	587003.63	0.027	0.003732
Cu	63	3	He	457.507	12.3643	586826.75	0.027	0.003732
Cu	63	3	He	492.409	13.3073	603677.94	0.027	0.003732
Zn	66	3	He	478.837	1.4939	68682.75	0.0031	0.002032
Zn	66	3	He	469.01	1.4633	69447.92	0.0031	0.002032
Zn	66	3	He	501.892	1.5657	71027.07	0.0031	0.002032
As	75	3	He	494.98	1.2629	58064.10	0.0025	0.0007733
As	75	3	He	487.846	1.2447	59076.05	0.0025	0.0007733
As	75	3	He	526.305	1.3428	60914.70	0.0025	0.0007733
Sr	88	3	He	201.537	2.1124	81187.32	0.0105	0.004071
Sr	88	3	He	206.343	2.1627	81932.21	0.0105	0.004071
Sr	88	3	He	217.826	2.2828	85007.83	0.0105	0.004071
Mo	98	3	He	50.855	1.1937	45877.23	0.0234	0.003908
Mo	98	3	He	52.602	1.2345	46770.26	0.0234	0.003908
Mo	98	3	He	55.763	1.3085	48726.06	0.0234	0.003908
Ag	107	3	He	51.088	2.5194	96828.74	0.0493	0.0004851
Ag	107	3	He	51.899	2.5594	96960.58	0.0493	0.0004851
Ag	107	3	He	52.301	2.5792	96044.51	0.0493	0.0004851
Cd	111	3	He	49.929	0.2802	10767.75	0.0056	0
Cd	111	3	He	50.973	0.286	10835.79	0.0056	0
Cd	111	3	He	51.072	0.2866	10671.67	0.0056	0
Sn	120	3	He	98.972	1.7314	66543.41	0.0169	0.0609
Sn	120	3	He	102.11	1.7844	67599.75	0.0169	0.0609
Sn	120	3	He	105.044	1.8339	68290.47	0.0169	0.0609
Sb	121	3	He	98.377	1.5867	60982.69	0.0161	0.0005433
Sb	121	3	He	100.357	1.6186	61320.71	0.0161	0.0005433
Sb	121	3	He	105.02	1.6938	63074.61	0.0161	0.0005433
Ba	137	3	He	662.413	3.4987	134467.56	0.0053	0.001141
Ba	137	3	He	684.625	3.616	136989.47	0.0053	0.001141
Ba	137	3	He	704.979	3.7234	138654.94	0.0053	0.001141
Tl	205	3	He	93.976	2.329	351919.10	0.0248	0.0005854
Tl	205	3	He	94.819	2.3499	354077.96	0.0248	0.0005854
Tl	205	3	He	100.231	2.484	364226.01	0.0248	0.0005854
Pb	208	3	He	50.099	1.6664	133378.42	0.0332	0.001693
Pb	208	3	He	50.102	1.6665	132992.40	0.0332	0.001693
Pb	208	3	He	52.158	1.7348	135113.47	0.0332	0.001693
U	238	3	He	49.662	1.6771	253408.88	0.0338	0.0007949
U	238	3	He	49.803	1.6818	253414.90	0.0338	0.0007949
U	238	3	He	53.48	1.806	264803.47	0.0338	0.0007949
Sc	45	1	No Gas			1279477.40		
Sc	45	1	No Gas			1230198.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1230753.89		
Ge	72	1	No Gas			648029.95		
Ge	72	1	No Gas			646930.81		
Ge	72	1	No Gas			648314.40		
Sc	45	2	H2			86146.50		
Sc	45	2	H2			86348.22		
Sc	45	2	H2			87030.66		
Ge	72	2	H2			71379.34		
Ge	72	2	H2			70936.69		
Ge	72	2	H2			70967.87		
In	115	2	H2			176968.18		
In	115	2	H2			180439.31		
In	115	2	H2			179271.72		
Sc	45	3	He			25160.20		
Sc	45	3	He			24659.17		
Sc	45	3	He			23627.91		
Ge	72	3	He			45976.45		
Ge	72	3	He			47461.33		
Ge	72	3	He			45364.52		
In	115	3	He			38899.67		
In	115	3	He			38357.97		
In	115	3	He			37716.64		
Tb	159	3	He			151101.32		
Tb	159	3	He			150677.47		
Tb	159	3	He			146628.28		
Bi	209	3	He			108472.73		
Bi	209	3	He			108734.90		
Bi	209	3	He			110154.10		

Quantitation Report

Data File Name 176_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:16:51 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

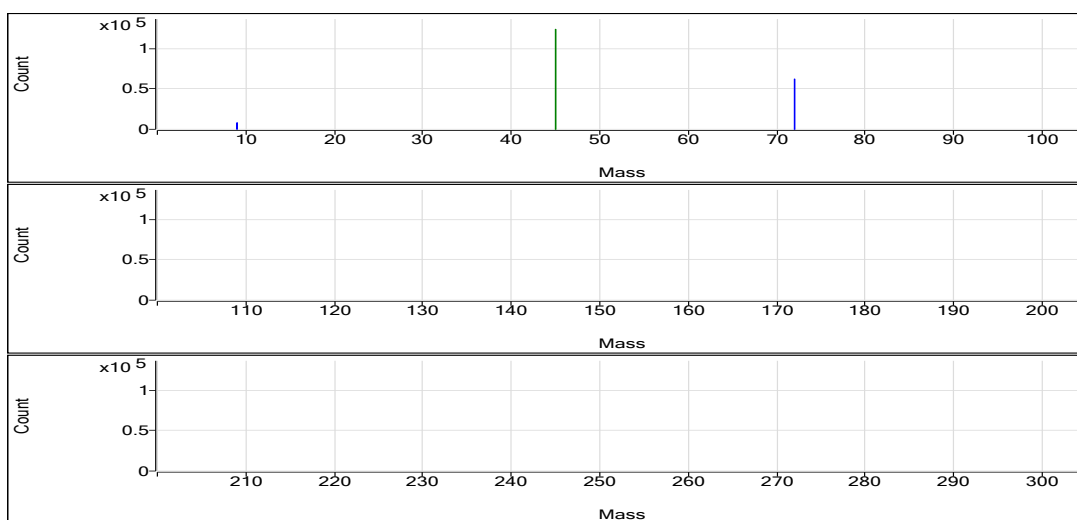
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.718	ppb	4.7	16462.73	0.0263	Pulse	0.5000	3
Se	78	72	H2	25.454	ppb	2.9	901.58	0.0129	Pulse	1.5000	3
Na	23	72	He	2507.573	ppb	3.7	215227.68	4.7269	Pulse	0.1000	3
Mg	24	72	He	2453.667	ppb	2.8	102682.24	2.2546	Pulse	0.1000	3
Al	27	72	He	2410.309	ppb	2.2	31991.32	0.7024	Pulse	0.1000	3
K	39	72	He	2478.114	ppb	7.2	100099.21	2.1997	Pulse	0.5000	3
Ca	44	72	He	2473.828	ppb	3.3	4645.35	0.1020	Pulse	0.5000	3
Ti	47	72	He	2451.494	ppb	2.7	34726.02	0.7625	Pulse	0.5000	3
V	51	72	He	244.675	ppb	3.5	152553.30	3.3504	Pulse	0.5000	3
Cr	52	72	He	242.402	ppb	2.5	189615.06	4.1633	Pulse	0.1000	3
Mn	55	72	He	242.537	ppb	3.7	80675.41	1.7719	Pulse	0.5000	3
Fe	57	72	He	2384.799	ppb	3.3	35299.22	0.7752	Pulse	0.1000	3
Co	59	72	He	243.228	ppb	3.8	368006.15	8.0827	Pulse	0.5000	3
Ni	60	72	He	242.066	ppb	3.3	102959.90	2.2611	Pulse	0.5000	3
Cu	63	72	He	242.805	ppb	2.9	298902.37	6.5637	Pulse	0.5000	3
Zn	66	72	He	239.755	ppb	3.6	34106.54	0.7490	Pulse	0.5000	3
As	75	72	He	239.886	ppb	1.6	27898.85	0.6125	Pulse	0.5000	3
Sr	88	115	He	25.368	ppb	1.2	10387.05	0.2694	Pulse	0.1000	3
Mo	98	115	He	24.939	ppb	2.0	22640.08	0.5874	Pulse	0.1000	3
Ag	107	115	He	25.348	ppb	2.3	48188.57	1.2502	Pulse	0.1000	3
Cd	111	115	He	25.037	ppb	4.7	5412.98	0.1405	Pulse	0.5000	3
Sn	120	115	He	24.806	ppb	1.1	18488.18	0.4796	Pulse	0.1000	3
Sb	121	115	He	24.640	ppb	1.7	15334.30	0.3978	Pulse	0.3000	3
Ba	137	115	He	251.135	ppb	3.8	51142.85	1.3271	Pulse	0.1000	3
Tl	205	159	He	25.037	ppb	1.2	92185.19	0.6209	Pulse	0.1000	3
Pb	208	159	He	25.105	ppb	0.9	124097.45	0.8359	Pulse	0.1000	3
U	238	159	He	25.205	ppb	1.3	126426.49	0.8516	Pulse	0.1000	3

ISTD Table:

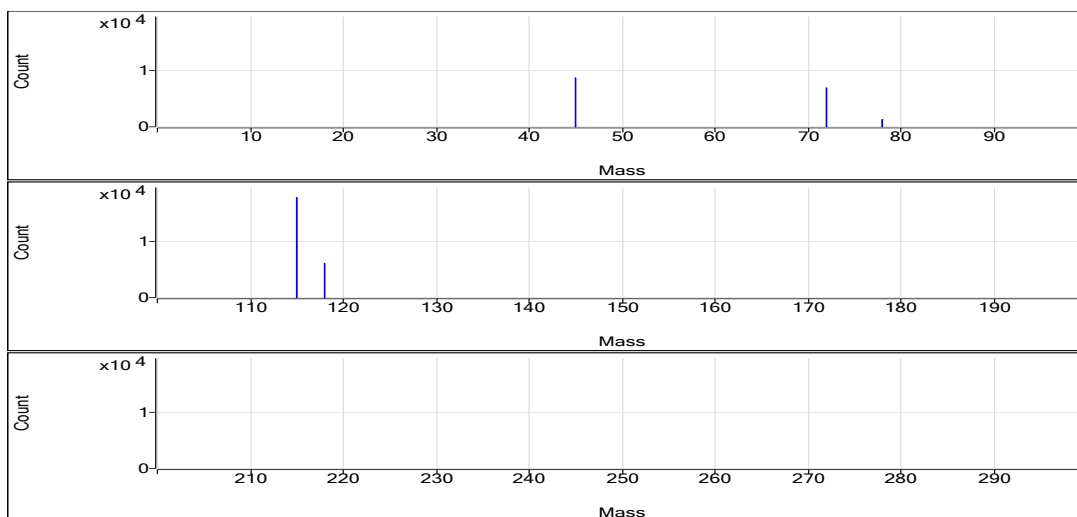
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1241933.39	0.5	95.0	Analog	0.1000	3
No Gas	Ge	72	624980.61	1.0	95.4	Pulse	0.1000	3
H2	Sc	45	87771.82	1.2	106.8	Pulse	0.1000	3
H2	Ge	72	69775.24	1.6	102.1	Pulse	0.1000	3
H2	In	115	179283.67	1.0	105.1	Pulse	0.1000	3
He	Sc	45	24538.90	1.5	95.8	Pulse	0.1000	3
He	Ge	72	45569.00	3.4	95.9	Pulse	0.1000	3
He	In	115	38556.28	2.3	94.2	Pulse	0.1000	3
He	Tb	159	148469.31	0.7	93.1	Pulse	0.1000	3
He	Bi	209	110614.89	0.6	94.6	Pulse	0.1000	3

No Gas

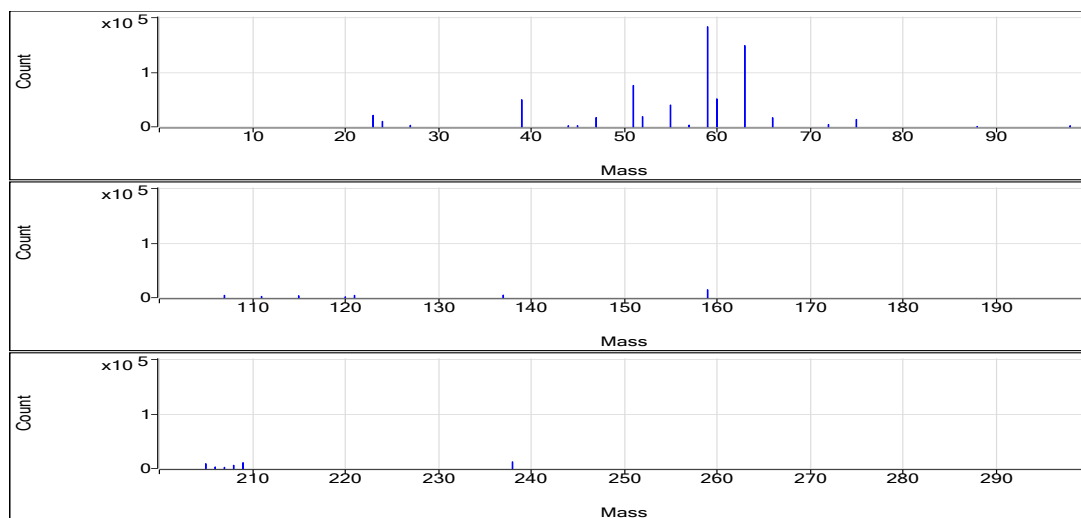


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.541	0.0251	15497.12	0.0011	7.835E-05
Be	9	1	No Gas	24.761	0.0264	16562.15	0.0011	7.835E-05
Be	9	1	No Gas	25.85	0.0275	17328.93	0.0011	7.835E-05
Se	78	2	H2	26.047	0.0132	910.03	0.0005	2.594E-05
Se	78	2	H2	25.684	0.013	906.03	0.0005	2.594E-05
Se	78	2	H2	24.631	0.0125	888.69	0.0005	2.594E-05
Na	23	3	He	2613.923	4.9201	215649.37	0.0018	0.1731
Na	23	3	He	2466.75	4.6528	214201.34	0.0018	0.1731
Na	23	3	He	2442.045	4.6079	215832.32	0.0018	0.1731
Mg	24	3	He	2532.322	2.3267	101981.10	0.0009	0.006537
Mg	24	3	He	2402.497	2.2078	101639.06	0.0009	0.006537
Mg	24	3	He	2426.182	2.2295	104426.57	0.0009	0.006537
Al	27	3	He	2459.42	0.7166	31410.24	0.0003	0.00231
Al	27	3	He	2416.085	0.704	32412.10	0.0003	0.00231
Al	27	3	He	2355.423	0.6864	32151.62	0.0003	0.00231
K	39	3	He	2675.619	2.3473	102883.31	0.0007	0.3475
K	39	3	He	2427.314	2.1617	99518.86	0.0007	0.3475
K	39	3	He	2331.409	2.09	97895.45	0.0007	0.3475
Ca	44	3	He	2559.91	0.1055	4622.68	0	0.002807
Ca	44	3	He	2465.279	0.1017	4680.69	0	0.002807
Ca	44	3	He	2396.295	0.0989	4632.67	0	0.002807
Ti	47	3	He	2527.713	0.7862	34460.13	0.0003	0.0001123
Ti	47	3	He	2415.082	0.7512	34582.39	0.0003	0.0001123
Ti	47	3	He	2411.687	0.7501	35135.54	0.0003	0.0001123
V	51	3	He	254.195	3.4804	152549.23	0.0137	0.008308
V	51	3	He	242.204	3.3166	152688.78	0.0137	0.008308
V	51	3	He	237.628	3.2541	152421.89	0.0137	0.008308
Cr	52	3	He	248.452	4.2667	187011.05	0.0171	0.02156
Cr	52	3	He	242.325	4.162	191606.54	0.0171	0.02156
Cr	52	3	He	236.43	4.0613	190227.58	0.0171	0.02156
Mn	55	3	He	252.399	1.8438	80816.70	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	240.483	1.7569	80882.95	0.0073	0.002316
Mn	55	3	He	234.731	1.7149	80326.59	0.0073	0.002316
Fe	57	3	He	2468.683	0.8024	35168.94	0.0003	0.002736
Fe	57	3	He	2375.486	0.7722	35549.68	0.0003	0.002736
Fe	57	3	He	2310.229	0.7511	35179.04	0.0003	0.002736
Co	59	3	He	253.552	8.4257	369304.47	0.0332	0.001922
Co	59	3	He	240.151	7.9805	367399.94	0.0332	0.001922
Co	59	3	He	235.982	7.842	367314.03	0.0332	0.001922
Ni	60	3	He	251.202	2.3464	102842.61	0.0093	0.003141
Ni	60	3	He	239.155	2.234	102846.34	0.0093	0.003141
Ni	60	3	He	235.841	2.2031	103190.76	0.0093	0.003141
Cu	63	3	He	250.946	6.7836	297328.84	0.027	0.003732
Cu	63	3	He	239.534	6.4753	298103.88	0.027	0.003732
Cu	63	3	He	237.935	6.4321	301274.38	0.027	0.003732
Zn	66	3	He	249.385	0.779	34144.00	0.0031	0.002032
Zn	66	3	He	233.096	0.7283	33526.64	0.0031	0.002032
Zn	66	3	He	236.784	0.7397	34648.98	0.0031	0.002032
As	75	3	He	244.298	0.6237	27337.20	0.0025	0.0007733
As	75	3	He	238.018	0.6077	27976.30	0.0025	0.0007733
As	75	3	He	237.343	0.606	28383.06	0.0025	0.0007733
Sr	88	3	He	25.535	0.2712	10313.72	0.0105	0.004071
Sr	88	3	He	25.016	0.2658	10513.78	0.0105	0.004071
Sr	88	3	He	25.552	0.2714	10333.64	0.0105	0.004071
Mo	98	3	He	24.994	0.5886	22386.26	0.0234	0.003908
Mo	98	3	He	24.422	0.5753	22756.82	0.0234	0.003908
Mo	98	3	He	25.401	0.5982	22777.15	0.0234	0.003908
Ag	107	3	He	25.741	1.2696	48285.45	0.0493	0.0004851
Ag	107	3	He	24.689	1.2178	48175.20	0.0493	0.0004851
Ag	107	3	He	25.613	1.2633	48105.05	0.0493	0.0004851
Cd	111	3	He	25.422	0.1426	5424.98	0.0056	0
Cd	111	3	He	23.709	0.133	5262.92	0.0056	0
Cd	111	3	He	25.98	0.1458	5551.03	0.0056	0
Sn	120	3	He	24.841	0.4802	18261.19	0.0169	0.0609
Sn	120	3	He	24.506	0.4745	18771.97	0.0169	0.0609
Sn	120	3	He	25.07	0.484	18431.38	0.0169	0.0609
Sb	121	3	He	24.915	0.4022	15297.58	0.0161	0.0005433
Sb	121	3	He	24.149	0.3899	15424.39	0.0161	0.0005433
Sb	121	3	He	24.856	0.4013	15280.92	0.0161	0.0005433
Ba	137	3	He	252.297	1.3333	50704.89	0.0053	0.001141
Ba	137	3	He	241.093	1.2741	50403.40	0.0053	0.001141
Ba	137	3	He	260.013	1.374	52320.26	0.0053	0.001141
Tl	205	3	He	24.706	0.6127	91044.31	0.0248	0.0005854
Tl	205	3	He	25.123	0.6231	93107.36	0.0248	0.0005854
Tl	205	3	He	25.28	0.627	92403.90	0.0248	0.0005854
Pb	208	3	He	24.891	0.8288	65155.85	0.0332	0.001693
Pb	208	3	He	25.064	0.8345	64593.66	0.0332	0.001693
Pb	208	3	He	25.358	0.8443	65326.83	0.0332	0.001693
U	238	3	He	24.868	0.8402	124841.78	0.0338	0.0007949
U	238	3	He	25.233	0.8525	127395.44	0.0338	0.0007949
U	238	3	He	25.514	0.862	127042.26	0.0338	0.0007949
Sc	45	1	No Gas			1234868.26		
Sc	45	1	No Gas			1245915.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1245016.70		
Ge	72	1	No Gas			617803.58		
Ge	72	1	No Gas			627838.15		
Ge	72	1	No Gas			629300.11		
Sc	45	2	H2			88789.75		
Sc	45	2	H2			87896.64		
Sc	45	2	H2			86629.08		
Ge	72	2	H2			68807.36		
Ge	72	2	H2			69470.78		
Ge	72	2	H2			71047.57		
In	115	2	H2			177148.01		
In	115	2	H2			180468.40		
In	115	2	H2			180234.59		
Sc	45	3	He			24328.60		
Sc	45	3	He			24969.50		
Sc	45	3	He			24318.60		
Ge	72	3	He			43830.56		
Ge	72	3	He			46037.13		
Ge	72	3	He			46839.32		
In	115	3	He			38158.36		
In	115	3	He			39691.09		
In	115	3	He			38207.63		
Tb	159	3	He			148587.33		
Tb	159	3	He			149434.87		
Tb	159	3	He			147385.73		
Bi	209	3	He			111302.84		
Bi	209	3	He			110396.74		
Bi	209	3	He			110145.08		

Quantitation Report

Data File Name 178_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:21:16 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

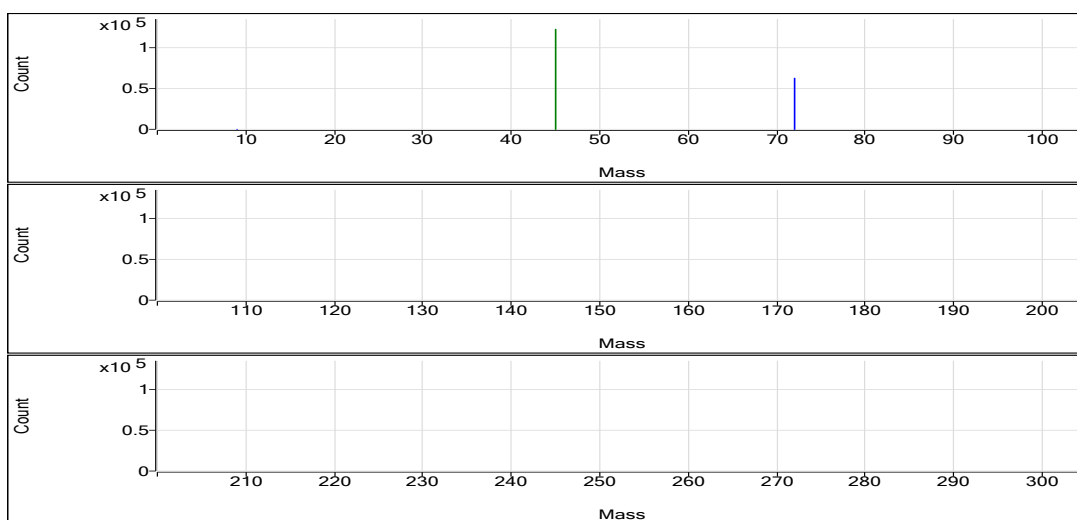
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.062	ppb	29.3	91.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.034	ppb	28.5	3.11	0.0000	Pulse	1.5000	3
Na	23	72	He	6.210	ppb	16.8	8348.96	0.1843	Pulse	0.1000	3
Mg	24	72	He	5.637	ppb	23.7	530.03	0.0117	Pulse	0.1000	3
Al	27	72	He	-2.375	ppb	N/A	73.33	0.0016	Pulse	0.1000	3
K	39	72	He	19.986	ppb	414.8	16409.69	0.3624	Pulse	0.5000	3
Ca	44	72	He	-14.923	ppb	N/A	100.00	0.0022	Pulse	0.5000	3
Ti	47	72	He	0.538	ppb	54.6	12.67	0.0003	Pulse	0.5000	3
V	51	72	He	-0.023	ppb	N/A	362.01	0.0080	Pulse	0.5000	3
Cr	52	72	He	-0.133	ppb	N/A	873.38	0.0193	Pulse	0.1000	3
Mn	55	72	He	0.274	ppb	22.9	195.33	0.0043	Pulse	0.5000	3
Fe	57	72	He	0.648	ppb	488.8	133.34	0.0029	Pulse	0.1000	3
Co	59	72	He	0.031	ppb	49.8	133.33	0.0029	Pulse	0.5000	3
Ni	60	72	He	0.051	ppb	89.3	164.00	0.0036	Pulse	0.5000	3
Cu	63	72	He	-0.004	ppb	N/A	164.67	0.0036	Pulse	0.5000	3
Zn	66	72	He	-0.166	ppb	N/A	68.67	0.0015	Pulse	0.5000	3
As	75	72	He	0.141	ppb	37.0	51.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	-0.115	ppb	N/A	110.00	0.0029	Pulse	0.1000	3
Mo	98	115	He	-0.026	ppb	N/A	126.67	0.0033	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.075	ppb	318.6	2386.91	0.0622	Pulse	0.1000	3
Sb	121	115	He	0.036	ppb	39.0	43.33	0.0011	Pulse	0.3000	3
Ba	137	115	He	0.063	ppb	314.5	56.67	0.0015	Pulse	0.1000	3
Tl	205	159	He	0.033	ppb	40.5	206.68	0.0014	Pulse	0.1000	3
Pb	208	159	He	-0.022	ppb	N/A	140.00	0.0010	Pulse	0.1000	3
U	238	159	He	0.001	ppb	953.1	123.34	0.0008	Pulse	0.1000	3

ISTD Table:

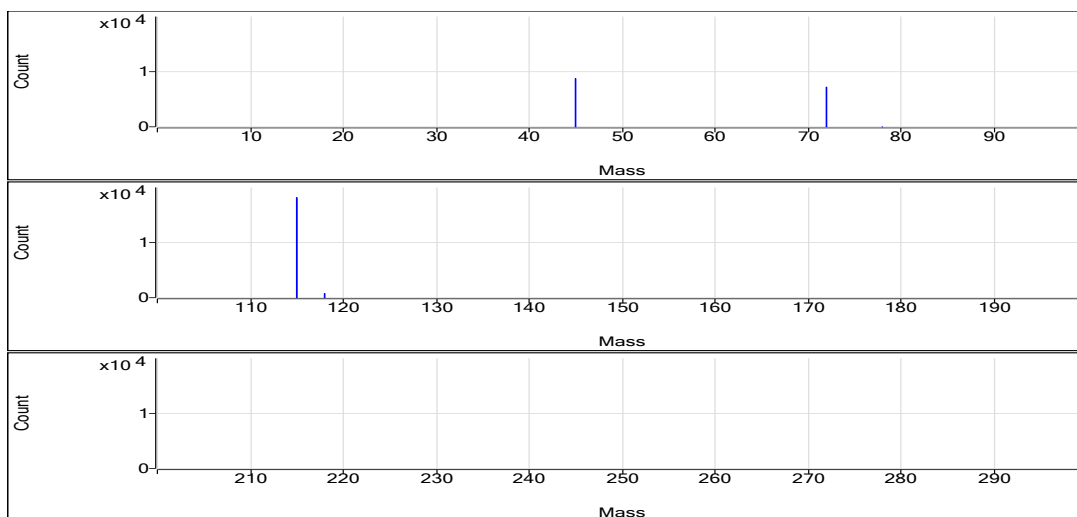
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1231093.81	1.7	94.2	Analog	0.1000	3
No Gas	Ge	72	630324.20	1.7	96.2	Pulse	0.1000	3
H2	Sc	45	87053.92	1.0	106.0	Pulse	0.1000	3
H2	Ge	72	71743.85	1.2	105.0	Pulse	0.1000	3
H2	In	115	180348.38	0.8	105.7	Pulse	0.1000	3
He	Sc	45	24191.78	2.9	94.5	Pulse	0.1000	3
He	Ge	72	45294.56	0.3	95.3	Pulse	0.1000	3
He	In	115	38391.69	0.2	93.8	Pulse	0.1000	3
He	Tb	159	146897.90	0.9	92.1	Pulse	0.1000	3
He	Bi	209	109262.50	0.9	93.4	Pulse	0.1000	3

No Gas

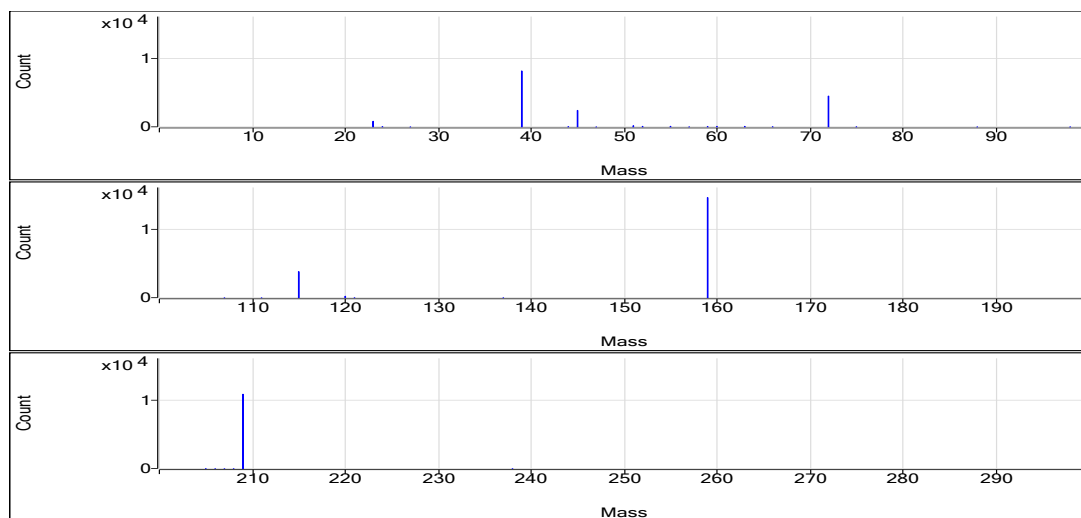


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.076	0.0002	102.00	0.0011	7.835E-05
Be	9	1	No Gas	0.07	0.0002	96.00	0.0011	7.835E-05
Be	9	1	No Gas	0.042	0.0001	76.00	0.0011	7.835E-05
Se	78	2	H2	0.041	0	3.33	0.0005	2.594E-05
Se	78	2	H2	0.023	0	2.67	0.0005	2.594E-05
Se	78	2	H2	0.039	0	3.33	0.0005	2.594E-05
Na	23	3	He	7.099	0.1859	8392.35	0.0018	0.1731
Na	23	3	He	5.066	0.1823	8262.25	0.0018	0.1731
Na	23	3	He	6.464	0.1848	8392.29	0.0018	0.1731
Mg	24	3	He	5.924	0.012	540.03	0.0009	0.006537
Mg	24	3	He	4.181	0.0104	470.02	0.0009	0.006537
Mg	24	3	He	6.805	0.0128	580.03	0.0009	0.006537
Al	27	3	He	-0.325	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-2.637	0.0015	70.00	0.0003	0.00231
Al	27	3	He	-4.163	0.0011	50.00	0.0003	0.00231
K	39	3	He	112.179	0.4313	19467.54	0.0007	0.3475
K	39	3	He	-3.822	0.3446	15623.45	0.0007	0.3475
K	39	3	He	-48.4	0.3113	14138.09	0.0007	0.3475
Ca	44	3	He	-10.32	0.0024	108.00	0	0.002807
Ca	44	3	He	-9.484	0.0024	110.00	0	0.002807
Ca	44	3	He	-24.965	0.0018	82.00	0	0.002807
Ti	47	3	He	0.209	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.774	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.63	0.0003	14.00	0.0003	0.0001123
V	51	3	He	-0.086	0.0071	322.01	0.0137	0.008308
V	51	3	He	0.038	0.0088	400.01	0.0137	0.008308
V	51	3	He	-0.021	0.008	364.01	0.0137	0.008308
Cr	52	3	He	-0.017	0.0213	960.06	0.0171	0.02156
Cr	52	3	He	-0.203	0.0181	820.04	0.0171	0.02156
Cr	52	3	He	-0.179	0.0185	840.04	0.0171	0.02156
Mn	55	3	He	0.332	0.0047	214.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.281	0.0044	198.00	0.0073	0.002316
Mn	55	3	He	0.208	0.0038	174.00	0.0073	0.002316
Fe	57	3	He	2.499	0.0035	160.01	0.0003	0.002736
Fe	57	3	He	2.451	0.0035	160.01	0.0003	0.002736
Fe	57	3	He	-3.007	0.0018	80.00	0.0003	0.002736
Co	59	3	He	0.021	0.0026	118.00	0.0332	0.001922
Co	59	3	He	0.048	0.0035	160.00	0.0332	0.001922
Co	59	3	He	0.023	0.0027	122.00	0.0332	0.001922
Ni	60	3	He	0.096	0.004	182.00	0.0093	0.003141
Ni	60	3	He	0.004	0.0032	144.00	0.0093	0.003141
Ni	60	3	He	0.055	0.0037	166.00	0.0093	0.003141
Cu	63	3	He	-0.035	0.0028	126.00	0.027	0.003732
Cu	63	3	He	0.002	0.0038	172.00	0.027	0.003732
Cu	63	3	He	0.022	0.0043	196.00	0.027	0.003732
Zn	66	3	He	-0.254	0.0012	56.00	0.0031	0.002032
Zn	66	3	He	-0.072	0.0018	82.00	0.0031	0.002032
Zn	66	3	He	-0.172	0.0015	68.00	0.0031	0.002032
As	75	3	He	0.096	0.001	46.00	0.0025	0.0007733
As	75	3	He	0.198	0.0013	58.00	0.0025	0.0007733
As	75	3	He	0.129	0.0011	50.00	0.0025	0.0007733
Sr	88	3	He	-0.14	0.0026	100.00	0.0105	0.004071
Sr	88	3	He	-0.165	0.0023	90.00	0.0105	0.004071
Sr	88	3	He	-0.041	0.0036	140.01	0.0105	0.004071
Mo	98	3	He	-0.022	0.0034	130.01	0.0234	0.003908
Mo	98	3	He	-0.034	0.0031	120.01	0.0234	0.003908
Mo	98	3	He	-0.022	0.0034	130.00	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.128	0.0587	2250.21	0.0169	0.0609
Sn	120	3	He	0.339	0.0666	2560.28	0.0169	0.0609
Sn	120	3	He	0.014	0.0611	2350.25	0.0169	0.0609
Sb	121	3	He	0.026	0.001	36.67	0.0161	0.0005433
Sb	121	3	He	0.031	0.001	40.00	0.0161	0.0005433
Sb	121	3	He	0.052	0.0014	53.33	0.0161	0.0005433
Ba	137	3	He	-0.117	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	0.277	0.0026	100.00	0.0053	0.001141
Ba	137	3	He	0.03	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	0.04	0.0016	230.01	0.0248	0.0005854
Tl	205	3	He	0.018	0.001	150.01	0.0248	0.0005854
Tl	205	3	He	0.042	0.0016	240.01	0.0248	0.0005854
Pb	208	3	He	-0.024	0.0009	70.00	0.0332	0.001693
Pb	208	3	He	-0.014	0.0012	90.00	0.0332	0.001693
Pb	208	3	He	-0.029	0.0007	70.00	0.0332	0.001693
U	238	3	He	-0.011	0.0004	60.00	0.0338	0.0007949
U	238	3	He	0.003	0.0009	130.01	0.0338	0.0007949
U	238	3	He	0.012	0.0012	180.01	0.0338	0.0007949
Sc	45	1	No Gas			1250820.29		
Sc	45	1	No Gas			1232651.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1209809.98		
Ge	72	1	No Gas			641938.35		
Ge	72	1	No Gas			628923.35		
Ge	72	1	No Gas			620110.89		
Sc	45	2	H2			86065.99		
Sc	45	2	H2			87844.13		
Sc	45	2	H2			87251.64		
Ge	72	2	H2			71619.87		
Ge	72	2	H2			70987.58		
Ge	72	2	H2			72624.09		
In	115	2	H2			178887.34		
In	115	2	H2			181571.56		
In	115	2	H2			180586.25		
Sc	45	3	He			23387.37		
Sc	45	3	He			24448.86		
Sc	45	3	He			24739.11		
Ge	72	3	He			45133.97		
Ge	72	3	He			45334.52		
Ge	72	3	He			45415.19		
In	115	3	He			38318.12		
In	115	3	He			38448.47		
In	115	3	He			38458.60		
Tb	159	3	He			145669.55		
Tb	159	3	He			146608.87		
Tb	159	3	He			148415.27		
Bi	209	3	He			110438.58		
Bi	209	3	He			108675.04		
Bi	209	3	He			108673.88		

Quantitation Report

Data File Name 179SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:23:28 PM
Sample Name 410-235715-S-4-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

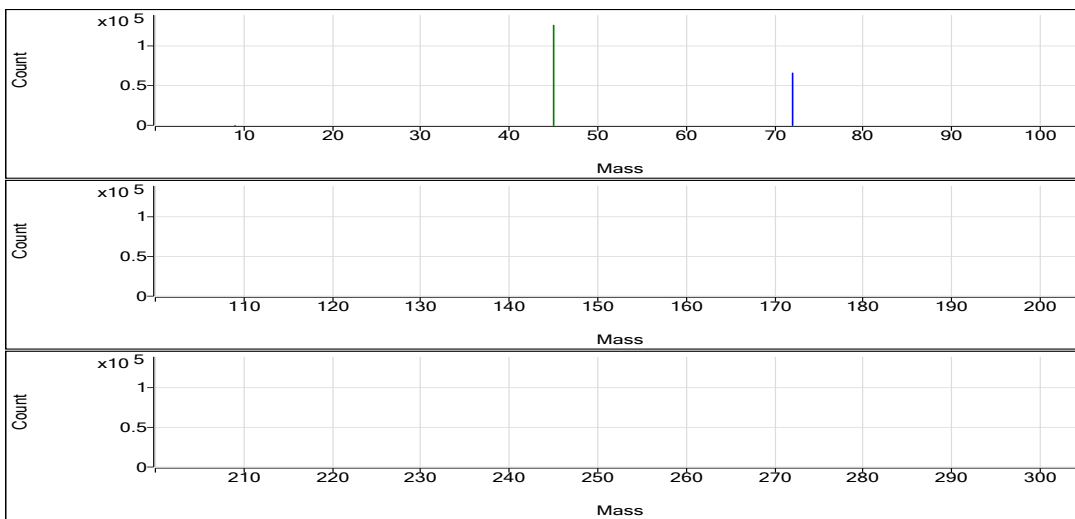
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.040	ppb	55.4	79.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.099	ppb	61.4	5.55	0.0001	Pulse	1.5000	3
Na	23	72	He	12437.366	ppb	3.3	1075561.29	22.7599	Analog	0.1000	3
Mg	24	72	He	6941.532	ppb	2.5	300920.01	6.3665	Pulse	0.1000	3
Al	27	72	He	26.466	ppb	9.4	473.36	0.0100	Pulse	0.1000	3
K	39	72	He	984.993	ppb	5.7	51249.19	1.0837	Pulse	0.5000	3
Ca	44	72	He	50134.834	ppb	2.9	95151.56	2.0134	Pulse	0.5000	3
Ti	47	72	He	0.406	ppb	82.1	11.33	0.0002	Pulse	0.5000	3
V	51	72	He	2.359	ppb	5.6	1915.45	0.0405	Pulse	0.5000	3
Cr	52	72	He	-0.245	ppb	N/A	823.38	0.0174	Pulse	0.1000	3
Mn	55	72	He	825.903	ppb	2.6	284912.19	6.0282	Pulse	0.5000	3
Fe	57	72	He	37.082	ppb	12.9	696.71	0.0147	Pulse	0.1000	3
Co	59	72	He	0.090	ppb	4.3	232.00	0.0049	Pulse	0.5000	3
Ni	60	72	He	0.289	ppb	6.0	276.00	0.0058	Pulse	0.5000	3
Cu	63	72	He	0.329	ppb	8.2	596.01	0.0126	Pulse	0.5000	3
Zn	66	72	He	0.897	ppb	15.9	228.67	0.0048	Pulse	0.5000	3
As	75	72	He	0.995	ppb	24.2	156.00	0.0033	Pulse	0.5000	3
Sr	88	115	He	116.591	ppb	2.2	47201.02	1.2238	Pulse	0.1000	3
Mo	98	115	He	0.963	ppb	2.5	1020.08	0.0264	Pulse	0.1000	3
Ag	107	115	He	0.002	ppb	552.4	23.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	86.6	2.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.296	ppb	N/A	2156.88	0.0559	Pulse	0.1000	3
Sb	121	115	He	0.063	ppb	52.7	60.00	0.0016	Pulse	0.3000	3
Ba	137	115	He	578.453	ppb	0.6	117848.85	3.0554	Pulse	0.1000	3
Tl	205	159	He	0.008	ppb	52.2	116.67	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.024	ppb	55.6	370.01	0.0025	Pulse	0.1000	3
U	238	159	He	1.735	ppb	5.3	8793.02	0.0594	Pulse	0.1000	3

ISTD Table:

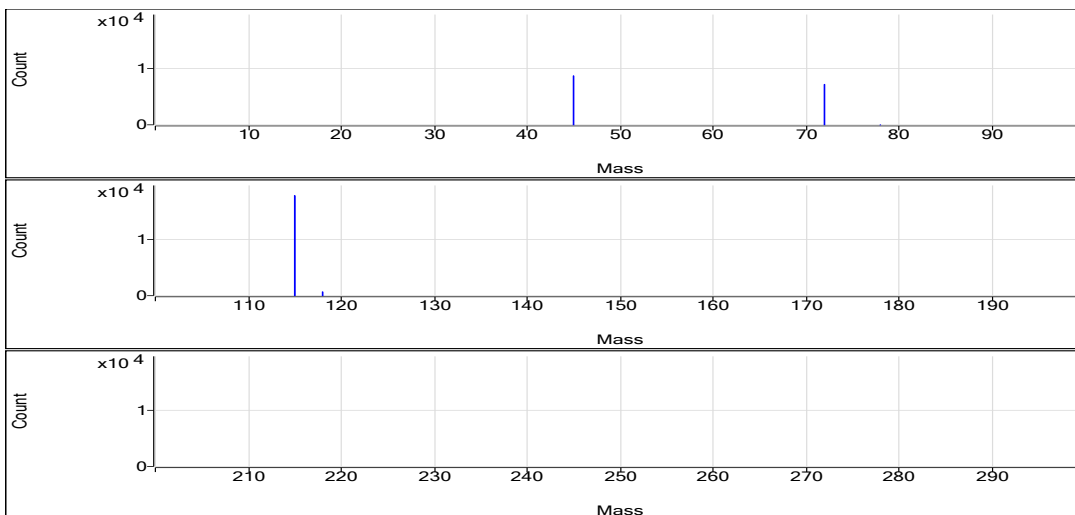
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1258973.50	0.7	96.3	Analog	0.1000	3
No Gas	Ge	72	658487.07	0.3	100.5	Pulse	0.1000	3
H2	Sc	45	87999.15	2.0	107.1	Pulse	0.1000	3
H2	Ge	72	72735.04	2.3	106.4	Pulse	0.1000	3
H2	In	115	179791.52	1.5	105.4	Pulse	0.1000	3
He	Sc	45	25073.15	1.9	97.9	Pulse	0.1000	3
He	Ge	72	47287.29	3.0	99.5	Pulse	0.1000	3
He	In	115	38570.39	0.6	94.2	Pulse	0.1000	3
He	Tb	159	148163.16	0.5	92.9	Pulse	0.1000	3
He	Bi	209	111374.67	0.7	95.2	Pulse	0.1000	3

No Gas

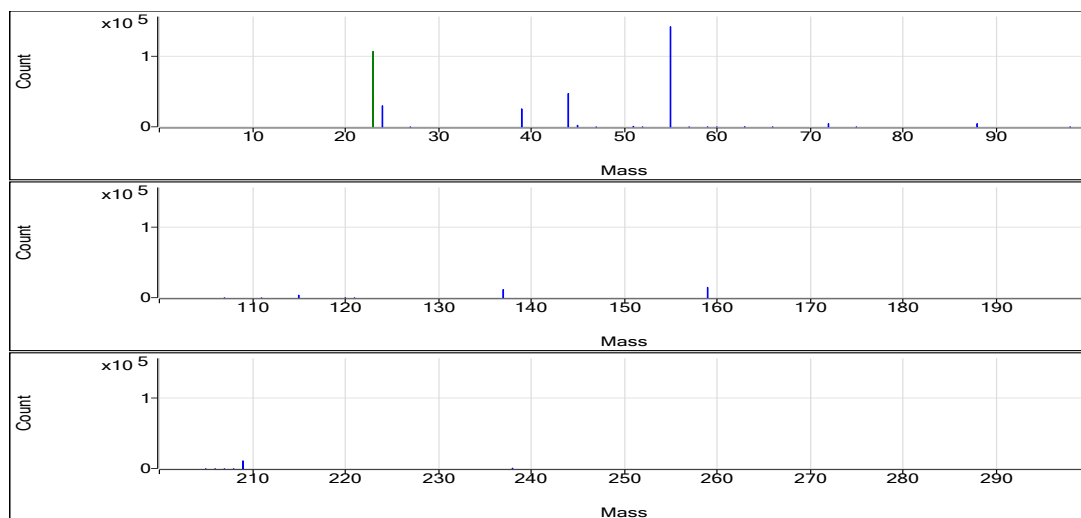


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.049	0.0001	86.00	0.0011	7.835E-05
Be	9	1	No Gas	0.015	0.0001	62.00	0.0011	7.835E-05
Be	9	1	No Gas	0.055	0.0001	90.00	0.0011	7.835E-05
Se	78	2	H2	0.161	0.0001	8.00	0.0005	2.594E-05
Se	78	2	H2	0.039	0	3.33	0.0005	2.594E-05
Se	78	2	H2	0.097	0.0001	5.33	0.0005	2.594E-05
Na	23	3	He	12051.674	22.0595	1072415.22	0.0018	0.1731
Na	23	3	He	12868.402	23.5427	1078875.14	0.0018	0.1731
Na	23	3	He	12392.021	22.6776	1075393.50	0.0018	0.1731
Mg	24	3	He	6750.747	6.1917	301009.04	0.0009	0.006537
Mg	24	3	He	7078.498	6.492	297505.39	0.0009	0.006537
Mg	24	3	He	6995.349	6.4158	304245.60	0.0009	0.006537
Al	27	3	He	28.168	0.0105	510.02	0.0003	0.00231
Al	27	3	He	23.604	0.0092	420.02	0.0003	0.00231
Al	27	3	He	27.626	0.0103	490.03	0.0003	0.00231
K	39	3	He	1028.188	1.116	54252.57	0.0007	0.3475
K	39	3	He	1005.87	1.0993	50376.41	0.0007	0.3475
K	39	3	He	920.922	1.0358	49118.59	0.0007	0.3475
Ca	44	3	He	48782.966	1.9592	95243.63	0	0.002807
Ca	44	3	He	51712.589	2.0766	95164.72	0	0.002807
Ca	44	3	He	49908.949	2.0043	95046.33	0	0.002807
Ti	47	3	He	0.433	0.0002	12.00	0.0003	0.0001123
Ti	47	3	He	0.06	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.724	0.0003	16.00	0.0003	0.0001123
V	51	3	He	2.368	0.0406	1976.13	0.0137	0.008308
V	51	3	He	2.485	0.0422	1936.12	0.0137	0.008308
V	51	3	He	2.223	0.0387	1834.11	0.0137	0.008308
Cr	52	3	He	-0.118	0.0195	950.06	0.0171	0.02156
Cr	52	3	He	-0.355	0.0155	710.04	0.0171	0.02156
Cr	52	3	He	-0.262	0.0171	810.04	0.0171	0.02156
Mn	55	3	He	804.427	5.8715	285441.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	847.208	6.1836	283373.06	0.0073	0.002316
Mn	55	3	He	826.075	6.0295	285922.50	0.0073	0.002316
Fe	57	3	He	37.915	0.015	730.05	0.0003	0.002736
Fe	57	3	He	41.409	0.0161	740.04	0.0003	0.002736
Fe	57	3	He	31.92	0.0131	620.04	0.0003	0.002736
Co	59	3	He	0.093	0.005	244.00	0.0332	0.001922
Co	59	3	He	0.091	0.0049	226.00	0.0332	0.001922
Co	59	3	He	0.086	0.0048	226.00	0.0332	0.001922
Ni	60	3	He	0.298	0.0059	288.00	0.0093	0.003141
Ni	60	3	He	0.3	0.0059	272.00	0.0093	0.003141
Ni	60	3	He	0.269	0.0057	268.00	0.0093	0.003141
Cu	63	3	He	0.299	0.0118	574.01	0.027	0.003732
Cu	63	3	He	0.351	0.0132	606.02	0.027	0.003732
Cu	63	3	He	0.336	0.0128	608.01	0.027	0.003732
Zn	66	3	He	0.998	0.0051	250.00	0.0031	0.002032
Zn	66	3	He	0.735	0.0043	198.00	0.0031	0.002032
Zn	66	3	He	0.959	0.005	238.00	0.0031	0.002032
As	75	3	He	0.826	0.0029	140.00	0.0025	0.0007733
As	75	3	He	1.271	0.004	184.00	0.0025	0.0007733
As	75	3	He	0.888	0.003	144.00	0.0025	0.0007733
Sr	88	3	He	118.193	1.2405	47601.88	0.0105	0.004071
Sr	88	3	He	113.662	1.1931	45977.42	0.0105	0.004071
Sr	88	3	He	117.919	1.2376	48023.75	0.0105	0.004071
Mo	98	3	He	0.936	0.0258	990.07	0.0234	0.003908
Mo	98	3	He	0.976	0.0267	1030.08	0.0234	0.003908
Mo	98	3	He	0.979	0.0268	1040.09	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.016	0.0013	50.00	0.0493	0.0004851
Cd	111	3	He	0.019	0.0001	4.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.211	0.0573	2200.21	0.0169	0.0609
Sn	120	3	He	-0.671	0.0496	1910.17	0.0169	0.0609
Sn	120	3	He	-0.004	0.0608	2360.26	0.0169	0.0609
Sb	121	3	He	0.101	0.0022	83.33	0.0161	0.0005433
Sb	121	3	He	0.047	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.041	0.0012	46.67	0.0161	0.0005433
Ba	137	3	He	577.034	3.0479	116955.84	0.0053	0.001141
Ba	137	3	He	576.131	3.0431	117268.07	0.0053	0.001141
Ba	137	3	He	582.194	3.0751	119322.64	0.0053	0.001141
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Tl	205	3	He	0.009	0.0008	120.01	0.0248	0.0005854
Tl	205	3	He	0.012	0.0009	130.00	0.0248	0.0005854
Pb	208	3	He	0.012	0.0021	180.01	0.0332	0.001693
Pb	208	3	He	0.022	0.0024	250.01	0.0332	0.001693
Pb	208	3	He	0.038	0.003	240.01	0.0332	0.001693
U	238	3	He	1.646	0.0564	8392.84	0.0338	0.0007949
U	238	3	He	1.729	0.0591	8722.96	0.0338	0.0007949
U	238	3	He	1.83	0.0626	9263.26	0.0338	0.0007949
Sc	45	1	No Gas			1262048.18		
Sc	45	1	No Gas			1266169.98		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1248702.33		
Ge	72	1	No Gas			657971.63		
Ge	72	1	No Gas			660940.07		
Ge	72	1	No Gas			656549.52		
Sc	45	2	H2			88880.46		
Sc	45	2	H2			86005.00		
Sc	45	2	H2			89111.99		
Ge	72	2	H2			74493.07		
Ge	72	2	H2			72564.00		
Ge	72	2	H2			71148.05		
In	115	2	H2			182146.34		
In	115	2	H2			176969.84		
In	115	2	H2			180258.38		
Sc	45	3	He			25620.53		
Sc	45	3	He			24729.40		
Sc	45	3	He			24869.52		
Ge	72	3	He			48614.65		
Ge	72	3	He			45826.26		
Ge	72	3	He			47420.97		
In	115	3	He			38388.32		
In	115	3	He			38549.01		
In	115	3	He			38819.13		
Tb	159	3	He			148920.23		
Tb	159	3	He			147487.27		
Tb	159	3	He			148081.99		
Bi	209	3	He			110692.11		
Bi	209	3	He			111272.36		
Bi	209	3	He			112159.53		

Quantitation Report

Data File Name 180SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:25:40 PM
Sample Name 410-235715-S-4-B DU
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

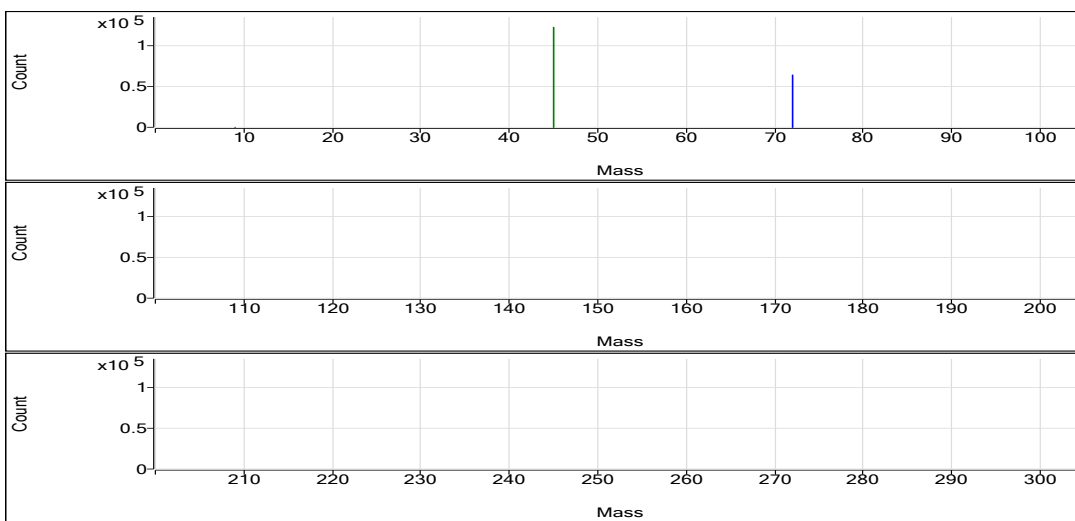
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.023	ppb	102.9	66.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.117	ppb	64.0	6.22	0.0001	Pulse	1.5000	3
Na	23	72	He	12439.782	ppb	1.4	1056198.74	22.7643	Analog	0.1000	3
Mg	24	72	He	7017.376	ppb	1.5	298604.98	6.4360	Pulse	0.1000	3
Al	27	72	He	25.514	ppb	37.5	450.03	0.0097	Pulse	0.1000	3
K	39	72	He	1011.998	ppb	8.1	51215.08	1.1039	Pulse	0.5000	3
Ca	44	72	He	50560.819	ppb	1.2	94206.90	2.0305	Pulse	0.5000	3
Ti	47	72	He	0.286	ppb	29.8	9.33	0.0002	Pulse	0.5000	3
V	51	72	He	2.316	ppb	4.8	1853.45	0.0399	Pulse	0.5000	3
Cr	52	72	He	-0.252	ppb	N/A	800.04	0.0172	Pulse	0.1000	3
Mn	55	72	He	832.315	ppb	1.4	281854.06	6.0750	Pulse	0.5000	3
Fe	57	72	He	40.551	ppb	12.8	736.71	0.0159	Pulse	0.1000	3
Co	59	72	He	0.094	ppb	16.4	234.00	0.0050	Pulse	0.5000	3
Ni	60	72	He	0.195	ppb	19.2	230.00	0.0050	Pulse	0.5000	3
Cu	63	72	He	0.310	ppb	10.7	561.35	0.0121	Pulse	0.5000	3
Zn	66	72	He	1.253	ppb	11.1	275.33	0.0059	Pulse	0.5000	3
As	75	72	He	1.022	ppb	10.7	156.67	0.0034	Pulse	0.5000	3
Sr	88	115	He	114.162	ppb	0.7	46452.19	1.1983	Pulse	0.1000	3
Mo	98	115	He	0.921	ppb	10.5	986.73	0.0255	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.025	ppb	108.7	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.424	ppb	N/A	2083.56	0.0538	Pulse	0.1000	3
Sb	121	115	He	0.053	ppb	92.0	54.44	0.0014	Pulse	0.3000	3
Ba	137	115	He	572.759	ppb	1.6	117271.21	3.0253	Pulse	0.1000	3
Tl	205	159	He	-0.004	ppb	N/A	73.33	0.0005	Pulse	0.1000	3
Pb	208	159	He	0.047	ppb	41.3	480.02	0.0032	Pulse	0.1000	3
U	238	159	He	1.783	ppb	4.2	9029.86	0.0610	Pulse	0.1000	3

ISTD Table:

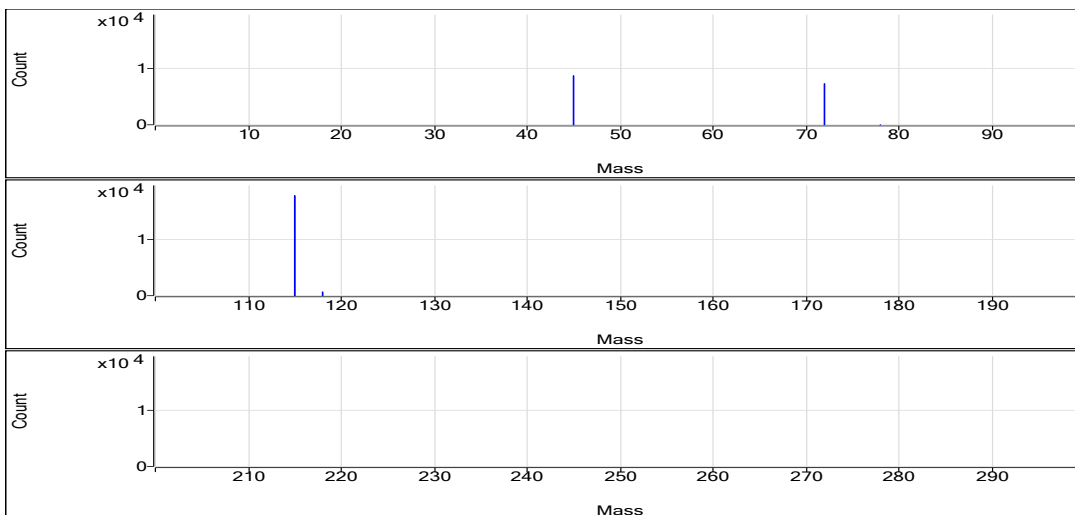
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1235846.88	2.0	94.5	Analog	0.1000	3
No Gas	Ge	72	646540.58	1.5	98.7	Pulse	0.1000	3
H2	Sc	45	87654.04	2.0	106.7	Pulse	0.1000	3
H2	Ge	72	73444.96	2.3	107.5	Pulse	0.1000	3
H2	In	115	178683.27	0.3	104.7	Pulse	0.1000	3
He	Sc	45	25273.49	0.2	98.7	Pulse	0.1000	3
He	Ge	72	46401.14	1.2	97.7	Pulse	0.1000	3
He	In	115	38764.48	0.6	94.7	Pulse	0.1000	3
He	Tb	159	148065.98	0.3	92.9	Pulse	0.1000	3
He	Bi	209	109893.03	1.1	94.0	Pulse	0.1000	3

No Gas

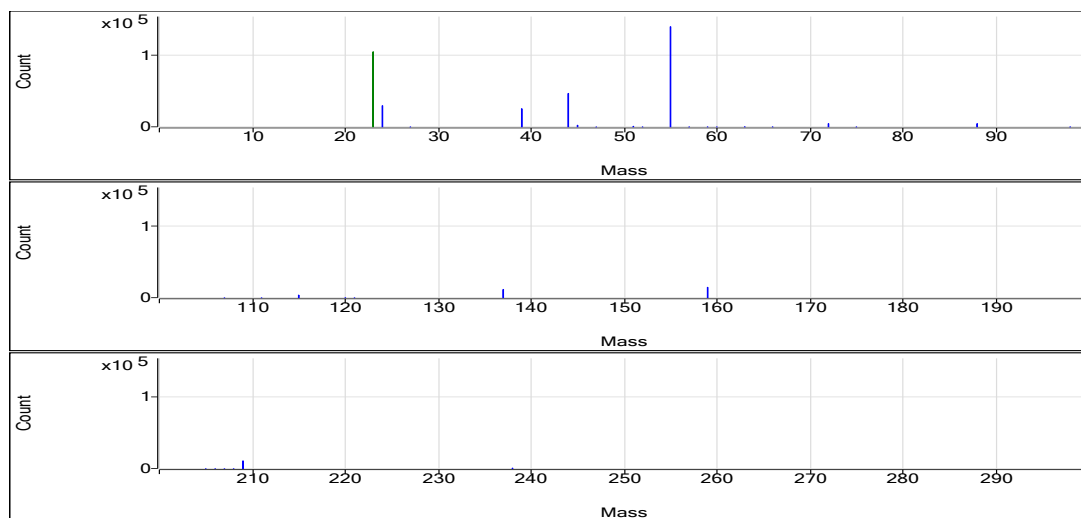


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.044	0.0001	82.00	0.0011	7.835E-05
Be	9	1	No Gas	0.028	0.0001	70.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.003	0.0001	48.00	0.0011	7.835E-05
Se	78	2	H2	0.071	0.0001	4.67	0.0005	2.594E-05
Se	78	2	H2	0.076	0.0001	4.67	0.0005	2.594E-05
Se	78	2	H2	0.203	0.0001	9.33	0.0005	2.594E-05
Na	23	3	He	12516.439	22.9035	1065882.33	0.0018	0.1731
Na	23	3	He	12557.802	22.9787	1052327.80	0.0018	0.1731
Na	23	3	He	12245.104	22.4108	1050386.08	0.0018	0.1731
Mg	24	3	He	7036.978	6.454	300354.84	0.0009	0.006537
Mg	24	3	He	7114.986	6.5255	298839.08	0.0009	0.006537
Mg	24	3	He	6900.165	6.3286	296621.03	0.0009	0.006537
Al	27	3	He	21.643	0.0086	400.04	0.0003	0.00231
Al	27	3	He	36.407	0.0129	590.04	0.0003	0.00231
Al	27	3	He	18.493	0.0077	360.01	0.0003	0.00231
K	39	3	He	1096.028	1.1667	54294.69	0.0007	0.3475
K	39	3	He	1007.725	1.1007	50406.50	0.0007	0.3475
K	39	3	He	932.24	1.0443	48944.05	0.0007	0.3475
Ca	44	3	He	50620.28	2.0328	94603.91	0	0.002807
Ca	44	3	He	51127.215	2.0532	94026.54	0	0.002807
Ca	44	3	He	49934.963	2.0054	93990.25	0	0.002807
Ti	47	3	He	0.33	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.341	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.188	0.0002	8.00	0.0003	0.0001123
V	51	3	He	2.198	0.0383	1784.11	0.0137	0.008308
V	51	3	He	2.33	0.0401	1838.11	0.0137	0.008308
V	51	3	He	2.419	0.0414	1938.13	0.0137	0.008308
Cr	52	3	He	-0.193	0.0183	850.05	0.0171	0.02156
Cr	52	3	He	-0.239	0.0175	800.04	0.0171	0.02156
Cr	52	3	He	-0.325	0.016	750.04	0.0171	0.02156
Mn	55	3	He	829.723	6.0561	281836.59	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	845.281	6.1696	282541.47	0.0073	0.002316
Mn	55	3	He	821.939	5.9993	281184.13	0.0073	0.002316
Fe	57	3	He	36.003	0.0144	670.04	0.0003	0.002736
Fe	57	3	He	39.42	0.0155	710.04	0.0003	0.002736
Fe	57	3	He	46.229	0.0177	830.06	0.0003	0.002736
Co	59	3	He	0.112	0.0056	262.00	0.0332	0.001922
Co	59	3	He	0.087	0.0048	220.00	0.0332	0.001922
Co	59	3	He	0.083	0.0047	220.00	0.0332	0.001922
Ni	60	3	He	0.152	0.0046	212.00	0.0093	0.003141
Ni	60	3	He	0.216	0.0052	236.00	0.0093	0.003141
Ni	60	3	He	0.217	0.0052	242.00	0.0093	0.003141
Cu	63	3	He	0.345	0.0131	608.02	0.027	0.003732
Cu	63	3	He	0.303	0.0119	546.01	0.027	0.003732
Cu	63	3	He	0.28	0.0113	530.01	0.027	0.003732
Zn	66	3	He	1.403	0.0064	298.00	0.0031	0.002032
Zn	66	3	He	1.226	0.0059	268.00	0.0031	0.002032
Zn	66	3	He	1.128	0.0055	260.00	0.0031	0.002032
As	75	3	He	1.011	0.0034	156.00	0.0025	0.0007733
As	75	3	He	1.135	0.0037	168.00	0.0025	0.0007733
As	75	3	He	0.918	0.0031	146.00	0.0025	0.0007733
Sr	88	3	He	113.993	1.1966	46649.37	0.0105	0.004071
Sr	88	3	He	113.487	1.1913	46178.11	0.0105	0.004071
Sr	88	3	He	115.005	1.2072	46529.10	0.0105	0.004071
Mo	98	3	He	0.82	0.0231	900.06	0.0234	0.003908
Mo	98	3	He	1.013	0.0276	1070.08	0.0234	0.003908
Mo	98	3	He	0.931	0.0257	990.06	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.055	0.0003	12.00	0.0056	0
Sn	120	3	He	-0.584	0.051	1990.20	0.0169	0.0609
Sn	120	3	He	-0.199	0.0575	2230.26	0.0169	0.0609
Sn	120	3	He	-0.488	0.0527	2030.22	0.0169	0.0609
Sb	121	3	He	0.109	0.0023	90.00	0.0161	0.0005433
Sb	121	3	He	0.02	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.031	0.001	40.00	0.0161	0.0005433
Ba	137	3	He	564.089	2.9795	116159.04	0.0053	0.001141
Ba	137	3	He	582.351	3.0759	119234.37	0.0053	0.001141
Ba	137	3	He	571.838	3.0204	116420.21	0.0053	0.001141
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	0.024	0.0025	220.01	0.0332	0.001693
Pb	208	3	He	0.059	0.0037	270.02	0.0332	0.001693
Pb	208	3	He	0.056	0.0036	270.01	0.0332	0.001693
U	238	3	He	1.727	0.0591	8732.96	0.0338	0.0007949
U	238	3	He	1.753	0.06	8863.11	0.0338	0.0007949
U	238	3	He	1.869	0.0639	9493.50	0.0338	0.0007949
Sc	45	1	No Gas			1264040.92		
Sc	45	1	No Gas			1226977.79		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1216521.93		
Ge	72	1	No Gas			655732.65		
Ge	72	1	No Gas			647520.77		
Ge	72	1	No Gas			636368.31		
Sc	45	2	H2			89623.66		
Sc	45	2	H2			86277.61		
Sc	45	2	H2			87060.86		
Ge	72	2	H2			75387.28		
Ge	72	2	H2			72463.67		
Ge	72	2	H2			72483.94		
In	115	2	H2			178189.72		
In	115	2	H2			179274.02		
In	115	2	H2			178586.07		
Sc	45	3	He			25220.20		
Sc	45	3	He			25260.09		
Sc	45	3	He			25340.18		
Ge	72	3	He			46537.88		
Ge	72	3	He			45795.87		
Ge	72	3	He			46869.67		
In	115	3	He			38999.69		
In	115	3	He			38779.11		
In	115	3	He			38558.38		
Tb	159	3	He			147769.03		
Tb	159	3	He			147818.26		
Tb	159	3	He			148610.64		
Bi	209	3	He			108462.13		
Bi	209	3	He			110557.46		
Bi	209	3	He			110659.51		

Quantitation Report

Data File Name 181SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:27:51 PM
Sample Name 410-235715-R-4-A MS
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

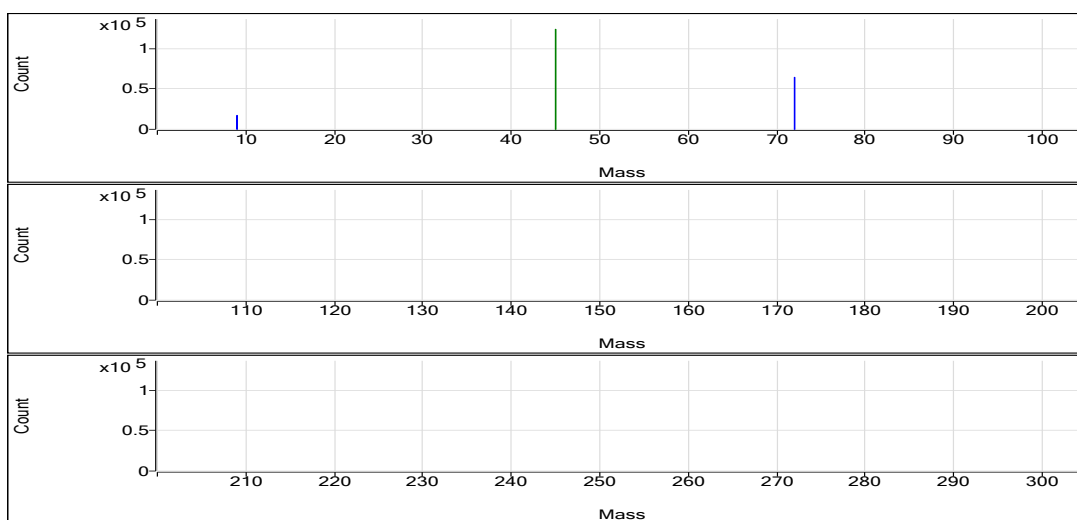
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.467	ppb	5.0	34672.19	0.0537	Pulse	0.5000	3
Se	78	72	H2	97.103	ppb	1.8	3582.85	0.0492	Pulse	1.5000	3
Na	23	72	He	17554.885	ppb	1.5	1480913.57	32.0536	Analog	0.1000	3
Mg	24	72	He	11834.687	ppb	1.3	501268.05	10.8498	Pulse	0.1000	3
Al	27	72	He	4781.229	ppb	2.2	64261.39	1.3910	Pulse	0.1000	3
K	39	72	He	5919.164	ppb	1.8	220449.67	4.7716	Pulse	0.5000	3
Ca	44	72	He	55485.839	ppb	0.9	102935.81	2.2280	Pulse	0.5000	3
Ti	47	72	He	491.030	ppb	1.0	7060.89	0.1528	Pulse	0.5000	3
V	51	72	He	487.178	ppb	0.7	307838.46	6.6628	Pulse	0.5000	3
Cr	52	72	He	483.155	ppb	0.5	382417.87	8.2769	Pulse	0.1000	3
Mn	55	72	He	1305.998	ppb	0.6	440357.05	9.5310	Pulse	0.5000	3
Fe	57	72	He	4815.249	ppb	2.2	72184.37	1.5625	Pulse	0.1000	3
Co	59	72	He	478.933	ppb	0.4	735260.42	15.9136	Pulse	0.5000	3
Ni	60	72	He	473.007	ppb	0.8	204003.53	4.4154	Pulse	0.5000	3
Cu	63	72	He	476.684	ppb	0.6	595206.77	12.8824	Pulse	0.5000	3
Zn	66	72	He	482.556	ppb	0.4	69556.50	1.5055	Pulse	0.5000	3
As	75	72	He	485.398	ppb	0.4	57221.26	1.2385	Pulse	0.5000	3
Sr	88	115	He	166.429	ppb	1.4	66925.38	1.7451	Pulse	0.1000	3
Mo	98	115	He	51.715	ppb	2.3	46549.57	1.2138	Pulse	0.1000	3
Ag	107	115	He	51.835	ppb	1.9	98023.57	2.5562	Pulse	0.1000	3
Cd	111	115	He	50.365	ppb	0.6	10838.47	0.2826	Pulse	0.5000	3
Sn	120	115	He	100.268	ppb	2.9	67229.34	1.7533	Pulse	0.1000	3
Sb	121	115	He	100.518	ppb	0.8	62173.96	1.6212	Pulse	0.3000	3
Ba	137	115	He	1082.324	ppb	0.7	219208.98	5.7158	Pulse	0.1000	3
Tl	205	159	He	98.517	ppb	0.4	361856.72	2.4415	Pulse	0.1000	3
Pb	208	159	He	50.387	ppb	1.9	248359.92	1.6760	Pulse	0.1000	3
U	238	159	He	53.290	ppb	1.2	266692.66	1.7995	Pulse	0.1000	3

ISTD Table:

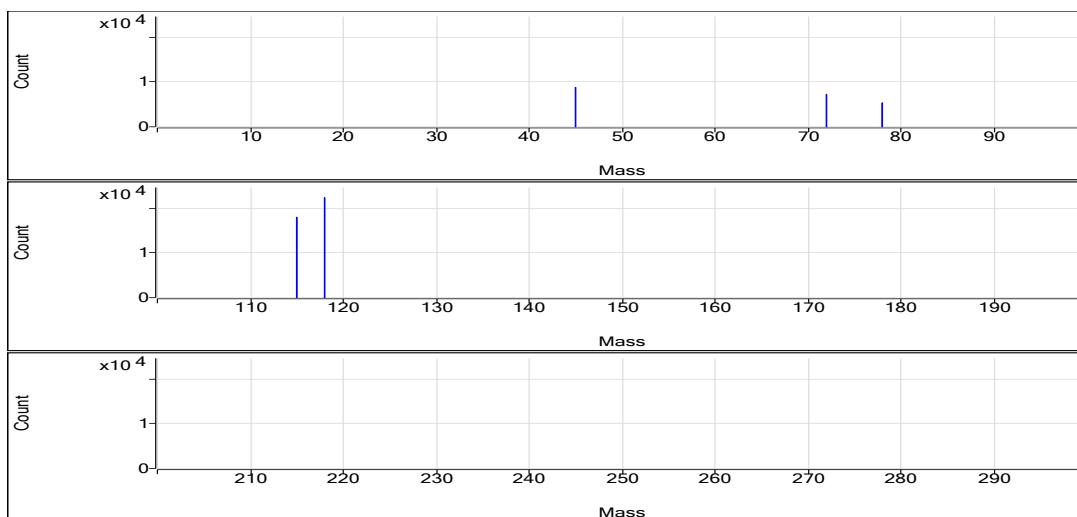
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1240448.34	2.8	94.9	Analog	0.1000	3
No Gas	Ge	72	645673.21	1.7	98.5	Pulse	0.1000	3
H2	Sc	45	88425.17	1.3	107.6	Pulse	0.1000	3
H2	Ge	72	72778.63	0.9	106.5	Pulse	0.1000	3
H2	In	115	179957.86	1.3	105.5	Pulse	0.1000	3
He	Sc	45	25336.95	0.9	98.9	Pulse	0.1000	3
He	Ge	72	46203.95	0.8	97.2	Pulse	0.1000	3
He	In	115	38352.18	1.0	93.7	Pulse	0.1000	3
He	Tb	159	148207.85	1.1	93.0	Pulse	0.1000	3
He	Bi	209	109248.41	0.1	93.4	Pulse	0.1000	3

No Gas

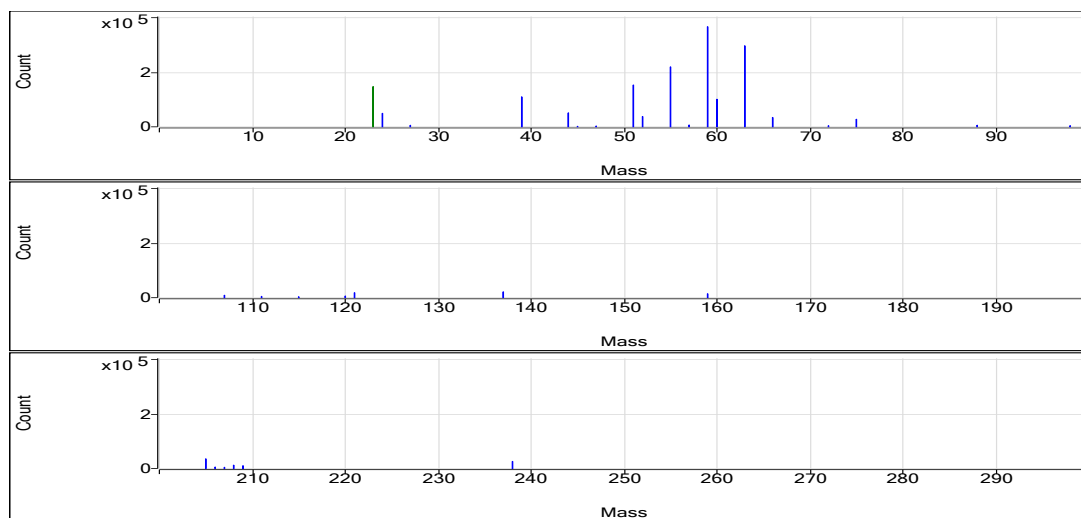


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	47.939	0.051	32939.95	0.0011	7.835E-05
Be	9	1	No Gas	50.501	0.0537	34104.43	0.0011	7.835E-05
Be	9	1	No Gas	52.962	0.0563	36972.18	0.0011	7.835E-05
Se	78	2	H2	97.421	0.0494	3599.74	0.0005	2.594E-05
Se	78	2	H2	98.694	0.05	3607.08	0.0005	2.594E-05
Se	78	2	H2	95.193	0.0483	3541.73	0.0005	2.594E-05
Na	23	3	He	17851.811	32.5929	1495896.85	0.0018	0.1731
Na	23	3	He	17430.712	31.8281	1467509.35	0.0018	0.1731
Na	23	3	He	17382.133	31.7399	1479334.51	0.0018	0.1731
Mg	24	3	He	11943.847	10.9498	502556.20	0.0009	0.006537
Mg	24	3	He	11901.16	10.9107	503061.75	0.0009	0.006537
Mg	24	3	He	11659.054	10.6888	498186.20	0.0009	0.006537
Al	27	3	He	4880.833	1.4199	65168.80	0.0003	0.00231
Al	27	3	He	4791.694	1.394	64274.49	0.0003	0.00231
Al	27	3	He	4671.162	1.359	63340.87	0.0003	0.00231
K	39	3	He	6035.534	4.8586	222991.11	0.0007	0.3475
K	39	3	He	5887.332	4.7478	218908.31	0.0007	0.3475
K	39	3	He	5834.626	4.7084	219449.58	0.0007	0.3475
Ca	44	3	He	56016.853	2.2493	103232.91	0	0.002807
Ca	44	3	He	55443.802	2.2263	102647.59	0	0.002807
Ca	44	3	He	54996.861	2.2084	102926.94	0	0.002807
Ti	47	3	He	494.513	0.1539	7063.56	0.0003	0.0001123
Ti	47	3	He	485.133	0.151	6961.52	0.0003	0.0001123
Ti	47	3	He	493.444	0.1536	7157.59	0.0003	0.0001123
V	51	3	He	490.457	6.7076	307856.06	0.0137	0.008308
V	51	3	He	487.138	6.6623	307179.91	0.0137	0.008308
V	51	3	He	483.939	6.6186	308479.41	0.0137	0.008308
Cr	52	3	He	483.26	8.2787	379962.57	0.0171	0.02156
Cr	52	3	He	485.643	8.3194	383585.74	0.0171	0.02156
Cr	52	3	He	480.563	8.2326	383705.31	0.0171	0.02156
Mn	55	3	He	1314.908	9.596	440423.88	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1304.856	9.5227	439065.94	0.0073	0.002316
Mn	55	3	He	1298.231	9.4744	441581.34	0.0073	0.002316
Fe	57	3	He	4924.463	1.5979	73335.80	0.0003	0.002736
Fe	57	3	He	4811.811	1.5614	71990.26	0.0003	0.002736
Fe	57	3	He	4709.472	1.5282	71227.04	0.0003	0.002736
Co	59	3	He	481.414	15.996	734161.94	0.0332	0.001922
Co	59	3	He	477.668	15.8716	731796.19	0.0332	0.001922
Co	59	3	He	477.719	15.8733	739823.13	0.0332	0.001922
Ni	60	3	He	471.896	4.405	202174.22	0.0093	0.003141
Ni	60	3	He	477.13	4.4538	205354.41	0.0093	0.003141
Ni	60	3	He	469.994	4.3873	204481.97	0.0093	0.003141
Cu	63	3	He	476.548	12.8788	591089.31	0.027	0.003732
Cu	63	3	He	479.434	12.9567	597399.38	0.027	0.003732
Cu	63	3	He	474.069	12.8118	597131.63	0.027	0.003732
Zn	66	3	He	484.744	1.5123	69407.91	0.0031	0.002032
Zn	66	3	He	482.216	1.5044	69363.70	0.0031	0.002032
Zn	66	3	He	480.707	1.4997	69897.88	0.0031	0.002032
As	75	3	He	486.567	1.2415	56978.46	0.0025	0.0007733
As	75	3	He	486.747	1.2419	57261.39	0.0025	0.0007733
As	75	3	He	482.882	1.2321	57423.93	0.0025	0.0007733
Sr	88	3	He	164.978	1.7299	66088.11	0.0105	0.004071
Sr	88	3	He	169.125	1.7733	67535.12	0.0105	0.004071
Sr	88	3	He	165.183	1.7321	67152.92	0.0105	0.004071
Mo	98	3	He	50.581	1.1873	45356.18	0.0234	0.003908
Mo	98	3	He	52.99	1.2436	47362.00	0.0234	0.003908
Mo	98	3	He	51.574	1.2105	46930.54	0.0234	0.003908
Ag	107	3	He	51.932	2.561	97835.30	0.0493	0.0004851
Ag	107	3	He	52.759	2.6017	99084.12	0.0493	0.0004851
Ag	107	3	He	50.814	2.5058	97151.30	0.0493	0.0004851
Cd	111	3	He	50.11	0.2812	10741.74	0.0056	0
Cd	111	3	He	50.688	0.2844	10831.81	0.0056	0
Cd	111	3	He	50.297	0.2822	10941.87	0.0056	0
Sn	120	3	He	102.007	1.7826	68099.76	0.0169	0.0609
Sn	120	3	He	101.928	1.7813	67838.23	0.0169	0.0609
Sn	120	3	He	96.87	1.6959	65750.02	0.0169	0.0609
Sb	121	3	He	100.424	1.6197	61876.30	0.0161	0.0005433
Sb	121	3	He	101.352	1.6347	62254.20	0.0161	0.0005433
Sb	121	3	He	99.777	1.6093	62391.39	0.0161	0.0005433
Ba	137	3	He	1090.623	5.7596	220032.09	0.0053	0.001141
Ba	137	3	He	1079.033	5.6984	217018.61	0.0053	0.001141
Ba	137	3	He	1077.317	5.6894	220576.25	0.0053	0.001141
Tl	205	3	He	98.394	2.4385	357057.96	0.0248	0.0005854
Tl	205	3	He	98.926	2.4517	364759.21	0.0248	0.0005854
Tl	205	3	He	98.232	2.4345	363753.00	0.0248	0.0005854
Pb	208	3	He	51.268	1.7052	133285.13	0.0332	0.001693
Pb	208	3	He	50.548	1.6813	133438.27	0.0332	0.001693
Pb	208	3	He	49.345	1.6413	130177.67	0.0332	0.001693
U	238	3	He	53.564	1.8088	264853.32	0.0338	0.0007949
U	238	3	He	53.725	1.8142	269915.87	0.0338	0.0007949
U	238	3	He	52.582	1.7756	265308.80	0.0338	0.0007949
Sc	45	1	No Gas			1244470.22		
Sc	45	1	No Gas			1204053.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1272821.23		
Ge	72	1	No Gas			645891.36		
Ge	72	1	No Gas			634837.72		
Ge	72	1	No Gas			656290.54		
Sc	45	2	H2			87081.42		
Sc	45	2	H2			89192.47		
Sc	45	2	H2			89001.63		
Ge	72	2	H2			72875.11		
Ge	72	2	H2			72082.39		
Ge	72	2	H2			73378.38		
In	115	2	H2			177606.62		
In	115	2	H2			182145.43		
In	115	2	H2			180121.52		
Sc	45	3	He			25089.82		
Sc	45	3	He			25510.69		
Sc	45	3	He			25410.35		
Ge	72	3	He			45896.47		
Ge	72	3	He			46107.33		
Ge	72	3	He			46608.05		
In	115	3	He			38679.25		
In	115	3	He			38558.88		
In	115	3	He			39230.22		
Tb	159	3	He			146425.53		
Tb	159	3	He			148780.12		
Tb	159	3	He			149417.91		
Bi	209	3	He			109228.56		
Bi	209	3	He			109319.17		
Bi	209	3	He			109197.49		

Quantitation Report

Data File Name 182SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:30:02 PM
Sample Name 410-235715-R-4-B MSD
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

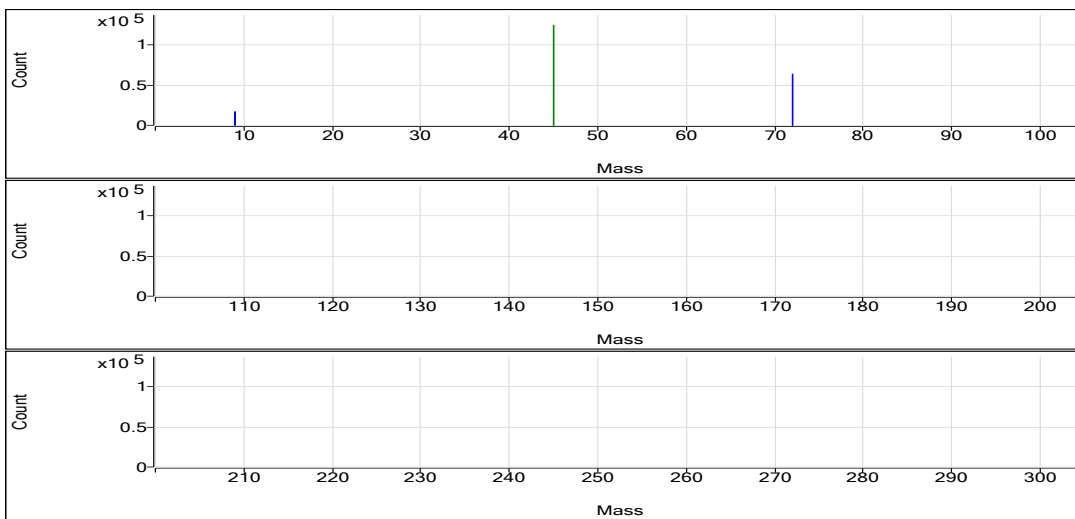
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	50.054	ppb	3.9	34097.03	0.0532	Pulse	0.5000	3
Se	78	72	H2	96.631	ppb	2.5	3538.40	0.0490	Pulse	1.5000	3
Na	23	72	He	16957.805	ppb	0.9	1456293.62	30.9693	Analog	0.1000	3
Mg	24	72	He	11583.739	ppb	1.9	499340.19	10.6198	Pulse	0.1000	3
Al	27	72	He	4668.470	ppb	1.3	63866.79	1.3582	Pulse	0.1000	3
K	39	72	He	5781.483	ppb	2.2	219521.56	4.6687	Pulse	0.5000	3
Ca	44	72	He	54405.279	ppb	1.6	102720.63	2.1846	Pulse	0.5000	3
Ti	47	72	He	484.784	ppb	1.5	7094.90	0.1509	Pulse	0.5000	3
V	51	72	He	477.878	ppb	1.2	307321.37	6.5358	Pulse	0.5000	3
Cr	52	72	He	470.879	ppb	1.1	379336.83	8.0671	Pulse	0.1000	3
Mn	55	72	He	1284.675	ppb	1.4	440836.89	9.3754	Pulse	0.5000	3
Fe	57	72	He	4747.438	ppb	1.2	72438.39	1.5405	Pulse	0.1000	3
Co	59	72	He	467.277	ppb	1.7	730035.65	15.5264	Pulse	0.5000	3
Ni	60	72	He	464.118	ppb	1.4	203713.73	4.3325	Pulse	0.5000	3
Cu	63	72	He	463.725	ppb	1.0	589296.56	12.5323	Pulse	0.5000	3
Zn	66	72	He	469.599	ppb	1.9	68886.37	1.4651	Pulse	0.5000	3
As	75	72	He	471.315	ppb	0.8	56548.31	1.2026	Pulse	0.5000	3
Sr	88	115	He	166.522	ppb	3.9	66315.75	1.7461	Pulse	0.1000	3
Mo	98	115	He	52.717	ppb	3.7	46990.98	1.2372	Pulse	0.1000	3
Ag	107	115	He	51.743	ppb	3.5	96916.15	2.5517	Pulse	0.1000	3
Cd	111	115	He	50.992	ppb	1.3	10871.16	0.2861	Pulse	0.5000	3
Sn	120	115	He	103.455	ppb	3.5	68635.99	1.8070	Pulse	0.1000	3
Sb	121	115	He	101.704	ppb	2.7	62310.18	1.6403	Pulse	0.3000	3
Ba	137	115	He	1069.430	ppb	3.8	214505.38	5.6477	Pulse	0.1000	3
Tl	205	159	He	97.647	ppb	0.9	359644.89	2.4200	Pulse	0.1000	3
Pb	208	159	He	50.182	ppb	0.5	248062.13	1.6692	Pulse	0.1000	3
U	238	159	He	52.175	ppb	1.7	261836.52	1.7619	Pulse	0.1000	3

ISTD Table:

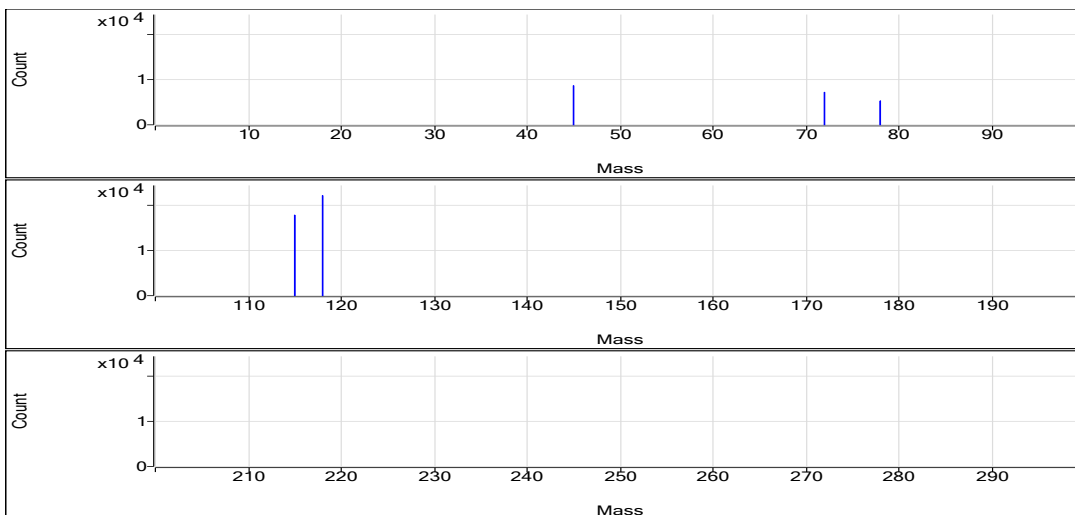
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1248750.27	1.5	95.5	Analog	0.1000	3
No Gas	Ge	72	640178.47	1.2	97.7	Pulse	0.1000	3
H2	Sc	45	86695.15	1.8	105.5	Pulse	0.1000	3
H2	Ge	72	72239.35	1.7	105.7	Pulse	0.1000	3
H2	In	115	178361.77	0.9	104.5	Pulse	0.1000	3
He	Sc	45	25453.65	2.1	99.4	Pulse	0.1000	3
He	Ge	72	47026.30	1.3	99.0	Pulse	0.1000	3
He	In	115	38001.20	2.2	92.8	Pulse	0.1000	3
He	Tb	159	148616.92	0.6	93.2	Pulse	0.1000	3
He	Bi	209	110639.18	0.7	94.6	Pulse	0.1000	3

No Gas

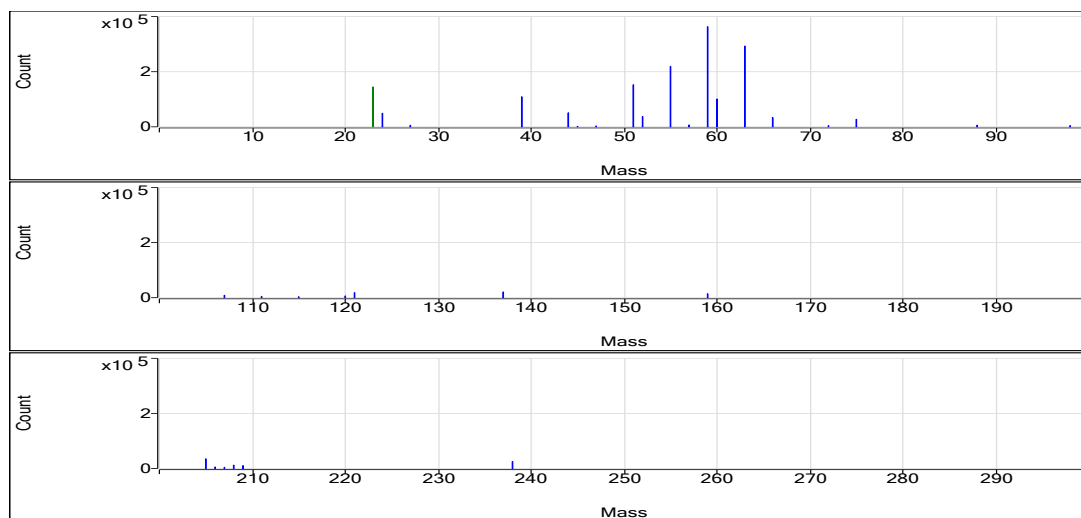


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	48.215	0.0513	32569.44	0.0011	7.835E-05
Be	9	1	No Gas	49.82	0.053	33749.55	0.0011	7.835E-05
Be	9	1	No Gas	52.126	0.0554	35972.10	0.0011	7.835E-05
Se	78	2	H2	94.85	0.0481	3502.39	0.0005	2.594E-05
Se	78	2	H2	95.605	0.0485	3542.40	0.0005	2.594E-05
Se	78	2	H2	99.438	0.0504	3570.40	0.0005	2.594E-05
Na	23	3	He	16874.642	30.8183	1442266.07	0.0018	0.1731
Na	23	3	He	16869.238	30.8084	1470853.57	0.0018	0.1731
Na	23	3	He	17129.536	31.2812	1455761.23	0.0018	0.1731
Mg	24	3	He	11524.044	10.5651	494438.94	0.0009	0.006537
Mg	24	3	He	11401.982	10.4533	499060.70	0.0009	0.006537
Mg	24	3	He	11825.193	10.8411	504520.93	0.0009	0.006537
Al	27	3	He	4724.482	1.3745	64325.22	0.0003	0.00231
Al	27	3	He	4607.177	1.3404	63994.54	0.0003	0.00231
Al	27	3	He	4673.752	1.3598	63280.62	0.0003	0.00231
K	39	3	He	5913.936	4.7677	223123.14	0.0007	0.3475
K	39	3	He	5654.605	4.5739	218364.41	0.0007	0.3475
K	39	3	He	5775.908	4.6645	217077.13	0.0007	0.3475
Ca	44	3	He	54497.838	2.1883	102412.22	0	0.002807
Ca	44	3	He	53496.923	2.1482	102559.08	0	0.002807
Ca	44	3	He	55221.075	2.2173	103190.59	0	0.002807
Ti	47	3	He	492.942	0.1534	7179.61	0.0003	0.0001123
Ti	47	3	He	480.909	0.1497	7145.60	0.0003	0.0001123
Ti	47	3	He	480.501	0.1495	6959.50	0.0003	0.0001123
V	51	3	He	478.362	6.5424	306178.53	0.0137	0.008308
V	51	3	He	471.726	6.4518	308019.09	0.0137	0.008308
V	51	3	He	483.548	6.6132	307766.50	0.0137	0.008308
Cr	52	3	He	475.343	8.1434	381103.94	0.0171	0.02156
Cr	52	3	He	465.359	7.9728	380637.42	0.0171	0.02156
Cr	52	3	He	471.937	8.0852	376269.14	0.0171	0.02156
Mn	55	3	He	1290.314	9.4166	440687.72	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1264.43	9.2277	440549.66	0.0073	0.002316
Mn	55	3	He	1299.28	9.482	441273.28	0.0073	0.002316
Fe	57	3	He	4798.838	1.5572	72873.67	0.0003	0.002736
Fe	57	3	He	4688.937	1.5216	72642.24	0.0003	0.002736
Fe	57	3	He	4754.537	1.5428	71799.25	0.0003	0.002736
Co	59	3	He	470.368	15.6291	731426.50	0.0332	0.001922
Co	59	3	He	458.141	15.2228	726767.50	0.0332	0.001922
Co	59	3	He	473.323	15.7272	731912.94	0.0332	0.001922
Ni	60	3	He	467.499	4.364	204230.91	0.0093	0.003141
Ni	60	3	He	456.551	4.2619	203469.55	0.0093	0.003141
Ni	60	3	He	468.304	4.3715	203440.73	0.0093	0.003141
Cu	63	3	He	464.88	12.5635	587960.31	0.027	0.003732
Cu	63	3	He	458.72	12.3971	591859.63	0.027	0.003732
Cu	63	3	He	467.576	12.6363	588069.75	0.027	0.003732
Zn	66	3	He	476.043	1.4852	69504.27	0.0031	0.002032
Zn	66	3	He	459.189	1.4327	68397.66	0.0031	0.002032
Zn	66	3	He	473.565	1.4774	68757.18	0.0031	0.002032
As	75	3	He	472.972	1.2068	56476.71	0.0025	0.0007733
As	75	3	He	467.121	1.1919	56902.22	0.0025	0.0007733
As	75	3	He	473.852	1.209	56266.00	0.0025	0.0007733
Sr	88	3	He	161.654	1.6952	65375.19	0.0105	0.004071
Sr	88	3	He	173.792	1.8221	67473.80	0.0105	0.004071
Sr	88	3	He	164.119	1.721	66098.25	0.0105	0.004071
Mo	98	3	He	51.248	1.2029	46388.85	0.0234	0.003908
Mo	98	3	He	54.921	1.2888	47723.51	0.0234	0.003908
Mo	98	3	He	51.984	1.2201	46860.57	0.0234	0.003908
Ag	107	3	He	50.278	2.4794	95621.49	0.0493	0.0004851
Ag	107	3	He	53.776	2.6519	98198.28	0.0493	0.0004851
Ag	107	3	He	51.175	2.5237	96928.68	0.0493	0.0004851
Cd	111	3	He	50.683	0.2844	10967.90	0.0056	0
Cd	111	3	He	51.764	0.2905	10755.74	0.0056	0
Cd	111	3	He	50.529	0.2835	10889.83	0.0056	0
Sn	120	3	He	100.38	1.7551	67688.58	0.0169	0.0609
Sn	120	3	He	107.473	1.8749	69425.96	0.0169	0.0609
Sn	120	3	He	102.512	1.7911	68793.42	0.0169	0.0609
Sb	121	3	He	99.634	1.607	61973.42	0.0161	0.0005433
Sb	121	3	He	104.754	1.6895	62562.33	0.0161	0.0005433
Sb	121	3	He	100.724	1.6245	62394.79	0.0161	0.0005433
Ba	137	3	He	1032.788	5.4542	210347.24	0.0053	0.001141
Ba	137	3	He	1112.511	5.8752	217557.09	0.0053	0.001141
Ba	137	3	He	1062.992	5.6137	215611.81	0.0053	0.001141
Tl	205	3	He	98.653	2.4449	362538.08	0.0248	0.0005854
Tl	205	3	He	97.191	2.4087	360309.14	0.0248	0.0005854
Tl	205	3	He	97.095	2.4063	356087.46	0.0248	0.0005854
Pb	208	3	He	50.412	1.6768	132134.92	0.0332	0.001693
Pb	208	3	He	49.938	1.661	133298.06	0.0332	0.001693
Pb	208	3	He	50.197	1.6697	130702.90	0.0332	0.001693
U	238	3	He	53.078	1.7924	265780.39	0.0338	0.0007949
U	238	3	He	51.312	1.7328	259197.75	0.0338	0.0007949
U	238	3	He	52.136	1.7606	260531.42	0.0338	0.0007949
Sc	45	1	No Gas			1256625.06		
Sc	45	1	No Gas			1227986.54		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1261639.20		
Ge	72	1	No Gas			634964.37		
Ge	72	1	No Gas			636812.10		
Ge	72	1	No Gas			648758.94		
Sc	45	2	H2			87362.05		
Sc	45	2	H2			87833.93		
Sc	45	2	H2			84889.46		
Ge	72	2	H2			72825.65		
Ge	72	2	H2			73076.10		
Ge	72	2	H2			70816.31		
In	115	2	H2			176783.53		
In	115	2	H2			179920.37		
In	115	2	H2			178381.40		
Sc	45	3	He			24839.51		
Sc	45	3	He			25690.58		
Sc	45	3	He			25830.86		
Ge	72	3	He			46799.07		
Ge	72	3	He			47741.89		
Ge	72	3	He			46537.95		
In	115	3	He			39039.59		
In	115	3	He			37515.83		
In	115	3	He			38889.53		
Tb	159	3	He			148283.00		
Tb	159	3	He			149586.99		
Tb	159	3	He			147980.76		
Bi	209	3	He			110951.20		
Bi	209	3	He			111193.66		
Bi	209	3	He			109772.68		

Quantitation Report

Data File Name 183SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:32:14 PM
Sample Name 180-193865-N-1-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

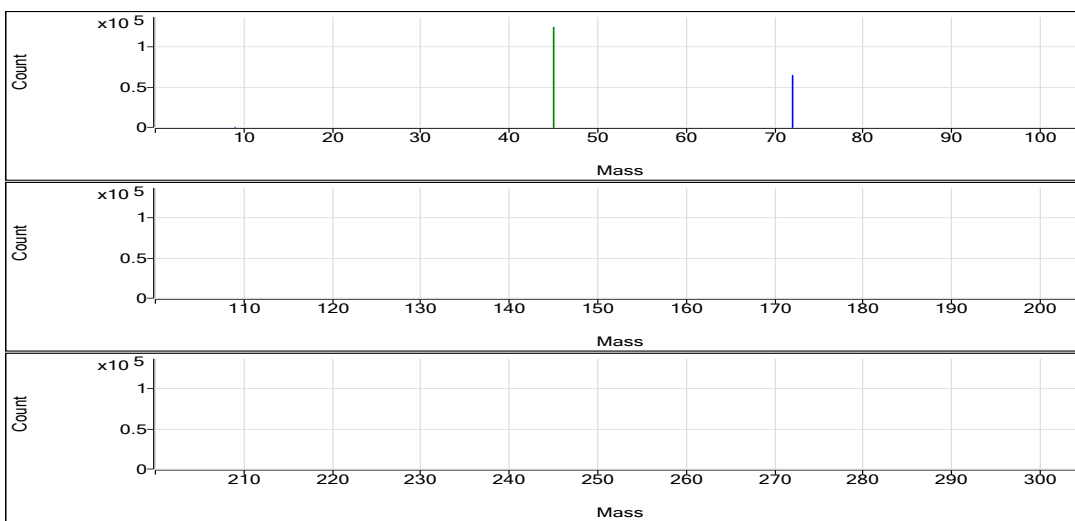
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.096	ppb	22.9	117.33	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.161	ppb	55.2	7.78	0.0001	Pulse	1.5000	3
Na	23	72	He	8723.523	ppb	1.6	748366.68	16.0154	Pulse	0.1000	3
Mg	24	72	He	19714.906	ppb	1.2	844401.71	18.0698	Pulse	0.1000	3
Al	27	72	He	-1.315	ppb	N/A	90.00	0.0019	Pulse	0.1000	3
K	39	72	He	1821.529	ppb	5.7	79830.88	1.7089	Pulse	0.5000	3
Ca	44	72	He	77400.470	ppb	1.9	145169.54	3.1068	Pulse	0.5000	3
Ti	47	72	He	0.144	ppb	59.1	7.33	0.0002	Pulse	0.5000	3
V	51	72	He	0.064	ppb	43.5	429.34	0.0092	Pulse	0.5000	3
Cr	52	72	He	-0.213	ppb	N/A	836.71	0.0179	Pulse	0.1000	3
Mn	55	72	He	947.537	ppb	1.4	323160.85	6.9157	Pulse	0.5000	3
Fe	57	72	He	87.982	ppb	3.2	1460.12	0.0312	Pulse	0.1000	3
Co	59	72	He	0.233	ppb	17.1	451.34	0.0097	Pulse	0.5000	3
Ni	60	72	He	0.370	ppb	7.8	308.00	0.0066	Pulse	0.5000	3
Cu	63	72	He	0.712	ppb	2.4	1072.71	0.0230	Pulse	0.5000	3
Zn	66	72	He	13.376	ppb	5.3	2041.48	0.0437	Pulse	0.5000	3
As	75	72	He	0.090	ppb	140.2	46.67	0.0010	Pulse	0.5000	3
Sr	88	115	He	214.575	ppb	2.6	86935.05	2.2488	Pulse	0.1000	3
Mo	98	115	He	0.456	ppb	15.5	563.37	0.0146	Pulse	0.1000	3
Ag	107	115	He	0.006	ppb	88.5	30.00	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.071	ppb	37.5	15.33	0.0004	Pulse	0.5000	3
Sn	120	115	He	-0.113	ppb	N/A	2280.24	0.0590	Pulse	0.1000	3
Sb	121	115	He	0.191	ppb	11.5	140.00	0.0036	Pulse	0.3000	3
Ba	137	115	He	19.791	ppb	2.4	4084.01	0.1056	Pulse	0.1000	3
Tl	205	159	He	0.289	ppb	11.7	1153.42	0.0078	Pulse	0.1000	3
Pb	208	159	He	0.118	ppb	12.8	836.70	0.0056	Pulse	0.1000	3
U	238	159	He	0.199	ppb	19.5	1120.08	0.0075	Pulse	0.1000	3

ISTD Table:

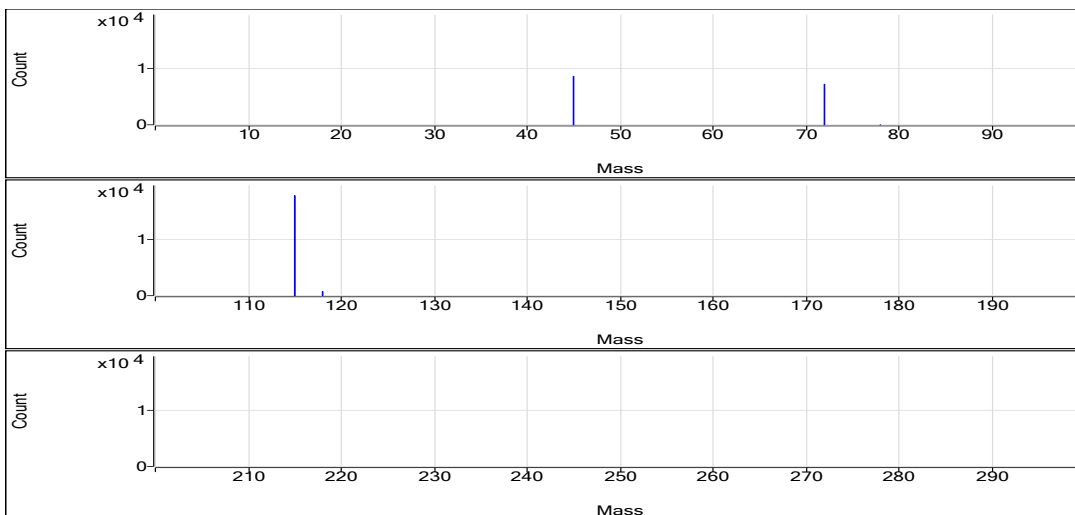
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1250077.53	2.4	95.6	Analog	0.1000	3
No Gas	Ge	72	649608.09	1.3	99.1	Pulse	0.1000	3
H2	Sc	45	86350.63	1.0	105.1	Pulse	0.1000	3
H2	Ge	72	72226.09	1.2	105.7	Pulse	0.1000	3
H2	In	115	177811.28	1.8	104.2	Pulse	0.1000	3
He	Sc	45	24959.68	0.3	97.5	Pulse	0.1000	3
He	Ge	72	46735.58	1.5	98.4	Pulse	0.1000	3
He	In	115	38659.73	0.3	94.4	Pulse	0.1000	3
He	Tb	159	148827.20	0.9	93.3	Pulse	0.1000	3
He	Bi	209	110172.48	1.8	94.2	Pulse	0.1000	3

No Gas

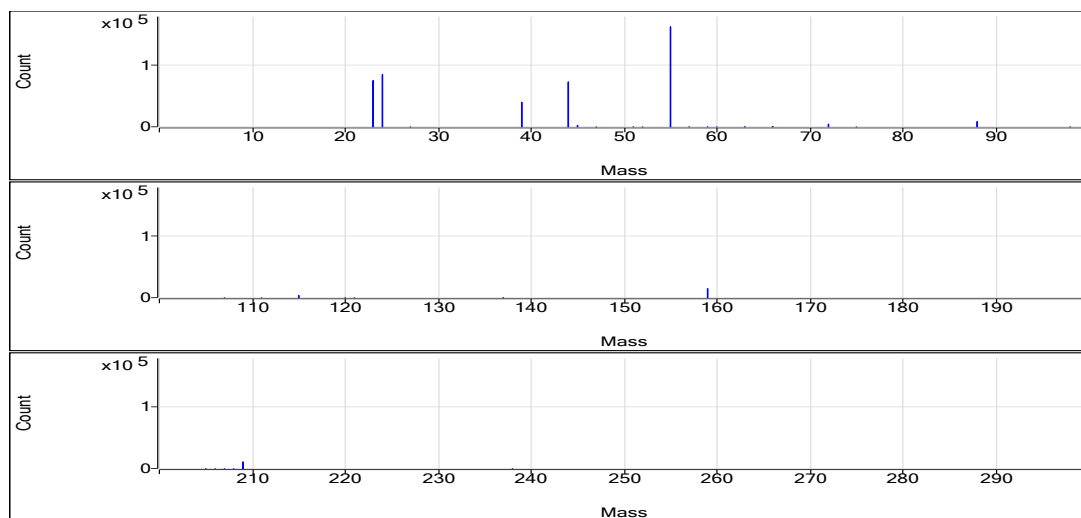


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.122	0.0002	134.00	0.0011	7.835E-05
Be	9	1	No Gas	0.083	0.0002	110.00	0.0011	7.835E-05
Be	9	1	No Gas	0.084	0.0002	108.00	0.0011	7.835E-05
Se	78	2	H2	0.206	0.0001	9.33	0.0005	2.594E-05
Se	78	2	H2	0.218	0.0001	10.00	0.0005	2.594E-05
Se	78	2	H2	0.059	0.0001	4.00	0.0005	2.594E-05
Na	23	3	He	8882.408	16.304	749440.61	0.0018	0.1731
Na	23	3	He	8679.551	15.9356	746410.61	0.0018	0.1731
Na	23	3	He	8608.61	15.8067	749248.82	0.0018	0.1731
Mg	24	3	He	19996.283	18.3276	842461.63	0.0009	0.006537
Mg	24	3	He	19587.21	17.9528	840897.33	0.0009	0.006537
Mg	24	3	He	19561.226	17.929	849846.16	0.0009	0.006537
Al	27	3	He	0.287	0.0024	110.01	0.0003	0.00231
Al	27	3	He	-3.543	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-0.69	0.0021	100.00	0.0003	0.00231
K	39	3	He	1937.091	1.7953	82524.41	0.0007	0.3475
K	39	3	He	1791.147	1.6862	78981.55	0.0007	0.3475
K	39	3	He	1736.349	1.6453	77986.67	0.0007	0.3475
Ca	44	3	He	79059.095	3.1733	145867.39	0	0.002807
Ca	44	3	He	77001.123	3.0908	144770.48	0	0.002807
Ca	44	3	He	76141.193	3.0563	144870.75	0	0.002807
Ti	47	3	He	0.199	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.188	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.046	0.0001	6.00	0.0003	0.0001123
V	51	3	He	0.032	0.0087	402.01	0.0137	0.008308
V	51	3	He	0.083	0.0094	442.01	0.0137	0.008308
V	51	3	He	0.078	0.0094	444.01	0.0137	0.008308
Cr	52	3	He	-0.129	0.0194	890.05	0.0171	0.02156
Cr	52	3	He	-0.3	0.0164	770.04	0.0171	0.02156
Cr	52	3	He	-0.212	0.0179	850.05	0.0171	0.02156
Mn	55	3	He	962.653	7.0259	322959.94	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	942.791	6.881	322302.34	0.0073	0.002316
Mn	55	3	He	937.168	6.84	324220.28	0.0073	0.002316
Fe	57	3	He	86.261	0.0307	1410.12	0.0003	0.002736
Fe	57	3	He	86.473	0.0307	1440.11	0.0003	0.002736
Fe	57	3	He	91.212	0.0323	1530.13	0.0003	0.002736
Co	59	3	He	0.279	0.0112	514.01	0.0332	0.001922
Co	59	3	He	0.204	0.0087	408.01	0.0332	0.001922
Co	59	3	He	0.216	0.0091	432.01	0.0332	0.001922
Ni	60	3	He	0.382	0.0067	308.00	0.0093	0.003141
Ni	60	3	He	0.391	0.0068	318.00	0.0093	0.003141
Ni	60	3	He	0.337	0.0063	298.00	0.0093	0.003141
Cu	63	3	He	0.727	0.0234	1074.04	0.027	0.003732
Cu	63	3	He	0.715	0.0231	1080.04	0.027	0.003732
Cu	63	3	He	0.693	0.0224	1064.04	0.027	0.003732
Zn	66	3	He	14.138	0.0461	2118.15	0.0031	0.002032
Zn	66	3	He	13.246	0.0433	2028.14	0.0031	0.002032
Zn	66	3	He	12.743	0.0417	1978.14	0.0031	0.002032
As	75	3	He	0.226	0.0013	62.00	0.0025	0.0007733
As	75	3	He	0.065	0.0009	44.00	0.0025	0.0007733
As	75	3	He	-0.022	0.0007	34.00	0.0025	0.0007733
Sr	88	3	He	217.266	2.2769	88195.12	0.0105	0.004071
Sr	88	3	He	218.309	2.2878	88154.81	0.0105	0.004071
Sr	88	3	He	208.15	2.1816	84455.21	0.0105	0.004071
Mo	98	3	He	0.451	0.0145	560.03	0.0234	0.003908
Mo	98	3	He	0.388	0.013	500.03	0.0234	0.003908
Mo	98	3	He	0.529	0.0163	630.04	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Cd	111	3	He	0.101	0.0006	22.00	0.0056	0
Cd	111	3	He	0.056	0.0003	12.00	0.0056	0
Cd	111	3	He	0.055	0.0003	12.00	0.0056	0
Sn	120	3	He	-0.335	0.0553	2140.21	0.0169	0.0609
Sn	120	3	He	0.113	0.0628	2420.28	0.0169	0.0609
Sn	120	3	He	-0.119	0.0589	2280.24	0.0169	0.0609
Sb	121	3	He	0.19	0.0036	140.00	0.0161	0.0005433
Sb	121	3	He	0.213	0.004	153.34	0.0161	0.0005433
Sb	121	3	He	0.169	0.0033	126.67	0.0161	0.0005433
Ba	137	3	He	20.177	0.1077	4170.68	0.0053	0.001141
Ba	137	3	He	19.252	0.1028	3960.65	0.0053	0.001141
Ba	137	3	He	19.943	0.1064	4120.69	0.0053	0.001141
Tl	205	3	He	0.32	0.0085	1260.10	0.0248	0.0005854
Tl	205	3	He	0.295	0.0079	1170.08	0.0248	0.0005854
Tl	205	3	He	0.253	0.0069	1030.07	0.0248	0.0005854
Pb	208	3	He	0.124	0.0058	490.02	0.0332	0.001693
Pb	208	3	He	0.13	0.006	460.02	0.0332	0.001693
Pb	208	3	He	0.101	0.0051	520.03	0.0332	0.001693
U	238	3	He	0.154	0.006	890.06	0.0338	0.0007949
U	238	3	He	0.221	0.0082	1220.09	0.0338	0.0007949
U	238	3	He	0.223	0.0083	1250.10	0.0338	0.0007949
Sc	45	1	No Gas			1215995.29		
Sc	45	1	No Gas			1275058.11		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1259179.20		
Ge	72	1	No Gas			644879.72		
Ge	72	1	No Gas			659015.62		
Ge	72	1	No Gas			644928.94		
Sc	45	2	H2			86798.94		
Sc	45	2	H2			86921.10		
Sc	45	2	H2			85331.85		
Ge	72	2	H2			71630.26		
Ge	72	2	H2			73217.49		
Ge	72	2	H2			71830.53		
In	115	2	H2			177009.59		
In	115	2	H2			181275.92		
In	115	2	H2			175148.34		
Sc	45	3	He			24989.64		
Sc	45	3	He			25019.84		
Sc	45	3	He			24869.57		
Ge	72	3	He			45966.79		
Ge	72	3	He			46839.31		
Ge	72	3	He			47400.63		
In	115	3	He			38749.25		
In	115	3	He			38548.86		
In	115	3	He			38728.96		
Tb	159	3	He			148125.24		
Tb	159	3	He			148032.60		
Tb	159	3	He			150323.76		
Bi	209	3	He			110033.88		
Bi	209	3	He			108291.86		
Bi	209	3	He			112191.70		

Quantitation Report

Data File Name 184SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:34:26 PM
Sample Name 180-193743-N-1-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

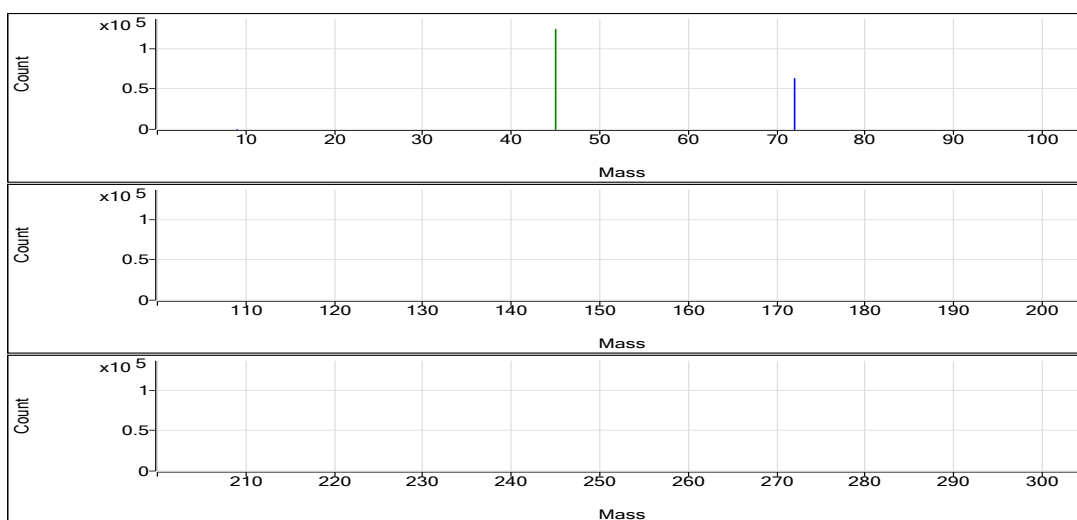
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.076	ppb	24.6	100.00	0.0002	Pulse	0.5000	3
Se	78	72	H2	1.744	ppb	13.5	62.89	0.0009	Pulse	1.5000	3
Na	23	72	He	16556.744	ppb	0.5	1351642.43	30.2409	Analog	0.1000	3
Mg	24	72	He	45910.454	ppb	1.1	1880288.72	42.0708	Analog	0.1000	3
Al	27	72	He	-3.331	ppb	N/A	60.00	0.0013	Pulse	0.1000	3
K	39	72	He	4690.405	ppb	1.3	172233.20	3.8532	Pulse	0.5000	3
Ca	44	72	He	65094.081	ppb	0.3	116801.79	2.6133	Pulse	0.5000	3
Ti	47	72	He	0.358	ppb	39.3	10.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.024	ppb	320.8	386.01	0.0086	Pulse	0.5000	3
Cr	52	72	He	-0.169	ppb	N/A	833.39	0.0187	Pulse	0.1000	3
Mn	55	72	He	0.999	ppb	7.3	429.34	0.0096	Pulse	0.5000	3
Fe	57	72	He	2.138	ppb	142.9	153.34	0.0034	Pulse	0.1000	3
Co	59	72	He	0.053	ppb	21.4	165.33	0.0037	Pulse	0.5000	3
Ni	60	72	He	0.175	ppb	18.4	213.33	0.0048	Pulse	0.5000	3
Cu	63	72	He	9.149	ppb	1.2	11213.92	0.2509	Pulse	0.5000	3
Zn	66	72	He	20.767	ppb	3.4	2982.96	0.0667	Pulse	0.5000	3
As	75	72	He	0.024	ppb	209.9	37.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	1046.275	ppb	1.4	405032.57	10.9493	Pulse	0.1000	3
Mo	98	115	He	0.034	ppb	217.9	173.34	0.0047	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	286.0	23.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	1.8	2.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.484	ppb	44.7	2553.62	0.0691	Pulse	0.1000	3
Sb	121	115	He	0.074	ppb	18.4	64.44	0.0017	Pulse	0.3000	3
Ba	137	115	He	54.663	ppb	3.3	10724.07	0.2898	Pulse	0.1000	3
Tl	205	159	He	0.072	ppb	14.9	350.02	0.0024	Pulse	0.1000	3
Pb	208	159	He	0.617	ppb	8.0	3290.26	0.0222	Pulse	0.1000	3
U	238	159	He	0.999	ppb	4.3	5114.43	0.0345	Pulse	0.1000	3

ISTD Table:

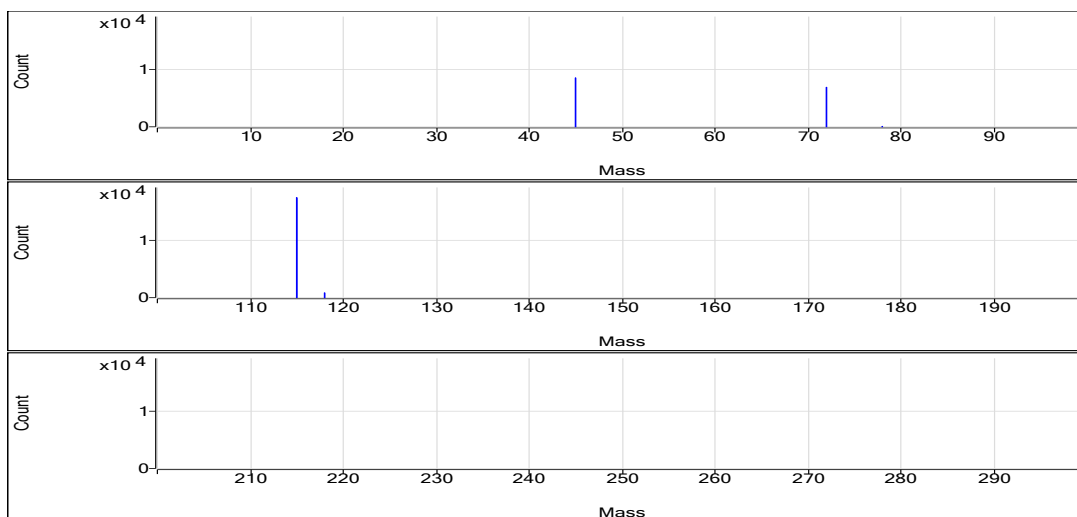
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1244468.13	0.8	95.2	Analog	0.1000	3
No Gas	Ge	72	631432.79	1.5	96.4	Pulse	0.1000	3
H2	Sc	45	85365.28	1.0	103.9	Pulse	0.1000	3
H2	Ge	72	69149.29	0.8	101.2	Pulse	0.1000	3
H2	In	115	174436.10	1.2	102.2	Pulse	0.1000	3
He	Sc	45	25280.07	2.9	98.7	Pulse	0.1000	3
He	Ge	72	44696.16	1.1	94.1	Pulse	0.1000	3
He	In	115	36996.95	1.8	90.4	Pulse	0.1000	3
He	Tb	159	148240.50	0.3	93.0	Pulse	0.1000	3
He	Bi	209	108482.88	1.5	92.8	Pulse	0.1000	3

No Gas

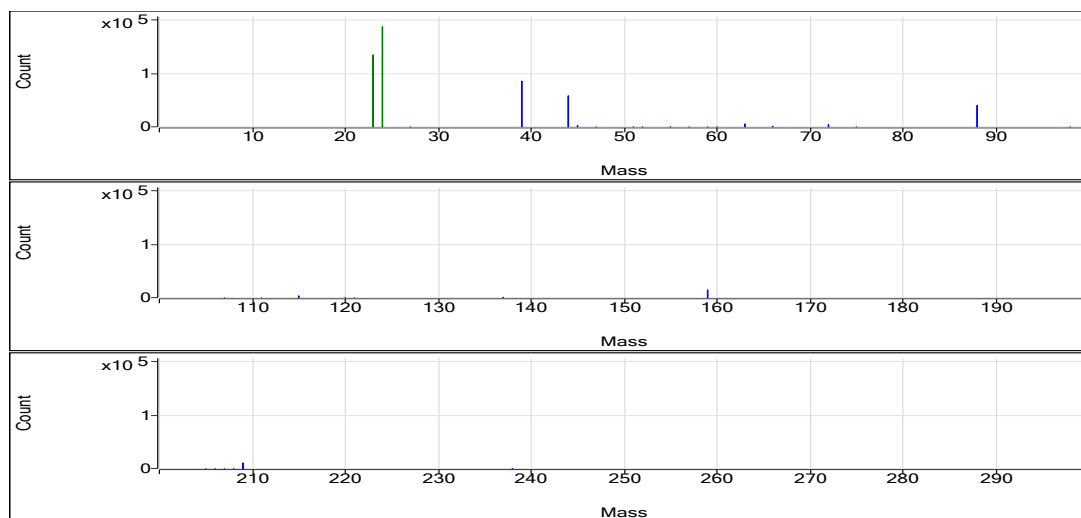


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.095	0.0002	112.00	0.0011	7.835E-05
Be	9	1	No Gas	0.073	0.0002	98.00	0.0011	7.835E-05
Be	9	1	No Gas	0.058	0.0001	90.00	0.0011	7.835E-05
Se	78	2	H2	1.515	0.0008	55.33	0.0005	2.594E-05
Se	78	2	H2	1.732	0.0009	62.00	0.0005	2.594E-05
Se	78	2	H2	1.985	0.001	71.33	0.0005	2.594E-05
Na	23	3	He	16479.816	30.1012	1357986.39	0.0018	0.1731
Na	23	3	He	16642.971	30.3975	1361590.76	0.0018	0.1731
Na	23	3	He	16547.444	30.2241	1335350.14	0.0018	0.1731
Mg	24	3	He	45328.56	41.5377	1873928.72	0.0009	0.006537
Mg	24	3	He	46184.279	42.3217	1895707.00	0.0009	0.006537
Mg	24	3	He	46218.523	42.3531	1871230.44	0.0009	0.006537
Al	27	3	He	-0.322	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-7.953	0	0.00	0.0003	0.00231
Al	27	3	He	-1.719	0.0018	80.00	0.0003	0.00231
K	39	3	He	4762.575	3.9071	176266.23	0.0007	0.3475
K	39	3	He	4648.743	3.8221	171200.36	0.0007	0.3475
K	39	3	He	4659.896	3.8304	169233.00	0.0007	0.3475
Ca	44	3	He	64909.67	2.6059	117561.84	0	0.002807
Ca	44	3	He	65152.266	2.6156	117160.69	0	0.002807
Ca	44	3	He	65220.305	2.6183	115682.84	0	0.002807
Ti	47	3	He	0.494	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	0.213	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.367	0.0002	10.00	0.0003	0.0001123
V	51	3	He	0.109	0.0098	442.01	0.0137	0.008308
V	51	3	He	-0.003	0.0083	370.01	0.0137	0.008308
V	51	3	He	-0.035	0.0078	346.01	0.0137	0.008308
Cr	52	3	He	-0.418	0.0144	650.04	0.0171	0.02156
Cr	52	3	He	-0.047	0.0208	930.06	0.0171	0.02156
Cr	52	3	He	-0.043	0.0208	920.06	0.0171	0.02156
Mn	55	3	He	0.916	0.009	406.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.053	0.01	448.01	0.0073	0.002316
Mn	55	3	He	1.029	0.0098	434.01	0.0073	0.002316
Fe	57	3	He	5.241	0.0044	200.01	0.0003	0.002736
Fe	57	3	He	-0.864	0.0025	110.00	0.0003	0.002736
Fe	57	3	He	2.036	0.0034	150.00	0.0003	0.002736
Co	59	3	He	0.061	0.0039	178.00	0.0332	0.001922
Co	59	3	He	0.059	0.0039	174.00	0.0332	0.001922
Co	59	3	He	0.04	0.0033	144.00	0.0332	0.001922
Ni	60	3	He	0.139	0.0044	200.00	0.0093	0.003141
Ni	60	3	He	0.199	0.005	224.00	0.0093	0.003141
Ni	60	3	He	0.187	0.0049	216.00	0.0093	0.003141
Cu	63	3	He	9.121	0.2502	11285.98	0.027	0.003732
Cu	63	3	He	9.054	0.2483	11123.85	0.027	0.003732
Cu	63	3	He	9.271	0.2542	11231.92	0.027	0.003732
Zn	66	3	He	21.491	0.069	3112.32	0.0031	0.002032
Zn	66	3	He	20.059	0.0645	2890.27	0.0031	0.002032
Zn	66	3	He	20.752	0.0667	2946.29	0.0031	0.002032
As	75	3	He	0.079	0.001	44.00	0.0025	0.0007733
As	75	3	He	0.012	0.0008	36.00	0.0025	0.0007733
As	75	3	He	-0.019	0.0007	32.00	0.0025	0.0007733
Sr	88	3	He	1062.824	11.1225	404579.45	0.0105	0.004071
Sr	88	3	He	1035.683	10.8386	408388.12	0.0105	0.004071
Sr	88	3	He	1040.316	10.887	402130.15	0.0105	0.004071
Mo	98	3	He	0.115	0.0066	240.01	0.0234	0.003908
Mo	98	3	He	-0.031	0.0032	120.00	0.0234	0.003908
Mo	98	3	He	0.018	0.0043	160.01	0.0234	0.003908
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.012	0.0011	40.00	0.0493	0.0004851
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Sn	120	3	He	0.692	0.0726	2640.31	0.0169	0.0609
Sn	120	3	He	0.26	0.0653	2460.27	0.0169	0.0609
Sn	120	3	He	0.498	0.0693	2560.29	0.0169	0.0609
Sb	121	3	He	0.063	0.0016	56.67	0.0161	0.0005433
Sb	121	3	He	0.071	0.0017	63.33	0.0161	0.0005433
Sb	121	3	He	0.089	0.002	73.33	0.0161	0.0005433
Ba	137	3	He	52.651	0.2791	10153.62	0.0053	0.001141
Ba	137	3	He	56.103	0.2974	11204.51	0.0053	0.001141
Ba	137	3	He	55.234	0.2928	10814.09	0.0053	0.001141
Tl	205	3	He	0.061	0.0021	310.02	0.0248	0.0005854
Tl	205	3	He	0.071	0.0024	350.02	0.0248	0.0005854
Tl	205	3	He	0.082	0.0026	390.02	0.0248	0.0005854
Pb	208	3	He	0.636	0.0228	1750.16	0.0332	0.001693
Pb	208	3	He	0.654	0.0234	1930.18	0.0332	0.001693
Pb	208	3	He	0.561	0.0203	1660.15	0.0332	0.001693
U	238	3	He	0.963	0.0333	4921.01	0.0338	0.0007949
U	238	3	He	0.986	0.0341	5061.06	0.0338	0.0007949
U	238	3	He	1.046	0.0361	5361.23	0.0338	0.0007949
Sc	45	1	No Gas			1236191.78		
Sc	45	1	No Gas			1255067.33		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1242145.29		
Ge	72	1	No Gas			624285.03		
Ge	72	1	No Gas			627824.60		
Ge	72	1	No Gas			642188.74		
Sc	45	2	H2			84376.93		
Sc	45	2	H2			86035.10		
Sc	45	2	H2			85683.80		
Ge	72	2	H2			69731.50		
Ge	72	2	H2			68606.78		
Ge	72	2	H2			69109.60		
In	115	2	H2			176490.19		
In	115	2	H2			174569.61		
In	115	2	H2			172248.51		
Sc	45	3	He			24759.37		
Sc	45	3	He			26121.17		
Sc	45	3	He			24959.66		
Ge	72	3	He			45113.97		
Ge	72	3	He			44792.80		
Ge	72	3	He			44181.70		
In	115	3	He			36393.42		
In	115	3	He			37696.44		
In	115	3	He			36954.61		
Tb	159	3	He			147749.23		
Tb	159	3	He			148517.15		
Tb	159	3	He			148455.11		
Bi	209	3	He			109469.68		
Bi	209	3	He			109330.00		
Bi	209	3	He			106648.95		

Quantitation Report

Data File Name 185SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:36:37 PM
Sample Name 180-193744-N-1-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

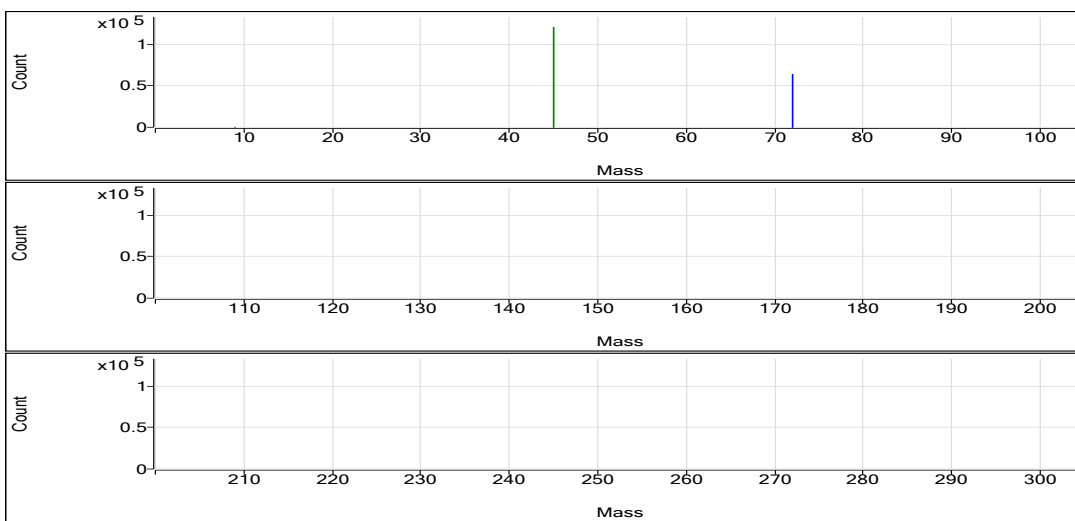
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.058	ppb	63.9	89.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	3.135	ppb	5.5	117.33	0.0016	Pulse	1.5000	3
Na	23	72	He	25489.173	ppb	1.9	2192464.24	46.4627	Analog	0.1000	3
Mg	24	72	He	21571.635	ppb	1.5	932981.86	19.7710	Pulse	0.1000	3
Al	27	72	He	0.098	ppb	2679.4	110.00	0.0023	Pulse	0.1000	3
K	39	72	He	19473.631	ppb	1.6	703231.67	14.9025	Pulse	0.5000	3
Ca	44	72	He	67808.170	ppb	1.6	128454.02	2.7221	Pulse	0.5000	3
Ti	47	72	He	-0.087	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	0.294	ppb	16.0	581.35	0.0123	Pulse	0.5000	3
Cr	52	72	He	-0.124	ppb	N/A	916.72	0.0194	Pulse	0.1000	3
Mn	55	72	He	14.402	ppb	1.2	5068.14	0.1074	Pulse	0.5000	3
Fe	57	72	He	4.399	ppb	99.9	196.67	0.0042	Pulse	0.1000	3
Co	59	72	He	0.084	ppb	11.0	222.67	0.0047	Pulse	0.5000	3
Ni	60	72	He	2.719	ppb	1.4	1345.40	0.0285	Pulse	0.5000	3
Cu	63	72	He	2.110	ppb	4.0	2866.27	0.0608	Pulse	0.5000	3
Zn	66	72	He	77.634	ppb	2.4	11511.48	0.2439	Pulse	0.5000	3
As	75	72	He	0.052	ppb	107.9	42.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	306.050	ppb	1.1	124247.54	3.2057	Pulse	0.1000	3
Mo	98	115	He	0.035	ppb	143.8	183.34	0.0047	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.156	ppb	22.4	34.00	0.0009	Pulse	0.5000	3
Sn	120	115	He	-0.315	ppb	N/A	2153.55	0.0556	Pulse	0.1000	3
Sb	121	115	He	0.084	ppb	9.5	73.33	0.0019	Pulse	0.3000	3
Ba	137	115	He	35.115	ppb	4.5	7228.61	0.1865	Pulse	0.1000	3
Tl	205	159	He	0.023	ppb	12.9	170.01	0.0011	Pulse	0.1000	3
Pb	208	159	He	0.014	ppb	71.8	320.01	0.0022	Pulse	0.1000	3
U	238	159	He	0.262	ppb	2.0	1430.13	0.0096	Pulse	0.1000	3

ISTD Table:

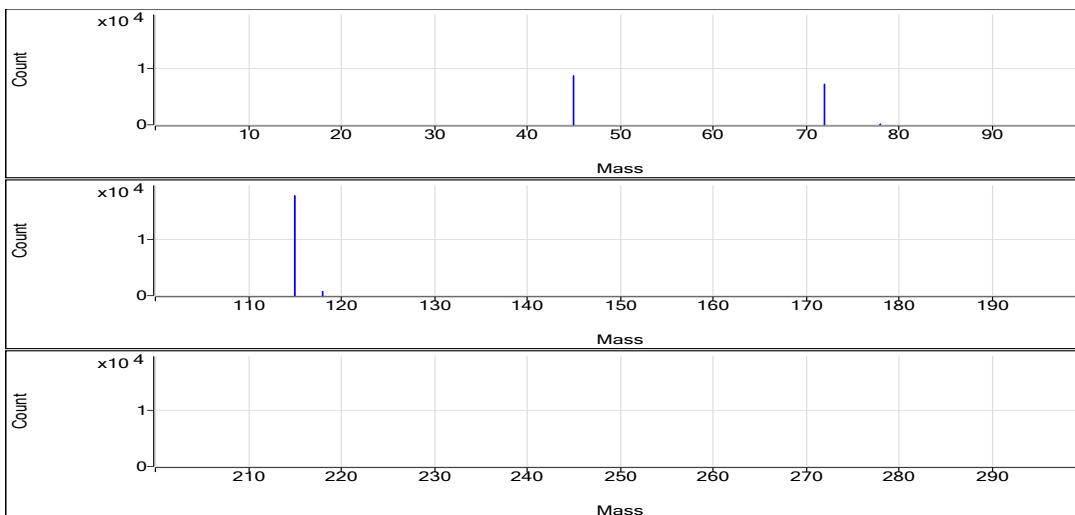
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1204457.98	1.3	92.1	Analog	0.1000	3
No Gas	Ge	72	638728.48	1.3	97.5	Pulse	0.1000	3
H2	Sc	45	87409.73	1.1	106.4	Pulse	0.1000	3
H2	Ge	72	72698.25	2.2	106.4	Pulse	0.1000	3
H2	In	115	178013.38	1.8	104.3	Pulse	0.1000	3
He	Sc	45	25139.90	3.0	98.2	Pulse	0.1000	3
He	Ge	72	47196.60	1.6	99.3	Pulse	0.1000	3
He	In	115	38760.70	1.1	94.7	Pulse	0.1000	3
He	Tb	159	148523.92	0.8	93.2	Pulse	0.1000	3
He	Bi	209	108478.97	0.8	92.8	Pulse	0.1000	3

No Gas

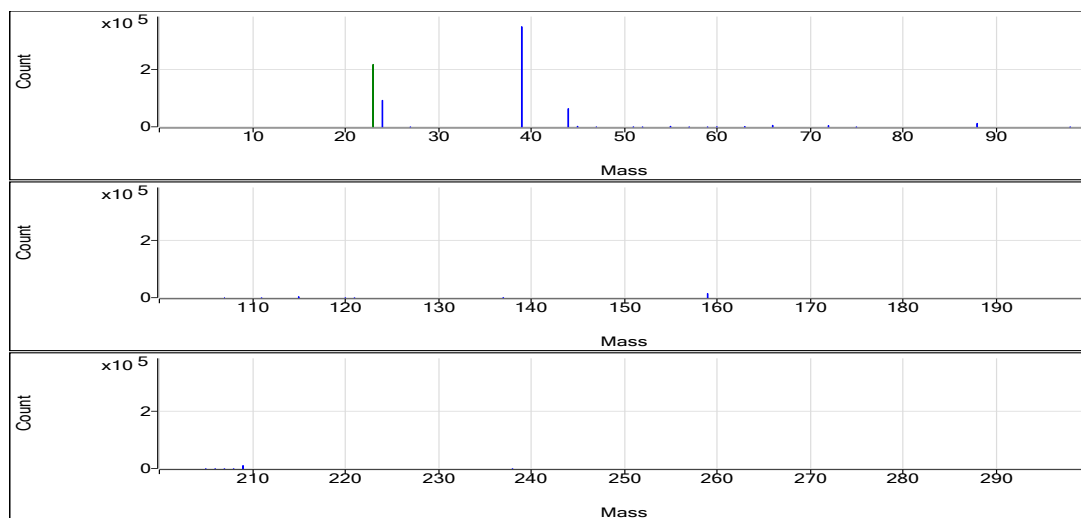


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.055	0.0001	88.00	0.0011	7.835E-05
Be	9	1	No Gas	0.097	0.0002	114.00	0.0011	7.835E-05
Be	9	1	No Gas	0.023	0.0001	66.00	0.0011	7.835E-05
Se	78	2	H2	3.135	0.0016	114.67	0.0005	2.594E-05
Se	78	2	H2	2.961	0.0015	113.33	0.0005	2.594E-05
Se	78	2	H2	3.308	0.0017	124.00	0.0005	2.594E-05
Na	23	3	He	25525.362	46.5284	2183996.22	0.0018	0.1731
Na	23	3	He	25955.027	47.3087	2205920.75	0.0018	0.1731
Na	23	3	He	24987.13	45.551	2187475.75	0.0018	0.1731
Mg	24	3	He	21573.001	19.7722	928088.89	0.0009	0.006537
Mg	24	3	He	21903.448	20.075	936061.78	0.0009	0.006537
Mg	24	3	He	21238.457	19.4657	934794.91	0.0009	0.006537
Al	27	3	He	1.583	0.0028	130.01	0.0003	0.00231
Al	27	3	He	1.646	0.0028	130.00	0.0003	0.00231
Al	27	3	He	-2.935	0.0015	70.00	0.0003	0.00231
K	39	3	He	19607.103	15.0022	704190.06	0.0007	0.3475
K	39	3	He	19700.968	15.0724	702799.25	0.0007	0.3475
K	39	3	He	19112.823	14.6328	702705.69	0.0007	0.3475
Ca	44	3	He	68056.498	2.7321	128241.19	0	0.002807
Ca	44	3	He	68741.859	2.7596	128673.75	0	0.002807
Ca	44	3	He	66626.153	2.6747	128447.13	0	0.002807
Ti	47	3	He	0.05	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.085	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.227	0	2.00	0.0003	0.0001123
V	51	3	He	0.25	0.0117	550.01	0.0137	0.008308
V	51	3	He	0.343	0.013	606.02	0.0137	0.008308
V	51	3	He	0.288	0.0122	588.01	0.0137	0.008308
Cr	52	3	He	-0.04	0.0209	980.06	0.0171	0.02156
Cr	52	3	He	-0.069	0.0204	950.06	0.0171	0.02156
Cr	52	3	He	-0.262	0.0171	820.04	0.0171	0.02156
Mn	55	3	He	14.548	0.1085	5090.82	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	14.447	0.1077	5022.79	0.0073	0.002316
Mn	55	3	He	14.212	0.106	5090.81	0.0073	0.002316
Fe	57	3	He	7.998	0.0053	250.01	0.0003	0.002736
Fe	57	3	He	-0.5	0.0026	120.00	0.0003	0.002736
Fe	57	3	He	5.698	0.0046	220.01	0.0003	0.002736
Co	59	3	He	0.093	0.005	236.00	0.0332	0.001922
Co	59	3	He	0.084	0.0047	220.00	0.0332	0.001922
Co	59	3	He	0.075	0.0044	212.00	0.0332	0.001922
Ni	60	3	He	2.692	0.0283	1326.06	0.0093	0.003141
Ni	60	3	He	2.763	0.0289	1348.07	0.0093	0.003141
Ni	60	3	He	2.704	0.0284	1362.07	0.0093	0.003141
Cu	63	3	He	2.174	0.0625	2932.28	0.027	0.003732
Cu	63	3	He	2.142	0.0616	2872.27	0.027	0.003732
Cu	63	3	He	2.016	0.0582	2794.26	0.027	0.003732
Zn	66	3	He	75.523	0.2373	11139.89	0.0031	0.002032
Zn	66	3	He	79.213	0.2488	11602.20	0.0031	0.002032
Zn	66	3	He	78.165	0.2456	11792.35	0.0031	0.002032
As	75	3	He	0.064	0.0009	44.00	0.0025	0.0007733
As	75	3	He	0.1	0.001	48.00	0.0025	0.0007733
As	75	3	He	-0.009	0.0007	36.00	0.0025	0.0007733
Sr	88	3	He	304.024	3.1845	123156.59	0.0105	0.004071
Sr	88	3	He	304.027	3.1846	124949.77	0.0105	0.004071
Sr	88	3	He	310.099	3.2481	124636.25	0.0105	0.004071
Mo	98	3	He	0.087	0.0059	230.01	0.0234	0.003908
Mo	98	3	He	-0.015	0.0036	140.01	0.0234	0.003908
Mo	98	3	He	0.033	0.0047	180.01	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0.157	0.0009	34.00	0.0056	0
Cd	111	3	He	0.191	0.0011	42.00	0.0056	0
Cd	111	3	He	0.121	0.0007	26.00	0.0056	0
Sn	120	3	He	-0.268	0.0564	2180.24	0.0169	0.0609
Sn	120	3	He	-0.543	0.0517	2030.19	0.0169	0.0609
Sn	120	3	He	-0.134	0.0586	2250.23	0.0169	0.0609
Sb	121	3	He	0.079	0.0018	70.00	0.0161	0.0005433
Sb	121	3	He	0.093	0.002	80.00	0.0161	0.0005433
Sb	121	3	He	0.079	0.0018	70.00	0.0161	0.0005433
Ba	137	3	He	34.466	0.1831	7081.89	0.0053	0.001141
Ba	137	3	He	33.968	0.1805	7081.82	0.0053	0.001141
Ba	137	3	He	36.911	0.196	7522.11	0.0053	0.001141
Tl	205	3	He	0.026	0.0012	180.01	0.0248	0.0005854
Tl	205	3	He	0.02	0.0011	160.01	0.0248	0.0005854
Tl	205	3	He	0.022	0.0011	170.01	0.0248	0.0005854
Pb	208	3	He	0.004	0.0018	110.00	0.0332	0.001693
Pb	208	3	He	0.024	0.0025	180.01	0.0332	0.001693
Pb	208	3	He	0.013	0.0021	200.01	0.0332	0.001693
U	238	3	He	0.256	0.0094	1390.12	0.0338	0.0007949
U	238	3	He	0.266	0.0098	1450.13	0.0338	0.0007949
U	238	3	He	0.263	0.0097	1450.13	0.0338	0.0007949
Sc	45	1	No Gas			1205784.83		
Sc	45	1	No Gas			1188237.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1219351.23		
Ge	72	1	No Gas			642745.73		
Ge	72	1	No Gas			629053.70		
Ge	72	1	No Gas			644386.01		
Sc	45	2	H2			86287.48		
Sc	45	2	H2			87966.01		
Sc	45	2	H2			87975.71		
Ge	72	2	H2			71007.87		
Ge	72	2	H2			74251.44		
Ge	72	2	H2			72835.45		
In	115	2	H2			176856.72		
In	115	2	H2			175593.18		
In	115	2	H2			181590.23		
Sc	45	3	He			25600.56		
Sc	45	3	He			25560.43		
Sc	45	3	He			24258.72		
Ge	72	3	He			46938.98		
Ge	72	3	He			46628.22		
Ge	72	3	He			48022.61		
In	115	3	He			38688.78		
In	115	3	He			39250.43		
In	115	3	He			38388.12		
Tb	159	3	He			147366.35		
Tb	159	3	He			148416.56		
Tb	159	3	He			149788.86		
Bi	209	3	He			107597.15		
Bi	209	3	He			109367.95		
Bi	209	3	He			108471.81		

Quantitation Report

Data File Name 186SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:38:49 PM
Sample Name 180-192431-B-86-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

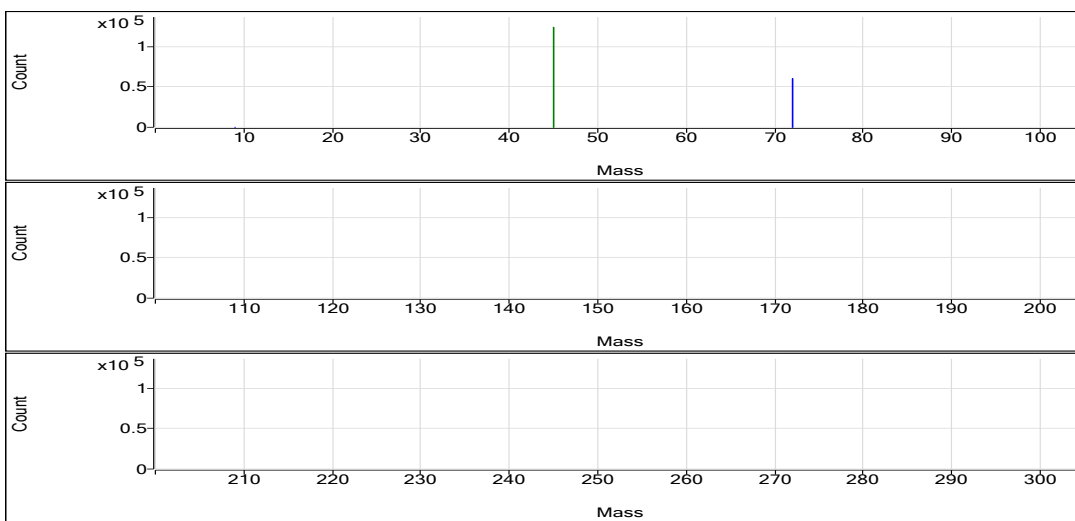
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.068	ppb	17.9	91.33	0.0002	Pulse	0.5000	3
Se	78	72	H2	2.665	ppb	5.9	90.22	0.0014	Pulse	1.5000	3
Na	23	72	He	1805.725	ppb	2.1	147934.97	3.4523	Pulse	0.1000	3
Mg	24	72	He	20880.290	ppb	1.4	820128.35	19.1376	Pulse	0.1000	3
Al	27	72	He	6.790	ppb	27.1	183.34	0.0043	Pulse	0.1000	3
K	39	72	He	2275.815	ppb	4.1	87773.29	2.0485	Pulse	0.5000	3
Ca	44	72	He	814203.071	ppb	1.8	1399384.12	32.6549	Analog	0.5000	3
Ti	47	72	He	0.192	ppb	199.5	7.33	0.0002	Pulse	0.5000	3
V	51	72	He	1.499	ppb	1.3	1233.38	0.0288	Pulse	0.5000	3
Cr	52	72	He	-0.092	ppb	N/A	856.72	0.0200	Pulse	0.1000	3
Mn	55	72	He	2456.218	ppb	1.0	768093.66	17.9232	Pulse	0.5000	3
Fe	57	72	He	51.791	ppb	12.2	836.72	0.0195	Pulse	0.1000	3
Co	59	72	He	32.957	ppb	1.2	47005.05	1.0969	Pulse	0.5000	3
Ni	60	72	He	63.896	ppb	1.5	25675.58	0.5992	Pulse	0.5000	3
Cu	63	72	He	2.133	ppb	1.4	2630.23	0.0614	Pulse	0.5000	3
Zn	66	72	He	11.016	ppb	0.7	1558.08	0.0364	Pulse	0.5000	3
As	75	72	He	1.648	ppb	15.3	213.33	0.0050	Pulse	0.5000	3
Sr	88	115	He	1698.803	ppb	2.4	681437.93	17.7756	Pulse	0.1000	3
Mo	98	115	He	15.558	ppb	3.4	14103.35	0.3679	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	6.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.641	ppb	5.2	138.00	0.0036	Pulse	0.5000	3
Sn	120	115	He	-0.527	ppb	N/A	1996.85	0.0520	Pulse	0.1000	3
Sb	121	115	He	1.341	ppb	1.9	850.03	0.0222	Pulse	0.3000	3
Ba	137	115	He	426.067	ppb	2.5	86282.95	2.2508	Pulse	0.1000	3
Tl	205	159	He	0.141	ppb	5.9	600.03	0.0041	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	43.3	323.34	0.0022	Pulse	0.1000	3
U	238	159	He	25.638	ppb	0.5	127768.86	0.8662	Pulse	0.1000	3

ISTD Table:

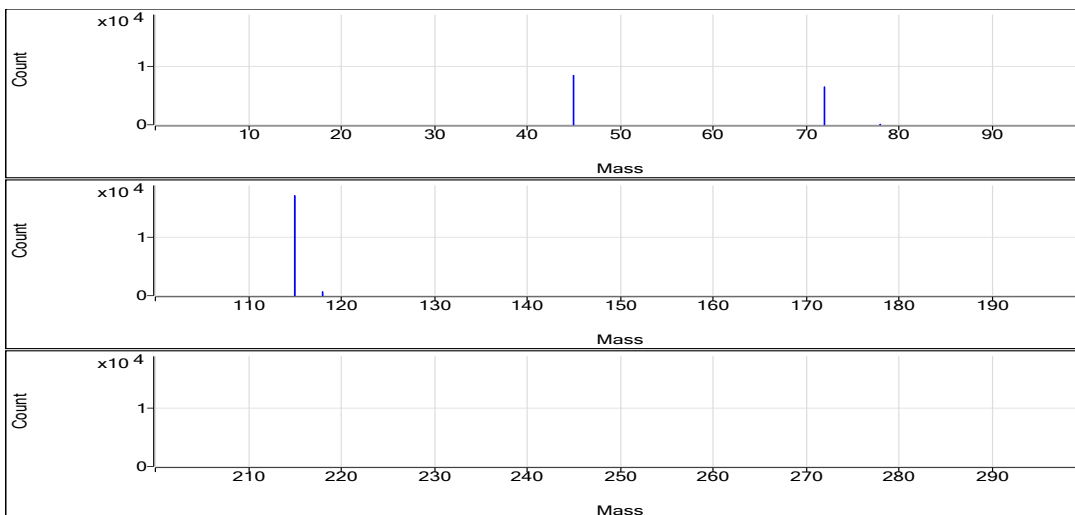
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1242961.59	2.5	95.1	Analog	0.1000	3
No Gas	Ge	72	605974.20	1.8	92.5	Pulse	0.1000	3
H2	Sc	45	85533.18	2.0	104.1	Pulse	0.1000	3
H2	Ge	72	65547.54	0.2	95.9	Pulse	0.1000	3
H2	In	115	172787.80	0.7	101.3	Pulse	0.1000	3
He	Sc	45	25176.57	3.4	98.3	Pulse	0.1000	3
He	Ge	72	42857.79	1.2	90.2	Pulse	0.1000	3
He	In	115	38350.88	2.5	93.7	Pulse	0.1000	3
He	Tb	159	147517.13	0.9	92.5	Pulse	0.1000	3
He	Bi	209	107559.45	1.1	92.0	Pulse	0.1000	3

No Gas

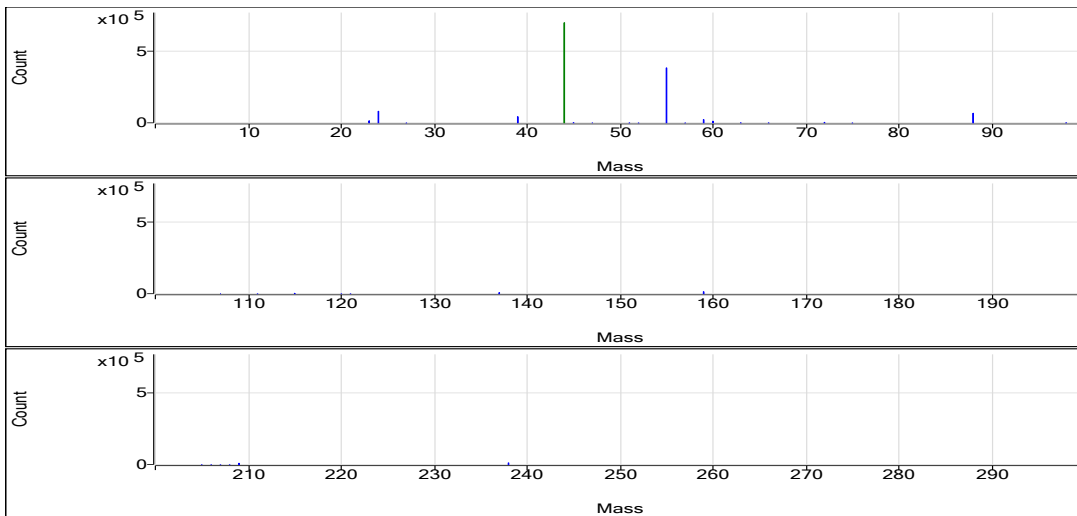


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.065	0.0001	88.00	0.0011	7.835E-05
Be	9	1	No Gas	0.058	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.082	0.0002	102.00	0.0011	7.835E-05
Se	78	2	H2	2.592	0.0013	88.00	0.0005	2.594E-05
Se	78	2	H2	2.845	0.0015	96.00	0.0005	2.594E-05
Se	78	2	H2	2.558	0.0013	86.67	0.0005	2.594E-05
Na	23	3	He	1843.922	3.5217	149061.41	0.0018	0.1731
Na	23	3	He	1767.111	3.3822	146751.60	0.0018	0.1731
Na	23	3	He	1806.143	3.4531	147991.89	0.0018	0.1731
Mg	24	3	He	20963.94	19.2142	813269.13	0.0009	0.006537
Mg	24	3	He	20561.692	18.8457	817697.96	0.0009	0.006537
Mg	24	3	He	21115.239	19.3528	829417.96	0.0009	0.006537
Al	27	3	He	8.316	0.0047	200.01	0.0003	0.00231
Al	27	3	He	4.743	0.0037	160.00	0.0003	0.00231
Al	27	3	He	7.311	0.0044	190.01	0.0003	0.00231
K	39	3	He	2382.233	2.128	90071.28	0.0007	0.3475
K	39	3	He	2232.653	2.0162	87481.95	0.0007	0.3475
K	39	3	He	2212.558	2.0012	85766.65	0.0007	0.3475
Ca	44	3	He	816591.906	32.7507	1386219.63	0	0.002807
Ca	44	3	He	798100.882	32.0091	1388850.25	0	0.002807
Ca	44	3	He	827916.427	33.2048	1423082.50	0	0.002807
Ti	47	3	He	0.551	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	-0.213	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.239	0.0002	8.00	0.0003	0.0001123
V	51	3	He	1.512	0.029	1226.05	0.0137	0.008308
V	51	3	He	1.508	0.0289	1254.05	0.0137	0.008308
V	51	3	He	1.476	0.0285	1220.05	0.0137	0.008308
Cr	52	3	He	-0.114	0.0196	830.05	0.0171	0.02156
Cr	52	3	He	-0.142	0.0191	830.05	0.0171	0.02156
Cr	52	3	He	-0.019	0.0212	910.06	0.0171	0.02156
Mn	55	3	He	2469.828	18.0225	762826.63	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	2428.662	17.7221	768947.81	0.0073	0.002316
Mn	55	3	He	2470.165	18.0249	772506.56	0.0073	0.002316
Fe	57	3	He	44.802	0.0172	730.04	0.0003	0.002736
Fe	57	3	He	53.46	0.0201	870.05	0.0003	0.002736
Fe	57	3	He	57.11	0.0212	910.06	0.0003	0.002736
Co	59	3	He	33.409	1.1119	47061.86	0.0332	0.001922
Co	59	3	He	32.669	1.0873	47176.29	0.0332	0.001922
Co	59	3	He	32.794	1.0914	46777.00	0.0332	0.001922
Ni	60	3	He	64.883	0.6084	25750.37	0.0093	0.003141
Ni	60	3	He	62.974	0.5906	25624.16	0.0093	0.003141
Ni	60	3	He	63.829	0.5985	25652.22	0.0093	0.003141
Cu	63	3	He	2.115	0.0609	2576.22	0.027	0.003732
Cu	63	3	He	2.118	0.0609	2644.23	0.027	0.003732
Cu	63	3	He	2.168	0.0623	2670.23	0.027	0.003732
Zn	66	3	He	11.011	0.0363	1538.08	0.0031	0.002032
Zn	66	3	He	11.096	0.0366	1588.09	0.0031	0.002032
Zn	66	3	He	10.942	0.0361	1548.08	0.0031	0.002032
As	75	3	He	1.642	0.005	210.00	0.0025	0.0007733
As	75	3	He	1.902	0.0056	244.00	0.0025	0.0007733
As	75	3	He	1.399	0.0043	186.00	0.0025	0.0007733
Sr	88	3	He	1742.634	18.2341	679464.83	0.0105	0.004071
Sr	88	3	He	1661.408	17.3844	679654.13	0.0105	0.004071
Sr	88	3	He	1692.368	17.7082	685194.83	0.0105	0.004071
Mo	98	3	He	15.923	0.3764	14026.61	0.0234	0.003908
Mo	98	3	He	14.961	0.3539	13836.41	0.0234	0.003908
Mo	98	3	He	15.792	0.3734	14447.02	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.603	0.0034	126.00	0.0056	0
Cd	111	3	He	0.666	0.0037	146.00	0.0056	0
Cd	111	3	He	0.654	0.0037	142.00	0.0056	0
Sn	120	3	He	-0.842	0.0467	1740.15	0.0169	0.0609
Sn	120	3	He	-0.547	0.0517	2020.19	0.0169	0.0609
Sn	120	3	He	-0.193	0.0576	2230.22	0.0169	0.0609
Sb	121	3	He	1.37	0.0226	843.37	0.0161	0.0005433
Sb	121	3	He	1.325	0.0219	856.70	0.0161	0.0005433
Sb	121	3	He	1.329	0.022	850.03	0.0161	0.0005433
Ba	137	3	He	438.534	2.3166	86324.18	0.0053	0.001141
Ba	137	3	He	419.521	2.2162	86644.16	0.0053	0.001141
Ba	137	3	He	420.146	2.2195	85880.51	0.0053	0.001141
Tl	205	3	He	0.145	0.0042	610.03	0.0248	0.0005854
Tl	205	3	He	0.146	0.0042	620.04	0.0248	0.0005854
Tl	205	3	He	0.131	0.0038	570.03	0.0248	0.0005854
Pb	208	3	He	0.021	0.0024	150.01	0.0332	0.001693
Pb	208	3	He	0.008	0.002	160.01	0.0332	0.001693
Pb	208	3	He	0.016	0.0022	210.01	0.0332	0.001693
U	238	3	He	25.774	0.8708	127274.42	0.0338	0.0007949
U	238	3	He	25.622	0.8656	127788.11	0.0338	0.0007949
U	238	3	He	25.517	0.8621	128244.06	0.0338	0.0007949
Sc	45	1	No Gas			1233072.56		
Sc	45	1	No Gas			1218162.79		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1277649.43		
Ge	72	1	No Gas			598488.00		
Ge	72	1	No Gas			600956.32		
Ge	72	1	No Gas			618478.27		
Sc	45	2	H2			87081.11		
Sc	45	2	H2			83643.22		
Sc	45	2	H2			85875.22		
Ge	72	2	H2			65685.04		
Ge	72	2	H2			65413.62		
Ge	72	2	H2			65543.95		
In	115	2	H2			174004.70		
In	115	2	H2			171575.88		
In	115	2	H2			172782.81		
Sc	45	3	He			24188.44		
Sc	45	3	He			25620.64		
Sc	45	3	He			25720.62		
Ge	72	3	He			42326.45		
Ge	72	3	He			43389.20		
Ge	72	3	He			42857.71		
In	115	3	He			37275.60		
In	115	3	He			39109.83		
In	115	3	He			38709.15		
Tb	159	3	He			146165.02		
Tb	159	3	He			147626.19		
Tb	159	3	He			148760.18		
Bi	209	3	He			107001.53		
Bi	209	3	He			106711.41		
Bi	209	3	He			108965.42		

Quantitation Report

Data File Name 187SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:41:00 PM
Sample Name 410-235347-I-1-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

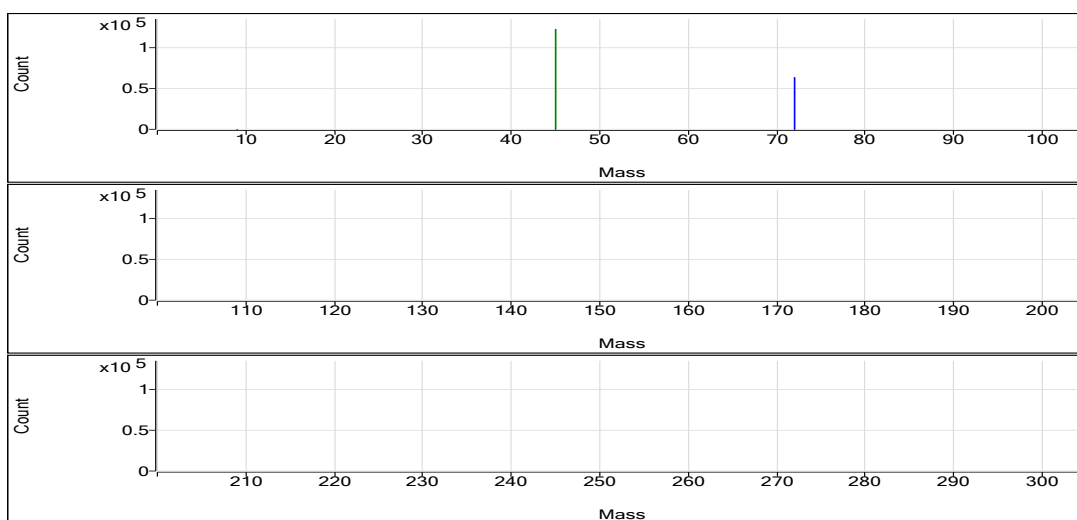
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.062	ppb	37.4	92.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.304	ppb	42.0	12.67	0.0002	Pulse	1.5000	3
Na	23	72	He	166066.245	ppb	3.2	13684336.05	301.7578	Analog	0.1000	3
Mg	24	72	He	44883.731	ppb	1.8	1865754.29	41.1301	Analog	0.1000	3
Al	27	72	He	14.038	ppb	11.9	290.01	0.0064	Pulse	0.1000	3
K	39	72	He	2958.988	ppb	4.7	116038.14	2.5591	Pulse	0.5000	3
Ca	44	72	He	128880.383	ppb	2.7	234537.39	5.1713	Pulse	0.5000	3
Ti	47	72	He	1.538	ppb	31.3	26.67	0.0006	Pulse	0.5000	3
V	51	72	He	2.166	ppb	6.4	1718.10	0.0379	Pulse	0.5000	3
Cr	52	72	He	0.520	ppb	12.5	1380.10	0.0304	Pulse	0.1000	3
Mn	55	72	He	5666.146	ppb	2.0	1875318.21	41.3431	Analog	0.5000	3
Fe	57	72	He	3489.490	ppb	2.9	51385.61	1.1330	Pulse	0.1000	3
Co	59	72	He	1.029	ppb	8.3	1635.42	0.0361	Pulse	0.5000	3
Ni	60	72	He	160.901	ppb	3.1	68206.83	1.5040	Pulse	0.5000	3
Cu	63	72	He	1.141	ppb	2.1	1567.42	0.0346	Pulse	0.5000	3
Zn	66	72	He	10.500	ppb	5.1	1576.09	0.0347	Pulse	0.5000	3
As	75	72	He	692.806	ppb	2.8	80152.92	1.7673	Pulse	0.5000	3
Sr	88	115	He	1132.638	ppb	0.9	446521.97	11.8528	Pulse	0.1000	3
Mo	98	115	He	4.799	ppb	0.7	4377.41	0.1162	Pulse	0.1000	3
Ag	107	115	He	0.014	ppb	83.5	43.33	0.0012	Pulse	0.1000	3
Cd	111	115	He	0.031	ppb	44.6	6.67	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.025	ppb	N/A	2280.24	0.0605	Pulse	0.1000	3
Sb	121	115	He	0.430	ppb	10.9	282.23	0.0075	Pulse	0.3000	3
Ba	137	115	He	177.504	ppb	1.9	35348.34	0.9384	Pulse	0.1000	3
Tl	205	159	He	0.009	ppb	52.8	120.00	0.0008	Pulse	0.1000	3
Pb	208	159	He	0.752	ppb	8.3	3973.68	0.0267	Pulse	0.1000	3
U	238	159	He	0.266	ppb	8.2	1456.79	0.0098	Pulse	0.1000	3

ISTD Table:

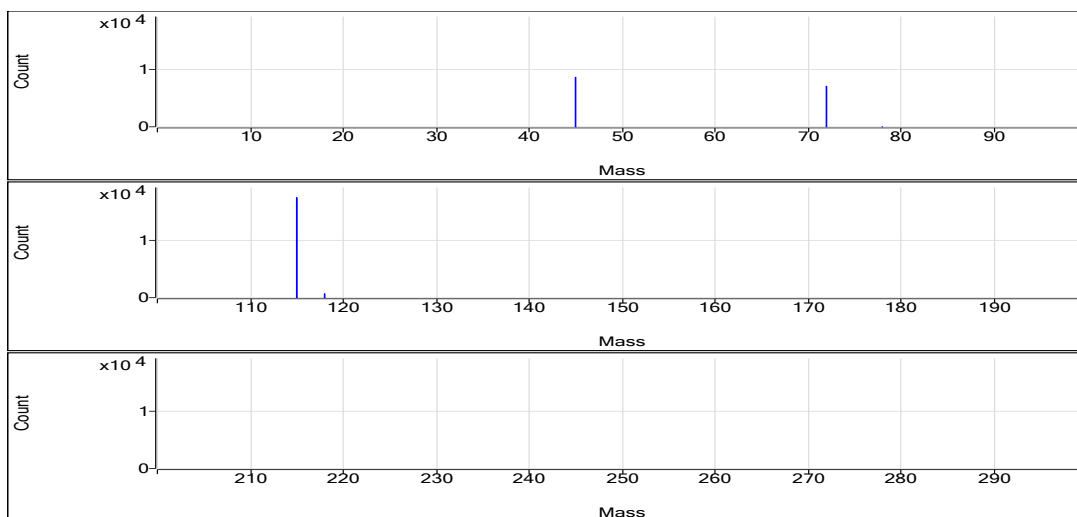
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1228698.29	0.2	94.0	Analog	0.1000	3
No Gas	Ge	72	636191.81	0.3	97.1	Pulse	0.1000	3
H2	Sc	45	86240.43	1.4	105.0	Pulse	0.1000	3
H2	Ge	72	70736.45	1.7	103.5	Pulse	0.1000	3
H2	In	115	173716.14	1.0	101.8	Pulse	0.1000	3
He	Sc	45	24832.78	0.7	97.0	Pulse	0.1000	3
He	Ge	72	45378.21	3.1	95.5	Pulse	0.1000	3
He	In	115	37677.21	2.2	92.0	Pulse	0.1000	3
He	Tb	159	148993.52	0.3	93.4	Pulse	0.1000	3
He	Bi	209	106813.58	1.4	91.3	Pulse	0.1000	3

No Gas

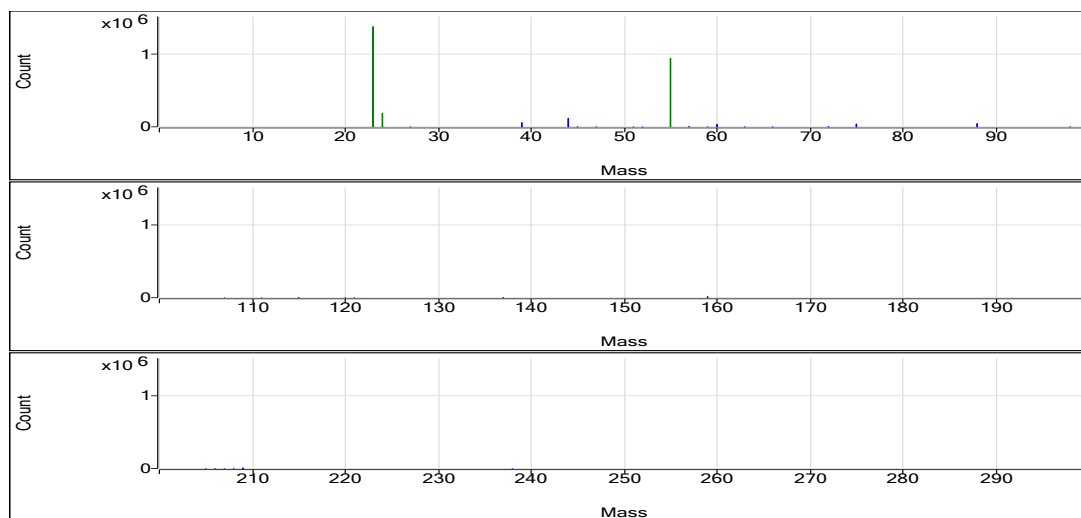


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.089	0.0002	110.00	0.0011	7.835E-05
Be	9	1	No Gas	0.051	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.047	0.0001	82.00	0.0011	7.835E-05
Se	78	2	H2	0.168	0.0001	8.00	0.0005	2.594E-05
Se	78	2	H2	0.421	0.0002	16.67	0.0005	2.594E-05
Se	78	2	H2	0.322	0.0002	13.33	0.0005	2.594E-05
Na	23	3	He	169141.783	307.3432	13702136.05	0.0018	0.1731
Na	23	3	He	169070.095	307.213	13690206.05	0.0018	0.1731
Na	23	3	He	159986.856	290.7174	13660666.05	0.0018	0.1731
Mg	24	3	He	45532.563	41.7246	1860187.00	0.0009	0.006537
Mg	24	3	He	45125.085	41.3512	1842717.94	0.0009	0.006537
Mg	24	3	He	43993.544	40.3145	1894357.94	0.0009	0.006537
Al	27	3	He	12.127	0.0058	260.01	0.0003	0.00231
Al	27	3	He	15.226	0.0067	300.01	0.0003	0.00231
Al	27	3	He	14.762	0.0066	310.02	0.0003	0.00231
K	39	3	He	3086.551	2.6544	118341.48	0.0007	0.3475
K	39	3	He	2979.479	2.5744	114722.29	0.0007	0.3475
K	39	3	He	2810.933	2.4484	115050.66	0.0007	0.3475
Ca	44	3	He	130474.504	5.2352	233400.17	0	0.002807
Ca	44	3	He	131225.129	5.2653	234637.22	0	0.002807
Ca	44	3	He	124941.514	5.0133	235574.78	0	0.002807
Ti	47	3	He	1.659	0.0006	28.00	0.0003	0.0001123
Ti	47	3	He	1.948	0.0007	32.00	0.0003	0.0001123
Ti	47	3	He	1.008	0.0004	20.00	0.0003	0.0001123
V	51	3	He	2.315	0.0399	1780.11	0.0137	0.008308
V	51	3	He	2.142	0.0376	1674.09	0.0137	0.008308
V	51	3	He	2.041	0.0362	1700.10	0.0137	0.008308
Cr	52	3	He	0.55	0.031	1380.10	0.0171	0.02156
Cr	52	3	He	0.564	0.0312	1390.11	0.0171	0.02156
Cr	52	3	He	0.445	0.0292	1370.09	0.0171	0.02156
Mn	55	3	He	5739.36	41.8773	1866997.13	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5722.27	41.7526	1860605.50	0.0073	0.002316
Mn	55	3	He	5536.808	40.3995	1898352.00	0.0073	0.002316
Fe	57	3	He	3569.068	1.1588	51663.01	0.0003	0.002736
Fe	57	3	He	3524.098	1.1443	50990.77	0.0003	0.002736
Fe	57	3	He	3375.305	1.0961	51503.04	0.0003	0.002736
Co	59	3	He	1.049	0.0368	1640.09	0.0332	0.001922
Co	59	3	He	1.101	0.0385	1716.10	0.0332	0.001922
Co	59	3	He	0.935	0.033	1550.08	0.0332	0.001922
Ni	60	3	He	163.701	1.5302	68218.11	0.0093	0.003141
Ni	60	3	He	163.876	1.5318	68260.45	0.0093	0.003141
Ni	60	3	He	155.125	1.4502	68141.93	0.0093	0.003141
Cu	63	3	He	1.132	0.0343	1530.08	0.027	0.003732
Cu	63	3	He	1.168	0.0353	1572.09	0.027	0.003732
Cu	63	3	He	1.122	0.0341	1600.09	0.027	0.003732
Zn	66	3	He	11.112	0.0367	1634.09	0.0031	0.002032
Zn	66	3	He	10.152	0.0337	1500.08	0.0031	0.002032
Zn	66	3	He	10.237	0.0339	1594.09	0.0031	0.002032
As	75	3	He	701.726	1.7901	79806.52	0.0025	0.0007733
As	75	3	He	706.18	1.8014	80276.92	0.0025	0.0007733
As	75	3	He	670.513	1.7105	80375.33	0.0025	0.0007733
Sr	88	3	He	1144.08	11.9725	440101.52	0.0105	0.004071
Sr	88	3	He	1123.603	11.7583	450477.61	0.0105	0.004071
Sr	88	3	He	1130.232	11.8276	448986.79	0.0105	0.004071
Mo	98	3	He	4.764	0.1154	4240.69	0.0234	0.003908
Mo	98	3	He	4.799	0.1162	4450.77	0.0234	0.003908
Mo	98	3	He	4.833	0.117	4440.78	0.0234	0.003908
Ag	107	3	He	0.018	0.0014	50.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.022	0.0016	60.00	0.0493	0.0004851
Cd	111	3	He	0.029	0.0002	6.00	0.0056	0
Cd	111	3	He	0.047	0.0003	10.00	0.0056	0
Cd	111	3	He	0.019	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.175	0.0579	2130.20	0.0169	0.0609
Sn	120	3	He	0.073	0.0621	2380.27	0.0169	0.0609
Sn	120	3	He	0.029	0.0614	2330.26	0.0169	0.0609
Sb	121	3	He	0.399	0.007	256.67	0.0161	0.0005433
Sb	121	3	He	0.484	0.0084	320.01	0.0161	0.0005433
Sb	121	3	He	0.407	0.0071	270.01	0.0161	0.0005433
Ba	137	3	He	180.635	0.9549	35101.14	0.0053	0.001141
Ba	137	3	He	177.866	0.9403	36023.23	0.0053	0.001141
Ba	137	3	He	174.01	0.9199	34920.66	0.0053	0.001141
Tl	205	3	He	0.006	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	0.006	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	0.014	0.0009	140.00	0.0248	0.0005854
Pb	208	3	He	0.723	0.0257	2020.20	0.0332	0.001693
Pb	208	3	He	0.823	0.029	2300.26	0.0332	0.001693
Pb	208	3	He	0.708	0.0252	2000.19	0.0332	0.001693
U	238	3	He	0.278	0.0102	1510.14	0.0338	0.0007949
U	238	3	He	0.28	0.0102	1530.13	0.0338	0.0007949
U	238	3	He	0.241	0.0089	1330.11	0.0338	0.0007949
Sc	45	1	No Gas			1226957.95		
Sc	45	1	No Gas			1230766.23		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1228370.68		
Ge	72	1	No Gas			635137.88		
Ge	72	1	No Gas			634774.25		
Ge	72	1	No Gas			638663.31		
Sc	45	2	H2			84850.04		
Sc	45	2	H2			87121.62		
Sc	45	2	H2			86749.62		
Ge	72	2	H2			72041.64		
Ge	72	2	H2			69691.62		
Ge	72	2	H2			70476.10		
In	115	2	H2			173186.62		
In	115	2	H2			172376.91		
In	115	2	H2			175584.88		
Sc	45	3	He			25039.95		
Sc	45	3	He			24719.06		
Sc	45	3	He			24739.34		
Ge	72	3	He			44582.53		
Ge	72	3	He			44562.59		
Ge	72	3	He			46989.51		
In	115	3	He			36774.25		
In	115	3	He			38328.14		
In	115	3	He			37977.12		
Tb	159	3	He			148465.12		
Tb	159	3	He			149504.42		
Tb	159	3	He			149011.02		
Bi	209	3	He			108451.98		
Bi	209	3	He			106407.62		
Bi	209	3	He			105581.14		

Quantitation Report

Data File Name 189_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:45:23 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

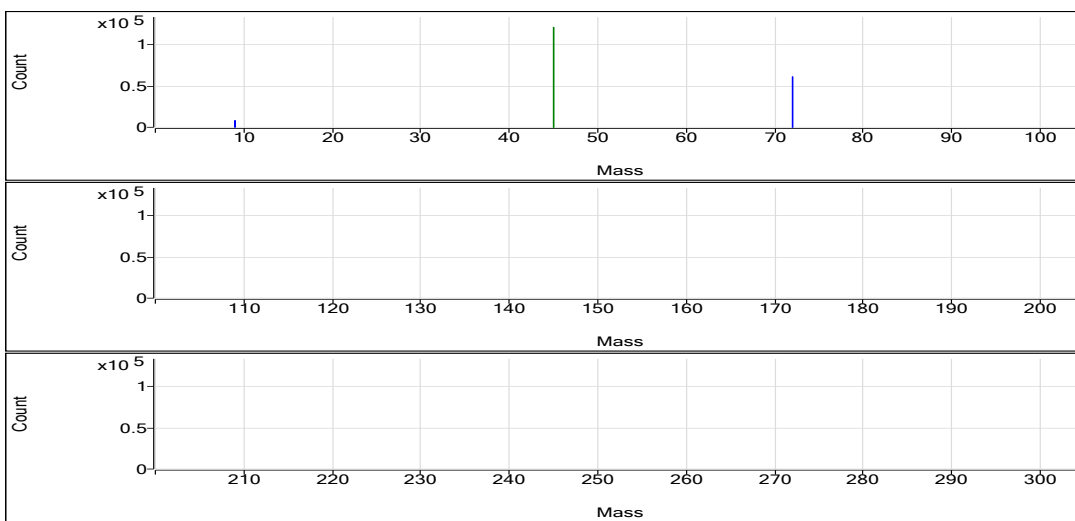
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.684	ppb	5.8	16883.19	0.0274	Pulse	0.5000	3
Se	78	72	H2	24.813	ppb	3.9	881.80	0.0126	Pulse	1.5000	3
Na	23	72	He	2468.092	ppb	3.1	210011.26	4.6552	Pulse	0.1000	3
Mg	24	72	He	2487.492	ppb	3.6	103104.60	2.2856	Pulse	0.1000	3
Al	27	72	He	2395.159	ppb	3.3	31490.45	0.6980	Pulse	0.1000	3
K	39	72	He	2443.010	ppb	6.4	98008.99	2.1734	Pulse	0.5000	3
Ca	44	72	He	2468.245	ppb	0.9	4594.00	0.1018	Pulse	0.5000	3
Ti	47	72	He	2432.013	ppb	3.5	34122.69	0.7565	Pulse	0.5000	3
V	51	72	He	243.501	ppb	2.3	150442.74	3.3344	Pulse	0.5000	3
Cr	52	72	He	243.296	ppb	2.5	188535.00	4.1786	Pulse	0.1000	3
Mn	55	72	He	242.398	ppb	3.3	79886.03	1.7709	Pulse	0.5000	3
Fe	57	72	He	2391.698	ppb	2.0	35088.70	0.7774	Pulse	0.1000	3
Co	59	72	He	243.918	ppb	2.8	365688.47	8.1057	Pulse	0.5000	3
Ni	60	72	He	243.393	ppb	2.1	102584.28	2.2735	Pulse	0.5000	3
Cu	63	72	He	241.826	ppb	2.2	294958.34	6.5372	Pulse	0.5000	3
Zn	66	72	He	240.378	ppb	2.8	33878.75	0.7509	Pulse	0.5000	3
As	75	72	He	240.585	ppb	2.3	27713.88	0.6142	Pulse	0.5000	3
Sr	88	115	He	24.399	ppb	2.4	9846.71	0.2593	Pulse	0.1000	3
Mo	98	115	He	25.628	ppb	0.9	22913.90	0.6035	Pulse	0.1000	3
Ag	107	115	He	26.122	ppb	1.7	48920.84	1.2884	Pulse	0.1000	3
Cd	111	115	He	25.227	ppb	1.1	5374.96	0.1416	Pulse	0.5000	3
Sn	120	115	He	25.378	ppb	3.4	18574.93	0.4892	Pulse	0.1000	3
Sb	121	115	He	24.720	ppb	1.8	15154.18	0.3991	Pulse	0.3000	3
Ba	137	115	He	245.960	ppb	0.3	49353.83	1.2998	Pulse	0.1000	3
Tl	205	159	He	25.177	ppb	0.8	91734.53	0.6244	Pulse	0.1000	3
Pb	208	159	He	25.272	ppb	1.6	123601.08	0.8414	Pulse	0.1000	3
U	238	159	He	25.264	ppb	1.7	125378.11	0.8536	Pulse	0.1000	3

ISTD Table:

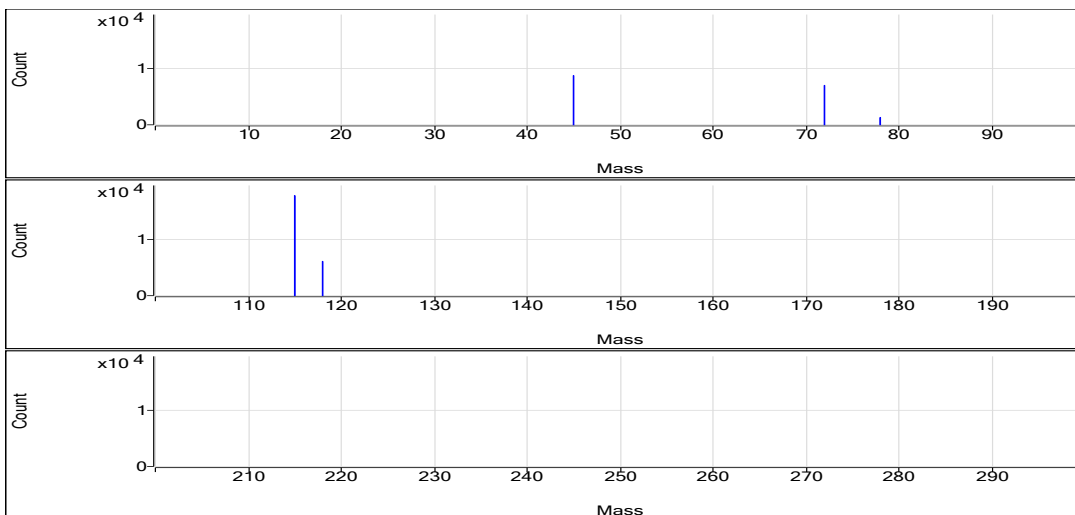
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1219982.85	2.5	93.3	Analog	0.1000	3
No Gas	Ge	72	616423.56	2.7	94.1	Pulse	0.1000	3
H2	Sc	45	87366.01	0.1	106.3	Pulse	0.1000	3
H2	Ge	72	70005.86	1.5	102.4	Pulse	0.1000	3
H2	In	115	177456.56	0.7	104.0	Pulse	0.1000	3
He	Sc	45	24659.27	2.9	96.3	Pulse	0.1000	3
He	Ge	72	45137.60	2.7	95.0	Pulse	0.1000	3
He	In	115	37970.69	0.8	92.7	Pulse	0.1000	3
He	Tb	159	146909.05	1.2	92.1	Pulse	0.1000	3
He	Bi	209	109101.49	0.6	93.3	Pulse	0.1000	3

No Gas

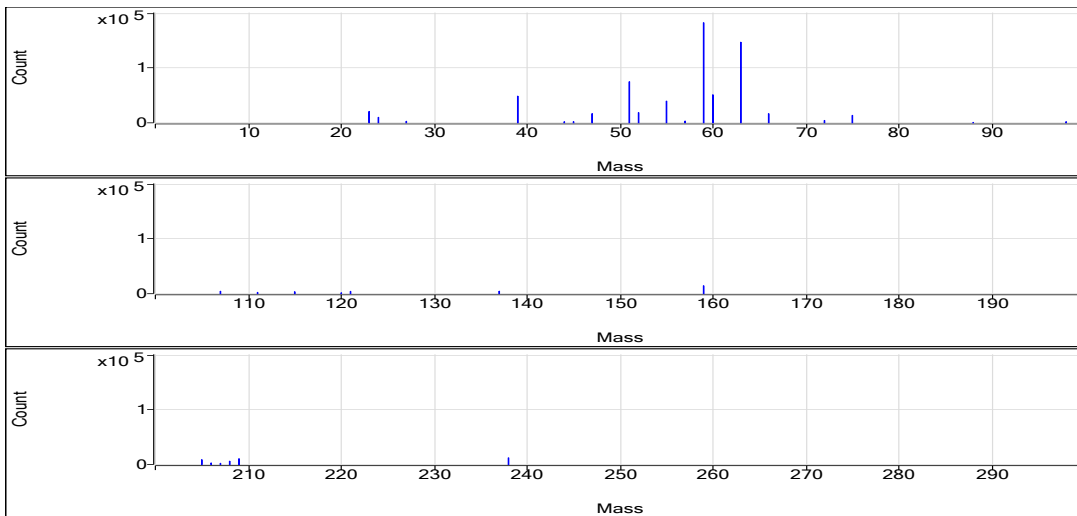


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	24.064	0.0256	15339.02	0.0011	7.835E-05
Be	9	1	No Gas	25.977	0.0277	17156.79	0.0011	7.835E-05
Be	9	1	No Gas	27.011	0.0288	18153.76	0.0011	7.835E-05
Se	78	2	H2	24.341	0.0124	877.36	0.0005	2.594E-05
Se	78	2	H2	25.921	0.0132	906.69	0.0005	2.594E-05
Se	78	2	H2	24.177	0.0123	861.36	0.0005	2.594E-05
Na	23	3	He	2553.331	4.81	210777.73	0.0018	0.1731
Na	23	3	He	2448.348	4.6194	209419.61	0.0018	0.1731
Na	23	3	He	2402.597	4.5363	209836.44	0.0018	0.1731
Mg	24	3	He	2590.547	2.3801	104295.26	0.0009	0.006537
Mg	24	3	He	2441.025	2.2431	101689.37	0.0009	0.006537
Mg	24	3	He	2430.906	2.2338	103329.17	0.0009	0.006537
Al	27	3	He	2480.459	0.7227	31670.77	0.0003	0.00231
Al	27	3	He	2326.551	0.678	30738.89	0.0003	0.00231
Al	27	3	He	2378.467	0.6931	32061.70	0.0003	0.00231
K	39	3	He	2617.306	2.3037	100949.72	0.0007	0.3475
K	39	3	He	2395.284	2.1378	96915.84	0.0007	0.3475
K	39	3	He	2316.439	2.0788	96161.41	0.0007	0.3475
Ca	44	3	He	2493.346	0.1028	4504.64	0	0.002807
Ca	44	3	He	2450.622	0.1011	4582.66	0	0.002807
Ca	44	3	He	2460.765	0.1015	4694.70	0	0.002807
Ti	47	3	He	2520.495	0.784	34353.82	0.0003	0.0001123
Ti	47	3	He	2424.768	0.7542	34191.56	0.0003	0.0001123
Ti	47	3	He	2350.777	0.7312	33822.70	0.0003	0.0001123
V	51	3	He	249.793	3.4203	149879.33	0.0137	0.008308
V	51	3	He	241.729	3.3102	150066.56	0.0137	0.008308
V	51	3	He	238.98	3.2726	151382.34	0.0137	0.008308
Cr	52	3	He	250.198	4.2965	188275.27	0.0171	0.02156
Cr	52	3	He	239.629	4.1159	186595.62	0.0171	0.02156
Cr	52	3	He	240.062	4.1233	190734.10	0.0171	0.02156
Mn	55	3	He	251.269	1.8356	80436.82	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	239.983	1.7533	79484.11	0.0073	0.002316
Mn	55	3	He	235.942	1.7238	79737.16	0.0073	0.002316
Fe	57	3	He	2425.462	0.7884	34547.35	0.0003	0.002736
Fe	57	3	He	2336.661	0.7596	34437.40	0.0003	0.002736
Fe	57	3	He	2412.971	0.7843	36281.34	0.0003	0.002736
Co	59	3	He	251.541	8.3589	366292.16	0.0332	0.001922
Co	59	3	He	241.552	8.0271	363907.56	0.0332	0.001922
Co	59	3	He	238.66	7.931	366865.69	0.0332	0.001922
Ni	60	3	He	249.104	2.3268	101961.27	0.0093	0.003141
Ni	60	3	He	241.279	2.2538	102176.33	0.0093	0.003141
Ni	60	3	He	239.797	2.24	103615.23	0.0093	0.003141
Cu	63	3	He	247.833	6.6995	293575.13	0.027	0.003732
Cu	63	3	He	239.806	6.4826	293889.97	0.027	0.003732
Cu	63	3	He	237.838	6.4295	297409.94	0.027	0.003732
Zn	66	3	He	248.136	0.7751	33965.61	0.0031	0.002032
Zn	66	3	He	237.411	0.7417	33624.86	0.0031	0.002032
Zn	66	3	He	235.586	0.736	34045.79	0.0031	0.002032
As	75	3	He	245.699	0.6273	27487.49	0.0025	0.0007733
As	75	3	He	241.311	0.6161	27930.26	0.0025	0.0007733
As	75	3	He	234.744	0.5993	27723.89	0.0025	0.0007733
Sr	88	3	He	23.725	0.2523	9543.17	0.0105	0.004071
Sr	88	3	He	24.653	0.262	10033.46	0.0105	0.004071
Sr	88	3	He	24.819	0.2637	9963.50	0.0105	0.004071
Mo	98	3	He	25.501	0.6005	22716.94	0.0234	0.003908
Mo	98	3	He	25.499	0.6005	22997.29	0.0234	0.003908
Mo	98	3	He	25.884	0.6095	23027.47	0.0234	0.003908
Ag	107	3	He	25.765	1.2708	48074.22	0.0493	0.0004851
Ag	107	3	He	25.981	1.2814	49078.73	0.0493	0.0004851
Ag	107	3	He	26.621	1.313	49609.58	0.0493	0.0004851
Cd	111	3	He	25.491	0.143	5410.98	0.0056	0
Cd	111	3	He	25.234	0.1416	5422.97	0.0056	0
Cd	111	3	He	24.956	0.14	5290.92	0.0056	0
Sn	120	3	He	24.882	0.4809	18190.97	0.0169	0.0609
Sn	120	3	He	24.873	0.4807	18411.41	0.0169	0.0609
Sn	120	3	He	26.378	0.5061	19122.40	0.0169	0.0609
Sb	121	3	He	24.265	0.3918	14820.52	0.0161	0.0005433
Sb	121	3	He	24.761	0.3998	15310.99	0.0161	0.0005433
Sb	121	3	He	25.133	0.4058	15331.02	0.0161	0.0005433
Ba	137	3	He	246.555	1.3029	49290.10	0.0053	0.001141
Ba	137	3	He	245.067	1.2951	49601.32	0.0053	0.001141
Ba	137	3	He	246.259	1.3014	49170.07	0.0053	0.001141
Tl	205	3	He	24.94	0.6185	89705.92	0.0248	0.0005854
Tl	205	3	He	25.354	0.6288	92452.15	0.0248	0.0005854
Tl	205	3	He	25.237	0.6259	93045.53	0.0248	0.0005854
Pb	208	3	He	25.727	0.8566	65769.12	0.0332	0.001693
Pb	208	3	He	25.036	0.8336	65317.25	0.0332	0.001693
Pb	208	3	He	25.053	0.8342	65366.96	0.0332	0.001693
U	238	3	He	25.617	0.8655	125519.86	0.0338	0.0007949
U	238	3	He	25.376	0.8573	126053.96	0.0338	0.0007949
U	238	3	He	24.8	0.8379	124560.52	0.0338	0.0007949
Sc	45	1	No Gas			1186190.61		
Sc	45	1	No Gas			1242974.36		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1230783.58		
Ge	72	1	No Gas			598253.08		
Ge	72	1	No Gas			620026.05		
Ge	72	1	No Gas			630991.55		
Sc	45	2	H2			87363.15		
Sc	45	2	H2			87452.46		
Sc	45	2	H2			87282.43		
Ge	72	2	H2			70976.81		
Ge	72	2	H2			68887.65		
Ge	72	2	H2			70153.13		
In	115	2	H2			178025.52		
In	115	2	H2			178365.23		
In	115	2	H2			175978.94		
Sc	45	3	He			23868.11		
Sc	45	3	He			25250.27		
Sc	45	3	He			24859.42		
Ge	72	3	He			43820.46		
Ge	72	3	He			45335.05		
Ge	72	3	He			46257.29		
In	115	3	He			37957.07		
In	115	3	He			38428.30		
In	115	3	He			37916.77		
Tb	159	3	He			145033.03		
Tb	159	3	He			147033.37		
Tb	159	3	He			148660.75		
Bi	209	3	He			108363.45		
Bi	209	3	He			109329.41		
Bi	209	3	He			109611.61		

Quantitation Report

Data File Name 191_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:49:48 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

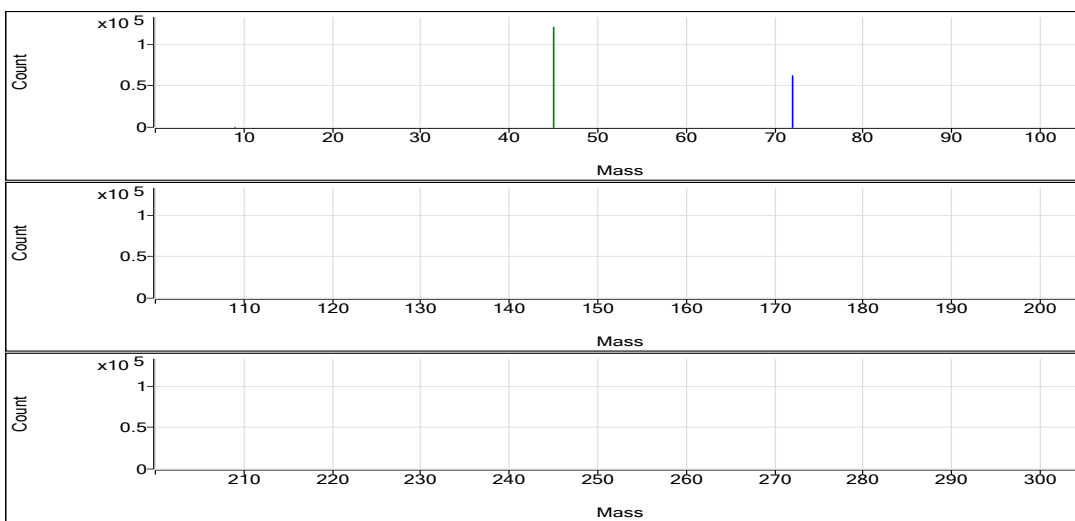
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.052	ppb	35.3	83.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.006	ppb	787.3	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	-2.525	ppb	N/A	7661.95	0.1685	Pulse	0.1000	3
Mg	24	72	He	3.104	ppb	24.3	426.69	0.0094	Pulse	0.1000	3
Al	27	72	He	-3.157	ppb	N/A	63.33	0.0014	Pulse	0.1000	3
K	39	72	He	12.279	ppb	639.3	16216.14	0.3567	Pulse	0.5000	3
Ca	44	72	He	-4.578	ppb	N/A	119.33	0.0026	Pulse	0.5000	3
Ti	47	72	He	0.110	ppb	194.1	6.67	0.0001	Pulse	0.5000	3
V	51	72	He	-0.002	ppb	N/A	376.68	0.0083	Pulse	0.5000	3
Cr	52	72	He	-0.074	ppb	N/A	923.39	0.0203	Pulse	0.1000	3
Mn	55	72	He	0.362	ppb	18.6	225.33	0.0050	Pulse	0.5000	3
Fe	57	72	He	-1.203	ppb	N/A	106.67	0.0023	Pulse	0.1000	3
Co	59	72	He	0.031	ppb	14.7	134.67	0.0030	Pulse	0.5000	3
Ni	60	72	He	0.045	ppb	185.5	162.00	0.0036	Pulse	0.5000	3
Cu	63	72	He	-0.014	ppb	N/A	152.00	0.0033	Pulse	0.5000	3
Zn	66	72	He	-0.144	ppb	N/A	72.00	0.0016	Pulse	0.5000	3
As	75	72	He	0.024	ppb	689.7	38.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.059	ppb	N/A	130.00	0.0035	Pulse	0.1000	3
Mo	98	115	He	0.009	ppb	608.2	153.34	0.0041	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.050	ppb	104.9	2306.92	0.0617	Pulse	0.1000	3
Sb	121	115	He	0.042	ppb	43.9	45.55	0.0012	Pulse	0.3000	3
Ba	137	115	He	-0.149	ppb	N/A	13.33	0.0004	Pulse	0.1000	3
Tl	205	159	He	0.021	ppb	82.5	160.01	0.0011	Pulse	0.1000	3
Pb	208	159	He	-0.023	ppb	N/A	133.33	0.0009	Pulse	0.1000	3
U	238	159	He	-0.001	ppb	N/A	110.00	0.0008	Pulse	0.1000	3

ISTD Table:

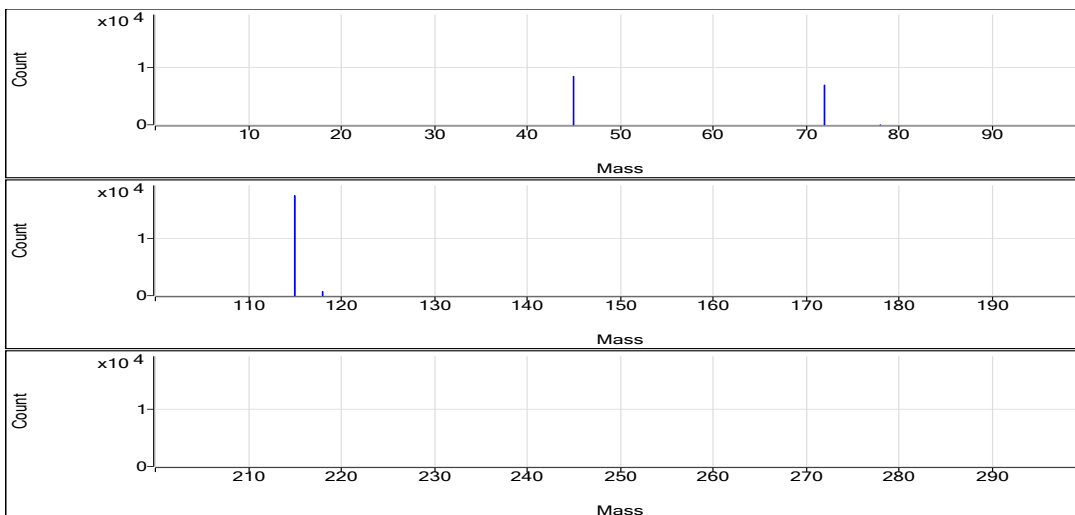
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1211454.54	1.2	92.7	Analog	0.1000	3
No Gas	Ge	72	623864.46	0.9	95.2	Pulse	0.1000	3
H2	Sc	45	84220.13	0.7	102.5	Pulse	0.1000	3
H2	Ge	72	69142.93	1.7	101.2	Pulse	0.1000	3
H2	In	115	173494.99	1.0	101.7	Pulse	0.1000	3
He	Sc	45	24342.03	3.3	95.0	Pulse	0.1000	3
He	Ge	72	45478.73	0.6	95.7	Pulse	0.1000	3
He	In	115	37376.42	2.9	91.3	Pulse	0.1000	3
He	Tb	159	145719.49	0.8	91.4	Pulse	0.1000	3
He	Bi	209	107474.36	1.2	91.9	Pulse	0.1000	3

No Gas

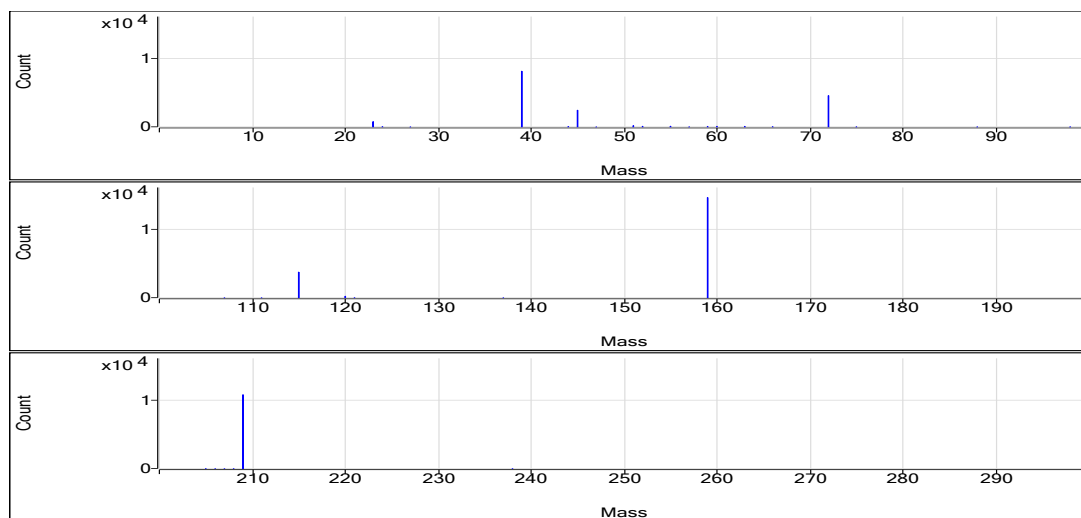


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.055	0.0001	86.00	0.0011	7.835E-05
Be	9	1	No Gas	0.032	0.0001	70.00	0.0011	7.835E-05
Be	9	1	No Gas	0.069	0.0002	94.00	0.0011	7.835E-05
Se	78	2	H2	0.045	0	3.33	0.0005	2.594E-05
Se	78	2	H2	0.025	0	2.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Na	23	3	He	-0.463	0.1722	7801.99	0.0018	0.1731
Na	23	3	He	-1.14	0.171	7832.04	0.0018	0.1731
Na	23	3	He	-5.973	0.1622	7351.82	0.0018	0.1731
Mg	24	3	He	3.706	0.0099	450.02	0.0009	0.006537
Mg	24	3	He	3.35	0.0096	440.02	0.0009	0.006537
Mg	24	3	He	2.257	0.0086	390.02	0.0009	0.006537
Al	27	3	He	-1.114	0.002	90.00	0.0003	0.00231
Al	27	3	He	-3.444	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-4.915	0.0009	40.00	0.0003	0.00231
K	39	3	He	101.782	0.4236	19189.20	0.0007	0.3475
K	39	3	He	-20.034	0.3325	15231.07	0.0007	0.3475
K	39	3	He	-44.911	0.3139	14228.14	0.0007	0.3475
Ca	44	3	He	-9.444	0.0024	110.00	0	0.002807
Ca	44	3	He	0.78	0.0028	130.00	0	0.002807
Ca	44	3	He	-5.069	0.0026	118.00	0	0.002807
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.341	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.065	0.0001	6.00	0.0003	0.0001123
V	51	3	He	-0.017	0.0081	366.01	0.0137	0.008308
V	51	3	He	0.031	0.0087	400.01	0.0137	0.008308
V	51	3	He	-0.02	0.008	364.01	0.0137	0.008308
Cr	52	3	He	-0.022	0.0212	960.06	0.0171	0.02156
Cr	52	3	He	0.042	0.0223	1020.06	0.0171	0.02156
Cr	52	3	He	-0.242	0.0174	790.05	0.0171	0.02156
Mn	55	3	He	0.433	0.0055	248.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.353	0.0049	224.00	0.0073	0.002316
Mn	55	3	He	0.299	0.0045	204.00	0.0073	0.002316
Fe	57	3	He	-2.994	0.0018	80.00	0.0003	0.002736
Fe	57	3	He	-1.706	0.0022	100.00	0.0003	0.002736
Fe	57	3	He	1.091	0.0031	140.01	0.0003	0.002736
Co	59	3	He	0.03	0.0029	132.00	0.0332	0.001922
Co	59	3	He	0.028	0.0028	130.00	0.0332	0.001922
Co	59	3	He	0.036	0.0031	142.00	0.0332	0.001922
Ni	60	3	He	-0.001	0.0031	142.00	0.0093	0.003141
Ni	60	3	He	0.141	0.0045	204.00	0.0093	0.003141
Ni	60	3	He	-0.006	0.0031	140.00	0.0093	0.003141
Cu	63	3	He	-0.019	0.0032	146.00	0.027	0.003732
Cu	63	3	He	0.001	0.0038	172.00	0.027	0.003732
Cu	63	3	He	-0.025	0.003	138.00	0.027	0.003732
Zn	66	3	He	-0.213	0.0014	62.00	0.0031	0.002032
Zn	66	3	He	-0.162	0.0015	70.00	0.0031	0.002032
Zn	66	3	He	-0.057	0.0019	84.00	0.0031	0.002032
As	75	3	He	-0.096	0.0005	24.00	0.0025	0.0007733
As	75	3	He	0.21	0.0013	60.00	0.0025	0.0007733
As	75	3	He	-0.044	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	-0.205	0.0019	70.00	0.0105	0.004071
Sr	88	3	He	0.008	0.0042	160.00	0.0105	0.004071
Sr	88	3	He	0.02	0.0043	160.01	0.0105	0.004071
Mo	98	3	He	0.045	0.005	180.01	0.0234	0.003908
Mo	98	3	He	-0.056	0.0026	100.00	0.0234	0.003908
Mo	98	3	He	0.039	0.0048	180.01	0.0234	0.003908
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	0.099	0.0626	2270.24	0.0169	0.0609
Sn	120	3	He	-0.004	0.0608	2340.27	0.0169	0.0609
Sn	120	3	He	0.053	0.0618	2310.24	0.0169	0.0609
Sb	121	3	He	0.057	0.0015	53.33	0.0161	0.0005433
Sb	121	3	He	0.047	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.022	0.0009	33.33	0.0161	0.0005433
Ba	137	3	He	-0.164	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	-0.118	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	-0.165	0.0003	10.00	0.0053	0.001141
Tl	205	3	He	0.026	0.0012	180.01	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	0.034	0.0014	210.01	0.0248	0.0005854
Pb	208	3	He	-0.02	0.001	100.00	0.0332	0.001693
Pb	208	3	He	-0.032	0.0006	40.00	0.0332	0.001693
Pb	208	3	He	-0.018	0.0011	120.00	0.0332	0.001693
U	238	3	He	0.001	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.001	0.0008	110.00	0.0338	0.0007949
U	238	3	He	-0.003	0.0007	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1224334.36		
Sc	45	1	No Gas			1214003.73		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1196025.53		
Ge	72	1	No Gas			630631.47		
Ge	72	1	No Gas			620347.26		
Ge	72	1	No Gas			620614.64		
Sc	45	2	H2			84076.19		
Sc	45	2	H2			84859.50		
Sc	45	2	H2			83724.70		
Ge	72	2	H2			68055.32		
Ge	72	2	H2			68928.70		
Ge	72	2	H2			70444.76		
In	115	2	H2			171486.74		
In	115	2	H2			174913.77		
In	115	2	H2			174084.47		
Sc	45	3	He			23657.82		
Sc	45	3	He			25209.96		
Sc	45	3	He			24158.32		
Ge	72	3	He			45304.90		
Ge	72	3	He			45806.49		
Ge	72	3	He			45324.81		
In	115	3	He			36293.04		
In	115	3	He			38488.61		
In	115	3	He			37396.04		
Tb	159	3	He			145536.97		
Tb	159	3	He			144629.38		
Tb	159	3	He			146992.11		
Bi	209	3	He			106558.22		
Bi	209	3	He			106930.06		
Bi	209	3	He			108934.81		

Quantitation Report

Data File Name 192SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:52:01 PM
Sample Name 410-234463-E-3-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

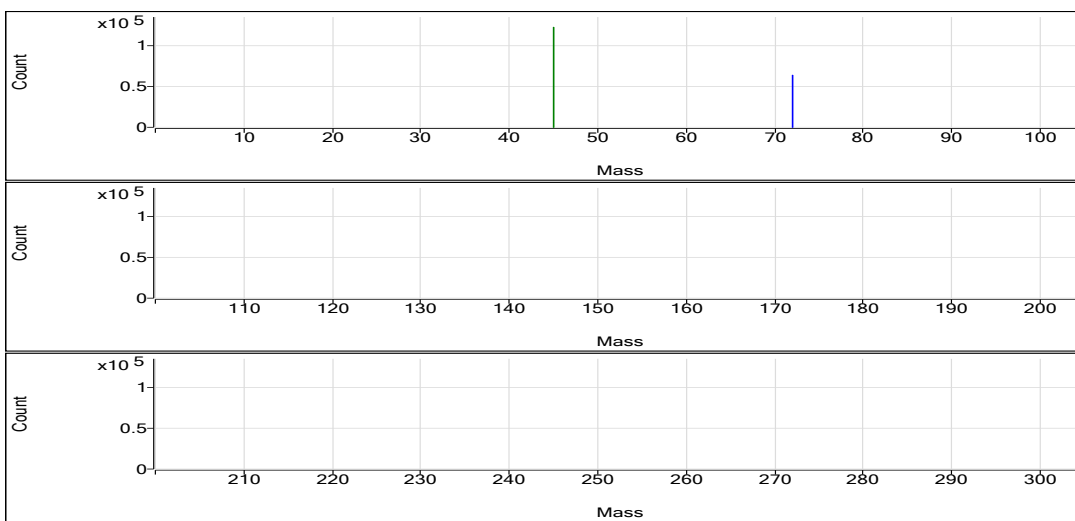
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	7.691	ppb	1.5	11985.13	0.2574	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

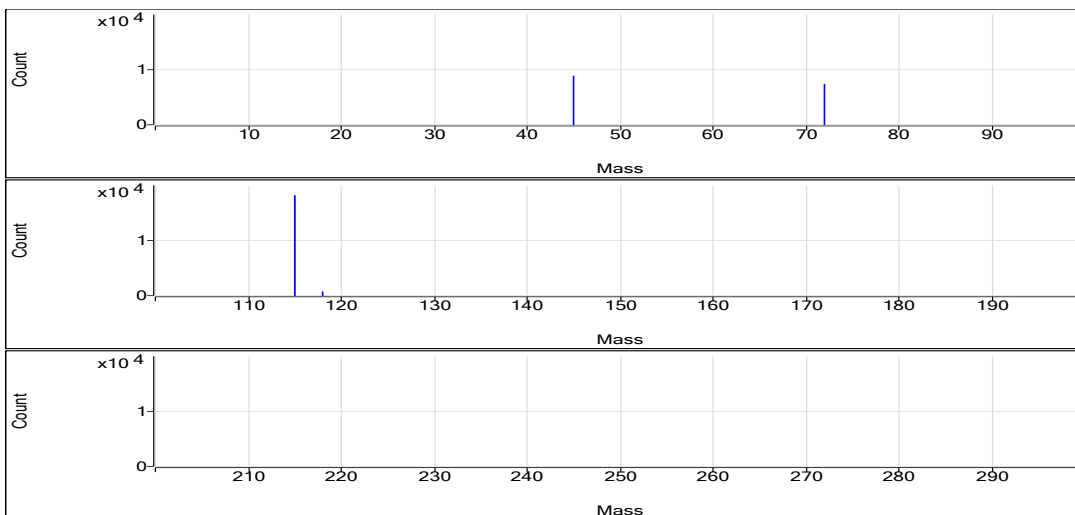
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1223151.29	2.3	93.6	Analog	0.1000	3
No Gas	Ge	72	638399.00	1.7	97.4	Pulse	0.1000	3
H2	Sc	45	88549.50	1.6	107.8	Pulse	0.1000	3
H2	Ge	72	73320.85	2.0	107.3	Pulse	0.1000	3
H2	In	115	181412.28	2.2	106.3	Pulse	0.1000	3
He	Sc	45	24879.50	2.7	97.1	Pulse	0.1000	3
He	Ge	72	46561.52	2.1	98.0	Pulse	0.1000	3
He	In	115	38445.03	1.0	93.9	Pulse	0.1000	3
He	Tb	159	145747.24	2.0	91.4	Pulse	0.1000	3
He	Bi	209	112762.04	1.3	96.4	Pulse	0.1000	3

No Gas

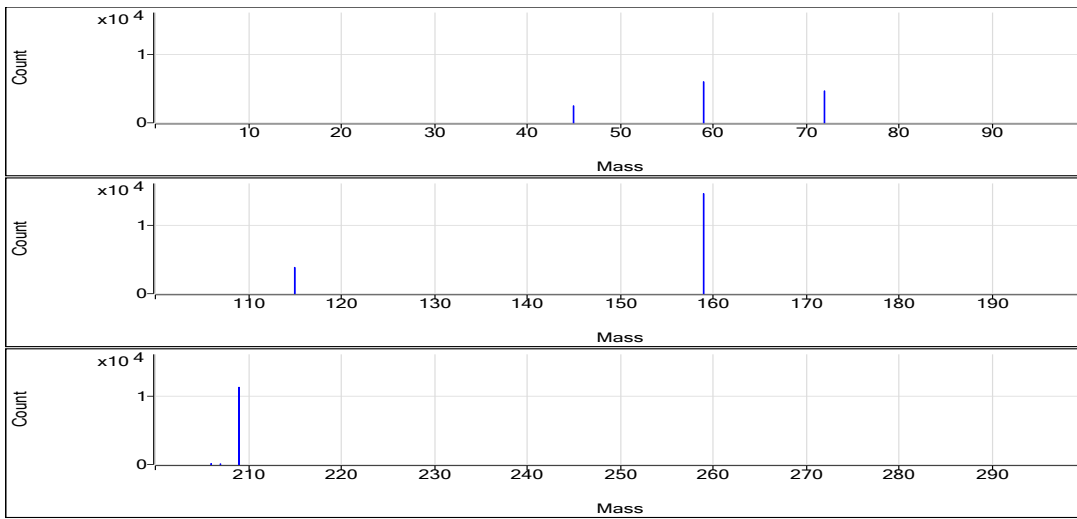


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	7.801	0.2611	11868.37	0.0332	0.001922
Co	59	3	He	7.569	0.2534	11876.39	0.0332	0.001922
Co	59	3	He	7.703	0.2578	12210.64	0.0332	0.001922
Sc	45	1	No Gas			1191767.33		
Sc	45	1	No Gas			1245060.14		
Sc	45	1	No Gas			1232626.39		
Ge	72	1	No Gas			625860.34		
Ge	72	1	No Gas			642305.65		
Ge	72	1	No Gas			647031.01		
Sc	45	2	H2			86930.97		
Sc	45	2	H2			89505.04		
Sc	45	2	H2			89212.49		
Ge	72	2	H2			71649.69		
Ge	72	2	H2			74543.29		
Ge	72	2	H2			73769.56		
In	115	2	H2			176887.03		
In	115	2	H2			183966.95		
In	115	2	H2			183382.85		
Sc	45	3	He			24448.89		
Sc	45	3	He			24539.03		
Sc	45	3	He			25650.57		
Ge	72	3	He			45454.61		
Ge	72	3	He			46869.61		
Ge	72	3	He			47360.35		
In	115	3	He			38037.27		
In	115	3	He			38478.80		
In	115	3	He			38819.02		
Tb	159	3	He			147214.28		
Tb	159	3	He			147568.46		
Tb	159	3	He			142458.98		
Bi	209	3	He			111878.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			112009.63		
Bi	209	3	He			114397.86		

Quantitation Report

Data File Name 193SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:53:33 PM
Sample Name 410-234463-E-3-B DU
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

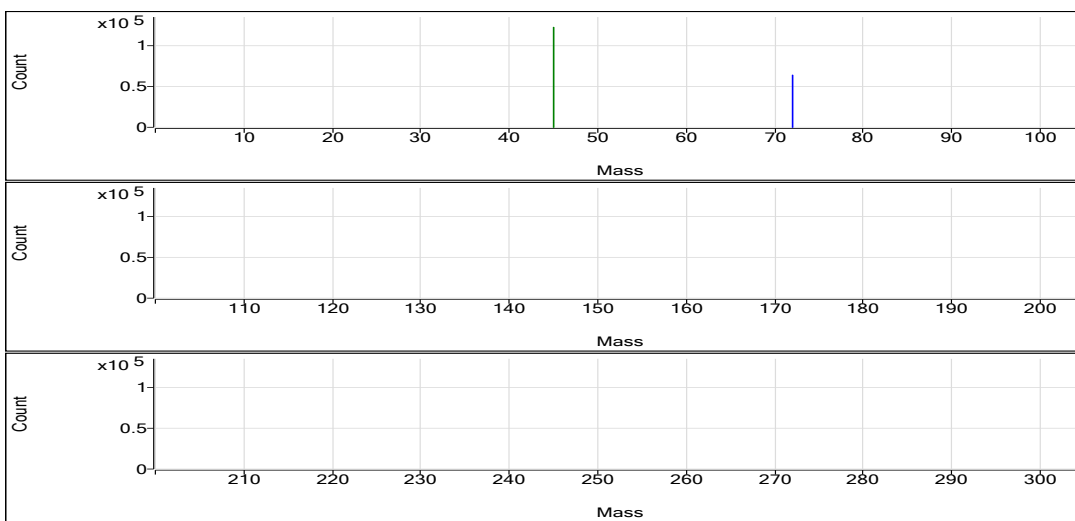
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	7.843	ppb	1.2	11976.44	0.2625	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

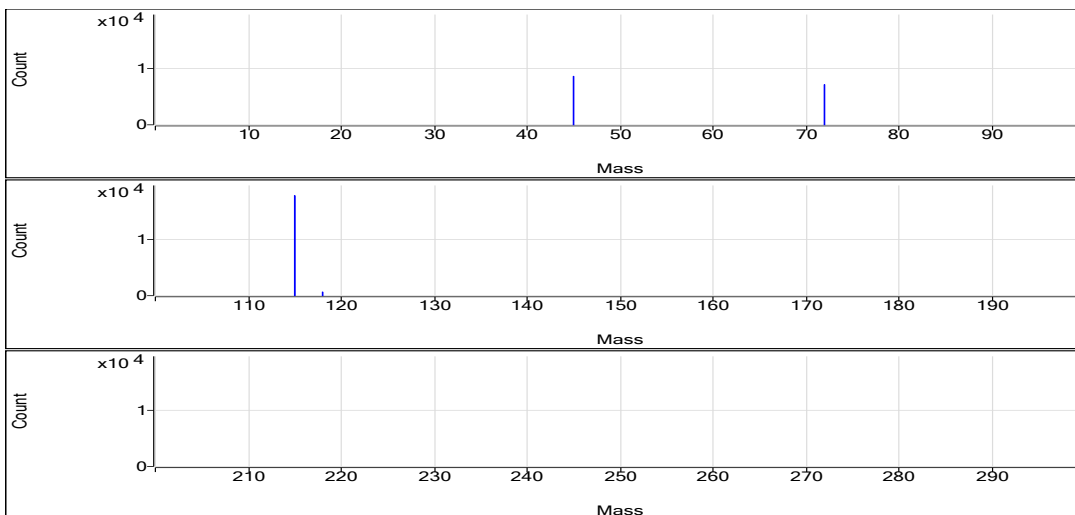
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1231500.73	0.9	94.2	Analog	0.1000	3
No Gas	Ge	72	643612.21	0.6	98.2	Pulse	0.1000	3
H2	Sc	45	86465.02	1.3	105.2	Pulse	0.1000	3
H2	Ge	72	71657.25	1.9	104.9	Pulse	0.1000	3
H2	In	115	178106.85	1.5	104.4	Pulse	0.1000	3
He	Sc	45	25440.47	4.2	99.3	Pulse	0.1000	3
He	Ge	72	45632.05	1.1	96.0	Pulse	0.1000	3
He	In	115	38257.91	2.5	93.4	Pulse	0.1000	3
He	Tb	159	145861.76	1.5	91.5	Pulse	0.1000	3
He	Bi	209	110503.73	0.4	94.5	Pulse	0.1000	3

No Gas

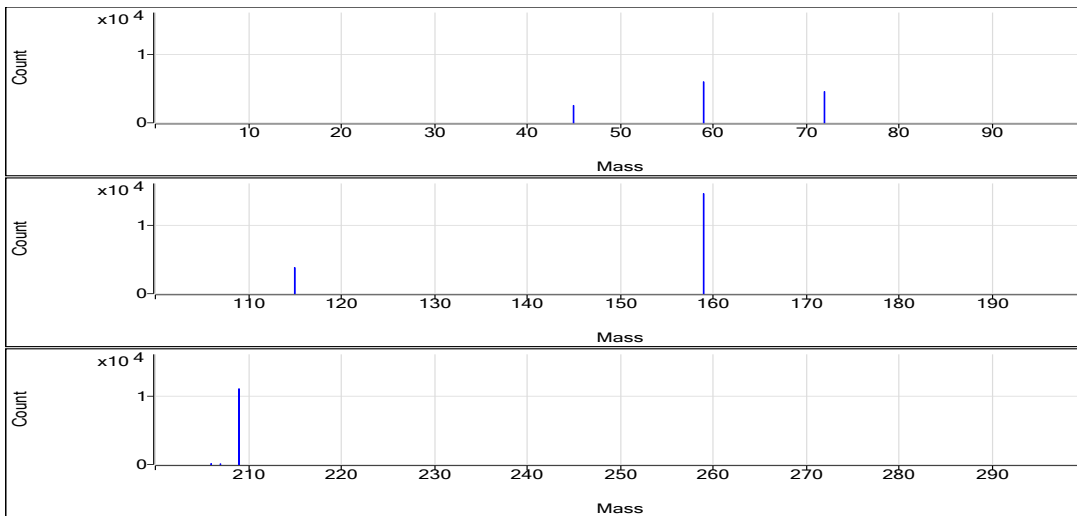


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	7.83	0.2621	11948.43	0.0332	0.001922
Co	59	3	He	7.753	0.2595	11972.44	0.0332	0.001922
Co	59	3	He	7.945	0.2659	12008.45	0.0332	0.001922
Sc	45	1	No Gas			1237193.18		
Sc	45	1	No Gas			1239115.29		
Sc	45	1	No Gas			1218193.73		
Ge	72	1	No Gas			643184.56		
Ge	72	1	No Gas			647738.12		
Ge	72	1	No Gas			639913.94		
Sc	45	2	H2			87734.88		
Sc	45	2	H2			86137.09		
Sc	45	2	H2			85523.10		
Ge	72	2	H2			73247.76		
Ge	72	2	H2			71078.09		
Ge	72	2	H2			70645.91		
In	115	2	H2			179983.43		
In	115	2	H2			179393.88		
In	115	2	H2			174943.24		
Sc	45	3	He			26051.43		
Sc	45	3	He			24208.68		
Sc	45	3	He			26061.31		
Ge	72	3	He			45595.47		
Ge	72	3	He			46136.46		
Ge	72	3	He			45164.21		
In	115	3	He			38408.15		
In	115	3	He			39140.29		
In	115	3	He			37225.28		
Tb	159	3	He			145842.04		
Tb	159	3	He			148051.36		
Tb	159	3	He			143691.89		
Bi	209	3	He			110801.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109982.21		
Bi	209	3	He			110727.89		

Quantitation Report

Data File Name 194SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:55:06 PM
Sample Name 410-234463-E-3-C MS
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

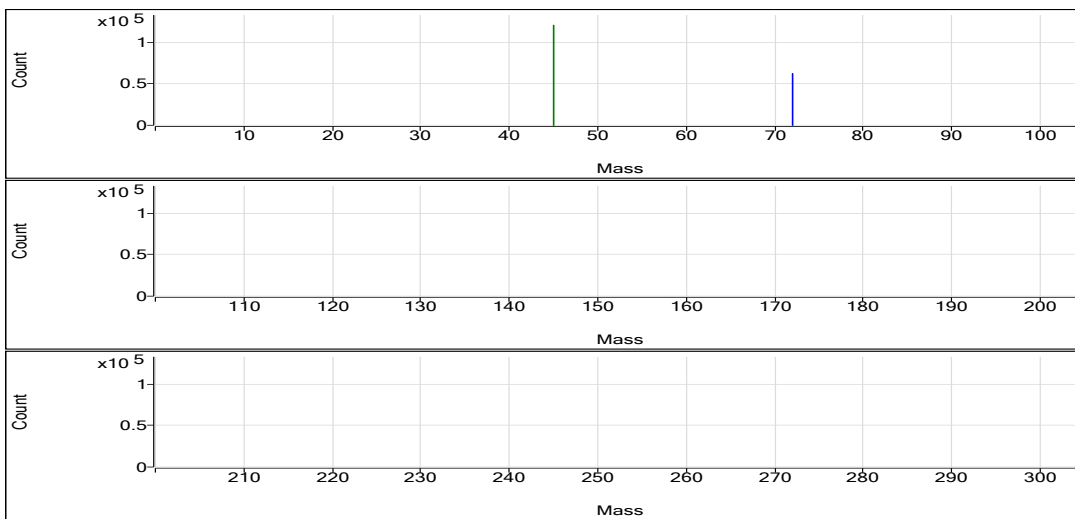
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	482.480	ppb	0.8	741498.10	16.0315	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

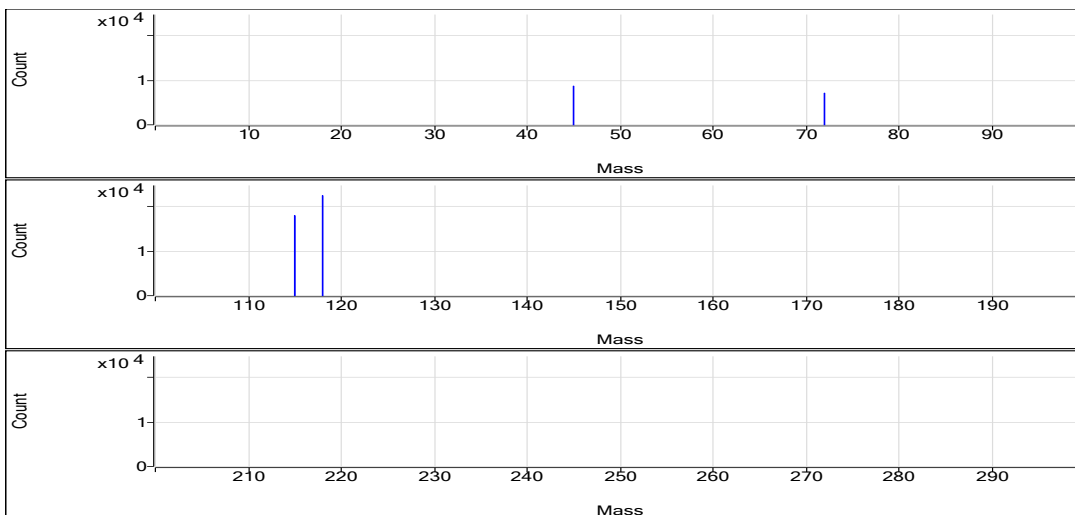
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1208724.82	1.0	92.5	Analog	0.1000	3
No Gas	Ge	72	625307.43	1.5	95.4	Pulse	0.1000	3
H2	Sc	45	87519.85	2.0	106.5	Pulse	0.1000	3
H2	Ge	72	71727.50	2.0	105.0	Pulse	0.1000	3
H2	In	115	180712.36	1.5	105.9	Pulse	0.1000	3
He	Sc	45	25400.33	1.4	99.2	Pulse	0.1000	3
He	Ge	72	46254.06	0.7	97.4	Pulse	0.1000	3
He	In	115	38321.33	3.1	93.6	Pulse	0.1000	3
He	Tb	159	146474.28	1.7	91.9	Pulse	0.1000	3
He	Bi	209	111434.73	0.8	95.3	Pulse	0.1000	3

No Gas

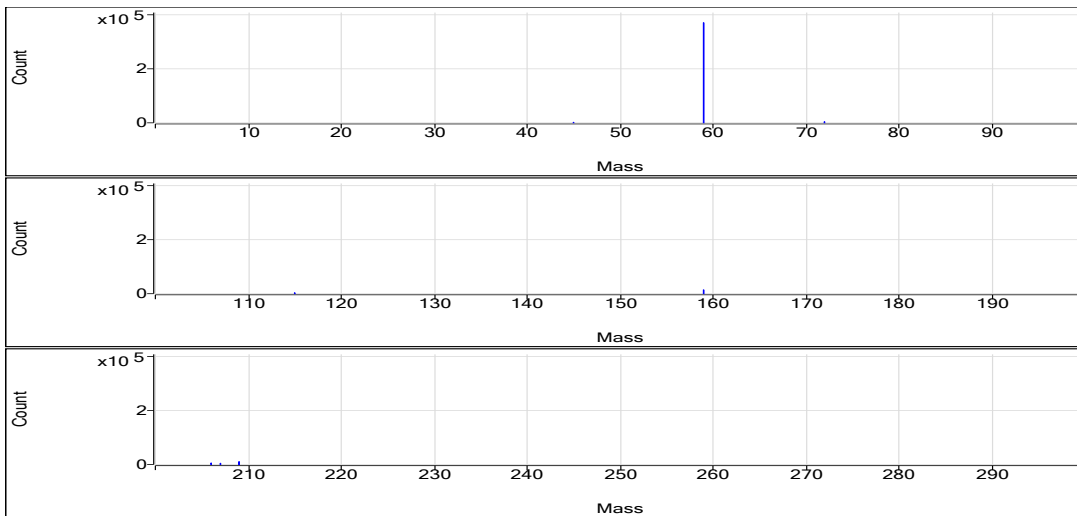


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	481.082	15.985	737661.63	0.0332	0.001922
Co	59	3	He	486.669	16.1706	743632.19	0.0332	0.001922
Co	59	3	He	479.689	15.9387	743200.50	0.0332	0.001922
Sc	45	1	No Gas			1201153.65		
Sc	45	1	No Gas			1201770.84		
Sc	45	1	No Gas			1223249.98		
Ge	72	1	No Gas			615785.42		
Ge	72	1	No Gas			625005.81		
Ge	72	1	No Gas			635131.05		
Sc	45	2	H2			86980.57		
Sc	45	2	H2			86135.87		
Sc	45	2	H2			89443.10		
Ge	72	2	H2			70354.63		
Ge	72	2	H2			71620.18		
Ge	72	2	H2			73207.68		
In	115	2	H2			178936.85		
In	115	2	H2			179392.81		
In	115	2	H2			183807.42		
Sc	45	3	He			25630.66		
Sc	45	3	He			24999.73		
Sc	45	3	He			25570.60		
Ge	72	3	He			46147.05		
Ge	72	3	He			45986.58		
Ge	72	3	He			46628.55		
In	115	3	He			37455.84		
In	115	3	He			39651.21		
In	115	3	He			37856.95		
Tb	159	3	He			144034.66		
Tb	159	3	He			148930.17		
Tb	159	3	He			146458.02		
Bi	209	3	He			111484.55		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			112331.24		
Bi	209	3	He			110488.40		

Quantitation Report

Data File Name 195SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 7:56:38 PM
Sample Name 410-234463-E-3-D MSD
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

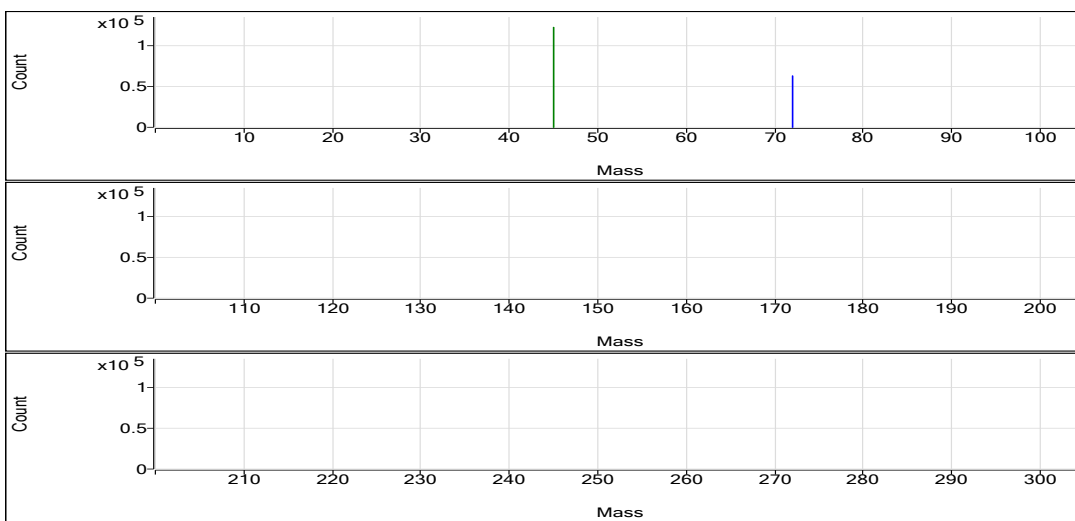
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	481.321	ppb	0.3	738027.04	15.9929	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

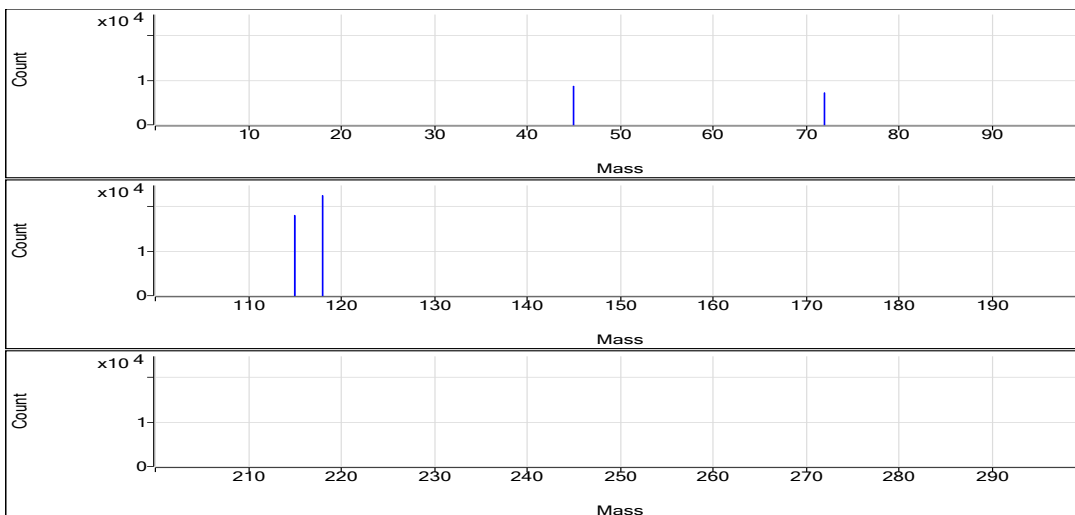
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1227313.60	0.5	93.9	Analog	0.1000	3
No Gas	Ge	72	631745.41	1.0	96.4	Pulse	0.1000	3
H2	Sc	45	86930.66	3.1	105.8	Pulse	0.1000	3
H2	Ge	72	71830.79	1.6	105.1	Pulse	0.1000	3
H2	In	115	180173.17	1.1	105.6	Pulse	0.1000	3
He	Sc	45	24605.76	0.3	96.1	Pulse	0.1000	3
He	Ge	72	46146.94	0.5	97.1	Pulse	0.1000	3
He	In	115	38475.03	3.8	94.0	Pulse	0.1000	3
He	Tb	159	146680.49	0.9	92.0	Pulse	0.1000	3
He	Bi	209	110692.47	1.2	94.6	Pulse	0.1000	3

No Gas

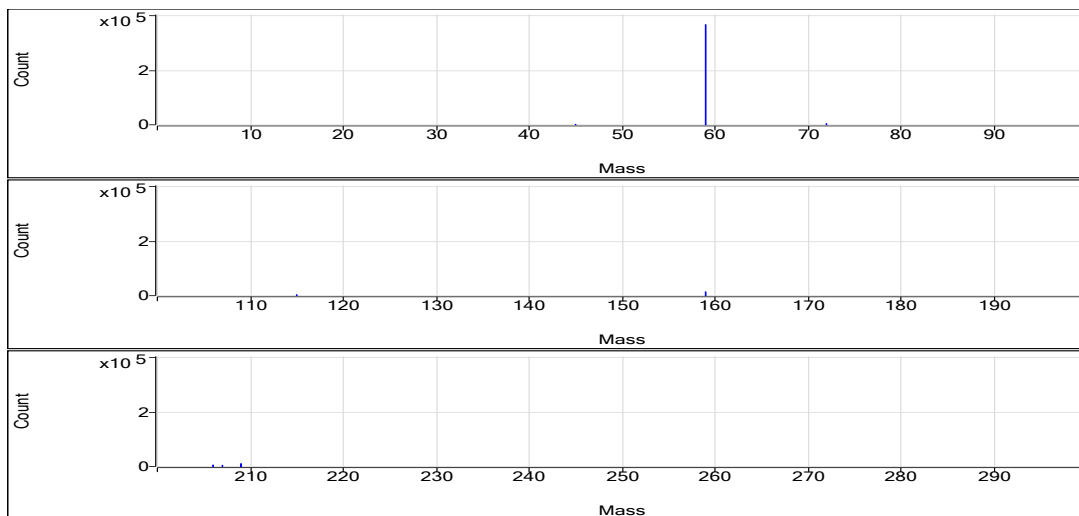


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	482.693	16.0385	743506.44	0.0332	0.001922
Co	59	3	He	481.741	16.0069	734819.56	0.0332	0.001922
Co	59	3	He	479.528	15.9334	735755.13	0.0332	0.001922
Sc	45	1	No Gas			1226411.39		
Sc	45	1	No Gas			1221249.83		
Sc	45	1	No Gas			1234279.59		
Ge	72	1	No Gas			624839.29		
Ge	72	1	No Gas			636857.41		
Ge	72	1	No Gas			633539.52		
Sc	45	2	H2			84628.83		
Sc	45	2	H2			86286.45		
Sc	45	2	H2			89876.71		
Ge	72	2	H2			71609.98		
Ge	72	2	H2			70775.61		
Ge	72	2	H2			73106.77		
In	115	2	H2			178221.01		
In	115	2	H2			180039.43		
In	115	2	H2			182259.08		
Sc	45	3	He			24608.95		
Sc	45	3	He			24528.97		
Sc	45	3	He			24679.37		
Ge	72	3	He			46357.50		
Ge	72	3	He			45906.40		
Ge	72	3	He			46176.91		
In	115	3	He			40092.42		
In	115	3	He			38037.33		
In	115	3	He			37295.35		
Tb	159	3	He			147951.99		
Tb	159	3	He			145276.52		
Tb	159	3	He			146812.95		
Bi	209	3	He			111687.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111262.11		
Bi	209	3	He			109127.43		

Quantitation Report

Data File Name 197_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:00:22 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

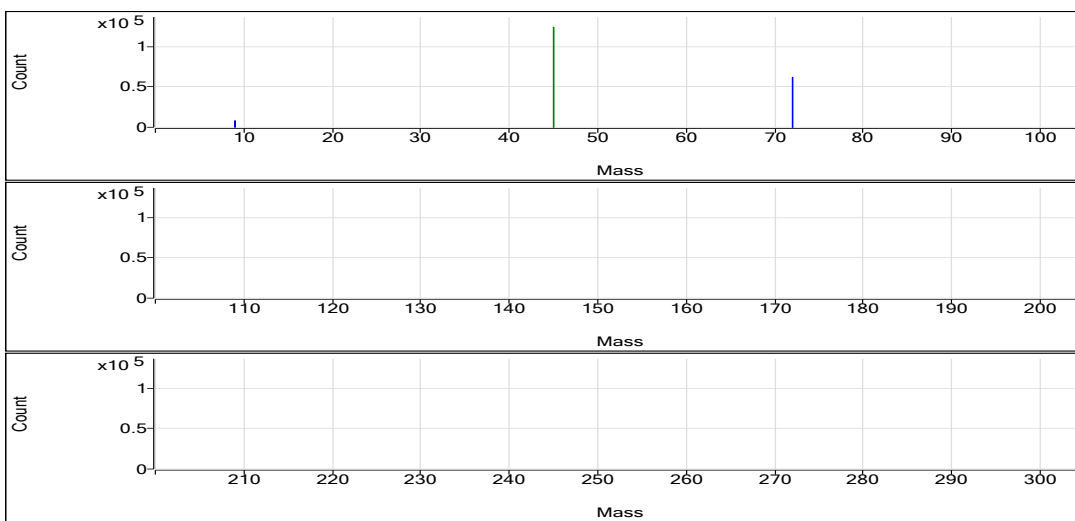
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.071	ppb	5.5	16550.82	0.0267	Pulse	0.5000	3
Se	78	72	H2	25.740	ppb	3.8	903.14	0.0131	Pulse	1.5000	3
Na	23	72	He	2478.144	ppb	2.2	210155.34	4.6735	Pulse	0.1000	3
Mg	24	72	He	2482.651	ppb	2.9	102565.17	2.2812	Pulse	0.1000	3
Al	27	72	He	2386.476	ppb	3.4	31276.77	0.6954	Pulse	0.1000	3
K	39	72	He	2488.726	ppb	0.6	99315.32	2.2076	Pulse	0.5000	3
Ca	44	72	He	2520.483	ppb	2.7	4671.36	0.1039	Pulse	0.5000	3
Ti	47	72	He	2441.593	ppb	2.3	34148.77	0.7594	Pulse	0.5000	3
V	51	72	He	243.722	ppb	2.4	150067.93	3.3374	Pulse	0.5000	3
Cr	52	72	He	240.861	ppb	3.3	185986.82	4.1370	Pulse	0.1000	3
Mn	55	72	He	240.847	ppb	2.8	79117.85	1.7596	Pulse	0.5000	3
Fe	57	72	He	2391.211	ppb	3.9	34941.69	0.7773	Pulse	0.1000	3
Co	59	72	He	243.362	ppb	2.7	363622.54	8.0872	Pulse	0.5000	3
Ni	60	72	He	240.976	ppb	3.4	101196.11	2.2510	Pulse	0.5000	3
Cu	63	72	He	240.217	ppb	2.5	291985.97	6.4937	Pulse	0.5000	3
Zn	66	72	He	239.796	ppb	3.4	33678.32	0.7491	Pulse	0.5000	3
As	75	72	He	240.348	ppb	2.6	27591.00	0.6136	Pulse	0.5000	3
Sr	88	115	He	25.319	ppb	1.7	10056.81	0.2689	Pulse	0.1000	3
Mo	98	115	He	25.628	ppb	2.3	22566.77	0.6035	Pulse	0.1000	3
Ag	107	115	He	25.938	ppb	0.8	47837.47	1.2794	Pulse	0.1000	3
Cd	111	115	He	25.138	ppb	0.6	5274.93	0.1411	Pulse	0.5000	3
Sn	120	115	He	25.611	ppb	1.3	18441.48	0.4932	Pulse	0.1000	3
Sb	121	115	He	25.054	ppb	2.4	15121.93	0.4045	Pulse	0.3000	3
Ba	137	115	He	249.735	ppb	2.1	49340.40	1.3197	Pulse	0.1000	3
Tl	205	159	He	24.998	ppb	1.3	90520.61	0.6200	Pulse	0.1000	3
Pb	208	159	He	25.150	ppb	0.8	122265.15	0.8374	Pulse	0.1000	3
U	238	159	He	25.175	ppb	1.7	124185.08	0.8505	Pulse	0.1000	3

ISTD Table:

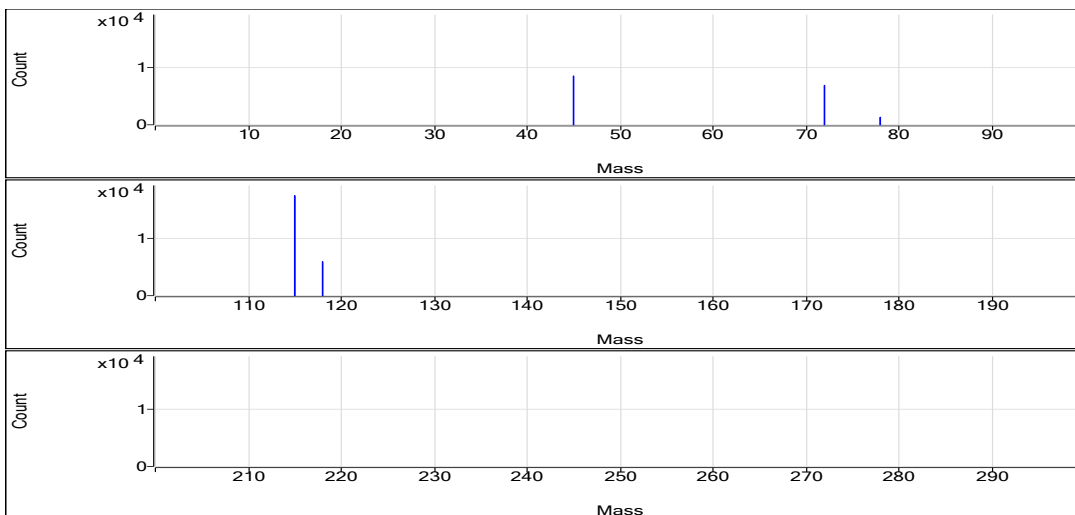
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1239294.15	2.4	94.8	Analog	0.1000	3
No Gas	Ge	72	620145.11	2.5	94.6	Pulse	0.1000	3
H2	Sc	45	85496.85	1.8	104.1	Pulse	0.1000	3
H2	Ge	72	69116.25	2.5	101.1	Pulse	0.1000	3
H2	In	115	174996.51	2.2	102.6	Pulse	0.1000	3
He	Sc	45	24715.92	1.5	96.5	Pulse	0.1000	3
He	Ge	72	44986.97	3.0	94.7	Pulse	0.1000	3
He	In	115	37393.85	1.5	91.3	Pulse	0.1000	3
He	Tb	159	146022.15	1.5	91.6	Pulse	0.1000	3
He	Bi	209	109043.45	1.2	93.2	Pulse	0.1000	3

No Gas

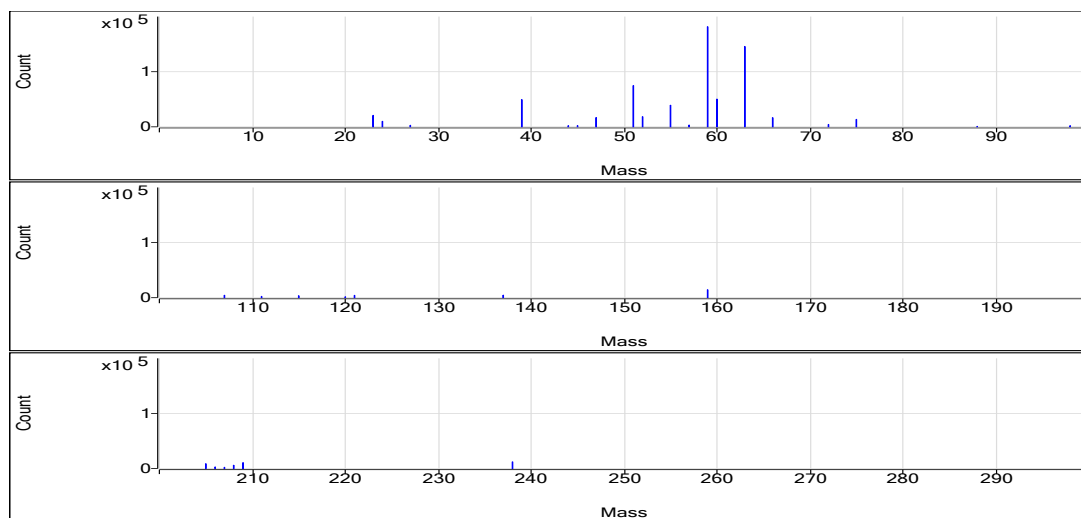


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.801	0.0254	15875.49	0.0011	7.835E-05
Be	9	1	No Gas	24.887	0.0265	16748.37	0.0011	7.835E-05
Be	9	1	No Gas	26.523	0.0283	17028.59	0.0011	7.835E-05
Se	78	2	H2	24.606	0.0125	875.36	0.0005	2.594E-05
Se	78	2	H2	26.416	0.0134	941.36	0.0005	2.594E-05
Se	78	2	H2	26.197	0.0133	892.69	0.0005	2.594E-05
Na	23	3	He	2414.729	4.5583	212181.66	0.0018	0.1731
Na	23	3	He	2515.633	4.7416	209107.16	0.0018	0.1731
Na	23	3	He	2504.07	4.7206	209177.20	0.0018	0.1731
Mg	24	3	He	2399.173	2.2047	102625.63	0.0009	0.006537
Mg	24	3	He	2516.528	2.3122	101971.78	0.0009	0.006537
Mg	24	3	He	2532.252	2.3266	103098.10	0.0009	0.006537
Al	27	3	He	2353.164	0.6858	31921.24	0.0003	0.00231
Al	27	3	He	2478.74	0.7222	31851.40	0.0003	0.00231
Al	27	3	He	2327.526	0.6783	30057.67	0.0003	0.00231
K	39	3	He	2492.84	2.2107	102903.34	0.0007	0.3475
K	39	3	He	2500.049	2.2161	97730.63	0.0007	0.3475
K	39	3	He	2473.289	2.1961	97311.98	0.0007	0.3475
Ca	44	3	He	2449.24	0.101	4702.71	0	0.002807
Ca	44	3	He	2526.824	0.1041	4592.67	0	0.002807
Ca	44	3	He	2585.384	0.1065	4718.71	0	0.002807
Ti	47	3	He	2376.791	0.7393	34412.00	0.0003	0.0001123
Ti	47	3	He	2470.716	0.7685	33890.91	0.0003	0.0001123
Ti	47	3	He	2477.271	0.7705	34143.40	0.0003	0.0001123
V	51	3	He	237.214	3.2485	151211.11	0.0137	0.008308
V	51	3	He	248.736	3.4059	150201.84	0.0137	0.008308
V	51	3	He	245.218	3.3578	148790.84	0.0137	0.008308
Cr	52	3	He	231.7	3.9804	185282.65	0.0171	0.02156
Cr	52	3	He	246.762	4.2378	186890.66	0.0171	0.02156
Cr	52	3	He	244.123	4.1927	185787.15	0.0171	0.02156
Mn	55	3	He	234.182	1.7109	79640.89	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	247.49	1.808	79735.62	0.0073	0.002316
Mn	55	3	He	240.87	1.7597	77977.03	0.0073	0.002316
Fe	57	3	He	2290.147	0.7446	34657.60	0.0003	0.002736
Fe	57	3	He	2470.329	0.8029	35409.32	0.0003	0.002736
Fe	57	3	He	2413.158	0.7844	34758.15	0.0003	0.002736
Co	59	3	He	235.835	7.8371	364803.63	0.0332	0.001922
Co	59	3	He	247.05	8.2097	362054.94	0.0332	0.001922
Co	59	3	He	247.2	8.2147	364009.06	0.0332	0.001922
Ni	60	3	He	231.747	2.1649	100771.47	0.0093	0.003141
Ni	60	3	He	247.312	2.3101	101876.61	0.0093	0.003141
Ni	60	3	He	243.868	2.278	100940.26	0.0093	0.003141
Cu	63	3	He	233.238	6.3052	293495.28	0.027	0.003732
Cu	63	3	He	243.961	6.5949	290840.19	0.027	0.003732
Cu	63	3	He	243.452	6.5811	291622.44	0.027	0.003732
Zn	66	3	He	230.764	0.721	33560.69	0.0031	0.002032
Zn	66	3	He	246.947	0.7714	34019.69	0.0031	0.002032
Zn	66	3	He	241.675	0.755	33454.57	0.0031	0.002032
As	75	3	He	233.258	0.5956	27721.90	0.0025	0.0007733
As	75	3	He	245.383	0.6265	27627.77	0.0025	0.0007733
As	75	3	He	242.403	0.6189	27423.33	0.0025	0.0007733
Sr	88	3	He	25.036	0.266	10063.46	0.0105	0.004071
Sr	88	3	He	25.821	0.2742	10303.67	0.0105	0.004071
Sr	88	3	He	25.098	0.2666	9803.29	0.0105	0.004071
Mo	98	3	He	26.176	0.6163	23318.21	0.0234	0.003908
Mo	98	3	He	25	0.5888	22125.92	0.0234	0.003908
Mo	98	3	He	25.707	0.6053	22256.17	0.0234	0.003908
Ag	107	3	He	25.691	1.2672	47944.57	0.0493	0.0004851
Ag	107	3	He	26.051	1.2849	48285.18	0.0493	0.0004851
Ag	107	3	He	26.073	1.286	47282.65	0.0493	0.0004851
Cd	111	3	He	25.167	0.1412	5342.95	0.0056	0
Cd	111	3	He	25.263	0.1418	5326.95	0.0056	0
Cd	111	3	He	24.986	0.1402	5154.88	0.0056	0
Sn	120	3	He	25.881	0.4977	18832.08	0.0169	0.0609
Sn	120	3	He	25.246	0.487	18301.25	0.0169	0.0609
Sn	120	3	He	25.705	0.4948	18191.11	0.0169	0.0609
Sb	121	3	He	24.491	0.3954	14960.63	0.0161	0.0005433
Sb	121	3	He	25	0.4036	15167.51	0.0161	0.0005433
Sb	121	3	He	25.671	0.4144	15237.64	0.0161	0.0005433
Ba	137	3	He	244.557	1.2924	48898.63	0.0053	0.001141
Ba	137	3	He	249.824	1.3202	49611.69	0.0053	0.001141
Ba	137	3	He	254.823	1.3466	49510.88	0.0053	0.001141
Tl	205	3	He	25.348	0.6286	90329.03	0.0248	0.0005854
Tl	205	3	He	24.929	0.6183	91598.05	0.0248	0.0005854
Tl	205	3	He	24.717	0.613	89634.76	0.0248	0.0005854
Pb	208	3	He	25.331	0.8434	63820.25	0.0332	0.001693
Pb	208	3	He	24.923	0.8298	63951.60	0.0332	0.001693
Pb	208	3	He	25.195	0.8389	64965.36	0.0332	0.001693
U	238	3	He	25.58	0.8642	124178.19	0.0338	0.0007949
U	238	3	He	25.202	0.8514	126145.34	0.0338	0.0007949
U	238	3	He	24.742	0.8359	122231.70	0.0338	0.0007949
Sc	45	1	No Gas			1266531.86		
Sc	45	1	No Gas			1242789.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1208560.84		
Ge	72	1	No Gas			626006.20		
Ge	72	1	No Gas			631683.19		
Ge	72	1	No Gas			602745.93		
Sc	45	2	H2			87182.63		
Sc	45	2	H2			85221.74		
Sc	45	2	H2			84086.18		
Ge	72	2	H2			70053.50		
Ge	72	2	H2			70183.41		
Ge	72	2	H2			67111.84		
In	115	2	H2			174754.20		
In	115	2	H2			178969.41		
In	115	2	H2			171265.92		
Sc	45	3	He			24428.72		
Sc	45	3	He			25119.69		
Sc	45	3	He			24599.35		
Ge	72	3	He			46548.20		
Ge	72	3	He			44100.84		
Ge	72	3	He			44311.86		
In	115	3	He			37967.40		
In	115	3	He			37706.81		
In	115	3	He			36894.60		
Tb	159	3	He			143689.36		
Tb	159	3	He			148154.14		
Tb	159	3	He			146222.96		
Bi	209	3	He			108572.39		
Bi	209	3	He			110497.86		
Bi	209	3	He			108060.09		

Quantitation Report

Data File Name 199_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:04:48 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

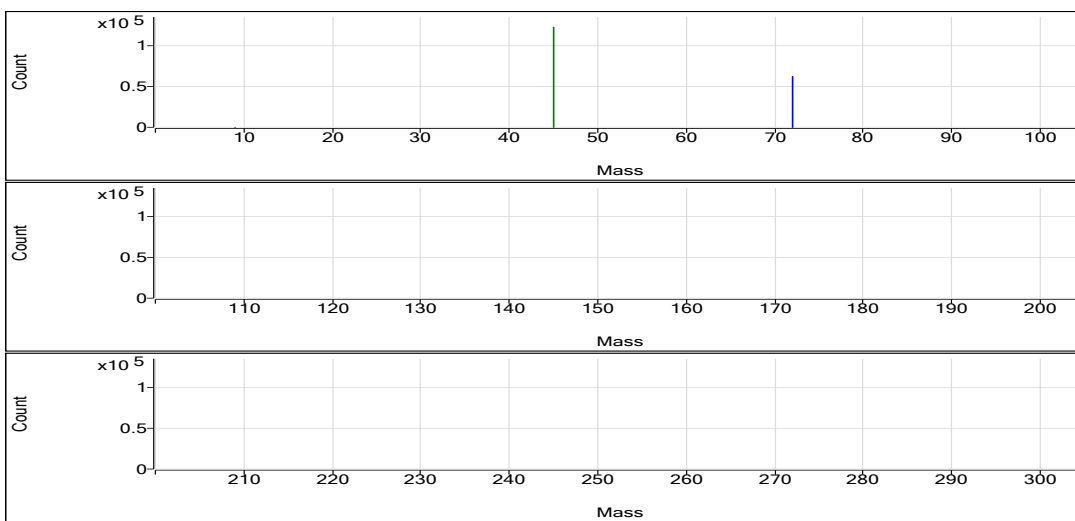
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.042	ppb	37.0	76.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.013	ppb	308.2	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	0.737	ppb	209.0	7635.32	0.1744	Pulse	0.1000	3
Mg	24	72	He	3.401	ppb	58.6	423.35	0.0097	Pulse	0.1000	3
Al	27	72	He	-3.731	ppb	N/A	53.33	0.0012	Pulse	0.1000	3
K	39	72	He	31.654	ppb	287.0	16216.84	0.3711	Pulse	0.5000	3
Ca	44	72	He	-5.121	ppb	N/A	114.00	0.0026	Pulse	0.5000	3
Ti	47	72	He	0.225	ppb	61.0	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.064	ppb	52.0	402.01	0.0092	Pulse	0.5000	3
Cr	52	72	He	-0.091	ppb	N/A	876.72	0.0200	Pulse	0.1000	3
Mn	55	72	He	0.257	ppb	10.0	183.33	0.0042	Pulse	0.5000	3
Fe	57	72	He	-0.663	ppb	N/A	110.00	0.0025	Pulse	0.1000	3
Co	59	72	He	0.031	ppb	10.1	129.33	0.0030	Pulse	0.5000	3
Ni	60	72	He	-0.012	ppb	N/A	132.67	0.0030	Pulse	0.5000	3
Cu	63	72	He	-0.022	ppb	N/A	137.33	0.0031	Pulse	0.5000	3
Zn	66	72	He	-0.139	ppb	N/A	70.00	0.0016	Pulse	0.5000	3
As	75	72	He	-0.071	ppb	N/A	26.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.006	ppb	N/A	146.67	0.0040	Pulse	0.1000	3
Mo	98	115	He	-0.054	ppb	N/A	96.67	0.0026	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.042	ppb	N/A	2206.90	0.0602	Pulse	0.1000	3
Sb	121	115	He	0.036	ppb	27.0	41.11	0.0011	Pulse	0.3000	3
Ba	137	115	He	0.044	ppb	324.4	50.00	0.0014	Pulse	0.1000	3
Tl	205	159	He	0.014	ppb	64.3	133.34	0.0009	Pulse	0.1000	3
Pb	208	159	He	-0.014	ppb	N/A	180.00	0.0012	Pulse	0.1000	3
U	238	159	He	-0.002	ppb	N/A	106.67	0.0007	Pulse	0.1000	3

ISTD Table:

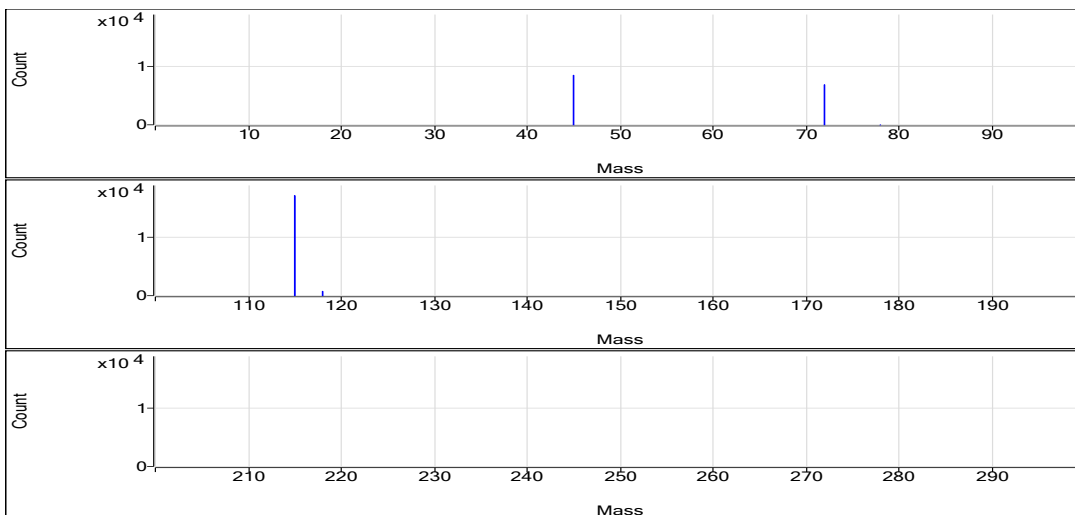
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1232034.87	0.7	94.3	Analog	0.1000	3
No Gas	Ge	72	624720.60	1.8	95.3	Pulse	0.1000	3
H2	Sc	45	84661.97	0.3	103.1	Pulse	0.1000	3
H2	Ge	72	68439.78	0.4	100.1	Pulse	0.1000	3
H2	In	115	170755.18	2.3	100.1	Pulse	0.1000	3
He	Sc	45	23831.21	2.6	93.1	Pulse	0.1000	3
He	Ge	72	43783.85	1.8	92.2	Pulse	0.1000	3
He	In	115	36681.99	2.3	89.6	Pulse	0.1000	3
He	Tb	159	144713.96	1.0	90.8	Pulse	0.1000	3
He	Bi	209	106642.93	1.3	91.2	Pulse	0.1000	3

No Gas

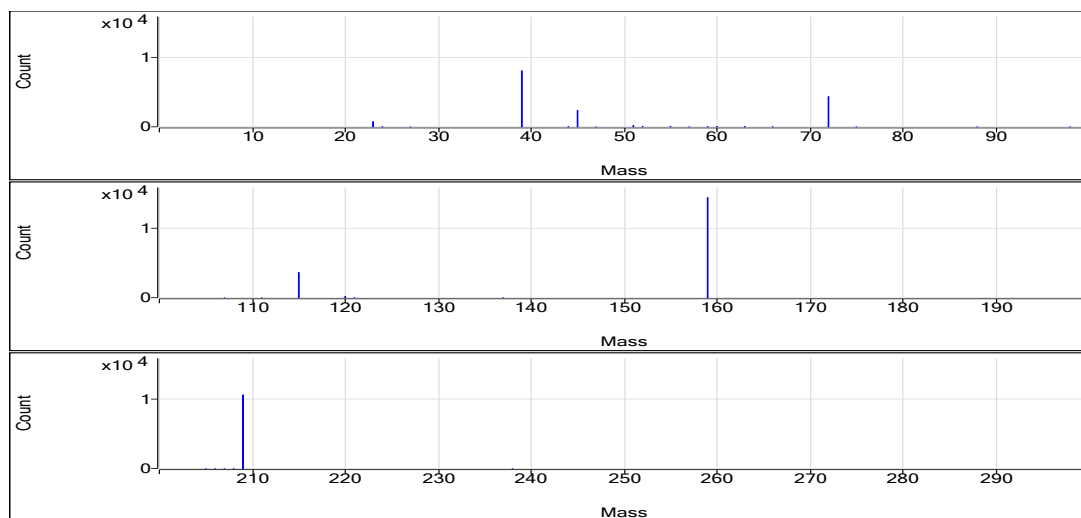


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.059	0.0001	86.00	0.0011	7.835E-05
Be	9	1	No Gas	0.039	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.028	0.0001	68.00	0.0011	7.835E-05
Se	78	2	H2	0.045	0	3.33	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.026	0	2.67	0.0005	2.594E-05
Na	23	3	He	1.179	0.1752	7511.93	0.0018	0.1731
Na	23	3	He	2.007	0.1767	7842.08	0.0018	0.1731
Na	23	3	He	-0.976	0.1713	7551.95	0.0018	0.1731
Mg	24	3	He	1.52	0.0079	340.01	0.0009	0.006537
Mg	24	3	He	3.194	0.0095	420.02	0.0009	0.006537
Mg	24	3	He	5.49	0.0116	510.02	0.0009	0.006537
Al	27	3	He	-0.727	0.0021	90.00	0.0003	0.00231
Al	27	3	He	-4.075	0.0011	50.00	0.0003	0.00231
Al	27	3	He	-6.392	0.0005	20.00	0.0003	0.00231
K	39	3	He	133.918	0.4476	19191.24	0.0007	0.3475
K	39	3	He	0.704	0.348	15445.30	0.0007	0.3475
K	39	3	He	-39.661	0.3178	14013.98	0.0007	0.3475
Ca	44	3	He	-12.996	0.0023	98.00	0	0.002807
Ca	44	3	He	-11.556	0.0023	104.00	0	0.002807
Ca	44	3	He	9.189	0.0032	140.00	0	0.002807
Ti	47	3	He	0.089	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.364	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.222	0.0002	8.00	0.0003	0.0001123
V	51	3	He	0.027	0.0087	372.01	0.0137	0.008308
V	51	3	He	0.091	0.0096	424.01	0.0137	0.008308
V	51	3	He	0.073	0.0093	410.01	0.0137	0.008308
Cr	52	3	He	-0.183	0.0184	790.05	0.0171	0.02156
Cr	52	3	He	-0.114	0.0196	870.05	0.0171	0.02156
Cr	52	3	He	0.026	0.022	970.06	0.0171	0.02156
Mn	55	3	He	0.284	0.0044	188.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.232	0.004	178.00	0.0073	0.002316
Mn	55	3	He	0.255	0.0042	184.00	0.0073	0.002316
Fe	57	3	He	1.635	0.0033	140.01	0.0003	0.002736
Fe	57	3	He	-2.881	0.0018	80.00	0.0003	0.002736
Fe	57	3	He	-0.744	0.0025	110.00	0.0003	0.002736
Co	59	3	He	0.031	0.0029	126.00	0.0332	0.001922
Co	59	3	He	0.034	0.0031	136.00	0.0332	0.001922
Co	59	3	He	0.028	0.0029	126.00	0.0332	0.001922
Ni	60	3	He	-0.032	0.0028	122.00	0.0093	0.003141
Ni	60	3	He	0.016	0.0033	146.00	0.0093	0.003141
Ni	60	3	He	-0.021	0.0029	130.00	0.0093	0.003141
Cu	63	3	He	-0.01	0.0035	148.00	0.027	0.003732
Cu	63	3	He	-0.058	0.0022	96.00	0.027	0.003732
Cu	63	3	He	0.003	0.0038	168.00	0.027	0.003732
Zn	66	3	He	-0.158	0.0015	66.00	0.0031	0.002032
Zn	66	3	He	-0.132	0.0016	72.00	0.0031	0.002032
Zn	66	3	He	-0.128	0.0016	72.00	0.0031	0.002032
As	75	3	He	-0.12	0.0005	20.00	0.0025	0.0007733
As	75	3	He	0.033	0.0009	38.00	0.0025	0.0007733
As	75	3	He	-0.125	0.0005	20.00	0.0025	0.0007733
Sr	88	3	He	0.056	0.0047	170.01	0.0105	0.004071
Sr	88	3	He	-0.11	0.0029	110.00	0.0105	0.004071
Sr	88	3	He	0.037	0.0045	160.01	0.0105	0.004071
Mo	98	3	He	-0.073	0.0022	80.00	0.0234	0.003908
Mo	98	3	He	-0.065	0.0024	90.00	0.0234	0.003908
Mo	98	3	He	-0.024	0.0033	120.00	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.138	0.0586	2140.22	0.0169	0.0609
Sn	120	3	He	-0.094	0.0593	2230.25	0.0169	0.0609
Sn	120	3	He	0.105	0.0627	2250.24	0.0169	0.0609
Sb	121	3	He	0.029	0.001	36.67	0.0161	0.0005433
Sb	121	3	He	0.032	0.0011	40.00	0.0161	0.0005433
Sb	121	3	He	0.047	0.0013	46.67	0.0161	0.0005433
Ba	137	3	He	-0.009	0.0011	40.00	0.0053	0.001141
Ba	137	3	He	-0.065	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	0.206	0.0022	80.00	0.0053	0.001141
Tl	205	3	He	0.016	0.001	140.01	0.0248	0.0005854
Tl	205	3	He	0.021	0.0011	160.01	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	-0.013	0.0013	130.01	0.0332	0.001693
Pb	208	3	He	-0.011	0.0013	60.00	0.0332	0.001693
Pb	208	3	He	-0.016	0.0012	100.00	0.0332	0.001693
U	238	3	He	-0.009	0.0005	70.00	0.0338	0.0007949
U	238	3	He	-0.003	0.0007	100.00	0.0338	0.0007949
U	238	3	He	0.007	0.001	150.01	0.0338	0.0007949
Sc	45	1	No Gas			1222641.54		
Sc	45	1	No Gas			1238638.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1234824.90		
Ge	72	1	No Gas			611589.87		
Ge	72	1	No Gas			632938.70		
Ge	72	1	No Gas			629633.23		
Sc	45	2	H2			84356.82		
Sc	45	2	H2			84739.30		
Sc	45	2	H2			84889.78		
Ge	72	2	H2			68356.10		
Ge	72	2	H2			68727.21		
Ge	72	2	H2			68236.04		
In	115	2	H2			174894.35		
In	115	2	H2			167018.22		
In	115	2	H2			170352.97		
Sc	45	3	He			23317.12		
Sc	45	3	He			24508.89		
Sc	45	3	He			23667.62		
Ge	72	3	He			42878.18		
Ge	72	3	He			44381.90		
Ge	72	3	He			44091.47		
In	115	3	He			36553.60		
In	115	3	He			37616.29		
In	115	3	He			35922.43		
Tb	159	3	He			143265.76		
Tb	159	3	He			144618.68		
Tb	159	3	He			146257.43		
Bi	209	3	He			105088.60		
Bi	209	3	He			107606.63		
Bi	209	3	He			107233.55		

Quantitation Report

Data File Name 200SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:07:00 PM
Sample Name 410-234463-E-1-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

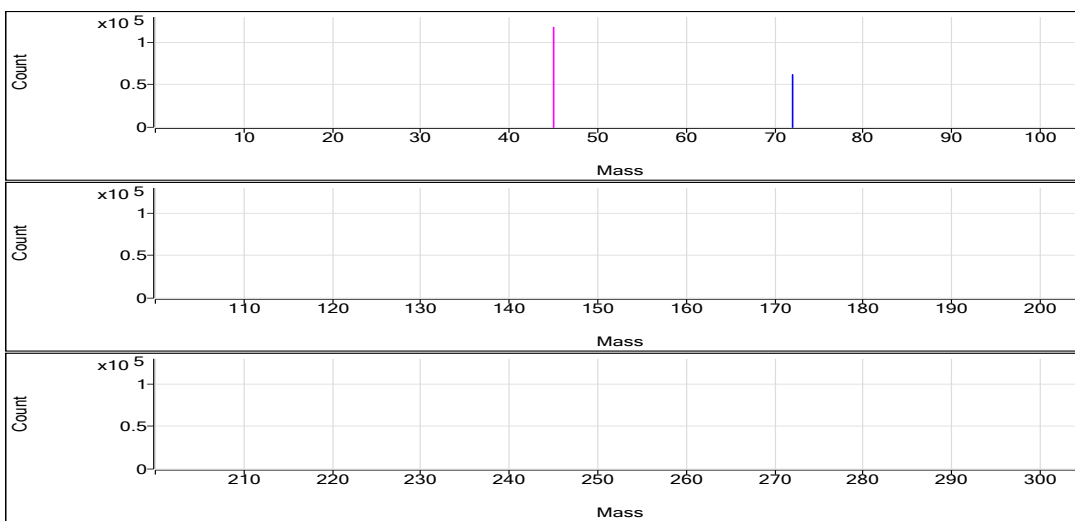
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	0.711	ppb	1.4	1164.05	0.0256	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

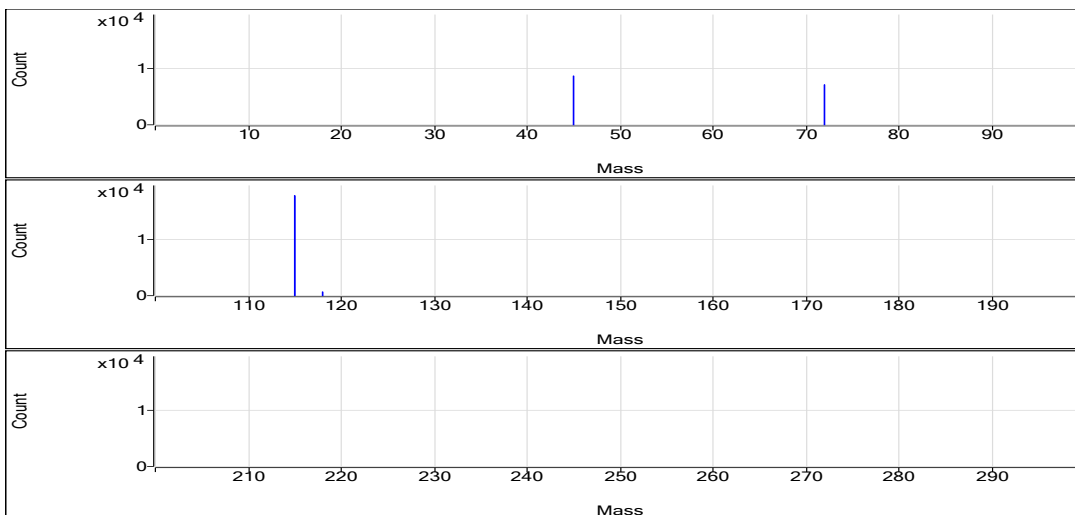
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1178589.30	0.2	90.2	Mix	0.1000	3
No Gas	Ge	72	620751.08	0.6	94.7	Pulse	0.1000	3
H2	Sc	45	86996.72	1.5	105.9	Pulse	0.1000	3
H2	Ge	72	71351.93	2.8	104.4	Pulse	0.1000	3
H2	In	115	177975.18	2.5	104.3	Pulse	0.1000	3
He	Sc	45	24909.53	2.0	97.3	Pulse	0.1000	3
He	Ge	72	45558.47	1.2	95.9	Pulse	0.1000	3
He	In	115	37863.65	4.1	92.5	Pulse	0.1000	3
He	Tb	159	145790.32	0.4	91.4	Pulse	0.1000	3
He	Bi	209	109886.13	0.5	94.0	Pulse	0.1000	3

No Gas

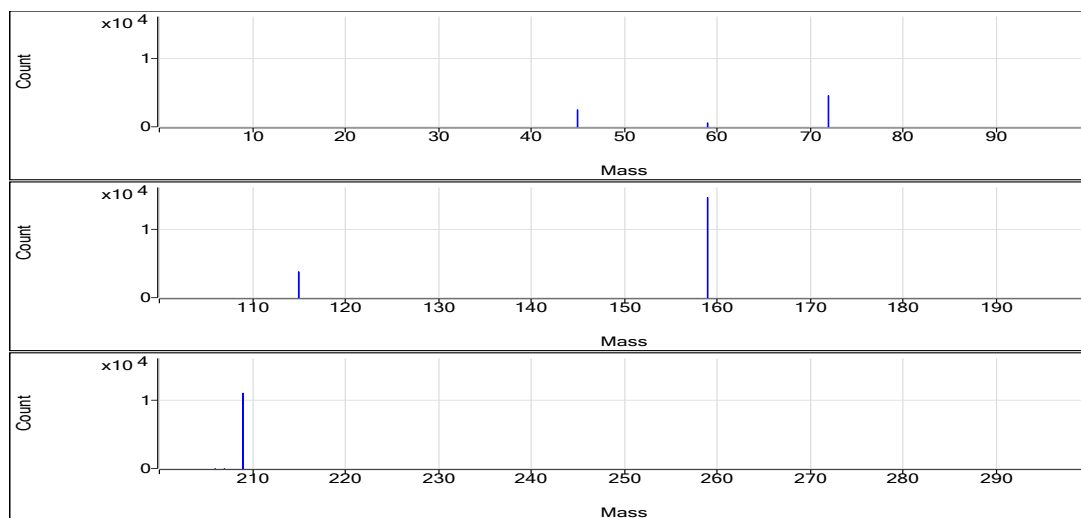


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	0.712	0.0256	1176.05	0.0332	0.001922
Co	59	3	He	0.721	0.0259	1162.05	0.0332	0.001922
Co	59	3	He	0.701	0.0252	1154.05	0.0332	0.001922
Sc	45	1	No Gas			1176654.36		
Sc	45	1	No Gas			1181329.04		
Sc	45	1	No Gas			1177784.51		
Ge	72	1	No Gas			623135.46		
Ge	72	1	No Gas			622554.99		
Ge	72	1	No Gas			616562.80		
Sc	45	2	H2			86085.37		
Sc	45	2	H2			88447.29		
Sc	45	2	H2			86457.50		
Ge	72	2	H2			69179.25		
Ge	72	2	H2			73146.41		
Ge	72	2	H2			71730.13		
In	115	2	H2			173506.83		
In	115	2	H2			177857.97		
In	115	2	H2			182560.74		
Sc	45	3	He			25410.16		
Sc	45	3	He			24919.47		
Sc	45	3	He			24398.96		
Ge	72	3	He			45976.50		
Ge	72	3	He			44933.27		
Ge	72	3	He			45765.65		
In	115	3	He			39581.23		
In	115	3	He			37465.80		
In	115	3	He			36543.93		
Tb	159	3	He			145901.94		
Tb	159	3	He			145204.26		
Tb	159	3	He			146264.75		
Bi	209	3	He			110256.41		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109287.32		
Bi	209	3	He			110114.67		

Quantitation Report

Data File Name 201SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:08:31 PM
Sample Name 410-234463-E-2-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

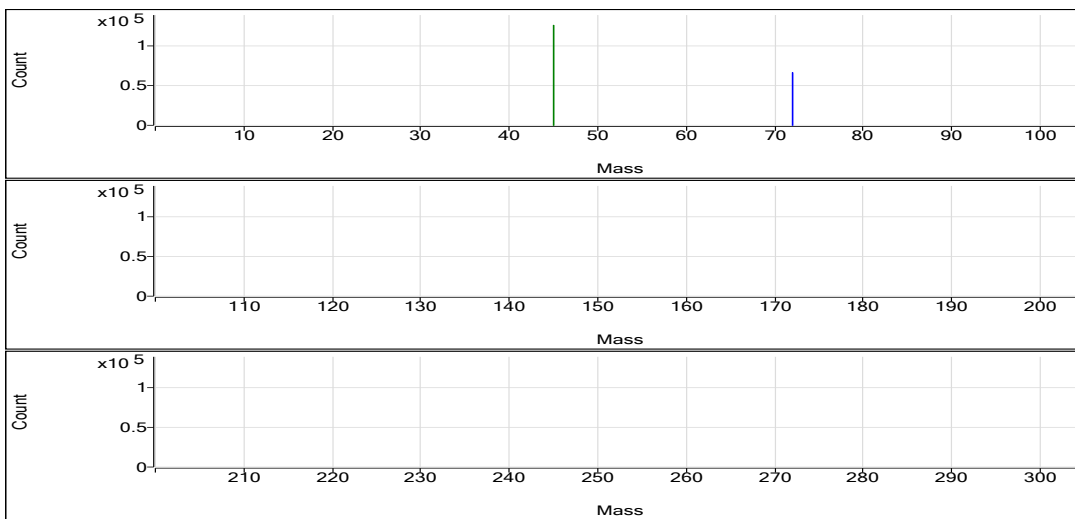
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	0.103	ppb	5.0	248.67	0.0053	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

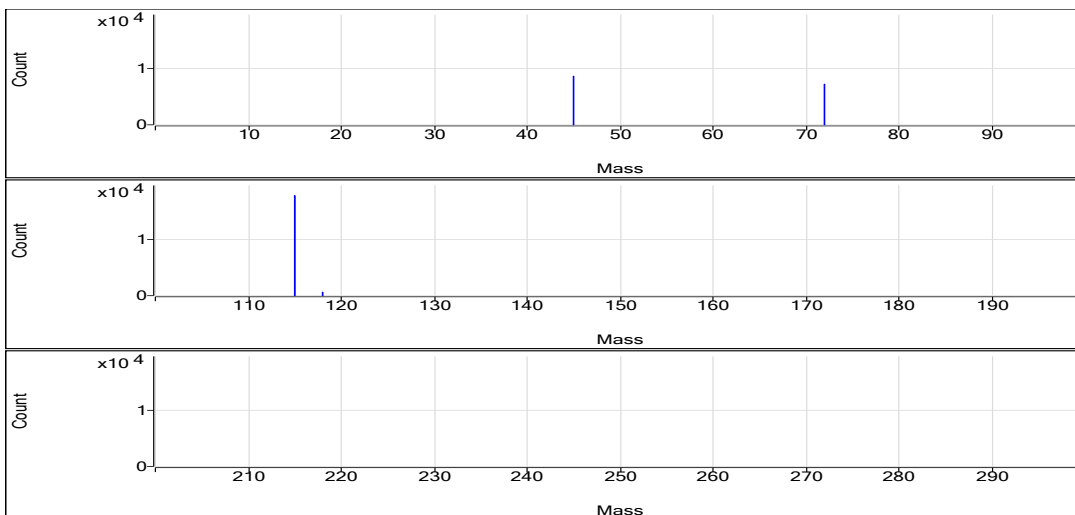
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1255259.80	2.4	96.0	Analog	0.1000	3
No Gas	Ge	72	661639.97	1.0	101.0	Pulse	0.1000	3
H2	Sc	45	86598.96	0.1	105.4	Pulse	0.1000	3
H2	Ge	72	72446.90	1.9	106.0	Pulse	0.1000	3
H2	In	115	177772.81	0.7	104.2	Pulse	0.1000	3
He	Sc	45	24191.86	2.6	94.5	Pulse	0.1000	3
He	Ge	72	46568.10	1.0	98.0	Pulse	0.1000	3
He	In	115	37903.79	1.6	92.6	Pulse	0.1000	3
He	Tb	159	145722.02	1.4	91.4	Pulse	0.1000	3
He	Bi	209	111720.02	1.3	95.5	Pulse	0.1000	3

No Gas

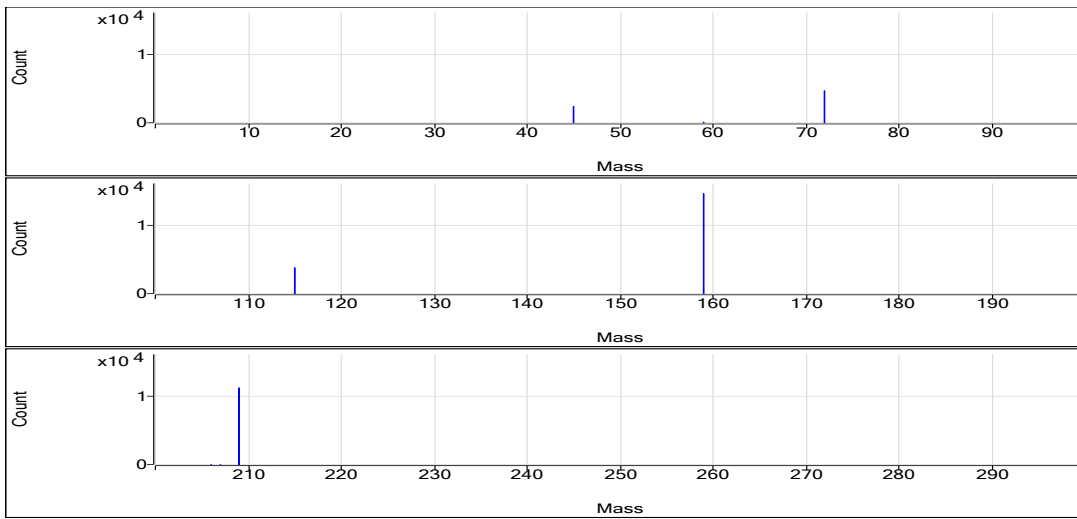


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	0.109	0.0055	260.00	0.0332	0.001922
Co	59	3	He	0.101	0.0053	246.00	0.0332	0.001922
Co	59	3	He	0.099	0.0052	240.00	0.0332	0.001922
Sc	45	1	No Gas			1286107.56		
Sc	45	1	No Gas			1254857.87		
Sc	45	1	No Gas			1224813.97		
Ge	72	1	No Gas			669508.74		
Ge	72	1	No Gas			658574.37		
Ge	72	1	No Gas			656836.79		
Sc	45	2	H2			86468.20		
Sc	45	2	H2			86719.50		
Sc	45	2	H2			86609.18		
Ge	72	2	H2			73829.75		
Ge	72	2	H2			71118.08		
Ge	72	2	H2			72392.86		
In	115	2	H2			176502.48		
In	115	2	H2			177685.19		
In	115	2	H2			179130.76		
Sc	45	3	He			24549.04		
Sc	45	3	He			24559.22		
Sc	45	3	He			23467.33		
Ge	72	3	He			46979.47		
Ge	72	3	He			46678.43		
Ge	72	3	He			46046.39		
In	115	3	He			38608.92		
In	115	3	He			37646.42		
In	115	3	He			37456.03		
Tb	159	3	He			145507.46		
Tb	159	3	He			147899.49		
Tb	159	3	He			143759.11		
Bi	209	3	He			113106.86		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111878.39		
Bi	209	3	He			110174.81		

US EPA Tune Check Report

Operator Name us19_usr_ins23851
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\ICPMS Half QC.b
Acq. Date-Time 8/11/2025 8:13:45 AM
Report Comment E08 Tune Report
Instrument Name G8403A SG19504696

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9	10.00	2257	22567.19			0.595	5.000
24	10.00	11267	112673.90			0.391	5.000
25	10.00	1559	15593.69			0.596	5.000
26	10.00	1819	18189.19			0.638	5.000
59	10.00	22373	223727.08			0.355	5.000
115	10.00	30174	301739.12			0.245	5.000
206	10.00	5135	51351.58			0.483	5.000
207	10.00	4236	42360.91			1.134	5.000
208	10.00	10341	103413.12			0.631	5.000

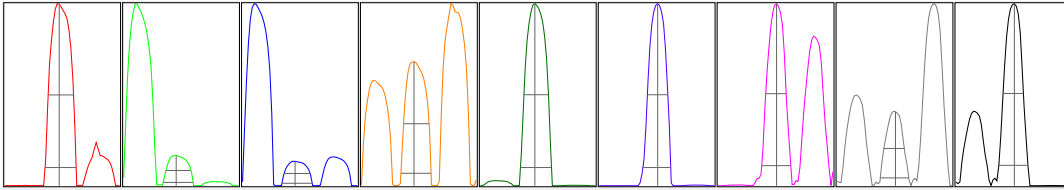
Mass	RSD% (Flag)
9	
24	
25	
26	
59	
115	
206	
207	
208	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2256	2246	2268	2241	2272
24	11206	11327	11256	11284	11264
25	1554	1569	1558	1548	1568
26	1807	1834	1828	1815	1811
59	22328	22509	22345	22371	22311
115	30192	30122	30227	30253	30076
206	5157	5154	5146	5117	5101
207	4217	4206	4313	4250	4194
208	10270	10317	10434	10380	10306

Integration Time [sec] 0.1

Resolution/Axis

US EPA Tune Check Report



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	3648.56	8.95	8.90 - 9.10	
24	18426.22	23.90	23.90 - 24.10	
25	2478.20	24.90	24.90 - 25.10	
26	2925.44	25.90	25.90 - 26.10	
59	37311.72	58.95	58.90 - 59.10	
115	58430.67	115.05	114.90 - 115.10	
206	9774.35	206.05	205.90 - 206.10	
207	7975.28	207.05	206.90 - 207.10	
208	19613.90	208.05	207.90 - 208.10	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
9	0.65	0.799	0.900	
24	0.64	0.772	0.900	
25	0.67	0.778	0.900	
26	0.66	0.776	0.900	
59	0.63	0.799	0.900	
115	0.53	0.716	0.900	
206	0.53	0.749	0.900	
207	0.53	0.731	0.900	
208	0.52	0.748	0.900	

Integration Time [sec] 0.1
 Acquisition Time [sec] 235
 Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	1.05 L/min	Dilution Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	15.4 V
Extract 2	-250.0 V	Cell Entrance	-24 V	Plate Bias	-45 V
Omega Bias	-105 V	Cell Exit	-54 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V

US EPA Tune Check Report

He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	150 V		
QP Parameters					
Mass Gain	144	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	123	Axis Offset	0.09		
Hardware Settings					
Torch					
Torch H	-0.1 mm	Torch V	-0.7 mm		
EM					
Discriminator	2.1 mV	Analog HV	2184 V	Pulse HV	1187 V

Quantitation Report

Data File Name 202SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:10:02 PM
Sample Name 410-234463-E-4-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

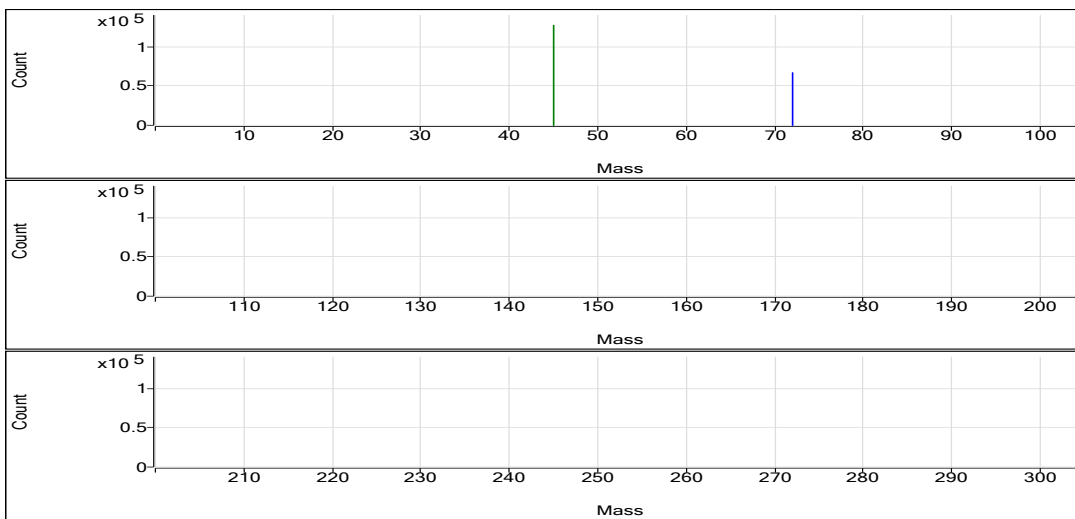
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	14.493	ppb	2.4	21932.16	0.4834	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

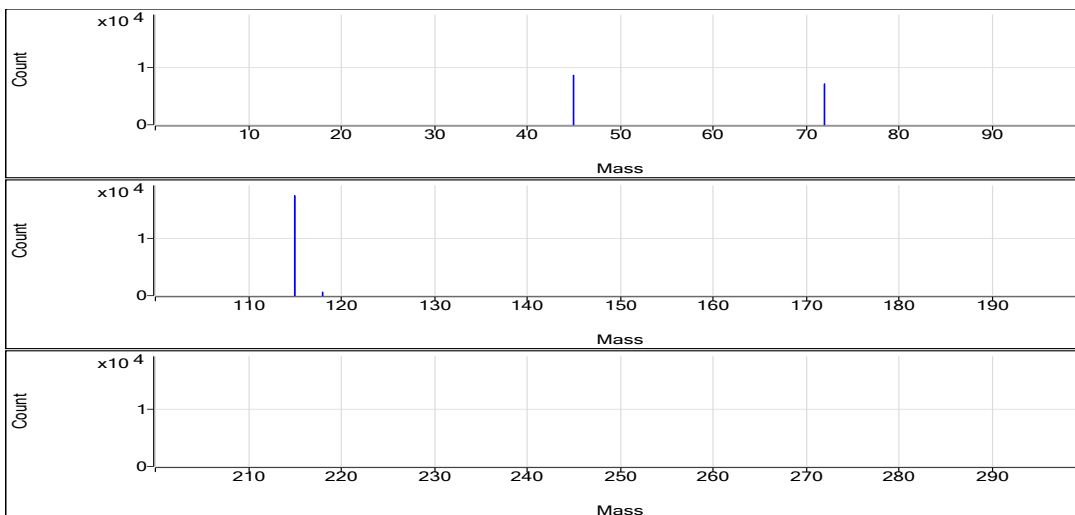
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1279719.90	0.4	97.9	Analog	0.1000	3
No Gas	Ge	72	671792.57	0.6	102.5	Pulse	0.1000	3
H2	Sc	45	87426.64	2.0	106.4	Pulse	0.1000	3
H2	Ge	72	72102.70	1.1	105.5	Pulse	0.1000	3
H2	In	115	175877.68	0.4	103.1	Pulse	0.1000	3
He	Sc	45	24518.84	3.6	95.7	Pulse	0.1000	3
He	Ge	72	45385.03	2.5	95.5	Pulse	0.1000	3
He	In	115	38231.32	1.4	93.4	Pulse	0.1000	3
He	Tb	159	147250.29	1.1	92.4	Pulse	0.1000	3
He	Bi	209	109853.62	1.5	93.9	Pulse	0.1000	3

No Gas

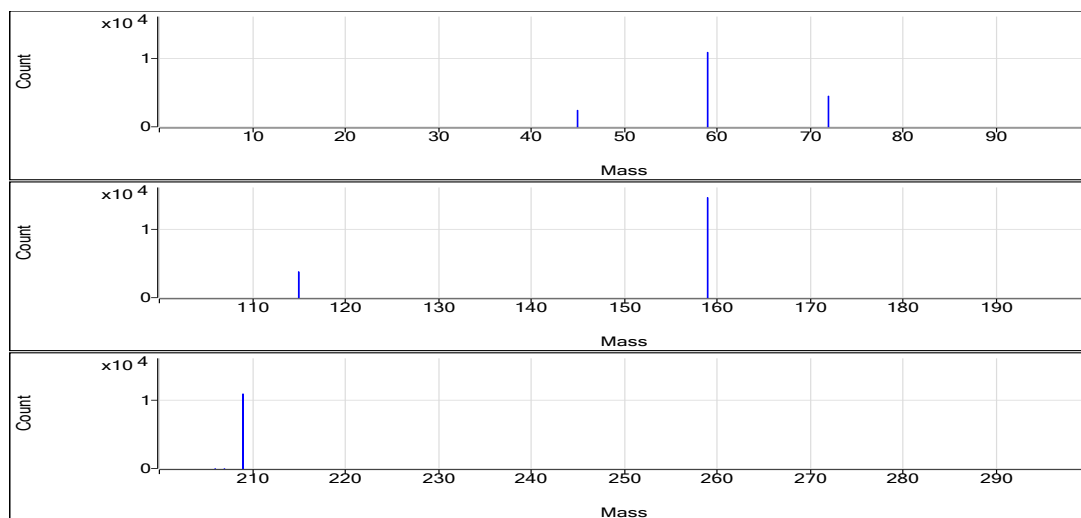


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	14.896	0.4968	21890.75	0.0332	0.001922
Co	59	3	He	14.352	0.4788	22069.02	0.0332	0.001922
Co	59	3	He	14.232	0.4747	21836.72	0.0332	0.001922
Sc	45	1	No Gas			1277961.78		
Sc	45	1	No Gas			1285422.25		
Sc	45	1	No Gas			1275775.68		
Ge	72	1	No Gas			667085.54		
Ge	72	1	No Gas			672739.05		
Ge	72	1	No Gas			675553.11		
Sc	45	2	H2			87342.20		
Sc	45	2	H2			89203.36		
Sc	45	2	H2			85734.35		
Ge	72	2	H2			72534.27		
Ge	72	2	H2			72554.30		
Ge	72	2	H2			71219.53		
In	115	2	H2			176471.17		
In	115	2	H2			175995.54		
In	115	2	H2			175166.33		
Sc	45	3	He			25530.54		
Sc	45	3	He			23837.61		
Sc	45	3	He			24188.38		
Ge	72	3	He			44060.90		
Ge	72	3	He			46096.93		
Ge	72	3	He			45997.27		
In	115	3	He			38137.63		
In	115	3	He			38809.70		
In	115	3	He			37746.64		
Tb	159	3	He			146274.22		
Tb	159	3	He			149081.85		
Tb	159	3	He			146394.80		
Bi	209	3	He			108633.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111667.00		
Bi	209	3	He			109260.02		

Quantitation Report

Data File Name 203SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:11:34 PM
Sample Name 410-234463-E-8-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

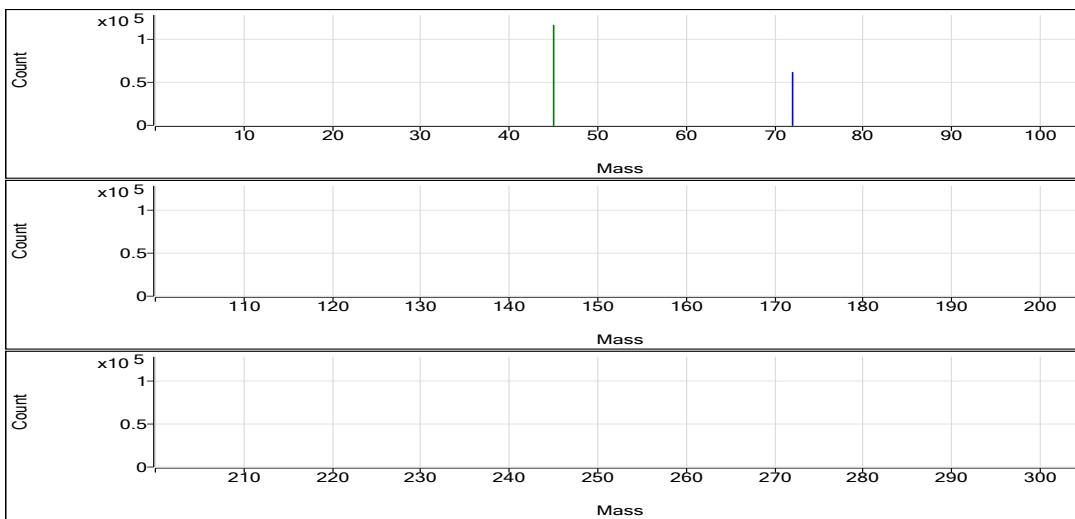
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	0.050	ppb	31.2	162.00	0.0036	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

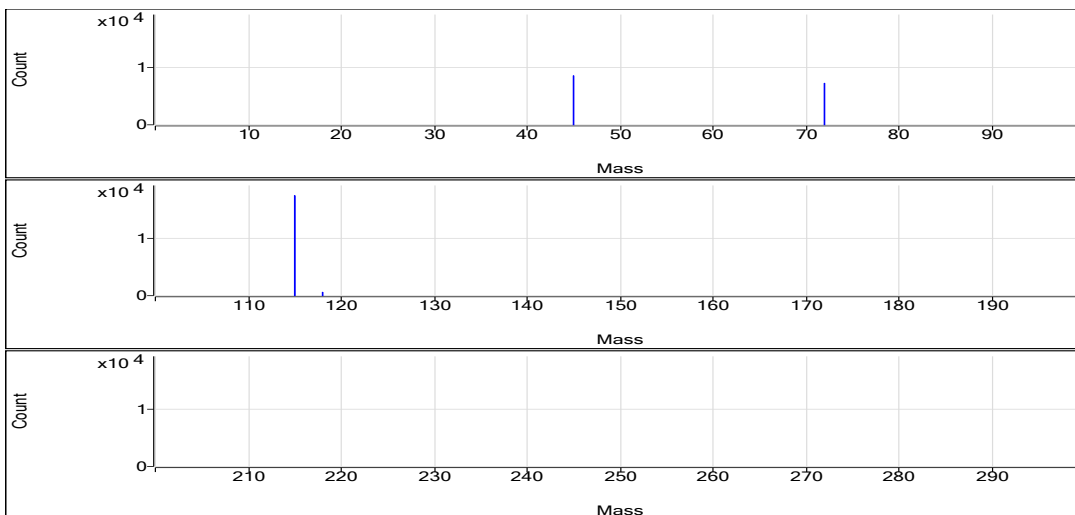
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1165613.57	0.4	89.2	Analog	0.1000	3
No Gas	Ge	72	616127.91	0.9	94.0	Pulse	0.1000	3
H2	Sc	45	86447.72	2.4	105.2	Pulse	0.1000	3
H2	Ge	72	73345.14	1.4	107.3	Pulse	0.1000	3
H2	In	115	176185.76	1.5	103.3	Pulse	0.1000	3
He	Sc	45	24846.13	1.1	97.0	Pulse	0.1000	3
He	Ge	72	45358.13	0.8	95.5	Pulse	0.1000	3
He	In	115	37021.40	2.8	90.4	Pulse	0.1000	3
He	Tb	159	146322.41	1.5	91.8	Pulse	0.1000	3
He	Bi	209	109420.03	1.8	93.6	Pulse	0.1000	3

No Gas

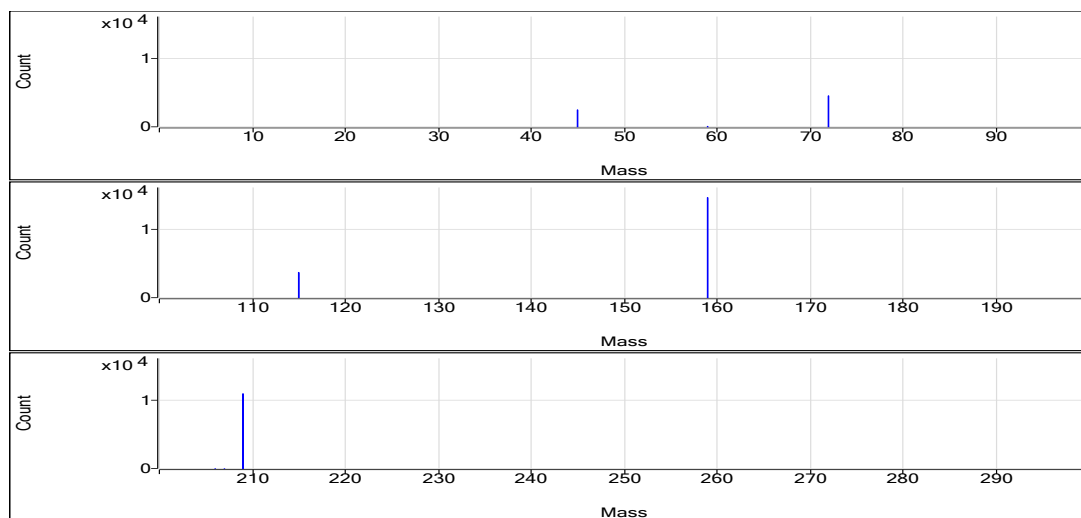


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	0.041	0.0033	148.00	0.0332	0.001922
Co	59	3	He	0.041	0.0033	150.00	0.0332	0.001922
Co	59	3	He	0.068	0.0042	188.00	0.0332	0.001922
Sc	45	1	No Gas			1160925.37		
Sc	45	1	No Gas			1164734.90		
Sc	45	1	No Gas			1171180.45		
Ge	72	1	No Gas			615932.53		
Ge	72	1	No Gas			621927.96		
Ge	72	1	No Gas			610523.23		
Sc	45	2	H2			86559.00		
Sc	45	2	H2			84336.22		
Sc	45	2	H2			88447.93		
Ge	72	2	H2			72906.34		
Ge	72	2	H2			72595.31		
Ge	72	2	H2			74533.77		
In	115	2	H2			175563.08		
In	115	2	H2			173903.43		
In	115	2	H2			179090.78		
Sc	45	3	He			24899.60		
Sc	45	3	He			24538.95		
Sc	45	3	He			25099.84		
Ge	72	3	He			45194.66		
Ge	72	3	He			45785.89		
Ge	72	3	He			45093.83		
In	115	3	He			35831.87		
In	115	3	He			37526.05		
In	115	3	He			37706.28		
Tb	159	3	He			147537.57		
Tb	159	3	He			143781.42		
Tb	159	3	He			147648.23		
Bi	209	3	He			109863.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			107314.74		
Bi	209	3	He			111081.91		

Quantitation Report

Data File Name 204SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:13:06 PM
Sample Name 410-234463-E-5-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

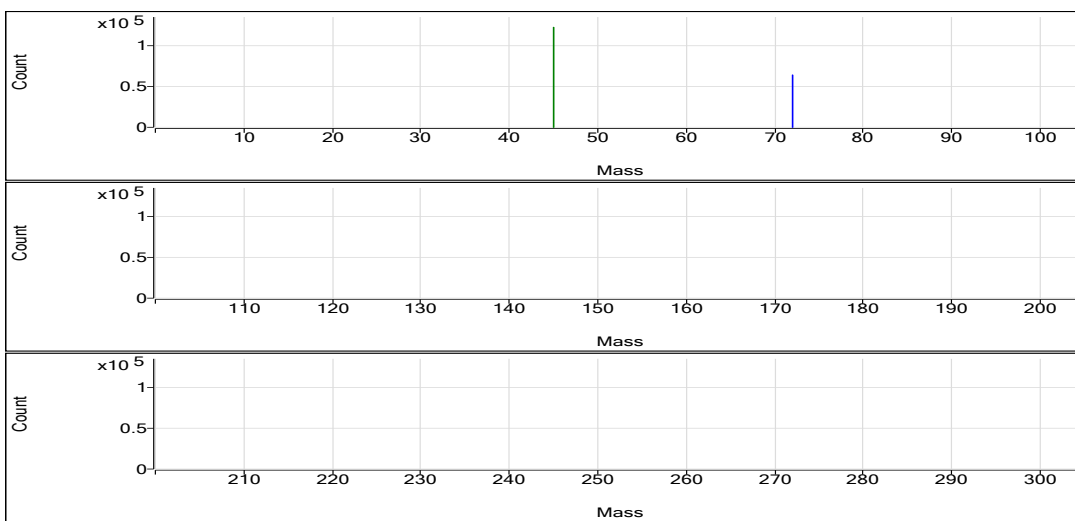
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	14.203	ppb	1.4	21796.64	0.4738	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

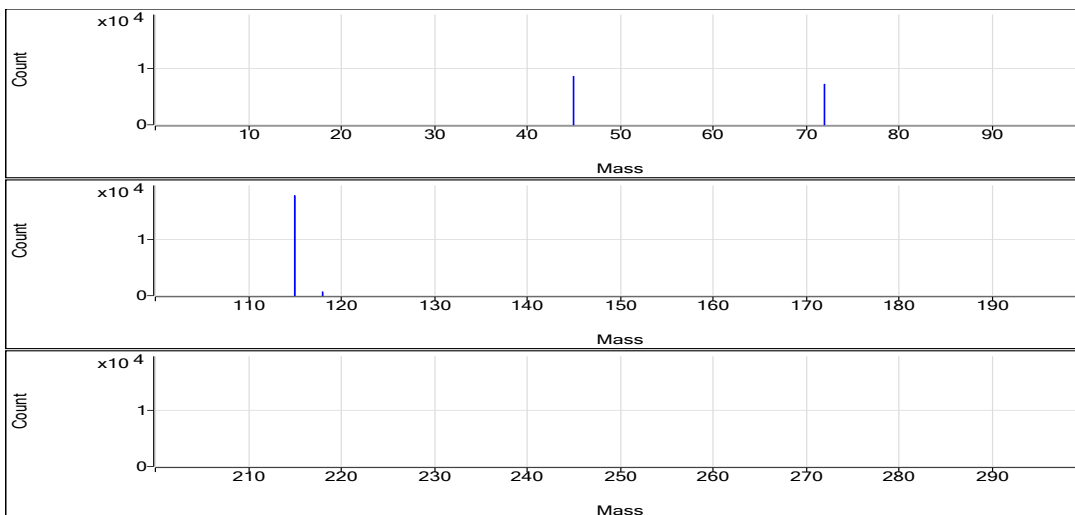
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1225648.42	2.7	93.8	Analog	0.1000	3
No Gas	Ge	72	641759.06	2.0	97.9	Pulse	0.1000	3
H2	Sc	45	85965.17	2.5	104.6	Pulse	0.1000	3
H2	Ge	72	72145.82	3.4	105.6	Pulse	0.1000	3
H2	In	115	177208.62	2.2	103.9	Pulse	0.1000	3
He	Sc	45	24311.86	2.4	94.9	Pulse	0.1000	3
He	Ge	72	46006.51	1.3	96.8	Pulse	0.1000	3
He	In	115	37636.38	1.0	91.9	Pulse	0.1000	3
He	Tb	159	147038.98	0.7	92.2	Pulse	0.1000	3
He	Bi	209	108898.87	0.9	93.1	Pulse	0.1000	3

No Gas

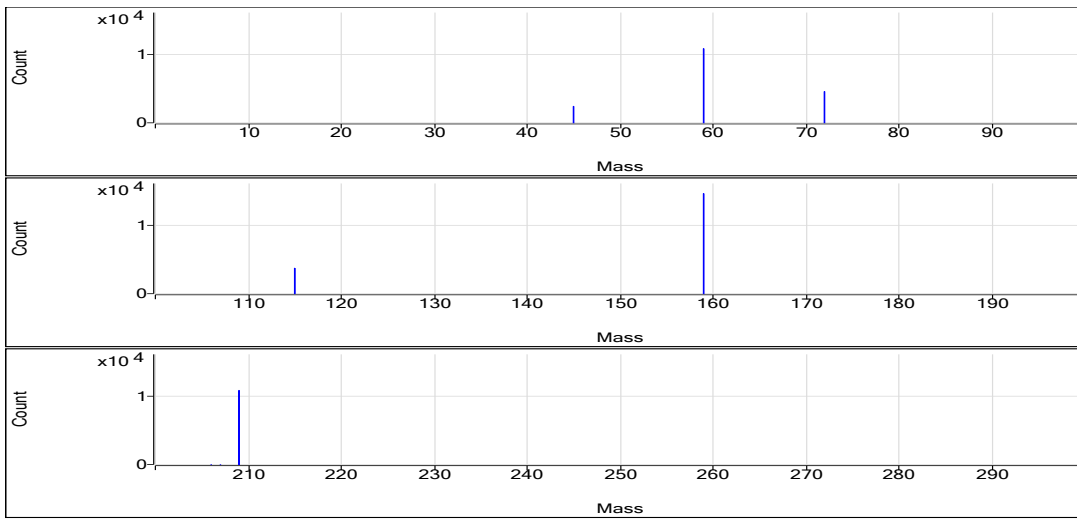


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	13.976	0.4663	21670.46	0.0332	0.001922
Co	59	3	He	14.367	0.4793	22159.12	0.0332	0.001922
Co	59	3	He	14.266	0.4759	21560.35	0.0332	0.001922
Sc	45	1	No Gas			1247554.75		
Sc	45	1	No Gas			1241147.72		
Sc	45	1	No Gas			1188242.79		
Ge	72	1	No Gas			641647.61		
Ge	72	1	No Gas			654538.51		
Ge	72	1	No Gas			629091.05		
Sc	45	2	H2			86869.49		
Sc	45	2	H2			87543.23		
Sc	45	2	H2			83482.80		
Ge	72	2	H2			74121.29		
Ge	72	2	H2			72865.82		
Ge	72	2	H2			69450.35		
In	115	2	H2			179162.85		
In	115	2	H2			179750.47		
In	115	2	H2			172712.54		
Sc	45	3	He			23948.02		
Sc	45	3	He			24989.55		
Sc	45	3	He			23998.02		
Ge	72	3	He			46477.77		
Ge	72	3	He			46237.05		
Ge	72	3	He			45304.70		
In	115	3	He			37566.20		
In	115	3	He			38037.43		
In	115	3	He			37305.51		
Tb	159	3	He			146659.11		
Tb	159	3	He			148142.93		
Tb	159	3	He			146314.91		
Bi	209	3	He			108370.60		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			110075.19		
Bi	209	3	He			108250.82		

Quantitation Report

Data File Name 205SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:14:38 PM
Sample Name 410-234463-E-6-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

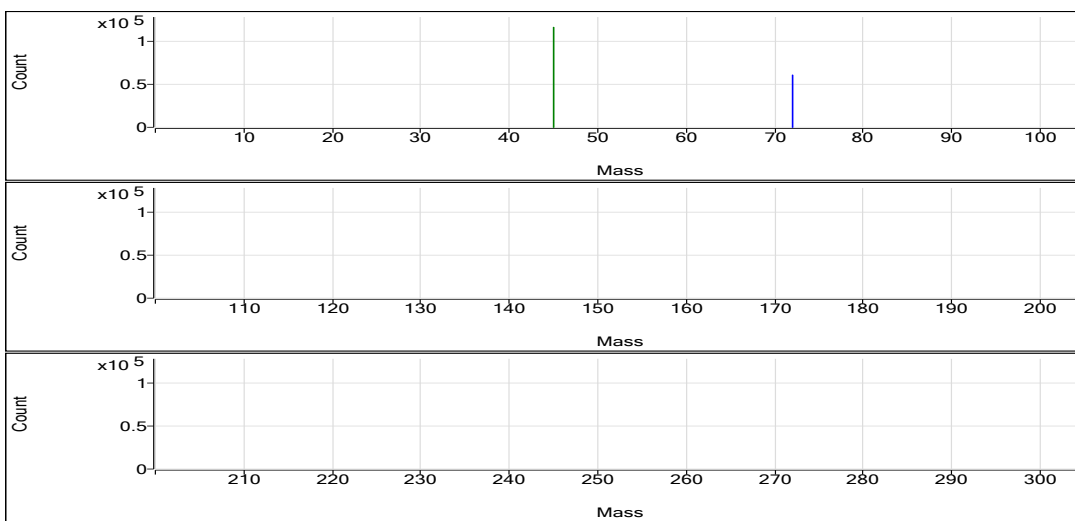
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	4.901	ppb	0.8	7617.82	0.1647	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

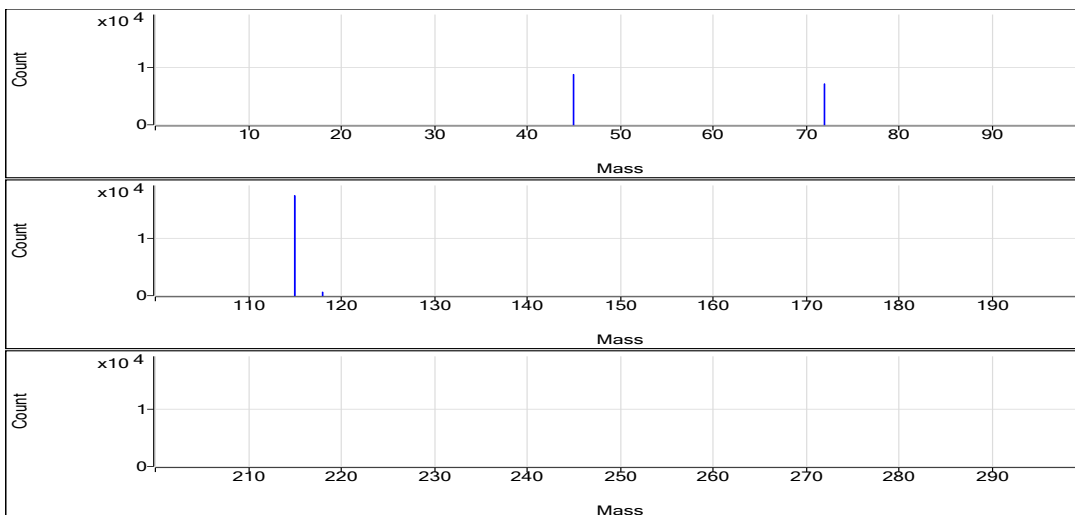
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1166278.63	1.7	89.2	Analog	0.1000	3
No Gas	Ge	72	610026.53	1.1	93.1	Pulse	0.1000	3
H2	Sc	45	88022.84	1.5	107.1	Pulse	0.1000	3
H2	Ge	72	71529.37	1.3	104.7	Pulse	0.1000	3
H2	In	115	174732.57	0.3	102.4	Pulse	0.1000	3
He	Sc	45	24882.86	3.0	97.2	Pulse	0.1000	3
He	Ge	72	46240.71	1.0	97.3	Pulse	0.1000	3
He	In	115	37967.14	0.4	92.7	Pulse	0.1000	3
He	Tb	159	148354.70	1.0	93.0	Pulse	0.1000	3
He	Bi	209	108060.39	0.9	92.4	Pulse	0.1000	3

No Gas

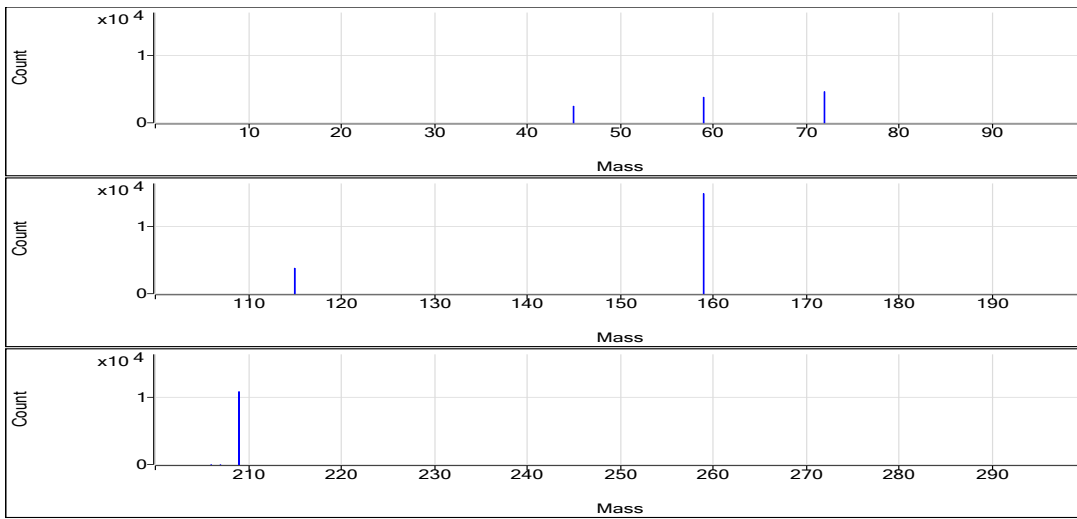


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	4.855	0.1632	7497.78	0.0332	0.001922
Co	59	3	He	4.918	0.1653	7733.86	0.0332	0.001922
Co	59	3	He	4.929	0.1657	7621.81	0.0332	0.001922
Sc	45	1	No Gas			1165437.56		
Sc	45	1	No Gas			1186663.97		
Sc	45	1	No Gas			1146734.36		
Ge	72	1	No Gas			607400.03		
Ge	72	1	No Gas			617860.26		
Ge	72	1	No Gas			604819.29		
Sc	45	2	H2			89393.15		
Sc	45	2	H2			87814.82		
Sc	45	2	H2			86860.55		
Ge	72	2	H2			72613.97		
Ge	72	2	H2			71107.72		
Ge	72	2	H2			70866.42		
In	115	2	H2			175230.54		
In	115	2	H2			174125.15		
In	115	2	H2			174842.01		
Sc	45	3	He			24689.09		
Sc	45	3	He			25710.93		
Sc	45	3	He			24248.56		
Ge	72	3	He			45936.35		
Ge	72	3	He			46779.14		
Ge	72	3	He			46006.65		
In	115	3	He			38037.37		
In	115	3	He			37776.57		
In	115	3	He			38087.49		
Tb	159	3	He			147153.08		
Tb	159	3	He			149979.34		
Tb	159	3	He			147931.68		
Bi	209	3	He			107384.43		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109169.38		
Bi	209	3	He			107627.36		

Quantitation Report

Data File Name 206SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:16:10 PM
Sample Name 410-234463-E-7-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

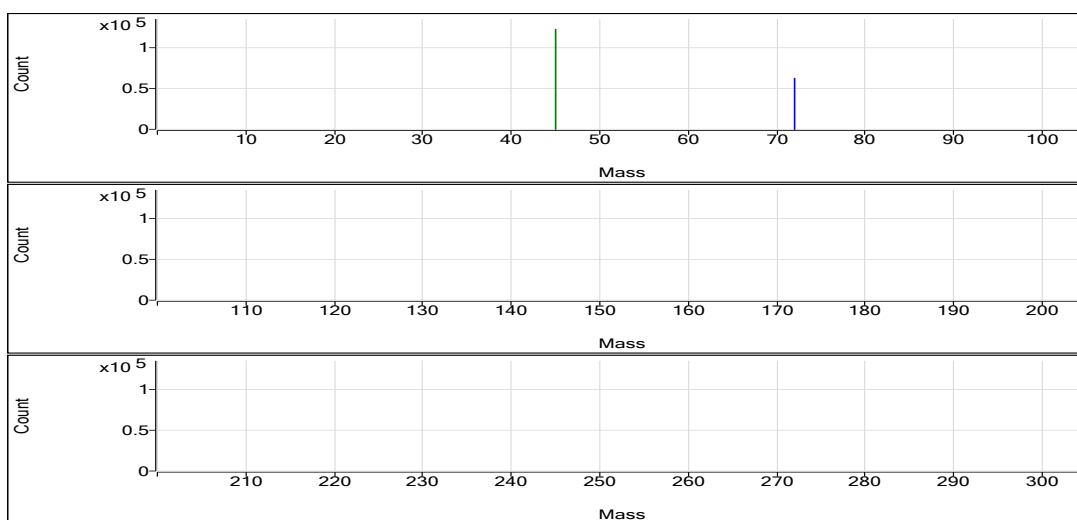
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He	0.836	ppb	6.1	1313.39	0.0297	Pulse	0.5000	3
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

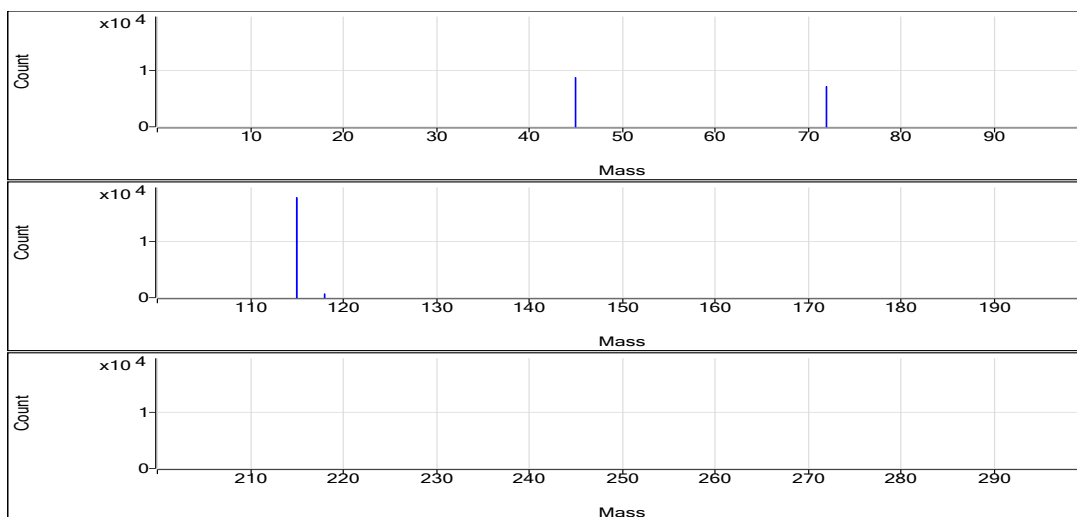
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1221518.34	1.4	93.5	Analog	0.1000	3
No Gas	Ge	72	624754.22	1.5	95.3	Pulse	0.1000	3
H2	Sc	45	87784.57	1.3	106.9	Pulse	0.1000	3
H2	Ge	72	72005.13	1.3	105.4	Pulse	0.1000	3
H2	In	115	178241.82	1.0	104.5	Pulse	0.1000	3
He	Sc	45	23868.04	1.7	93.2	Pulse	0.1000	3
He	Ge	72	44278.47	3.2	93.2	Pulse	0.1000	3
He	In	115	37185.39	0.5	90.8	Pulse	0.1000	3
He	Tb	159	146162.09	0.4	91.7	Pulse	0.1000	3
He	Bi	209	106746.40	0.7	91.3	Pulse	0.1000	3

No Gas

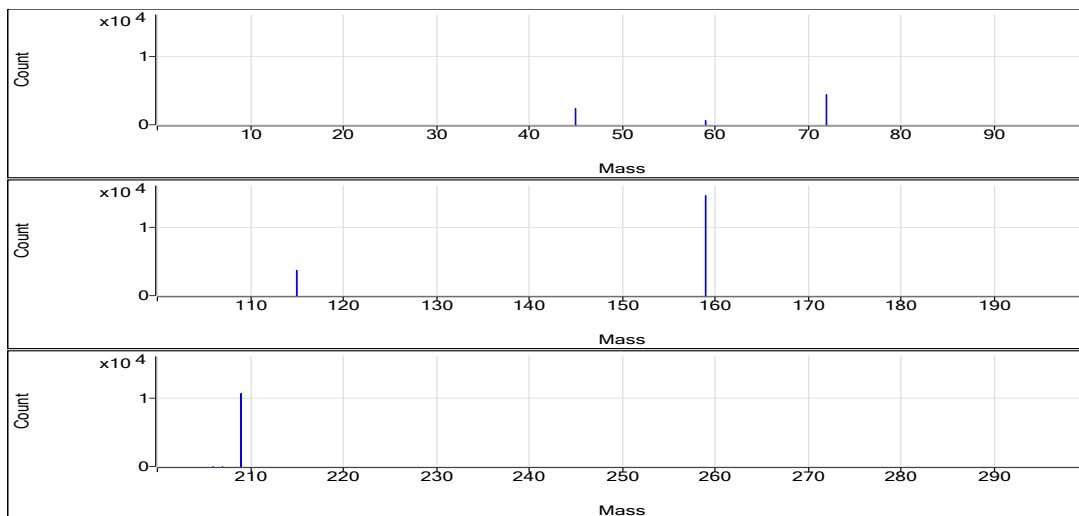


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Co	59	3	He	0.854	0.0303	1312.06	0.0332	0.001922
Co	59	3	He	0.875	0.031	1352.06	0.0332	0.001922
Co	59	3	He	0.779	0.0278	1276.06	0.0332	0.001922
Sc	45	1	No Gas			1214648.19		
Sc	45	1	No Gas			1209065.22		
Sc	45	1	No Gas			1240841.62		
Ge	72	1	No Gas			625106.51		
Ge	72	1	No Gas			615009.87		
Ge	72	1	No Gas			634146.28		
Sc	45	2	H2			87664.08		
Sc	45	2	H2			88991.42		
Sc	45	2	H2			86698.20		
Ge	72	2	H2			72453.80		
Ge	72	2	H2			72624.06		
Ge	72	2	H2			70937.53		
In	115	2	H2			176726.15		
In	115	2	H2			180130.62		
In	115	2	H2			177868.69		
Sc	45	3	He			24328.66		
Sc	45	3	He			23517.61		
Sc	45	3	He			23757.85		
Ge	72	3	He			43289.02		
Ge	72	3	He			43630.05		
Ge	72	3	He			45916.35		
In	115	3	He			37034.99		
In	115	3	He			37366.01		
In	115	3	He			37155.18		
Tb	159	3	He			145476.37		
Tb	159	3	He			146667.00		
Tb	159	3	He			146342.91		
Bi	209	3	He			107485.18		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106024.28		
Bi	209	3	He			106729.74		

Quantitation Report

Data File Name 208_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:19:53 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

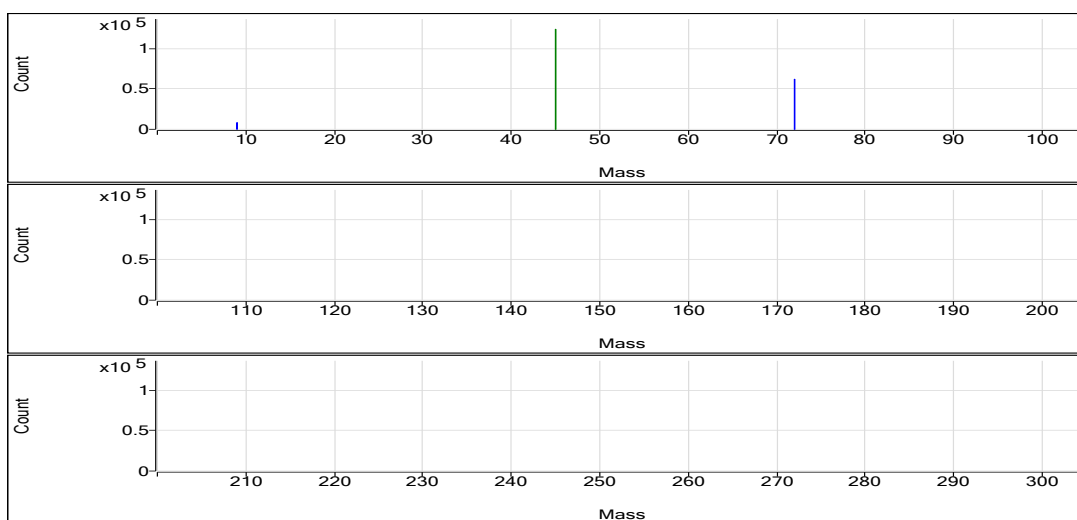
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.290	ppb	5.1	16755.70	0.0269	Pulse	0.5000	3
Se	78	72	H2	25.163	ppb	2.4	872.47	0.0128	Pulse	1.5000	3
Na	23	72	He	2505.088	ppb	0.5	209632.55	4.7224	Pulse	0.1000	3
Mg	24	72	He	2497.987	ppb	0.9	101884.35	2.2953	Pulse	0.1000	3
Al	27	72	He	2421.283	ppb	4.3	31310.18	0.7056	Pulse	0.1000	3
K	39	72	He	2504.640	ppb	4.6	98499.29	2.2195	Pulse	0.5000	3
Ca	44	72	He	2451.823	ppb	1.5	4489.97	0.1011	Pulse	0.5000	3
Ti	47	72	He	2441.143	ppb	1.2	33703.87	0.7593	Pulse	0.5000	3
V	51	72	He	244.549	ppb	1.1	148641.72	3.3487	Pulse	0.5000	3
Cr	52	72	He	244.285	ppb	1.1	186232.44	4.1955	Pulse	0.1000	3
Mn	55	72	He	243.360	ppb	0.9	78918.93	1.7779	Pulse	0.5000	3
Fe	57	72	He	2389.518	ppb	1.4	34477.26	0.7767	Pulse	0.1000	3
Co	59	72	He	245.204	ppb	1.2	361688.94	8.1484	Pulse	0.5000	3
Ni	60	72	He	244.457	ppb	1.1	101358.55	2.2834	Pulse	0.5000	3
Cu	63	72	He	242.672	ppb	1.2	291187.10	6.5601	Pulse	0.5000	3
Zn	66	72	He	242.721	ppb	1.3	33656.31	0.7582	Pulse	0.5000	3
As	75	72	He	242.026	ppb	1.5	27426.75	0.6179	Pulse	0.5000	3
Sr	88	115	He	25.817	ppb	1.4	10180.26	0.2741	Pulse	0.1000	3
Mo	98	115	He	26.037	ppb	3.0	22763.78	0.6130	Pulse	0.1000	3
Ag	107	115	He	26.038	ppb	0.8	47693.63	1.2843	Pulse	0.1000	3
Cd	111	115	He	25.272	ppb	1.0	5265.58	0.1418	Pulse	0.5000	3
Sn	120	115	He	25.434	ppb	1.7	18201.12	0.4902	Pulse	0.1000	3
Sb	121	115	He	24.920	ppb	2.9	14937.30	0.4023	Pulse	0.3000	3
Ba	137	115	He	247.253	ppb	1.1	48517.87	1.3066	Pulse	0.1000	3
Tl	205	159	He	24.426	ppb	2.0	89602.26	0.6058	Pulse	0.1000	3
Pb	208	159	He	24.665	ppb	1.5	121480.27	0.8213	Pulse	0.1000	3
U	238	159	He	25.031	ppb	0.4	125095.00	0.8457	Pulse	0.1000	3

ISTD Table:

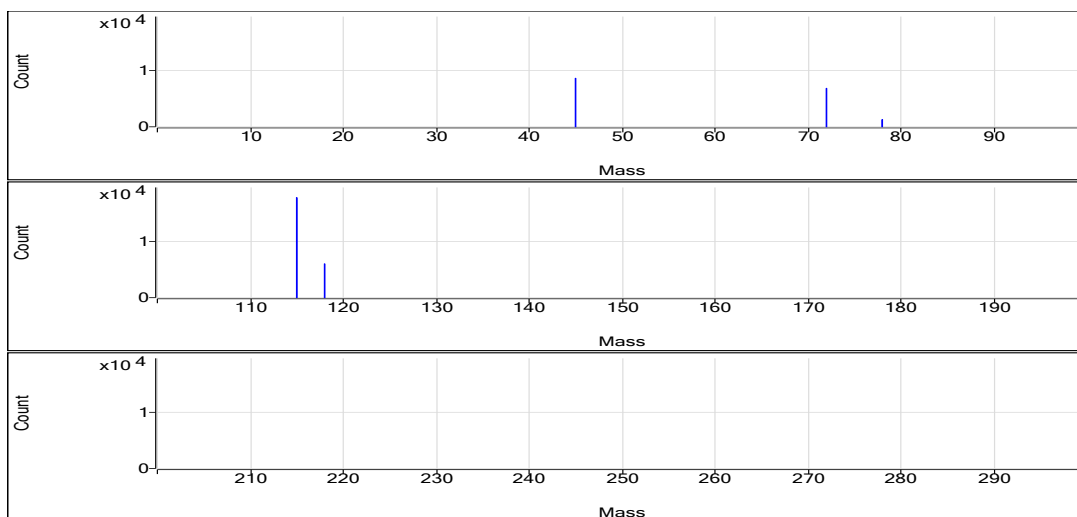
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1239136.75	0.7	94.8	Analog	0.1000	3
No Gas	Ge	72	621730.59	1.2	94.9	Pulse	0.1000	3
H2	Sc	45	86106.00	1.2	104.8	Pulse	0.1000	3
H2	Ge	72	68285.71	0.8	99.9	Pulse	0.1000	3
H2	In	115	177067.80	1.0	103.8	Pulse	0.1000	3
He	Sc	45	24719.30	1.7	96.5	Pulse	0.1000	3
He	Ge	72	44392.18	1.3	93.4	Pulse	0.1000	3
He	In	115	37134.70	1.1	90.7	Pulse	0.1000	3
He	Tb	159	147924.26	0.6	92.8	Pulse	0.1000	3
He	Bi	209	109245.70	2.4	93.4	Pulse	0.1000	3

No Gas

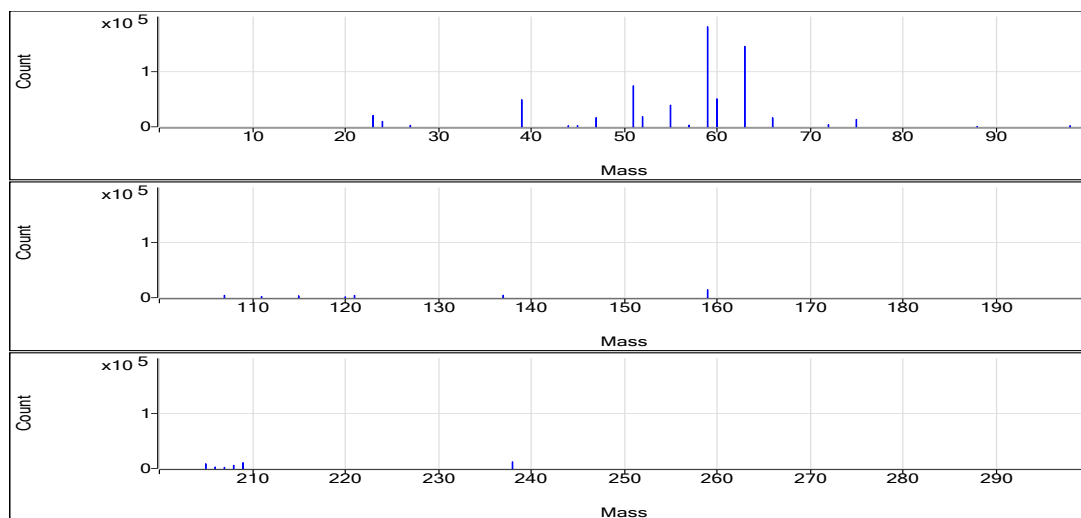


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.826	0.0254	15629.26	0.0011	7.835E-05
Be	9	1	No Gas	25.84	0.0275	17044.63	0.0011	7.835E-05
Be	9	1	No Gas	26.204	0.0279	17593.21	0.0011	7.835E-05
Se	78	2	H2	24.504	0.0124	851.36	0.0005	2.594E-05
Se	78	2	H2	25.312	0.0129	884.03	0.0005	2.594E-05
Se	78	2	H2	25.672	0.013	882.03	0.0005	2.594E-05
Na	23	3	He	2518.632	4.747	208063.47	0.0018	0.1731
Na	23	3	He	2501.218	4.7154	212023.34	0.0018	0.1731
Na	23	3	He	2495.413	4.7048	208810.84	0.0018	0.1731
Mg	24	3	He	2511.312	2.3075	101136.93	0.0009	0.006537
Mg	24	3	He	2471.476	2.271	102111.85	0.0009	0.006537
Mg	24	3	He	2511.174	2.3073	102404.26	0.0009	0.006537
Al	27	3	He	2499.591	0.7283	31921.49	0.0003	0.00231
Al	27	3	He	2303.636	0.6714	30188.12	0.0003	0.00231
Al	27	3	He	2460.621	0.717	31820.93	0.0003	0.00231
K	39	3	He	2637.98	2.3192	101649.84	0.0007	0.3475
K	39	3	He	2429.002	2.163	97256.02	0.0007	0.3475
K	39	3	He	2446.938	2.1764	96592.02	0.0007	0.3475
Ca	44	3	He	2430.169	0.1003	4394.61	0	0.002807
Ca	44	3	He	2493.61	0.1028	4622.68	0	0.002807
Ca	44	3	He	2431.69	0.1003	4452.63	0	0.002807
Ti	47	3	He	2473.47	0.7693	33720.59	0.0003	0.0001123
Ti	47	3	He	2427.716	0.7551	33953.02	0.0003	0.0001123
Ti	47	3	He	2422.245	0.7534	33437.99	0.0003	0.0001123
V	51	3	He	247.019	3.3824	148252.42	0.0137	0.008308
V	51	3	He	241.727	3.3101	148837.36	0.0137	0.008308
V	51	3	He	244.902	3.3535	148835.38	0.0137	0.008308
Cr	52	3	He	245.562	4.2173	184846.40	0.0171	0.02156
Cr	52	3	He	241.236	4.1434	186304.04	0.0171	0.02156
Cr	52	3	He	246.056	4.2257	187546.89	0.0171	0.02156
Mn	55	3	He	245.5	1.7935	78610.20	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	241.207	1.7622	79235.29	0.0073	0.002316
Mn	55	3	He	243.374	1.778	78911.30	0.0073	0.002316
Fe	57	3	He	2417.847	0.7859	34447.04	0.0003	0.002736
Fe	57	3	He	2353.247	0.765	34397.19	0.0003	0.002736
Fe	57	3	He	2397.462	0.7793	34587.56	0.0003	0.002736
Co	59	3	He	247.395	8.2212	360337.34	0.0332	0.001922
Co	59	3	He	241.747	8.0335	361221.31	0.0332	0.001922
Co	59	3	He	246.469	8.1904	363508.16	0.0332	0.001922
Ni	60	3	He	246.359	2.3012	100862.02	0.0093	0.003141
Ni	60	3	He	241.43	2.2552	101403.71	0.0093	0.003141
Ni	60	3	He	245.582	2.2939	101809.91	0.0093	0.003141
Cu	63	3	He	245.41	6.634	290772.25	0.027	0.003732
Cu	63	3	He	239.761	6.4814	291431.44	0.027	0.003732
Cu	63	3	He	242.846	6.5648	291357.63	0.027	0.003732
Zn	66	3	He	246.318	0.7694	33725.14	0.0031	0.002032
Zn	66	3	He	240.263	0.7506	33749.19	0.0031	0.002032
Zn	66	3	He	241.581	0.7547	33494.60	0.0031	0.002032
As	75	3	He	245.805	0.6275	27505.56	0.0025	0.0007733
As	75	3	He	238.447	0.6088	27373.40	0.0025	0.0007733
As	75	3	He	241.825	0.6174	27401.29	0.0025	0.0007733
Sr	88	3	He	26.127	0.2774	10373.67	0.0105	0.004071
Sr	88	3	He	25.413	0.2699	10073.48	0.0105	0.004071
Sr	88	3	He	25.911	0.2751	10093.63	0.0105	0.004071
Mo	98	3	He	25.179	0.593	22176.30	0.0234	0.003908
Mo	98	3	He	26.712	0.6288	23468.01	0.0234	0.003908
Mo	98	3	He	26.219	0.6173	22647.04	0.0234	0.003908
Ag	107	3	He	26.03	1.2839	48014.40	0.0493	0.0004851
Ag	107	3	He	26.254	1.2949	48325.81	0.0493	0.0004851
Ag	107	3	He	25.831	1.274	46740.67	0.0493	0.0004851
Cd	111	3	He	25.166	0.1412	5280.92	0.0056	0
Cd	111	3	He	25.085	0.1408	5252.92	0.0056	0
Cd	111	3	He	25.566	0.1435	5262.91	0.0056	0
Sn	120	3	He	25.417	0.4899	18321.25	0.0169	0.0609
Sn	120	3	He	25.001	0.4829	18020.90	0.0169	0.0609
Sn	120	3	He	25.883	0.4978	18261.21	0.0169	0.0609
Sb	121	3	He	24.313	0.3925	14680.37	0.0161	0.0005433
Sb	121	3	He	24.73	0.3993	14900.63	0.0161	0.0005433
Sb	121	3	He	25.716	0.4152	15230.91	0.0161	0.0005433
Ba	137	3	He	244.934	1.2944	48407.40	0.0053	0.001141
Ba	137	3	He	246.569	1.303	48628.06	0.0053	0.001141
Ba	137	3	He	250.258	1.3225	48518.15	0.0053	0.001141
Tl	205	3	He	24.507	0.6078	89926.50	0.0248	0.0005854
Tl	205	3	He	23.906	0.5929	88206.33	0.0248	0.0005854
Tl	205	3	He	24.863	0.6166	90673.95	0.0248	0.0005854
Pb	208	3	He	24.368	0.8114	64151.67	0.0332	0.001693
Pb	208	3	He	24.54	0.8171	64654.43	0.0332	0.001693
Pb	208	3	He	25.088	0.8353	63910.68	0.0332	0.001693
U	238	3	He	25.036	0.8459	125146.47	0.0338	0.0007949
U	238	3	He	24.916	0.8418	125234.67	0.0338	0.0007949
U	238	3	He	25.141	0.8494	124903.85	0.0338	0.0007949
Sc	45	1	No Gas			1230068.50		
Sc	45	1	No Gas			1240366.93		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1246974.83		
Ge	72	1	No Gas			615654.95		
Ge	72	1	No Gas			619227.65		
Ge	72	1	No Gas			630309.17		
Sc	45	2	H2			86428.22		
Sc	45	2	H2			86930.13		
Sc	45	2	H2			84959.64		
Ge	72	2	H2			68416.21		
Ge	72	2	H2			68778.00		
Ge	72	2	H2			67662.93		
In	115	2	H2			178037.36		
In	115	2	H2			175037.50		
In	115	2	H2			178128.53		
Sc	45	3	He			24238.53		
Sc	45	3	He			24859.57		
Sc	45	3	He			25059.79		
Ge	72	3	He			43830.37		
Ge	72	3	He			44964.11		
Ge	72	3	He			44382.05		
In	115	3	He			37526.11		
In	115	3	He			37445.67		
In	115	3	He			36814.56		
Tb	159	3	He			147953.37		
Tb	159	3	He			148769.82		
Tb	159	3	He			147049.60		
Bi	209	3	He			106408.74		
Bi	209	3	He			111706.23		
Bi	209	3	He			109622.14		

Quantitation Report

Data File Name 210_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:24:19 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

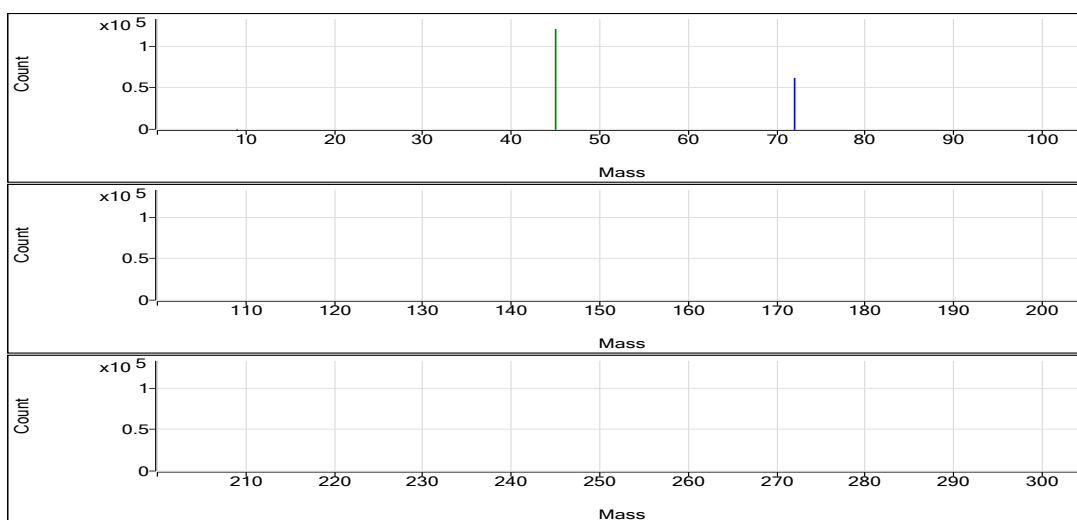
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.052	ppb	32.6	82.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.005	ppb	363.4	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	-1.300	ppb	N/A	7658.64	0.1707	Pulse	0.1000	3
Mg	24	72	He	3.252	ppb	27.5	426.69	0.0095	Pulse	0.1000	3
Al	27	72	He	-4.386	ppb	N/A	46.67	0.0010	Pulse	0.1000	3
K	39	72	He	18.384	ppb	469.7	16179.49	0.3612	Pulse	0.5000	3
Ca	44	72	He	3.365	ppb	239.9	132.00	0.0029	Pulse	0.5000	3
Ti	47	72	He	0.209	ppb	179.2	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.001	ppb	9288.3	373.34	0.0083	Pulse	0.5000	3
Cr	52	72	He	-0.145	ppb	N/A	856.72	0.0191	Pulse	0.1000	3
Mn	55	72	He	0.218	ppb	11.1	175.33	0.0039	Pulse	0.5000	3
Fe	57	72	He	-0.187	ppb	N/A	120.00	0.0027	Pulse	0.1000	3
Co	59	72	He	0.027	ppb	73.0	126.00	0.0028	Pulse	0.5000	3
Ni	60	72	He	0.047	ppb	184.1	160.67	0.0036	Pulse	0.5000	3
Cu	63	72	He	-0.014	ppb	N/A	150.00	0.0033	Pulse	0.5000	3
Zn	66	72	He	-0.223	ppb	N/A	60.00	0.0013	Pulse	0.5000	3
As	75	72	He	0.035	ppb	138.6	38.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.253	ppb	N/A	53.33	0.0014	Pulse	0.1000	3
Mo	98	115	He	-0.068	ppb	N/A	86.67	0.0023	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	6.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.120	ppb	211.1	2356.93	0.0629	Pulse	0.1000	3
Sb	121	115	He	0.047	ppb	48.4	48.89	0.0013	Pulse	0.3000	3
Ba	137	115	He	-0.081	ppb	N/A	26.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	147.3	123.34	0.0008	Pulse	0.1000	3
Pb	208	159	He	-0.012	ppb	N/A	190.00	0.0013	Pulse	0.1000	3
U	238	159	He	0.000	ppb	N/A	113.34	0.0008	Pulse	0.1000	3

ISTD Table:

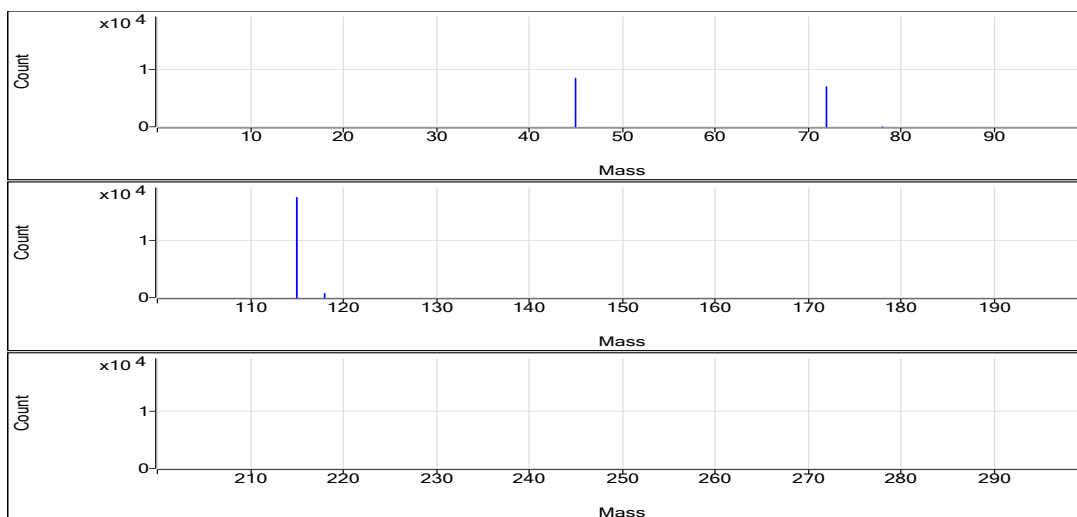
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1209385.79	0.9	92.5	Analog	0.1000	3
No Gas	Ge	72	617833.07	1.2	94.3	Pulse	0.1000	3
H2	Sc	45	84996.58	1.0	103.5	Pulse	0.1000	3
H2	Ge	72	69983.04	1.5	102.4	Pulse	0.1000	3
H2	In	115	175136.68	0.6	102.7	Pulse	0.1000	3
He	Sc	45	24692.49	3.1	96.4	Pulse	0.1000	3
He	Ge	72	44863.66	1.4	94.4	Pulse	0.1000	3
He	In	115	37459.44	0.4	91.5	Pulse	0.1000	3
He	Tb	159	145249.25	1.0	91.1	Pulse	0.1000	3
He	Bi	209	108453.16	1.8	92.7	Pulse	0.1000	3

No Gas

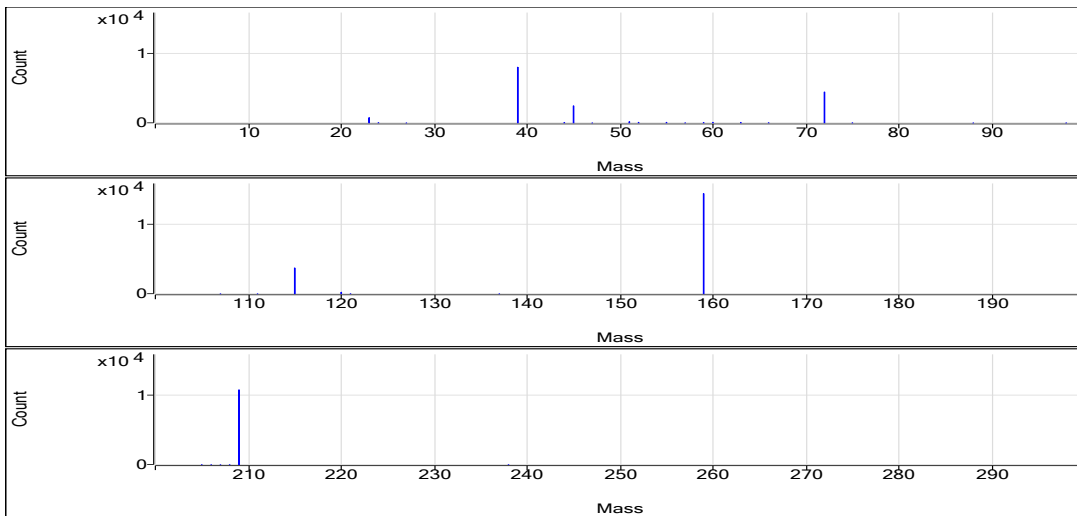


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.054	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.068	0.0002	94.00	0.0011	7.835E-05
Be	9	1	No Gas	0.034	0.0001	70.00	0.0011	7.835E-05
Se	78	2	H2	0.024	0	2.67	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.004	0	2.00	0.0005	2.594E-05
Na	23	3	He	-2.395	0.1687	7451.88	0.0018	0.1731
Na	23	3	He	-1.831	0.1697	7651.97	0.0018	0.1731
Na	23	3	He	0.326	0.1736	7872.07	0.0018	0.1731
Mg	24	3	He	3.985	0.0102	450.02	0.0009	0.006537
Mg	24	3	He	3.517	0.0098	440.02	0.0009	0.006537
Mg	24	3	He	2.255	0.0086	390.02	0.0009	0.006537
Al	27	3	He	-5.615	0.0007	30.00	0.0003	0.00231
Al	27	3	He	-6.426	0.0004	20.00	0.0003	0.00231
Al	27	3	He	-1.118	0.002	90.00	0.0003	0.00231
K	39	3	He	115.05	0.4335	19147.27	0.0007	0.3475
K	39	3	He	-8.75	0.3409	15371.20	0.0007	0.3475
K	39	3	He	-51.147	0.3093	14020.00	0.0007	0.3475
Ca	44	3	He	3.399	0.0029	130.00	0	0.002807
Ca	44	3	He	-4.723	0.0026	118.00	0	0.002807
Ca	44	3	He	11.417	0.0033	148.00	0	0.002807
Ti	47	3	He	-0.215	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.495	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	0.348	0.0002	10.00	0.0003	0.0001123
V	51	3	He	-0.041	0.0077	342.01	0.0137	0.008308
V	51	3	He	0.09	0.0095	430.01	0.0137	0.008308
V	51	3	He	-0.046	0.0077	348.01	0.0137	0.008308
Cr	52	3	He	-0.202	0.0181	800.05	0.0171	0.02156
Cr	52	3	He	-0.249	0.0173	780.04	0.0171	0.02156
Cr	52	3	He	0.016	0.0218	990.07	0.0171	0.02156
Mn	55	3	He	0.235	0.004	178.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.23	0.004	180.00	0.0073	0.002316
Mn	55	3	He	0.19	0.0037	168.00	0.0073	0.002316
Fe	57	3	He	-0.059	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	-0.228	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	-0.274	0.0026	120.00	0.0003	0.002736
Co	59	3	He	0.048	0.0035	156.00	0.0332	0.001922
Co	59	3	He	0.01	0.0023	102.00	0.0332	0.001922
Co	59	3	He	0.022	0.0026	120.00	0.0332	0.001922
Ni	60	3	He	-0.026	0.0029	128.00	0.0093	0.003141
Ni	60	3	He	0.025	0.0034	152.00	0.0093	0.003141
Ni	60	3	He	0.141	0.0045	202.00	0.0093	0.003141
Cu	63	3	He	-0.016	0.0033	146.00	0.027	0.003732
Cu	63	3	He	0	0.0037	168.00	0.027	0.003732
Cu	63	3	He	-0.027	0.003	136.00	0.027	0.003732
Zn	66	3	He	-0.274	0.0012	52.00	0.0031	0.002032
Zn	66	3	He	-0.254	0.0012	56.00	0.0031	0.002032
Zn	66	3	He	-0.142	0.0016	72.00	0.0031	0.002032
As	75	3	He	0.087	0.001	44.00	0.0025	0.0007733
As	75	3	He	0.027	0.0008	38.00	0.0025	0.0007733
As	75	3	He	-0.009	0.0007	34.00	0.0025	0.0007733
Sr	88	3	He	-0.287	0.0011	40.00	0.0105	0.004071
Sr	88	3	He	-0.211	0.0019	70.00	0.0105	0.004071
Sr	88	3	He	-0.262	0.0013	50.00	0.0105	0.004071
Mo	98	3	He	-0.075	0.0021	80.00	0.0234	0.003908
Mo	98	3	He	-0.053	0.0027	100.00	0.0234	0.003908
Mo	98	3	He	-0.076	0.0021	80.00	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	0.378	0.0673	2510.29	0.0169	0.0609
Sn	120	3	He	0.109	0.0627	2360.25	0.0169	0.0609
Sn	120	3	He	-0.127	0.0588	2200.24	0.0169	0.0609
Sb	121	3	He	0.055	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	0.065	0.0016	60.00	0.0161	0.0005433
Sb	121	3	He	0.021	0.0009	33.33	0.0161	0.0005433
Ba	137	3	He	-0.165	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	-0.115	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	0.037	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	0.016	0.001	140.01	0.0248	0.0005854
Tl	205	3	He	0.023	0.0012	170.01	0.0248	0.0005854
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Pb	208	3	He	-0.009	0.0014	110.00	0.0332	0.001693
Pb	208	3	He	-0.018	0.0011	80.00	0.0332	0.001693
Pb	208	3	He	-0.007	0.0015	130.01	0.0332	0.001693
U	238	3	He	-0.009	0.0005	70.00	0.0338	0.0007949
U	238	3	He	0.005	0.001	140.00	0.0338	0.0007949
U	238	3	He	0.003	0.0009	130.01	0.0338	0.0007949
Sc	45	1	No Gas			1207708.19		
Sc	45	1	No Gas			1221098.65		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1199350.53		
Ge	72	1	No Gas			616618.55		
Ge	72	1	No Gas			625544.60		
Ge	72	1	No Gas			611336.05		
Sc	45	2	H2			85924.77		
Sc	45	2	H2			84658.52		
Sc	45	2	H2			84406.46		
Ge	72	2	H2			70173.20		
Ge	72	2	H2			68878.53		
Ge	72	2	H2			70897.38		
In	115	2	H2			175064.74		
In	115	2	H2			174185.54		
In	115	2	H2			176159.76		
Sc	45	3	He			24639.05		
Sc	45	3	He			25480.39		
Sc	45	3	He			23958.04		
Ge	72	3	He			44171.75		
Ge	72	3	He			45084.37		
Ge	72	3	He			45334.85		
In	115	3	He			37325.39		
In	115	3	He			37636.33		
In	115	3	He			37466.10		
Tb	159	3	He			144146.13		
Tb	159	3	He			146932.00		
Tb	159	3	He			144669.61		
Bi	209	3	He			106418.45		
Bi	209	3	He			110185.83		
Bi	209	3	He			108755.20		

Quantitation Report

Data File Name 211SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:26:31 PM
Sample Name 410-234631-G-4-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

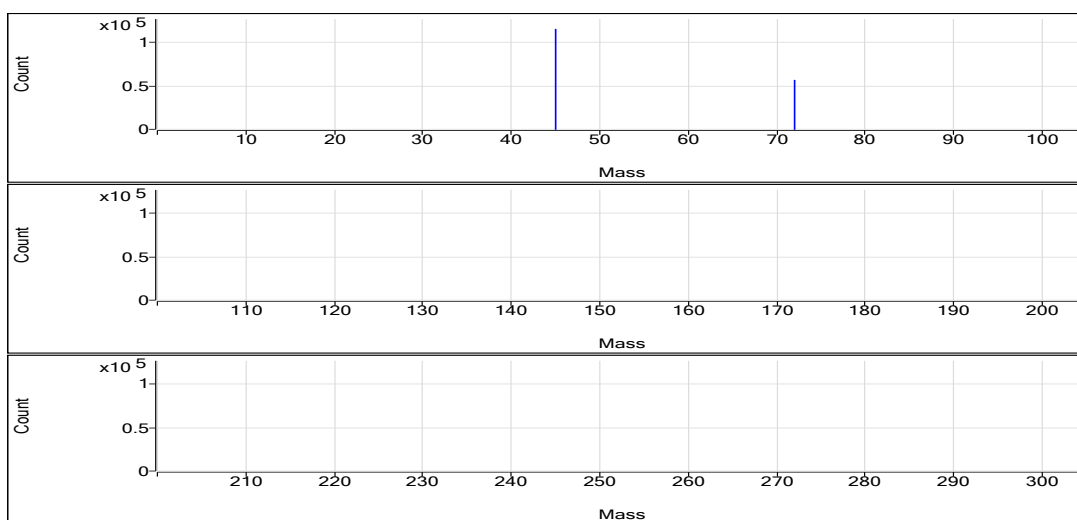
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	0.525	ppb	13.5	82.67	0.0021	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.024	ppb	87.0	31.11	0.0009	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.003	ppb	N/A	70.00	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.008	ppb	N/A	196.67	0.0014	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

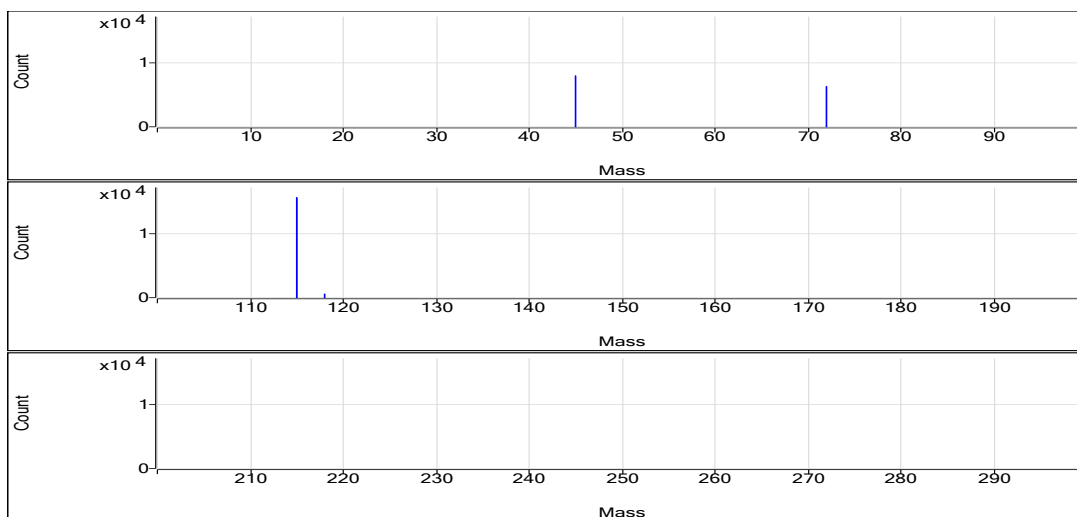
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1155417.79	2.3	88.4	Pulse	0.1000	3
No Gas	Ge	72	568313.43	2.6	86.7	Pulse	0.1000	3
H2	Sc	45	79516.36	2.0	96.8	Pulse	0.1000	3
H2	Ge	72	62900.77	1.0	92.0	Pulse	0.1000	3
H2	In	115	156084.34	1.0	91.5	Pulse	0.1000	3
He	Sc	45	21261.01	1.7	83.0	Pulse	0.1000	3
He	Ge	72	39151.89	1.6	82.4	Pulse	0.1000	3
He	In	115	33520.22	1.9	81.9	Pulse	0.1000	3
He	Tb	159	138770.99	1.4	87.0	Pulse	0.1000	3
He	Bi	209	94258.02	1.1	80.6	Pulse	0.1000	3

No Gas

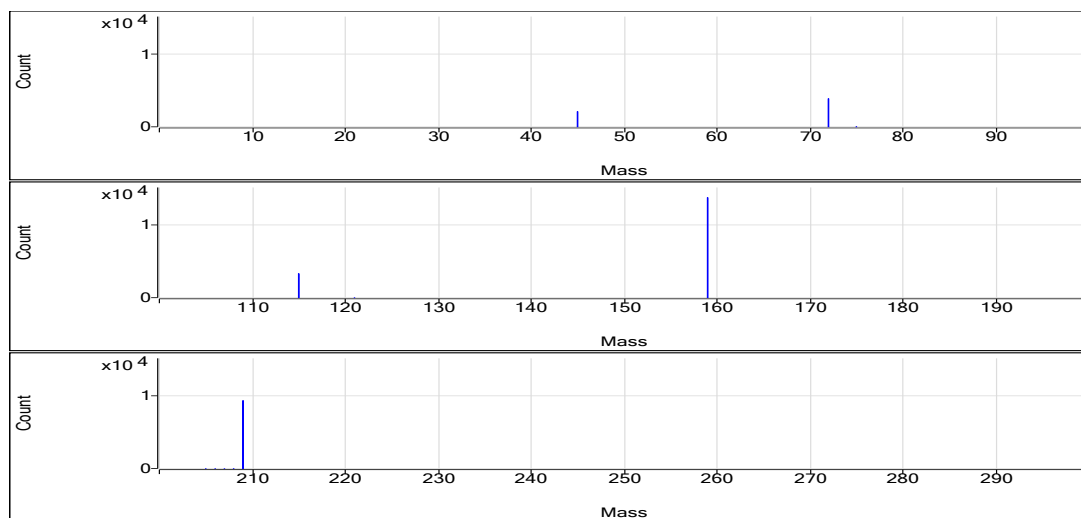


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	0.595	0.0023	88.00	0.0025	0.0007733
As	75	3	He	0.453	0.0019	76.00	0.0025	0.0007733
As	75	3	He	0.528	0.0021	84.00	0.0025	0.0007733
Sb	121	3	He	0.045	0.0013	43.33	0.0161	0.0005433
Sb	121	3	He	0.023	0.0009	30.00	0.0161	0.0005433
Sb	121	3	He	0.004	0.0006	20.00	0.0161	0.0005433
Tl	205	3	He	-0.009	0.0004	50.00	0.0248	0.0005854
Tl	205	3	He	-0.009	0.0004	50.00	0.0248	0.0005854
Tl	205	3	He	0.008	0.0008	110.00	0.0248	0.0005854
Pb	208	3	He	0.006	0.0019	160.01	0.0332	0.001693
Pb	208	3	He	-0.025	0.0009	80.00	0.0332	0.001693
Pb	208	3	He	-0.006	0.0015	140.01	0.0332	0.001693
Sc	45	1	No Gas			1175639.51		
Sc	45	1	No Gas			1165895.61		
Sc	45	1	No Gas			1124718.26		
Ge	72	1	No Gas			581109.76		
Ge	72	1	No Gas			572043.23		
Ge	72	1	No Gas			551787.30		
Sc	45	2	H2			81351.80		
Sc	45	2	H2			78628.30		
Sc	45	2	H2			78568.98		
Ge	72	2	H2			62883.65		
Ge	72	2	H2			62251.78		
Ge	72	2	H2			63566.87		
In	115	2	H2			156481.83		
In	115	2	H2			157330.23		
In	115	2	H2			154440.96		
Sc	45	3	He			21664.81		
Sc	45	3	He			21124.33		
Sc	45	3	He			20993.88		
Ge	72	3	He			38426.88		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			39389.19		
Ge	72	3	He			39639.60		
In	115	3	He			34258.68		
In	115	3	He			33065.93		
In	115	3	He			33236.05		
Tb	159	3	He			137602.79		
Tb	159	3	He			137634.45		
Tb	159	3	He			141075.72		
Bi	209	3	He			93057.38		
Bi	209	3	He			94837.53		
Bi	209	3	He			94879.14		

Quantitation Report

Data File Name 212SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:28:07 PM
Sample Name 410-234631-R-1-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

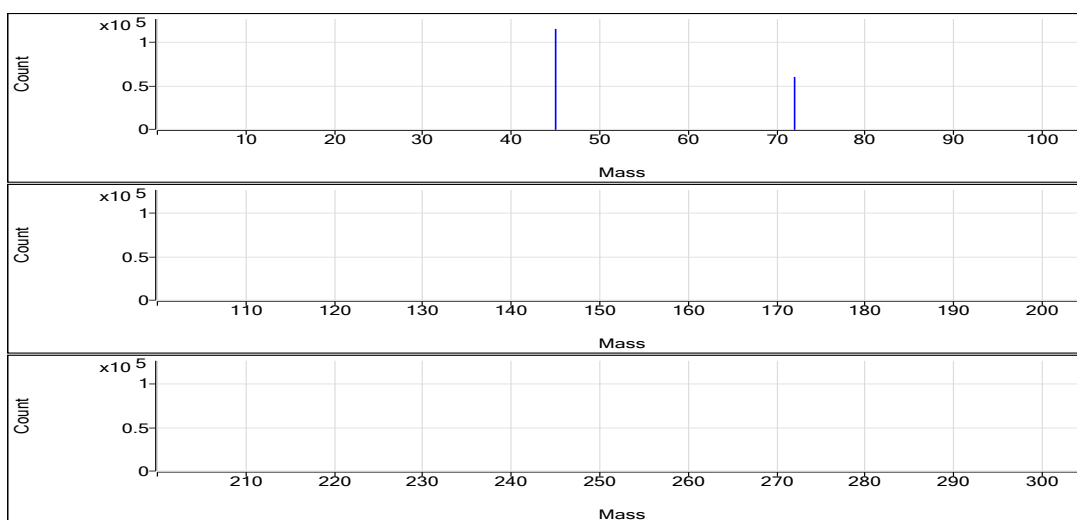
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	0.056	ppb	112.8	40.67	0.0009	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.004	ppb	246.4	23.33	0.0006	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.006	ppb	N/A	66.67	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.013	ppb	56.0	313.34	0.0021	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

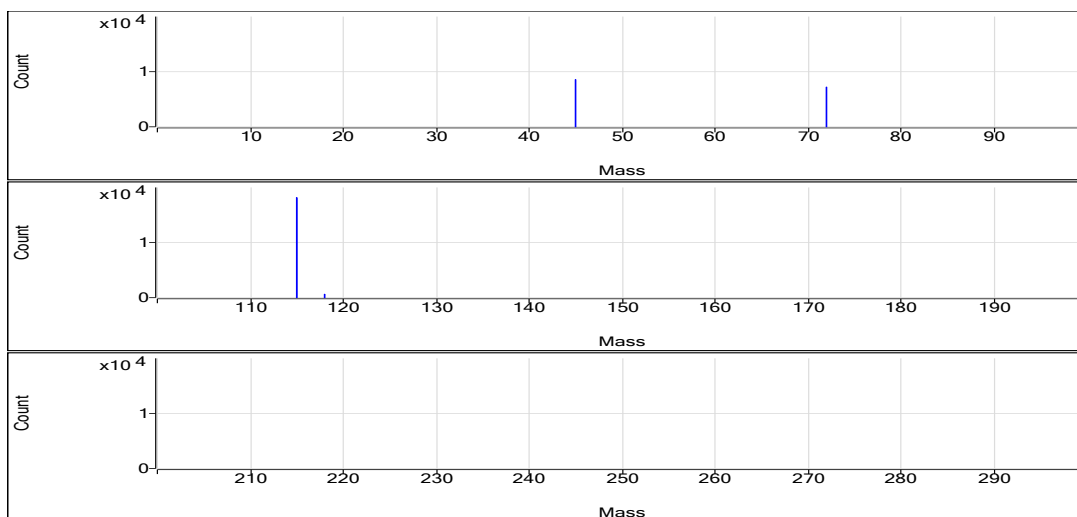
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1155220.17	0.6	88.4	Pulse	0.1000	3
No Gas	Ge	72	600849.93	0.6	91.7	Pulse	0.1000	3
H2	Sc	45	85566.80	2.7	104.2	Pulse	0.1000	3
H2	Ge	72	72112.56	3.3	105.5	Pulse	0.1000	3
H2	In	115	181151.72	2.8	106.2	Pulse	0.1000	3
He	Sc	45	23584.16	0.8	92.1	Pulse	0.1000	3
He	Ge	72	44482.52	2.4	93.6	Pulse	0.1000	3
He	In	115	38231.31	3.2	93.4	Pulse	0.1000	3
He	Tb	159	148267.76	1.5	93.0	Pulse	0.1000	3
He	Bi	209	111922.03	0.4	95.7	Pulse	0.1000	3

No Gas

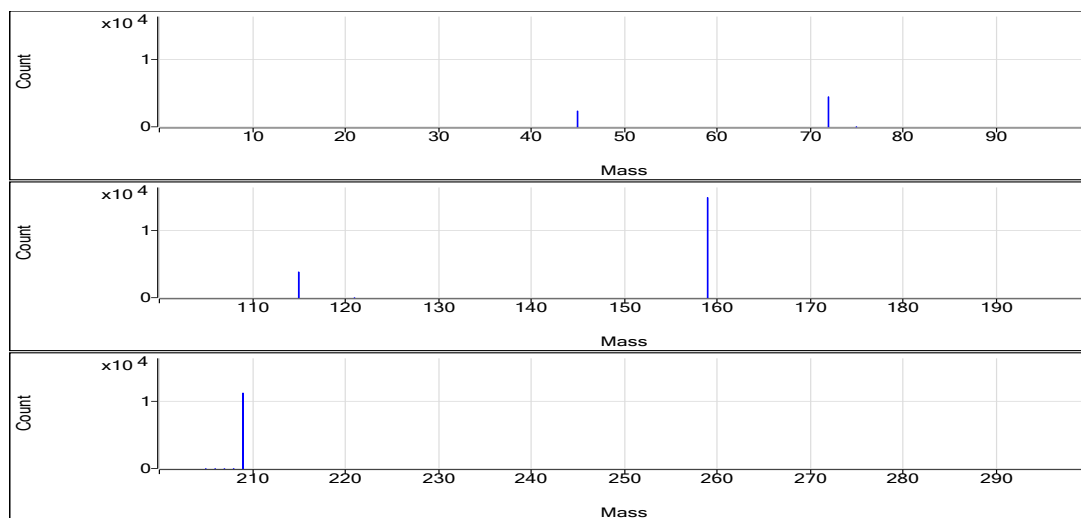


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	0.023	0.0008	38.00	0.0025	0.0007733
As	75	3	He	0.129	0.0011	48.00	0.0025	0.0007733
As	75	3	He	0.016	0.0008	36.00	0.0025	0.0007733
Sb	121	3	He	-0.006	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	0.005	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	0.013	0.0008	30.00	0.0161	0.0005433
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	0	0.0006	90.00	0.0248	0.0005854
Pb	208	3	He	0.021	0.0024	180.01	0.0332	0.001693
Pb	208	3	He	0.011	0.002	170.01	0.0332	0.001693
Pb	208	3	He	0.007	0.0019	190.01	0.0332	0.001693
Sc	45	1	No Gas			1160991.00		
Sc	45	1	No Gas			1156750.61		
Sc	45	1	No Gas			1147918.89		
Ge	72	1	No Gas			604152.57		
Ge	72	1	No Gas			596882.57		
Ge	72	1	No Gas			601514.64		
Sc	45	2	H2			82980.02		
Sc	45	2	H2			86498.40		
Sc	45	2	H2			87221.98		
Ge	72	2	H2			69631.17		
Ge	72	2	H2			74303.49		
Ge	72	2	H2			72403.01		
In	115	2	H2			175289.45		
In	115	2	H2			184927.15		
In	115	2	H2			183238.55		
Sc	45	3	He			23377.23		
Sc	45	3	He			23667.61		
Sc	45	3	He			23707.63		
Ge	72	3	He			45625.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			43570.08		
Ge	72	3	He			44251.89		
In	115	3	He			37887.40		
In	115	3	He			37235.21		
In	115	3	He			39571.33		
Tb	159	3	He			147173.81		
Tb	159	3	He			146788.65		
Tb	159	3	He			150840.81		
Bi	209	3	He			112393.21		
Bi	209	3	He			111647.11		
Bi	209	3	He			111725.77		

Quantitation Report

Data File Name 213SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:29:42 PM
Sample Name 410-234631-G-3-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

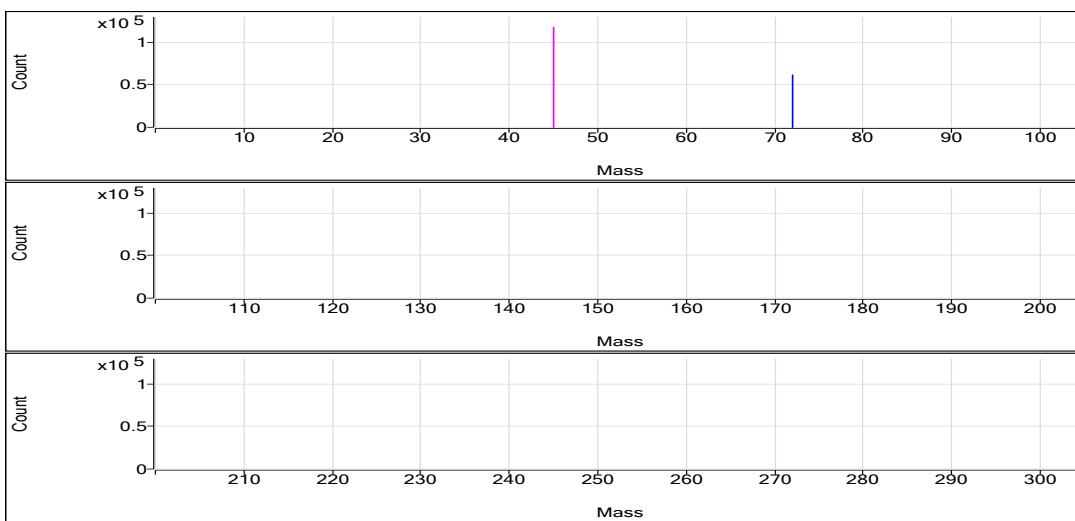
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	2.248	ppb	10.2	295.33	0.0065	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.039	ppb	105.1	45.56	0.0012	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.015	ppb	N/A	33.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.201	ppb	2.5	1250.07	0.0084	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

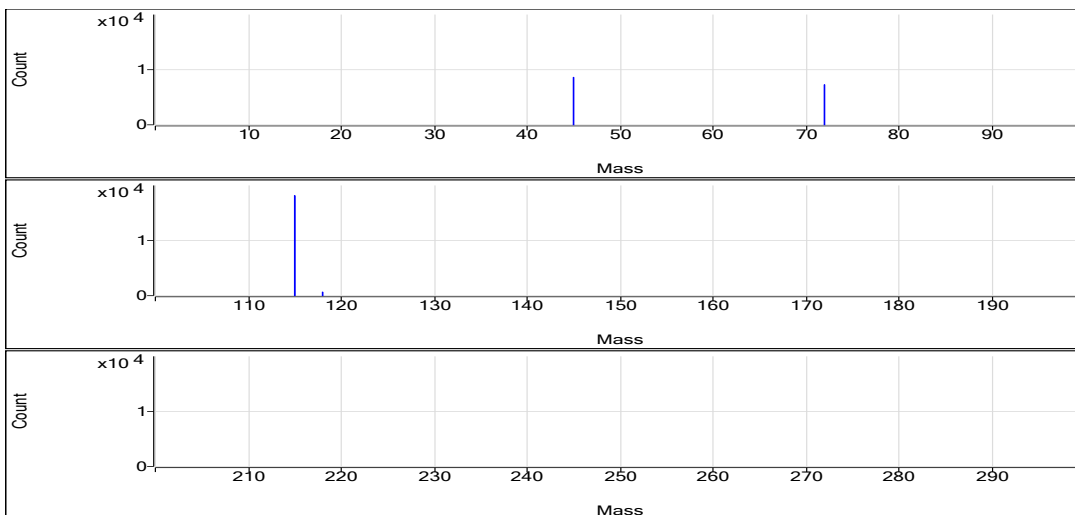
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1173499.80	2.0	89.8	Mix	0.1000	3
No Gas	Ge	72	615247.58	1.5	93.9	Pulse	0.1000	3
H2	Sc	45	85878.45	0.8	104.5	Pulse	0.1000	3
H2	Ge	72	72504.62	1.1	106.1	Pulse	0.1000	3
H2	In	115	180698.71	0.5	105.9	Pulse	0.1000	3
He	Sc	45	23617.65	1.1	92.2	Pulse	0.1000	3
He	Ge	72	45418.51	0.8	95.6	Pulse	0.1000	3
He	In	115	38662.03	0.8	94.4	Pulse	0.1000	3
He	Tb	159	149419.91	0.8	93.7	Pulse	0.1000	3
He	Bi	209	112029.61	1.0	95.8	Pulse	0.1000	3

No Gas

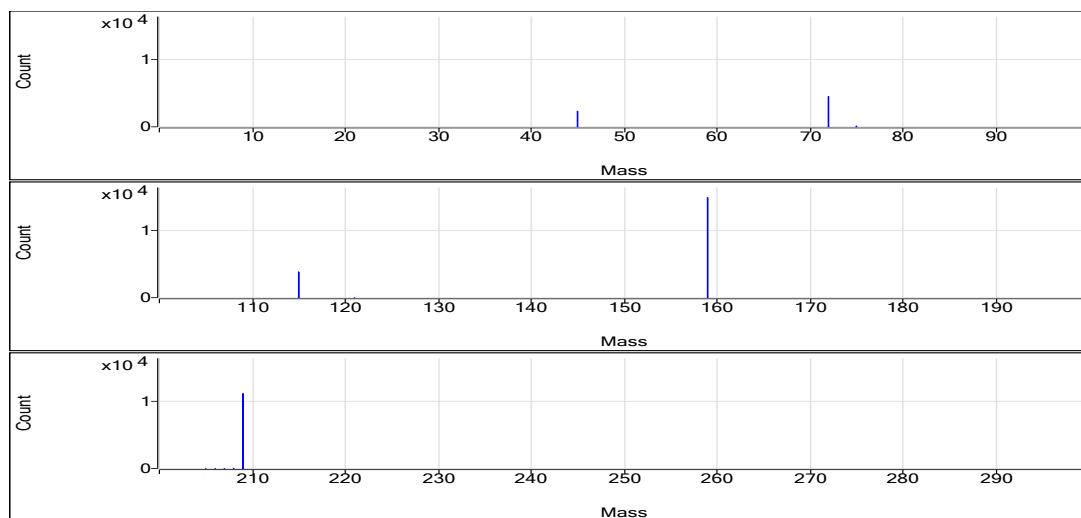


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	2.468	0.0071	318.00	0.0025	0.0007733
As	75	3	He	2.266	0.0066	298.00	0.0025	0.0007733
As	75	3	He	2.011	0.0059	270.00	0.0025	0.0007733
Sb	121	3	He	-0.007	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	0.053	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	0.073	0.0017	66.67	0.0161	0.0005433
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Pb	208	3	He	0.206	0.0085	600.04	0.0332	0.001693
Pb	208	3	He	0.2	0.0083	650.04	0.0332	0.001693
Pb	208	3	He	0.197	0.0082	650.04	0.0332	0.001693
Sc	45	1	No Gas			1198699.90		
Sc	45	1	No Gas			1153904.44		
Sc	45	1	No Gas			1167895.06		
Ge	72	1	No Gas			618591.05		
Ge	72	1	No Gas			604844.83		
Ge	72	1	No Gas			622306.87		
Sc	45	2	H2			85342.61		
Sc	45	2	H2			86689.32		
Sc	45	2	H2			85603.41		
Ge	72	2	H2			72434.54		
Ge	72	2	H2			71710.45		
Ge	72	2	H2			73368.87		
In	115	2	H2			179852.65		
In	115	2	H2			181620.21		
In	115	2	H2			180623.28		
Sc	45	3	He			23697.69		
Sc	45	3	He			23817.92		
Sc	45	3	He			23337.33		
Ge	72	3	He			45003.52		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			45495.56		
Ge	72	3	He			45756.45		
In	115	3	He			38738.93		
In	115	3	He			38317.76		
In	115	3	He			38929.39		
Tb	159	3	He			148547.88		
Tb	159	3	He			148954.34		
Tb	159	3	He			150757.50		
Bi	209	3	He			110719.39		
Bi	209	3	He			112553.38		
Bi	209	3	He			112816.07		

Quantitation Report

Data File Name 214SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:31:16 PM
Sample Name 410-234631-R-5-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

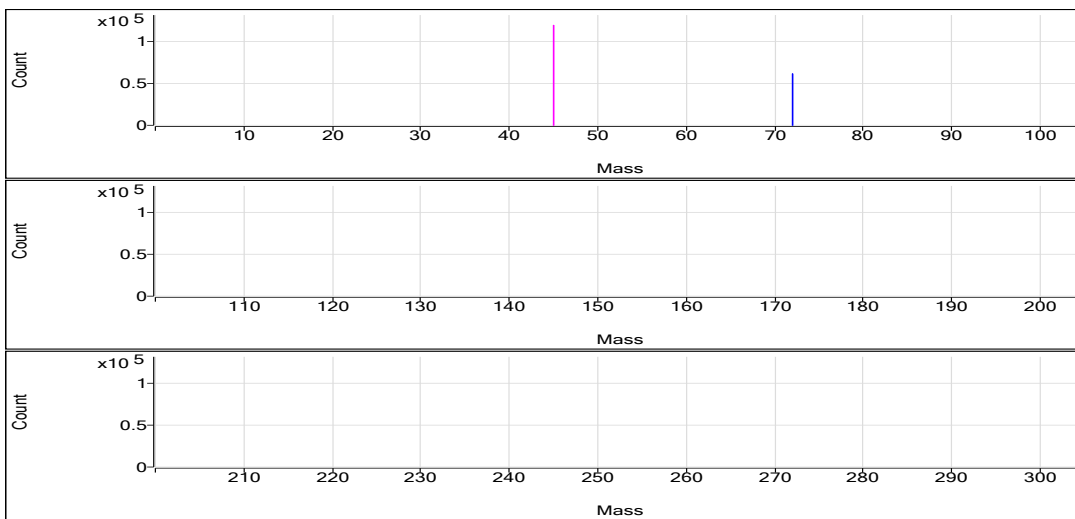
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	8.453	ppb	2.1	966.04	0.0223	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.074	ppb	23.8	65.56	0.0017	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.012	ppb	N/A	43.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.023	ppb	54.3	363.34	0.0025	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

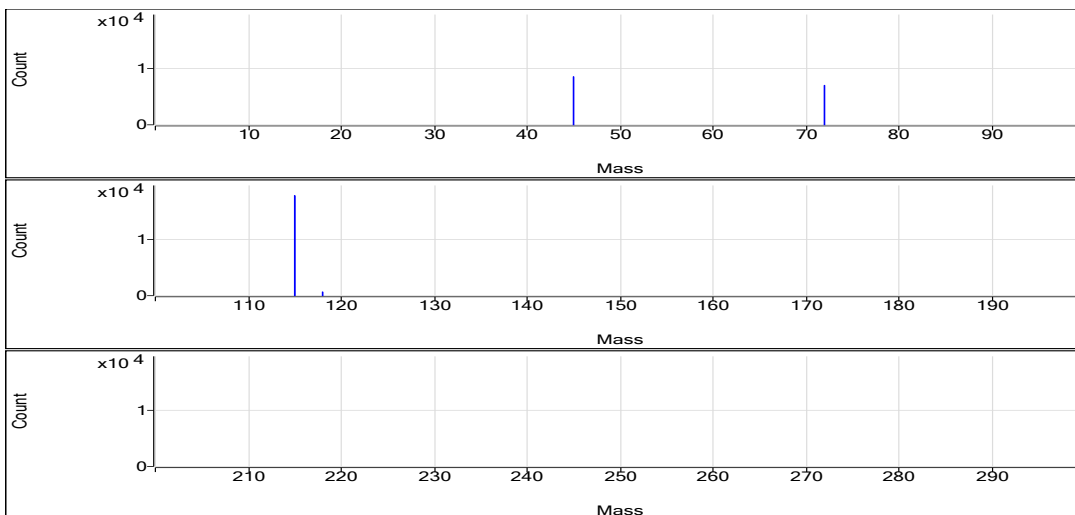
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1203945.37	1.3	92.1	Mix	0.1000	3
No Gas	Ge	72	620412.87	0.9	94.7	Pulse	0.1000	3
H2	Sc	45	85381.63	2.0	103.9	Pulse	0.1000	3
H2	Ge	72	70110.21	0.8	102.6	Pulse	0.1000	3
H2	In	115	177543.73	0.4	104.1	Pulse	0.1000	3
He	Sc	45	23807.86	2.2	93.0	Pulse	0.1000	3
He	Ge	72	43275.68	1.7	91.1	Pulse	0.1000	3
He	In	115	37863.38	2.3	92.5	Pulse	0.1000	3
He	Tb	159	147439.68	0.8	92.5	Pulse	0.1000	3
He	Bi	209	106612.86	1.0	91.2	Pulse	0.1000	3

No Gas

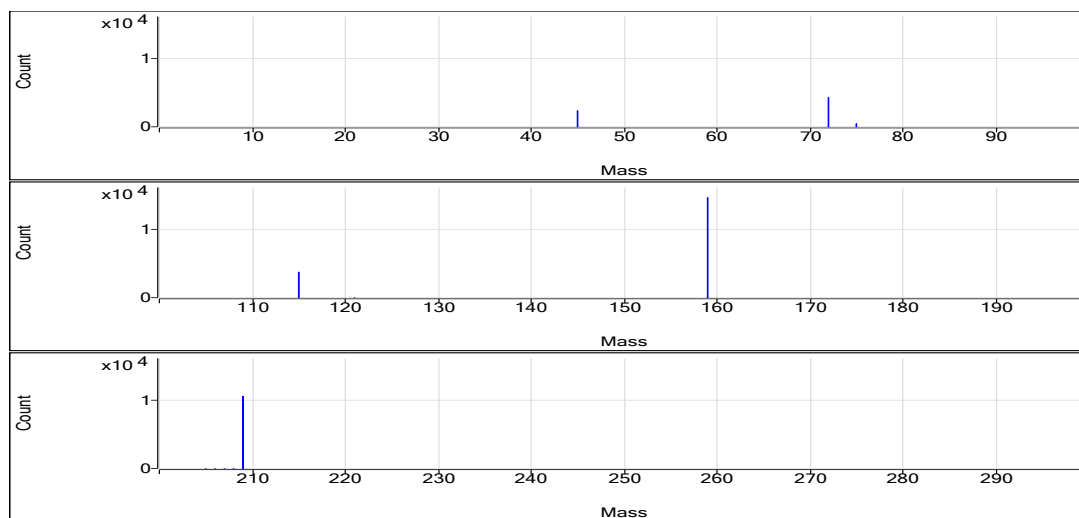


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	8.51	0.0225	966.04	0.0025	0.0007733
As	75	3	He	8.252	0.0218	962.04	0.0025	0.0007733
As	75	3	He	8.598	0.0227	970.04	0.0025	0.0007733
Sb	121	3	He	0.094	0.0021	76.67	0.0161	0.0005433
Sb	121	3	He	0.066	0.0016	60.00	0.0161	0.0005433
Sb	121	3	He	0.062	0.0015	60.00	0.0161	0.0005433
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	0.01	0.002	150.01	0.0332	0.001693
Pb	208	3	He	0.024	0.0025	190.01	0.0332	0.001693
Pb	208	3	He	0.035	0.0029	240.01	0.0332	0.001693
Sc	45	1	No Gas			1187122.48		
Sc	45	1	No Gas			1207122.17		
Sc	45	1	No Gas			1217591.47		
Ge	72	1	No Gas			617109.21		
Ge	72	1	No Gas			617263.51		
Ge	72	1	No Gas			626865.89		
Sc	45	2	H2			86406.54		
Sc	45	2	H2			86286.18		
Sc	45	2	H2			83452.17		
Ge	72	2	H2			70745.72		
Ge	72	2	H2			69652.48		
Ge	72	2	H2			69932.43		
In	115	2	H2			178020.76		
In	115	2	H2			177958.47		
In	115	2	H2			176651.97		
Sc	45	3	He			23547.55		
Sc	45	3	He			24398.65		
Sc	45	3	He			23477.38		
Ge	72	3	He			42987.98		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			44101.26		
Ge	72	3	He			42737.79		
In	115	3	He			37225.23		
In	115	3	He			37485.89		
In	115	3	He			38879.02		
Tb	159	3	He			147457.55		
Tb	159	3	He			148627.58		
Tb	159	3	He			146233.90		
Bi	209	3	He			106911.23		
Bi	209	3	He			107535.78		
Bi	209	3	He			105391.58		

Quantitation Report

Data File Name 215SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:32:52 PM
Sample Name 410-234631-G-6-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

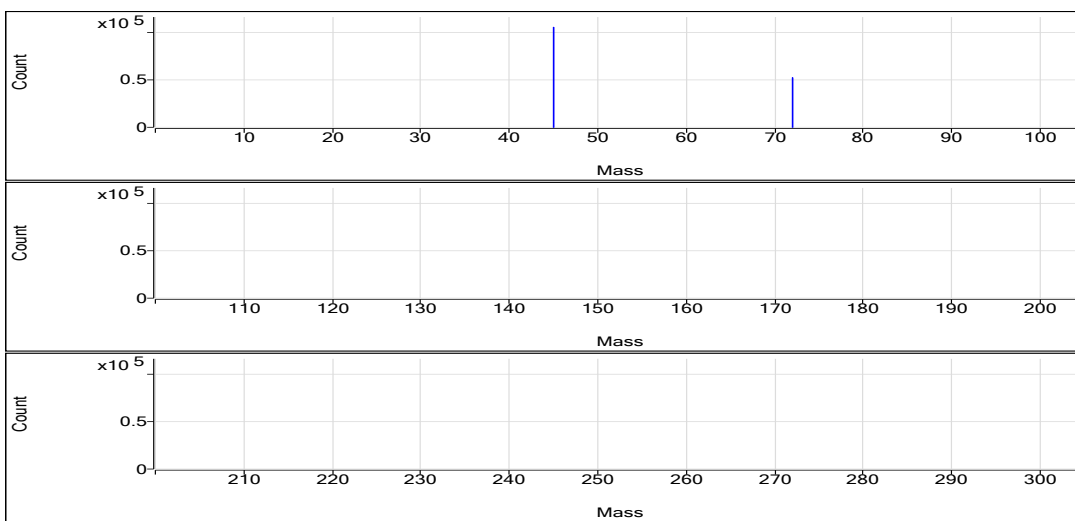
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	13.688	ppb	4.7	1357.40	0.0357	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.030	ppb	5.7	34.44	0.0010	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.010	ppb	N/A	46.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	-0.003	ppb	N/A	216.67	0.0016	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

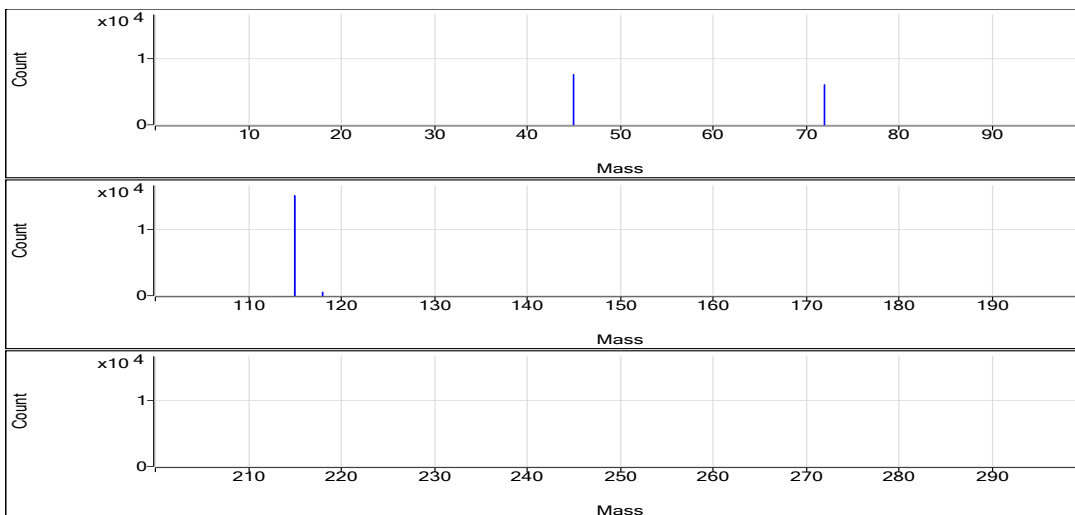
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1057513.60	0.7	80.9	Pulse	0.1000	3
No Gas	Ge	72	524926.32	0.7	80.1	Pulse	0.1000	3
H2	Sc	45	76512.54	1.9	93.1	Pulse	0.1000	3
H2	Ge	72	60916.29	2.9	89.1	Pulse	0.1000	3
H2	In	115	152077.41	2.0	89.1	Pulse	0.1000	3
He	Sc	45	20586.82	1.5	80.4	Pulse	0.1000	3
He	Ge	72	38062.42	1.5	80.1	Pulse	0.1000	3
He	In	115	33596.97	3.5	82.1	Pulse	0.1000	3
He	Tb	159	136634.22	0.3	85.7	Pulse	0.1000	3
He	Bi	209	94928.87	0.7	81.2	Pulse	0.1000	3

No Gas

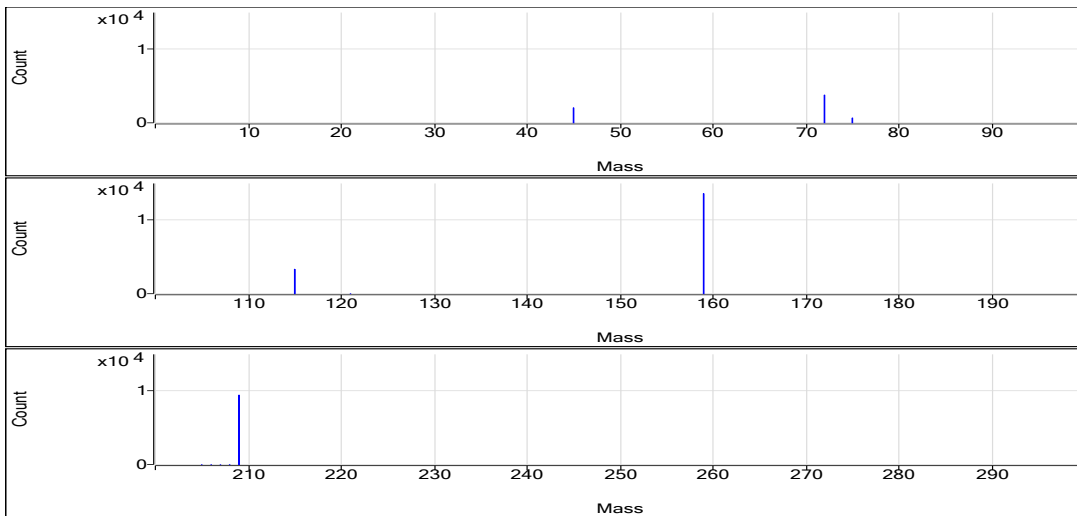


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	14.247	0.0371	1410.07	0.0025	0.0007733
As	75	3	He	13.835	0.0361	1352.07	0.0025	0.0007733
As	75	3	He	12.98	0.0339	1310.06	0.0025	0.0007733
Sb	121	3	He	0.032	0.0011	36.67	0.0161	0.0005433
Sb	121	3	He	0.03	0.001	33.33	0.0161	0.0005433
Sb	121	3	He	0.028	0.001	33.33	0.0161	0.0005433
Tl	205	3	He	-0.012	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.003	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	-0.003	0.0016	150.01	0.0332	0.001693
Pb	208	3	He	0	0.0017	100.00	0.0332	0.001693
Pb	208	3	He	-0.007	0.0015	120.00	0.0332	0.001693
Sc	45	1	No Gas			1048995.14		
Sc	45	1	No Gas			1059057.48		
Sc	45	1	No Gas			1064488.19		
Ge	72	1	No Gas			521643.78		
Ge	72	1	No Gas			524146.91		
Ge	72	1	No Gas			528988.27		
Sc	45	2	H2			78126.87		
Sc	45	2	H2			75313.49		
Sc	45	2	H2			76097.25		
Ge	72	2	H2			61920.13		
Ge	72	2	H2			58868.02		
Ge	72	2	H2			61960.73		
In	115	2	H2			152712.45		
In	115	2	H2			148816.43		
In	115	2	H2			154703.36		
Sc	45	3	He			20232.99		
Sc	45	3	He			20743.64		
Sc	45	3	He			20783.83		
Ge	72	3	He			38005.37		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			37504.32		
Ge	72	3	He			38677.56		
In	115	3	He			34849.77		
In	115	3	He			32524.75		
In	115	3	He			33416.40		
Tb	159	3	He			137057.71		
Tb	159	3	He			136301.74		
Tb	159	3	He			136543.22		
Bi	209	3	He			95683.76		
Bi	209	3	He			94294.98		
Bi	209	3	He			94807.87		

Quantitation Report

Data File Name 216SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:34:26 PM
Sample Name 410-234644-S-6-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

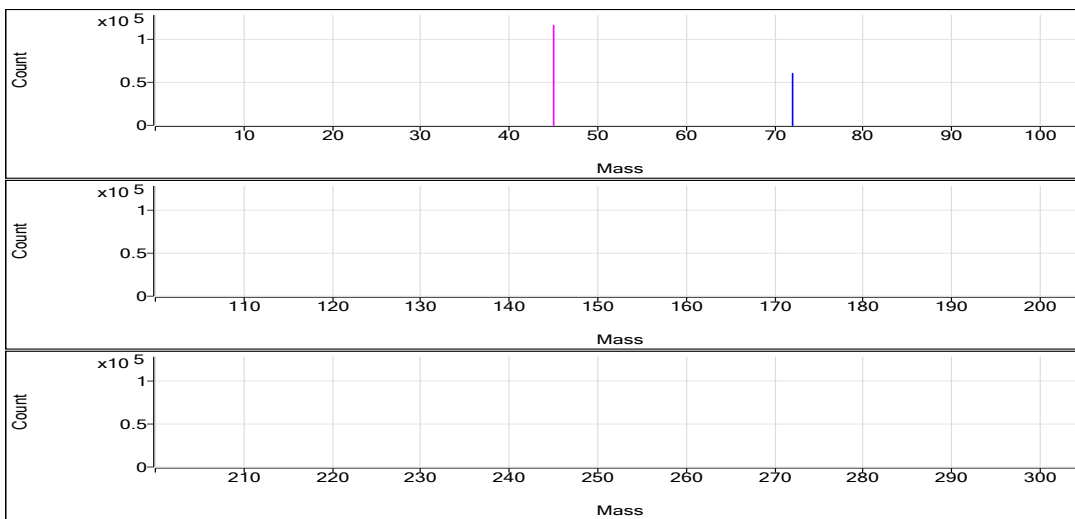
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	19.387	ppb	2.7	2101.48	0.0502	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	8.548	ppb	1.2	5115.34	0.1384	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.015	ppb	N/A	33.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.173	ppb	8.0	1103.39	0.0074	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

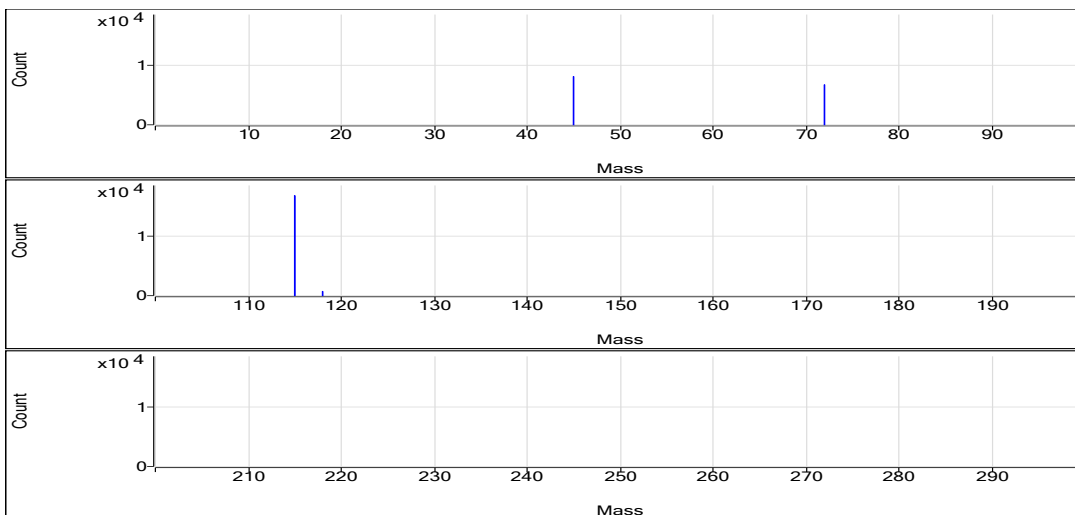
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1160078.86	0.2	88.8	Mix	0.1000	3
No Gas	Ge	72	603165.35	0.8	92.0	Pulse	0.1000	3
H2	Sc	45	81683.79	1.6	99.4	Pulse	0.1000	3
H2	Ge	72	67833.58	1.5	99.3	Pulse	0.1000	3
H2	In	115	169218.48	1.6	99.2	Pulse	0.1000	3
He	Sc	45	22906.57	2.0	89.4	Pulse	0.1000	3
He	Ge	72	41865.19	2.2	88.1	Pulse	0.1000	3
He	In	115	36971.47	2.6	90.3	Pulse	0.1000	3
He	Tb	159	148554.40	0.3	93.2	Pulse	0.1000	3
He	Bi	209	107813.78	0.9	92.2	Pulse	0.1000	3

No Gas

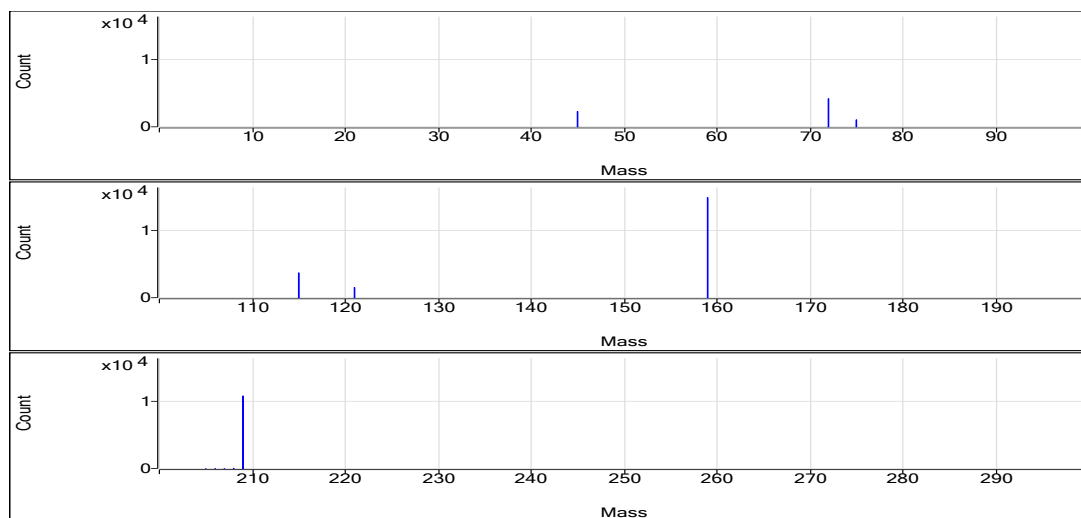


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	19.326	0.0501	2140.15	0.0025	0.0007733
As	75	3	He	18.902	0.049	2052.14	0.0025	0.0007733
As	75	3	He	19.933	0.0516	2112.15	0.0025	0.0007733
Sb	121	3	He	8.463	0.137	5204.27	0.0161	0.0005433
Sb	121	3	He	8.667	0.1403	5174.25	0.0161	0.0005433
Sb	121	3	He	8.514	0.1378	4967.51	0.0161	0.0005433
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	0.169	0.0073	610.04	0.0332	0.001693
Pb	208	3	He	0.188	0.0079	660.04	0.0332	0.001693
Pb	208	3	He	0.161	0.007	570.03	0.0332	0.001693
Sc	45	1	No Gas			1159076.78		
Sc	45	1	No Gas			1163159.83		
Sc	45	1	No Gas			1157999.98		
Ge	72	1	No Gas			598434.52		
Ge	72	1	No Gas			602986.51		
Ge	72	1	No Gas			608075.03		
Sc	45	2	H2			80226.99		
Sc	45	2	H2			81975.24		
Sc	45	2	H2			82849.13		
Ge	72	2	H2			66839.07		
Ge	72	2	H2			67753.41		
Ge	72	2	H2			68908.25		
In	115	2	H2			166845.25		
In	115	2	H2			168746.48		
In	115	2	H2			172063.71		
Sc	45	3	He			23397.10		
Sc	45	3	He			22466.04		
Sc	45	3	He			22856.57		
Ge	72	3	He			42758.14		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			41905.01		
Ge	72	3	He			40932.43		
In	115	3	He			37987.36		
In	115	3	He			36884.58		
In	115	3	He			36042.46		
Tb	159	3	He			148023.08		
Tb	159	3	He			148618.38		
Tb	159	3	He			149021.75		
Bi	209	3	He			108007.99		
Bi	209	3	He			106719.25		
Bi	209	3	He			108714.09		

Quantitation Report

Data File Name 217SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:36:01 PM
Sample Name 410-234644-Q-1-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

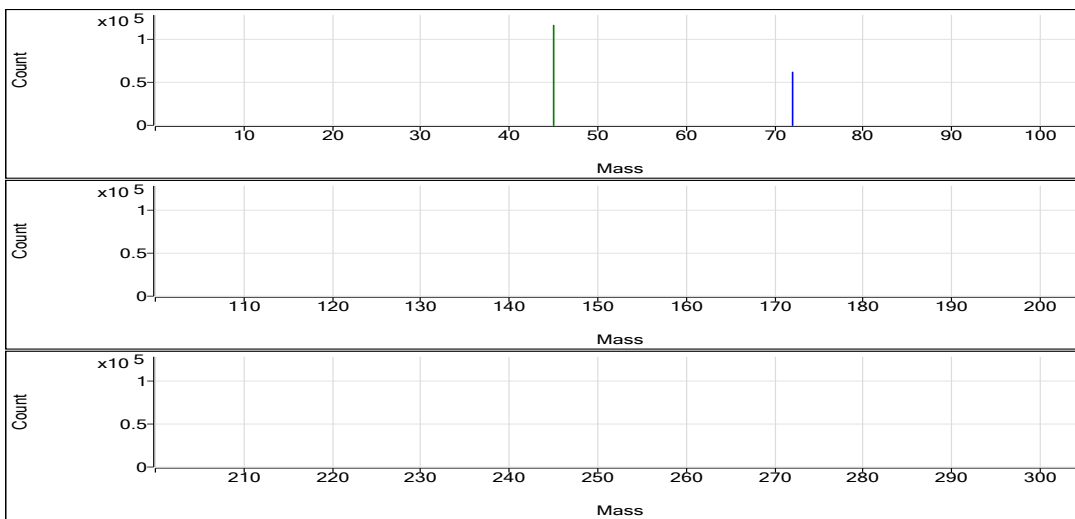
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	-0.018	ppb	N/A	32.67	0.0007	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.086	ppb	19.5	73.33	0.0019	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.004	ppb	N/A	73.34	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.005	ppb	N/A	230.00	0.0015	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

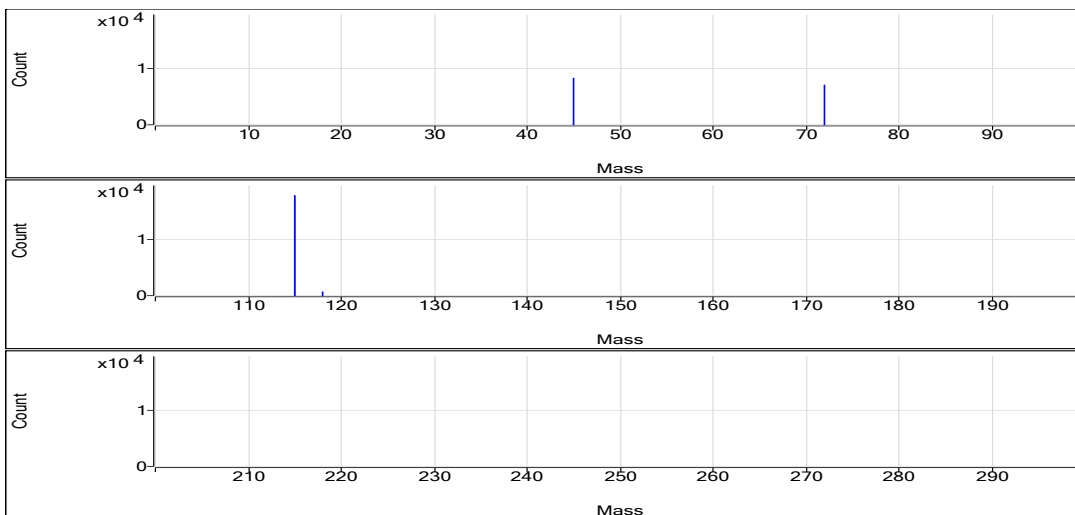
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1164191.73	0.2	89.1	Analog	0.1000	3
No Gas	Ge	72	619896.20	0.9	94.6	Pulse	0.1000	3
H2	Sc	45	84025.39	3.6	102.3	Pulse	0.1000	3
H2	Ge	72	71543.62	2.6	104.7	Pulse	0.1000	3
H2	In	115	179770.06	2.8	105.4	Pulse	0.1000	3
He	Sc	45	23357.25	1.7	91.2	Pulse	0.1000	3
He	Ge	72	44896.94	1.3	94.5	Pulse	0.1000	3
He	In	115	37903.67	0.9	92.6	Pulse	0.1000	3
He	Tb	159	151249.27	1.0	94.9	Pulse	0.1000	3
He	Bi	209	113070.58	1.0	96.7	Pulse	0.1000	3

No Gas

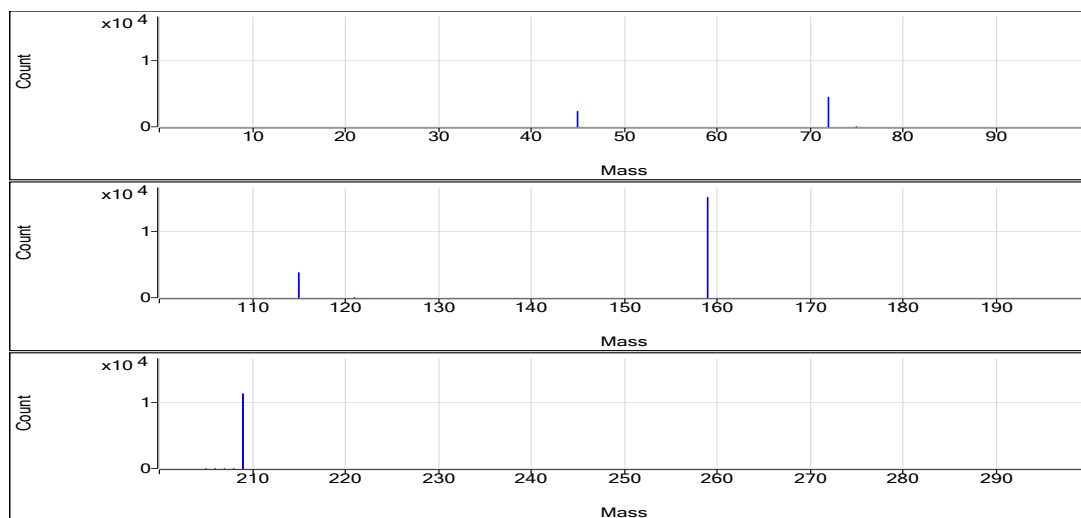


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	0.041	0.0009	40.00	0.0025	0.0007733
As	75	3	He	-0.021	0.0007	32.00	0.0025	0.0007733
As	75	3	He	-0.075	0.0006	26.00	0.0025	0.0007733
Sb	121	3	He	0.104	0.0022	83.33	0.0161	0.0005433
Sb	121	3	He	0.085	0.0019	73.33	0.0161	0.0005433
Sb	121	3	He	0.07	0.0017	63.33	0.0161	0.0005433
Tl	205	3	He	0.006	0.0007	110.01	0.0248	0.0005854
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Pb	208	3	He	-0.017	0.0011	80.00	0.0332	0.001693
Pb	208	3	He	0.01	0.002	160.01	0.0332	0.001693
Pb	208	3	He	-0.009	0.0014	80.00	0.0332	0.001693
Sc	45	1	No Gas			1167031.31		
Sc	45	1	No Gas			1162375.37		
Sc	45	1	No Gas			1163168.50		
Ge	72	1	No Gas			624422.06		
Ge	72	1	No Gas			621693.35		
Ge	72	1	No Gas			613573.19		
Sc	45	2	H2			87332.89		
Sc	45	2	H2			81361.30		
Sc	45	2	H2			83381.98		
Ge	72	2	H2			73689.73		
Ge	72	2	H2			70114.31		
Ge	72	2	H2			70826.83		
In	115	2	H2			185588.38		
In	115	2	H2			176210.33		
In	115	2	H2			177511.48		
Sc	45	3	He			23597.69		
Sc	45	3	He			23587.58		
Sc	45	3	He			22886.49		
Ge	72	3	He			45575.48		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			44532.64		
Ge	72	3	He			44582.71		
In	115	3	He			37616.13		
In	115	3	He			38268.21		
In	115	3	He			37826.66		
Tb	159	3	He			150001.48		
Tb	159	3	He			152980.55		
Tb	159	3	He			150765.78		
Bi	209	3	He			114247.36		
Bi	209	3	He			112028.07		
Bi	209	3	He			112936.32		

Quantitation Report

Data File Name 218SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:37:35 PM
Sample Name 410-234644-S-5-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

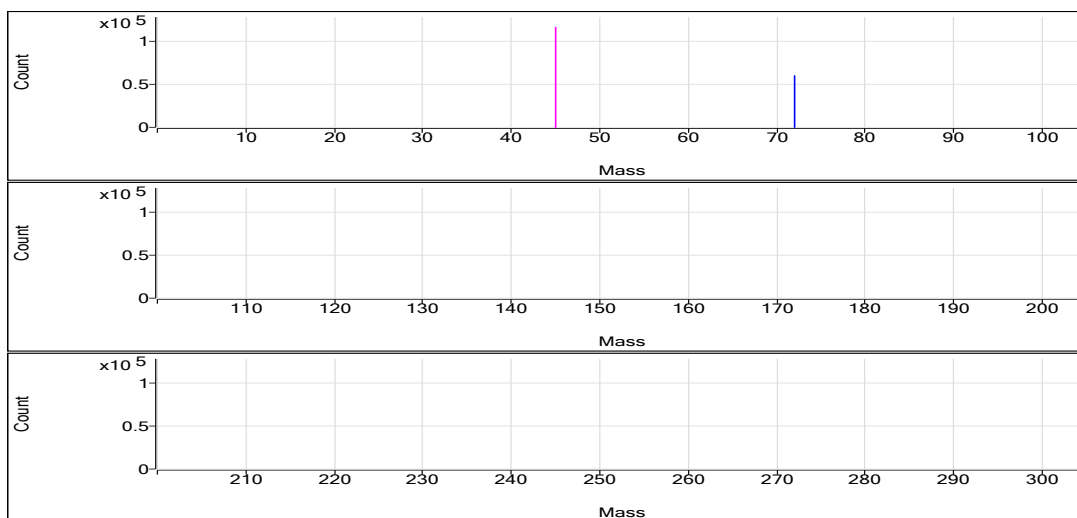
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	7.658	ppb	4.4	850.03	0.0203	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.224	ppb	21.2	150.01	0.0042	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.010	ppb	N/A	50.00	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.160	ppb	3.9	1030.05	0.0070	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

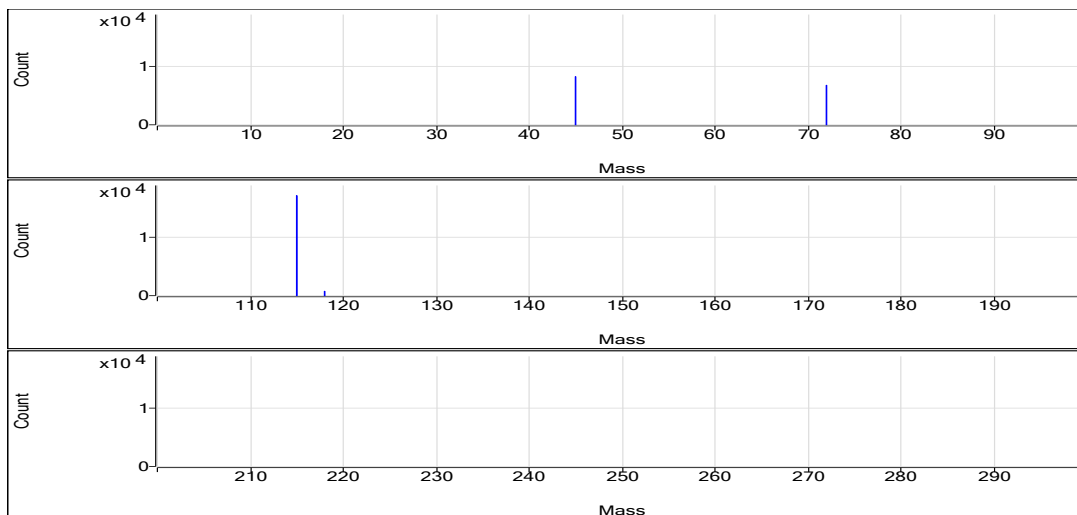
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1165746.75	1.2	89.2	Mix	0.1000	3
No Gas	Ge	72	600790.86	1.8	91.7	Pulse	0.1000	3
H2	Sc	45	82679.10	1.5	100.6	Pulse	0.1000	3
H2	Ge	72	67971.37	1.9	99.5	Pulse	0.1000	3
H2	In	115	171594.43	0.8	100.6	Pulse	0.1000	3
He	Sc	45	22599.54	1.6	88.2	Pulse	0.1000	3
He	Ge	72	41882.13	0.6	88.2	Pulse	0.1000	3
He	In	115	35989.22	3.4	87.9	Pulse	0.1000	3
He	Tb	159	146981.68	0.6	92.2	Pulse	0.1000	3
He	Bi	209	106031.36	2.0	90.7	Pulse	0.1000	3

No Gas

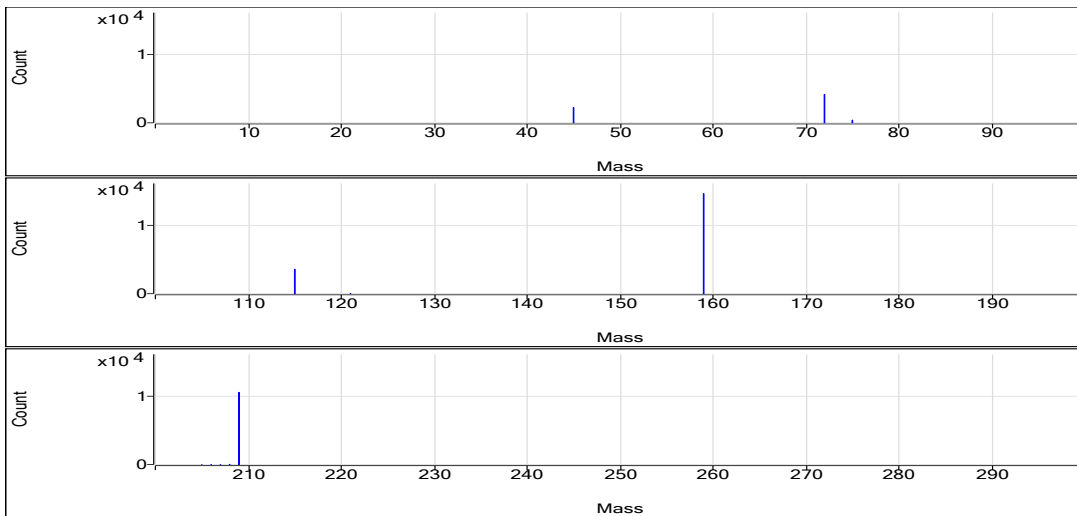


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	7.3	0.0194	818.03	0.0025	0.0007733
As	75	3	He	7.705	0.0204	852.03	0.0025	0.0007733
As	75	3	He	7.968	0.0211	880.03	0.0025	0.0007733
Sb	121	3	He	0.17	0.0033	113.34	0.0161	0.0005433
Sb	121	3	He	0.258	0.0047	173.34	0.0161	0.0005433
Sb	121	3	He	0.243	0.0045	163.34	0.0161	0.0005433
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Pb	208	3	He	0.155	0.0069	450.02	0.0332	0.001693
Pb	208	3	He	0.167	0.0072	530.03	0.0332	0.001693
Pb	208	3	He	0.157	0.0069	530.03	0.0332	0.001693
Sc	45	1	No Gas			1149230.76		
Sc	45	1	No Gas			1171686.08		
Sc	45	1	No Gas			1176323.42		
Ge	72	1	No Gas			588198.55		
Ge	72	1	No Gas			605874.91		
Ge	72	1	No Gas			608299.13		
Sc	45	2	H2			83624.33		
Sc	45	2	H2			83181.34		
Sc	45	2	H2			81231.63		
Ge	72	2	H2			66538.60		
Ge	72	2	H2			68958.63		
Ge	72	2	H2			68416.87		
In	115	2	H2			172911.29		
In	115	2	H2			170061.74		
In	115	2	H2			171810.25		
Sc	45	3	He			22836.51		
Sc	45	3	He			22185.78		
Sc	45	3	He			22776.33		
Ge	72	3	He			42195.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			41725.17		
Ge	72	3	He			41725.39		
In	115	3	He			34569.35		
In	115	3	He			36804.41		
In	115	3	He			36593.91		
Tb	159	3	He			145981.30		
Tb	159	3	He			147688.47		
Tb	159	3	He			147275.26		
Bi	209	3	He			103879.02		
Bi	209	3	He			106205.54		
Bi	209	3	He			108009.51		

Quantitation Report

Data File Name 219SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:39:11 PM
Sample Name 410-234644-Q-4-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

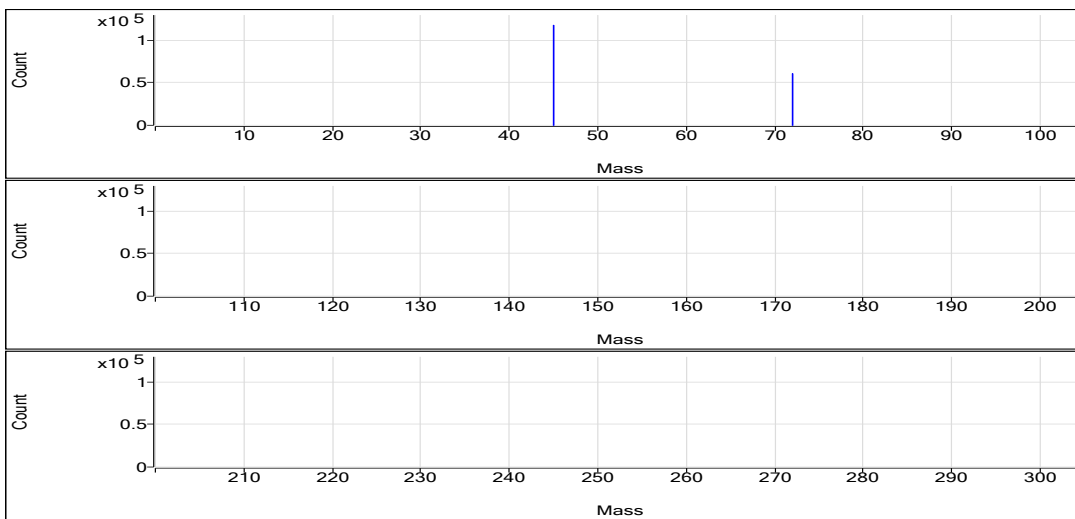
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	5.905	ppb	2.7	693.35	0.0158	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.557	ppb	12.4	355.57	0.0095	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.018	ppb	N/A	20.00	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.571	ppb	8.0	3076.91	0.0207	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

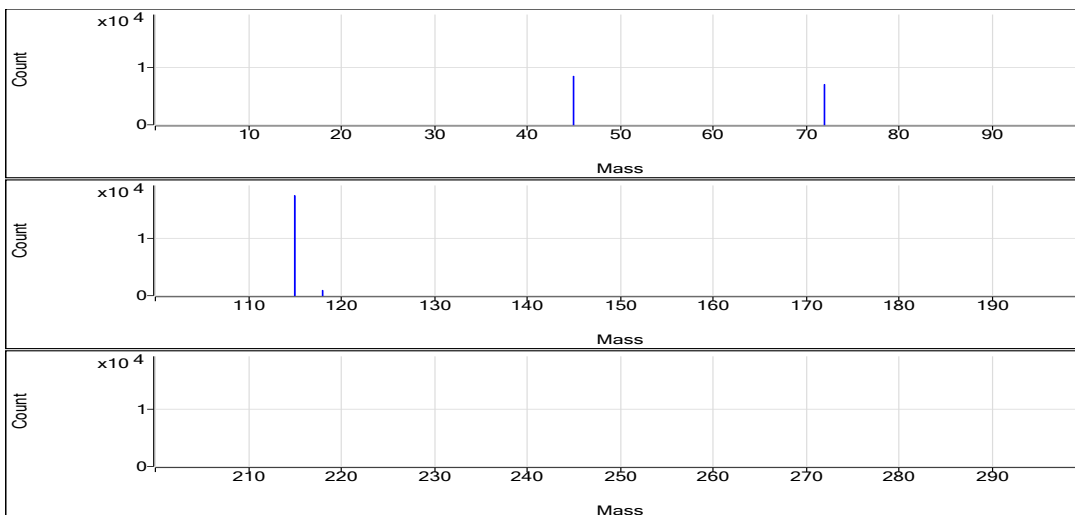
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1173183.16	0.4	89.8	Pulse	0.1000	3
No Gas	Ge	72	606392.57	1.1	92.5	Pulse	0.1000	3
H2	Sc	45	84578.59	1.8	103.0	Pulse	0.1000	3
H2	Ge	72	70213.92	0.3	102.7	Pulse	0.1000	3
H2	In	115	173886.13	0.8	101.9	Pulse	0.1000	3
He	Sc	45	23203.67	2.3	90.6	Pulse	0.1000	3
He	Ge	72	43813.82	1.8	92.2	Pulse	0.1000	3
He	In	115	37288.86	0.6	91.1	Pulse	0.1000	3
He	Tb	159	148960.01	1.8	93.4	Pulse	0.1000	3
He	Bi	209	106659.39	0.6	91.2	Pulse	0.1000	3

No Gas

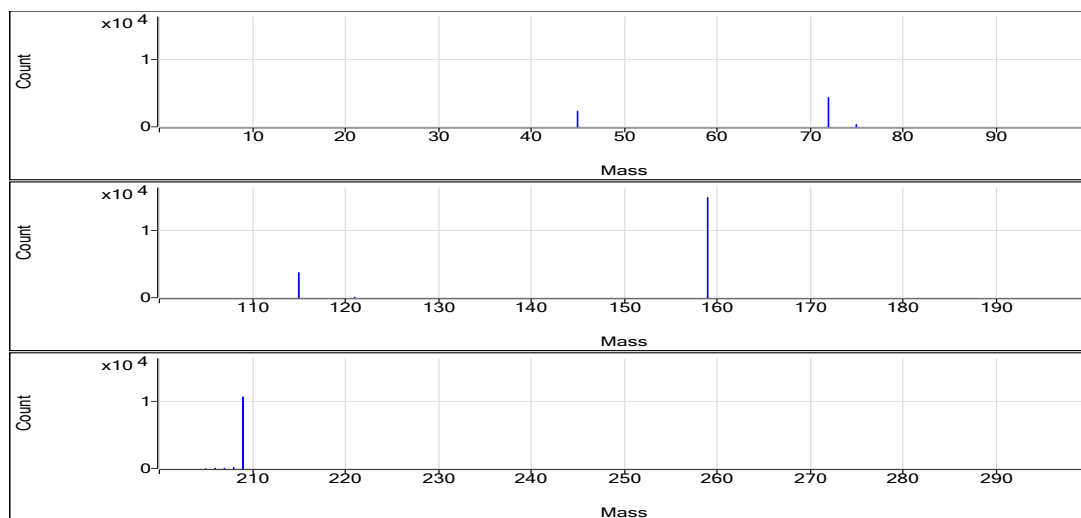


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	6.04	0.0162	704.02	0.0025	0.0007733
As	75	3	He	5.944	0.0159	688.02	0.0025	0.0007733
As	75	3	He	5.73	0.0154	688.02	0.0025	0.0007733
Sb	121	3	He	0.622	0.0106	396.68	0.0161	0.0005433
Sb	121	3	He	0.565	0.0097	360.01	0.0161	0.0005433
Sb	121	3	He	0.485	0.0084	310.01	0.0161	0.0005433
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Pb	208	3	He	0.535	0.0195	1690.16	0.0332	0.001693
Pb	208	3	He	0.556	0.0202	1440.12	0.0332	0.001693
Pb	208	3	He	0.622	0.0224	1860.18	0.0332	0.001693
Sc	45	1	No Gas			1176999.36		
Sc	45	1	No Gas			1175002.56		
Sc	45	1	No Gas			1167547.56		
Ge	72	1	No Gas			609096.98		
Ge	72	1	No Gas			611083.12		
Ge	72	1	No Gas			598997.61		
Sc	45	2	H2			84216.83		
Sc	45	2	H2			83272.51		
Sc	45	2	H2			86246.43		
Ge	72	2	H2			70174.31		
Ge	72	2	H2			70013.02		
Ge	72	2	H2			70454.44		
In	115	2	H2			174540.68		
In	115	2	H2			172375.70		
In	115	2	H2			174742.01		
Sc	45	3	He			23046.79		
Sc	45	3	He			23787.69		
Sc	45	3	He			22776.53		
Ge	72	3	He			43529.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			43188.72		
Ge	72	3	He			44723.18		
In	115	3	He			37506.00		
In	115	3	He			37265.58		
In	115	3	He			37094.99		
Tb	159	3	He			151990.08		
Tb	159	3	He			147819.33		
Tb	159	3	He			147070.62		
Bi	209	3	He			107383.79		
Bi	209	3	He			106387.83		
Bi	209	3	He			106206.56		

Quantitation Report

Data File Name 220SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:40:46 PM
Sample Name 410-234644-Q-3-A
Sample Type Sample
Comment MS-J9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

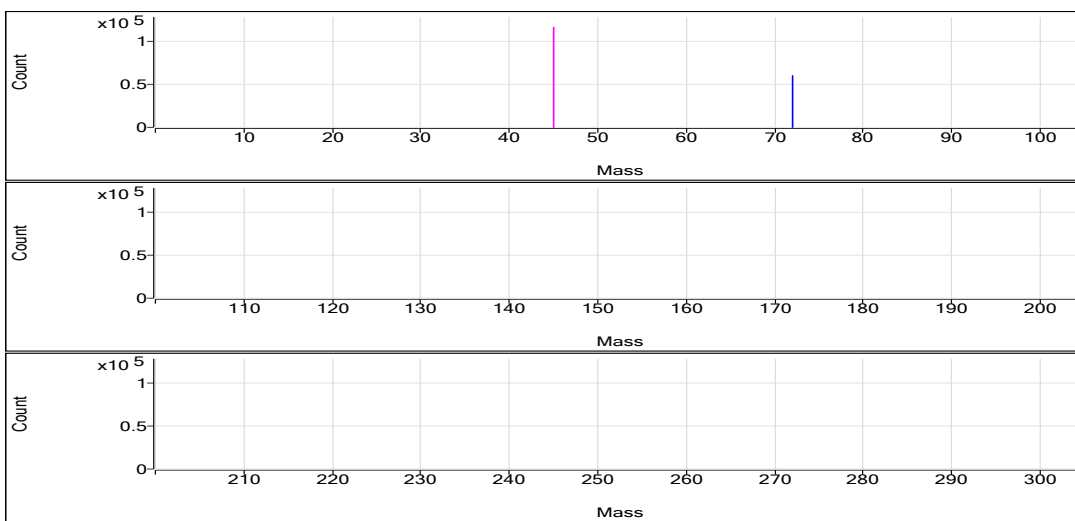
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He		ppb						0
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He	0.810	ppb	25.1	122.00	0.0028	Pulse	0.5000	3
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He	0.043	ppb	27.3	46.67	0.0012	Pulse	0.3000	3
Ba	137	115	He		ppb						0
Tl	205	159	He	-0.017	ppb	N/A	23.33	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.110	ppb	21.9	800.04	0.0054	Pulse	0.1000	3
U	238	159	He		ppb						0

ISTD Table:

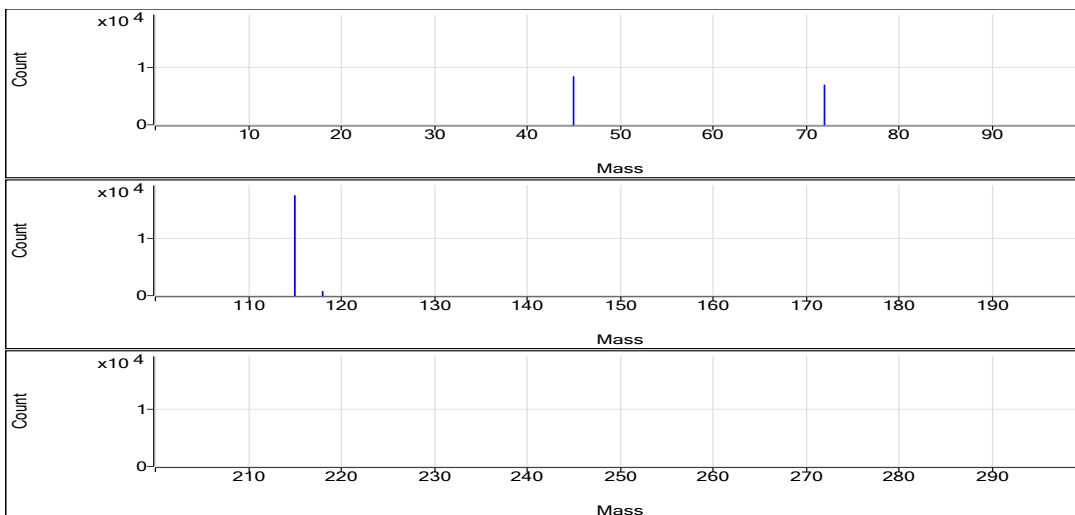
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1168457.02	0.3	89.4	Mix	0.1000	3
No Gas	Ge	72	602321.70	0.6	91.9	Pulse	0.1000	3
H2	Sc	45	83556.22	1.4	101.7	Pulse	0.1000	3
H2	Ge	72	69186.32	2.9	101.2	Pulse	0.1000	3
H2	In	115	173687.14	1.0	101.8	Pulse	0.1000	3
He	Sc	45	24018.09	2.1	93.8	Pulse	0.1000	3
He	Ge	72	42901.46	2.1	90.3	Pulse	0.1000	3
He	In	115	37562.56	1.2	91.7	Pulse	0.1000	3
He	Tb	159	149456.42	0.3	93.7	Pulse	0.1000	3
He	Bi	209	108089.62	0.8	92.4	Pulse	0.1000	3

No Gas

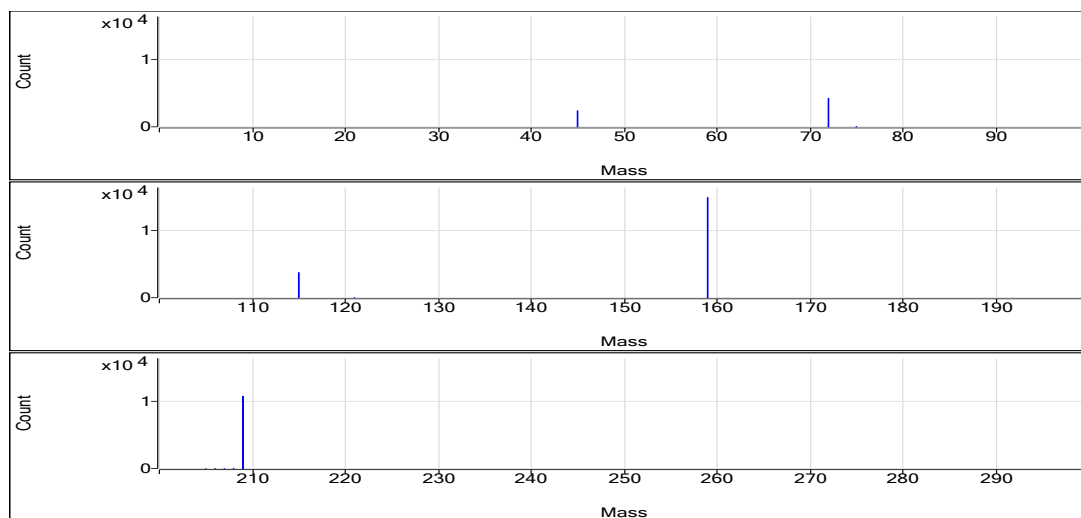


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
As	75	3	He	0.697	0.0026	110.00	0.0025	0.0007733
As	75	3	He	1.044	0.0034	150.00	0.0025	0.0007733
As	75	3	He	0.688	0.0025	106.00	0.0025	0.0007733
Sb	121	3	He	0.055	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	0.032	0.0011	40.00	0.0161	0.0005433
Sb	121	3	He	0.044	0.0012	46.67	0.0161	0.0005433
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Pb	208	3	He	0.116	0.0056	480.03	0.0332	0.001693
Pb	208	3	He	0.083	0.0045	320.02	0.0332	0.001693
Pb	208	3	He	0.131	0.006	450.03	0.0332	0.001693
Sc	45	1	No Gas			1171470.22		
Sc	45	1	No Gas			1165336.00		
Sc	45	1	No Gas			1168564.83		
Ge	72	1	No Gas			599134.64		
Ge	72	1	No Gas			606100.42		
Ge	72	1	No Gas			601730.03		
Sc	45	2	H2			84477.77		
Sc	45	2	H2			82266.16		
Sc	45	2	H2			83924.73		
Ge	72	2	H2			70454.45		
Ge	72	2	H2			66890.03		
Ge	72	2	H2			70214.49		
In	115	2	H2			172267.09		
In	115	2	H2			173224.76		
In	115	2	H2			175569.57		
Sc	45	3	He			24218.31		
Sc	45	3	He			23447.38		
Sc	45	3	He			24388.59		
Ge	72	3	He			43128.67		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Ge	72	3	He			43650.11		
Ge	72	3	He			41925.60		
In	115	3	He			37175.18		
In	115	3	He			38036.99		
In	115	3	He			37475.50		
Tb	159	3	He			149205.28		
Tb	159	3	He			149980.77		
Tb	159	3	He			149183.20		
Bi	209	3	He			107152.67		
Bi	209	3	He			108845.01		
Bi	209	3	He			108271.17		

Quantitation Report

Data File Name 222_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:44:33 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

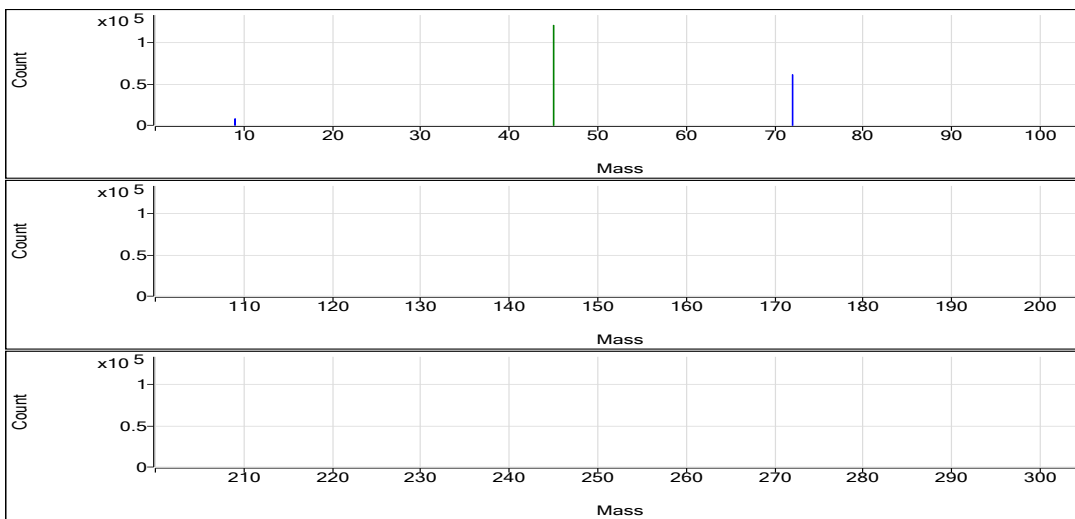
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.539	ppb	4.9	16109.07	0.0261	Pulse	0.5000	3
Se	78	72	H2	24.833	ppb	4.1	885.58	0.0126	Pulse	1.5000	3
Na	23	72	He	2643.291	ppb	1.9	217537.65	4.9734	Pulse	0.1000	3
Mg	24	72	He	2465.807	ppb	0.6	99127.23	2.2658	Pulse	0.1000	3
Al	27	72	He	2354.251	ppb	2.5	30007.87	0.6861	Pulse	0.1000	3
K	39	72	He	2439.803	ppb	3.7	94965.90	2.1710	Pulse	0.5000	3
Ca	44	72	He	2457.088	ppb	3.7	4432.62	0.1013	Pulse	0.5000	3
Ti	47	72	He	2423.579	ppb	1.4	32974.41	0.7538	Pulse	0.5000	3
V	51	72	He	241.150	ppb	1.5	144449.96	3.3022	Pulse	0.5000	3
Cr	52	72	He	240.116	ppb	1.2	180412.26	4.1243	Pulse	0.1000	3
Mn	55	72	He	240.329	ppb	2.5	76793.43	1.7558	Pulse	0.5000	3
Fe	57	72	He	2352.127	ppb	1.6	33448.62	0.7646	Pulse	0.1000	3
Co	59	72	He	242.592	ppb	2.2	352610.71	8.0616	Pulse	0.5000	3
Ni	60	72	He	241.277	ppb	2.0	98578.41	2.2538	Pulse	0.5000	3
Cu	63	72	He	241.405	ppb	1.4	285455.91	6.5258	Pulse	0.5000	3
Zn	66	72	He	242.419	ppb	0.8	33129.23	0.7573	Pulse	0.5000	3
As	75	72	He	240.840	ppb	1.6	26897.85	0.6149	Pulse	0.5000	3
Sr	88	115	He	24.196	ppb	3.4	9810.01	0.2572	Pulse	0.1000	3
Mo	98	115	He	25.246	ppb	3.0	22670.22	0.5945	Pulse	0.1000	3
Ag	107	115	He	25.549	ppb	1.6	48064.50	1.2602	Pulse	0.1000	3
Cd	111	115	He	25.622	ppb	2.9	5482.99	0.1438	Pulse	0.5000	3
Sn	120	115	He	25.507	ppb	3.5	18741.85	0.4914	Pulse	0.1000	3
Sb	121	115	He	24.803	ppb	2.1	15272.09	0.4004	Pulse	0.3000	3
Ba	137	115	He	242.906	ppb	2.7	48959.20	1.2837	Pulse	0.1000	3
Tl	205	159	He	24.995	ppb	1.6	92368.43	0.6199	Pulse	0.1000	3
Pb	208	159	He	25.282	ppb	1.1	125443.12	0.8418	Pulse	0.1000	3
U	238	159	He	25.318	ppb	1.7	127456.02	0.8554	Pulse	0.1000	3

ISTD Table:

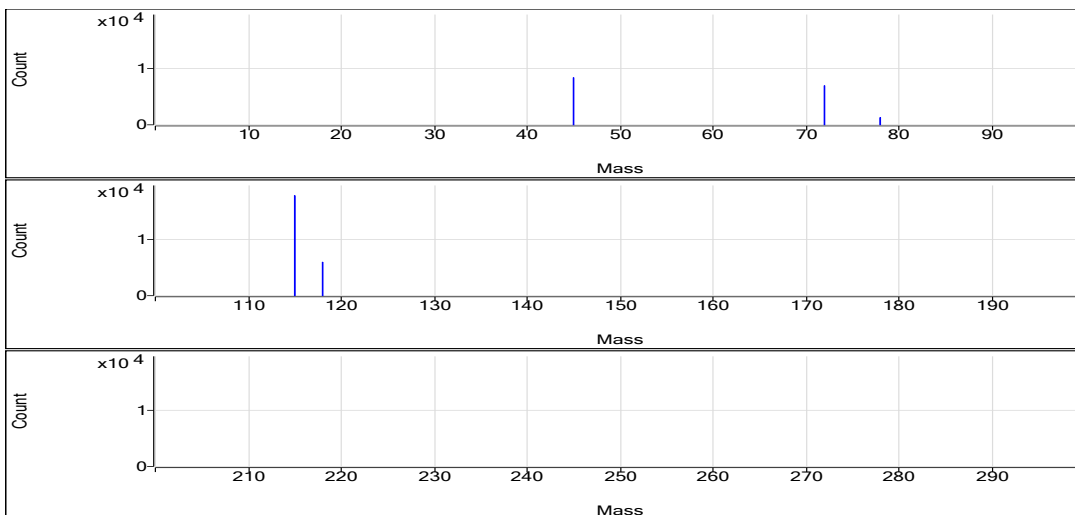
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1217479.93	1.5	93.1	Analog	0.1000	3
No Gas	Ge	72	616408.23	1.2	94.1	Pulse	0.1000	3
H2	Sc	45	84615.15	0.6	103.0	Pulse	0.1000	3
H2	Ge	72	70233.57	1.2	102.8	Pulse	0.1000	3
H2	In	115	179414.48	0.9	105.2	Pulse	0.1000	3
He	Sc	45	23884.67	1.2	93.3	Pulse	0.1000	3
He	Ge	72	43750.29	1.9	92.1	Pulse	0.1000	3
He	In	115	38150.05	2.7	93.2	Pulse	0.1000	3
He	Tb	159	149015.35	0.6	93.5	Pulse	0.1000	3
He	Bi	209	111834.05	1.0	95.6	Pulse	0.1000	3

No Gas

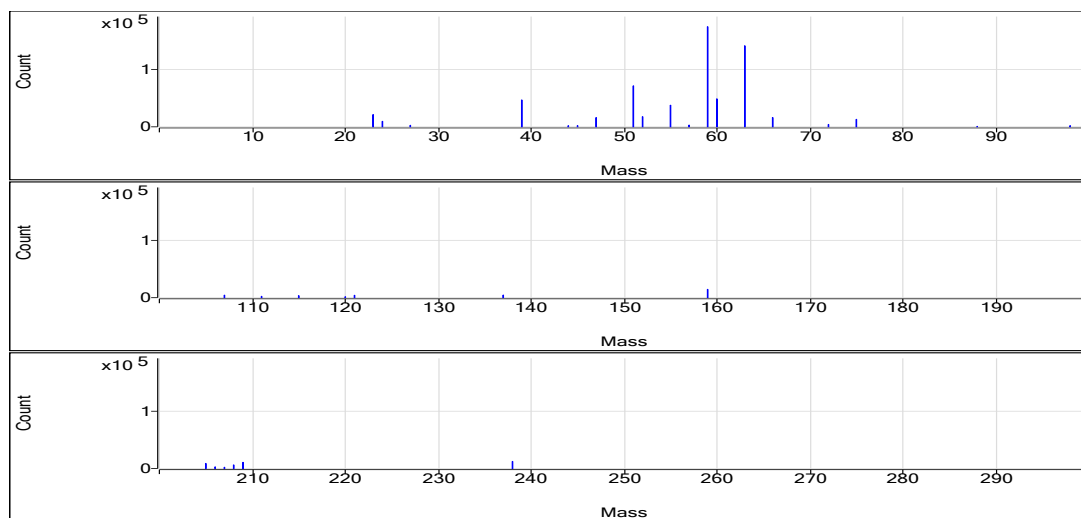


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.392	0.0249	15507.14	0.0011	7.835E-05
Be	9	1	No Gas	24.429	0.026	16105.75	0.0011	7.835E-05
Be	9	1	No Gas	25.795	0.0275	16714.32	0.0011	7.835E-05
Se	78	2	H2	23.657	0.012	849.36	0.0005	2.594E-05
Se	78	2	H2	25.57	0.013	918.69	0.0005	2.594E-05
Se	78	2	H2	25.272	0.0128	888.69	0.0005	2.594E-05
Na	23	3	He	2643.442	4.9737	217501.60	0.0018	0.1731
Na	23	3	He	2692.932	5.0636	217367.11	0.0018	0.1731
Na	23	3	He	2593.497	4.883	217744.25	0.0018	0.1731
Mg	24	3	He	2449.244	2.2506	98419.68	0.0009	0.006537
Mg	24	3	He	2476.006	2.2751	97665.57	0.0009	0.006537
Mg	24	3	He	2472.172	2.2716	101296.45	0.0009	0.006537
Al	27	3	He	2323.1	0.677	29607.14	0.0003	0.00231
Al	27	3	He	2422.929	0.706	30308.31	0.0003	0.00231
Al	27	3	He	2316.724	0.6752	30108.17	0.0003	0.00231
K	39	3	He	2531.92	2.2399	97951.74	0.0007	0.3475
K	39	3	He	2435.111	2.1675	93047.51	0.0007	0.3475
K	39	3	He	2352.377	2.1057	93898.45	0.0007	0.3475
Ca	44	3	He	2371.996	0.0979	4282.58	0	0.002807
Ca	44	3	He	2554.783	0.1053	4518.64	0	0.002807
Ca	44	3	He	2444.486	0.1008	4496.63	0	0.002807
Ti	47	3	He	2419.589	0.7526	32911.01	0.0003	0.0001123
Ti	47	3	He	2458.98	0.7648	32832.75	0.0003	0.0001123
Ti	47	3	He	2392.167	0.7441	33179.46	0.0003	0.0001123
V	51	3	He	239.399	3.2783	143363.41	0.0137	0.008308
V	51	3	He	245.274	3.3586	144176.48	0.0137	0.008308
V	51	3	He	238.776	3.2698	145810.00	0.0137	0.008308
Cr	52	3	He	241.362	4.1455	181286.97	0.0171	0.02156
Cr	52	3	He	242.127	4.1586	178520.31	0.0171	0.02156
Cr	52	3	He	236.859	4.0686	181429.51	0.0171	0.02156
Mn	55	3	He	237.747	1.7369	75957.53	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	247.209	1.806	77526.70	0.0073	0.002316
Mn	55	3	He	236.03	1.7244	76896.05	0.0073	0.002316
Fe	57	3	He	2317.294	0.7533	32944.24	0.0003	0.002736
Fe	57	3	He	2393.204	0.7779	33395.02	0.0003	0.002736
Fe	57	3	He	2345.885	0.7626	34006.60	0.0003	0.002736
Co	59	3	He	239.951	7.9739	348701.28	0.0332	0.001922
Co	59	3	He	248.679	8.2638	354747.84	0.0332	0.001922
Co	59	3	He	239.146	7.9471	354383.00	0.0332	0.001922
Ni	60	3	He	241.285	2.2539	98562.30	0.0093	0.003141
Ni	60	3	He	246.135	2.2991	98695.04	0.0093	0.003141
Ni	60	3	He	236.411	2.2084	98477.90	0.0093	0.003141
Cu	63	3	He	240.71	6.5071	284557.13	0.027	0.003732
Cu	63	3	He	245.175	6.6277	284511.56	0.027	0.003732
Cu	63	3	He	238.33	6.4428	287299.06	0.027	0.003732
Zn	66	3	He	241.352	0.754	32971.65	0.0031	0.002032
Zn	66	3	He	244.543	0.7639	32793.19	0.0031	0.002032
Zn	66	3	He	241.361	0.754	33622.86	0.0031	0.002032
As	75	3	He	237.564	0.6065	26523.91	0.0025	0.0007733
As	75	3	He	245.013	0.6255	26852.46	0.0025	0.0007733
As	75	3	He	239.942	0.6126	27317.18	0.0025	0.0007733
Sr	88	3	He	23.282	0.2476	9613.14	0.0105	0.004071
Sr	88	3	He	24.444	0.2598	9603.19	0.0105	0.004071
Sr	88	3	He	24.863	0.2642	10213.71	0.0105	0.004071
Mo	98	3	He	24.934	0.5872	22796.94	0.0234	0.003908
Mo	98	3	He	26.101	0.6145	22717.15	0.0234	0.003908
Mo	98	3	He	24.703	0.5818	22496.56	0.0234	0.003908
Ag	107	3	He	25.112	1.2386	48084.72	0.0493	0.0004851
Ag	107	3	He	25.933	1.2791	47281.95	0.0493	0.0004851
Ag	107	3	He	25.603	1.2629	48826.84	0.0493	0.0004851
Cd	111	3	He	24.767	0.139	5394.96	0.0056	0
Cd	111	3	He	26.154	0.1468	5424.97	0.0056	0
Cd	111	3	He	25.946	0.1456	5629.04	0.0056	0
Sn	120	3	He	24.476	0.474	18401.41	0.0169	0.0609
Sn	120	3	He	26.014	0.5	18481.59	0.0169	0.0609
Sn	120	3	He	26.032	0.5003	19342.54	0.0169	0.0609
Sb	121	3	He	24.258	0.3917	15204.22	0.0161	0.0005433
Sb	121	3	He	25.298	0.4084	15097.45	0.0161	0.0005433
Sb	121	3	He	24.854	0.4013	15514.59	0.0161	0.0005433
Ba	137	3	He	235.214	1.2431	48256.89	0.0053	0.001141
Ba	137	3	He	246.617	1.3033	48176.27	0.0053	0.001141
Ba	137	3	He	246.885	1.3047	50444.43	0.0053	0.001141
Tl	205	3	He	25.371	0.6292	93066.27	0.0248	0.0005854
Tl	205	3	He	25.039	0.621	92794.40	0.0248	0.0005854
Tl	205	3	He	24.577	0.6095	91244.61	0.0248	0.0005854
Pb	208	3	He	24.96	0.8311	65185.82	0.0332	0.001693
Pb	208	3	He	25.435	0.8468	67195.16	0.0332	0.001693
Pb	208	3	He	25.452	0.8474	66752.67	0.0332	0.001693
U	238	3	He	25.817	0.8722	129010.17	0.0338	0.0007949
U	238	3	He	25.123	0.8488	126840.12	0.0338	0.0007949
U	238	3	He	25.015	0.8452	126517.77	0.0338	0.0007949
Sc	45	1	No Gas			1221387.40		
Sc	45	1	No Gas			1232887.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1198164.51		
Ge	72	1	No Gas			622135.93		
Ge	72	1	No Gas			618808.47		
Ge	72	1	No Gas			608280.30		
Sc	45	2	H2			84226.69		
Sc	45	2	H2			85201.53		
Sc	45	2	H2			84417.23		
Ge	72	2	H2			70695.26		
Ge	72	2	H2			70756.18		
Ge	72	2	H2			69249.26		
In	115	2	H2			177978.34		
In	115	2	H2			179182.03		
In	115	2	H2			181083.06		
Sc	45	3	He			24228.44		
Sc	45	3	He			23697.83		
Sc	45	3	He			23727.75		
Ge	72	3	He			43730.54		
Ge	72	3	He			42927.78		
Ge	72	3	He			44592.54		
In	115	3	He			38949.54		
In	115	3	He			37094.89		
In	115	3	He			38799.31		
Tb	159	3	He			147913.00		
Tb	159	3	He			149435.63		
Tb	159	3	He			149697.42		
Bi	209	3	He			111474.30		
Bi	209	3	He			110960.86		
Bi	209	3	He			113066.98		

Quantitation Report

Data File Name 224_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:48:58 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

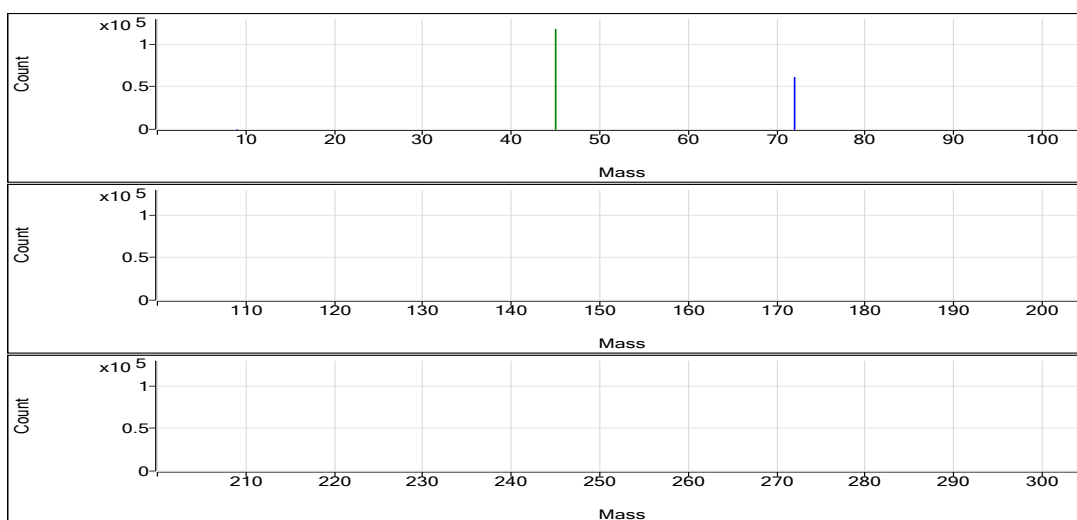
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.048	ppb	28.2	78.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.026	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	134.207	ppb	3.9	18293.83	0.4168	Pulse	0.1000	3
Mg	24	72	He	22.474	ppb	7.6	1190.09	0.0271	Pulse	0.1000	3
Al	27	72	He	-2.498	ppb	N/A	70.00	0.0016	Pulse	0.1000	3
K	39	72	He	26.019	ppb	287.3	16130.08	0.3669	Pulse	0.5000	3
Ca	44	72	He	-6.023	ppb	N/A	112.67	0.0026	Pulse	0.5000	3
Ti	47	72	He	0.520	ppb	85.0	12.00	0.0003	Pulse	0.5000	3
V	51	72	He	0.046	ppb	129.2	392.01	0.0089	Pulse	0.5000	3
Cr	52	72	He	-0.168	ppb	N/A	820.05	0.0187	Pulse	0.1000	3
Mn	55	72	He	0.260	ppb	28.9	184.67	0.0042	Pulse	0.5000	3
Fe	57	72	He	-2.086	ppb	N/A	90.00	0.0021	Pulse	0.1000	3
Co	59	72	He	0.005	ppb	301.2	91.33	0.0021	Pulse	0.5000	3
Ni	60	72	He	0.036	ppb	40.9	152.67	0.0035	Pulse	0.5000	3
Cu	63	72	He	-0.021	ppb	N/A	139.33	0.0032	Pulse	0.5000	3
Zn	66	72	He	-0.261	ppb	N/A	53.33	0.0012	Pulse	0.5000	3
As	75	72	He	0.060	ppb	42.5	40.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.141	ppb	N/A	96.67	0.0026	Pulse	0.1000	3
Mo	98	115	He	-0.026	ppb	N/A	123.34	0.0033	Pulse	0.1000	3
Ag	107	115	He	-0.004	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.253	ppb	104.7	2433.62	0.0652	Pulse	0.1000	3
Sb	121	115	He	0.025	ppb	80.5	35.56	0.0010	Pulse	0.3000	3
Ba	137	115	He	-0.046	ppb	N/A	33.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.004	ppb	145.8	103.34	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.006	ppb	N/A	223.34	0.0015	Pulse	0.1000	3
U	238	159	He	0.001	ppb	2196.0	120.00	0.0008	Pulse	0.1000	3

ISTD Table:

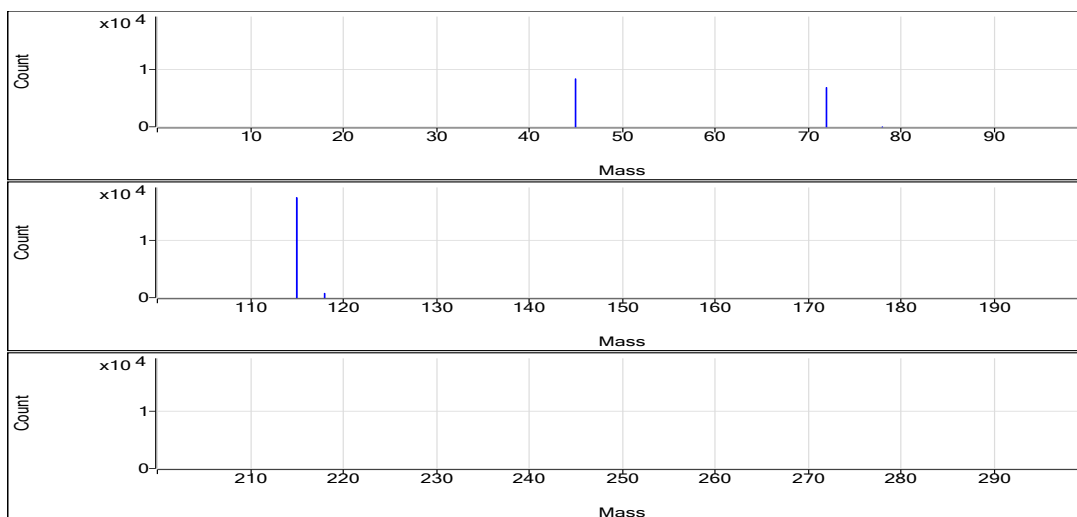
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1176786.10	1.8	90.0	Analog	0.1000	3
No Gas	Ge	72	610886.52	1.8	93.2	Pulse	0.1000	3
H2	Sc	45	84300.54	2.0	102.6	Pulse	0.1000	3
H2	Ge	72	69085.52	3.0	101.1	Pulse	0.1000	3
H2	In	115	175885.65	2.2	103.1	Pulse	0.1000	3
He	Sc	45	23631.09	1.0	92.3	Pulse	0.1000	3
He	Ge	72	43890.63	1.7	92.4	Pulse	0.1000	3
He	In	115	37325.11	1.0	91.2	Pulse	0.1000	3
He	Tb	159	148193.48	1.2	92.9	Pulse	0.1000	3
He	Bi	209	108935.45	0.3	93.1	Pulse	0.1000	3

No Gas

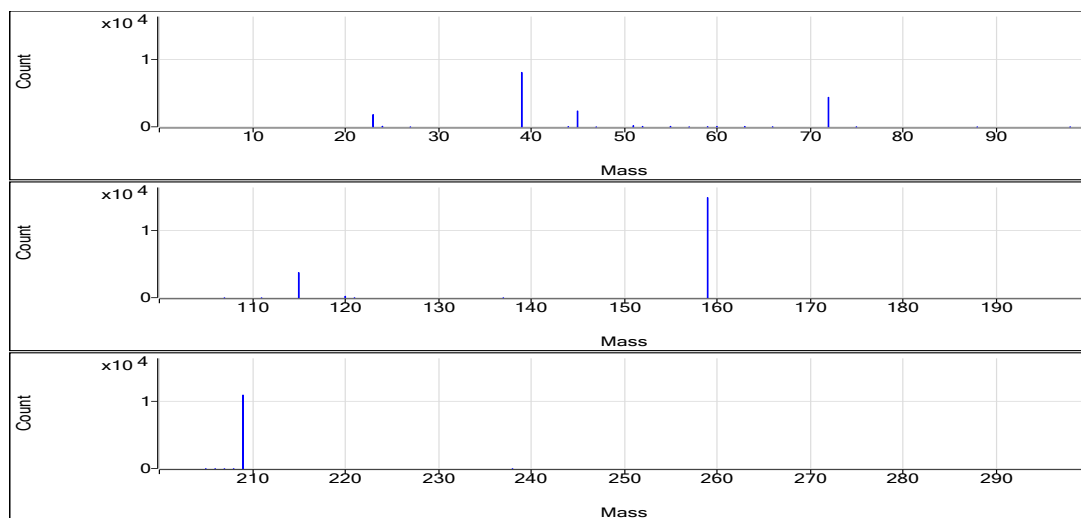


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.034	0.0001	70.00	0.0011	7.835E-05
Be	9	1	No Gas	0.061	0.0001	86.00	0.0011	7.835E-05
Be	9	1	No Gas	0.047	0.0001	80.00	0.0011	7.835E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Na	23	3	He	138.746	0.425	18961.15	0.0018	0.1731
Na	23	3	He	128.475	0.4064	17860.15	0.0018	0.1731
Na	23	3	He	135.399	0.4189	18060.18	0.0018	0.1731
Mg	24	3	He	20.512	0.0253	1130.08	0.0009	0.006537
Mg	24	3	He	23.661	0.0282	1240.09	0.0009	0.006537
Mg	24	3	He	23.249	0.0278	1200.09	0.0009	0.006537
Al	27	3	He	-0.236	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-0.903	0.002	90.00	0.0003	0.00231
Al	27	3	He	-6.356	0.0005	20.00	0.0003	0.00231
K	39	3	He	111.422	0.4308	19217.27	0.0007	0.3475
K	39	3	He	-5.88	0.3431	15078.93	0.0007	0.3475
K	39	3	He	-27.484	0.3269	14094.05	0.0007	0.3475
Ca	44	3	He	-6.268	0.0026	114.00	0	0.002807
Ca	44	3	He	1.499	0.0029	126.00	0	0.002807
Ca	44	3	He	-13.301	0.0023	98.00	0	0.002807
Ti	47	3	He	0.071	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.956	0.0004	18.00	0.0003	0.0001123
Ti	47	3	He	0.534	0.0003	12.00	0.0003	0.0001123
V	51	3	He	0.071	0.0093	414.01	0.0137	0.008308
V	51	3	He	-0.022	0.008	352.01	0.0137	0.008308
V	51	3	He	0.088	0.0095	410.01	0.0137	0.008308
Cr	52	3	He	-0.199	0.0182	810.05	0.0171	0.02156
Cr	52	3	He	-0.196	0.0182	800.05	0.0171	0.02156
Cr	52	3	He	-0.108	0.0197	850.05	0.0171	0.02156
Mn	55	3	He	0.254	0.0042	186.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.188	0.0037	162.00	0.0073	0.002316
Mn	55	3	He	0.338	0.0048	206.00	0.0073	0.002316
Fe	57	3	He	-4.985	0.0011	50.00	0.0003	0.002736
Fe	57	3	He	-1.421	0.0023	100.00	0.0003	0.002736
Fe	57	3	He	0.148	0.0028	120.00	0.0003	0.002736
Co	59	3	He	0.016	0.0025	110.00	0.0332	0.001922
Co	59	3	He	-0.011	0.0015	68.00	0.0332	0.001922
Co	59	3	He	0.009	0.0022	96.00	0.0332	0.001922
Ni	60	3	He	0.053	0.0036	162.00	0.0093	0.003141
Ni	60	3	He	0.024	0.0034	148.00	0.0093	0.003141
Ni	60	3	He	0.031	0.0034	148.00	0.0093	0.003141
Cu	63	3	He	-0.025	0.003	136.00	0.027	0.003732
Cu	63	3	He	-0.027	0.003	132.00	0.027	0.003732
Cu	63	3	He	-0.009	0.0035	150.00	0.027	0.003732
Zn	66	3	He	-0.307	0.0011	48.00	0.0031	0.002032
Zn	66	3	He	-0.36	0.0009	40.00	0.0031	0.002032
Zn	66	3	He	-0.116	0.0017	72.00	0.0031	0.002032
As	75	3	He	0.048	0.0009	40.00	0.0025	0.0007733
As	75	3	He	0.089	0.001	44.00	0.0025	0.0007733
As	75	3	He	0.042	0.0009	38.00	0.0025	0.0007733
Sr	88	3	He	-0.161	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.158	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.105	0.003	110.00	0.0105	0.004071
Mo	98	3	He	-0.031	0.0032	120.01	0.0234	0.003908
Mo	98	3	He	-0.052	0.0027	100.00	0.0234	0.003908
Mo	98	3	He	0.006	0.0041	150.01	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Sn	120	3	He	0.525	0.0698	2630.32	0.0169	0.0609
Sn	120	3	He	0.239	0.0649	2420.29	0.0169	0.0609
Sn	120	3	He	-0.005	0.0608	2250.25	0.0169	0.0609
Sb	121	3	He	0.049	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.016	0.0008	30.00	0.0161	0.0005433
Sb	121	3	He	0.011	0.0007	26.67	0.0161	0.0005433
Ba	137	3	He	-0.166	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	0.038	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	-0.011	0.0011	40.00	0.0053	0.001141
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Tl	205	3	He	0.011	0.0009	130.01	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Pb	208	3	He	0	0.0017	110.01	0.0332	0.001693
Pb	208	3	He	-0.015	0.0012	80.00	0.0332	0.001693
Pb	208	3	He	-0.002	0.0016	130.00	0.0332	0.001693
U	238	3	He	-0.001	0.0007	110.00	0.0338	0.0007949
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
U	238	3	He	0.013	0.0012	180.01	0.0338	0.0007949
Sc	45	1	No Gas			1178580.14		
Sc	45	1	No Gas			1154296.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1197481.70		
Ge	72	1	No Gas			609978.51		
Ge	72	1	No Gas			600303.47		
Ge	72	1	No Gas			622377.57		
Sc	45	2	H2			82669.32		
Sc	45	2	H2			86055.62		
Sc	45	2	H2			84176.68		
Ge	72	2	H2			69108.71		
Ge	72	2	H2			71167.88		
Ge	72	2	H2			66979.96		
In	115	2	H2			174561.01		
In	115	2	H2			180163.65		
In	115	2	H2			172932.28		
Sc	45	3	He			23537.55		
Sc	45	3	He			23467.75		
Sc	45	3	He			23887.96		
Ge	72	3	He			44612.31		
Ge	72	3	He			43950.69		
Ge	72	3	He			43108.90		
In	115	3	He			37726.40		
In	115	3	He			37285.20		
In	115	3	He			37014.83		
Tb	159	3	He			147517.75		
Tb	159	3	He			150162.48		
Tb	159	3	He			146900.21		
Bi	209	3	He			109267.74		
Bi	209	3	He			108734.69		
Bi	209	3	He			108803.92		

Quantitation Report

Data File Name 225SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:51:10 PM
Sample Name 180-193799-F-7-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

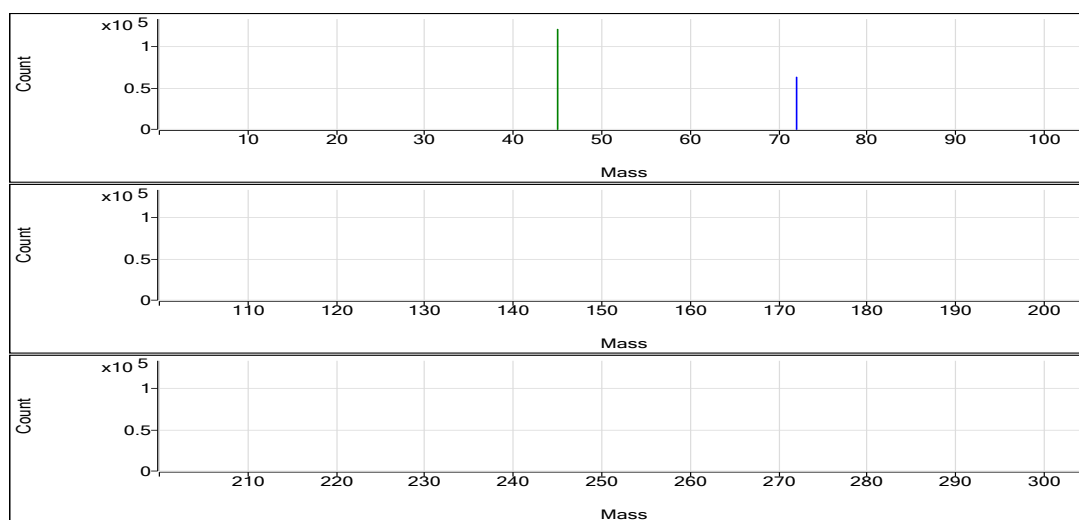
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.161	ppb	N/A	846.72	0.0188	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

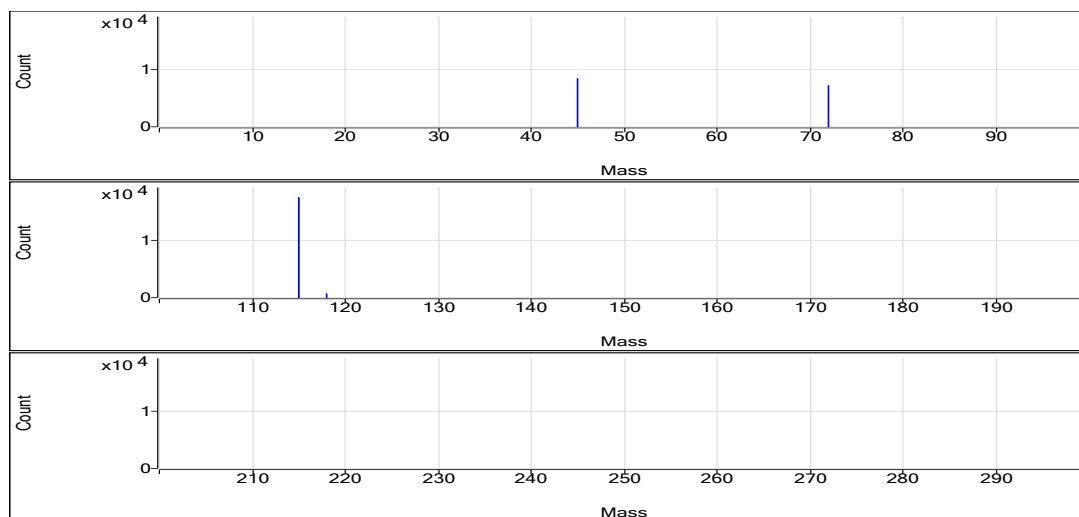
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1213066.02	1.8	92.8	Analog	0.1000	3
No Gas	Ge	72	633752.96	0.8	96.7	Pulse	0.1000	3
H2	Sc	45	84812.25	0.6	103.2	Pulse	0.1000	3
H2	Ge	72	72226.22	2.4	105.7	Pulse	0.1000	3
H2	In	115	175796.72	1.3	103.0	Pulse	0.1000	3
He	Sc	45	24111.67	1.4	94.1	Pulse	0.1000	3
He	Ge	72	44987.23	1.2	94.7	Pulse	0.1000	3
He	In	115	36827.94	0.1	89.9	Pulse	0.1000	3
He	Tb	159	148169.72	1.0	92.9	Pulse	0.1000	3
He	Bi	209	109476.19	1.9	93.6	Pulse	0.1000	3

No Gas

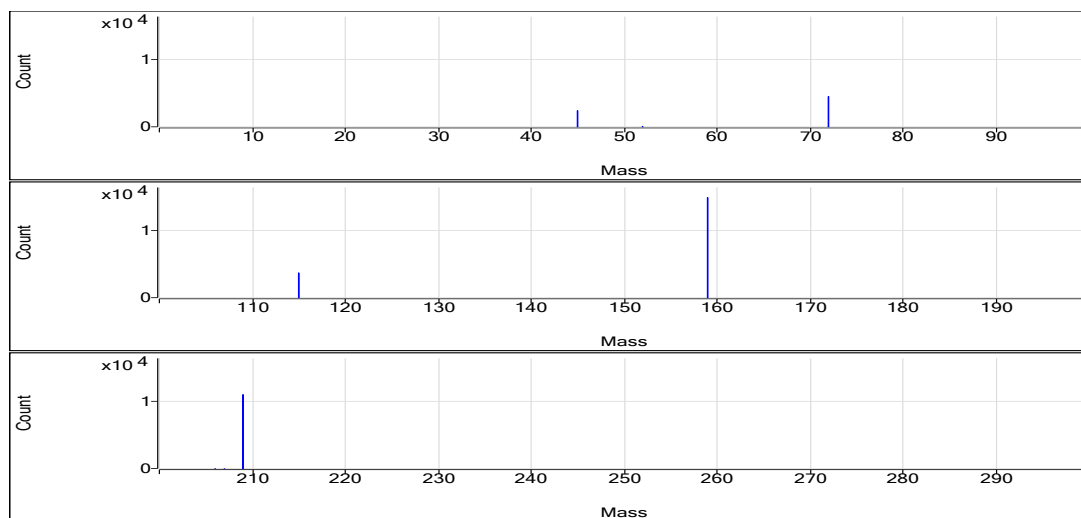


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.328	0.0159	710.03	0.0171	0.02156
Cr	52	3	He	-0.183	0.0184	840.05	0.0171	0.02156
Cr	52	3	He	0.03	0.0221	990.07	0.0171	0.02156
Sc	45	1	No Gas			1188058.19		
Sc	45	1	No Gas			1227783.26		
Sc	45	1	No Gas			1223356.62		
Ge	72	1	No Gas			627573.78		
Ge	72	1	No Gas			637259.44		
Ge	72	1	No Gas			636425.65		
Sc	45	2	H2			84265.85		
Sc	45	2	H2			85180.72		
Sc	45	2	H2			84990.19		
Ge	72	2	H2			70203.83		
Ge	72	2	H2			73066.78		
Ge	72	2	H2			73408.04		
In	115	2	H2			173234.12		
In	115	2	H2			176986.60		
In	115	2	H2			177169.43		
Sc	45	3	He			24488.94		
Sc	45	3	He			23948.09		
Sc	45	3	He			23897.98		
Ge	72	3	He			44522.42		
Ge	72	3	He			45585.68		
Ge	72	3	He			44853.58		
In	115	3	He			36794.56		
In	115	3	He			36864.73		
In	115	3	He			36824.52		
Tb	159	3	He			148061.31		
Tb	159	3	He			149667.44		
Tb	159	3	He			146780.42		
Bi	209	3	He			108269.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111887.23		
Bi	209	3	He			108271.58		

Quantitation Report

Data File Name 226SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:52:41 PM
Sample Name 180-193799-O-5-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

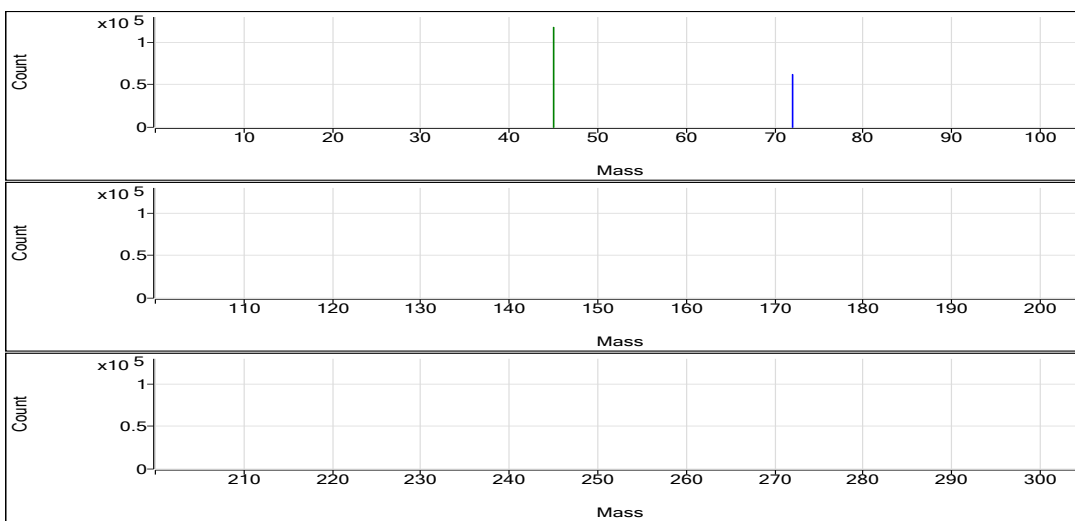
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	4.351	ppb	6.9	4227.34	0.0959	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

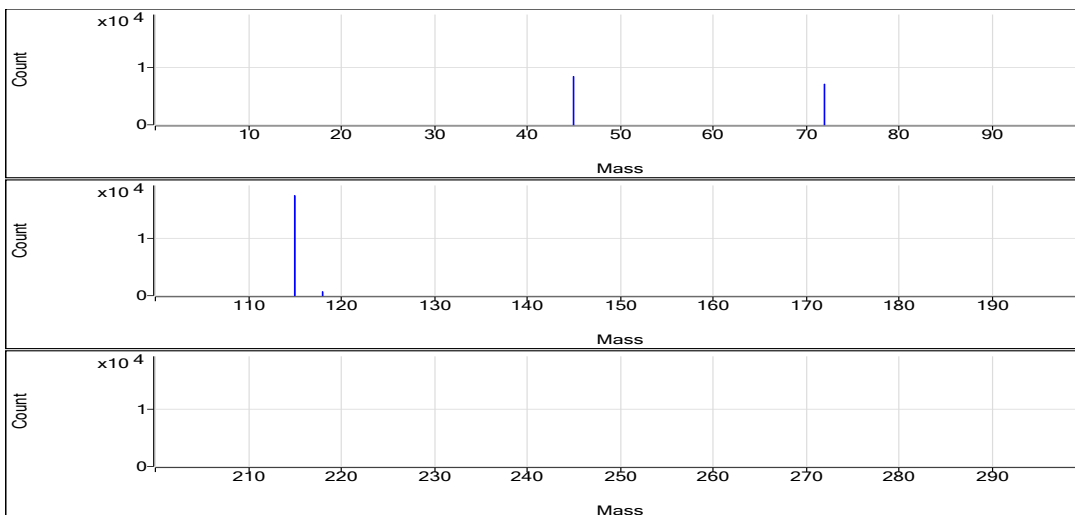
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1173369.41	0.2	89.8	Analog	0.1000	3
No Gas	Ge	72	620442.67	0.1	94.7	Pulse	0.1000	3
H2	Sc	45	84692.24	3.5	103.1	Pulse	0.1000	3
H2	Ge	72	71452.36	2.7	104.6	Pulse	0.1000	3
H2	In	115	175222.02	2.2	102.7	Pulse	0.1000	3
He	Sc	45	23577.54	1.9	92.1	Pulse	0.1000	3
He	Ge	72	44081.24	1.4	92.8	Pulse	0.1000	3
He	In	115	36911.21	2.6	90.2	Pulse	0.1000	3
He	Tb	159	149075.75	2.7	93.5	Pulse	0.1000	3
He	Bi	209	109043.57	0.7	93.2	Pulse	0.1000	3

No Gas

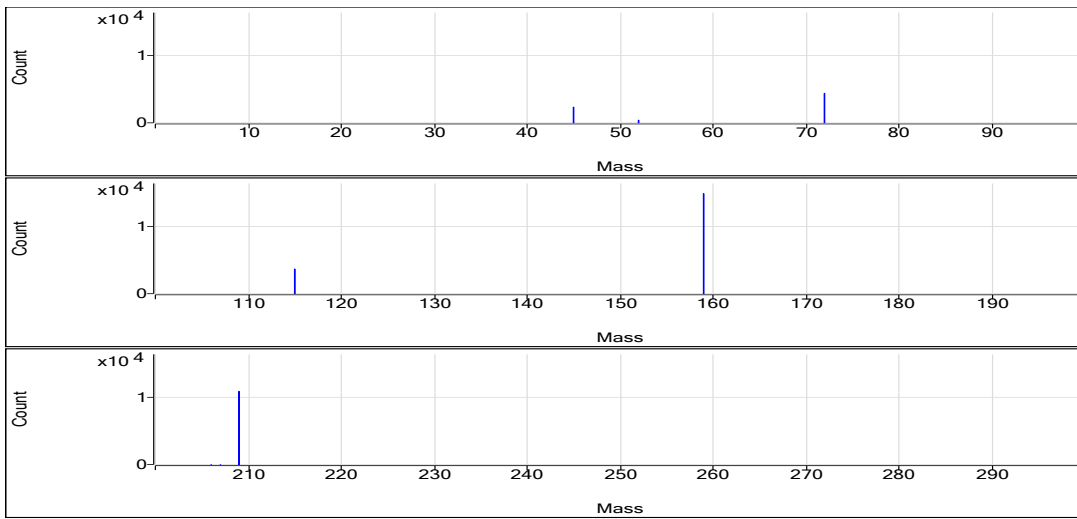


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	4.006	0.09	3970.61	0.0171	0.02156
Cr	52	3	He	4.53	0.099	4300.71	0.0171	0.02156
Cr	52	3	He	4.517	0.0987	4410.70	0.0171	0.02156
Sc	45	1	No Gas			1174994.90		
Sc	45	1	No Gas			1171125.92		
Sc	45	1	No Gas			1173987.40		
Ge	72	1	No Gas			619907.22		
Ge	72	1	No Gas			620223.74		
Ge	72	1	No Gas			621197.06		
Sc	45	2	H2			87513.41		
Sc	45	2	H2			81643.26		
Sc	45	2	H2			84920.04		
Ge	72	2	H2			72925.29		
Ge	72	2	H2			69249.29		
Ge	72	2	H2			72182.49		
In	115	2	H2			179526.79		
In	115	2	H2			172336.35		
In	115	2	H2			173802.93		
Sc	45	3	He			23627.57		
Sc	45	3	He			23106.90		
Sc	45	3	He			23998.15		
Ge	72	3	He			44111.35		
Ge	72	3	He			43459.73		
Ge	72	3	He			44672.64		
In	115	3	He			35872.30		
In	115	3	He			37074.63		
In	115	3	He			37786.70		
Tb	159	3	He			145126.10		
Tb	159	3	He			149009.86		
Tb	159	3	He			153091.28		
Bi	209	3	He			108785.34		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			108393.45		
Bi	209	3	He			109951.91		

Quantitation Report

Data File Name 227SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:54:12 PM
Sample Name 180-193799-J-13-A
Sample Type Sample
Comment E9
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

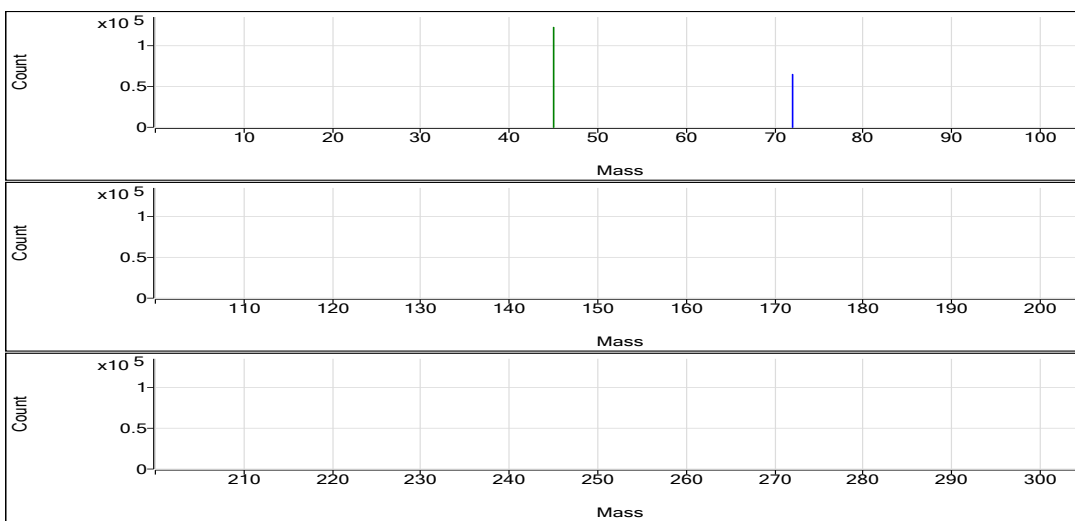
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	0.315	ppb	32.0	1213.42	0.0269	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

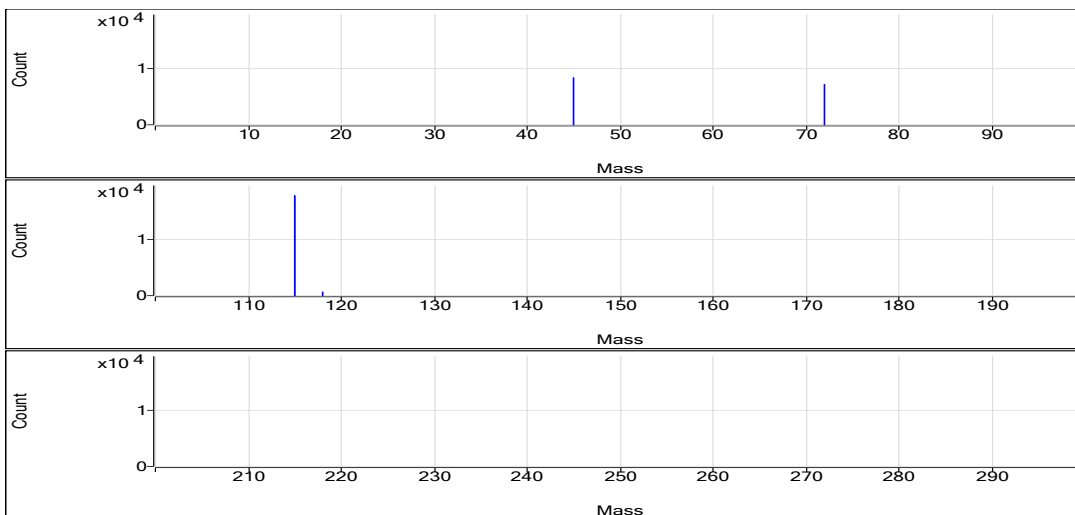
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1229301.41	1.6	94.0	Analog	0.1000	3
No Gas	Ge	72	651689.70	1.0	99.5	Pulse	0.1000	3
H2	Sc	45	83857.80	0.9	102.1	Pulse	0.1000	3
H2	Ge	72	72175.67	1.2	105.6	Pulse	0.1000	3
H2	In	115	178188.16	1.1	104.4	Pulse	0.1000	3
He	Sc	45	24028.20	3.0	93.8	Pulse	0.1000	3
He	Ge	72	45067.38	1.1	94.9	Pulse	0.1000	3
He	In	115	37382.25	0.5	91.3	Pulse	0.1000	3
He	Tb	159	149421.97	0.5	93.7	Pulse	0.1000	3
He	Bi	209	109328.84	2.4	93.5	Pulse	0.1000	3

No Gas

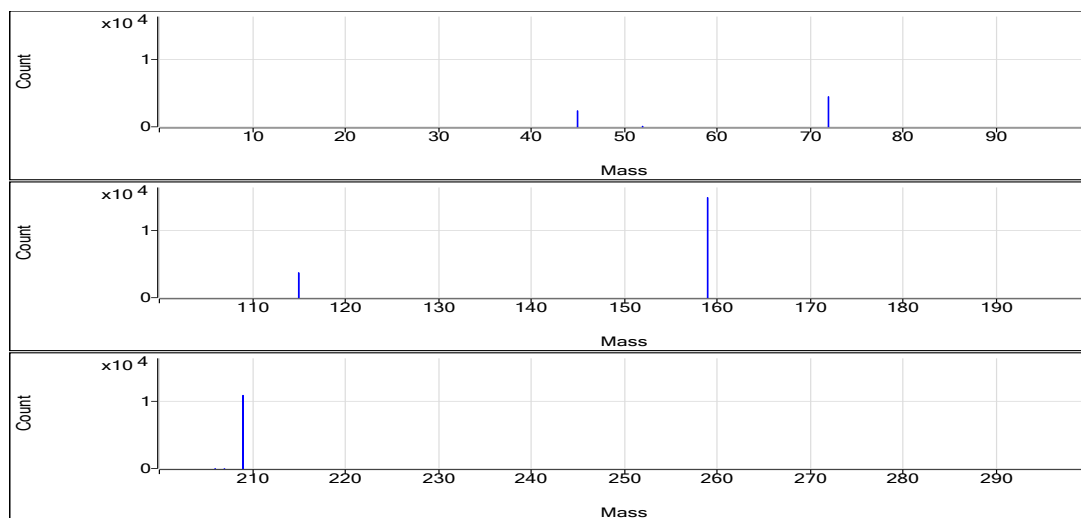


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.429	0.0289	1290.10	0.0171	0.02156
Cr	52	3	He	0.274	0.0262	1180.08	0.0171	0.02156
Cr	52	3	He	0.24	0.0257	1170.08	0.0171	0.02156
Sc	45	1	No Gas			1231321.47		
Sc	45	1	No Gas			1208848.34		
Sc	45	1	No Gas			1247734.43		
Ge	72	1	No Gas			649201.98		
Ge	72	1	No Gas			646453.86		
Ge	72	1	No Gas			659413.27		
Sc	45	2	H2			84015.07		
Sc	45	2	H2			83070.63		
Sc	45	2	H2			84487.69		
Ge	72	2	H2			71982.04		
Ge	72	2	H2			71388.72		
Ge	72	2	H2			73156.24		
In	115	2	H2			180437.77		
In	115	2	H2			177211.11		
In	115	2	H2			176915.60		
Sc	45	3	He			23777.70		
Sc	45	3	He			24829.44		
Sc	45	3	He			23477.45		
Ge	72	3	He			44652.68		
Ge	72	3	He			44963.86		
Ge	72	3	He			45585.60		
In	115	3	He			37355.59		
In	115	3	He			37205.11		
In	115	3	He			37586.05		
Tb	159	3	He			150142.45		
Tb	159	3	He			148588.66		
Tb	159	3	He			149534.81		
Bi	209	3	He			111304.00		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			110335.77		
Bi	209	3	He			106346.74		

Quantitation Report

Data File Name 228SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:55:43 PM
Sample Name 180-193739-N-4-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

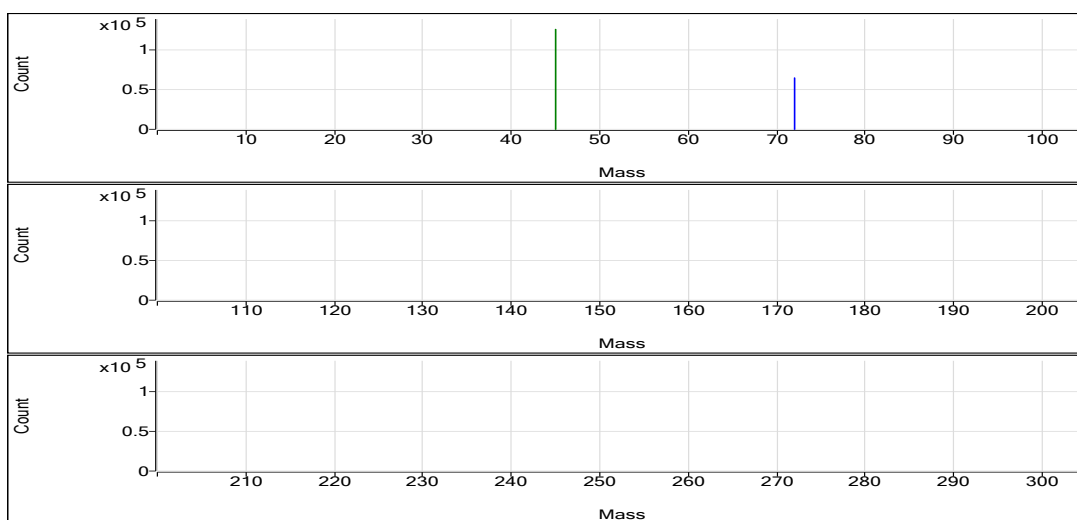
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.237	ppb	N/A	770.04	0.0175	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

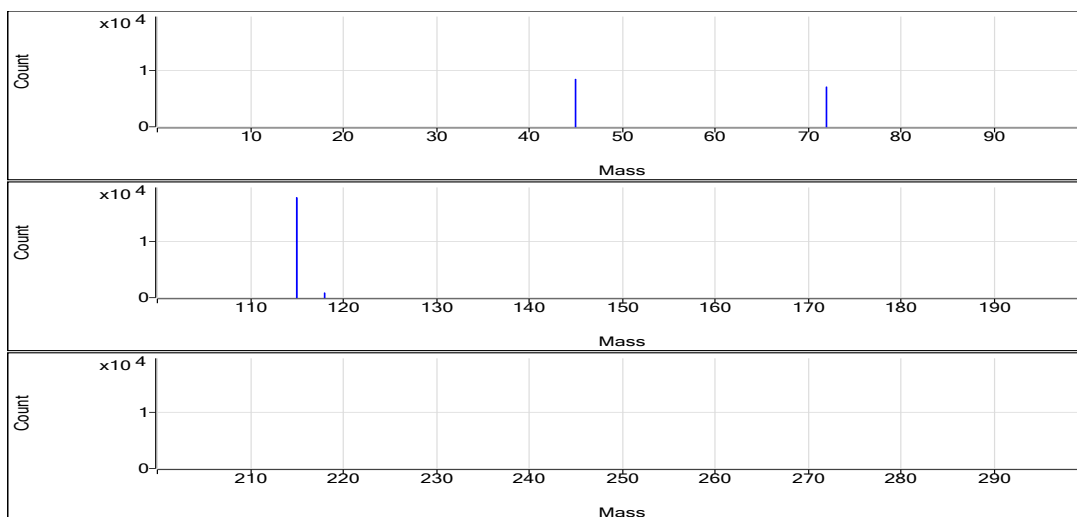
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1260153.71	1.3	96.4	Analog	0.1000	3
No Gas	Ge	72	648434.28	0.9	99.0	Pulse	0.1000	3
H2	Sc	45	85258.45	1.9	103.8	Pulse	0.1000	3
H2	Ge	72	71362.26	1.7	104.4	Pulse	0.1000	3
H2	In	115	178804.06	2.3	104.8	Pulse	0.1000	3
He	Sc	45	24065.06	3.1	94.0	Pulse	0.1000	3
He	Ge	72	44034.37	2.3	92.7	Pulse	0.1000	3
He	In	115	37790.31	1.5	92.3	Pulse	0.1000	3
He	Tb	159	145814.00	0.2	91.5	Pulse	0.1000	3
He	Bi	209	111155.76	1.6	95.0	Pulse	0.1000	3

No Gas

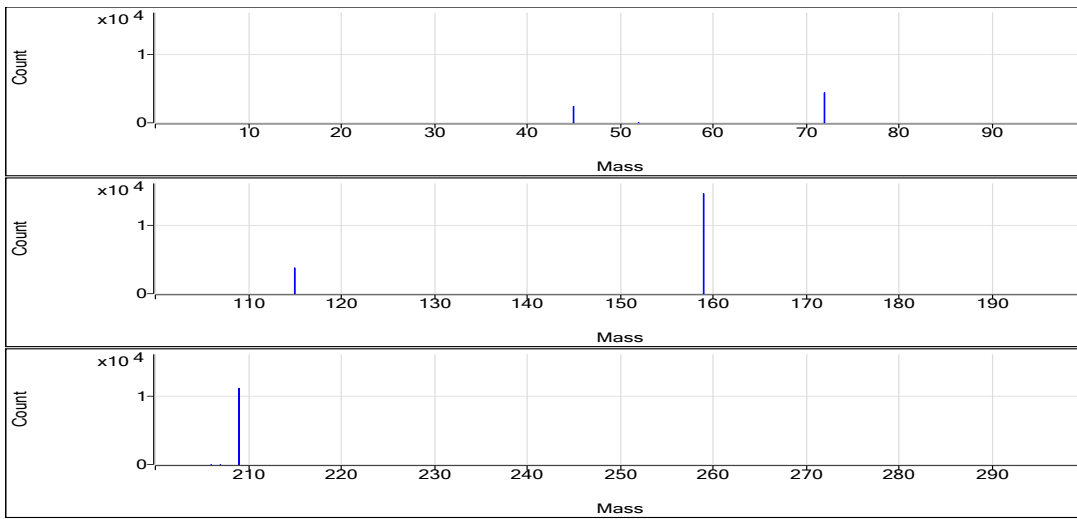


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.327	0.016	720.04	0.0171	0.02156
Cr	52	3	He	-0.184	0.0184	810.04	0.0171	0.02156
Cr	52	3	He	-0.201	0.0181	780.04	0.0171	0.02156
Sc	45	1	No Gas			1254156.39		
Sc	45	1	No Gas			1279224.59		
Sc	45	1	No Gas			1247080.14		
Ge	72	1	No Gas			642440.58		
Ge	72	1	No Gas			653612.18		
Ge	72	1	No Gas			649250.07		
Sc	45	2	H2			86981.64		
Sc	45	2	H2			84979.74		
Sc	45	2	H2			83813.96		
Ge	72	2	H2			71821.44		
Ge	72	2	H2			72242.57		
Ge	72	2	H2			70022.77		
In	115	2	H2			181801.60		
In	115	2	H2			180446.70		
In	115	2	H2			174163.88		
Sc	45	3	He			24909.51		
Sc	45	3	He			23567.84		
Sc	45	3	He			23717.83		
Ge	72	3	He			45063.68		
Ge	72	3	He			43990.81		
Ge	72	3	He			43048.63		
In	115	3	He			38267.84		
In	115	3	He			37185.29		
In	115	3	He			37917.79		
Tb	159	3	He			146184.46		
Tb	159	3	He			145586.50		
Tb	159	3	He			145671.03		
Bi	209	3	He			111485.35		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109289.10		
Bi	209	3	He			112692.83		

Quantitation Report

Data File Name 229SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:57:14 PM
Sample Name 180-193739-O-3-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

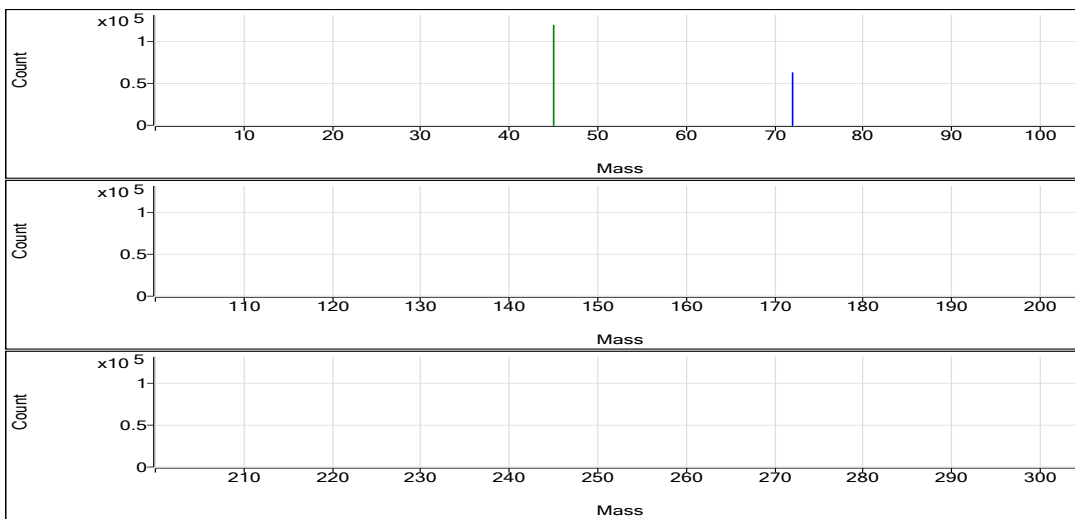
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	13.553	ppb	1.3	11177.47	0.2531	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

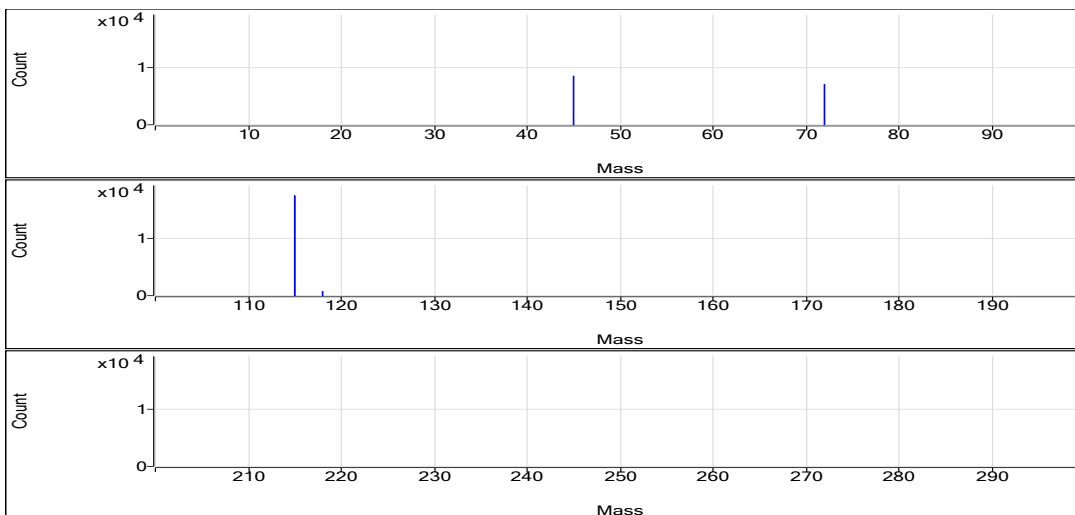
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1202282.19	2.0	92.0	Analog	0.1000	3
No Gas	Ge	72	630977.50	1.2	96.3	Pulse	0.1000	3
H2	Sc	45	85838.07	2.5	104.5	Pulse	0.1000	3
H2	Ge	72	71155.00	1.4	104.1	Pulse	0.1000	3
H2	In	115	175956.09	2.1	103.1	Pulse	0.1000	3
He	Sc	45	23868.11	3.2	93.2	Pulse	0.1000	3
He	Ge	72	44158.14	1.3	92.9	Pulse	0.1000	3
He	In	115	37088.26	1.5	90.6	Pulse	0.1000	3
He	Tb	159	148327.28	2.2	93.0	Pulse	0.1000	3
He	Bi	209	107350.63	0.5	91.8	Pulse	0.1000	3

No Gas

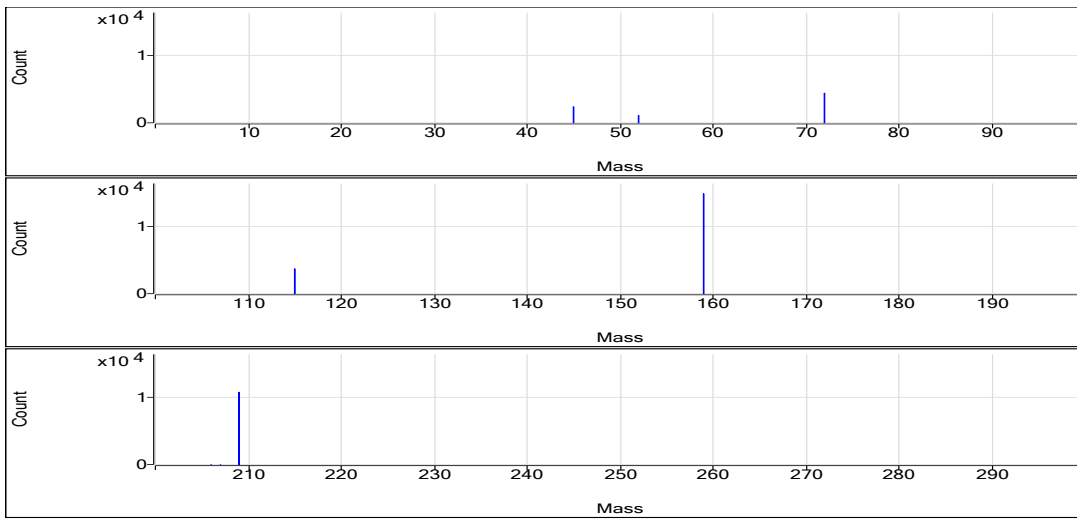


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	13.534	0.2528	11324.20	0.0171	0.02156
Cr	52	3	He	13.744	0.2564	11194.14	0.0171	0.02156
Cr	52	3	He	13.382	0.2502	11014.06	0.0171	0.02156
Sc	45	1	No Gas			1227504.43		
Sc	45	1	No Gas			1198722.17		
Sc	45	1	No Gas			1180619.98		
Ge	72	1	No Gas			637918.62		
Ge	72	1	No Gas			632488.39		
Ge	72	1	No Gas			622525.50		
Sc	45	2	H2			88256.82		
Sc	45	2	H2			84970.62		
Sc	45	2	H2			84286.78		
Ge	72	2	H2			72252.91		
Ge	72	2	H2			70867.09		
Ge	72	2	H2			70344.99		
In	115	2	H2			180083.98		
In	115	2	H2			174963.36		
In	115	2	H2			172820.93		
Sc	45	3	He			24739.26		
Sc	45	3	He			23527.72		
Sc	45	3	He			23337.35		
Ge	72	3	He			44793.21		
Ge	72	3	He			43660.31		
Ge	72	3	He			44020.91		
In	115	3	He			36453.74		
In	115	3	He			37295.04		
In	115	3	He			37516.01		
Tb	159	3	He			151566.37		
Tb	159	3	He			144901.36		
Tb	159	3	He			148514.11		
Bi	209	3	He			107484.98		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106790.06		
Bi	209	3	He			107776.86		

Quantitation Report

Data File Name 230SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 8:58:46 PM
Sample Name 180-193739-K-2-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

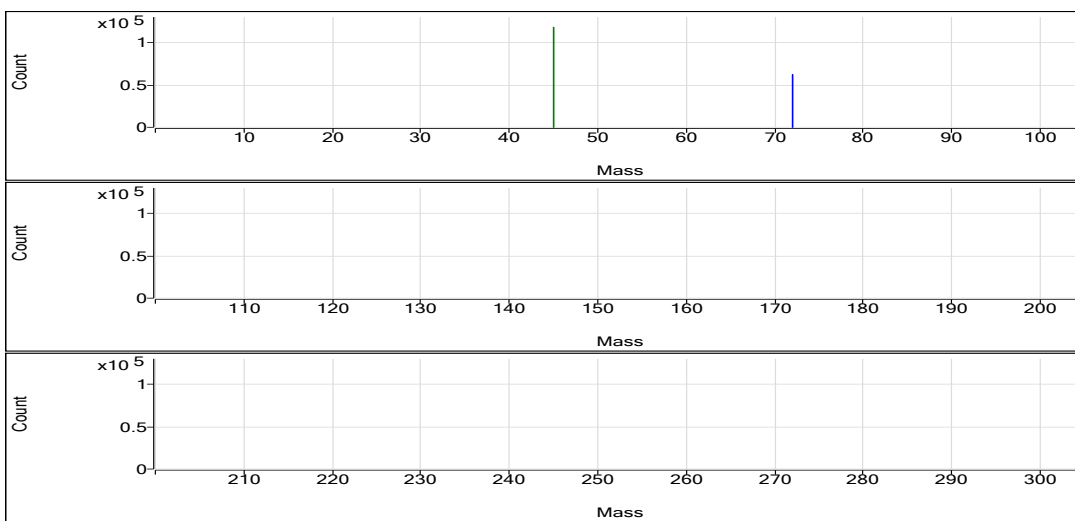
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.204	ppb	N/A	790.05	0.0181	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

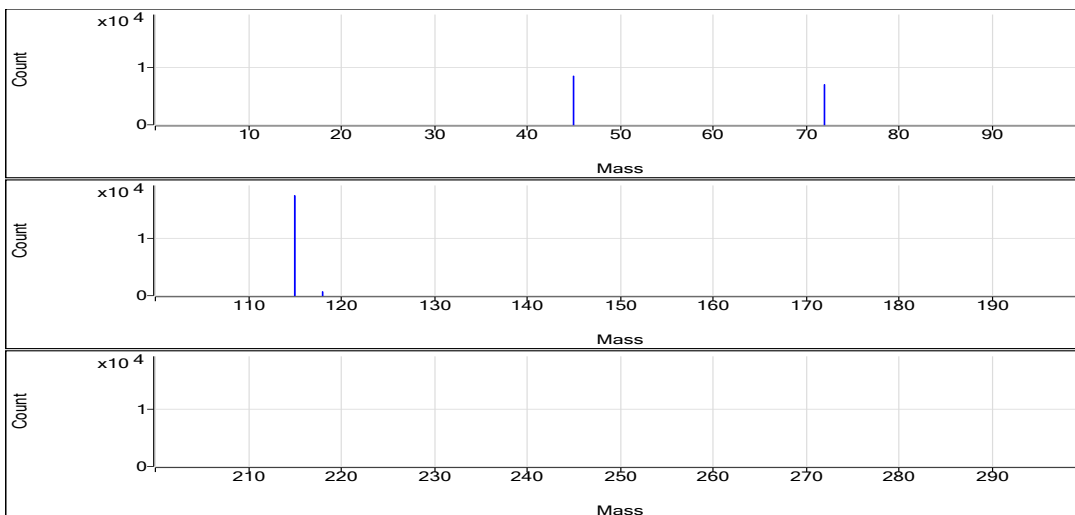
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1184710.06	1.4	90.6	Analog	0.1000	3
No Gas	Ge	72	625603.21	2.0	95.5	Pulse	0.1000	3
H2	Sc	45	85001.11	5.0	103.5	Pulse	0.1000	3
H2	Ge	72	70076.83	4.5	102.5	Pulse	0.1000	3
H2	In	115	174176.90	3.8	102.1	Pulse	0.1000	3
He	Sc	45	23931.48	3.7	93.4	Pulse	0.1000	3
He	Ge	72	43717.32	0.8	92.0	Pulse	0.1000	3
He	In	115	36894.39	1.2	90.1	Pulse	0.1000	3
He	Tb	159	145456.29	0.7	91.2	Pulse	0.1000	3
He	Bi	209	105749.66	2.0	90.4	Pulse	0.1000	3

No Gas

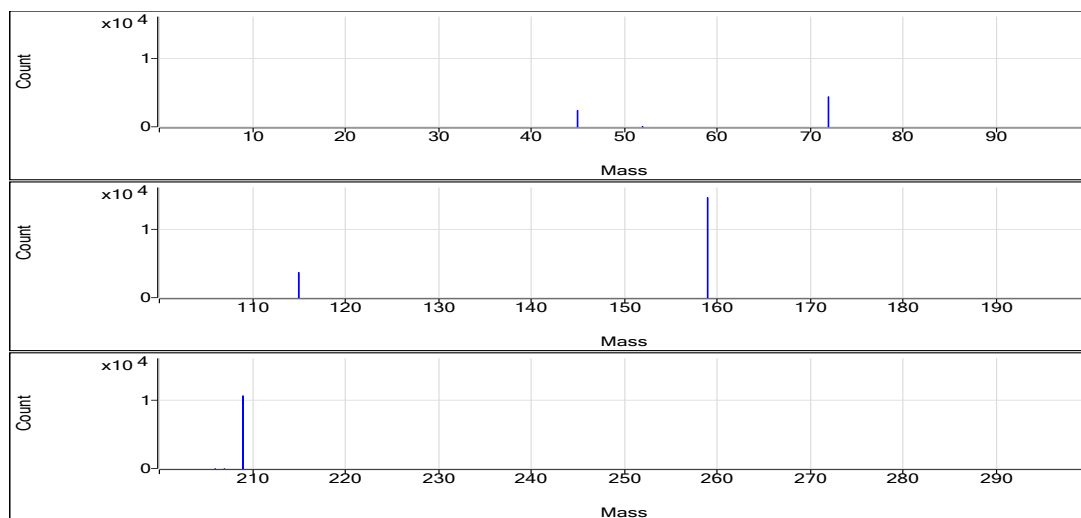


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.22	0.0178	780.05	0.0171	0.02156
Cr	52	3	He	-0.262	0.0171	740.04	0.0171	0.02156
Cr	52	3	He	-0.131	0.0193	850.05	0.0171	0.02156
Sc	45	1	No Gas			1185090.14		
Sc	45	1	No Gas			1200643.03		
Sc	45	1	No Gas			1168397.01		
Ge	72	1	No Gas			616972.88		
Ge	72	1	No Gas			639935.85		
Ge	72	1	No Gas			619900.89		
Sc	45	2	H2			87182.56		
Sc	45	2	H2			87714.83		
Sc	45	2	H2			80105.93		
Ge	72	2	H2			72995.92		
Ge	72	2	H2			70525.87		
Ge	72	2	H2			66708.71		
In	115	2	H2			180203.81		
In	115	2	H2			175166.72		
In	115	2	H2			167160.17		
Sc	45	3	He			24659.26		
Sc	45	3	He			24198.53		
Sc	45	3	He			22936.65		
Ge	72	3	He			43841.22		
Ge	72	3	He			43309.59		
Ge	72	3	He			44001.14		
In	115	3	He			37285.09		
In	115	3	He			36393.60		
In	115	3	He			37004.49		
Tb	159	3	He			146687.17		
Tb	159	3	He			145032.63		
Tb	159	3	He			144649.08		
Bi	209	3	He			105522.46		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			103808.65		
Bi	209	3	He			107917.86		

Quantitation Report

Data File Name 231SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:00:17 PM
Sample Name 180-193739-N-3-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

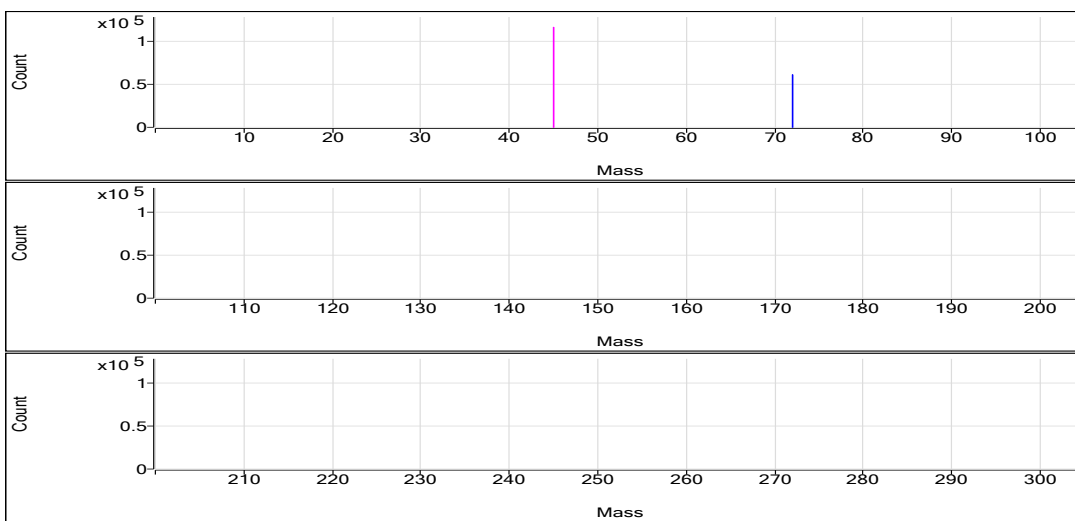
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	13.062	ppb	3.9	11120.78	0.2447	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

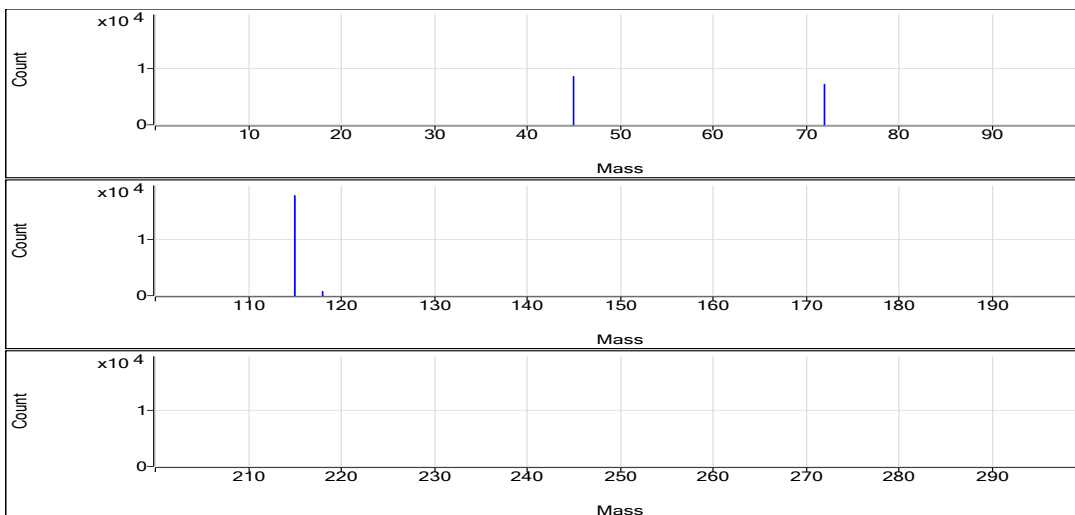
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1162696.83	1.1	89.0	Mix	0.1000	3
No Gas	Ge	72	611326.45	1.0	93.3	Pulse	0.1000	3
H2	Sc	45	86173.56	2.4	104.9	Pulse	0.1000	3
H2	Ge	72	72614.59	2.0	106.3	Pulse	0.1000	3
H2	In	115	178525.37	1.7	104.6	Pulse	0.1000	3
He	Sc	45	23878.00	2.4	93.2	Pulse	0.1000	3
He	Ge	72	45438.50	1.9	95.6	Pulse	0.1000	3
He	In	115	36747.65	2.8	89.8	Pulse	0.1000	3
He	Tb	159	148997.02	1.3	93.5	Pulse	0.1000	3
He	Bi	209	108599.90	2.1	92.9	Pulse	0.1000	3

No Gas

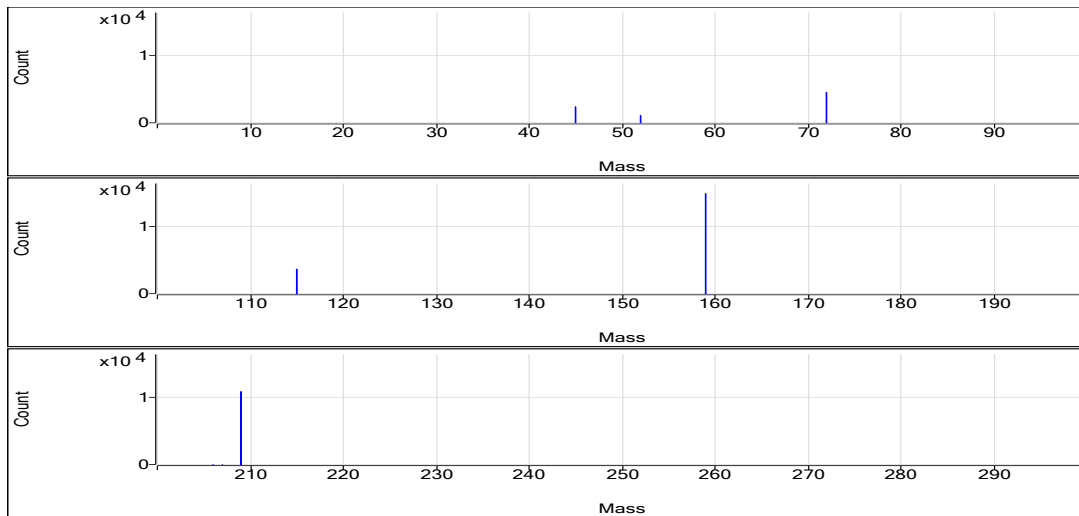


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	12.485	0.2349	10593.79	0.0171	0.02156
Cr	52	3	He	13.228	0.2476	11494.32	0.0171	0.02156
Cr	52	3	He	13.472	0.2517	11274.23	0.0171	0.02156
Sc	45	1	No Gas			1162774.75		
Sc	45	1	No Gas			1150214.28		
Sc	45	1	No Gas			1175101.47		
Ge	72	1	No Gas			604073.55		
Ge	72	1	No Gas			614472.76		
Ge	72	1	No Gas			615433.04		
Sc	45	2	H2			87554.68		
Sc	45	2	H2			83783.74		
Sc	45	2	H2			87182.25		
Ge	72	2	H2			72815.79		
Ge	72	2	H2			71056.69		
Ge	72	2	H2			73971.29		
In	115	2	H2			175653.22		
In	115	2	H2			178109.61		
In	115	2	H2			181813.28		
Sc	45	3	He			23377.18		
Sc	45	3	He			24518.98		
Sc	45	3	He			23737.84		
Ge	72	3	He			45103.98		
Ge	72	3	He			46427.81		
Ge	72	3	He			44783.71		
In	115	3	He			36032.71		
In	115	3	He			37917.45		
In	115	3	He			36292.78		
Tb	159	3	He			146849.46		
Tb	159	3	He			150182.13		
Tb	159	3	He			149959.47		
Bi	209	3	He			106145.74		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			110658.59		
Bi	209	3	He			108995.37		

Quantitation Report

Data File Name 232SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:01:48 PM
Sample Name 180-193739-J-2-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

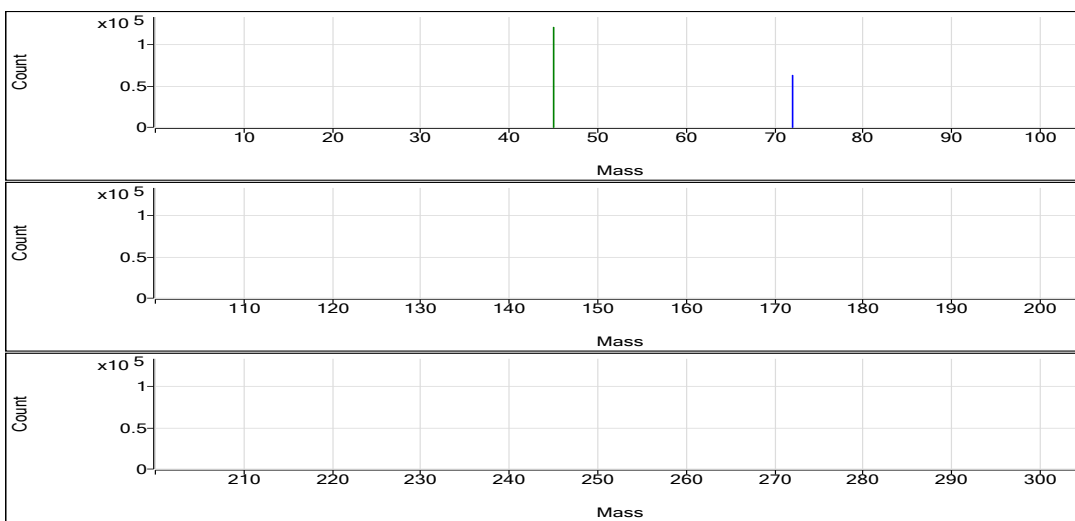
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.124	ppb	N/A	856.72	0.0194	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

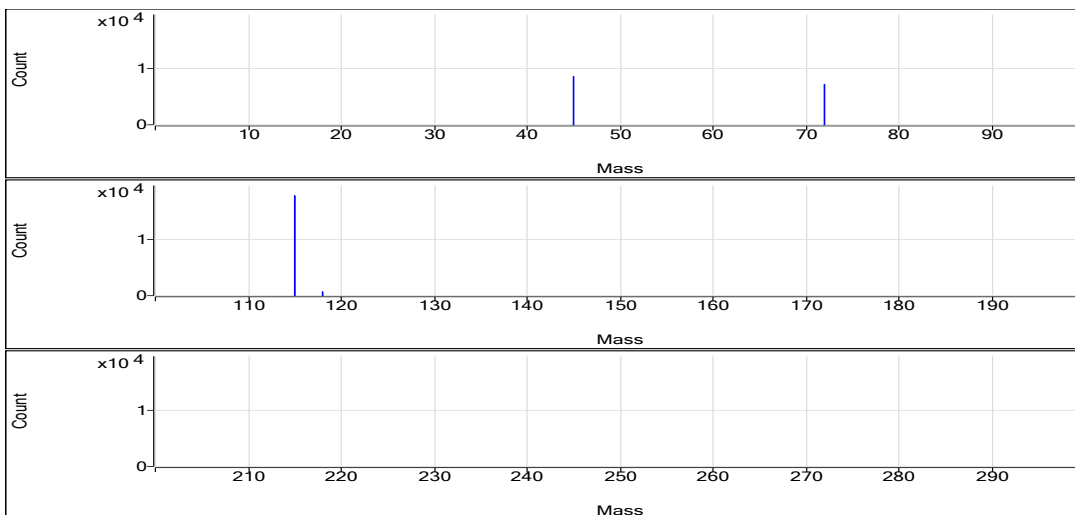
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1218642.80	0.6	93.2	Analog	0.1000	3
No Gas	Ge	72	634572.57	0.6	96.8	Pulse	0.1000	3
H2	Sc	45	85931.79	0.9	104.6	Pulse	0.1000	3
H2	Ge	72	71968.73	1.1	105.3	Pulse	0.1000	3
H2	In	115	177691.99	0.6	104.2	Pulse	0.1000	3
He	Sc	45	23734.48	1.8	92.7	Pulse	0.1000	3
He	Ge	72	44161.39	2.9	92.9	Pulse	0.1000	3
He	In	115	37532.77	2.2	91.7	Pulse	0.1000	3
He	Tb	159	147971.60	0.7	92.8	Pulse	0.1000	3
He	Bi	209	106532.24	0.9	91.1	Pulse	0.1000	3

No Gas

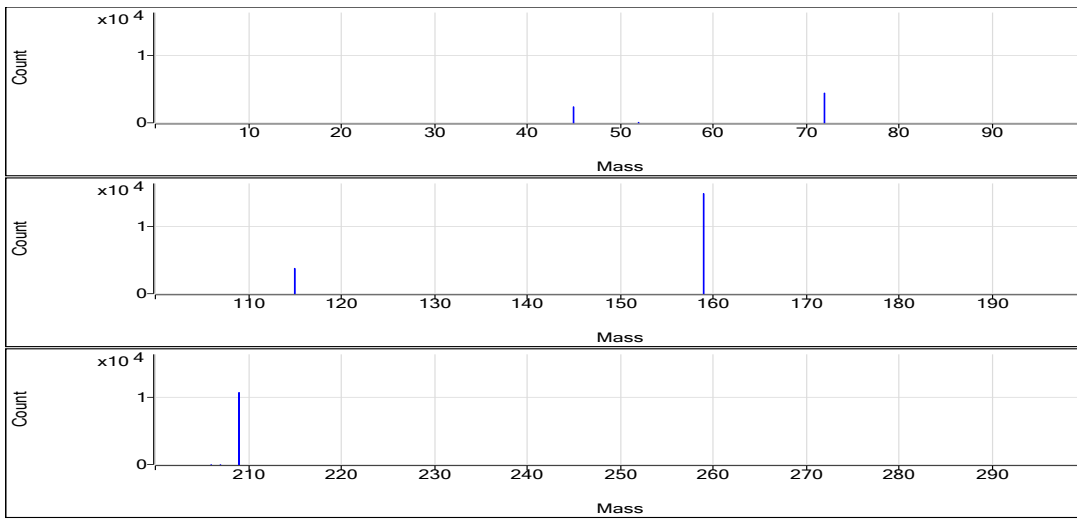


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.131	0.0193	860.05	0.0171	0.02156
Cr	52	3	He	0.011	0.0218	930.06	0.0171	0.02156
Cr	52	3	He	-0.252	0.0173	780.05	0.0171	0.02156
Sc	45	1	No Gas			1218845.61		
Sc	45	1	No Gas			1225882.25		
Sc	45	1	No Gas			1211200.53		
Ge	72	1	No Gas			632437.57		
Ge	72	1	No Gas			639212.92		
Ge	72	1	No Gas			632067.22		
Sc	45	2	H2			85884.67		
Sc	45	2	H2			85211.56		
Sc	45	2	H2			86699.15		
Ge	72	2	H2			71841.11		
Ge	72	2	H2			72796.32		
Ge	72	2	H2			71268.76		
In	115	2	H2			178716.87		
In	115	2	H2			176581.70		
In	115	2	H2			177777.40		
Sc	45	3	He			23277.13		
Sc	45	3	He			23818.10		
Sc	45	3	He			24108.21		
Ge	72	3	He			44522.32		
Ge	72	3	He			42757.59		
Ge	72	3	He			45204.27		
In	115	3	He			38438.37		
In	115	3	He			36784.16		
In	115	3	He			37375.77		
Tb	159	3	He			149044.83		
Tb	159	3	He			147079.63		
Tb	159	3	He			147790.35		
Bi	209	3	He			107383.96		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106680.14		
Bi	209	3	He			105532.63		

Quantitation Report

Data File Name 234_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:05:32 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

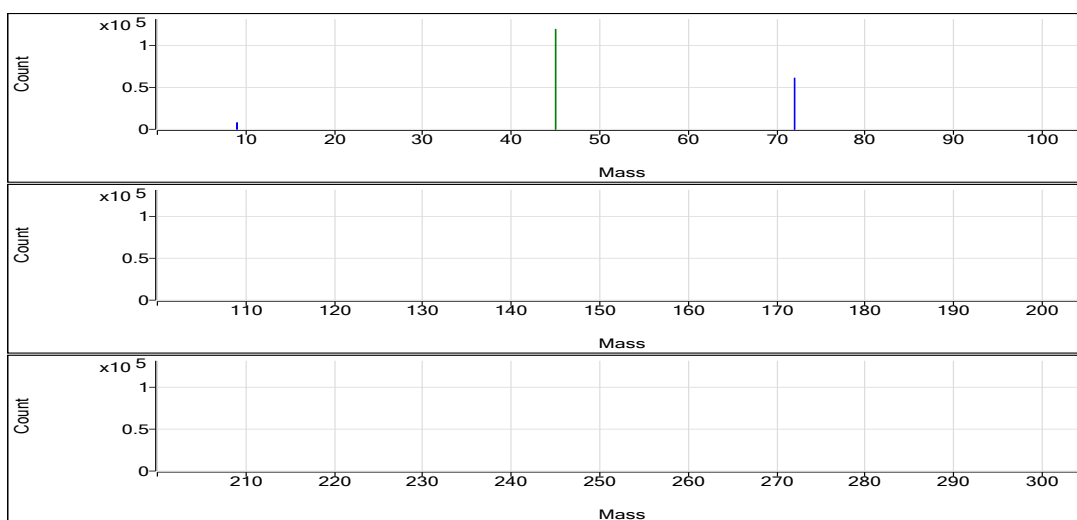
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.538	ppb	6.2	16068.36	0.0261	Pulse	0.5000	3
Se	78	72	H2	25.344	ppb	5.1	890.03	0.0129	Pulse	1.5000	3
Na	23	72	He	2606.698	ppb	1.6	215486.42	4.9069	Pulse	0.1000	3
Mg	24	72	He	2484.374	ppb	2.1	100248.79	2.2828	Pulse	0.1000	3
Al	27	72	He	2440.970	ppb	0.5	31236.68	0.7113	Pulse	0.1000	3
K	39	72	He	2512.363	ppb	3.6	97714.44	2.2253	Pulse	0.5000	3
Ca	44	72	He	2440.778	ppb	3.8	4421.29	0.1007	Pulse	0.5000	3
Ti	47	72	He	2495.104	ppb	0.7	34081.94	0.7761	Pulse	0.5000	3
V	51	72	He	250.145	ppb	0.4	150421.37	3.4251	Pulse	0.5000	3
Cr	52	72	He	246.156	ppb	1.5	185654.29	4.2274	Pulse	0.1000	3
Mn	55	72	He	246.463	ppb	0.8	79073.68	1.8005	Pulse	0.5000	3
Fe	57	72	He	2499.583	ppb	1.5	35676.53	0.8124	Pulse	0.1000	3
Co	59	72	He	248.779	ppb	0.5	363066.24	8.2672	Pulse	0.5000	3
Ni	60	72	He	248.675	ppb	1.1	102005.90	2.3228	Pulse	0.5000	3
Cu	63	72	He	246.407	ppb	0.3	292528.69	6.6610	Pulse	0.5000	3
Zn	66	72	He	246.351	ppb	0.9	33795.20	0.7695	Pulse	0.5000	3
As	75	72	He	245.484	ppb	1.3	27524.27	0.6267	Pulse	0.5000	3
Sr	88	115	He	25.149	ppb	2.5	10150.19	0.2672	Pulse	0.1000	3
Mo	98	115	He	26.121	ppb	1.4	23364.66	0.6150	Pulse	0.1000	3
Ag	107	115	He	25.967	ppb	1.3	48659.73	1.2808	Pulse	0.1000	3
Cd	111	115	He	25.674	ppb	0.9	5472.99	0.1441	Pulse	0.5000	3
Sn	120	115	He	24.829	ppb	0.5	18234.59	0.4800	Pulse	0.1000	3
Sb	121	115	He	24.872	ppb	1.6	15254.28	0.4016	Pulse	0.3000	3
Ba	137	115	He	253.602	ppb	1.4	50908.94	1.3402	Pulse	0.1000	3
Tl	205	159	He	25.294	ppb	0.5	93770.88	0.6273	Pulse	0.1000	3
Pb	208	159	He	25.152	ppb	1.3	125182.79	0.8375	Pulse	0.1000	3
U	238	159	He	25.658	ppb	1.5	129575.05	0.8668	Pulse	0.1000	3

ISTD Table:

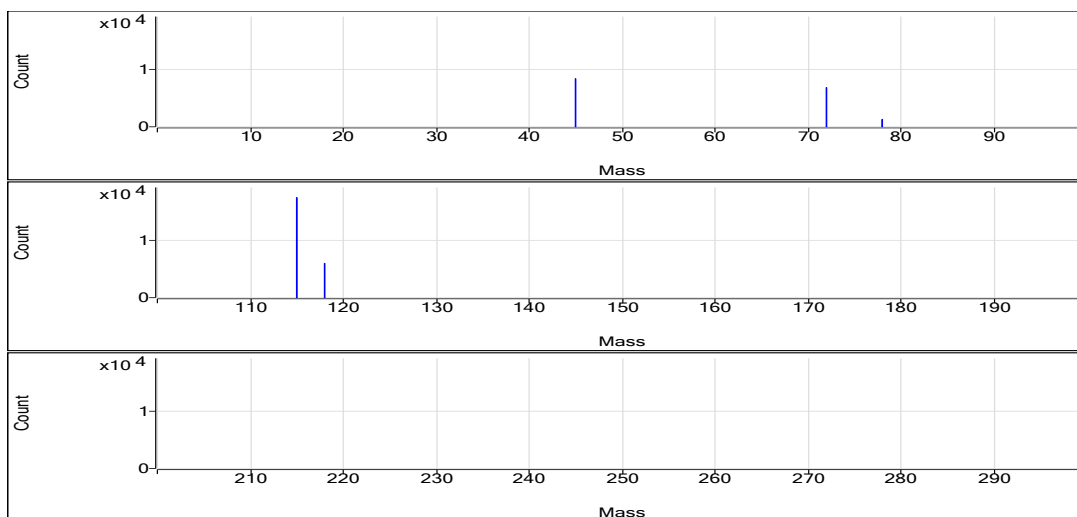
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1198474.75	1.7	91.7	Analog	0.1000	3
No Gas	Ge	72	614848.34	1.3	93.8	Pulse	0.1000	3
H2	Sc	45	84796.80	1.3	103.2	Pulse	0.1000	3
H2	Ge	72	69236.56	3.6	101.3	Pulse	0.1000	3
H2	In	115	176233.88	1.1	103.3	Pulse	0.1000	3
He	Sc	45	24071.59	1.0	94.0	Pulse	0.1000	3
He	Ge	72	43917.36	0.7	92.4	Pulse	0.1000	3
He	In	115	37989.84	0.7	92.8	Pulse	0.1000	3
He	Tb	159	149483.46	0.6	93.8	Pulse	0.1000	3
He	Bi	209	111243.69	0.6	95.1	Pulse	0.1000	3

No Gas

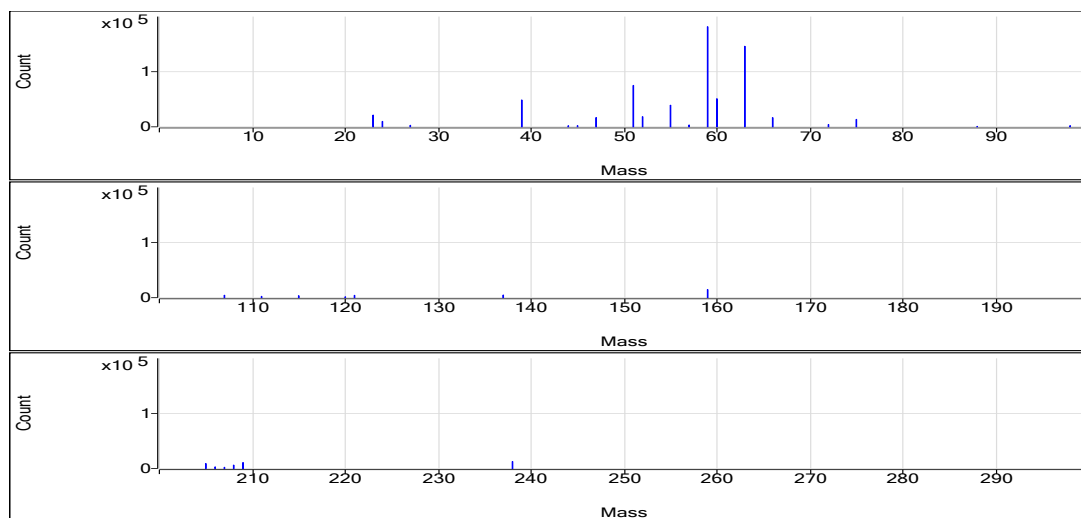


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	22.968	0.0245	15090.77	0.0011	7.835E-05
Be	9	1	No Gas	24.624	0.0262	16315.93	0.0011	7.835E-05
Be	9	1	No Gas	26.02	0.0277	16798.38	0.0011	7.835E-05
Se	78	2	H2	24.794	0.0126	894.69	0.0005	2.594E-05
Se	78	2	H2	26.812	0.0136	904.03	0.0005	2.594E-05
Se	78	2	H2	24.427	0.0124	871.36	0.0005	2.594E-05
Na	23	3	He	2644.469	4.9755	216832.91	0.0018	0.1731
Na	23	3	He	2611.564	4.9158	216349.14	0.0018	0.1731
Na	23	3	He	2564.06	4.8295	213277.22	0.0018	0.1731
Mg	24	3	He	2501.61	2.2986	100171.24	0.0009	0.006537
Mg	24	3	He	2524.714	2.3197	102094.37	0.0009	0.006537
Mg	24	3	He	2426.798	2.23	98480.76	0.0009	0.006537
Al	27	3	He	2445.919	0.7127	31059.62	0.0003	0.00231
Al	27	3	He	2450.866	0.7141	31430.29	0.0003	0.00231
Al	27	3	He	2426.124	0.707	31220.13	0.0003	0.00231
K	39	3	He	2614.058	2.3013	100289.43	0.0007	0.3475
K	39	3	He	2486.894	2.2062	97099.07	0.0007	0.3475
K	39	3	He	2436.135	2.1683	95754.82	0.0007	0.3475
Ca	44	3	He	2536.125	0.1045	4554.66	0	0.002807
Ca	44	3	He	2434.639	0.1004	4420.62	0	0.002807
Ca	44	3	He	2351.569	0.0971	4288.58	0	0.002807
Ti	47	3	He	2512.977	0.7816	34063.23	0.0003	0.0001123
Ti	47	3	He	2493.471	0.7756	34133.40	0.0003	0.0001123
Ti	47	3	He	2478.864	0.771	34049.20	0.0003	0.0001123
V	51	3	He	250.188	3.4257	149291.48	0.0137	0.008308
V	51	3	He	251.149	3.4388	151347.06	0.0137	0.008308
V	51	3	He	249.098	3.4108	150625.58	0.0137	0.008308
Cr	52	3	He	246.482	4.233	184474.20	0.0171	0.02156
Cr	52	3	He	249.57	4.2858	188622.32	0.0171	0.02156
Cr	52	3	He	242.415	4.1635	183866.36	0.0171	0.02156
Mn	55	3	He	246.844	1.8033	78588.02	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	248.12	1.8126	79775.65	0.0073	0.002316
Mn	55	3	He	244.425	1.7857	78857.36	0.0073	0.002316
Fe	57	3	He	2519.838	0.819	35689.81	0.0003	0.002736
Fe	57	3	He	2521.788	0.8196	36070.87	0.0003	0.002736
Fe	57	3	He	2457.124	0.7986	35268.90	0.0003	0.002736
Co	59	3	He	249.531	8.2922	361370.31	0.0332	0.001922
Co	59	3	He	249.407	8.288	364765.75	0.0332	0.001922
Co	59	3	He	247.399	8.2213	363062.66	0.0332	0.001922
Ni	60	3	He	251.377	2.348	102325.23	0.0093	0.003141
Ni	60	3	He	248.567	2.3218	102184.48	0.0093	0.003141
Ni	60	3	He	246.079	2.2986	101507.98	0.0093	0.003141
Cu	63	3	He	247.123	6.6803	291125.97	0.027	0.003732
Cu	63	3	He	246.444	6.662	293200.41	0.027	0.003732
Cu	63	3	He	245.655	6.6407	293259.69	0.027	0.003732
Zn	66	3	He	248.668	0.7768	33851.34	0.0031	0.002032
Zn	66	3	He	245.859	0.768	33801.25	0.0031	0.002032
Zn	66	3	He	244.525	0.7639	33733.00	0.0031	0.002032
As	75	3	He	246.085	0.6283	27379.36	0.0025	0.0007733
As	75	3	He	241.92	0.6176	27183.01	0.0025	0.0007733
As	75	3	He	248.445	0.6343	28010.45	0.0025	0.0007733
Sr	88	3	He	25.814	0.2741	10443.69	0.0105	0.004071
Sr	88	3	He	24.538	0.2608	9823.35	0.0105	0.004071
Sr	88	3	He	25.094	0.2666	10183.54	0.0105	0.004071
Mo	98	3	He	25.814	0.6078	23157.66	0.0234	0.003908
Mo	98	3	He	26.007	0.6124	23067.59	0.0234	0.003908
Mo	98	3	He	26.541	0.6248	23868.73	0.0234	0.003908
Ag	107	3	He	26.116	1.2881	49077.46	0.0493	0.0004851
Ag	107	3	He	25.593	1.2623	47553.07	0.0493	0.0004851
Ag	107	3	He	26.192	1.2919	49348.65	0.0493	0.0004851
Cd	111	3	He	25.919	0.1454	5541.01	0.0056	0
Cd	111	3	He	25.608	0.1437	5412.97	0.0056	0
Cd	111	3	He	25.496	0.1431	5464.99	0.0056	0
Sn	120	3	He	24.961	0.4822	18371.34	0.0169	0.0609
Sn	120	3	He	24.719	0.4781	18011.07	0.0169	0.0609
Sn	120	3	He	24.808	0.4796	18321.36	0.0169	0.0609
Sb	121	3	He	25.147	0.406	15467.84	0.0161	0.0005433
Sb	121	3	He	25.043	0.4043	15230.90	0.0161	0.0005433
Sb	121	3	He	24.425	0.3944	15064.11	0.0161	0.0005433
Ba	137	3	He	253.438	1.3393	51025.90	0.0053	0.001141
Ba	137	3	He	257.232	1.3593	51206.38	0.0053	0.001141
Ba	137	3	He	250.136	1.3219	50494.54	0.0053	0.001141
Tl	205	3	He	25.333	0.6283	93760.74	0.0248	0.0005854
Tl	205	3	He	25.149	0.6237	92794.41	0.0248	0.0005854
Tl	205	3	He	25.399	0.6299	94757.49	0.0248	0.0005854
Pb	208	3	He	24.908	0.8293	64583.53	0.0332	0.001693
Pb	208	3	He	25.527	0.8499	67156.10	0.0332	0.001693
Pb	208	3	He	25.022	0.8331	65920.75	0.0332	0.001693
U	238	3	He	26.11	0.8821	131643.92	0.0338	0.0007949
U	238	3	He	25.417	0.8587	127756.96	0.0338	0.0007949
U	238	3	He	25.445	0.8597	129324.27	0.0338	0.0007949
Sc	45	1	No Gas			1183922.72		
Sc	45	1	No Gas			1221780.22		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1189721.31		
Ge	72	1	No Gas			616560.93		
Ge	72	1	No Gas			621922.76		
Ge	72	1	No Gas			606061.32		
Sc	45	2	H2			85956.88		
Sc	45	2	H2			84558.76		
Sc	45	2	H2			83874.77		
Ge	72	2	H2			71058.04		
Ge	72	2	H2			66407.84		
Ge	72	2	H2			70243.80		
In	115	2	H2			177562.54		
In	115	2	H2			177234.84		
In	115	2	H2			173904.27		
Sc	45	3	He			24178.33		
Sc	45	3	He			23797.80		
Sc	45	3	He			24238.64		
Ge	72	3	He			43579.76		
Ge	72	3	He			44011.11		
Ge	72	3	He			44161.21		
In	115	3	He			38227.89		
In	115	3	He			37796.55		
In	115	3	He			38328.00		
Tb	159	3	He			149236.50		
Tb	159	3	He			148778.94		
Tb	159	3	He			150434.94		
Bi	209	3	He			111968.58		
Bi	209	3	He			111062.37		
Bi	209	3	He			110700.12		

Quantitation Report

Data File Name 236_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:09:56 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

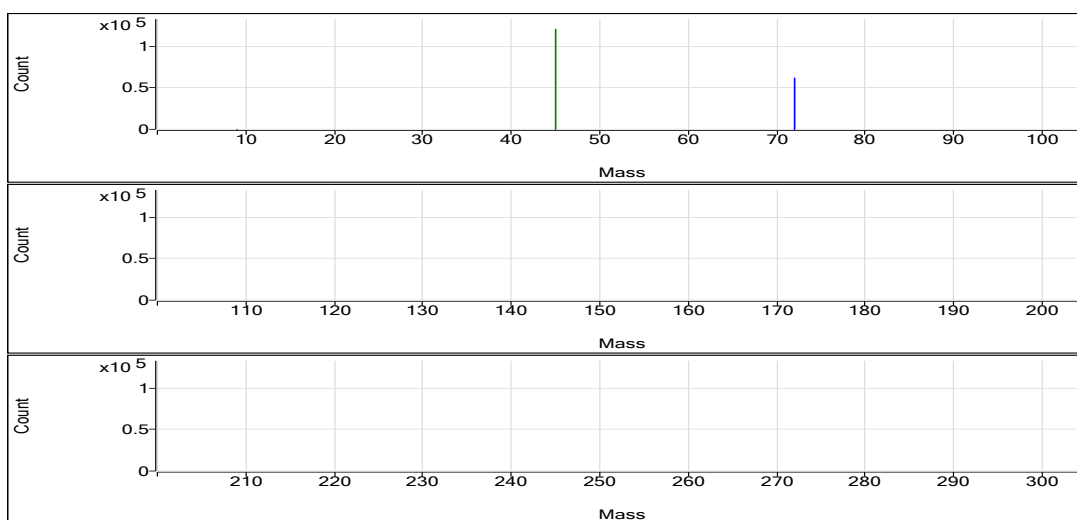
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.020	ppb	68.9	61.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.007	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	72	He	80.417	ppb	3.5	13956.17	0.3191	Pulse	0.1000	3
Mg	24	72	He	17.081	ppb	6.0	970.05	0.0222	Pulse	0.1000	3
Al	27	72	He	-2.654	ppb	N/A	66.67	0.0015	Pulse	0.1000	3
K	39	72	He	25.460	ppb	341.7	16060.73	0.3665	Pulse	0.5000	3
Ca	44	72	He	-9.276	ppb	N/A	106.67	0.0024	Pulse	0.5000	3
Ti	47	72	He	0.469	ppb	62.3	11.33	0.0003	Pulse	0.5000	3
V	51	72	He	0.028	ppb	298.3	379.34	0.0087	Pulse	0.5000	3
Cr	52	72	He	-0.213	ppb	N/A	783.38	0.0179	Pulse	0.1000	3
Mn	55	72	He	0.214	ppb	54.0	169.33	0.0039	Pulse	0.5000	3
Fe	57	72	He	-2.106	ppb	N/A	90.00	0.0021	Pulse	0.1000	3
Co	59	72	He	0.010	ppb	34.8	98.67	0.0023	Pulse	0.5000	3
Ni	60	72	He	0.014	ppb	342.8	143.33	0.0033	Pulse	0.5000	3
Cu	63	72	He	0.002	ppb	643.4	165.33	0.0038	Pulse	0.5000	3
Zn	66	72	He	-0.271	ppb	N/A	52.00	0.0012	Pulse	0.5000	3
As	75	72	He	0.050	ppb	86.9	39.33	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.024	ppb	N/A	146.67	0.0038	Pulse	0.1000	3
Mo	98	115	He	0.029	ppb	147.7	176.67	0.0046	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.075	ppb	679.6	2386.94	0.0622	Pulse	0.1000	3
Sb	121	115	He	0.040	ppb	41.8	45.56	0.0012	Pulse	0.3000	3
Ba	137	115	He	-0.018	ppb	N/A	40.00	0.0010	Pulse	0.1000	3
Tl	205	159	He	-0.004	ppb	N/A	73.33	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.018	ppb	N/A	160.00	0.0011	Pulse	0.1000	3
U	238	159	He	-0.007	ppb	N/A	83.33	0.0006	Pulse	0.1000	3

ISTD Table:

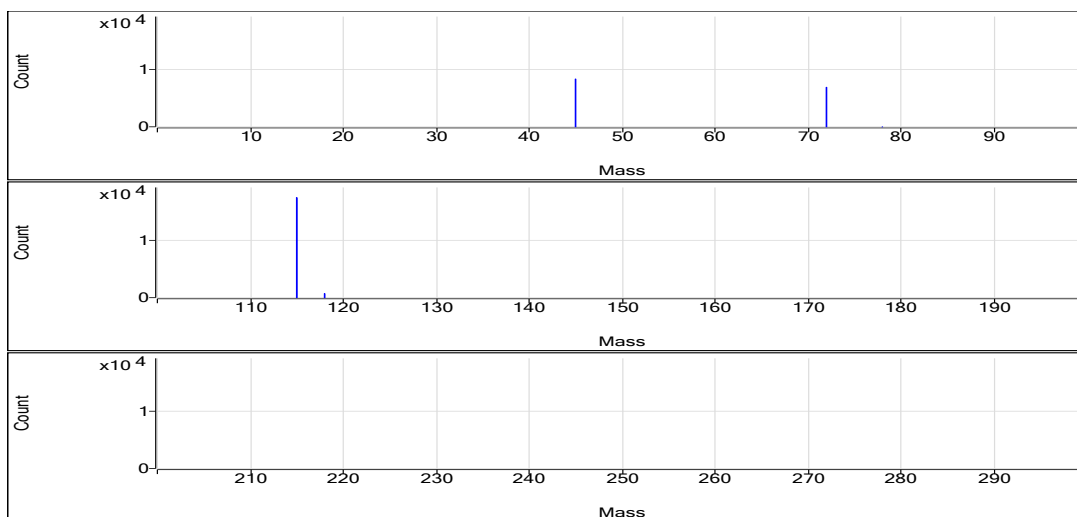
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1207180.27	2.9	92.4	Analog	0.1000	3
No Gas	Ge	72	619573.18	1.9	94.5	Pulse	0.1000	3
H2	Sc	45	84236.91	0.8	102.5	Pulse	0.1000	3
H2	Ge	72	69748.91	1.0	102.1	Pulse	0.1000	3
H2	In	115	176101.41	0.3	103.2	Pulse	0.1000	3
He	Sc	45	24018.28	0.7	93.8	Pulse	0.1000	3
He	Ge	72	43740.31	1.6	92.1	Pulse	0.1000	3
He	In	115	38431.51	1.3	93.9	Pulse	0.1000	3
He	Tb	159	147668.12	0.9	92.6	Pulse	0.1000	3
He	Bi	209	108709.45	0.7	92.9	Pulse	0.1000	3

No Gas

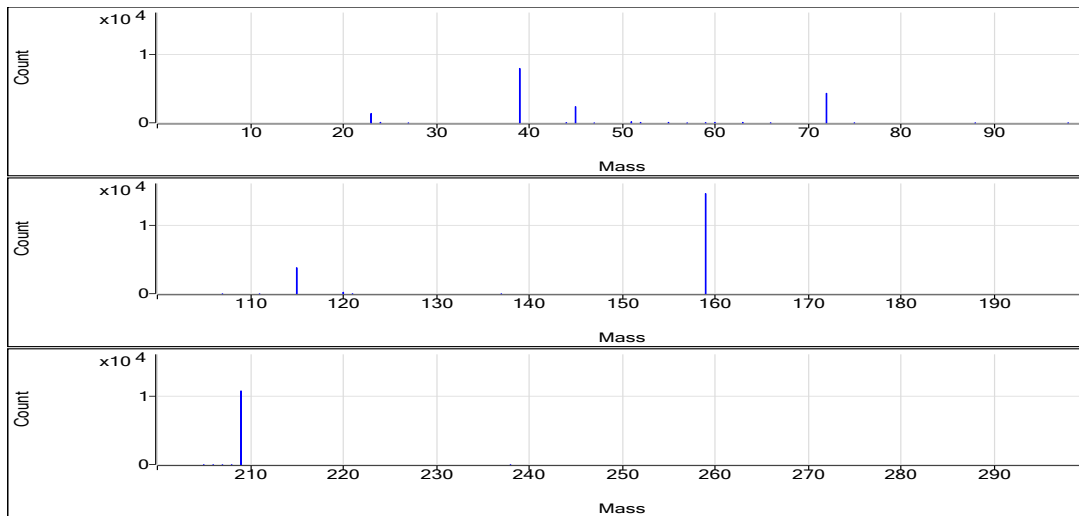


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.032	0.0001	68.00	0.0011	7.835E-05
Be	9	1	No Gas	0.005	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.022	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.043	0	3.33	0.0005	2.594E-05
Na	23	3	He	77.622	0.314	13946.18	0.0018	0.1731
Na	23	3	He	83.185	0.3241	14206.34	0.0018	0.1731
Na	23	3	He	80.443	0.3191	13716.00	0.0018	0.1731
Mg	24	3	He	15.967	0.0212	940.05	0.0009	0.006537
Mg	24	3	He	17.27	0.0224	980.06	0.0009	0.006537
Mg	24	3	He	18.008	0.023	990.05	0.0009	0.006537
Al	27	3	He	-5.628	0.0007	30.00	0.0003	0.00231
Al	27	3	He	-5.597	0.0007	30.00	0.0003	0.00231
Al	27	3	He	3.263	0.0033	140.01	0.0003	0.00231
K	39	3	He	121.919	0.4386	19479.59	0.0007	0.3475
K	39	3	He	1.487	0.3486	15279.12	0.0007	0.3475
K	39	3	He	-47.027	0.3123	13423.47	0.0007	0.3475
Ca	44	3	He	1.879	0.0029	128.00	0	0.002807
Ca	44	3	He	-13.097	0.0023	100.00	0	0.002807
Ca	44	3	He	-16.61	0.0021	92.00	0	0.002807
Ti	47	3	He	0.797	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.373	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.238	0.0002	8.00	0.0003	0.0001123
V	51	3	He	-0.044	0.0077	342.01	0.0137	0.008308
V	51	3	He	0.01	0.0084	370.01	0.0137	0.008308
V	51	3	He	0.117	0.0099	426.01	0.0137	0.008308
Cr	52	3	He	-0.181	0.0185	820.05	0.0171	0.02156
Cr	52	3	He	-0.3	0.0164	720.04	0.0171	0.02156
Cr	52	3	He	-0.159	0.0188	810.04	0.0171	0.02156
Mn	55	3	He	0.096	0.003	134.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.327	0.0047	206.00	0.0073	0.002316
Mn	55	3	He	0.218	0.0039	168.00	0.0073	0.002316
Fe	57	3	He	-0.104	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	-3.515	0.0016	70.00	0.0003	0.002736
Fe	57	3	He	-2.699	0.0019	80.00	0.0003	0.002736
Co	59	3	He	0.01	0.0023	100.00	0.0332	0.001922
Co	59	3	He	0.014	0.0024	104.00	0.0332	0.001922
Co	59	3	He	0.007	0.0021	92.00	0.0332	0.001922
Ni	60	3	He	0.069	0.0038	168.00	0.0093	0.003141
Ni	60	3	He	-0.004	0.0031	136.00	0.0093	0.003141
Ni	60	3	He	-0.022	0.0029	126.00	0.0093	0.003141
Cu	63	3	He	-0.001	0.0037	164.00	0.027	0.003732
Cu	63	3	He	-0.008	0.0035	154.00	0.027	0.003732
Cu	63	3	He	0.015	0.0041	178.00	0.027	0.003732
Zn	66	3	He	-0.219	0.0014	60.00	0.0031	0.002032
Zn	66	3	He	-0.301	0.0011	48.00	0.0031	0.002032
Zn	66	3	He	-0.294	0.0011	48.00	0.0031	0.002032
As	75	3	He	0.015	0.0008	36.00	0.0025	0.0007733
As	75	3	He	0.037	0.0009	38.00	0.0025	0.0007733
As	75	3	He	0.098	0.001	44.00	0.0025	0.0007733
Sr	88	3	He	-0.116	0.0029	110.00	0.0105	0.004071
Sr	88	3	He	0.039	0.0045	170.01	0.0105	0.004071
Sr	88	3	He	0.004	0.0041	160.01	0.0105	0.004071
Mo	98	3	He	-0.011	0.0036	140.00	0.0234	0.003908
Mo	98	3	He	0.025	0.0045	170.01	0.0234	0.003908
Mo	98	3	He	0.075	0.0057	220.01	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.294	0.0559	2150.22	0.0169	0.0609
Sn	120	3	He	0.656	0.072	2730.34	0.0169	0.0609
Sn	120	3	He	-0.137	0.0586	2280.25	0.0169	0.0609
Sb	121	3	He	0.058	0.0015	56.67	0.0161	0.0005433
Sb	121	3	He	0.037	0.0011	43.33	0.0161	0.0005433
Sb	121	3	He	0.025	0.0009	36.67	0.0161	0.0005433
Ba	137	3	He	-0.167	0.0003	10.00	0.0053	0.001141
Ba	137	3	He	0.183	0.0021	80.00	0.0053	0.001141
Ba	137	3	He	-0.07	0.0008	30.00	0.0053	0.001141
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.004	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	-0.008	0.0014	100.00	0.0332	0.001693
Pb	208	3	He	-0.033	0.0006	60.00	0.0332	0.001693
Pb	208	3	He	-0.014	0.0012	80.00	0.0332	0.001693
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	-0.009	0.0005	70.00	0.0338	0.0007949
Sc	45	1	No Gas			1171153.19		
Sc	45	1	No Gas			1208871.86		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1241515.76		
Ge	72	1	No Gas			607175.15		
Ge	72	1	No Gas			620935.62		
Ge	72	1	No Gas			630608.78		
Sc	45	2	H2			83482.95		
Sc	45	2	H2			84658.93		
Sc	45	2	H2			84568.84		
Ge	72	2	H2			68988.02		
Ge	72	2	H2			70225.04		
Ge	72	2	H2			70033.67		
In	115	2	H2			176482.56		
In	115	2	H2			175469.24		
In	115	2	H2			176352.44		
Sc	45	3	He			23888.01		
Sc	45	3	He			24208.52		
Sc	45	3	He			23958.30		
Ge	72	3	He			44412.33		
Ge	72	3	He			43830.66		
Ge	72	3	He			42977.95		
In	115	3	He			38458.60		
In	115	3	He			37956.61		
In	115	3	He			38929.44		
Tb	159	3	He			147910.86		
Tb	159	3	He			148787.81		
Tb	159	3	He			146305.68		
Bi	209	3	He			108998.62		
Bi	209	3	He			109290.09		
Bi	209	3	He			107839.65		

Quantitation Report

Data File Name 237SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:12:08 PM
Sample Name 180-193739-J-1-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

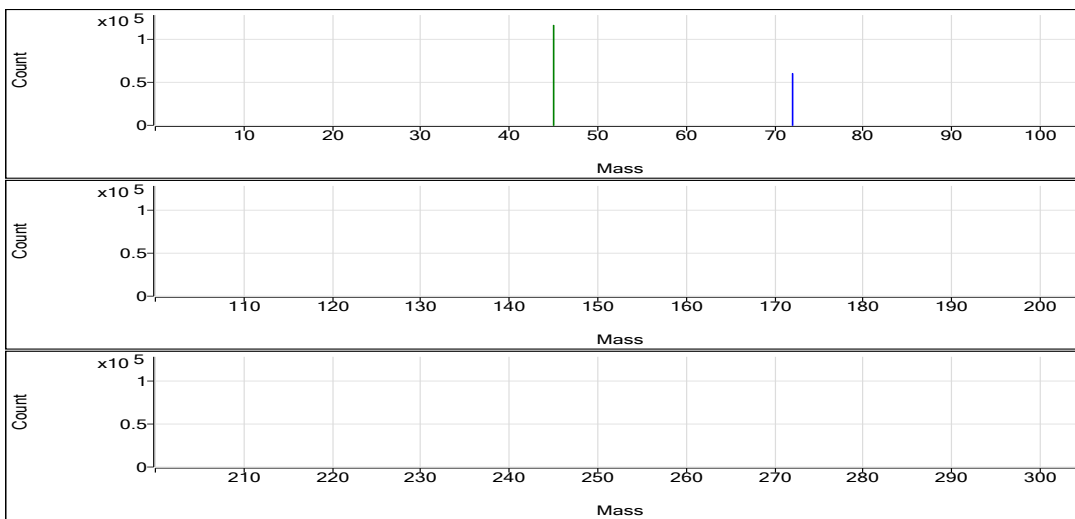
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.193	ppb	N/A	830.05	0.0183	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

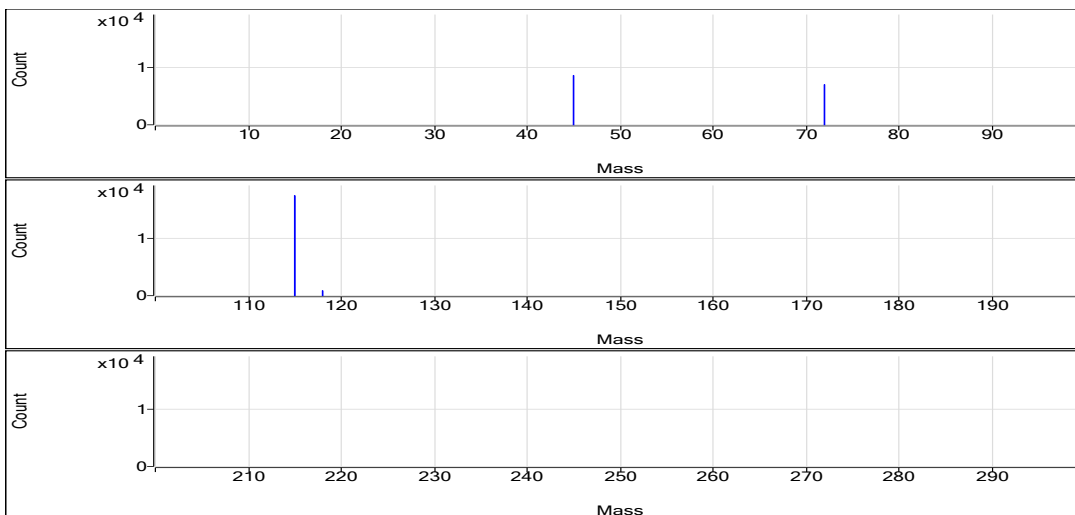
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1164754.75	1.6	89.1	Analog	0.1000	3
No Gas	Ge	72	603825.40	1.6	92.1	Pulse	0.1000	3
H2	Sc	45	86699.67	1.5	105.5	Pulse	0.1000	3
H2	Ge	72	70703.12	0.8	103.5	Pulse	0.1000	3
H2	In	115	175757.20	1.3	103.0	Pulse	0.1000	3
He	Sc	45	23841.43	2.3	93.1	Pulse	0.1000	3
He	Ge	72	45428.31	2.5	95.6	Pulse	0.1000	3
He	In	115	37365.54	2.3	91.3	Pulse	0.1000	3
He	Tb	159	150391.30	1.6	94.3	Pulse	0.1000	3
He	Bi	209	106005.00	1.7	90.6	Pulse	0.1000	3

No Gas

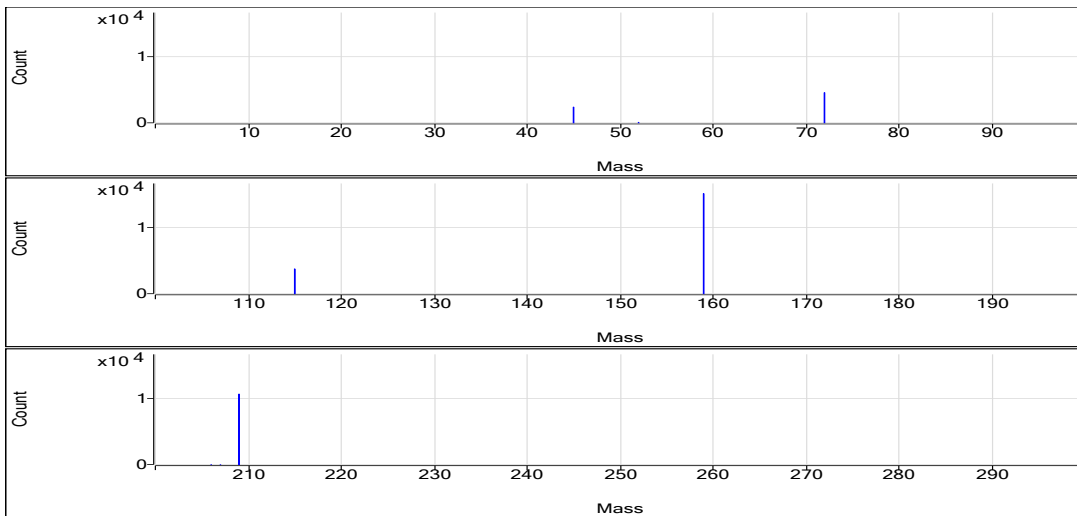


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.201	0.0181	830.04	0.0171	0.02156
Cr	52	3	He	-0.215	0.0179	790.05	0.0171	0.02156
Cr	52	3	He	-0.163	0.0188	870.05	0.0171	0.02156
Sc	45	1	No Gas			1157174.05		
Sc	45	1	No Gas			1151329.67		
Sc	45	1	No Gas			1185760.53		
Ge	72	1	No Gas			603238.43		
Ge	72	1	No Gas			594318.94		
Ge	72	1	No Gas			613918.82		
Sc	45	2	H2			87152.03		
Sc	45	2	H2			85241.35		
Sc	45	2	H2			87705.64		
Ge	72	2	H2			70837.15		
Ge	72	2	H2			70093.94		
Ge	72	2	H2			71178.28		
In	115	2	H2			173680.37		
In	115	2	H2			175357.83		
In	115	2	H2			178233.40		
Sc	45	3	He			24458.99		
Sc	45	3	He			23387.28		
Sc	45	3	He			23678.02		
Ge	72	3	He			45776.18		
Ge	72	3	He			44161.31		
Ge	72	3	He			46347.45		
In	115	3	He			36433.44		
In	115	3	He			37545.86		
In	115	3	He			38117.31		
Tb	159	3	He			150991.66		
Tb	159	3	He			147789.46		
Tb	159	3	He			152392.78		
Bi	209	3	He			106115.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			104162.26		
Bi	209	3	He			107737.67		

Quantitation Report

Data File Name 238SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:13:40 PM
Sample Name 180-193739-K-1-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

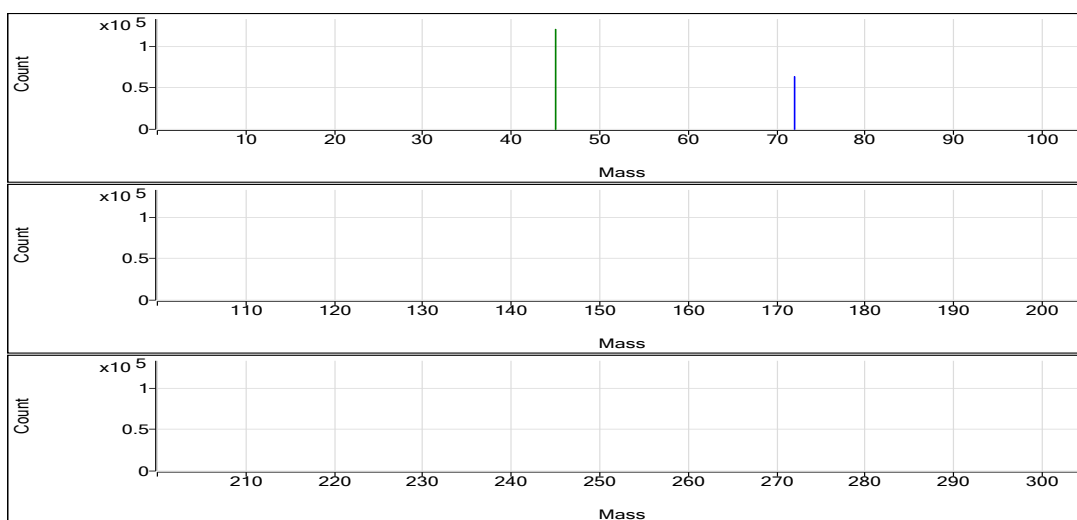
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.008	ppb	N/A	963.39	0.0214	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

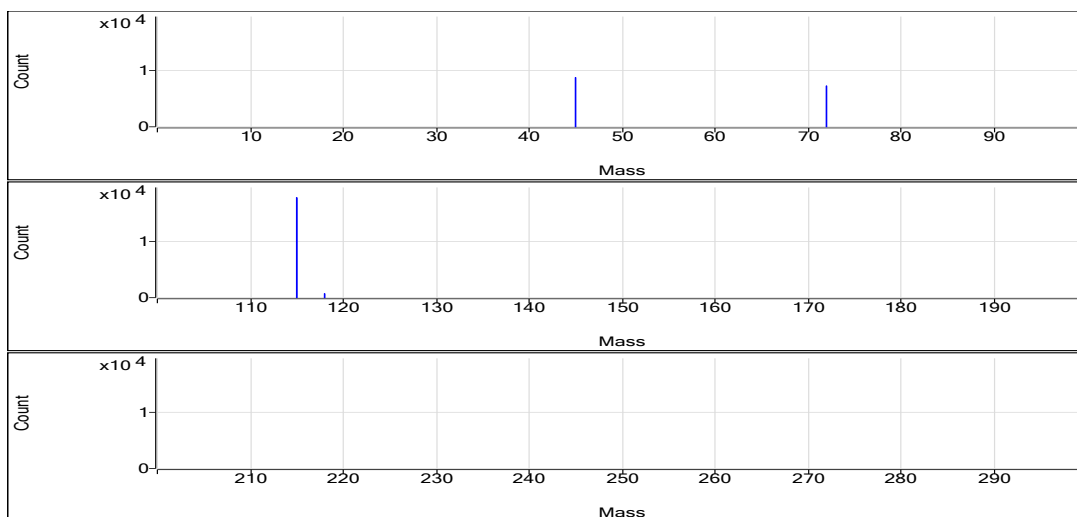
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1209614.23	2.9	92.5	Analog	0.1000	3
No Gas	Ge	72	637710.72	0.8	97.3	Pulse	0.1000	3
H2	Sc	45	87148.68	1.7	106.1	Pulse	0.1000	3
H2	Ge	72	72324.08	0.3	105.8	Pulse	0.1000	3
H2	In	115	176772.41	0.4	103.6	Pulse	0.1000	3
He	Sc	45	23817.85	0.8	93.0	Pulse	0.1000	3
He	Ge	72	44950.38	0.7	94.6	Pulse	0.1000	3
He	In	115	37158.31	0.5	90.8	Pulse	0.1000	3
He	Tb	159	147203.38	0.3	92.3	Pulse	0.1000	3
He	Bi	209	106169.87	0.6	90.8	Pulse	0.1000	3

No Gas

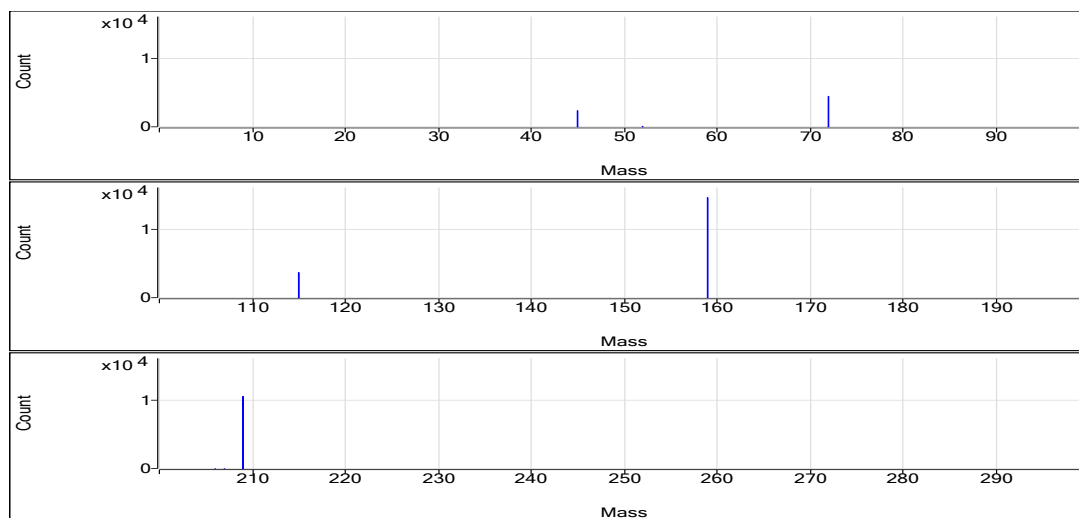


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.075	0.0203	910.05	0.0171	0.02156
Cr	52	3	He	0.224	0.0254	1150.08	0.0171	0.02156
Cr	52	3	He	-0.174	0.0186	830.04	0.0171	0.02156
Sc	45	1	No Gas			1178026.23		
Sc	45	1	No Gas			1246907.87		
Sc	45	1	No Gas			1203908.58		
Ge	72	1	No Gas			632445.34		
Ge	72	1	No Gas			643002.02		
Ge	72	1	No Gas			637684.80		
Sc	45	2	H2			86871.02		
Sc	45	2	H2			88740.45		
Sc	45	2	H2			85834.58		
Ge	72	2	H2			72595.48		
Ge	72	2	H2			72132.87		
Ge	72	2	H2			72243.89		
In	115	2	H2			177476.48		
In	115	2	H2			176844.59		
In	115	2	H2			175996.17		
Sc	45	3	He			23707.77		
Sc	45	3	He			24038.08		
Sc	45	3	He			23707.71		
Ge	72	3	He			44873.70		
Ge	72	3	He			45314.71		
Ge	72	3	He			44662.73		
In	115	3	He			37385.83		
In	115	3	He			37054.60		
In	115	3	He			37034.51		
Tb	159	3	He			147667.80		
Tb	159	3	He			146770.00		
Tb	159	3	He			147172.34		
Bi	209	3	He			106900.98		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106025.25		
Bi	209	3	He			105583.37		

Quantitation Report

Data File Name 239SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:15:12 PM
Sample Name 180-193739-K-9-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

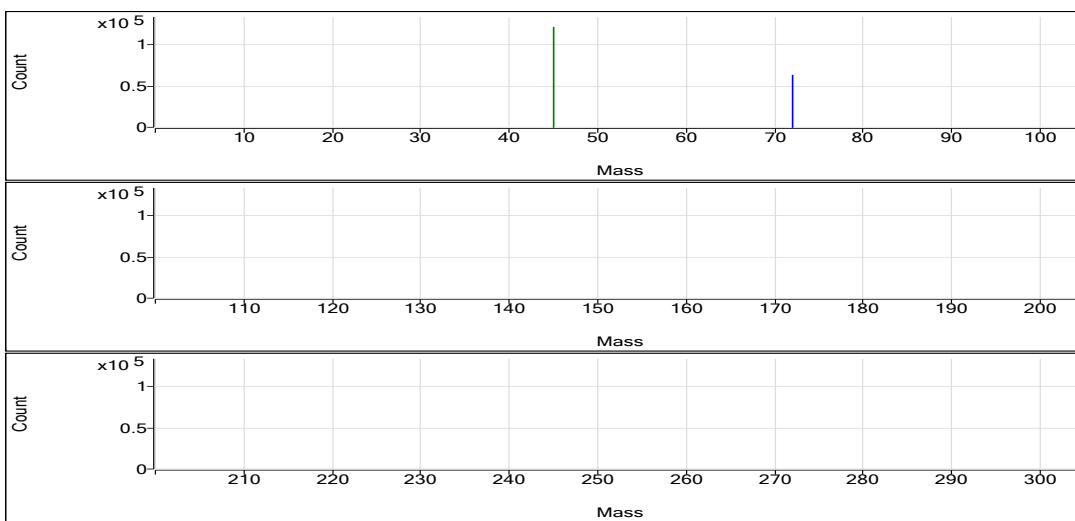
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.009	ppb	N/A	943.39	0.0214	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

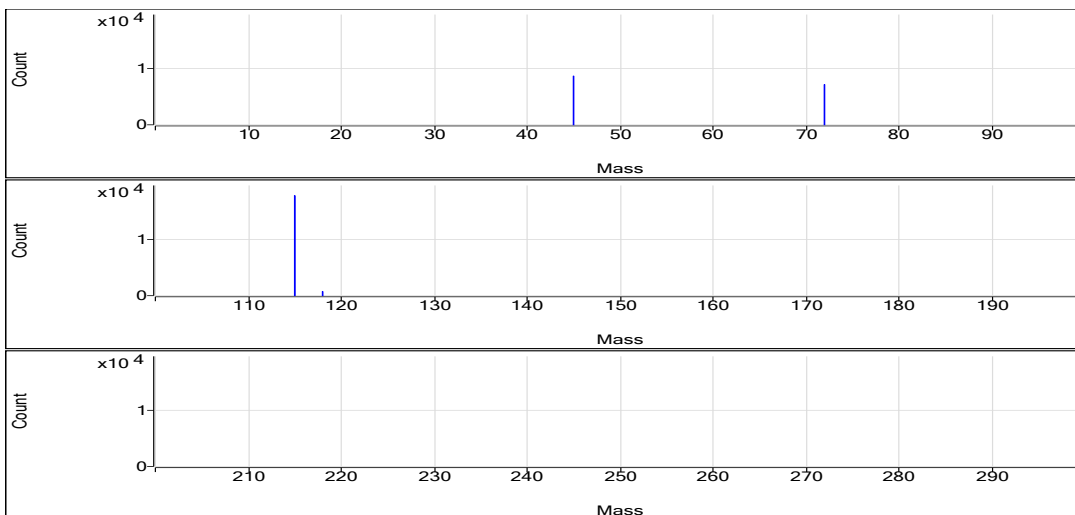
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1217356.81	0.7	93.1	Analog	0.1000	3
No Gas	Ge	72	634974.67	0.4	96.9	Pulse	0.1000	3
H2	Sc	45	87041.07	1.6	106.0	Pulse	0.1000	3
H2	Ge	72	71874.58	0.8	105.2	Pulse	0.1000	3
H2	In	115	178337.92	1.0	104.5	Pulse	0.1000	3
He	Sc	45	23861.44	2.1	93.2	Pulse	0.1000	3
He	Ge	72	44084.57	2.8	92.8	Pulse	0.1000	3
He	In	115	37245.43	1.5	91.0	Pulse	0.1000	3
He	Tb	159	146637.12	1.5	92.0	Pulse	0.1000	3
He	Bi	209	106968.37	0.8	91.5	Pulse	0.1000	3

No Gas

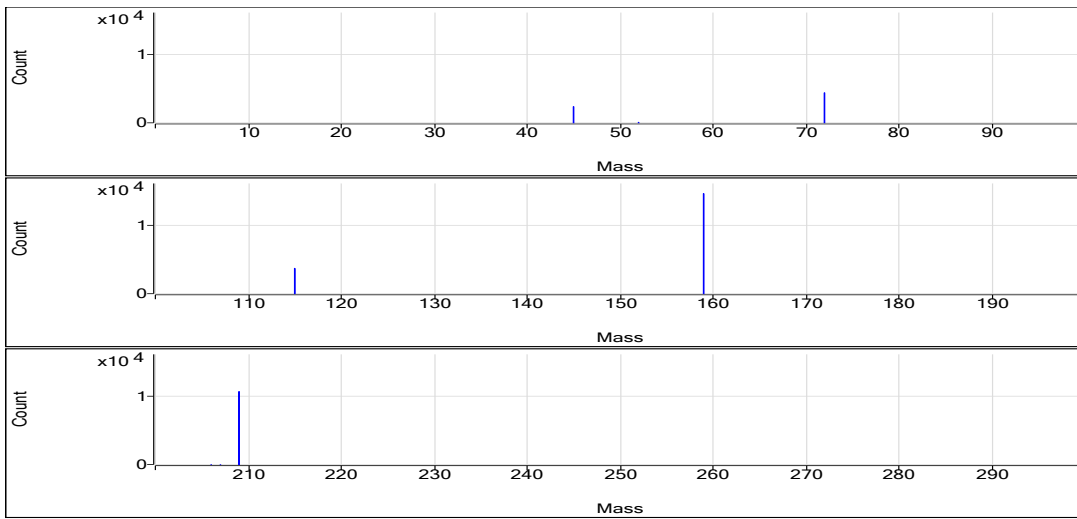


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.047	0.0208	900.05	0.0171	0.02156
Cr	52	3	He	0.033	0.0221	960.06	0.0171	0.02156
Cr	52	3	He	-0.014	0.0213	970.06	0.0171	0.02156
Sc	45	1	No Gas			1211274.83		
Sc	45	1	No Gas			1214094.20		
Sc	45	1	No Gas			1226701.39		
Ge	72	1	No Gas			633813.00		
Ge	72	1	No Gas			638164.60		
Ge	72	1	No Gas			632946.40		
Sc	45	2	H2			86729.42		
Sc	45	2	H2			88579.35		
Sc	45	2	H2			85814.44		
Ge	72	2	H2			71358.88		
Ge	72	2	H2			72463.89		
Ge	72	2	H2			71800.98		
In	115	2	H2			180388.32		
In	115	2	H2			176723.73		
In	115	2	H2			177901.72		
Sc	45	3	He			23317.28		
Sc	45	3	He			23978.30		
Sc	45	3	He			24288.73		
Ge	72	3	He			43359.38		
Ge	72	3	He			43409.56		
Ge	72	3	He			45484.76		
In	115	3	He			37556.16		
In	115	3	He			36603.69		
In	115	3	He			37576.44		
Tb	159	3	He			145536.92		
Tb	159	3	He			145173.45		
Tb	159	3	He			149200.98		
Bi	209	3	He			106547.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106408.85		
Bi	209	3	He			107948.36		

Quantitation Report

Data File Name 240SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:16:43 PM
Sample Name 180-193739-J-9-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

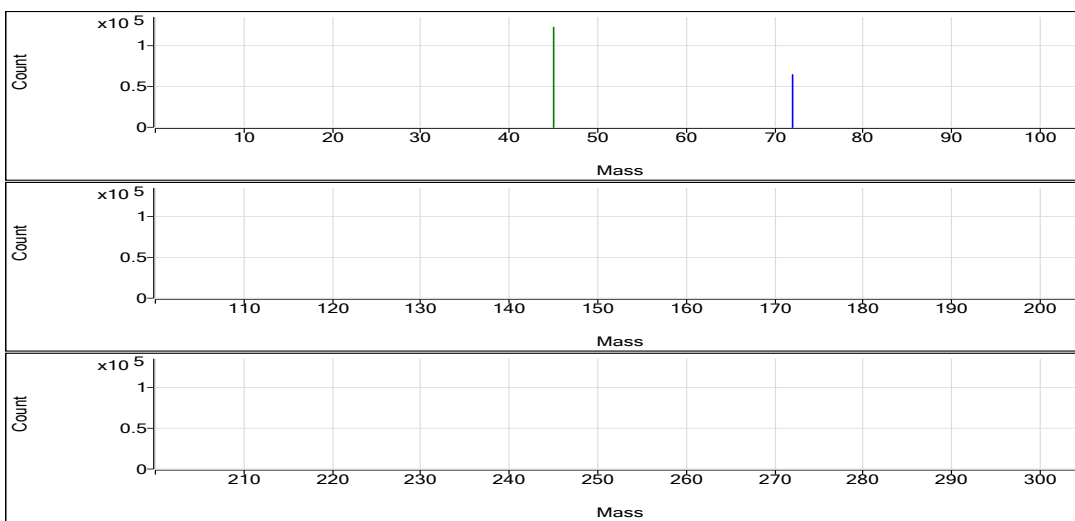
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.135	ppb	N/A	853.38	0.0193	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

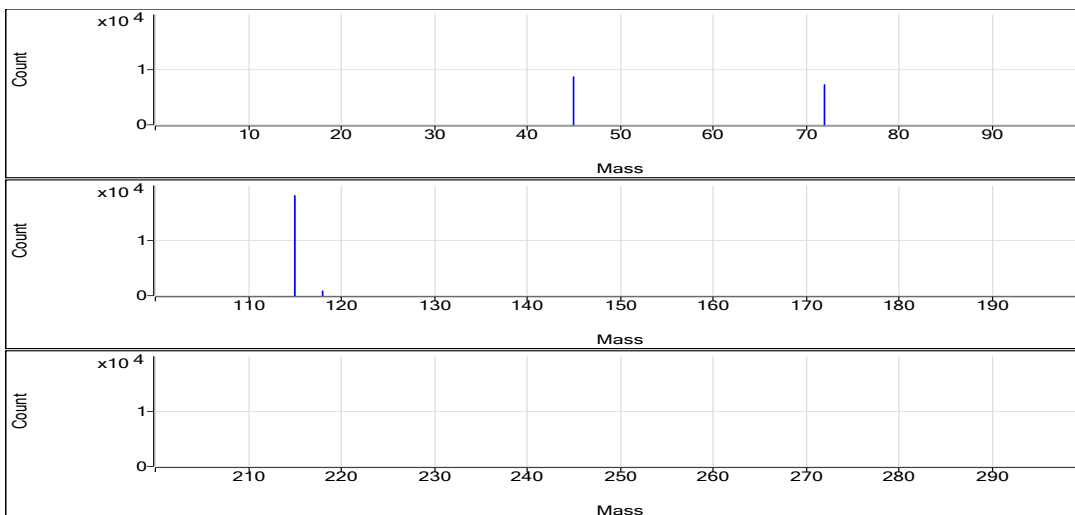
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1229137.01	1.5	94.0	Analog	0.1000	3
No Gas	Ge	72	645971.55	1.1	98.6	Pulse	0.1000	3
H2	Sc	45	86769.63	0.7	105.6	Pulse	0.1000	3
H2	Ge	72	72463.99	1.3	106.0	Pulse	0.1000	3
H2	In	115	180827.25	1.2	106.0	Pulse	0.1000	3
He	Sc	45	23998.12	2.4	93.7	Pulse	0.1000	3
He	Ge	72	44311.90	1.2	93.3	Pulse	0.1000	3
He	In	115	37369.01	2.5	91.3	Pulse	0.1000	3
He	Tb	159	146312.77	1.8	91.8	Pulse	0.1000	3
He	Bi	209	108132.90	2.5	92.5	Pulse	0.1000	3

No Gas

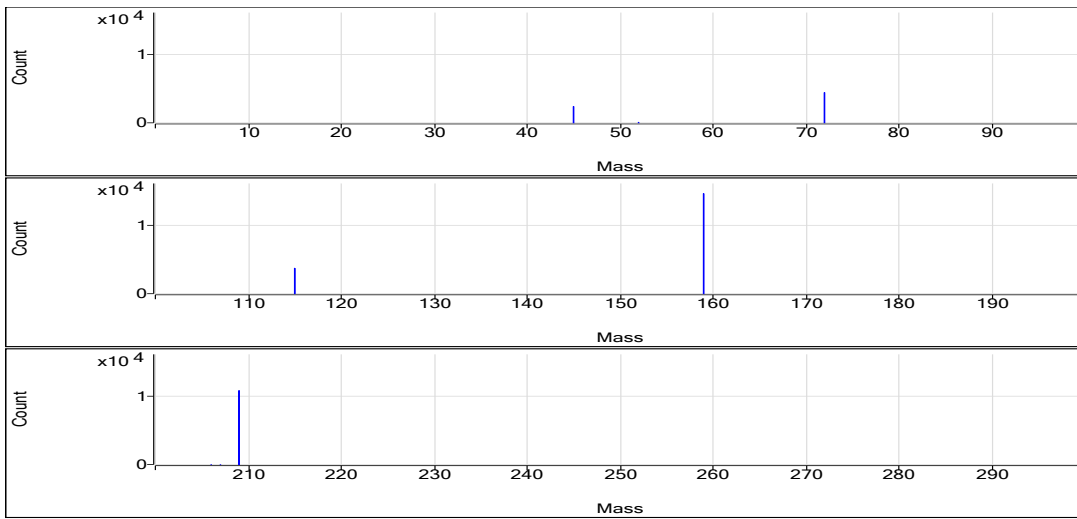


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.087	0.0201	900.05	0.0171	0.02156
Cr	52	3	He	-0.072	0.0203	890.05	0.0171	0.02156
Cr	52	3	He	-0.245	0.0174	770.05	0.0171	0.02156
Sc	45	1	No Gas			1217840.53		
Sc	45	1	No Gas			1250152.33		
Sc	45	1	No Gas			1219418.18		
Ge	72	1	No Gas			641688.62		
Ge	72	1	No Gas			654430.81		
Ge	72	1	No Gas			641795.22		
Sc	45	2	H2			86095.86		
Sc	45	2	H2			87384.22		
Sc	45	2	H2			86828.81		
Ge	72	2	H2			71881.93		
Ge	72	2	H2			71971.68		
Ge	72	2	H2			73538.36		
In	115	2	H2			182671.23		
In	115	2	H2			181427.97		
In	115	2	H2			178382.56		
Sc	45	3	He			24568.86		
Sc	45	3	He			23417.16		
Sc	45	3	He			24008.34		
Ge	72	3	He			44822.98		
Ge	72	3	He			43790.99		
Ge	72	3	He			44321.73		
In	115	3	He			36854.39		
In	115	3	He			38458.36		
In	115	3	He			36794.27		
Tb	159	3	He			145093.44		
Tb	159	3	He			149407.32		
Tb	159	3	He			144437.55		
Bi	209	3	He			110013.29		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109339.14		
Bi	209	3	He			105046.28		

Quantitation Report

Data File Name 241SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:18:14 PM
Sample Name 180-193739-J-8-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

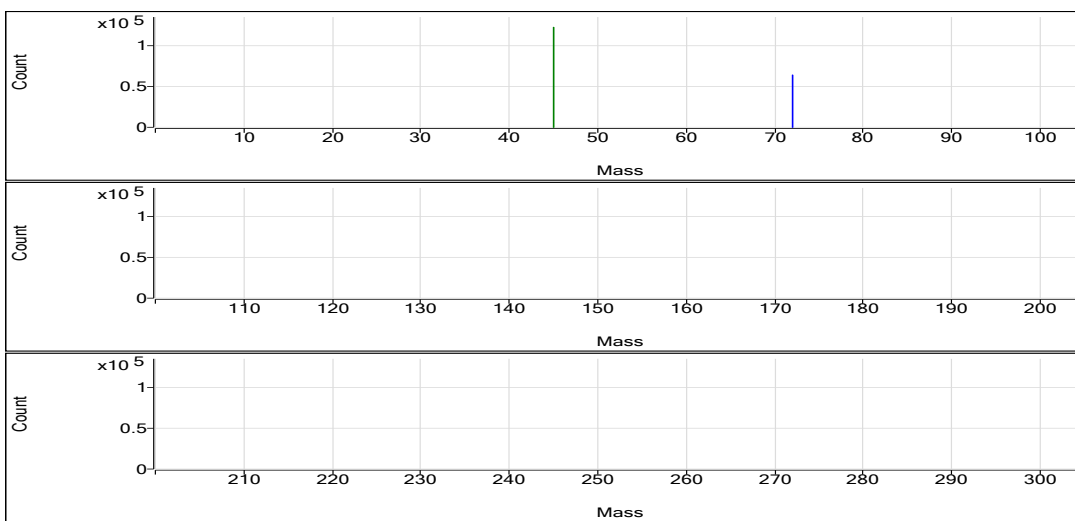
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	0.059	ppb	84.2	1003.39	0.0226	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

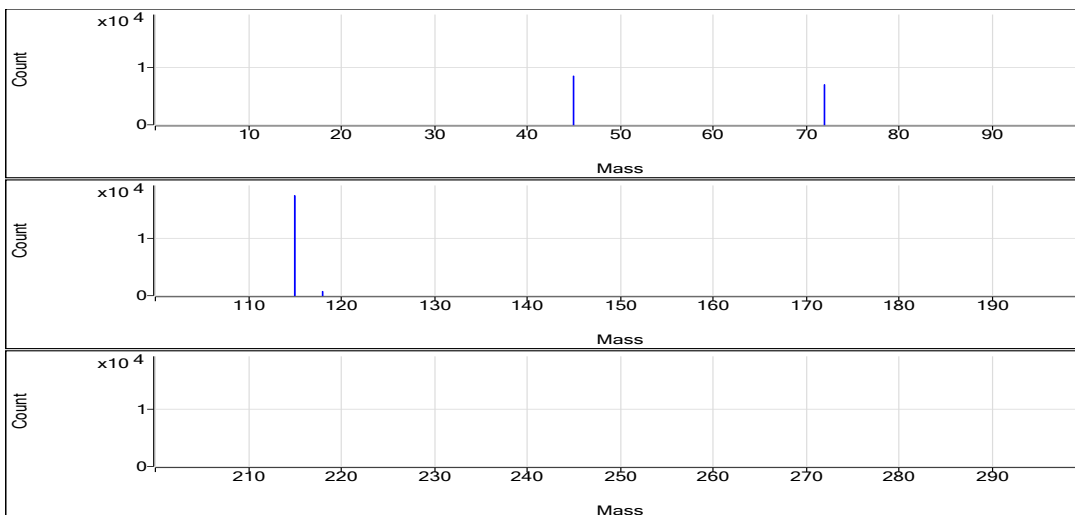
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1228950.29	0.9	94.0	Analog	0.1000	3
No Gas	Ge	72	643110.17	1.5	98.1	Pulse	0.1000	3
H2	Sc	45	85178.57	1.7	103.7	Pulse	0.1000	3
H2	Ge	72	70063.40	0.7	102.5	Pulse	0.1000	3
H2	In	115	174464.78	1.7	102.3	Pulse	0.1000	3
He	Sc	45	23400.60	1.4	91.4	Pulse	0.1000	3
He	Ge	72	44509.34	3.1	93.7	Pulse	0.1000	3
He	In	115	37075.11	3.3	90.6	Pulse	0.1000	3
He	Tb	159	145561.23	0.6	91.3	Pulse	0.1000	3
He	Bi	209	104631.23	1.9	89.5	Pulse	0.1000	3

No Gas

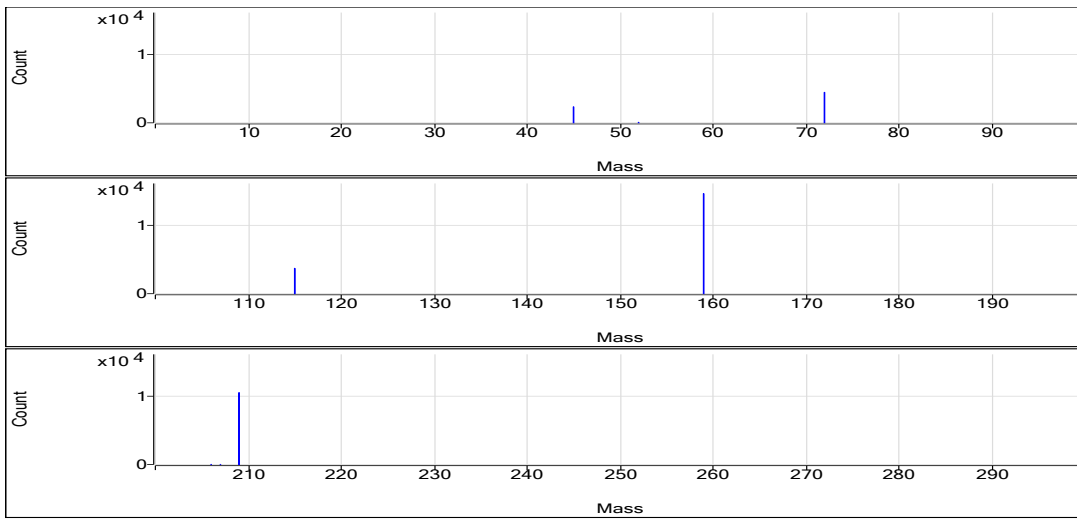


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.03	0.0221	1000.06	0.0171	0.02156
Cr	52	3	He	0.116	0.0235	1010.06	0.0171	0.02156
Cr	52	3	He	0.03	0.0221	1000.06	0.0171	0.02156
Sc	45	1	No Gas			1241225.76		
Sc	45	1	No Gas			1218242.09		
Sc	45	1	No Gas			1227383.03		
Ge	72	1	No Gas			651705.46		
Ge	72	1	No Gas			644826.55		
Ge	72	1	No Gas			632798.51		
Sc	45	2	H2			86869.61		
Sc	45	2	H2			84217.88		
Sc	45	2	H2			84448.23		
Ge	72	2	H2			70616.03		
Ge	72	2	H2			69822.08		
Ge	72	2	H2			69752.10		
In	115	2	H2			177734.26		
In	115	2	H2			172030.10		
In	115	2	H2			173629.98		
Sc	45	3	He			23216.91		
Sc	45	3	He			23197.06		
Sc	45	3	He			23787.82		
Ge	72	3	He			45305.09		
Ge	72	3	He			42917.99		
Ge	72	3	He			45304.94		
In	115	3	He			37265.41		
In	115	3	He			35782.46		
In	115	3	He			38177.47		
Tb	159	3	He			144935.85		
Tb	159	3	He			145151.49		
Tb	159	3	He			146596.35		
Bi	209	3	He			103093.27		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			103909.85		
Bi	209	3	He			106890.58		

Quantitation Report

Data File Name 242SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:19:44 PM
Sample Name 180-193739-J-7-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

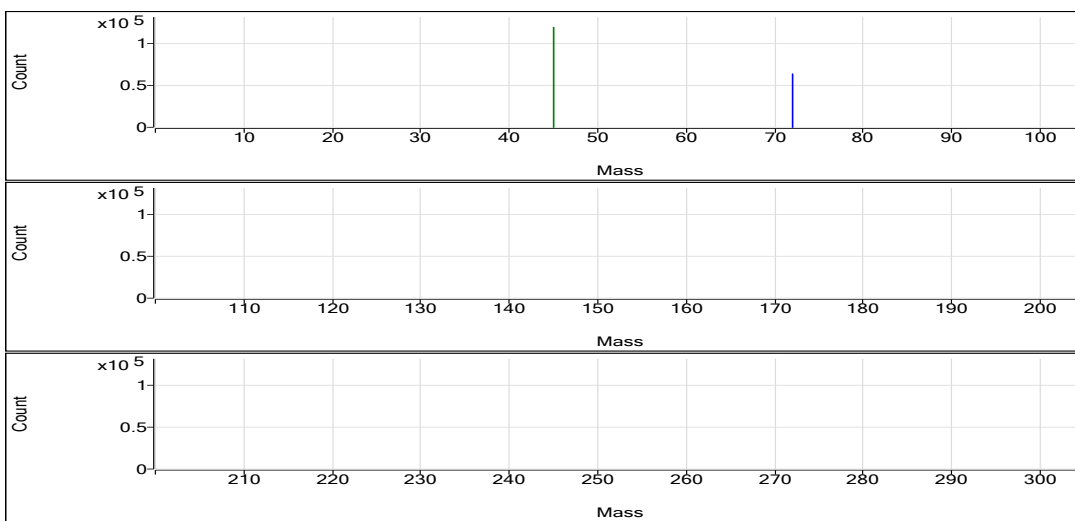
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.293	ppb	N/A	750.04	0.0166	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

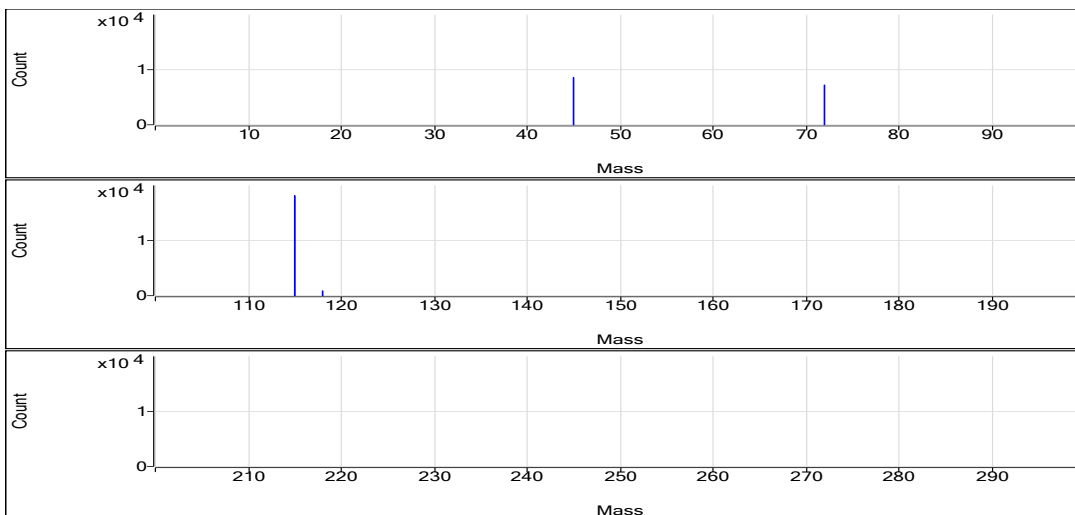
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1193529.20	1.2	91.3	Analog	0.1000	3
No Gas	Ge	72	637423.26	0.7	97.3	Pulse	0.1000	3
H2	Sc	45	85499.28	1.9	104.1	Pulse	0.1000	3
H2	Ge	72	72025.47	2.4	105.4	Pulse	0.1000	3
H2	In	115	180635.79	1.2	105.9	Pulse	0.1000	3
He	Sc	45	23848.03	2.1	93.1	Pulse	0.1000	3
He	Ge	72	45311.25	1.1	95.4	Pulse	0.1000	3
He	In	115	37840.27	1.8	92.4	Pulse	0.1000	3
He	Tb	159	147786.81	0.6	92.7	Pulse	0.1000	3
He	Bi	209	111172.63	0.9	95.1	Pulse	0.1000	3

No Gas

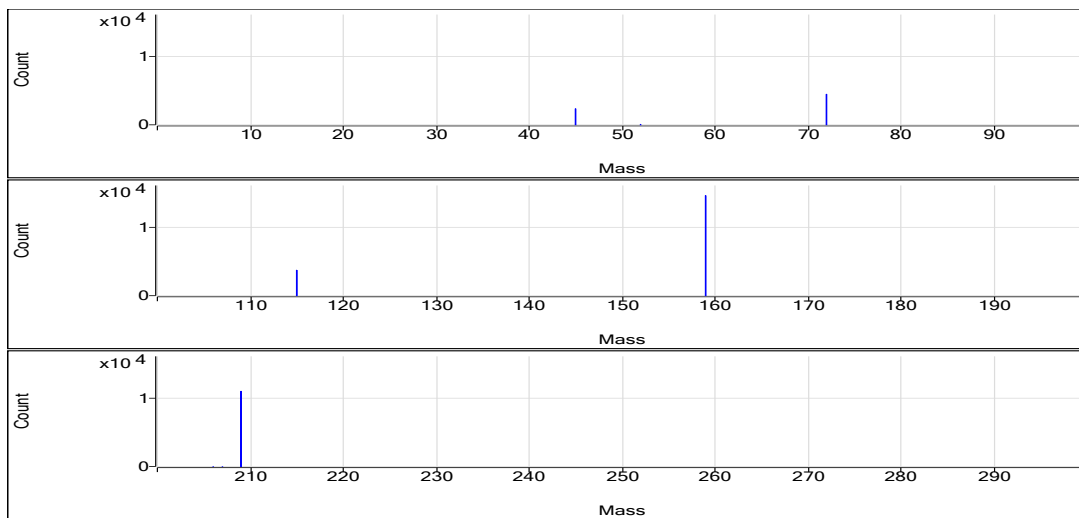


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.309	0.0163	730.04	0.0171	0.02156
Cr	52	3	He	-0.292	0.0166	760.04	0.0171	0.02156
Cr	52	3	He	-0.279	0.0168	760.04	0.0171	0.02156
Sc	45	1	No Gas			1203368.26		
Sc	45	1	No Gas			1199490.53		
Sc	45	1	No Gas			1177728.81		
Ge	72	1	No Gas			632493.74		
Ge	72	1	No Gas			638143.39		
Ge	72	1	No Gas			641632.65		
Sc	45	2	H2			87170.95		
Sc	45	2	H2			85392.62		
Sc	45	2	H2			83934.26		
Ge	72	2	H2			73117.29		
Ge	72	2	H2			72956.07		
Ge	72	2	H2			70003.05		
In	115	2	H2			182237.89		
In	115	2	H2			181551.07		
In	115	2	H2			178118.40		
Sc	45	3	He			23267.39		
Sc	45	3	He			24128.24		
Sc	45	3	He			24148.47		
Ge	72	3	He			44833.37		
Ge	72	3	He			45846.10		
Ge	72	3	He			45254.29		
In	115	3	He			37165.11		
In	115	3	He			37807.24		
In	115	3	He			38548.46		
Tb	159	3	He			148437.07		
Tb	159	3	He			146840.44		
Tb	159	3	He			148082.91		
Bi	209	3	He			112221.10		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111132.14		
Bi	209	3	He			110164.65		

Quantitation Report

Data File Name 243SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:21:15 PM
Sample Name 180-193739-K-8-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

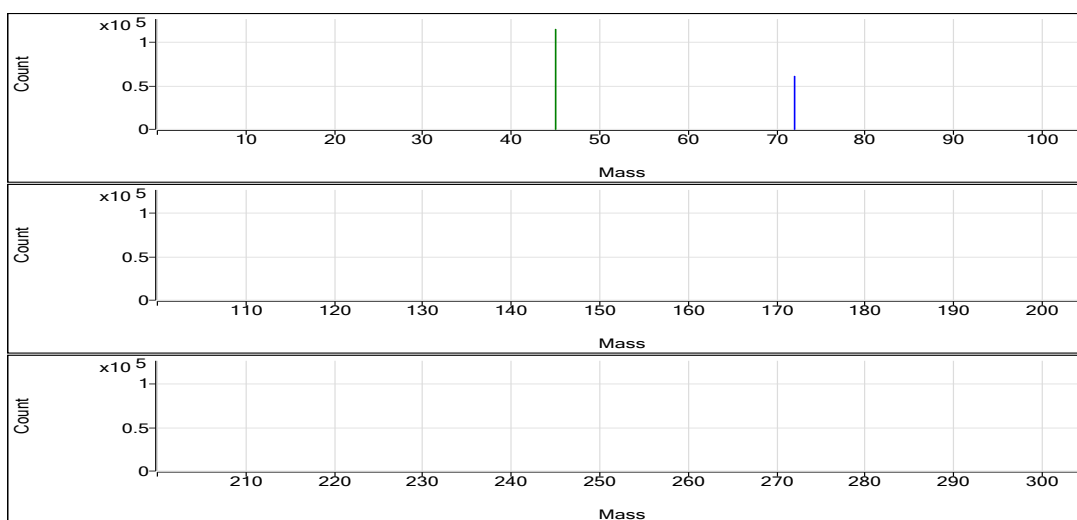
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	0.048	ppb	611.4	1036.74	0.0224	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

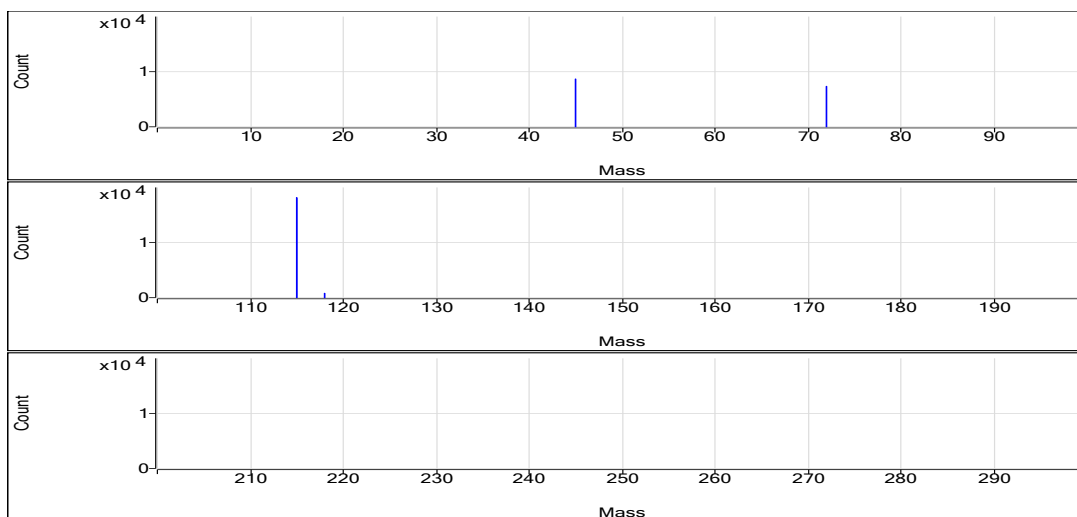
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1154864.49	2.9	88.4	Analog	0.1000	3
No Gas	Ge	72	613881.80	2.0	93.7	Pulse	0.1000	3
H2	Sc	45	86507.95	1.6	105.3	Pulse	0.1000	3
H2	Ge	72	73297.50	1.5	107.3	Pulse	0.1000	3
H2	In	115	180759.89	1.1	106.0	Pulse	0.1000	3
He	Sc	45	24562.27	1.1	95.9	Pulse	0.1000	3
He	Ge	72	46347.47	0.4	97.6	Pulse	0.1000	3
He	In	115	38779.26	1.5	94.7	Pulse	0.1000	3
He	Tb	159	149731.73	1.9	93.9	Pulse	0.1000	3
He	Bi	209	110458.07	1.1	94.4	Pulse	0.1000	3

No Gas

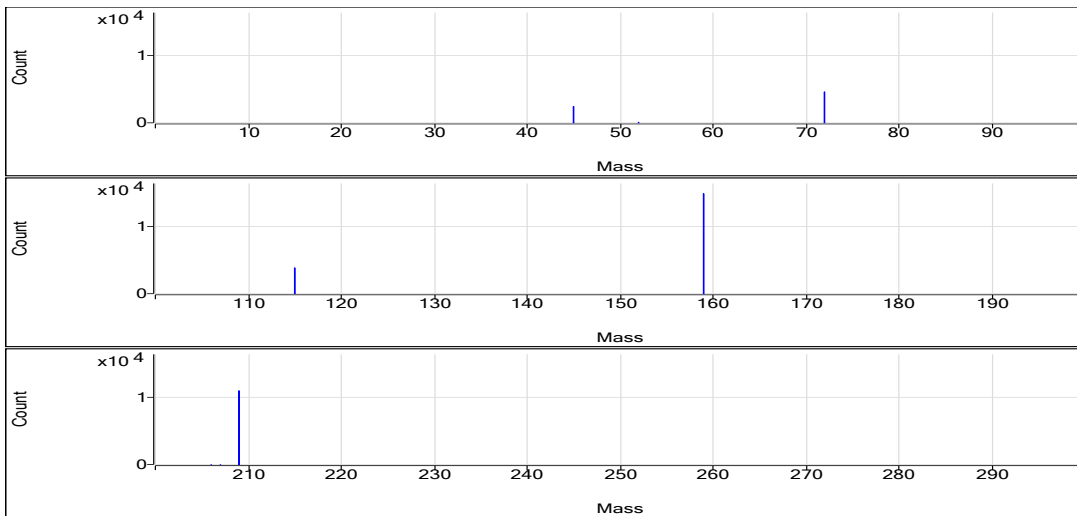


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.14	0.0192	890.06	0.0171	0.02156
Cr	52	3	He	0.388	0.0282	1300.10	0.0171	0.02156
Cr	52	3	He	-0.104	0.0198	920.06	0.0171	0.02156
Sc	45	1	No Gas			1120512.48		
Sc	45	1	No Gas			1188118.89		
Sc	45	1	No Gas			1155962.09		
Ge	72	1	No Gas			600192.22		
Ge	72	1	No Gas			623839.87		
Ge	72	1	No Gas			617613.31		
Sc	45	2	H2			85955.15		
Sc	45	2	H2			85442.42		
Sc	45	2	H2			88126.27		
Ge	72	2	H2			73558.70		
Ge	72	2	H2			74231.70		
Ge	72	2	H2			72102.09		
In	115	2	H2			181132.34		
In	115	2	H2			182573.06		
In	115	2	H2			178574.27		
Sc	45	3	He			24458.89		
Sc	45	3	He			24368.61		
Sc	45	3	He			24859.30		
Ge	72	3	He			46417.58		
Ge	72	3	He			46116.56		
Ge	72	3	He			46508.28		
In	115	3	He			38187.72		
In	115	3	He			38829.52		
In	115	3	He			39320.54		
Tb	159	3	He			146628.71		
Tb	159	3	He			152322.79		
Tb	159	3	He			150243.68		
Bi	209	3	He			109521.24		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			110004.77		
Bi	209	3	He			111848.19		

Quantitation Report

Data File Name 244SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:22:47 PM
Sample Name 180-193739-K-7-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

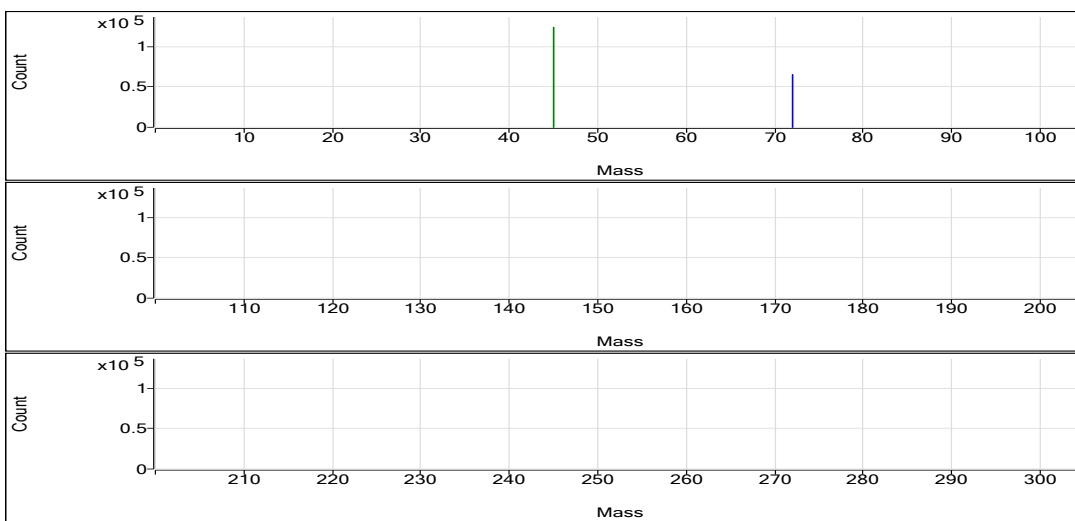
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.202	ppb	N/A	826.72	0.0181	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

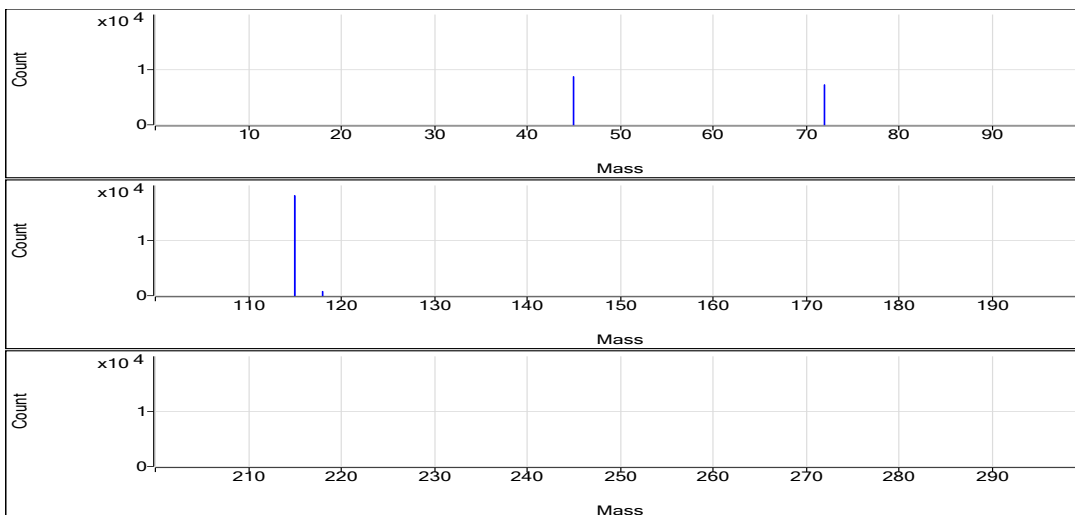
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1244288.44	2.2	95.2	Analog	0.1000	3
No Gas	Ge	72	655615.46	2.3	100.0	Pulse	0.1000	3
H2	Sc	45	87373.05	1.8	106.4	Pulse	0.1000	3
H2	Ge	72	72632.00	1.4	106.3	Pulse	0.1000	3
H2	In	115	181471.68	1.2	106.4	Pulse	0.1000	3
He	Sc	45	24268.47	1.1	94.8	Pulse	0.1000	3
He	Ge	72	45739.20	3.1	96.3	Pulse	0.1000	3
He	In	115	38545.17	1.4	94.1	Pulse	0.1000	3
He	Tb	159	148919.83	0.6	93.4	Pulse	0.1000	3
He	Bi	209	111131.97	0.6	95.0	Pulse	0.1000	3

No Gas

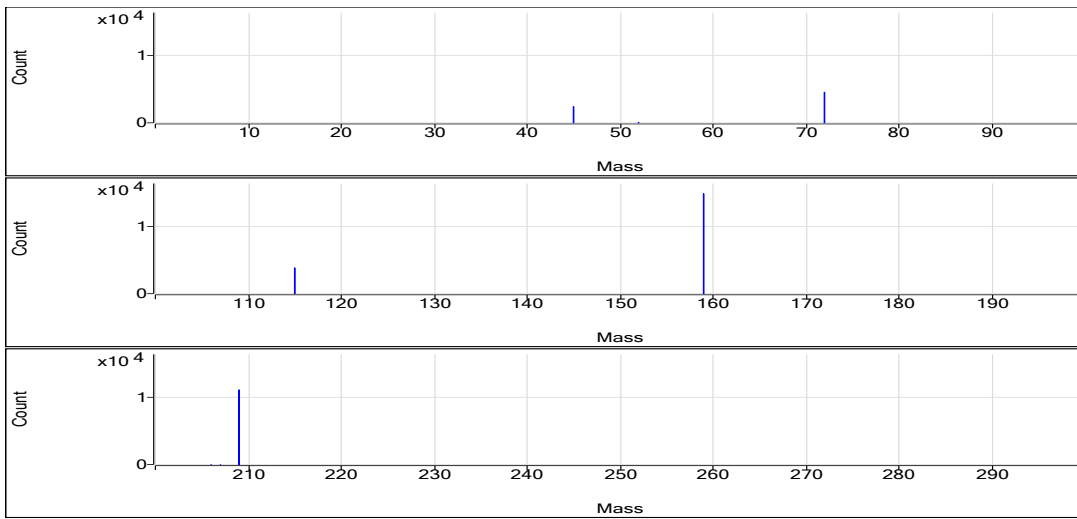


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.333	0.0159	750.04	0.0171	0.02156
Cr	52	3	He	-0.104	0.0198	880.06	0.0171	0.02156
Cr	52	3	He	-0.168	0.0187	850.05	0.0171	0.02156
Sc	45	1	No Gas			1230677.01		
Sc	45	1	No Gas			1226127.64		
Sc	45	1	No Gas			1276060.68		
Ge	72	1	No Gas			656784.37		
Ge	72	1	No Gas			640166.08		
Ge	72	1	No Gas			669895.93		
Sc	45	2	H2			85854.86		
Sc	45	2	H2			89001.18		
Sc	45	2	H2			87263.11		
Ge	72	2	H2			71470.18		
Ge	72	2	H2			73066.90		
Ge	72	2	H2			73358.92		
In	115	2	H2			181102.20		
In	115	2	H2			183755.25		
In	115	2	H2			179557.58		
Sc	45	3	He			24558.82		
Sc	45	3	He			24218.33		
Sc	45	3	He			24028.26		
Ge	72	3	He			47250.27		
Ge	72	3	He			44492.31		
Ge	72	3	He			45475.01		
In	115	3	He			39150.35		
In	115	3	He			38217.76		
In	115	3	He			38267.41		
Tb	159	3	He			148021.36		
Tb	159	3	He			149031.29		
Tb	159	3	He			149706.83		
Bi	209	3	He			110417.35		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111313.01		
Bi	209	3	He			111665.55		

Quantitation Report

Data File Name 245SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:24:18 PM
Sample Name 180-193739-O-4-A
Sample Type Sample
Comment B25
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

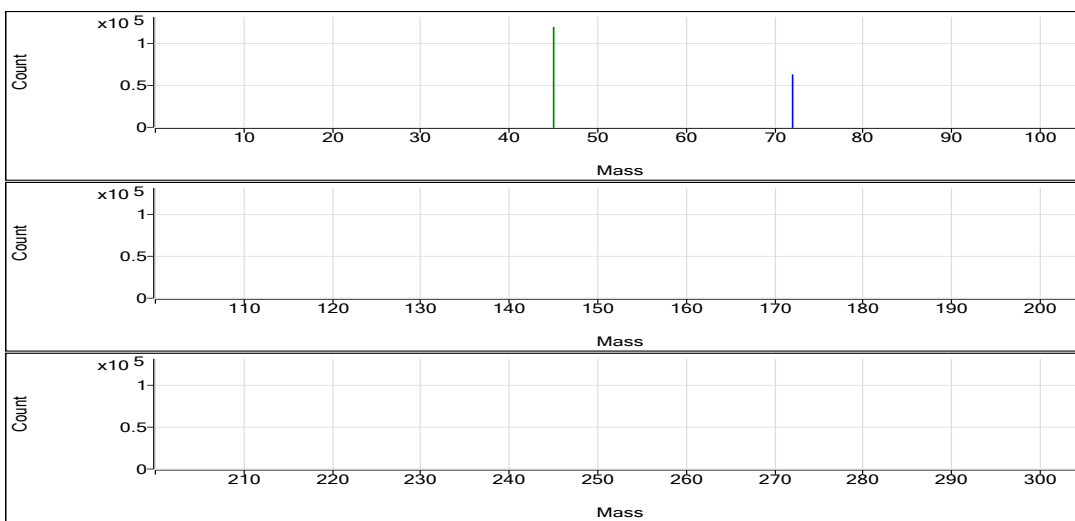
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.127	ppb	N/A	876.72	0.0194	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

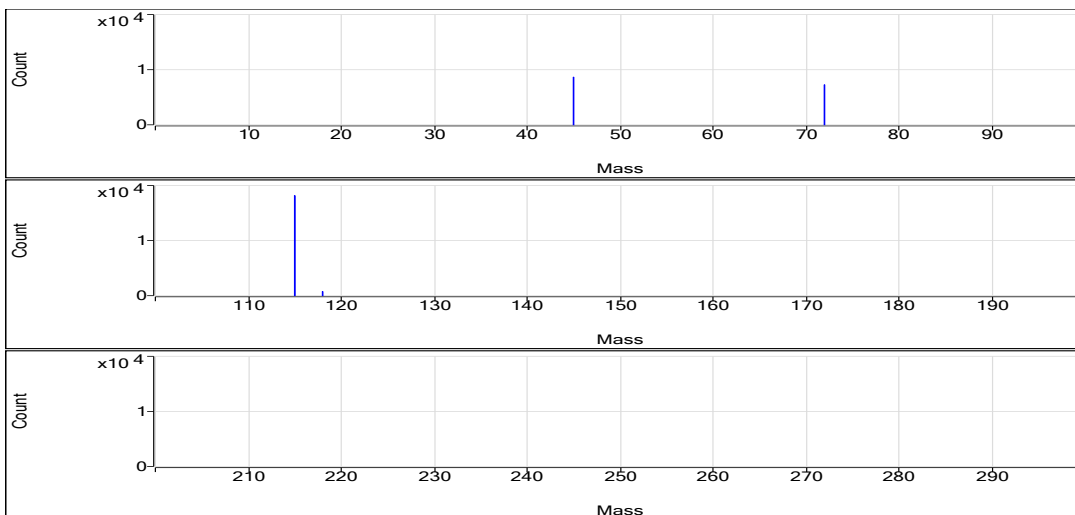
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1197446.96	0.5	91.6	Analog	0.1000	3
No Gas	Ge	72	628321.67	0.6	95.9	Pulse	0.1000	3
H2	Sc	45	87054.80	2.8	106.0	Pulse	0.1000	3
H2	Ge	72	73016.13	0.6	106.8	Pulse	0.1000	3
H2	In	115	182341.68	0.9	106.9	Pulse	0.1000	3
He	Sc	45	24248.56	1.6	94.7	Pulse	0.1000	3
He	Ge	72	45284.60	2.3	95.3	Pulse	0.1000	3
He	In	115	38899.36	2.8	95.0	Pulse	0.1000	3
He	Tb	159	147952.95	0.5	92.8	Pulse	0.1000	3
He	Bi	209	107536.41	0.6	91.9	Pulse	0.1000	3

No Gas

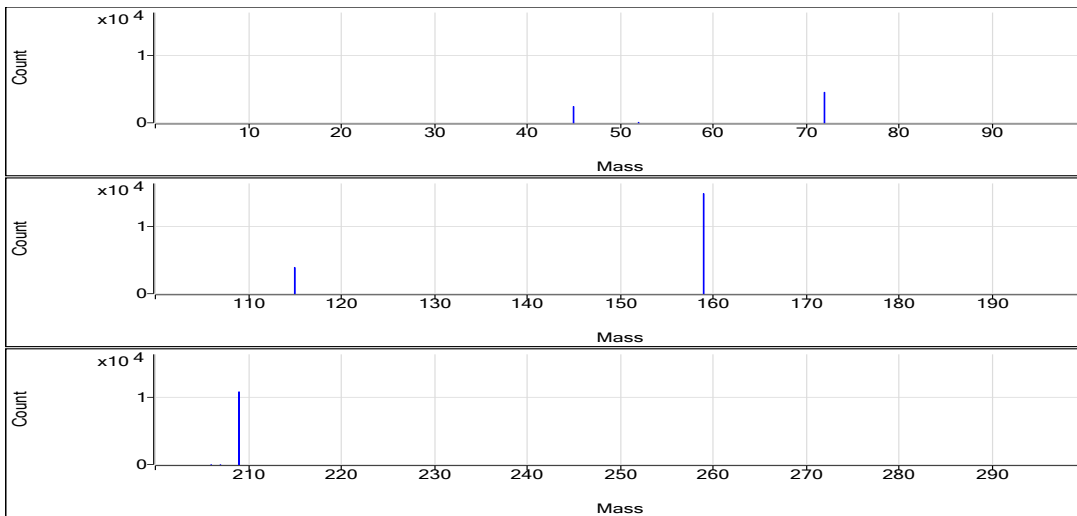


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.054	0.0225	1000.06	0.0171	0.02156
Cr	52	3	He	-0.217	0.0179	830.05	0.0171	0.02156
Cr	52	3	He	-0.219	0.0178	800.05	0.0171	0.02156
Sc	45	1	No Gas			1190090.61		
Sc	45	1	No Gas			1200744.67		
Sc	45	1	No Gas			1201505.61		
Ge	72	1	No Gas			623654.76		
Ge	72	1	No Gas			630360.46		
Ge	72	1	No Gas			630949.80		
Sc	45	2	H2			84828.76		
Sc	45	2	H2			86679.94		
Sc	45	2	H2			89655.69		
Ge	72	2	H2			72724.77		
Ge	72	2	H2			73548.39		
Ge	72	2	H2			72775.24		
In	115	2	H2			181996.77		
In	115	2	H2			180970.76		
In	115	2	H2			184057.52		
Sc	45	3	He			24308.75		
Sc	45	3	He			23827.88		
Sc	45	3	He			24609.06		
Ge	72	3	He			44492.52		
Ge	72	3	He			46477.58		
Ge	72	3	He			44883.71		
In	115	3	He			37786.83		
In	115	3	He			38929.27		
In	115	3	He			39981.97		
Tb	159	3	He			147263.04		
Tb	159	3	He			148688.25		
Tb	159	3	He			147907.56		
Bi	209	3	He			106760.15		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			107960.67		
Bi	209	3	He			107888.40		

Quantitation Report

Data File Name 247_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:28:02 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

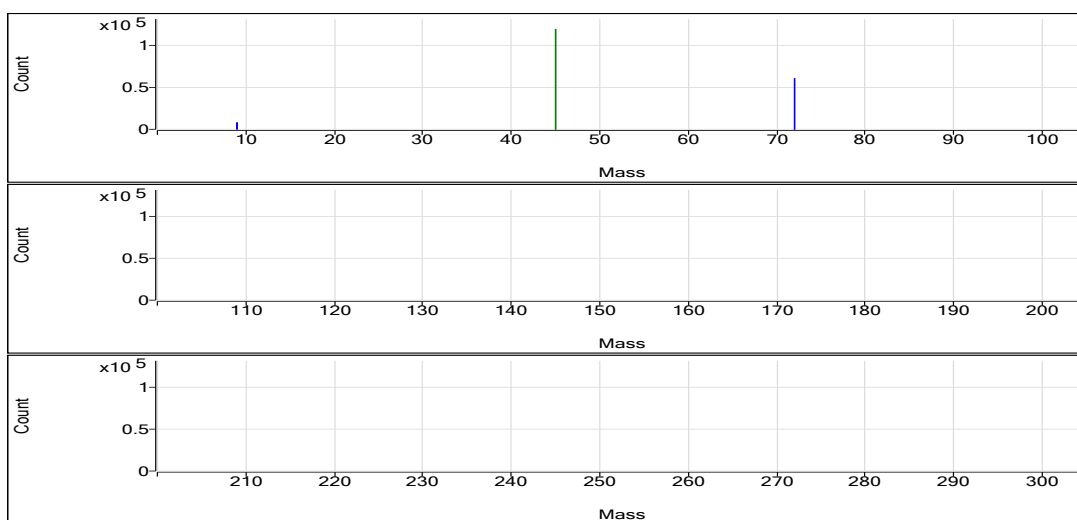
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	25.052	ppb	4.8	16196.47	0.0267	Pulse	0.5000	3
Se	78	72	H2	25.368	ppb	6.7	900.69	0.0129	Pulse	1.5000	3
Na	23	72	He	2561.491	ppb	0.7	215584.68	4.8248	Pulse	0.1000	3
Mg	24	72	He	2507.784	ppb	0.2	102960.66	2.3042	Pulse	0.1000	3
Al	27	72	He	2448.210	ppb	2.1	31874.64	0.7134	Pulse	0.1000	3
K	39	72	He	2515.499	ppb	3.8	99519.08	2.2276	Pulse	0.5000	3
Ca	44	72	He	2510.049	ppb	3.6	4624.01	0.1035	Pulse	0.5000	3
Ti	47	72	He	2446.034	ppb	2.1	33993.78	0.7608	Pulse	0.5000	3
V	51	72	He	245.717	ppb	0.8	150336.35	3.3646	Pulse	0.5000	3
Cr	52	72	He	244.462	ppb	0.8	187597.72	4.1985	Pulse	0.1000	3
Mn	55	72	He	245.778	ppb	0.8	80228.53	1.7955	Pulse	0.5000	3
Fe	57	72	He	2409.727	ppb	0.6	34998.43	0.7833	Pulse	0.1000	3
Co	59	72	He	245.930	ppb	0.5	365161.22	8.1725	Pulse	0.5000	3
Ni	60	72	He	244.451	ppb	0.6	102025.00	2.2834	Pulse	0.5000	3
Cu	63	72	He	243.592	ppb	0.8	294222.47	6.5849	Pulse	0.5000	3
Zn	66	72	He	242.768	ppb	0.9	33888.12	0.7584	Pulse	0.5000	3
As	75	72	He	241.784	ppb	0.5	27582.32	0.6173	Pulse	0.5000	3
Sr	88	115	He	25.617	ppb	2.9	10350.41	0.2721	Pulse	0.1000	3
Mo	98	115	He	25.709	ppb	1.5	23034.20	0.6054	Pulse	0.1000	3
Ag	107	115	He	25.870	ppb	3.7	48532.59	1.2760	Pulse	0.1000	3
Cd	111	115	He	24.948	ppb	1.5	5326.27	0.1400	Pulse	0.5000	3
Sn	120	115	He	26.388	ppb	1.8	19269.18	0.5063	Pulse	0.1000	3
Sb	121	115	He	25.248	ppb	1.8	15507.86	0.4076	Pulse	0.3000	3
Ba	137	115	He	251.762	ppb	3.0	50607.89	1.3304	Pulse	0.1000	3
Tl	205	159	He	24.863	ppb	1.0	92368.56	0.6166	Pulse	0.1000	3
Pb	208	159	He	25.133	ppb	1.4	125350.00	0.8368	Pulse	0.1000	3
U	238	159	He	25.210	ppb	0.4	127591.13	0.8517	Pulse	0.1000	3

ISTD Table:

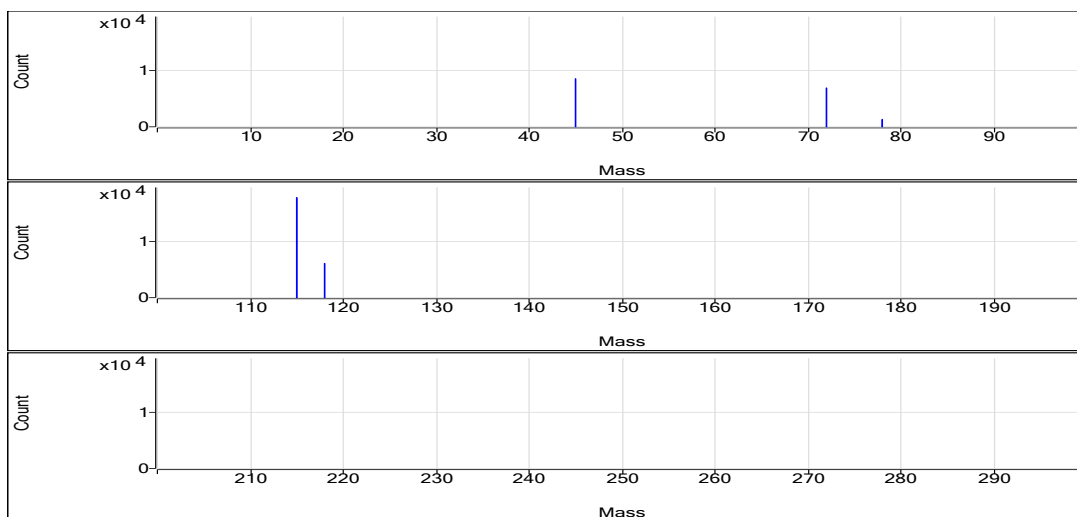
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1193180.53	0.3	91.3	Analog	0.1000	3
No Gas	Ge	72	606776.49	0.4	92.6	Pulse	0.1000	3
H2	Sc	45	86313.50	1.9	105.1	Pulse	0.1000	3
H2	Ge	72	69922.77	1.0	102.3	Pulse	0.1000	3
H2	In	115	179701.08	0.6	105.3	Pulse	0.1000	3
He	Sc	45	24525.76	2.2	95.8	Pulse	0.1000	3
He	Ge	72	44682.93	0.8	94.0	Pulse	0.1000	3
He	In	115	38052.89	1.9	92.9	Pulse	0.1000	3
He	Tb	159	149805.24	1.0	94.0	Pulse	0.1000	3
He	Bi	209	110488.21	0.4	94.5	Pulse	0.1000	3

No Gas

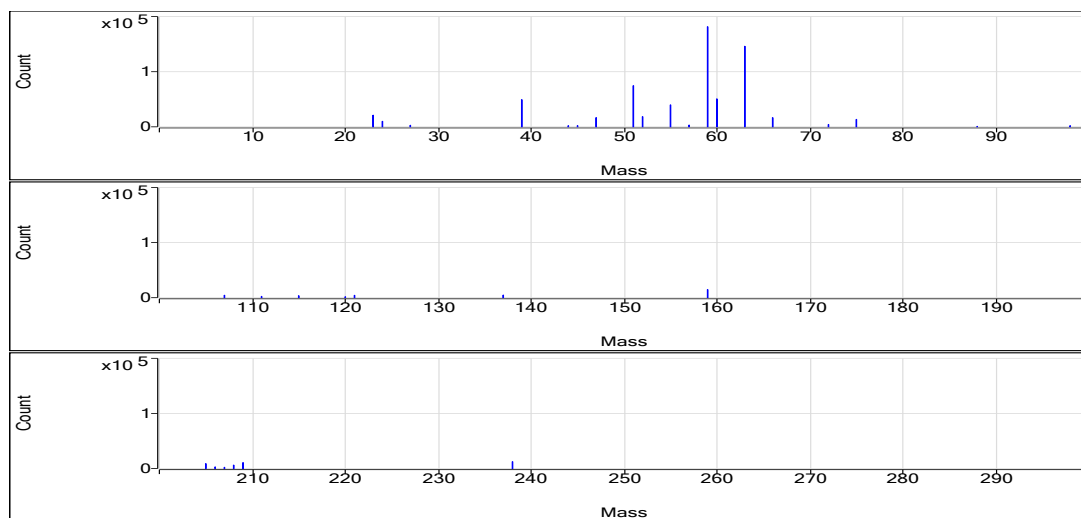


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.87	0.0254	15355.00	0.0011	7.835E-05
Be	9	1	No Gas	24.997	0.0266	16183.77	0.0011	7.835E-05
Be	9	1	No Gas	26.291	0.028	17050.64	0.0011	7.835E-05
Se	78	2	H2	27.068	0.0137	965.36	0.0005	2.594E-05
Se	78	2	H2	25.351	0.0129	890.03	0.0005	2.594E-05
Se	78	2	H2	23.686	0.012	846.69	0.0005	2.594E-05
Na	23	3	He	2573.861	4.8473	214503.04	0.0018	0.1731
Na	23	3	He	2568.92	4.8383	217549.80	0.0018	0.1731
Na	23	3	He	2541.692	4.7889	214701.19	0.0018	0.1731
Mg	24	3	He	2503.177	2.3	101779.84	0.0009	0.006537
Mg	24	3	He	2510.345	2.3066	103712.23	0.0009	0.006537
Mg	24	3	He	2509.83	2.3061	103389.90	0.0009	0.006537
Al	27	3	He	2453.069	0.7148	31630.59	0.0003	0.00231
Al	27	3	He	2394.19	0.6977	31370.43	0.0003	0.00231
Al	27	3	He	2497.371	0.7277	32622.90	0.0003	0.00231
K	39	3	He	2625.575	2.3099	102217.23	0.0007	0.3475
K	39	3	He	2467.751	2.1919	98557.39	0.0007	0.3475
K	39	3	He	2453.17	2.181	97782.63	0.0007	0.3475
Ca	44	3	He	2432.278	0.1003	4440.62	0	0.002807
Ca	44	3	He	2609.012	0.1074	4830.73	0	0.002807
Ca	44	3	He	2488.857	0.1026	4600.67	0	0.002807
Ti	47	3	He	2458.201	0.7646	33834.79	0.0003	0.0001123
Ti	47	3	He	2390.898	0.7437	33437.88	0.0003	0.0001123
Ti	47	3	He	2489.005	0.7742	34708.67	0.0003	0.0001123
V	51	3	He	247.381	3.3874	149897.50	0.0137	0.008308
V	51	3	He	243.668	3.3366	150027.83	0.0137	0.008308
V	51	3	He	246.103	3.3699	151083.73	0.0137	0.008308
Cr	52	3	He	245.808	4.2215	186809.61	0.0171	0.02156
Cr	52	3	He	245.371	4.214	189478.98	0.0171	0.02156
Cr	52	3	He	242.206	4.16	186504.57	0.0171	0.02156
Mn	55	3	He	246.351	1.7997	79641.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	243.634	1.7799	80030.84	0.0073	0.002316
Mn	55	3	He	247.349	1.807	81013.74	0.0073	0.002316
Fe	57	3	He	2424.117	0.7879	34868.23	0.0003	0.002736
Fe	57	3	He	2393.163	0.7779	34978.24	0.0003	0.002736
Fe	57	3	He	2411.903	0.784	35148.82	0.0003	0.002736
Co	59	3	He	247.468	8.2236	363910.06	0.0332	0.001922
Co	59	3	He	245.112	8.1453	366244.59	0.0332	0.001922
Co	59	3	He	245.211	8.1486	365329.00	0.0332	0.001922
Ni	60	3	He	246.126	2.299	101735.96	0.0093	0.003141
Ni	60	3	He	243.295	2.2726	102185.00	0.0093	0.003141
Ni	60	3	He	243.931	2.2785	102154.05	0.0093	0.003141
Cu	63	3	He	245.054	6.6244	293143.19	0.027	0.003732
Cu	63	3	He	241.302	6.523	293300.44	0.027	0.003732
Cu	63	3	He	244.419	6.6072	296223.78	0.027	0.003732
Zn	66	3	He	240.782	0.7522	33286.18	0.0031	0.002032
Zn	66	3	He	242.597	0.7579	34075.90	0.0031	0.002032
Zn	66	3	He	244.926	0.7651	34302.27	0.0031	0.002032
As	75	3	He	241.596	0.6168	27295.15	0.0025	0.0007733
As	75	3	He	240.581	0.6142	27617.76	0.0025	0.0007733
As	75	3	He	243.174	0.6208	27834.05	0.0025	0.0007733
Sr	88	3	He	26.293	0.2791	10393.79	0.0105	0.004071
Sr	88	3	He	24.804	0.2635	10083.57	0.0105	0.004071
Sr	88	3	He	25.755	0.2735	10573.87	0.0105	0.004071
Mo	98	3	He	26.002	0.6122	22797.11	0.0234	0.003908
Mo	98	3	He	25.256	0.5948	22757.17	0.0234	0.003908
Mo	98	3	He	25.868	0.6091	23548.32	0.0234	0.003908
Ag	107	3	He	26.957	1.3296	49508.76	0.0493	0.0004851
Ag	107	3	He	25.448	1.2552	48024.48	0.0493	0.0004851
Ag	107	3	He	25.205	1.2432	48064.53	0.0493	0.0004851
Cd	111	3	He	25.304	0.142	5286.93	0.0056	0
Cd	111	3	He	24.57	0.1379	5274.92	0.0056	0
Cd	111	3	He	24.97	0.1401	5416.97	0.0056	0
Sn	120	3	He	25.83	0.4969	18501.57	0.0169	0.0609
Sn	120	3	He	26.669	0.511	19552.84	0.0169	0.0609
Sn	120	3	He	26.663	0.5109	19753.12	0.0169	0.0609
Sb	121	3	He	25.758	0.4158	15484.54	0.0161	0.0005433
Sb	121	3	He	24.916	0.4023	15391.06	0.0161	0.0005433
Sb	121	3	He	25.07	0.4047	15647.99	0.0161	0.0005433
Ba	137	3	He	259.521	1.3714	51066.02	0.0053	0.001141
Ba	137	3	He	251.522	1.3292	50855.72	0.0053	0.001141
Ba	137	3	He	244.244	1.2907	49901.94	0.0053	0.001141
Tl	205	3	He	24.575	0.6095	92020.12	0.0248	0.0005854
Tl	205	3	He	25.078	0.6219	93428.71	0.0248	0.0005854
Tl	205	3	He	24.936	0.6184	91656.86	0.0248	0.0005854
Pb	208	3	He	24.987	0.832	65989.97	0.0332	0.001693
Pb	208	3	He	24.883	0.8285	65387.34	0.0332	0.001693
Pb	208	3	He	25.529	0.85	67476.83	0.0332	0.001693
U	238	3	He	25.161	0.8501	128344.62	0.0338	0.0007949
U	238	3	He	25.153	0.8498	127658.71	0.0338	0.0007949
U	238	3	He	25.317	0.8553	126770.07	0.0338	0.0007949
Sc	45	1	No Gas			1190507.01		
Sc	45	1	No Gas			1197956.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1191078.26		
Ge	72	1	No Gas			603747.06		
Ge	72	1	No Gas			607726.91		
Ge	72	1	No Gas			608855.50		
Sc	45	2	H2			87644.52		
Sc	45	2	H2			84466.96		
Sc	45	2	H2			86829.03		
Ge	72	2	H2			70244.14		
Ge	72	2	H2			69139.04		
Ge	72	2	H2			70385.14		
In	115	2	H2			179160.88		
In	115	2	H2			180944.18		
In	115	2	H2			178998.18		
Sc	45	3	He			25040.08		
Sc	45	3	He			23978.11		
Sc	45	3	He			24559.10		
Ge	72	3	He			44251.94		
Ge	72	3	He			44963.71		
Ge	72	3	He			44833.15		
In	115	3	He			37365.73		
In	115	3	He			38398.02		
In	115	3	He			38799.56		
Tb	159	3	He			150981.32		
Tb	159	3	He			150221.06		
Tb	159	3	He			148213.34		
Bi	209	3	He			110439.11		
Bi	209	3	He			110942.16		
Bi	209	3	He			110083.37		

Quantitation Report

Data File Name 249_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:32:27 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

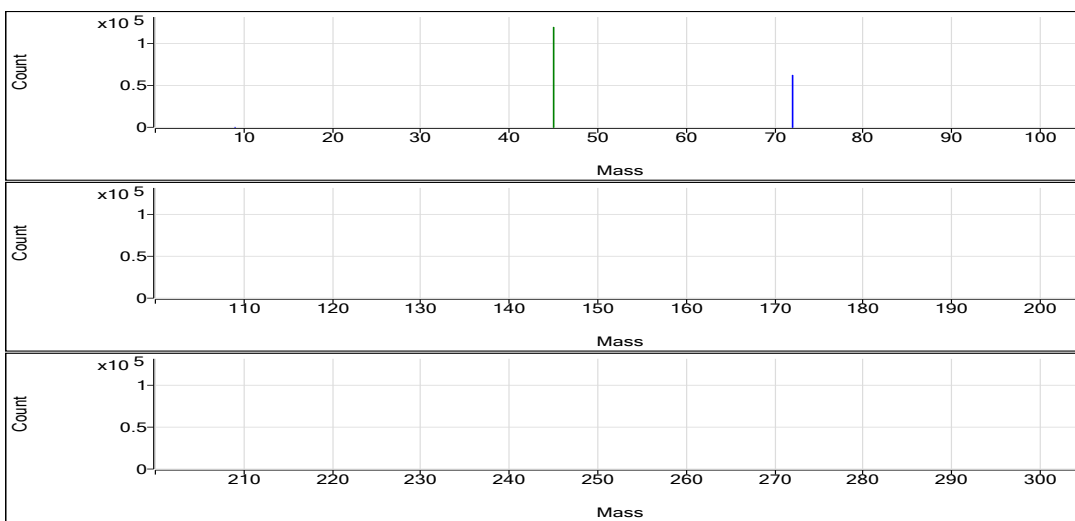
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.023	ppb	90.0	64.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.010	ppb	373.7	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	201.420	ppb	123.3	24451.24	0.5388	Pulse	0.1000	3
Mg	24	72	He	12.273	ppb	10.5	803.38	0.0178	Pulse	0.1000	3
Al	27	72	He	-2.872	ppb	N/A	66.67	0.0015	Pulse	0.1000	3
K	39	72	He	17.973	ppb	458.9	16296.94	0.3609	Pulse	0.5000	3
Ca	44	72	He	-15.108	ppb	N/A	99.33	0.0022	Pulse	0.5000	3
Ti	47	72	He	0.066	ppb	5.7	6.00	0.0001	Pulse	0.5000	3
V	51	72	He	0.039	ppb	135.3	399.34	0.0088	Pulse	0.5000	3
Cr	52	72	He	-0.147	ppb	N/A	860.05	0.0190	Pulse	0.1000	3
Mn	55	72	He	0.209	ppb	18.2	173.33	0.0038	Pulse	0.5000	3
Fe	57	72	He	-1.613	ppb	N/A	100.01	0.0022	Pulse	0.1000	3
Co	59	72	He	0.027	ppb	50.4	127.33	0.0028	Pulse	0.5000	3
Ni	60	72	He	0.019	ppb	101.4	150.00	0.0033	Pulse	0.5000	3
Cu	63	72	He	-0.011	ppb	N/A	154.67	0.0034	Pulse	0.5000	3
Zn	66	72	He	-0.287	ppb	N/A	51.33	0.0011	Pulse	0.5000	3
As	75	72	He	0.061	ppb	72.0	42.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.133	ppb	N/A	103.34	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.064	ppb	N/A	93.33	0.0024	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	99.6	2.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.041	ppb	N/A	2313.59	0.0602	Pulse	0.1000	3
Sb	121	115	He	0.015	ppb	92.0	30.00	0.0008	Pulse	0.3000	3
Ba	137	115	He	-0.051	ppb	N/A	33.33	0.0009	Pulse	0.1000	3
Tl	205	159	He	0.006	ppb	155.0	110.00	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.013	ppb	N/A	186.67	0.0013	Pulse	0.1000	3
U	238	159	He	-0.005	ppb	N/A	93.34	0.0006	Pulse	0.1000	3

ISTD Table:

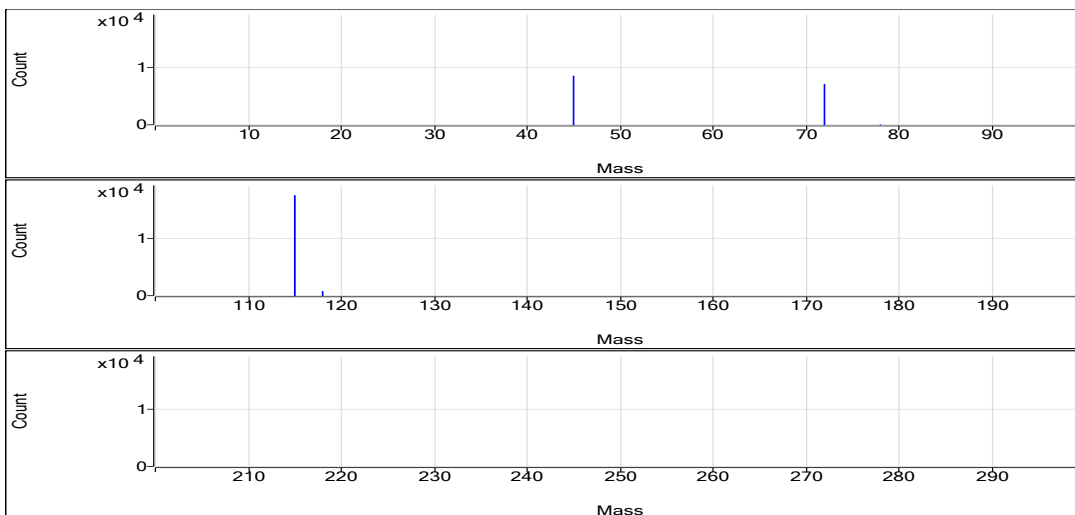
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1201964.57	1.8	92.0	Analog	0.1000	3
No Gas	Ge	72	626368.24	0.6	95.6	Pulse	0.1000	3
H2	Sc	45	86096.03	0.8	104.8	Pulse	0.1000	3
H2	Ge	72	71526.60	0.7	104.7	Pulse	0.1000	3
H2	In	115	176472.48	0.8	103.4	Pulse	0.1000	3
He	Sc	45	24575.67	2.0	96.0	Pulse	0.1000	3
He	Ge	72	45171.10	0.9	95.1	Pulse	0.1000	3
He	In	115	38408.60	2.0	93.8	Pulse	0.1000	3
He	Tb	159	148180.43	0.4	92.9	Pulse	0.1000	3
He	Bi	209	108949.84	0.9	93.2	Pulse	0.1000	3

No Gas

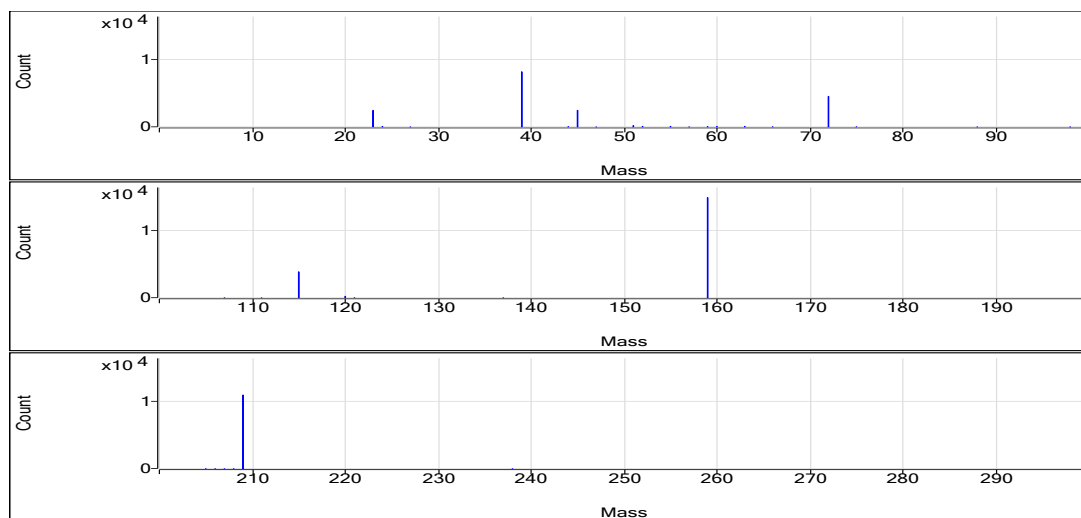


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.025	0.0001	66.00	0.0011	7.835E-05
Be	9	1	No Gas	0.041	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.001	0.0001	50.00	0.0011	7.835E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.041	0	3.33	0.0005	2.594E-05
Se	78	2	H2	0.022	0	2.67	0.0005	2.594E-05
Na	23	3	He	62.226	0.2861	12905.26	0.0018	0.1731
Na	23	3	He	53.973	0.2711	12144.73	0.0018	0.1731
Na	23	3	He	488.061	1.0594	48303.74	0.0018	0.1731
Mg	24	3	He	13.43	0.0188	850.04	0.0009	0.006537
Mg	24	3	He	10.893	0.0165	740.04	0.0009	0.006537
Mg	24	3	He	12.495	0.018	820.05	0.0009	0.006537
Al	27	3	He	0.442	0.0024	110.01	0.0003	0.00231
Al	27	3	He	-4.879	0.0009	40.00	0.0003	0.00231
Al	27	3	He	-4.178	0.0011	50.00	0.0003	0.00231
K	39	3	He	110.176	0.4298	19391.54	0.0007	0.3475
K	39	3	He	-7.442	0.3419	15319.15	0.0007	0.3475
K	39	3	He	-48.815	0.311	14180.13	0.0007	0.3475
Ca	44	3	He	-9.188	0.0024	110.00	0	0.002807
Ca	44	3	He	-10.992	0.0024	106.00	0	0.002807
Ca	44	3	He	-25.143	0.0018	82.00	0	0.002807
Ti	47	3	He	0.067	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.07	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.062	0.0001	6.00	0.0003	0.0001123
V	51	3	He	0.057	0.0091	410.01	0.0137	0.008308
V	51	3	He	0.081	0.0094	422.01	0.0137	0.008308
V	51	3	He	-0.021	0.008	366.01	0.0137	0.008308
Cr	52	3	He	-0.211	0.018	810.04	0.0171	0.02156
Cr	52	3	He	-0.034	0.021	940.06	0.0171	0.02156
Cr	52	3	He	-0.196	0.0182	830.05	0.0171	0.02156
Mn	55	3	He	0.211	0.0039	174.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.245	0.0041	184.00	0.0073	0.002316
Mn	55	3	He	0.17	0.0036	162.00	0.0073	0.002316
Fe	57	3	He	-5.708	0.0009	40.00	0.0003	0.002736
Fe	57	3	He	0.513	0.0029	130.01	0.0003	0.002736
Fe	57	3	He	0.357	0.0029	130.01	0.0003	0.002736
Co	59	3	He	0.03	0.0029	132.00	0.0332	0.001922
Co	59	3	He	0.012	0.0023	104.00	0.0332	0.001922
Co	59	3	He	0.039	0.0032	146.00	0.0332	0.001922
Ni	60	3	He	0.001	0.0031	142.00	0.0093	0.003141
Ni	60	3	He	0.017	0.0033	148.00	0.0093	0.003141
Ni	60	3	He	0.039	0.0035	160.00	0.0093	0.003141
Cu	63	3	He	-0.023	0.0031	140.00	0.027	0.003732
Cu	63	3	He	-0.018	0.0033	146.00	0.027	0.003732
Cu	63	3	He	0.006	0.0039	178.00	0.027	0.003732
Zn	66	3	He	-0.296	0.0011	50.00	0.0031	0.002032
Zn	66	3	He	-0.237	0.0013	58.00	0.0031	0.002032
Zn	66	3	He	-0.328	0.001	46.00	0.0031	0.002032
As	75	3	He	0.097	0.001	46.00	0.0025	0.0007733
As	75	3	He	0.012	0.0008	36.00	0.0025	0.0007733
As	75	3	He	0.075	0.001	44.00	0.0025	0.0007733
Sr	88	3	He	-0.185	0.0021	80.00	0.0105	0.004071
Sr	88	3	He	-0.166	0.0023	90.00	0.0105	0.004071
Sr	88	3	He	-0.046	0.0036	140.01	0.0105	0.004071
Mo	98	3	He	-0.11	0.0013	50.00	0.0234	0.003908
Mo	98	3	He	-0.034	0.0031	120.00	0.0234	0.003908
Mo	98	3	He	-0.047	0.0028	110.00	0.0234	0.003908
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.183	0.0578	2170.24	0.0169	0.0609
Sn	120	3	He	0.073	0.0621	2400.27	0.0169	0.0609
Sn	120	3	He	-0.012	0.0607	2370.26	0.0169	0.0609
Sb	121	3	He	-0.001	0.0005	20.00	0.0161	0.0005433
Sb	121	3	He	0.02	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.025	0.0009	36.67	0.0161	0.0005433
Ba	137	3	He	-0.014	0.0011	40.00	0.0053	0.001141
Ba	137	3	He	-0.069	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	-0.071	0.0008	30.00	0.0053	0.001141
Tl	205	3	He	0.009	0.0008	120.00	0.0248	0.0005854
Tl	205	3	He	0.015	0.0009	140.01	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	-0.009	0.0014	110.00	0.0332	0.001693
Pb	208	3	He	-0.014	0.0012	70.00	0.0332	0.001693
Pb	208	3	He	-0.016	0.0012	130.01	0.0332	0.001693
U	238	3	He	-0.002	0.0007	110.01	0.0338	0.0007949
U	238	3	He	-0.014	0.0003	50.00	0.0338	0.0007949
U	238	3	He	0.001	0.0008	120.00	0.0338	0.0007949
Sc	45	1	No Gas			1204540.61		
Sc	45	1	No Gas			1178883.81		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1222469.28		
Ge	72	1	No Gas			627725.85		
Ge	72	1	No Gas			622029.01		
Ge	72	1	No Gas			629349.87		
Sc	45	2	H2			86316.25		
Sc	45	2	H2			85311.93		
Sc	45	2	H2			86659.92		
Ge	72	2	H2			72012.39		
Ge	72	2	H2			70977.80		
Ge	72	2	H2			71589.61		
In	115	2	H2			174935.04		
In	115	2	H2			177645.54		
In	115	2	H2			176836.85		
Sc	45	3	He			24178.54		
Sc	45	3	He			24418.62		
Sc	45	3	He			25129.85		
Ge	72	3	He			45114.40		
Ge	72	3	He			44803.27		
Ge	72	3	He			45595.64		
In	115	3	He			37556.15		
In	115	3	He			38648.37		
In	115	3	He			39069.85		
Tb	159	3	He			148929.11		
Tb	159	3	He			147860.55		
Tb	159	3	He			147751.62		
Bi	209	3	He			110023.46		
Bi	209	3	He			108715.82		
Bi	209	3	He			108110.25		

Quantitation Report

Data File Name 250SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:34:39 PM
Sample Name 180-193739-O-10-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

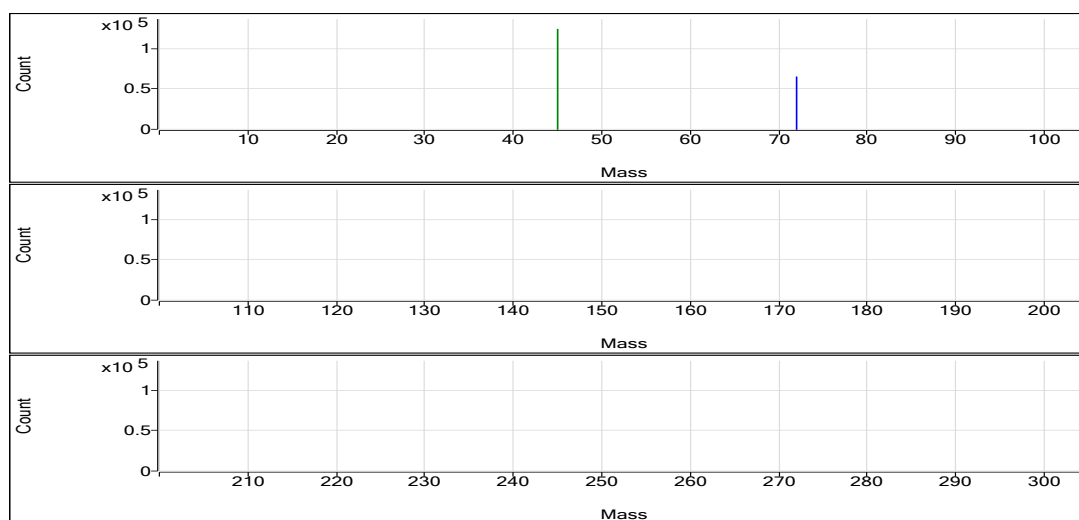
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	25.739	ppb	2.5	21304.48	0.4613	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

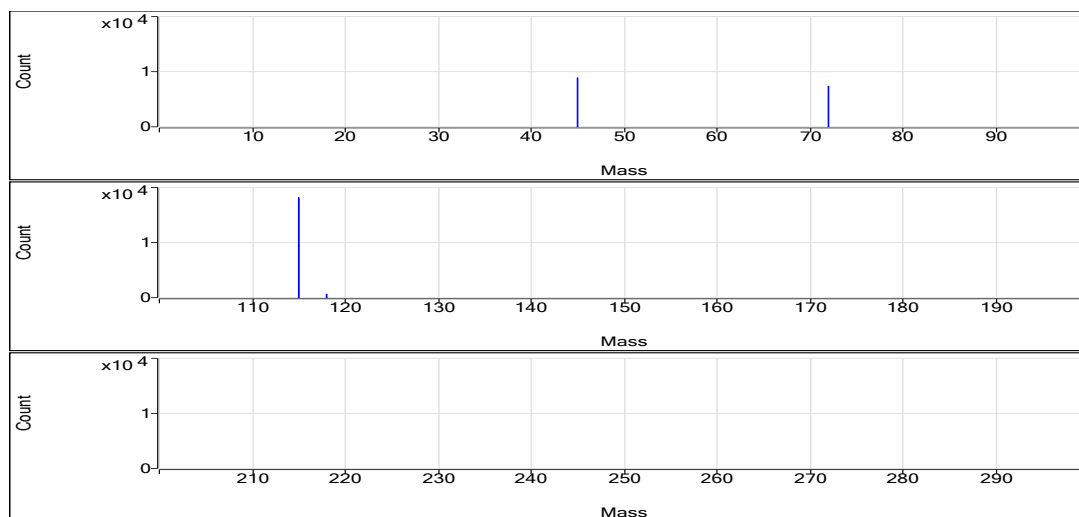
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1240675.09	1.7	94.9	Analog	0.1000	3
No Gas	Ge	72	650470.02	1.0	99.3	Pulse	0.1000	3
H2	Sc	45	89141.94	1.3	108.5	Pulse	0.1000	3
H2	Ge	72	74158.31	0.2	108.5	Pulse	0.1000	3
H2	In	115	182196.11	0.8	106.8	Pulse	0.1000	3
He	Sc	45	24465.65	3.2	95.5	Pulse	0.1000	3
He	Ge	72	46184.03	1.3	97.2	Pulse	0.1000	3
He	In	115	37502.57	2.9	91.6	Pulse	0.1000	3
He	Tb	159	149291.26	1.3	93.6	Pulse	0.1000	3
He	Bi	209	108577.56	1.2	92.8	Pulse	0.1000	3

No Gas

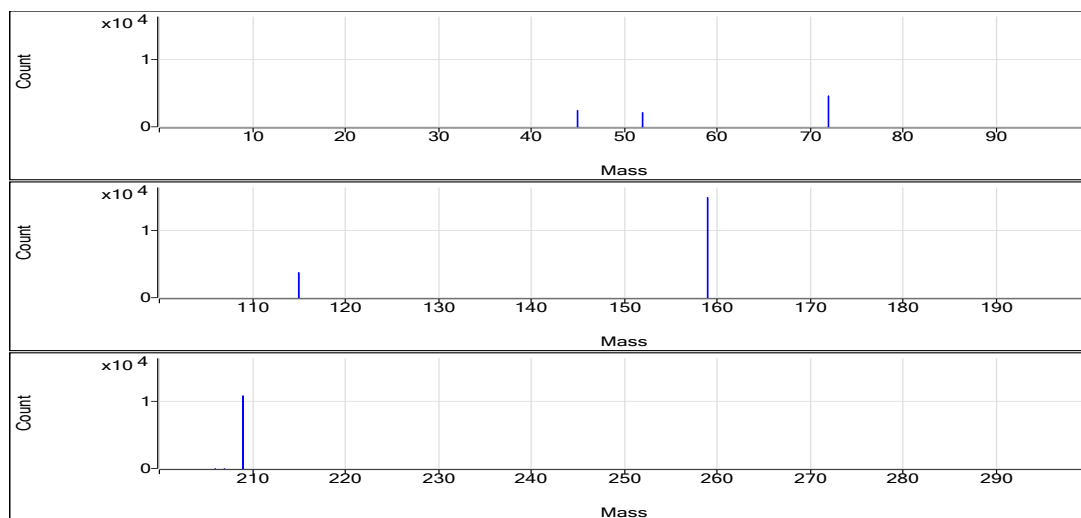


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	26.436	0.4732	21825.09	0.0171	0.02156
Cr	52	3	He	25.623	0.4594	20954.08	0.0171	0.02156
Cr	52	3	He	25.157	0.4514	21134.28	0.0171	0.02156
Sc	45	1	No Gas			1216196.00		
Sc	45	1	No Gas			1251845.14		
Sc	45	1	No Gas			1253984.12		
Ge	72	1	No Gas			645055.22		
Ge	72	1	No Gas			657613.51		
Ge	72	1	No Gas			648741.32		
Sc	45	2	H2			88036.28		
Sc	45	2	H2			90418.79		
Sc	45	2	H2			88970.75		
Ge	72	2	H2			74131.21		
Ge	72	2	H2			74041.65		
Ge	72	2	H2			74302.07		
In	115	2	H2			183915.04		
In	115	2	H2			181680.27		
In	115	2	H2			180993.01		
Sc	45	3	He			25220.34		
Sc	45	3	He			24498.89		
Sc	45	3	He			23677.73		
Ge	72	3	He			46117.59		
Ge	72	3	He			45615.69		
Ge	72	3	He			46818.81		
In	115	3	He			36874.42		
In	115	3	He			36854.37		
In	115	3	He			38778.92		
Tb	159	3	He			150213.15		
Tb	159	3	He			147094.83		
Tb	159	3	He			150565.79		
Bi	209	3	He			108412.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			107315.33		
Bi	209	3	He			110004.96		

Quantitation Report

Data File Name 251SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:36:11 PM
Sample Name 180-193739-P-10-A DU
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

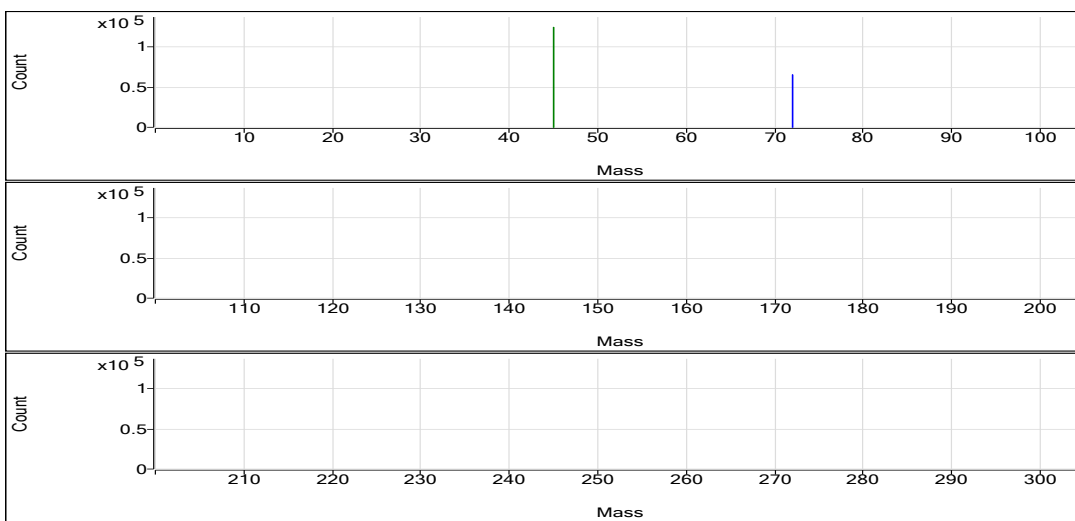
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	26.164	ppb	3.6	21972.02	0.4686	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

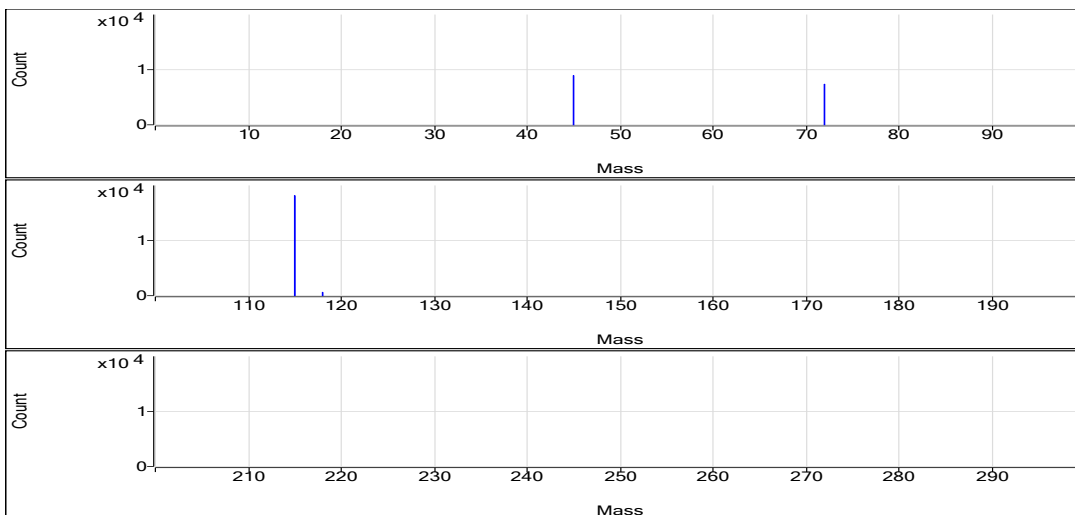
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1246027.56	0.6	95.3	Analog	0.1000	3
No Gas	Ge	72	654812.67	0.4	99.9	Pulse	0.1000	3
H2	Sc	45	89021.95	0.7	108.4	Pulse	0.1000	3
H2	Ge	72	73549.03	1.9	107.6	Pulse	0.1000	3
H2	In	115	180668.82	0.9	105.9	Pulse	0.1000	3
He	Sc	45	24602.33	3.7	96.1	Pulse	0.1000	3
He	Ge	72	46875.95	1.3	98.7	Pulse	0.1000	3
He	In	115	37679.94	2.1	92.0	Pulse	0.1000	3
He	Tb	159	148705.67	2.6	93.3	Pulse	0.1000	3
He	Bi	209	109309.00	1.1	93.5	Pulse	0.1000	3

No Gas

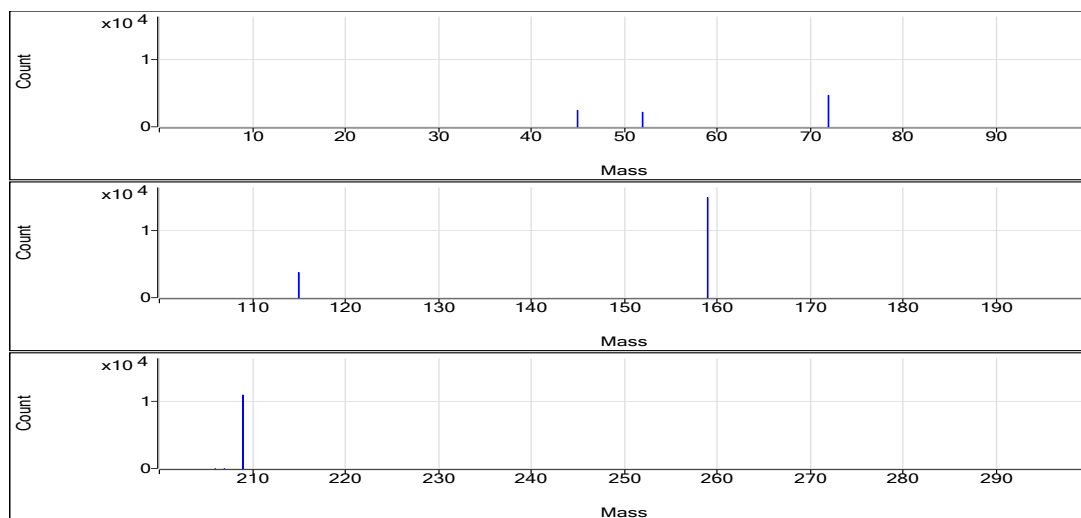


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	27.227	0.4868	23136.97	0.0171	0.02156
Cr	52	3	He	25.835	0.463	21444.68	0.0171	0.02156
Cr	52	3	He	25.43	0.4561	21334.41	0.0171	0.02156
Sc	45	1	No Gas			1251864.98		
Sc	45	1	No Gas			1248577.17		
Sc	45	1	No Gas			1237640.53		
Ge	72	1	No Gas			654674.91		
Ge	72	1	No Gas			652149.37		
Ge	72	1	No Gas			657613.74		
Sc	45	2	H2			88971.59		
Sc	45	2	H2			89686.23		
Sc	45	2	H2			88408.02		
Ge	72	2	H2			75106.01		
Ge	72	2	H2			73127.10		
Ge	72	2	H2			72413.98		
In	115	2	H2			182327.59		
In	115	2	H2			180700.37		
In	115	2	H2			178978.51		
Sc	45	3	He			24588.94		
Sc	45	3	He			23687.55		
Sc	45	3	He			25530.50		
Ge	72	3	He			47531.07		
Ge	72	3	He			46317.83		
Ge	72	3	He			46778.94		
In	115	3	He			37807.07		
In	115	3	He			36824.53		
In	115	3	He			38408.22		
Tb	159	3	He			148993.90		
Tb	159	3	He			144678.35		
Tb	159	3	He			152444.77		
Bi	209	3	He			108593.97		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			108603.85		
Bi	209	3	He			110729.19		

Quantitation Report

Data File Name 252SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:37:43 PM
Sample Name 180-193739-N-10-A MS
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

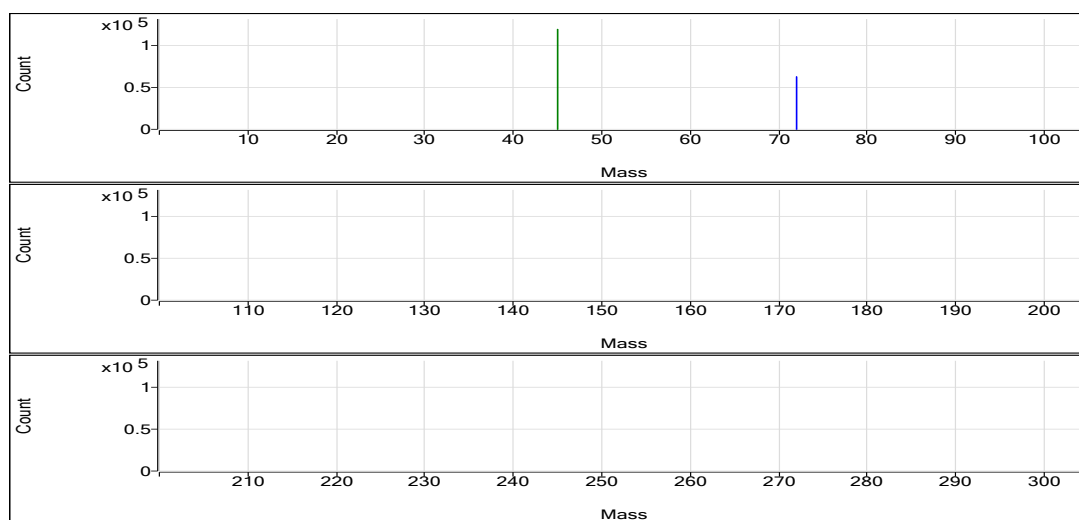
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	504.694	ppb	3.2	401602.23	8.6449	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

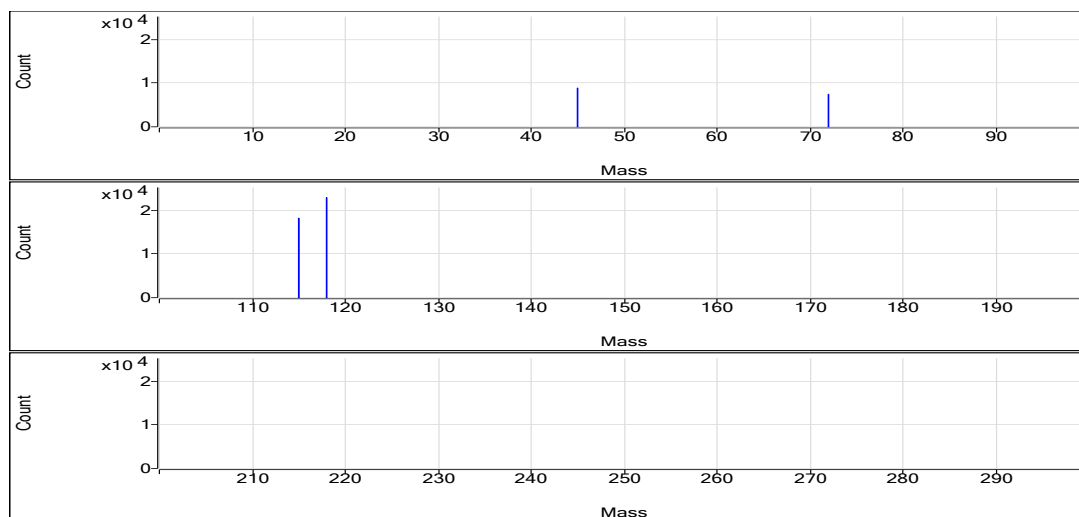
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1203779.28	0.8	92.1	Analog	0.1000	3
No Gas	Ge	72	632764.30	0.9	96.6	Pulse	0.1000	3
H2	Sc	45	89061.64	0.8	108.4	Pulse	0.1000	3
H2	Ge	72	74701.16	0.3	109.3	Pulse	0.1000	3
H2	In	115	182498.69	0.8	107.0	Pulse	0.1000	3
He	Sc	45	25049.73	1.8	97.8	Pulse	0.1000	3
He	Ge	72	46474.35	1.9	97.8	Pulse	0.1000	3
He	In	115	37512.89	1.7	91.6	Pulse	0.1000	3
He	Tb	159	149506.40	0.8	93.8	Pulse	0.1000	3
He	Bi	209	110027.17	1.6	94.1	Pulse	0.1000	3

No Gas

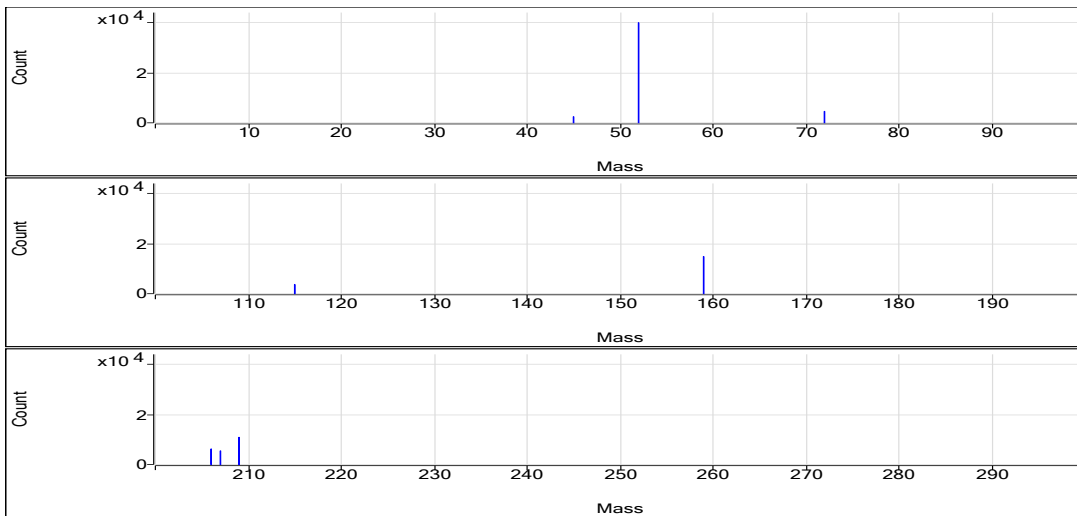


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	493.56	8.4547	398636.05	0.0171	0.02156
Cr	52	3	He	497.392	8.5201	398900.81	0.0171	0.02156
Cr	52	3	He	523.129	8.9599	407269.84	0.0171	0.02156
Sc	45	1	No Gas			1193124.36		
Sc	45	1	No Gas			1209361.39		
Sc	45	1	No Gas			1208852.09		
Ge	72	1	No Gas			637626.87		
Ge	72	1	No Gas			633833.94		
Ge	72	1	No Gas			626832.10		
Sc	45	2	H2			89121.82		
Sc	45	2	H2			88327.82		
Sc	45	2	H2			89735.27		
Ge	72	2	H2			74645.24		
Ge	72	2	H2			74945.00		
Ge	72	2	H2			74513.23		
In	115	2	H2			183745.82		
In	115	2	H2			181034.16		
In	115	2	H2			182716.09		
Sc	45	3	He			24519.00		
Sc	45	3	He			25259.91		
Sc	45	3	He			25370.28		
Ge	72	3	He			47149.81		
Ge	72	3	He			46818.52		
Ge	72	3	He			45454.73		
In	115	3	He			37175.50		
In	115	3	He			38237.93		
In	115	3	He			37125.23		
Tb	159	3	He			148264.06		
Tb	159	3	He			150747.57		
Tb	159	3	He			149507.56		
Bi	209	3	He			110062.75		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			108221.92		
Bi	209	3	He			111796.85		

Quantitation Report

Data File Name 253SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:39:14 PM
Sample Name 180-193739-N-10-B MSD
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

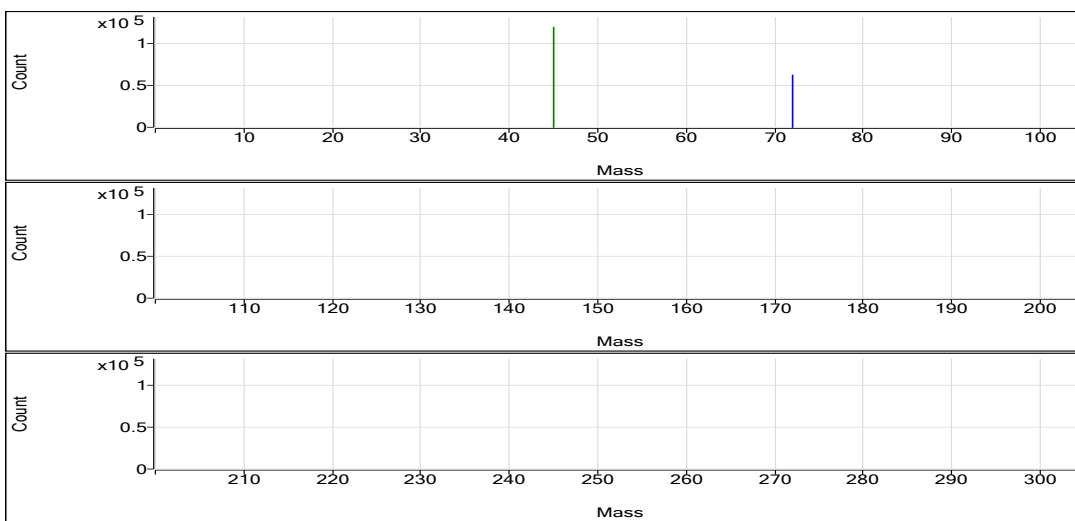
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	506.723	ppb	2.1	398856.63	8.6796	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

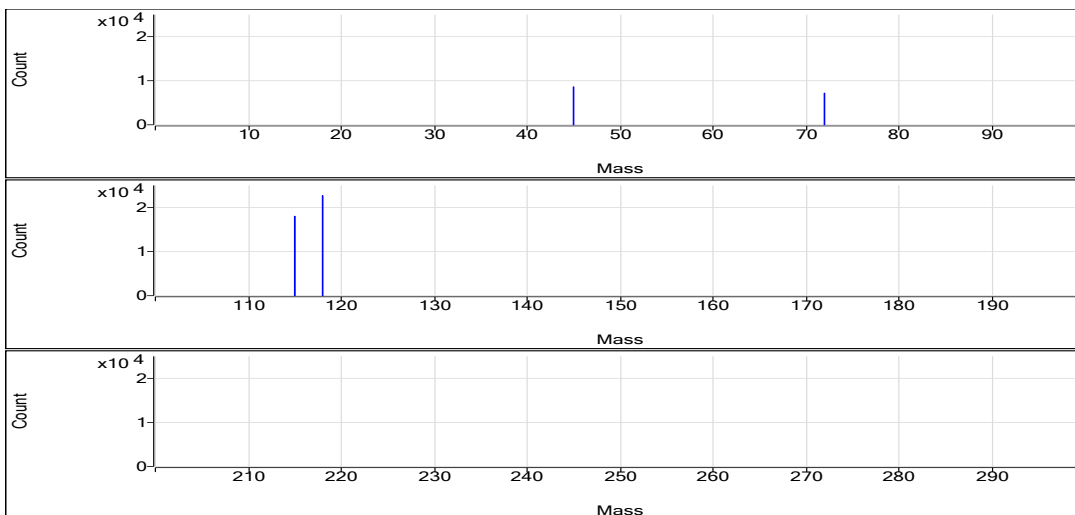
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1197901.36	2.2	91.6	Analog	0.1000	3
No Gas	Ge	72	626573.90	2.1	95.6	Pulse	0.1000	3
H2	Sc	45	86518.34	1.4	105.3	Pulse	0.1000	3
H2	Ge	72	72460.49	2.6	106.0	Pulse	0.1000	3
H2	In	115	181251.03	2.8	106.2	Pulse	0.1000	3
He	Sc	45	24752.68	1.5	96.6	Pulse	0.1000	3
He	Ge	72	45973.20	3.0	96.8	Pulse	0.1000	3
He	In	115	38772.33	0.9	94.7	Pulse	0.1000	3
He	Tb	159	152260.47	1.1	95.5	Pulse	0.1000	3
He	Bi	209	109265.20	1.1	93.4	Pulse	0.1000	3

No Gas

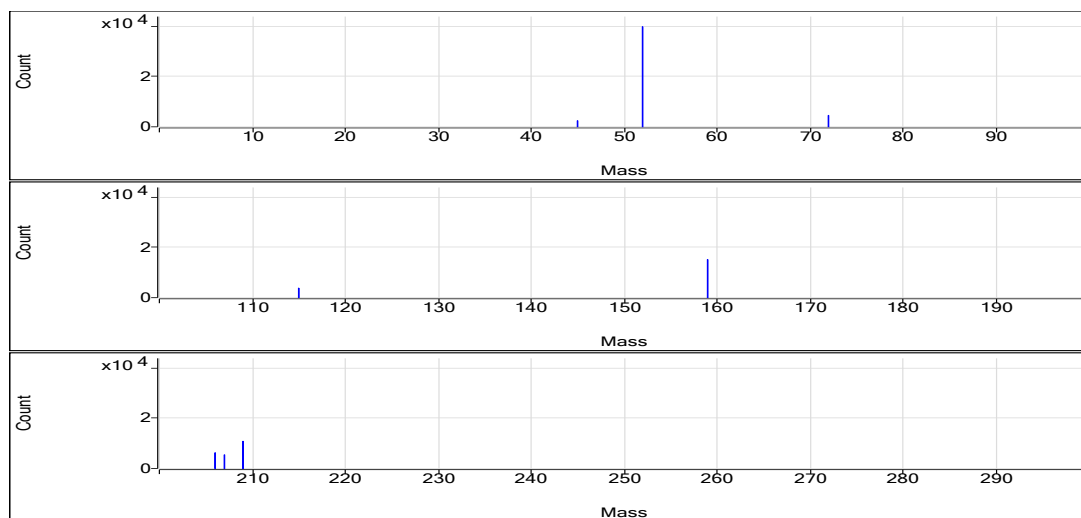


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	511.929	8.7685	397253.55	0.0171	0.02156
Cr	52	3	He	513.979	8.8036	396544.29	0.0171	0.02156
Cr	52	3	He	494.262	8.4667	402772.06	0.0171	0.02156
Sc	45	1	No Gas			1183457.95		
Sc	45	1	No Gas			1182487.64		
Sc	45	1	No Gas			1227758.50		
Ge	72	1	No Gas			628587.65		
Ge	72	1	No Gas			612519.83		
Ge	72	1	No Gas			638614.21		
Sc	45	2	H2			85763.42		
Sc	45	2	H2			85885.28		
Sc	45	2	H2			87906.31		
Ge	72	2	H2			70335.34		
Ge	72	2	H2			73317.07		
Ge	72	2	H2			73729.07		
In	115	2	H2			175501.97		
In	115	2	H2			183321.31		
In	115	2	H2			184929.80		
Sc	45	3	He			24338.78		
Sc	45	3	He			24929.66		
Sc	45	3	He			24989.61		
Ge	72	3	He			45304.46		
Ge	72	3	He			45043.68		
Ge	72	3	He			47571.47		
In	115	3	He			38638.75		
In	115	3	He			39160.07		
In	115	3	He			38518.18		
Tb	159	3	He			153093.06		
Tb	159	3	He			150363.38		
Tb	159	3	He			153324.96		
Bi	209	3	He			109640.88		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			107898.64		
Bi	209	3	He			110256.07		

Quantitation Report

Data File Name 254SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:40:45 PM
Sample Name 180-193901-N-11-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

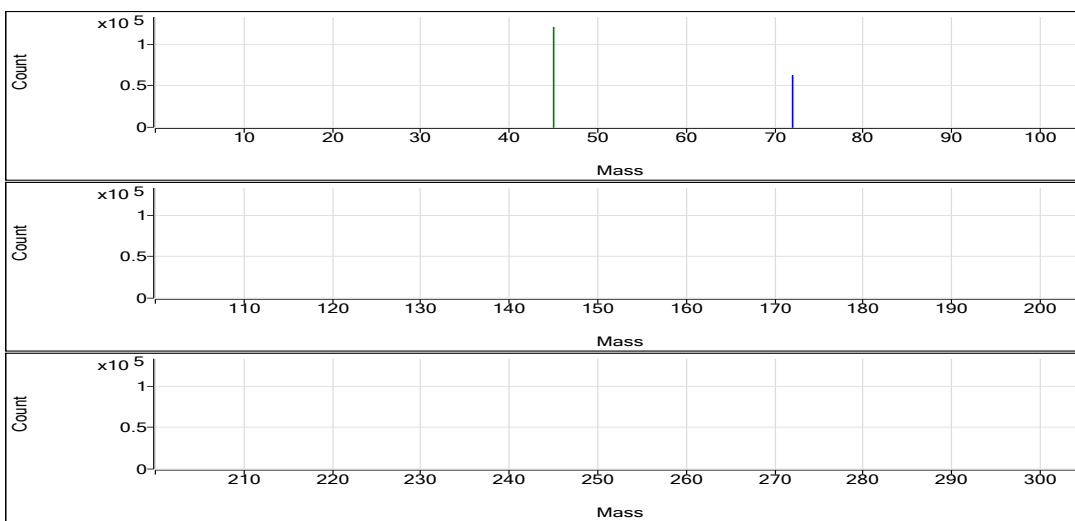
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.072	ppb	N/A	923.39	0.0203	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

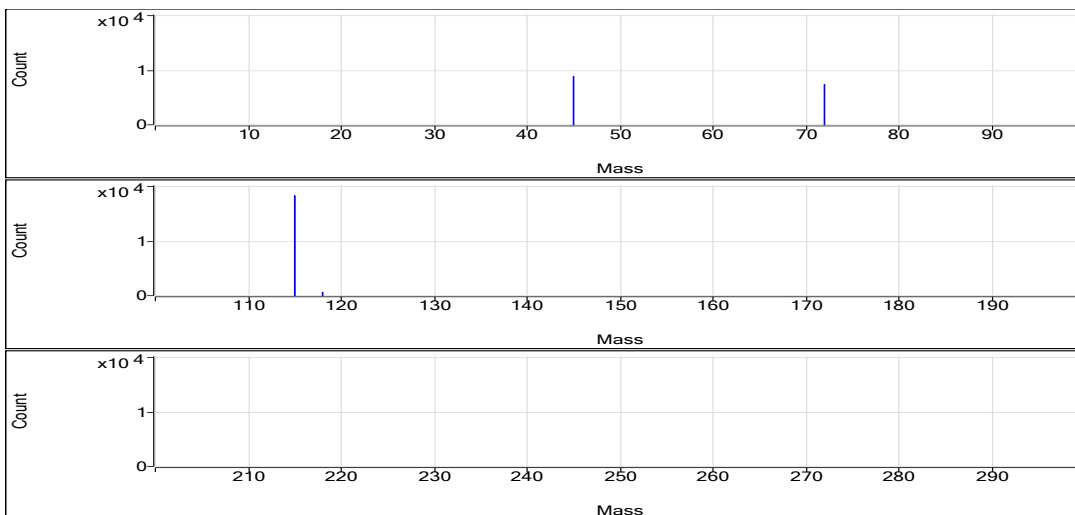
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1211493.37	1.0	92.7	Analog	0.1000	3
No Gas	Ge	72	627270.59	0.8	95.7	Pulse	0.1000	3
H2	Sc	45	89242.10	1.4	108.6	Pulse	0.1000	3
H2	Ge	72	74365.24	1.1	108.8	Pulse	0.1000	3
H2	In	115	184037.71	2.4	107.9	Pulse	0.1000	3
He	Sc	45	24929.44	1.0	97.3	Pulse	0.1000	3
He	Ge	72	45425.07	1.2	95.6	Pulse	0.1000	3
He	In	115	39130.19	1.9	95.6	Pulse	0.1000	3
He	Tb	159	149513.71	1.7	93.8	Pulse	0.1000	3
He	Bi	209	113399.95	1.7	97.0	Pulse	0.1000	3

No Gas

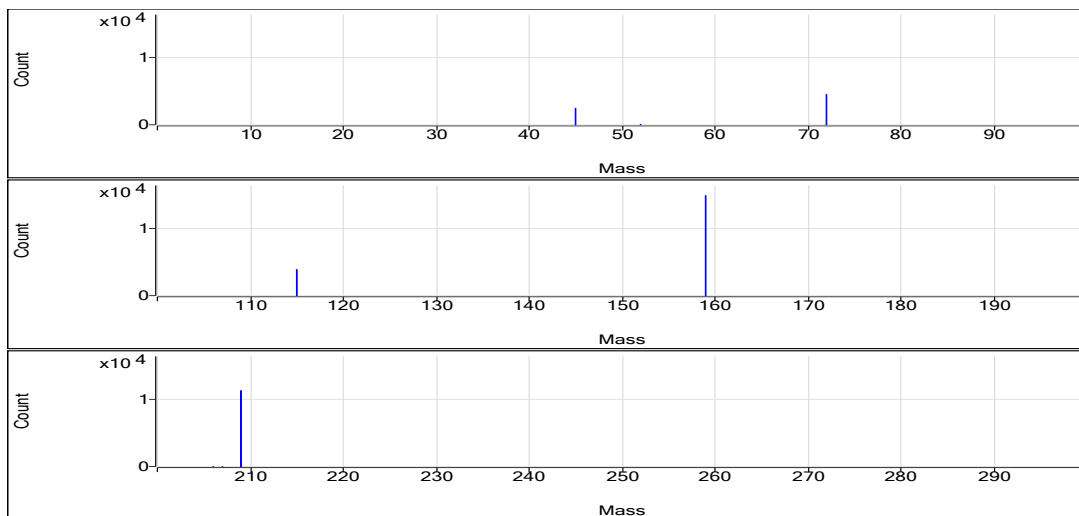


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.199	0.0182	830.04	0.0171	0.02156
Cr	52	3	He	0.004	0.0216	990.07	0.0171	0.02156
Cr	52	3	He	-0.02	0.0212	950.06	0.0171	0.02156
Sc	45	1	No Gas			1219042.64		
Sc	45	1	No Gas			1217269.28		
Sc	45	1	No Gas			1198168.19		
Ge	72	1	No Gas			633042.65		
Ge	72	1	No Gas			623342.41		
Ge	72	1	No Gas			625426.71		
Sc	45	2	H2			88015.55		
Sc	45	2	H2			90559.51		
Sc	45	2	H2			89151.24		
Ge	72	2	H2			74030.97		
Ge	72	2	H2			75265.92		
Ge	72	2	H2			73798.84		
In	115	2	H2			179131.48		
In	115	2	H2			187841.23		
In	115	2	H2			185140.41		
Sc	45	3	He			24729.06		
Sc	45	3	He			25199.93		
Sc	45	3	He			24859.32		
Ge	72	3	He			45715.92		
Ge	72	3	He			45785.92		
Ge	72	3	He			44773.36		
In	115	3	He			39340.71		
In	115	3	He			39741.78		
In	115	3	He			38308.08		
Tb	159	3	He			151707.71		
Tb	159	3	He			150182.75		
Tb	159	3	He			146650.68		
Bi	209	3	He			115263.78		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			113540.46		
Bi	209	3	He			111395.61		

Quantitation Report

Data File Name 255SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:42:17 PM
Sample Name 180-193901-H-1-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

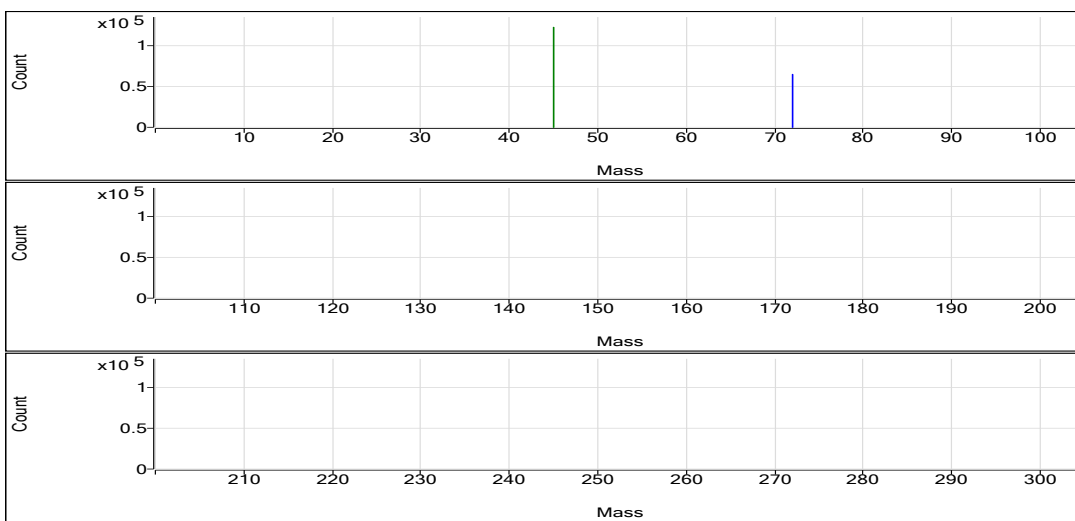
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	0.216	ppb	73.4	1150.08	0.0253	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

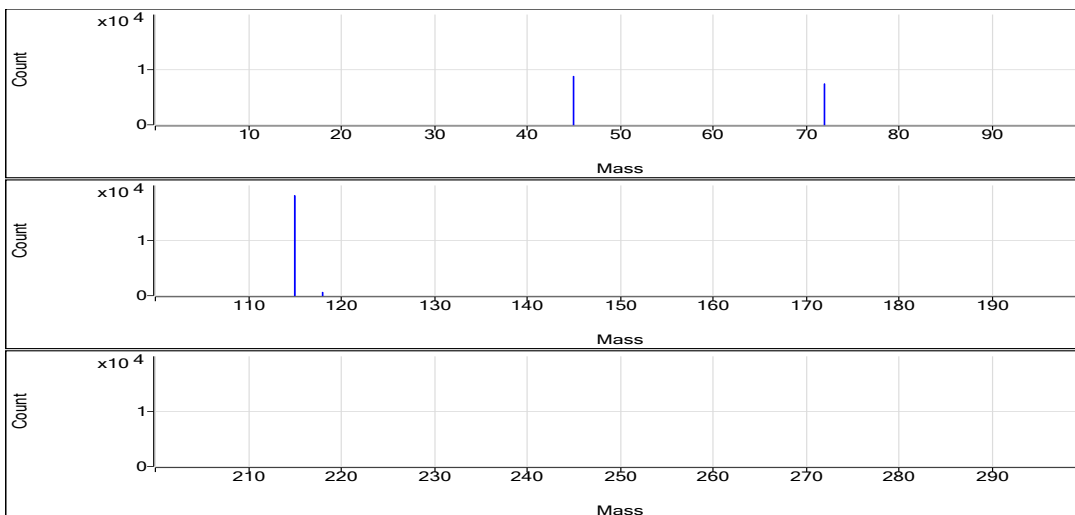
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1233338.99	1.4	94.4	Analog	0.1000	3
No Gas	Ge	72	653526.23	1.6	99.7	Pulse	0.1000	3
H2	Sc	45	87443.59	1.9	106.4	Pulse	0.1000	3
H2	Ge	72	73816.61	3.1	108.0	Pulse	0.1000	3
H2	In	115	180217.27	2.3	105.6	Pulse	0.1000	3
He	Sc	45	24385.61	4.2	95.2	Pulse	0.1000	3
He	Ge	72	45642.40	3.0	96.1	Pulse	0.1000	3
He	In	115	37569.60	1.4	91.8	Pulse	0.1000	3
He	Tb	159	148721.30	0.6	93.3	Pulse	0.1000	3
He	Bi	209	110682.51	1.7	94.6	Pulse	0.1000	3

No Gas

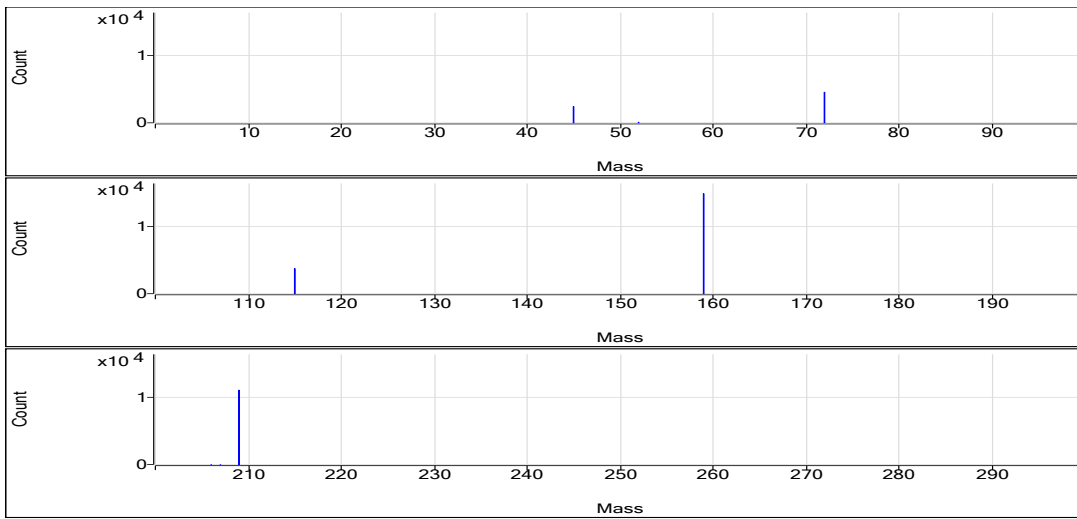


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.136	0.0239	1110.08	0.0171	0.02156
Cr	52	3	He	0.399	0.0284	1250.09	0.0171	0.02156
Cr	52	3	He	0.114	0.0235	1090.08	0.0171	0.02156
Sc	45	1	No Gas			1242904.98		
Sc	45	1	No Gas			1244161.62		
Sc	45	1	No Gas			1212950.37		
Ge	72	1	No Gas			663280.46		
Ge	72	1	No Gas			654634.37		
Ge	72	1	No Gas			642663.86		
Sc	45	2	H2			88167.90		
Sc	45	2	H2			88649.74		
Sc	45	2	H2			85513.13		
Ge	72	2	H2			74341.83		
Ge	72	2	H2			75768.68		
Ge	72	2	H2			71339.33		
In	115	2	H2			179647.34		
In	115	2	H2			184616.34		
In	115	2	H2			176388.14		
Sc	45	3	He			25039.84		
Sc	45	3	He			24899.81		
Sc	45	3	He			23217.19		
Ge	72	3	He			46478.06		
Ge	72	3	He			44061.36		
Ge	72	3	He			46387.77		
In	115	3	He			37867.08		
In	115	3	He			36974.77		
In	115	3	He			37866.95		
Tb	159	3	He			149686.36		
Tb	159	3	He			148012.26		
Tb	159	3	He			148465.29		
Bi	209	3	He			112733.66		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109088.34		
Bi	209	3	He			110225.52		

Quantitation Report

Data File Name 256SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:43:49 PM
Sample Name 180-193901-C-5-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

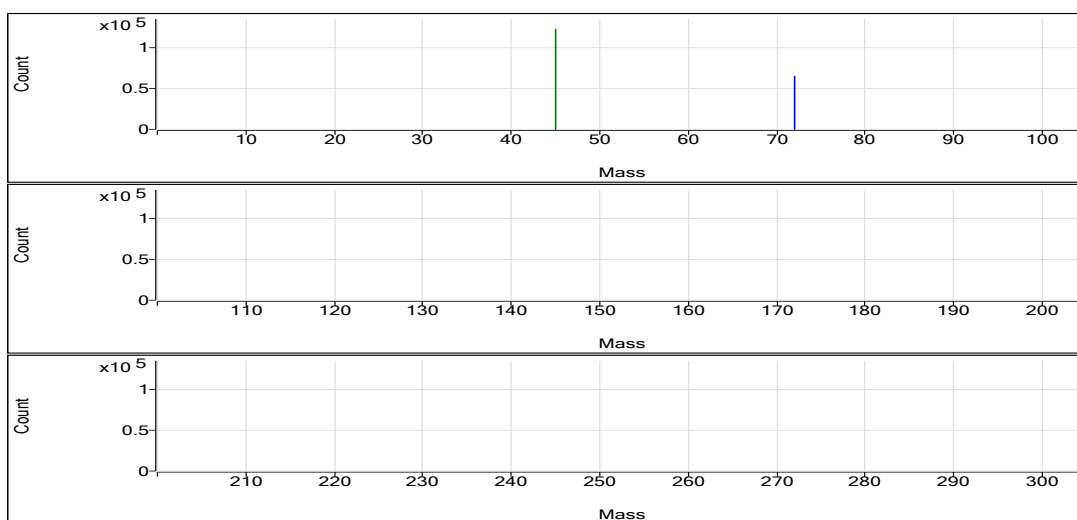
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.148	ppb	N/A	873.39	0.0190	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

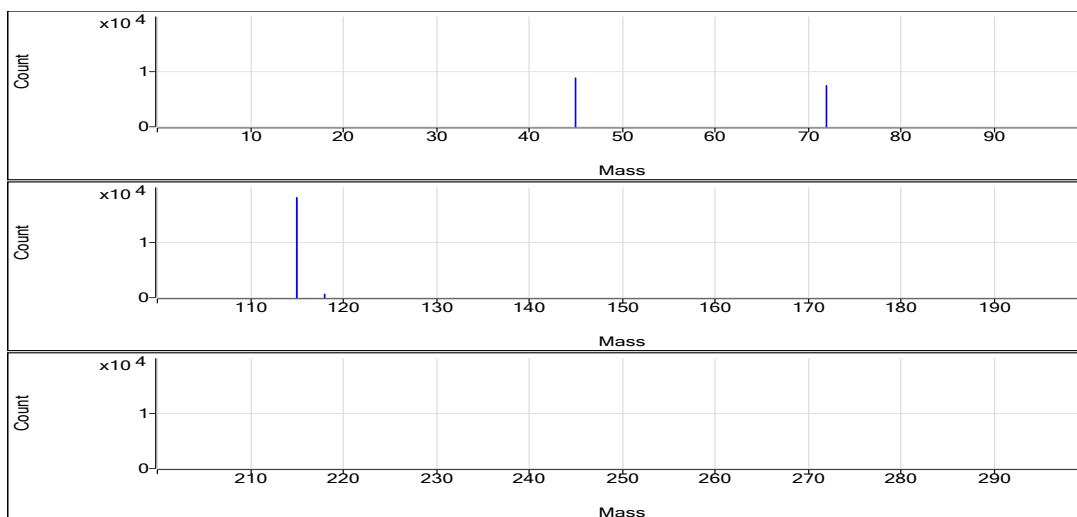
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1235168.16	1.9	94.5	Analog	0.1000	3
No Gas	Ge	72	656989.48	1.3	100.3	Pulse	0.1000	3
H2	Sc	45	88458.74	1.7	107.7	Pulse	0.1000	3
H2	Ge	72	74871.51	0.8	109.6	Pulse	0.1000	3
H2	In	115	181023.04	1.4	106.1	Pulse	0.1000	3
He	Sc	45	24619.05	1.9	96.1	Pulse	0.1000	3
He	Ge	72	45933.25	1.0	96.7	Pulse	0.1000	3
He	In	115	37282.06	2.6	91.1	Pulse	0.1000	3
He	Tb	159	148422.90	2.0	93.1	Pulse	0.1000	3
He	Bi	209	109769.31	1.3	93.9	Pulse	0.1000	3

No Gas

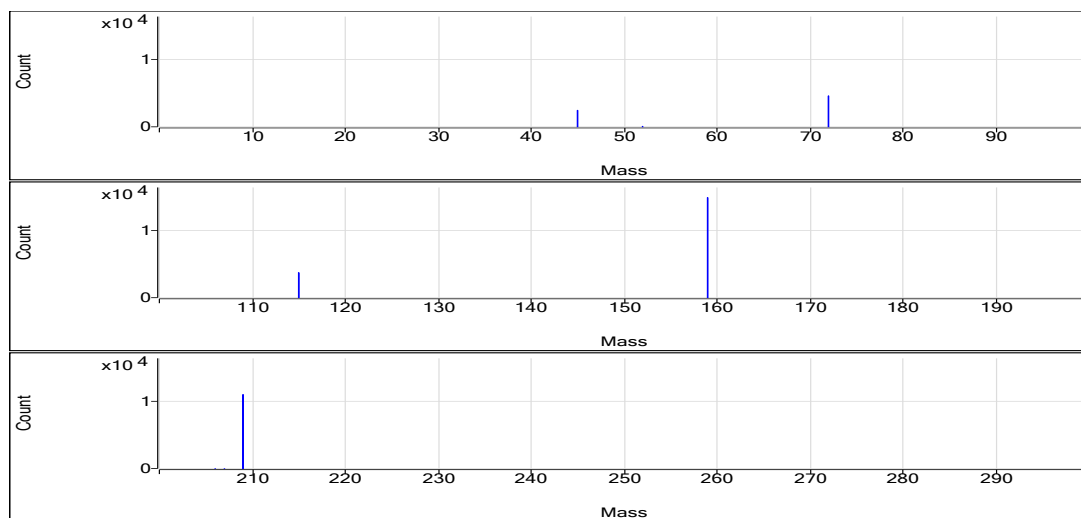


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.097	0.0199	920.06	0.0171	0.02156
Cr	52	3	He	-0.298	0.0165	760.04	0.0171	0.02156
Cr	52	3	He	-0.05	0.0207	940.06	0.0171	0.02156
Sc	45	1	No Gas			1211293.42		
Sc	45	1	No Gas			1258550.92		
Sc	45	1	No Gas			1235660.14		
Ge	72	1	No Gas			647436.83		
Ge	72	1	No Gas			664766.24		
Ge	72	1	No Gas			658765.38		
Sc	45	2	H2			88680.23		
Sc	45	2	H2			89827.02		
Sc	45	2	H2			86868.96		
Ge	72	2	H2			74693.54		
Ge	72	2	H2			75528.21		
Ge	72	2	H2			74392.77		
In	115	2	H2			182390.39		
In	115	2	H2			182538.42		
In	115	2	H2			178140.31		
Sc	45	3	He			24579.10		
Sc	45	3	He			24178.33		
Sc	45	3	He			25099.72		
Ge	72	3	He			46247.65		
Ge	72	3	He			46147.47		
Ge	72	3	He			45404.64		
In	115	3	He			38347.92		
In	115	3	He			36493.59		
In	115	3	He			37004.68		
Tb	159	3	He			150981.20		
Tb	159	3	He			145155.16		
Tb	159	3	He			149132.33		
Bi	209	3	He			109690.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			108393.34		
Bi	209	3	He			111223.81		

Quantitation Report

Data File Name 257SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:45:20 PM
Sample Name 180-193901-N-3-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

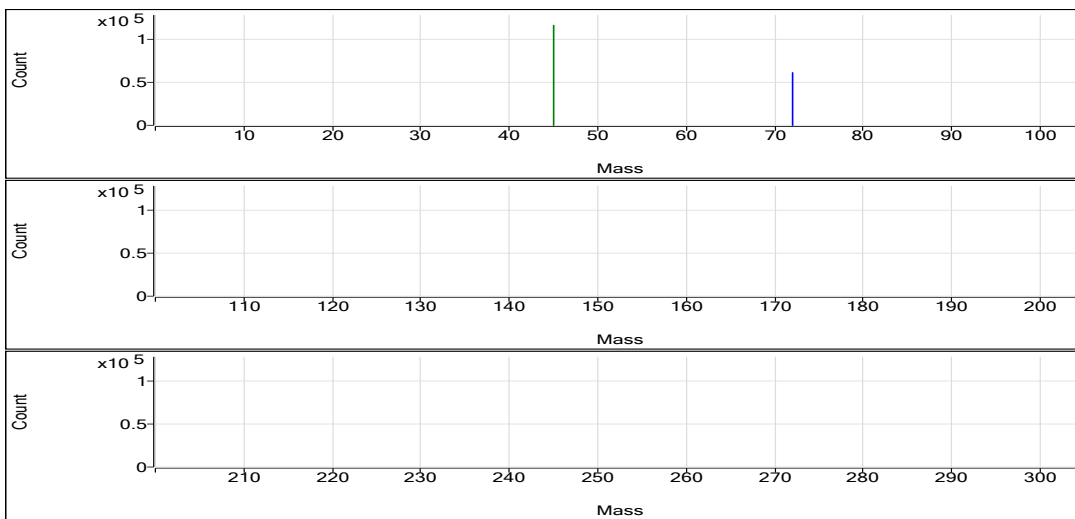
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.234	ppb	N/A	803.38	0.0176	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

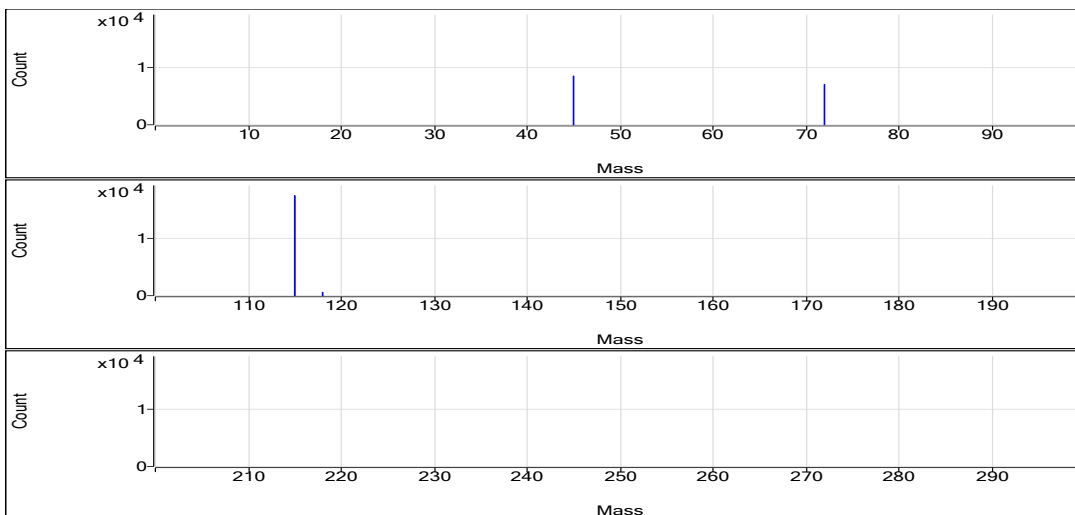
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1161806.94	2.0	88.9	Analog	0.1000	3
No Gas	Ge	72	610737.81	1.9	93.2	Pulse	0.1000	3
H2	Sc	45	85815.22	0.7	104.5	Pulse	0.1000	3
H2	Ge	72	71124.78	1.1	104.1	Pulse	0.1000	3
H2	In	115	175828.10	1.8	103.1	Pulse	0.1000	3
He	Sc	45	24265.14	3.4	94.7	Pulse	0.1000	3
He	Ge	72	45802.60	1.3	96.4	Pulse	0.1000	3
He	In	115	38384.61	2.6	93.7	Pulse	0.1000	3
He	Tb	159	150031.74	0.7	94.1	Pulse	0.1000	3
He	Bi	209	107307.80	0.2	91.7	Pulse	0.1000	3

No Gas

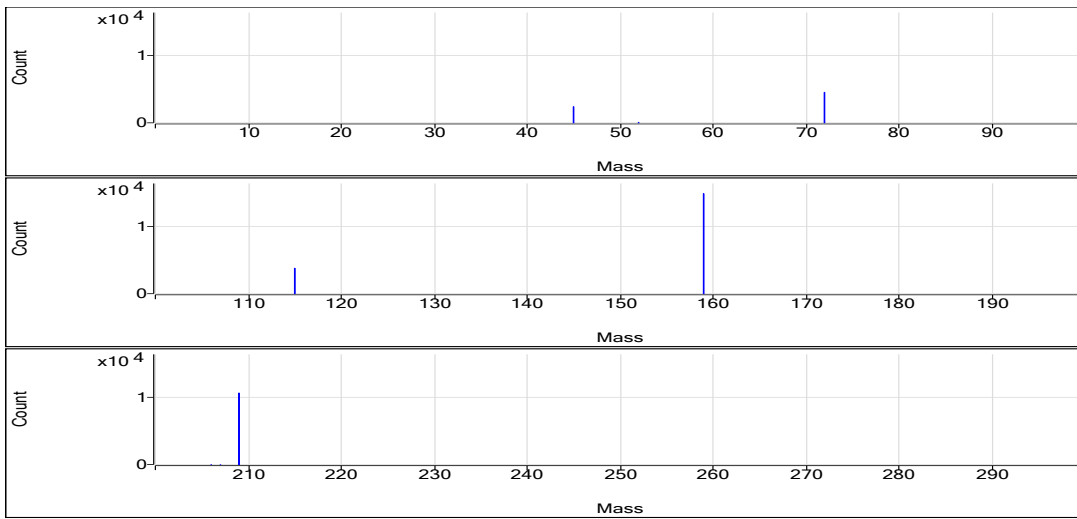


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.138	0.0192	870.05	0.0171	0.02156
Cr	52	3	He	-0.236	0.0175	800.04	0.0171	0.02156
Cr	52	3	He	-0.329	0.0159	740.04	0.0171	0.02156
Sc	45	1	No Gas			1162203.11		
Sc	45	1	No Gas			1138330.84		
Sc	45	1	No Gas			1184886.86		
Ge	72	1	No Gas			621336.36		
Ge	72	1	No Gas			598500.23		
Ge	72	1	No Gas			612376.83		
Sc	45	2	H2			85162.30		
Sc	45	2	H2			85875.15		
Sc	45	2	H2			86408.22		
Ge	72	2	H2			72062.96		
Ge	72	2	H2			70605.22		
Ge	72	2	H2			70706.15		
In	115	2	H2			173862.79		
In	115	2	H2			174235.86		
In	115	2	H2			179385.66		
Sc	45	3	He			23767.91		
Sc	45	3	He			25220.05		
Sc	45	3	He			23807.47		
Ge	72	3	He			45314.52		
Ge	72	3	He			45655.56		
Ge	72	3	He			46437.71		
In	115	3	He			37485.63		
In	115	3	He			39440.91		
In	115	3	He			38227.29		
Tb	159	3	He			150980.53		
Tb	159	3	He			150225.24		
Tb	159	3	He			148889.45		
Bi	209	3	He			107013.42		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			107525.51		
Bi	209	3	He			107384.48		

Quantitation Report

Data File Name 259_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:49:04 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

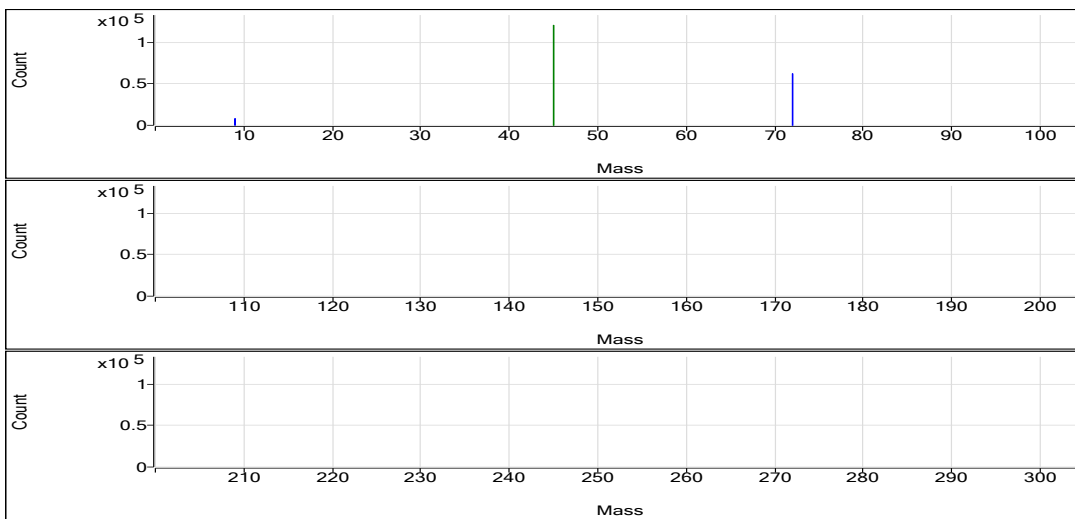
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.889	ppb	6.1	16581.54	0.0265	Pulse	0.5000	3
Se	78	72	H2	25.118	ppb	2.2	906.03	0.0128	Pulse	1.5000	3
Na	23	72	He	2503.771	ppb	0.4	213113.13	4.7200	Pulse	0.1000	3
Mg	24	72	He	2417.199	ppb	0.4	100291.01	2.2212	Pulse	0.1000	3
Al	27	72	He	2397.490	ppb	1.3	31544.10	0.6986	Pulse	0.1000	3
K	39	72	He	2458.231	ppb	3.2	98644.75	2.1848	Pulse	0.5000	3
Ca	44	72	He	2433.343	ppb	3.2	4532.65	0.1004	Pulse	0.5000	3
Ti	47	72	He	2444.110	ppb	0.7	34324.47	0.7602	Pulse	0.5000	3
V	51	72	He	244.716	ppb	0.4	151299.07	3.3510	Pulse	0.5000	3
Cr	52	72	He	243.776	ppb	1.2	189037.17	4.1868	Pulse	0.1000	3
Mn	55	72	He	241.690	ppb	0.4	79723.42	1.7657	Pulse	0.5000	3
Fe	57	72	He	2425.049	ppb	2.2	35589.78	0.7883	Pulse	0.1000	3
Co	59	72	He	242.668	ppb	0.1	364103.19	8.0641	Pulse	0.5000	3
Ni	60	72	He	242.276	ppb	0.7	102181.70	2.2631	Pulse	0.5000	3
Cu	63	72	He	241.622	ppb	0.4	294911.15	6.5317	Pulse	0.5000	3
Zn	66	72	He	240.739	ppb	0.9	33956.23	0.7521	Pulse	0.5000	3
As	75	72	He	239.765	ppb	0.9	27639.08	0.6121	Pulse	0.5000	3
Sr	88	115	He	25.107	ppb	2.4	10373.73	0.2667	Pulse	0.1000	3
Mo	98	115	He	24.836	ppb	3.6	22750.41	0.5850	Pulse	0.1000	3
Ag	107	115	He	24.996	ppb	1.7	47954.38	1.2329	Pulse	0.1000	3
Cd	111	115	He	25.455	ppb	3.2	5555.02	0.1428	Pulse	0.5000	3
Sn	120	115	He	24.555	ppb	1.1	18491.48	0.4753	Pulse	0.1000	3
Sb	121	115	He	24.865	ppb	1.0	15615.75	0.4015	Pulse	0.3000	3
Ba	137	115	He	244.219	ppb	0.4	50206.56	1.2906	Pulse	0.1000	3
Tl	205	159	He	24.896	ppb	0.7	92857.83	0.6174	Pulse	0.1000	3
Pb	208	159	He	24.806	ppb	0.3	124221.36	0.8260	Pulse	0.1000	3
U	238	159	He	25.073	ppb	1.3	127396.32	0.8471	Pulse	0.1000	3

ISTD Table:

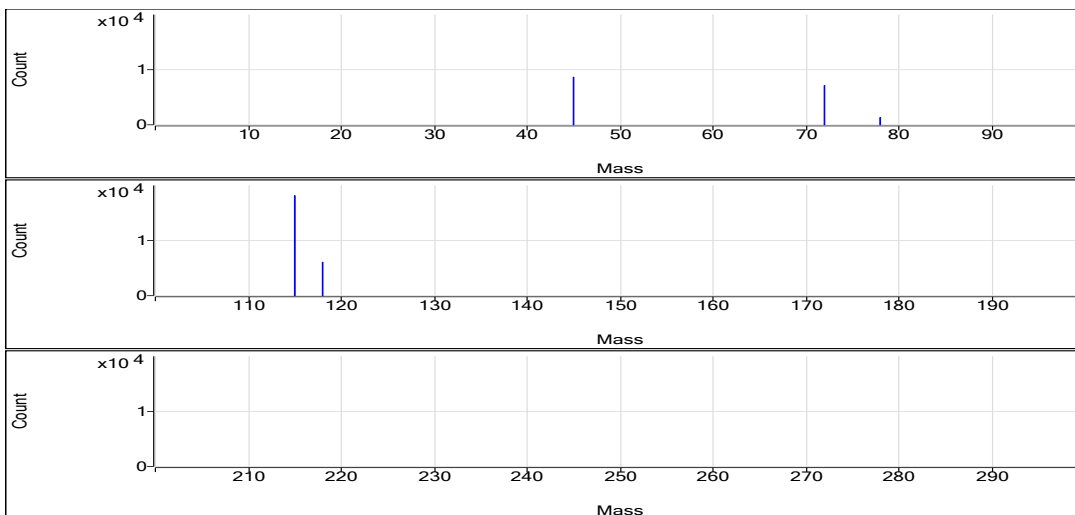
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1211050.56	1.1	92.6	Analog	0.1000	3
No Gas	Ge	72	625138.79	0.9	95.4	Pulse	0.1000	3
H2	Sc	45	86063.20	1.1	104.8	Pulse	0.1000	3
H2	Ge	72	71037.62	1.1	103.9	Pulse	0.1000	3
H2	In	115	180339.07	1.8	105.7	Pulse	0.1000	3
He	Sc	45	24078.14	0.4	94.0	Pulse	0.1000	3
He	Ge	72	45150.97	0.1	95.0	Pulse	0.1000	3
He	In	115	38900.30	1.1	95.0	Pulse	0.1000	3
He	Tb	159	150398.77	1.1	94.3	Pulse	0.1000	3
He	Bi	209	111007.77	0.0	94.9	Pulse	0.1000	3

No Gas

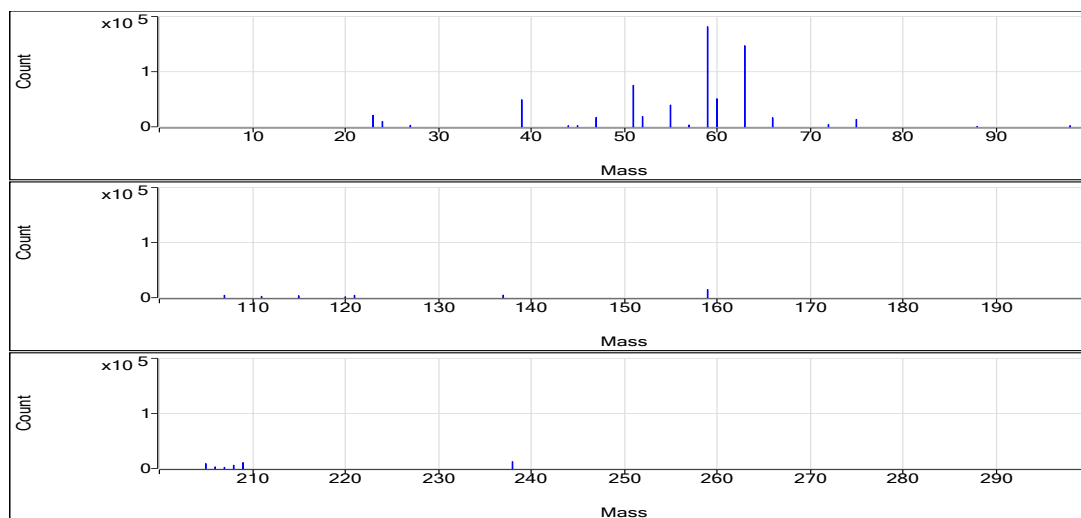


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.168	0.0247	15280.96	0.0011	7.835E-05
Be	9	1	No Gas	25.51	0.0272	17084.68	0.0011	7.835E-05
Be	9	1	No Gas	25.989	0.0277	17378.99	0.0011	7.835E-05
Se	78	2	H2	24.527	0.0125	892.69	0.0005	2.594E-05
Se	78	2	H2	25.231	0.0128	898.69	0.0005	2.594E-05
Se	78	2	H2	25.596	0.013	926.70	0.0005	2.594E-05
Na	23	3	He	2511.376	4.7338	213563.53	0.0018	0.1731
Na	23	3	He	2505.784	4.7237	213106.75	0.0018	0.1731
Na	23	3	He	2494.153	4.7026	212669.12	0.0018	0.1731
Mg	24	3	He	2406.517	2.2114	99767.73	0.0009	0.006537
Mg	24	3	He	2423.038	2.2266	100451.27	0.0009	0.006537
Mg	24	3	He	2422.043	2.2257	100654.03	0.0009	0.006537
Al	27	3	He	2383.877	0.6947	31340.32	0.0003	0.00231
Al	27	3	He	2434.327	0.7093	32001.58	0.0003	0.00231
Al	27	3	He	2374.266	0.6919	31290.40	0.0003	0.00231
K	39	3	He	2545.745	2.2502	101517.26	0.0007	0.3475
K	39	3	He	2436.88	2.1689	97847.05	0.0007	0.3475
K	39	3	He	2392.068	2.1354	96569.95	0.0007	0.3475
Ca	44	3	He	2436.422	0.1005	4534.65	0	0.002807
Ca	44	3	He	2509.387	0.1034	4666.69	0	0.002807
Ca	44	3	He	2354.221	0.0972	4396.61	0	0.002807
Ti	47	3	He	2423.922	0.7539	34013.17	0.0003	0.0001123
Ti	47	3	He	2452.046	0.7627	34407.98	0.0003	0.0001123
Ti	47	3	He	2456.363	0.764	34552.26	0.0003	0.0001123
V	51	3	He	243.892	3.3397	150668.17	0.0137	0.008308
V	51	3	He	245.754	3.3651	151816.78	0.0137	0.008308
V	51	3	He	244.502	3.348	151412.27	0.0137	0.008308
Cr	52	3	He	241.308	4.1446	186981.46	0.0171	0.02156
Cr	52	3	He	246.908	4.2403	191299.06	0.0171	0.02156
Cr	52	3	He	243.112	4.1754	188830.99	0.0171	0.02156
Mn	55	3	He	241.16	1.7618	79484.35	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	242.776	1.7736	80016.83	0.0073	0.002316
Mn	55	3	He	241.133	1.7617	79669.07	0.0073	0.002316
Fe	57	3	He	2406.417	0.7822	35289.03	0.0003	0.002736
Fe	57	3	He	2484.612	0.8075	36431.96	0.0003	0.002736
Fe	57	3	He	2384.12	0.775	35048.34	0.0003	0.002736
Co	59	3	He	242.491	8.0583	363542.44	0.0332	0.001922
Co	59	3	He	242.581	8.0612	363679.19	0.0332	0.001922
Co	59	3	He	242.931	8.0729	365087.94	0.0332	0.001922
Ni	60	3	He	240.276	2.2445	101256.68	0.0093	0.003141
Ni	60	3	He	242.871	2.2687	102349.17	0.0093	0.003141
Ni	60	3	He	243.68	2.2762	102939.25	0.0093	0.003141
Cu	63	3	He	241.645	6.5323	294700.13	0.027	0.003732
Cu	63	3	He	242.654	6.5596	295931.81	0.027	0.003732
Cu	63	3	He	240.567	6.5032	294101.53	0.027	0.003732
Zn	66	3	He	242.997	0.7591	34246.20	0.0031	0.002032
Zn	66	3	He	240.215	0.7504	33855.34	0.0031	0.002032
Zn	66	3	He	239.005	0.7467	33767.16	0.0031	0.002032
As	75	3	He	239.724	0.612	27611.69	0.0025	0.0007733
As	75	3	He	237.598	0.6066	27367.33	0.0025	0.0007733
As	75	3	He	241.973	0.6178	27938.22	0.0025	0.0007733
Sr	88	3	He	25.053	0.2662	10403.79	0.0105	0.004071
Sr	88	3	He	25.74	0.2733	10493.77	0.0105	0.004071
Sr	88	3	He	24.528	0.2607	10223.62	0.0105	0.004071
Mo	98	3	He	25.243	0.5945	23237.66	0.0234	0.003908
Mo	98	3	He	25.449	0.5993	23007.64	0.0234	0.003908
Mo	98	3	He	23.816	0.5611	22005.92	0.0234	0.003908
Ag	107	3	He	24.878	1.2271	47964.46	0.0493	0.0004851
Ag	107	3	He	25.462	1.2559	48215.34	0.0493	0.0004851
Ag	107	3	He	24.648	1.2158	47683.34	0.0493	0.0004851
Cd	111	3	He	25.089	0.1408	5503.00	0.0056	0
Cd	111	3	He	26.381	0.148	5683.06	0.0056	0
Cd	111	3	He	24.896	0.1397	5479.00	0.0056	0
Sn	120	3	He	24.875	0.4807	18791.85	0.0169	0.0609
Sn	120	3	He	24.419	0.4731	18161.08	0.0169	0.0609
Sn	120	3	He	24.371	0.4722	18521.52	0.0169	0.0609
Sb	121	3	He	24.954	0.4029	15748.13	0.0161	0.0005433
Sb	121	3	He	25.052	0.4045	15527.89	0.0161	0.0005433
Sb	121	3	He	24.59	0.397	15571.24	0.0161	0.0005433
Ba	137	3	He	245.315	1.2964	50674.86	0.0053	0.001141
Ba	137	3	He	243.194	1.2852	49340.52	0.0053	0.001141
Ba	137	3	He	244.149	1.2902	50604.29	0.0053	0.001141
Tl	205	3	He	24.966	0.6192	91958.53	0.0248	0.0005854
Tl	205	3	He	24.689	0.6123	92723.89	0.0248	0.0005854
Tl	205	3	He	25.032	0.6208	93891.08	0.0248	0.0005854
Pb	208	3	He	24.876	0.8283	64323.78	0.0332	0.001693
Pb	208	3	He	24.723	0.8232	65498.14	0.0332	0.001693
Pb	208	3	He	24.82	0.8264	64503.08	0.0332	0.001693
U	238	3	He	25.281	0.8541	126852.49	0.0338	0.0007949
U	238	3	He	25.23	0.8524	129080.93	0.0338	0.0007949
U	238	3	He	24.708	0.8348	126255.54	0.0338	0.0007949
Sc	45	1	No Gas			1209327.95		
Sc	45	1	No Gas			1225358.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1198465.69		
Ge	72	1	No Gas			618969.09		
Ge	72	1	No Gas			628689.44		
Ge	72	1	No Gas			627757.84		
Sc	45	2	H2			86910.92		
Sc	45	2	H2			86297.86		
Sc	45	2	H2			84980.83		
Ge	72	2	H2			71669.70		
Ge	72	2	H2			70144.40		
Ge	72	2	H2			71298.76		
In	115	2	H2			180880.52		
In	115	2	H2			183281.29		
In	115	2	H2			176855.39		
Sc	45	3	He			23998.04		
Sc	45	3	He			24038.12		
Sc	45	3	He			24198.27		
Ge	72	3	He			45114.25		
Ge	72	3	He			45114.54		
Ge	72	3	He			45224.11		
In	115	3	He			39220.41		
In	115	3	He			38518.38		
In	115	3	He			39350.43		
Tb	159	3	He			148519.04		
Tb	159	3	He			151434.89		
Tb	159	3	He			151242.39		
Bi	209	3	He			110951.73		
Bi	209	3	He			111019.91		
Bi	209	3	He			111051.68		

Quantitation Report

Data File Name 261_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:53:29 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

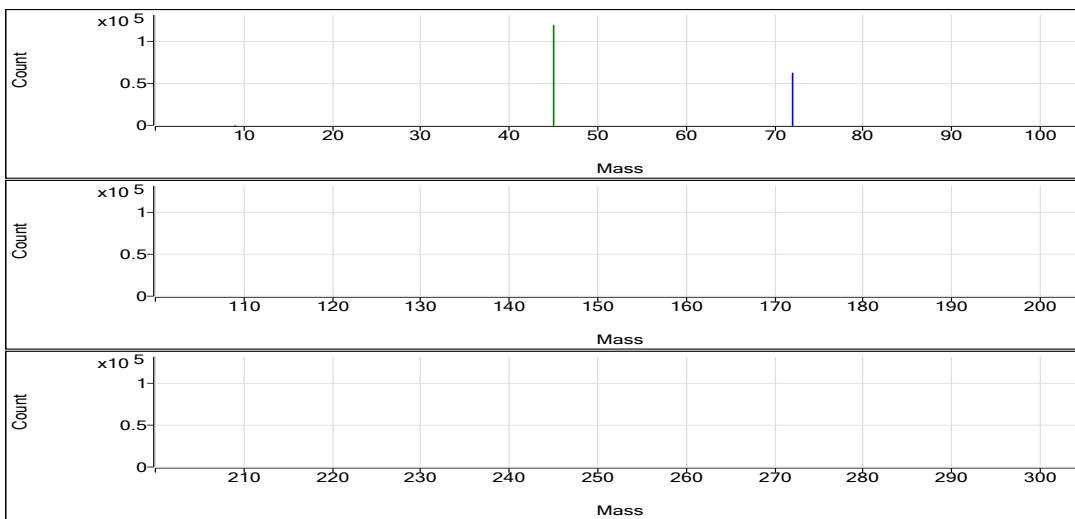
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.016	ppb	169.5	60.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.015	ppb	N/A	1.33	0.0000	Pulse	1.5000	3
Na	23	72	He	30.742	ppb	14.4	10336.85	0.2289	Pulse	0.1000	3
Mg	24	72	He	9.950	ppb	16.3	706.70	0.0157	Pulse	0.1000	3
Al	27	72	He	-4.636	ppb	N/A	43.33	0.0010	Pulse	0.1000	3
K	39	72	He	17.076	ppb	456.2	16267.54	0.3602	Pulse	0.5000	3
Ca	44	72	He	-8.526	ppb	N/A	111.33	0.0025	Pulse	0.5000	3
Ti	47	72	He	0.398	ppb	20.7	10.67	0.0002	Pulse	0.5000	3
V	51	72	He	0.026	ppb	208.0	391.34	0.0087	Pulse	0.5000	3
Cr	52	72	He	-0.120	ppb	N/A	880.05	0.0195	Pulse	0.1000	3
Mn	55	72	He	0.191	ppb	21.8	167.33	0.0037	Pulse	0.5000	3
Fe	57	72	He	2.927	ppb	70.4	166.68	0.0037	Pulse	0.1000	3
Co	59	72	He	0.011	ppb	56.1	104.00	0.0023	Pulse	0.5000	3
Ni	60	72	He	0.029	ppb	65.9	154.00	0.0034	Pulse	0.5000	3
Cu	63	72	He	-0.029	ppb	N/A	133.33	0.0030	Pulse	0.5000	3
Zn	66	72	He	-0.184	ppb	N/A	66.00	0.0015	Pulse	0.5000	3
As	75	72	He	0.021	ppb	115.4	37.33	0.0008	Pulse	0.5000	3
Sr	88	115	He	-0.164	ppb	N/A	90.00	0.0024	Pulse	0.1000	3
Mo	98	115	He	0.023	ppb	97.2	170.01	0.0045	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	695.5	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.073	ppb	N/A	2276.91	0.0597	Pulse	0.1000	3
Sb	121	115	He	0.010	ppb	115.6	26.67	0.0007	Pulse	0.3000	3
Ba	137	115	He	-0.017	ppb	N/A	40.00	0.0011	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	62.9	126.67	0.0009	Pulse	0.1000	3
Pb	208	159	He	-0.026	ppb	N/A	123.33	0.0008	Pulse	0.1000	3
U	238	159	He	-0.003	ppb	N/A	100.00	0.0007	Pulse	0.1000	3

ISTD Table:

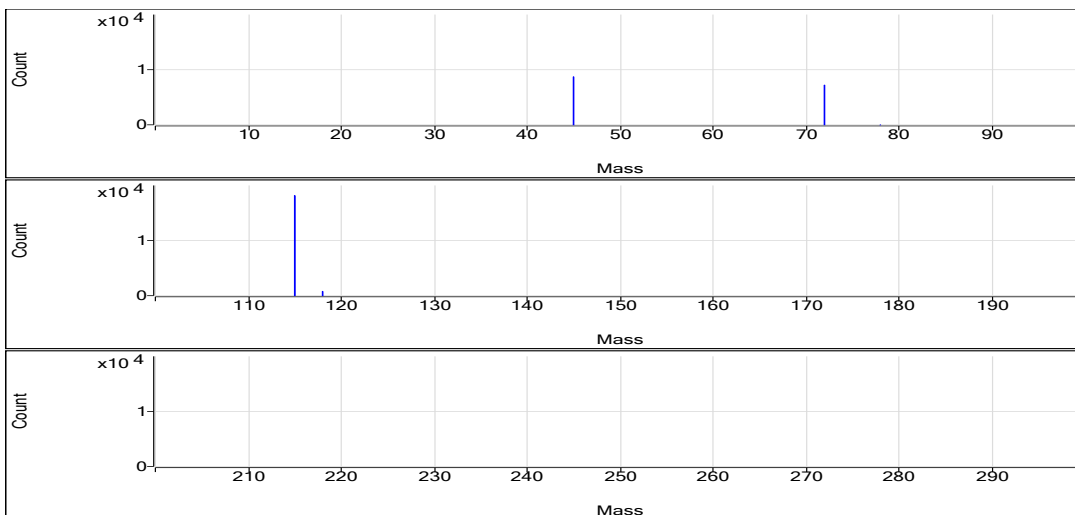
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1202172.77	2.3	92.0	Analog	0.1000	3
No Gas	Ge	72	628393.76	1.7	95.9	Pulse	0.1000	3
H2	Sc	45	86608.85	1.9	105.4	Pulse	0.1000	3
H2	Ge	72	71820.91	0.2	105.1	Pulse	0.1000	3
H2	In	115	180584.12	0.9	105.9	Pulse	0.1000	3
He	Sc	45	24231.90	3.2	94.6	Pulse	0.1000	3
He	Ge	72	45174.40	1.4	95.1	Pulse	0.1000	3
He	In	115	38221.86	2.1	93.4	Pulse	0.1000	3
He	Tb	159	147322.45	0.8	92.4	Pulse	0.1000	3
He	Bi	209	110031.75	0.9	94.1	Pulse	0.1000	3

No Gas

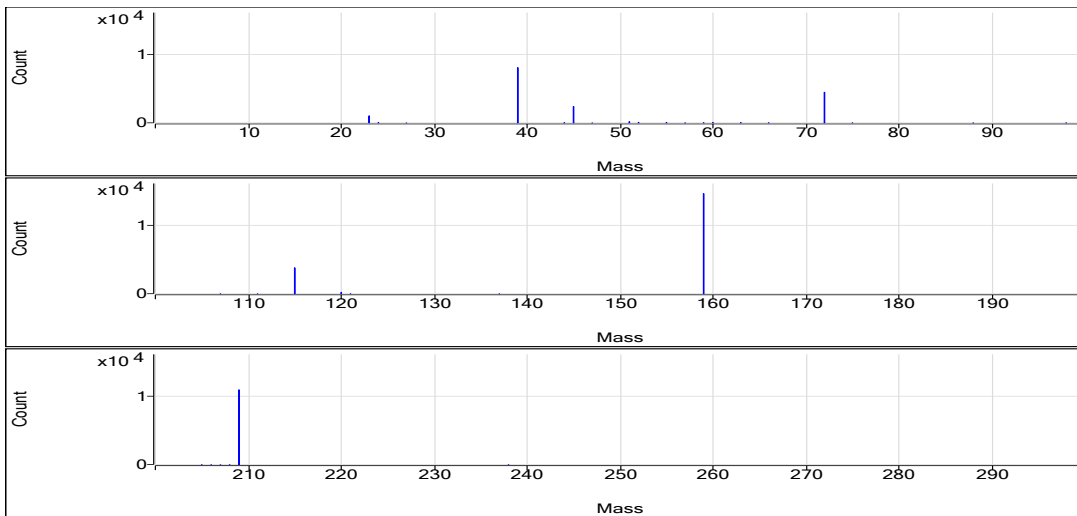


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.048	0.0001	80.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.004	0.0001	46.00	0.0011	7.835E-05
Be	9	1	No Gas	0.006	0.0001	54.00	0.0011	7.835E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.004	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Na	23	3	He	33.812	0.2345	10593.71	0.0018	0.1731
Na	23	3	He	32.731	0.2325	10353.48	0.0018	0.1731
Na	23	3	He	25.684	0.2197	10063.36	0.0018	0.1731
Mg	24	3	He	8.567	0.0144	650.03	0.0009	0.006537
Mg	24	3	He	11.738	0.0173	770.04	0.0009	0.006537
Mg	24	3	He	9.545	0.0153	700.04	0.0009	0.006537
Al	27	3	He	-4.143	0.0011	50.00	0.0003	0.00231
Al	27	3	He	-3.315	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-6.45	0.0004	20.00	0.0003	0.00231
K	39	3	He	103.713	0.425	19203.29	0.0007	0.3475
K	39	3	He	-5.265	0.3435	15299.12	0.0007	0.3475
K	39	3	He	-47.22	0.3122	14300.21	0.0007	0.3475
Ca	44	3	He	-2.66	0.0027	122.00	0	0.002807
Ca	44	3	He	-10.634	0.0024	106.00	0	0.002807
Ca	44	3	He	-12.284	0.0023	106.00	0	0.002807
Ti	47	3	He	0.493	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	0.361	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.341	0.0002	10.00	0.0003	0.0001123
V	51	3	He	0.017	0.0085	386.01	0.0137	0.008308
V	51	3	He	-0.023	0.008	356.01	0.0137	0.008308
V	51	3	He	0.082	0.0094	432.01	0.0137	0.008308
Cr	52	3	He	-0.174	0.0186	840.05	0.0171	0.02156
Cr	52	3	He	0.039	0.0222	990.06	0.0171	0.02156
Cr	52	3	He	-0.227	0.0177	810.05	0.0171	0.02156
Mn	55	3	He	0.156	0.0035	156.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.237	0.004	180.00	0.0073	0.002316
Mn	55	3	He	0.179	0.0036	166.00	0.0073	0.002316
Fe	57	3	He	3.854	0.004	180.01	0.0003	0.002736
Fe	57	3	He	0.567	0.0029	130.01	0.0003	0.002736
Fe	57	3	He	4.361	0.0041	190.01	0.0003	0.002736
Co	59	3	He	0.018	0.0025	114.00	0.0332	0.001922
Co	59	3	He	0.011	0.0023	102.00	0.0332	0.001922
Co	59	3	He	0.005	0.0021	96.00	0.0332	0.001922
Ni	60	3	He	0.048	0.0036	162.00	0.0093	0.003141
Ni	60	3	He	0.01	0.0032	144.00	0.0093	0.003141
Ni	60	3	He	0.028	0.0034	156.00	0.0093	0.003141
Cu	63	3	He	-0.023	0.0031	140.00	0.027	0.003732
Cu	63	3	He	-0.03	0.0029	130.00	0.027	0.003732
Cu	63	3	He	-0.033	0.0028	130.00	0.027	0.003732
Zn	66	3	He	-0.226	0.0013	60.00	0.0031	0.002032
Zn	66	3	He	-0.263	0.0012	54.00	0.0031	0.002032
Zn	66	3	He	-0.064	0.0018	84.00	0.0031	0.002032
As	75	3	He	0.044	0.0009	40.00	0.0025	0.0007733
As	75	3	He	-0.004	0.0008	34.00	0.0025	0.0007733
As	75	3	He	0.022	0.0008	38.00	0.0025	0.0007733
Sr	88	3	He	-0.169	0.0023	90.00	0.0105	0.004071
Sr	88	3	He	-0.164	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.159	0.0024	90.00	0.0105	0.004071
Mo	98	3	He	-0.003	0.0038	150.01	0.0234	0.003908
Mo	98	3	He	0.034	0.0047	180.01	0.0234	0.003908
Mo	98	3	He	0.039	0.0048	180.01	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.45	0.0533	2080.21	0.0169	0.0609
Sn	120	3	He	-0.09	0.0594	2270.24	0.0169	0.0609
Sn	120	3	He	0.32	0.0663	2480.29	0.0169	0.0609
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Sb	121	3	He	0.02	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.011	0.0007	26.67	0.0161	0.0005433
Ba	137	3	He	-0.119	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	0.081	0.0016	60.00	0.0053	0.001141
Ba	137	3	He	-0.014	0.0011	40.00	0.0053	0.001141
Tl	205	3	He	0.012	0.0009	130.01	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Tl	205	3	He	0.017	0.001	150.01	0.0248	0.0005854
Pb	208	3	He	-0.024	0.0009	60.00	0.0332	0.001693
Pb	208	3	He	-0.029	0.0007	70.00	0.0332	0.001693
Pb	208	3	He	-0.024	0.0009	70.00	0.0332	0.001693
U	238	3	He	-0.005	0.0006	90.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	0.003	0.0009	130.01	0.0338	0.0007949
Sc	45	1	No Gas			1182434.36		
Sc	45	1	No Gas			1189929.51		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1234154.43		
Ge	72	1	No Gas			620451.01		
Ge	72	1	No Gas			624454.25		
Ge	72	1	No Gas			640276.01		
Sc	45	2	H2			86990.43		
Sc	45	2	H2			88017.16		
Sc	45	2	H2			84818.96		
Ge	72	2	H2			71901.19		
Ge	72	2	H2			71680.22		
Ge	72	2	H2			71881.32		
In	115	2	H2			179019.94		
In	115	2	H2			182337.40		
In	115	2	H2			180395.02		
Sc	45	3	He			24108.27		
Sc	45	3	He			25060.01		
Sc	45	3	He			23527.41		
Ge	72	3	He			45184.25		
Ge	72	3	He			44532.74		
Ge	72	3	He			45806.22		
In	115	3	He			39039.79		
In	115	3	He			38247.76		
In	115	3	He			37425.84		
Tb	159	3	He			146084.62		
Tb	159	3	He			148283.14		
Tb	159	3	He			147599.58		
Bi	209	3	He			111184.88		
Bi	209	3	He			109367.97		
Bi	209	3	He			109542.39		

Quantitation Report

Data File Name 262SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:55:41 PM
Sample Name 180-193901-H-4-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

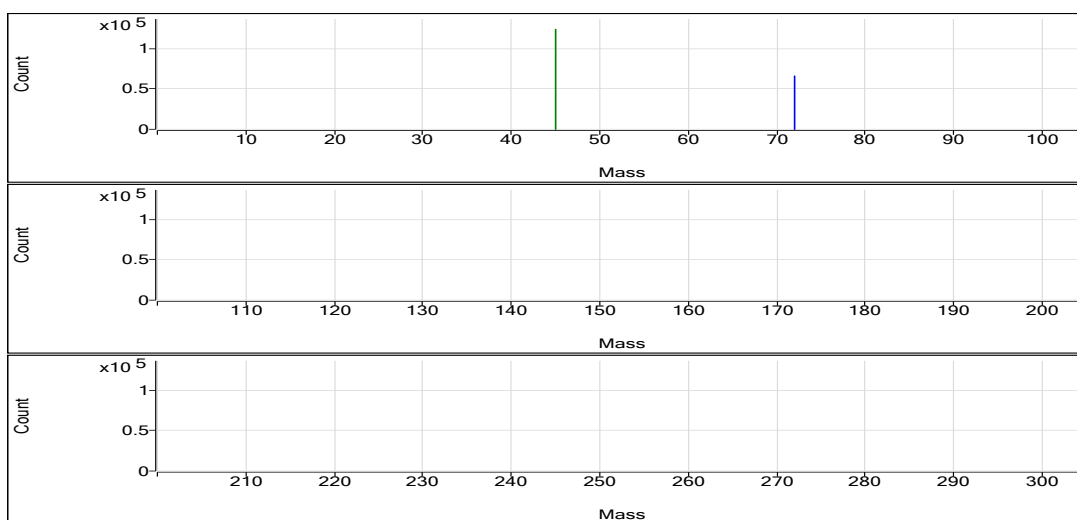
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	1.178	ppb	7.0	1906.84	0.0417	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

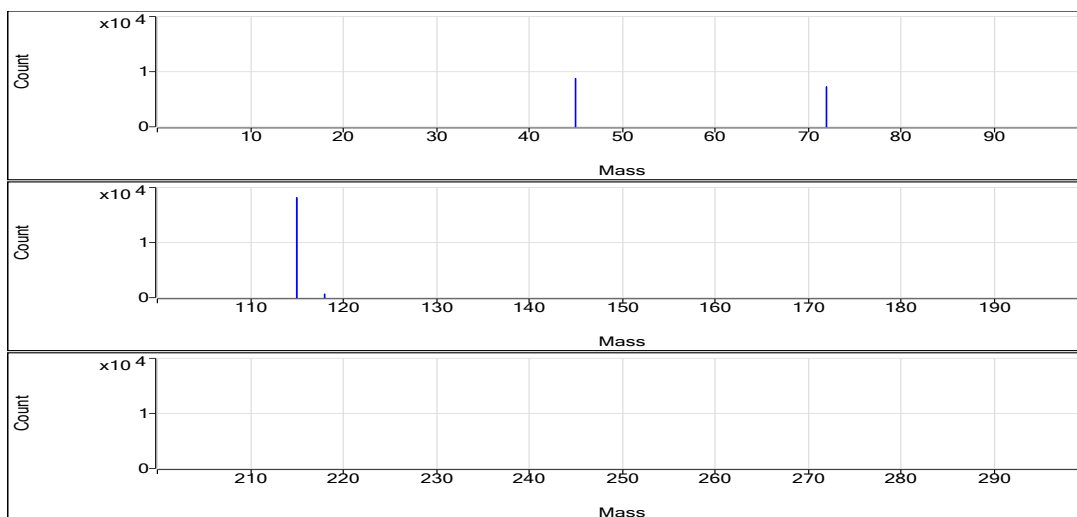
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1240239.72	1.4	94.9	Analog	0.1000	3
No Gas	Ge	72	661733.52	1.7	101.0	Pulse	0.1000	3
H2	Sc	45	87989.63	2.3	107.1	Pulse	0.1000	3
H2	Ge	72	72992.69	0.9	106.8	Pulse	0.1000	3
H2	In	115	181966.72	1.5	106.7	Pulse	0.1000	3
He	Sc	45	25049.69	2.1	97.8	Pulse	0.1000	3
He	Ge	72	45739.25	1.9	96.3	Pulse	0.1000	3
He	In	115	37839.99	1.0	92.4	Pulse	0.1000	3
He	Tb	159	147719.32	1.2	92.6	Pulse	0.1000	3
He	Bi	209	110171.63	0.8	94.2	Pulse	0.1000	3

No Gas

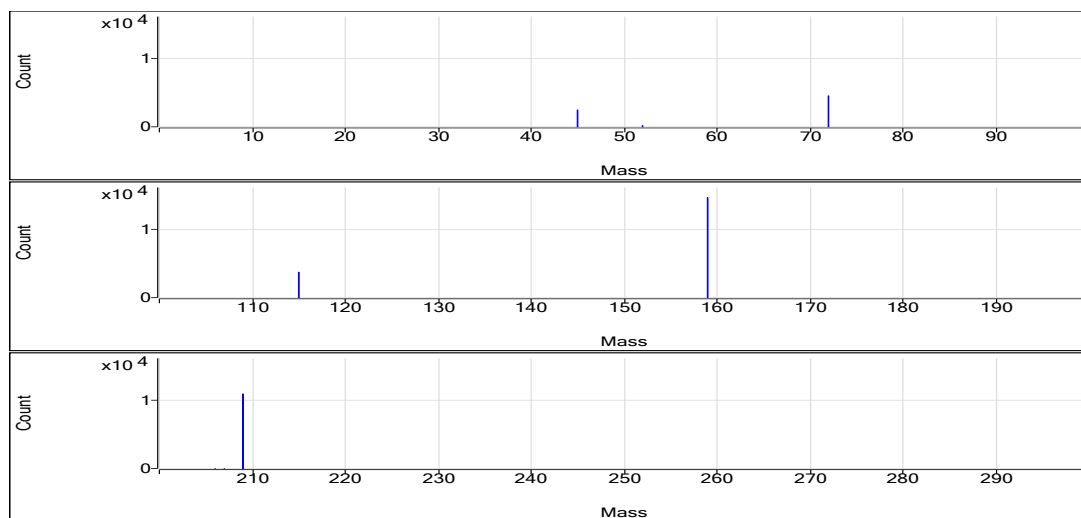


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	1.149	0.0412	1920.17	0.0171	0.02156
Cr	52	3	He	1.114	0.0406	1820.15	0.0171	0.02156
Cr	52	3	He	1.271	0.0433	1980.19	0.0171	0.02156
Sc	45	1	No Gas			1251276.31		
Sc	45	1	No Gas			1219725.53		
Sc	45	1	No Gas			1249717.33		
Ge	72	1	No Gas			668425.77		
Ge	72	1	No Gas			648480.11		
Ge	72	1	No Gas			668294.68		
Sc	45	2	H2			86358.51		
Sc	45	2	H2			90237.93		
Sc	45	2	H2			87372.46		
Ge	72	2	H2			73397.89		
Ge	72	2	H2			73347.67		
Ge	72	2	H2			72232.50		
In	115	2	H2			179894.18		
In	115	2	H2			185032.20		
In	115	2	H2			180973.77		
Sc	45	3	He			25009.67		
Sc	45	3	He			24548.92		
Sc	45	3	He			25590.47		
Ge	72	3	He			46618.55		
Ge	72	3	He			44843.51		
Ge	72	3	He			45755.70		
In	115	3	He			38117.29		
In	115	3	He			37385.44		
In	115	3	He			38017.25		
Tb	159	3	He			145860.87		
Tb	159	3	He			147750.50		
Tb	159	3	He			149546.60		
Bi	209	3	He			110235.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109279.57		
Bi	209	3	He			110999.57		

Quantitation Report

Data File Name 263SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:57:12 PM
Sample Name 180-193901-H-6-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

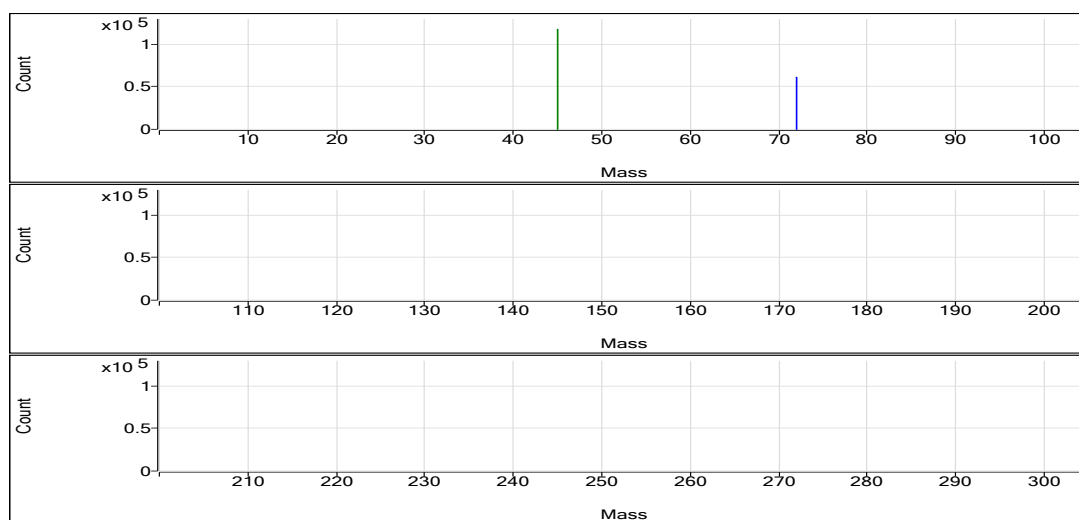
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.086	ppb	N/A	896.73	0.0201	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

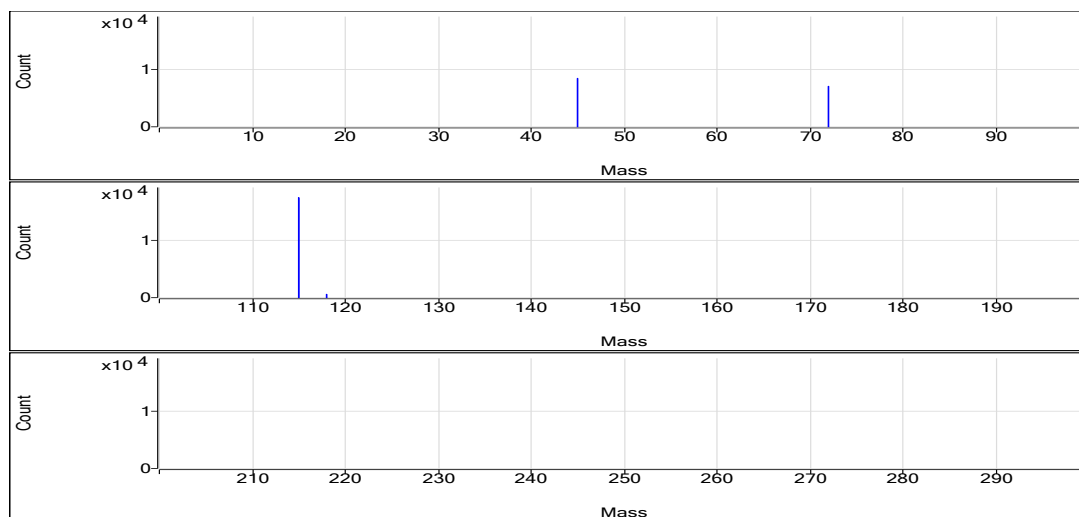
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1175733.52	1.2	89.9	Analog	0.1000	3
No Gas	Ge	72	612909.37	1.1	93.5	Pulse	0.1000	3
H2	Sc	45	85412.54	3.7	104.0	Pulse	0.1000	3
H2	Ge	72	71506.49	2.7	104.6	Pulse	0.1000	3
H2	In	115	176197.61	2.3	103.3	Pulse	0.1000	3
He	Sc	45	24151.69	2.4	94.3	Pulse	0.1000	3
He	Ge	72	44686.15	2.0	94.1	Pulse	0.1000	3
He	In	115	37943.72	0.8	92.7	Pulse	0.1000	3
He	Tb	159	147371.88	0.8	92.4	Pulse	0.1000	3
He	Bi	209	106693.50	0.6	91.2	Pulse	0.1000	3

No Gas

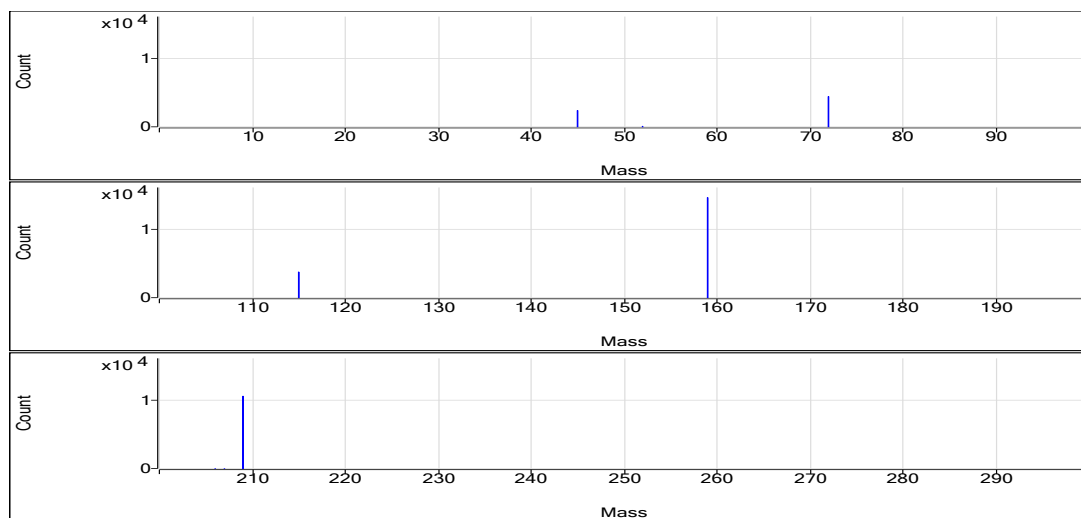


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.036	0.0222	970.06	0.0171	0.02156
Cr	52	3	He	-0.183	0.0184	840.06	0.0171	0.02156
Cr	52	3	He	-0.111	0.0197	880.06	0.0171	0.02156
Sc	45	1	No Gas			1175933.03		
Sc	45	1	No Gas			1161936.62		
Sc	45	1	No Gas			1189330.92		
Ge	72	1	No Gas			616026.32		
Ge	72	1	No Gas			605449.56		
Ge	72	1	No Gas			617252.22		
Sc	45	2	H2			86960.39		
Sc	45	2	H2			81744.16		
Sc	45	2	H2			87533.06		
Ge	72	2	H2			72815.24		
Ge	72	2	H2			69330.81		
Ge	72	2	H2			72373.41		
In	115	2	H2			179767.71		
In	115	2	H2			171667.75		
In	115	2	H2			177157.36		
Sc	45	3	He			23497.28		
Sc	45	3	He			24328.62		
Sc	45	3	He			24629.18		
Ge	72	3	He			43740.39		
Ge	72	3	He			45565.32		
Ge	72	3	He			44752.74		
In	115	3	He			37616.34		
In	115	3	He			38047.38		
In	115	3	He			38167.45		
Tb	159	3	He			145951.00		
Tb	159	3	He			147959.49		
Tb	159	3	He			148205.15		
Bi	209	3	He			107295.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106830.71		
Bi	209	3	He			105954.35		

Quantitation Report

Data File Name 264SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 9:58:43 PM
Sample Name 180-193799-F-11-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

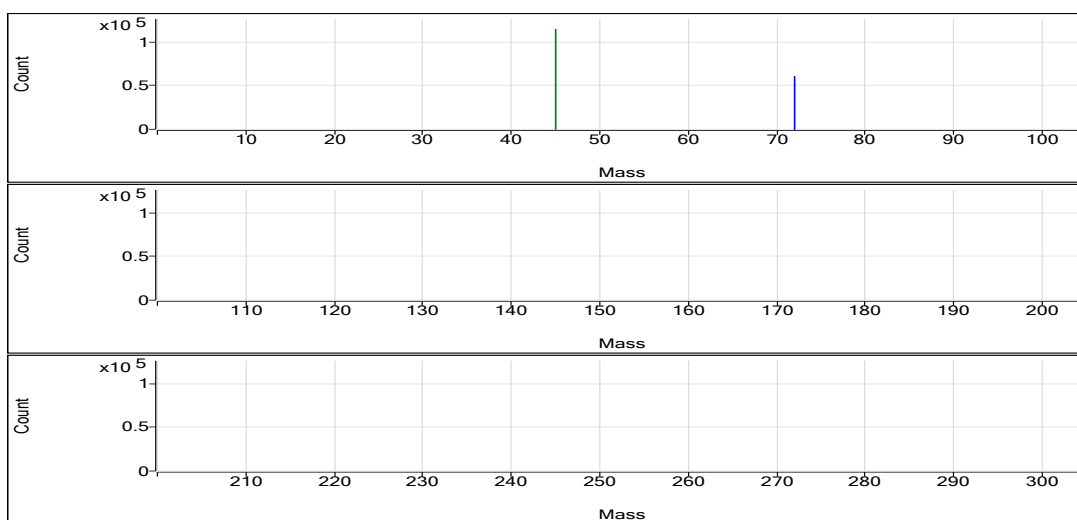
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.087	ppb	N/A	893.38	0.0201	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

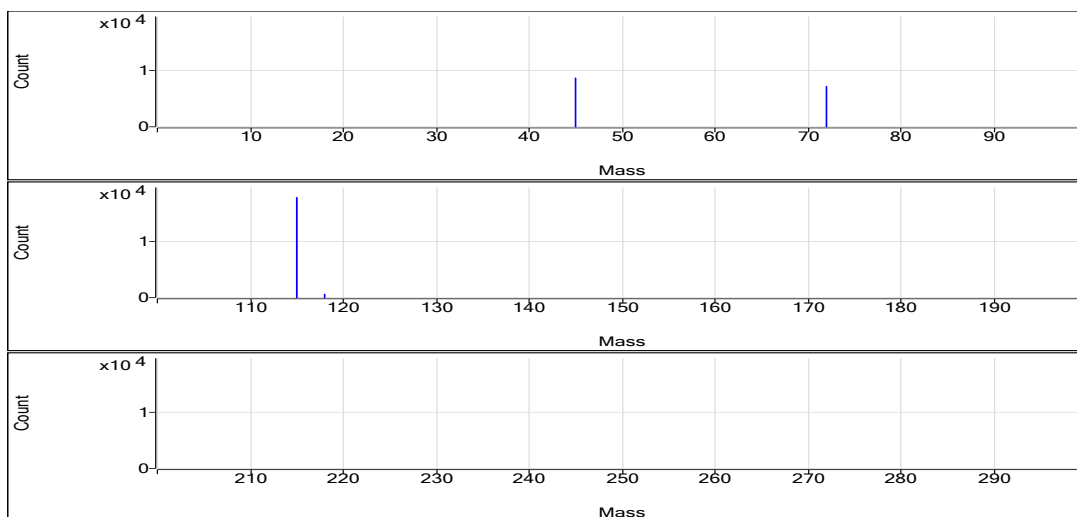
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1148115.79	0.8	87.8	Analog	0.1000	3
No Gas	Ge	72	605228.06	0.9	92.4	Pulse	0.1000	3
H2	Sc	45	87362.76	2.1	106.3	Pulse	0.1000	3
H2	Ge	72	72460.29	2.7	106.0	Pulse	0.1000	3
H2	In	115	178892.23	1.2	104.9	Pulse	0.1000	3
He	Sc	45	23854.61	4.6	93.1	Pulse	0.1000	3
He	Ge	72	44498.82	0.3	93.7	Pulse	0.1000	3
He	In	115	37940.22	1.5	92.7	Pulse	0.1000	3
He	Tb	159	148044.37	1.2	92.9	Pulse	0.1000	3
He	Bi	209	106742.41	0.1	91.3	Pulse	0.1000	3

No Gas

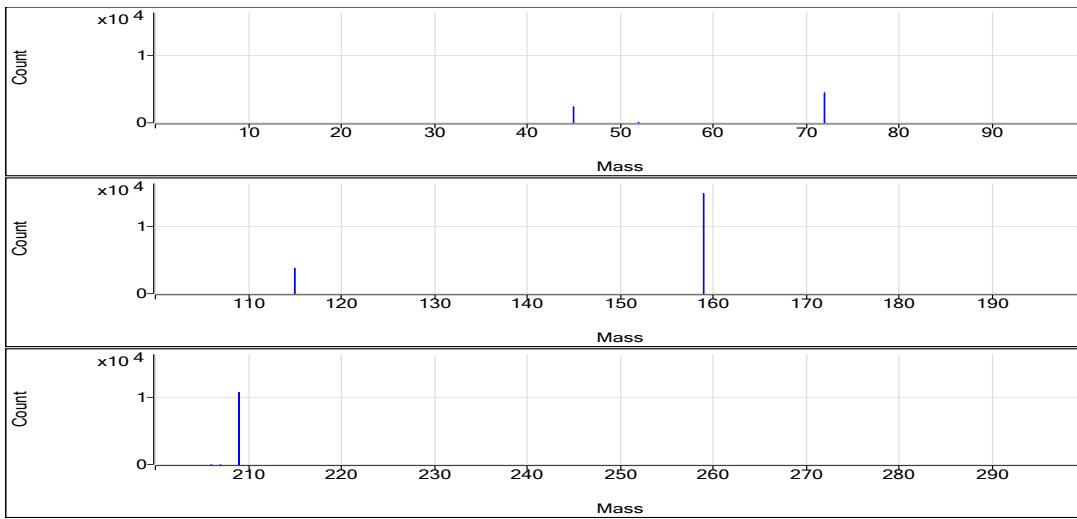


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.026	0.0211	940.05	0.0171	0.02156
Cr	52	3	He	-0.154	0.0189	840.05	0.0171	0.02156
Cr	52	3	He	-0.081	0.0202	900.05	0.0171	0.02156
Sc	45	1	No Gas			1138972.80		
Sc	45	1	No Gas			1156926.23		
Sc	45	1	No Gas			1148448.34		
Ge	72	1	No Gas			604575.58		
Ge	72	1	No Gas			610749.52		
Ge	72	1	No Gas			600359.09		
Sc	45	2	H2			85834.72		
Sc	45	2	H2			86870.57		
Sc	45	2	H2			89382.99		
Ge	72	2	H2			70564.97		
Ge	72	2	H2			72323.45		
Ge	72	2	H2			74492.46		
In	115	2	H2			177986.83		
In	115	2	H2			177423.38		
In	115	2	H2			181266.48		
Sc	45	3	He			22846.45		
Sc	45	3	He			23707.76		
Sc	45	3	He			25009.62		
Ge	72	3	He			44522.25		
Ge	72	3	He			44371.57		
Ge	72	3	He			44602.63		
In	115	3	He			38508.26		
In	115	3	He			37355.42		
In	115	3	He			37956.98		
Tb	159	3	He			146011.77		
Tb	159	3	He			148757.94		
Tb	159	3	He			149363.40		
Bi	209	3	He			106739.42		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			106890.22		
Bi	209	3	He			106597.58		

Quantitation Report

Data File Name 265SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:00:15 PM
Sample Name 180-193799-P-2-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

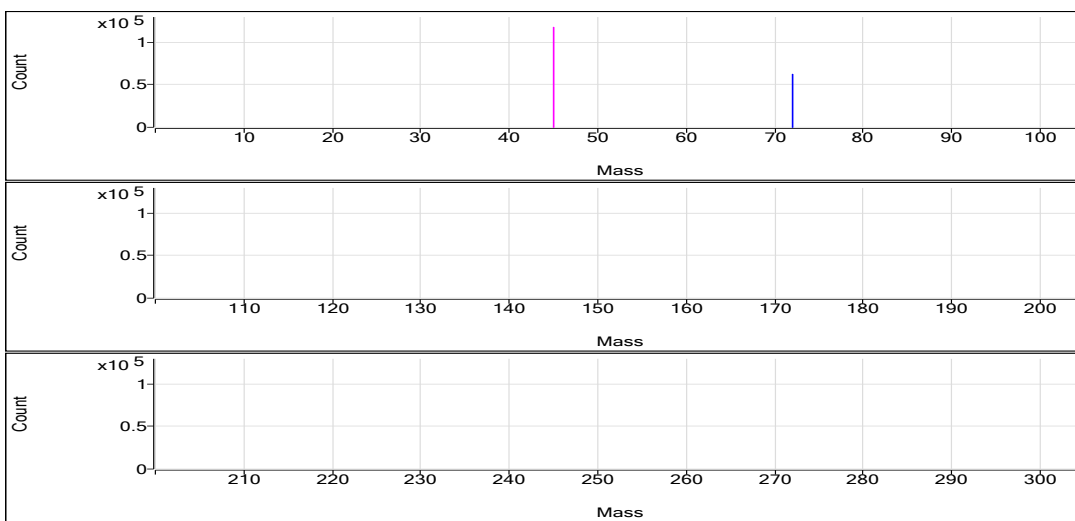
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	1.245	ppb	6.9	1946.85	0.0428	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

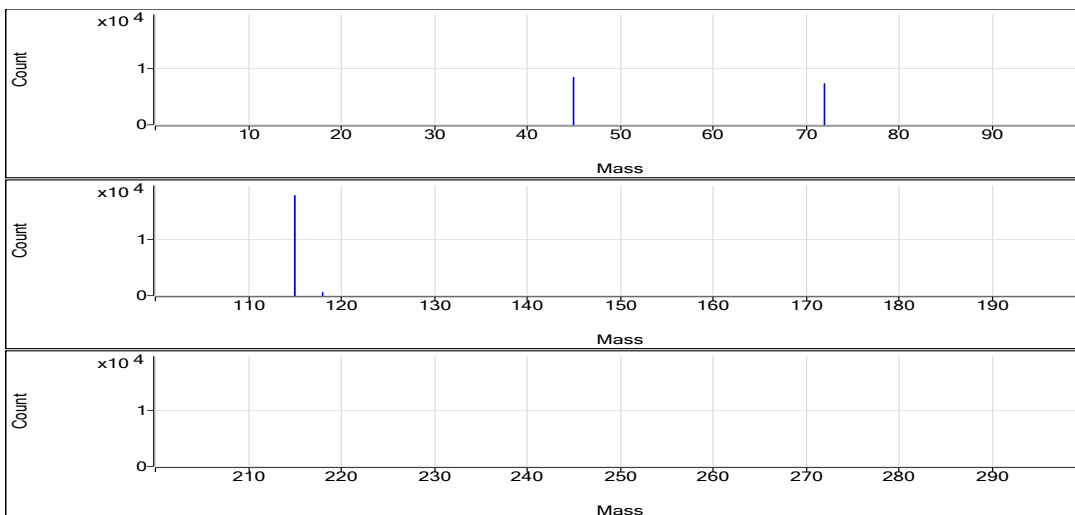
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1177290.76	2.1	90.1	Mix	0.1000	3
No Gas	Ge	72	625578.73	1.8	95.5	Pulse	0.1000	3
H2	Sc	45	84970.53	1.5	103.4	Pulse	0.1000	3
H2	Ge	72	73408.42	2.8	107.4	Pulse	0.1000	3
H2	In	115	178396.62	2.0	104.6	Pulse	0.1000	3
He	Sc	45	23994.76	3.3	93.7	Pulse	0.1000	3
He	Ge	72	45455.04	0.9	95.7	Pulse	0.1000	3
He	In	115	38147.77	2.5	93.2	Pulse	0.1000	3
He	Tb	159	149260.25	1.0	93.6	Pulse	0.1000	3
He	Bi	209	108550.20	1.3	92.8	Pulse	0.1000	3

No Gas

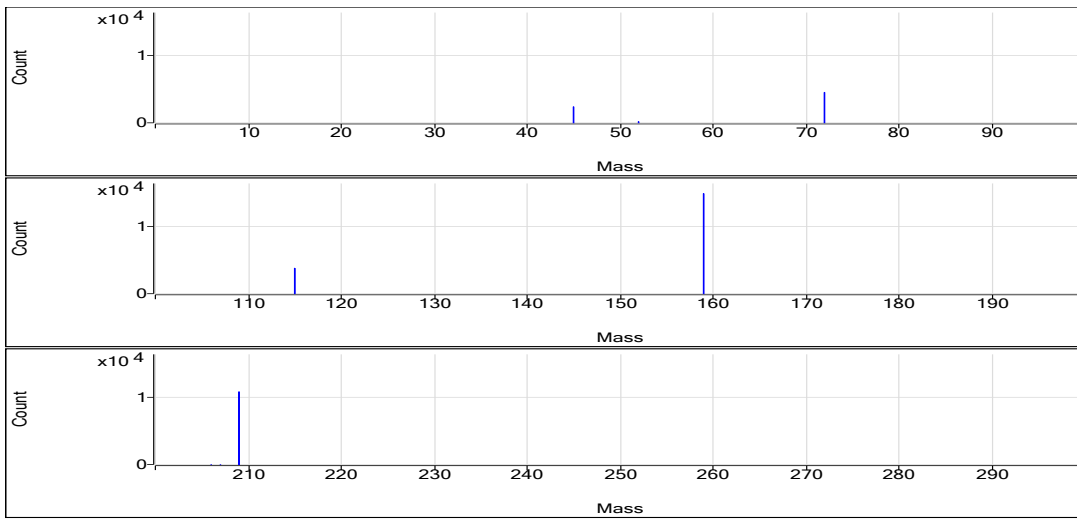


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	1.146	0.0411	1860.17	0.0171	0.02156
Cr	52	3	He	1.299	0.0438	2010.20	0.0171	0.02156
Cr	52	3	He	1.289	0.0436	1970.19	0.0171	0.02156
Sc	45	1	No Gas			1152681.70		
Sc	45	1	No Gas			1202452.01		
Sc	45	1	No Gas			1176738.58		
Ge	72	1	No Gas			612515.69		
Ge	72	1	No Gas			633992.57		
Ge	72	1	No Gas			630227.92		
Sc	45	2	H2			86256.42		
Sc	45	2	H2			84911.30		
Sc	45	2	H2			83743.86		
Ge	72	2	H2			74914.92		
Ge	72	2	H2			74242.66		
Ge	72	2	H2			71067.68		
In	115	2	H2			181972.87		
In	115	2	H2			178283.71		
In	115	2	H2			174933.28		
Sc	45	3	He			23257.10		
Sc	45	3	He			24819.34		
Sc	45	3	He			23907.83		
Ge	72	3	He			45214.59		
Ge	72	3	He			45946.36		
Ge	72	3	He			45204.16		
In	115	3	He			37797.02		
In	115	3	He			39220.08		
In	115	3	He			37426.22		
Tb	159	3	He			147839.75		
Tb	159	3	He			149022.23		
Tb	159	3	He			150918.77		
Bi	209	3	He			107626.77		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			110136.05		
Bi	209	3	He			107887.78		

Quantitation Report

Data File Name 266SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:01:47 PM
Sample Name 180-193799-N-1-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

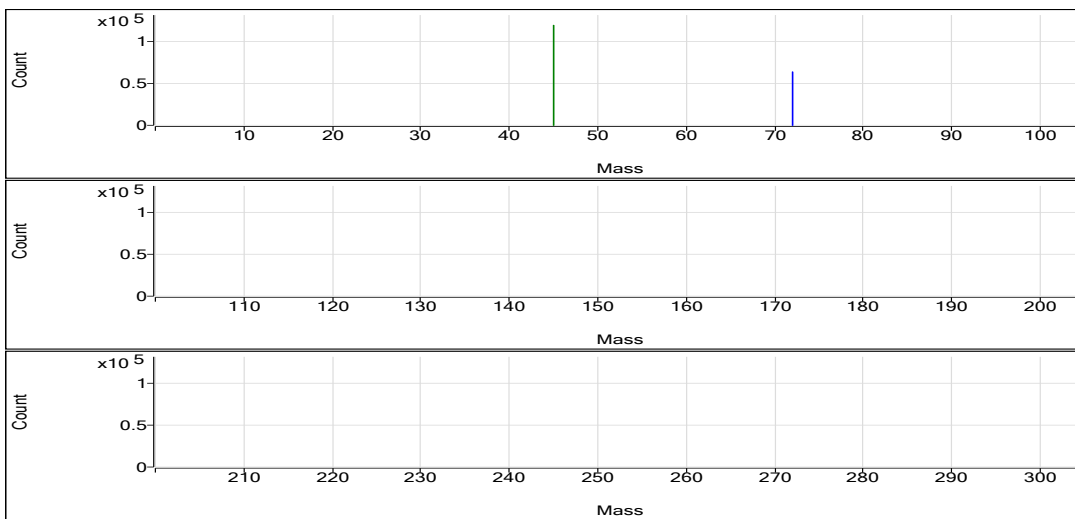
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	1.322	ppb	10.5	2000.20	0.0442	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

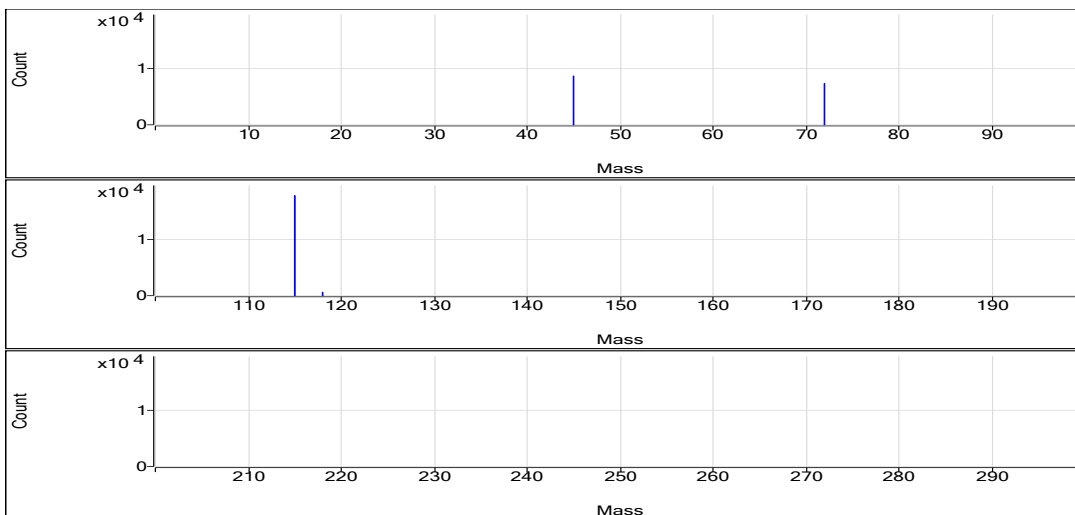
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1189033.47	2.3	91.0	Analog	0.1000	3
No Gas	Ge	72	635380.90	1.3	97.0	Pulse	0.1000	3
H2	Sc	45	87419.60	1.1	106.4	Pulse	0.1000	3
H2	Ge	72	73980.96	1.3	108.3	Pulse	0.1000	3
H2	In	115	179027.22	1.2	104.9	Pulse	0.1000	3
He	Sc	45	24622.42	1.5	96.1	Pulse	0.1000	3
He	Ge	72	45334.72	1.9	95.4	Pulse	0.1000	3
He	In	115	37683.20	0.9	92.0	Pulse	0.1000	3
He	Tb	159	149626.33	1.2	93.8	Pulse	0.1000	3
He	Bi	209	109123.65	0.5	93.3	Pulse	0.1000	3

No Gas

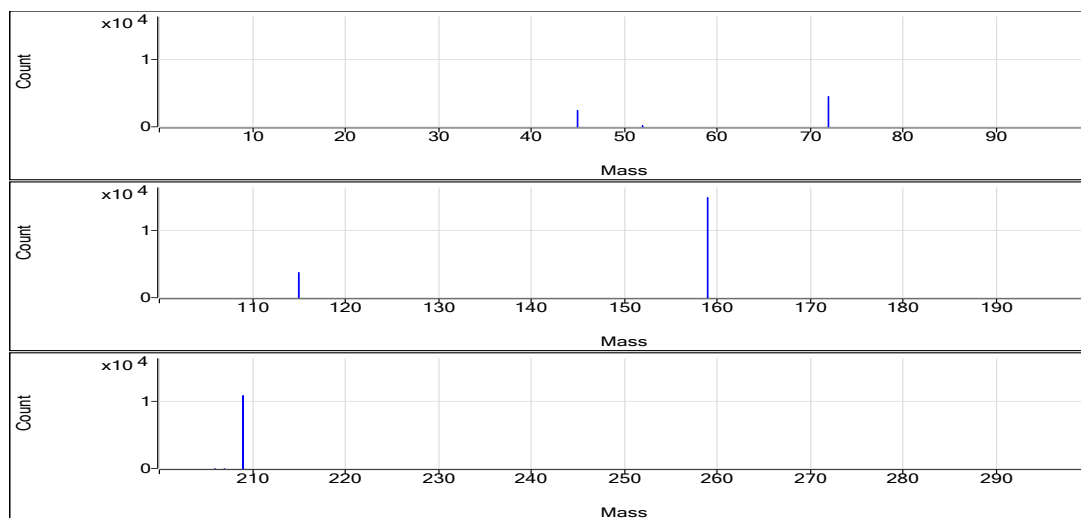


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	1.375	0.0451	2020.20	0.0171	0.02156
Cr	52	3	He	1.164	0.0414	1920.18	0.0171	0.02156
Cr	52	3	He	1.427	0.0459	2060.21	0.0171	0.02156
Sc	45	1	No Gas			1164209.44		
Sc	45	1	No Gas			1217443.97		
Sc	45	1	No Gas			1185447.01		
Ge	72	1	No Gas			626983.08		
Ge	72	1	No Gas			643336.16		
Ge	72	1	No Gas			635823.47		
Sc	45	2	H2			87915.57		
Sc	45	2	H2			88045.93		
Sc	45	2	H2			86297.29		
Ge	72	2	H2			74754.48		
Ge	72	2	H2			74262.19		
Ge	72	2	H2			72926.22		
In	115	2	H2			181478.24		
In	115	2	H2			178230.82		
In	115	2	H2			177372.60		
Sc	45	3	He			24709.39		
Sc	45	3	He			24939.48		
Sc	45	3	He			24218.38		
Ge	72	3	He			44833.70		
Ge	72	3	He			46327.41		
Ge	72	3	He			44843.06		
In	115	3	He			37475.94		
In	115	3	He			37486.07		
In	115	3	He			38087.59		
Tb	159	3	He			147910.18		
Tb	159	3	He			151534.60		
Tb	159	3	He			149434.22		
Bi	209	3	He			108542.26		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109207.95		
Bi	209	3	He			109620.75		

Quantitation Report

Data File Name 267SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:03:19 PM
Sample Name 180-193799-K-16-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

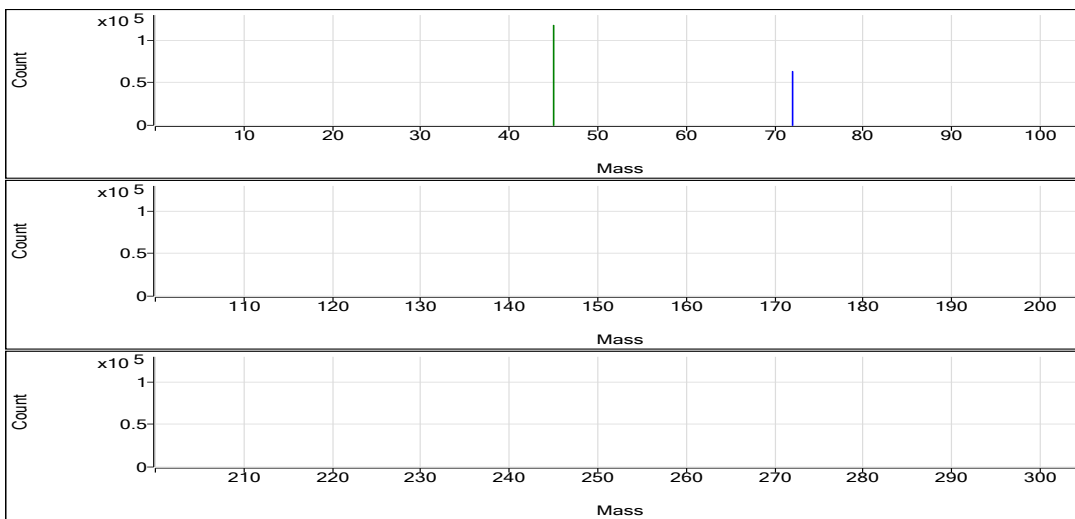
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.226	ppb	N/A	823.38	0.0177	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

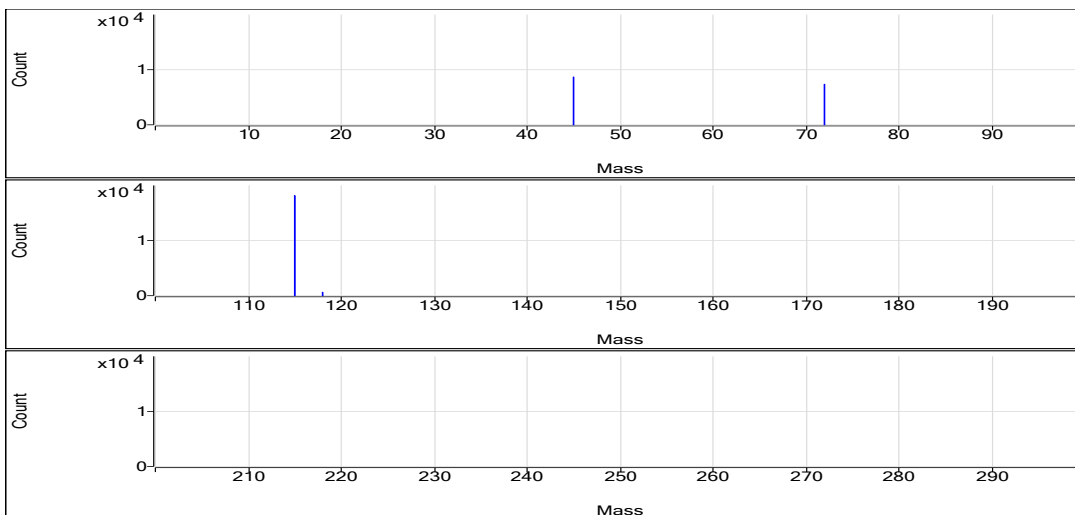
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1177393.73	1.1	90.1	Analog	0.1000	3
No Gas	Ge	72	634672.10	0.1	96.9	Pulse	0.1000	3
H2	Sc	45	86692.21	1.1	105.5	Pulse	0.1000	3
H2	Ge	72	73624.98	2.0	107.7	Pulse	0.1000	3
H2	In	115	181208.94	1.2	106.2	Pulse	0.1000	3
He	Sc	45	24265.27	1.7	94.7	Pulse	0.1000	3
He	Ge	72	46404.63	3.6	97.7	Pulse	0.1000	3
He	In	115	38151.00	1.4	93.2	Pulse	0.1000	3
He	Tb	159	149788.99	0.7	93.9	Pulse	0.1000	3
He	Bi	209	110373.45	0.8	94.4	Pulse	0.1000	3

No Gas

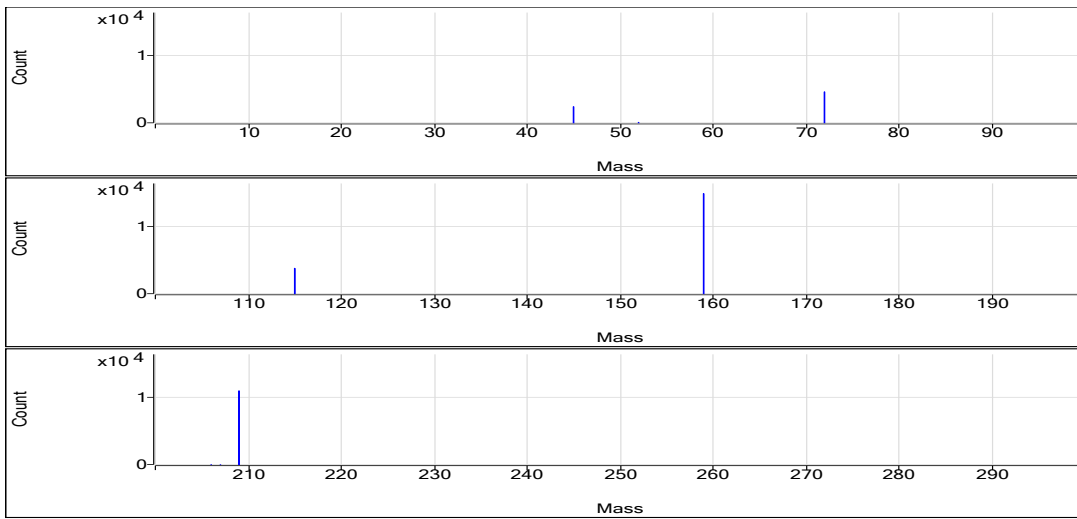


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	-0.203	0.0181	830.05	0.0171	0.02156
Cr	52	3	He	-0.352	0.0155	700.04	0.0171	0.02156
Cr	52	3	He	-0.122	0.0195	940.06	0.0171	0.02156
Sc	45	1	No Gas			1163597.25		
Sc	45	1	No Gas			1188035.84		
Sc	45	1	No Gas			1180548.11		
Ge	72	1	No Gas			634414.99		
Ge	72	1	No Gas			634217.61		
Ge	72	1	No Gas			635383.70		
Sc	45	2	H2			87754.58		
Sc	45	2	H2			85914.68		
Sc	45	2	H2			86407.36		
Ge	72	2	H2			75104.72		
Ge	72	2	H2			72222.13		
Ge	72	2	H2			73548.10		
In	115	2	H2			181621.38		
In	115	2	H2			178908.67		
In	115	2	H2			183096.76		
Sc	45	3	He			24669.08		
Sc	45	3	He			24288.78		
Sc	45	3	He			23837.95		
Ge	72	3	He			45896.52		
Ge	72	3	He			45033.86		
Ge	72	3	He			48283.52		
In	115	3	He			38769.02		
In	115	3	He			37796.76		
In	115	3	He			37887.21		
Tb	159	3	He			149243.57		
Tb	159	3	He			151030.61		
Tb	159	3	He			149092.78		
Bi	209	3	He			110146.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			109681.27		
Bi	209	3	He			111293.08		

Quantitation Report

Data File Name 268SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:04:51 PM
Sample Name 180-193799-F-8-A
Sample Type Sample
Comment F11
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

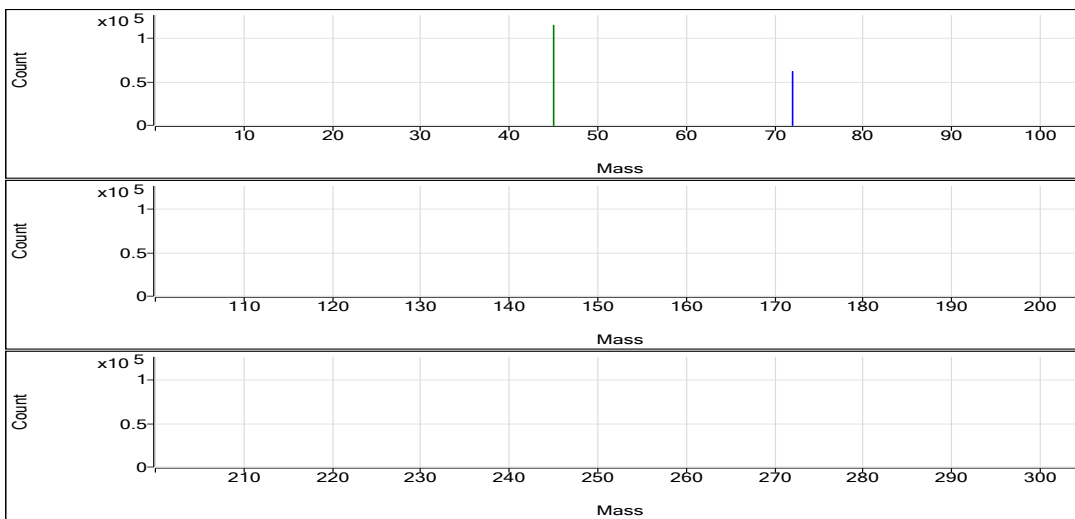
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas		ppb						0
Se	78	72	H2		ppb						0
Na	23	72	He		ppb						0
Mg	24	72	He		ppb						0
Al	27	72	He		ppb						0
K	39	72	He		ppb						0
Ca	44	72	He		ppb						0
Ti	47	72	He		ppb						0
V	51	72	He		ppb						0
Cr	52	72	He	-0.271	ppb	N/A	780.04	0.0169	Pulse	0.1000	3
Mn	55	72	He		ppb						0
Fe	57	72	He		ppb						0
Co	59	72	He		ppb						0
Ni	60	72	He		ppb						0
Cu	63	72	He		ppb						0
Zn	66	72	He		ppb						0
As	75	72	He		ppb						0
Sr	88	115	He		ppb						0
Mo	98	115	He		ppb						0
Ag	107	115	He		ppb						0
Cd	111	115	He		ppb						0
Sn	120	115	He		ppb						0
Sb	121	115	He		ppb						0
Ba	137	115	He		ppb						0
Tl	205	159	He		ppb						0
Pb	208	159	He		ppb						0
U	238	159	He		ppb						0

ISTD Table:

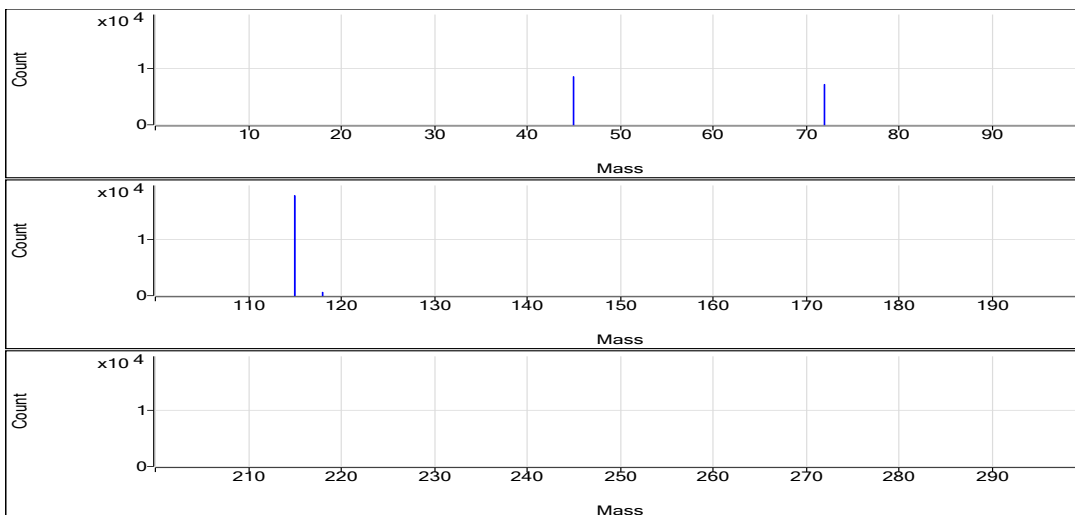
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1154582.75	0.9	88.3	Analog	0.1000	3
No Gas	Ge	72	621003.78	0.9	94.8	Pulse	0.1000	3
H2	Sc	45	86485.23	1.9	105.3	Pulse	0.1000	3
H2	Ge	72	72628.02	1.3	106.3	Pulse	0.1000	3
H2	In	115	179732.94	0.9	105.4	Pulse	0.1000	3
He	Sc	45	24732.56	0.9	96.6	Pulse	0.1000	3
He	Ge	72	46016.85	0.7	96.9	Pulse	0.1000	3
He	In	115	38197.50	0.7	93.3	Pulse	0.1000	3
He	Tb	159	151566.78	1.9	95.1	Pulse	0.1000	3
He	Bi	209	110071.66	1.6	94.1	Pulse	0.1000	3

No Gas

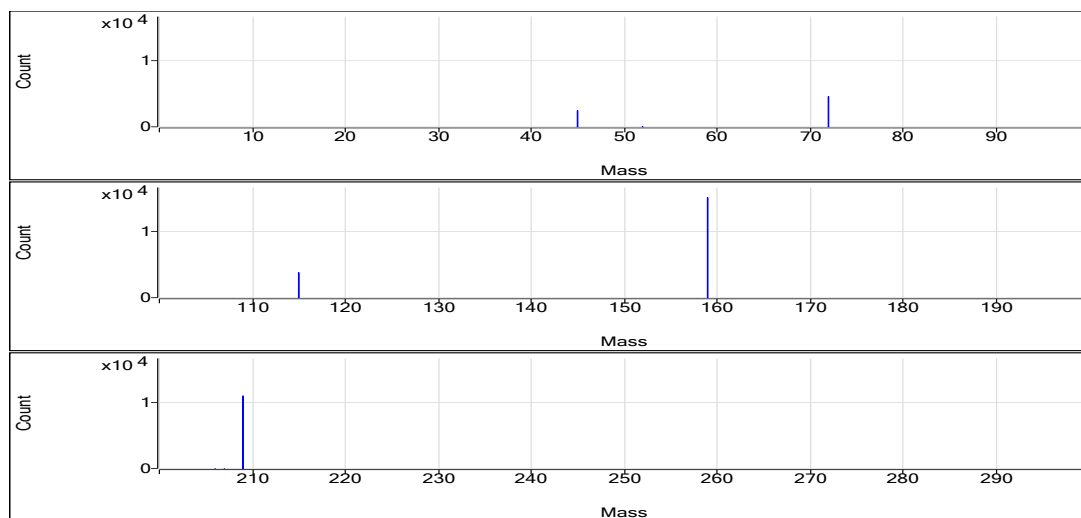


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Cr	52	3	He	0.001	0.0216	1000.06	0.0171	0.02156
Cr	52	3	He	-0.494	0.0131	600.03	0.0171	0.02156
Cr	52	3	He	-0.32	0.0161	740.04	0.0171	0.02156
Sc	45	1	No Gas			1166481.08		
Sc	45	1	No Gas			1148613.11		
Sc	45	1	No Gas			1148654.05		
Ge	72	1	No Gas			623876.63		
Ge	72	1	No Gas			624411.98		
Ge	72	1	No Gas			614722.73		
Sc	45	2	H2			88297.54		
Sc	45	2	H2			85141.20		
Sc	45	2	H2			86016.94		
Ge	72	2	H2			73689.55		
Ge	72	2	H2			71771.03		
Ge	72	2	H2			72423.49		
In	115	2	H2			180669.33		
In	115	2	H2			177848.81		
In	115	2	H2			180680.68		
Sc	45	3	He			24969.62		
Sc	45	3	He			24689.26		
Sc	45	3	He			24538.80		
Ge	72	3	He			46337.56		
Ge	72	3	He			45716.01		
Ge	72	3	He			45996.98		
In	115	3	He			38227.38		
In	115	3	He			37907.03		
In	115	3	He			38458.08		
Tb	159	3	He			148647.65		
Tb	159	3	He			154313.82		
Tb	159	3	He			151738.86		
Bi	209	3	He			109592.08		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Bi	209	3	He			111978.76		
Bi	209	3	He			108644.13		

Quantitation Report

Data File Name 270_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:08:34 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

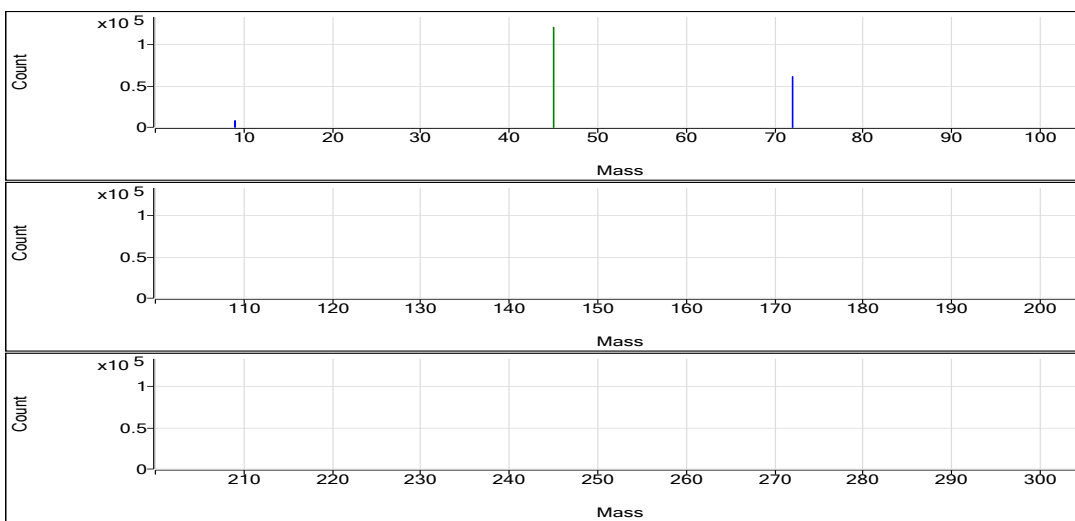
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.970	ppb	7.1	16355.98	0.0266	Pulse	0.5000	3
Se	78	72	H2	25.476	ppb	0.8	911.58	0.0129	Pulse	1.5000	3
Na	23	72	He	2466.468	ppb	1.9	209962.43	4.6523	Pulse	0.1000	3
Mg	24	72	He	2424.580	ppb	1.7	100559.29	2.2280	Pulse	0.1000	3
Al	27	72	He	2366.143	ppb	2.1	31119.85	0.6895	Pulse	0.1000	3
K	39	72	He	2431.722	ppb	4.4	97690.45	2.1650	Pulse	0.5000	3
Ca	44	72	He	2411.308	ppb	3.0	4491.98	0.0995	Pulse	0.5000	3
Ti	47	72	He	2429.345	ppb	2.6	34100.05	0.7556	Pulse	0.5000	3
V	51	72	He	242.383	ppb	1.5	149803.19	3.3191	Pulse	0.5000	3
Cr	52	72	He	239.924	ppb	1.7	185986.65	4.1210	Pulse	0.1000	3
Mn	55	72	He	240.964	ppb	1.6	79451.34	1.7604	Pulse	0.5000	3
Fe	57	72	He	2376.107	ppb	1.0	34868.44	0.7724	Pulse	0.1000	3
Co	59	72	He	240.950	ppb	1.6	361378.54	8.0071	Pulse	0.5000	3
Ni	60	72	He	239.634	ppb	2.1	101021.27	2.2385	Pulse	0.5000	3
Cu	63	72	He	240.327	ppb	1.7	293208.44	6.4967	Pulse	0.5000	3
Zn	66	72	He	239.368	ppb	1.6	33749.85	0.7478	Pulse	0.5000	3
As	75	72	He	242.907	ppb	0.9	27992.39	0.6202	Pulse	0.5000	3
Sr	88	115	He	25.014	ppb	5.0	10233.64	0.2657	Pulse	0.1000	3
Mo	98	115	He	25.249	ppb	3.3	22910.67	0.5946	Pulse	0.1000	3
Ag	107	115	He	25.076	ppb	1.4	47640.00	1.2368	Pulse	0.1000	3
Cd	111	115	He	25.321	ppb	2.1	5472.32	0.1421	Pulse	0.5000	3
Sn	120	115	He	25.670	ppb	2.3	19035.52	0.4942	Pulse	0.1000	3
Sb	121	115	He	24.982	ppb	4.0	15534.56	0.4033	Pulse	0.3000	3
Ba	137	115	He	249.271	ppb	3.1	50745.43	1.3173	Pulse	0.1000	3
Tl	205	159	He	24.835	ppb	1.6	92446.36	0.6159	Pulse	0.1000	3
Pb	208	159	He	25.028	ppb	2.1	125075.12	0.8333	Pulse	0.1000	3
U	238	159	He	25.149	ppb	1.0	127540.51	0.8497	Pulse	0.1000	3

ISTD Table:

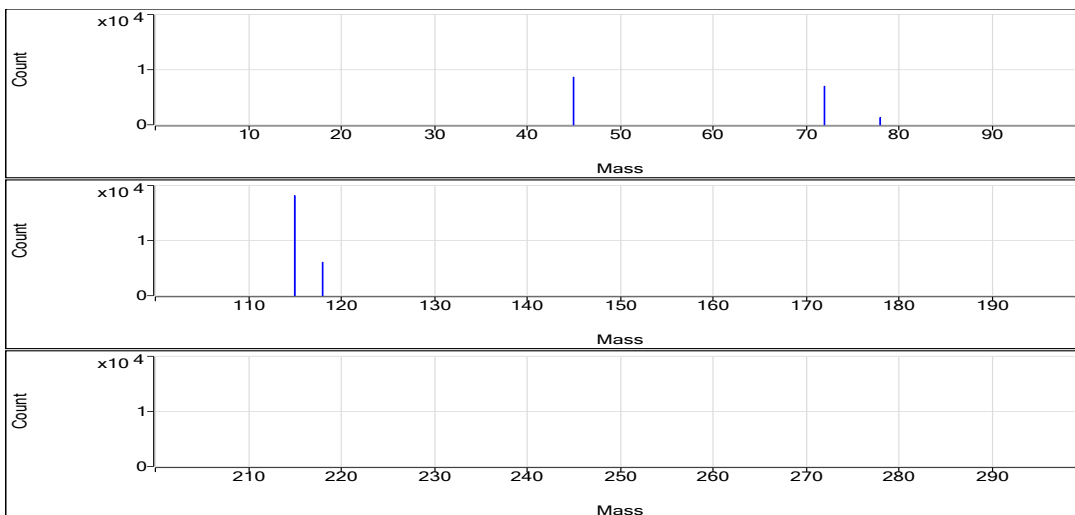
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1213352.30	2.0	92.8	Analog	0.1000	3
No Gas	Ge	72	614409.99	1.5	93.8	Pulse	0.1000	3
H2	Sc	45	86984.28	1.7	105.9	Pulse	0.1000	3
H2	Ge	72	70468.34	0.9	103.1	Pulse	0.1000	3
H2	In	115	182179.78	0.2	106.8	Pulse	0.1000	3
He	Sc	45	24235.12	0.8	94.6	Pulse	0.1000	3
He	Ge	72	45141.05	1.8	95.0	Pulse	0.1000	3
He	In	115	38522.27	1.4	94.1	Pulse	0.1000	3
He	Tb	159	150109.71	1.1	94.1	Pulse	0.1000	3
He	Bi	209	110340.05	1.1	94.3	Pulse	0.1000	3

No Gas

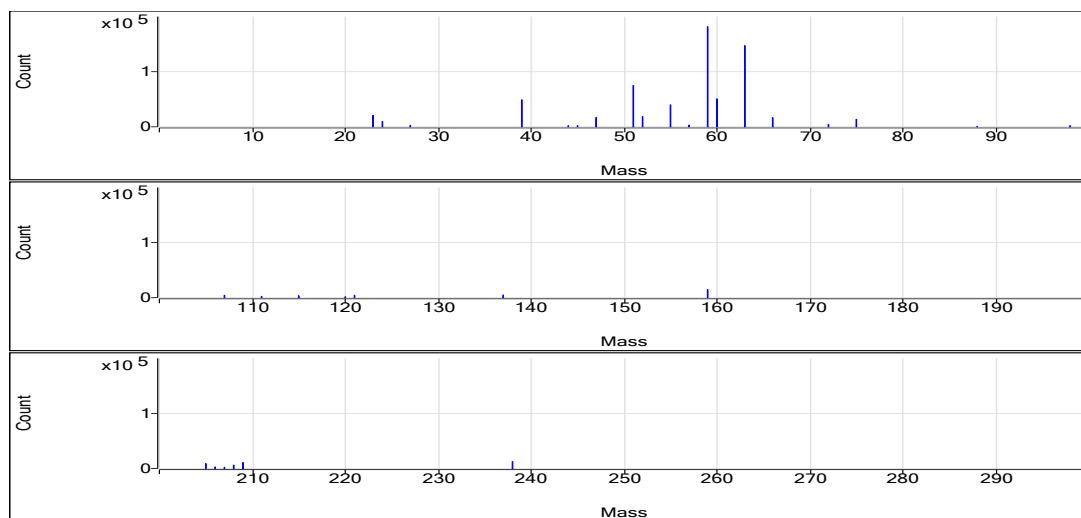


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.298	0.0248	15010.69	0.0011	7.835E-05
Be	9	1	No Gas	24.804	0.0264	16259.86	0.0011	7.835E-05
Be	9	1	No Gas	26.809	0.0286	17797.39	0.0011	7.835E-05
Se	78	2	H2	25.312	0.0129	908.03	0.0005	2.594E-05
Se	78	2	H2	25.69	0.013	910.03	0.0005	2.594E-05
Se	78	2	H2	25.427	0.0129	916.69	0.0005	2.594E-05
Na	23	3	He	2485.467	4.6868	209278.36	0.0018	0.1731
Na	23	3	He	2501.783	4.7164	210744.45	0.0018	0.1731
Na	23	3	He	2412.155	4.5536	209864.47	0.0018	0.1731
Mg	24	3	He	2413.535	2.2179	99034.49	0.0009	0.006537
Mg	24	3	He	2470.335	2.2699	101427.13	0.0009	0.006537
Mg	24	3	He	2389.87	2.1962	101216.24	0.0009	0.006537
Al	27	3	He	2363	0.6886	30749.04	0.0003	0.00231
Al	27	3	He	2417.753	0.7045	31480.50	0.0003	0.00231
Al	27	3	He	2317.676	0.6755	31130.02	0.0003	0.00231
K	39	3	He	2531.213	2.2394	99994.02	0.0007	0.3475
K	39	3	He	2444.539	2.1746	97167.23	0.0007	0.3475
K	39	3	He	2319.413	2.0811	95910.09	0.0007	0.3475
Ca	44	3	He	2336.087	0.0965	4308.60	0	0.002807
Ca	44	3	He	2482.931	0.1024	4574.66	0	0.002807
Ca	44	3	He	2414.906	0.0997	4592.67	0	0.002807
Ti	47	3	He	2432.089	0.7565	33778.71	0.0003	0.0001123
Ti	47	3	He	2491.447	0.7749	34626.50	0.0003	0.0001123
Ti	47	3	He	2364.498	0.7355	33894.94	0.0003	0.0001123
V	51	3	He	242.885	3.3259	148512.92	0.0137	0.008308
V	51	3	He	245.645	3.3637	150298.73	0.0137	0.008308
V	51	3	He	238.619	3.2677	150597.92	0.0137	0.008308
Cr	52	3	He	242.316	4.1618	185838.30	0.0171	0.02156
Cr	52	3	He	242.297	4.1615	185949.74	0.0171	0.02156
Cr	52	3	He	235.16	4.0396	186171.91	0.0171	0.02156
Mn	55	3	He	243.069	1.7758	79293.27	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	243.428	1.7784	79464.14	0.0073	0.002316
Mn	55	3	He	236.396	1.7271	79596.61	0.0073	0.002316
Fe	57	3	He	2349.645	0.7638	34106.99	0.0003	0.002736
Fe	57	3	He	2392.351	0.7777	34748.26	0.0003	0.002736
Fe	57	3	He	2386.323	0.7757	35750.06	0.0003	0.002736
Co	59	3	He	242.702	8.0653	360137.03	0.0332	0.001922
Co	59	3	He	243.561	8.0938	361657.31	0.0332	0.001922
Co	59	3	He	236.587	7.8621	362341.28	0.0332	0.001922
Ni	60	3	He	242.507	2.2653	101150.22	0.0093	0.003141
Ni	60	3	He	242.472	2.2649	101204.30	0.0093	0.003141
Ni	60	3	He	233.924	2.1852	100709.29	0.0093	0.003141
Cu	63	3	He	243.036	6.5699	293364.03	0.027	0.003732
Cu	63	3	He	242.268	6.5491	292636.53	0.027	0.003732
Cu	63	3	He	235.677	6.3711	293624.75	0.027	0.003732
Zn	66	3	He	240.675	0.7519	33572.88	0.0031	0.002032
Zn	66	3	He	242.325	0.757	33825.35	0.0031	0.002032
Zn	66	3	He	235.104	0.7345	33851.33	0.0031	0.002032
As	75	3	He	242.116	0.6181	27601.67	0.0025	0.0007733
As	75	3	He	245.452	0.6266	28000.42	0.0025	0.0007733
As	75	3	He	241.153	0.6157	28375.08	0.0025	0.0007733
Sr	88	3	He	24.779	0.2633	10063.54	0.0105	0.004071
Sr	88	3	He	26.366	0.2799	10693.97	0.0105	0.004071
Sr	88	3	He	23.898	0.2541	9943.42	0.0105	0.004071
Mo	98	3	He	24.319	0.5729	21895.90	0.0234	0.003908
Mo	98	3	He	25.538	0.6014	22977.47	0.0234	0.003908
Mo	98	3	He	25.891	0.6096	23858.65	0.0234	0.003908
Ag	107	3	He	25.356	1.2507	47803.60	0.0493	0.0004851
Ag	107	3	He	25.185	1.2422	47462.80	0.0493	0.0004851
Ag	107	3	He	24.687	1.2176	47653.61	0.0493	0.0004851
Cd	111	3	He	25.537	0.1433	5476.99	0.0056	0
Cd	111	3	He	25.714	0.1443	5513.00	0.0056	0
Cd	111	3	He	24.713	0.1387	5426.97	0.0056	0
Sn	120	3	He	26.343	0.5055	19322.42	0.0169	0.0609
Sn	120	3	He	25.19	0.4861	18571.69	0.0169	0.0609
Sn	120	3	He	25.477	0.4909	19212.44	0.0169	0.0609
Sb	121	3	He	24.329	0.3928	15014.07	0.0161	0.0005433
Sb	121	3	He	26.12	0.4217	16111.83	0.0161	0.0005433
Sb	121	3	He	24.496	0.3955	15477.78	0.0161	0.0005433
Ba	137	3	He	241.285	1.2751	48738.70	0.0053	0.001141
Ba	137	3	He	256.796	1.357	51849.28	0.0053	0.001141
Ba	137	3	He	249.731	1.3197	51648.30	0.0053	0.001141
Tl	205	3	He	25.035	0.6209	92231.42	0.0248	0.0005854
Tl	205	3	He	24.367	0.6043	91778.70	0.0248	0.0005854
Tl	205	3	He	25.103	0.6226	93328.96	0.0248	0.0005854
Pb	208	3	He	25.121	0.8364	66070.63	0.0332	0.001693
Pb	208	3	He	24.469	0.8147	63951.19	0.0332	0.001693
Pb	208	3	He	25.493	0.8488	67005.47	0.0332	0.001693
U	238	3	He	25.111	0.8484	126023.54	0.0338	0.0007949
U	238	3	He	24.915	0.8418	127840.66	0.0338	0.0007949
U	238	3	He	25.422	0.8589	128757.32	0.0338	0.0007949
Sc	45	1	No Gas			1196420.84		
Sc	45	1	No Gas			1202301.23		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1241334.83		
Ge	72	1	No Gas			604652.53		
Ge	72	1	No Gas			615319.09		
Ge	72	1	No Gas			623258.35		
Sc	45	2	H2			87131.40		
Sc	45	2	H2			85423.24		
Sc	45	2	H2			88398.20		
Ge	72	2	H2			70645.55		
Ge	72	2	H2			69761.85		
Ge	72	2	H2			70997.63		
In	115	2	H2			181820.31		
In	115	2	H2			182388.53		
In	115	2	H2			182330.51		
Sc	45	3	He			24078.22		
Sc	45	3	He			24438.90		
Sc	45	3	He			24188.25		
Ge	72	3	He			44652.85		
Ge	72	3	He			44683.17		
Ge	72	3	He			46087.12		
In	115	3	He			38357.98		
In	115	3	He			38338.20		
In	115	3	He			39270.38		
Tb	159	3	He			148548.15		
Tb	159	3	He			151869.24		
Tb	159	3	He			149911.75		
Bi	209	3	He			110297.51		
Bi	209	3	He			109177.59		
Bi	209	3	He			111545.05		

Quantitation Report

Data File Name 272_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:12:58 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

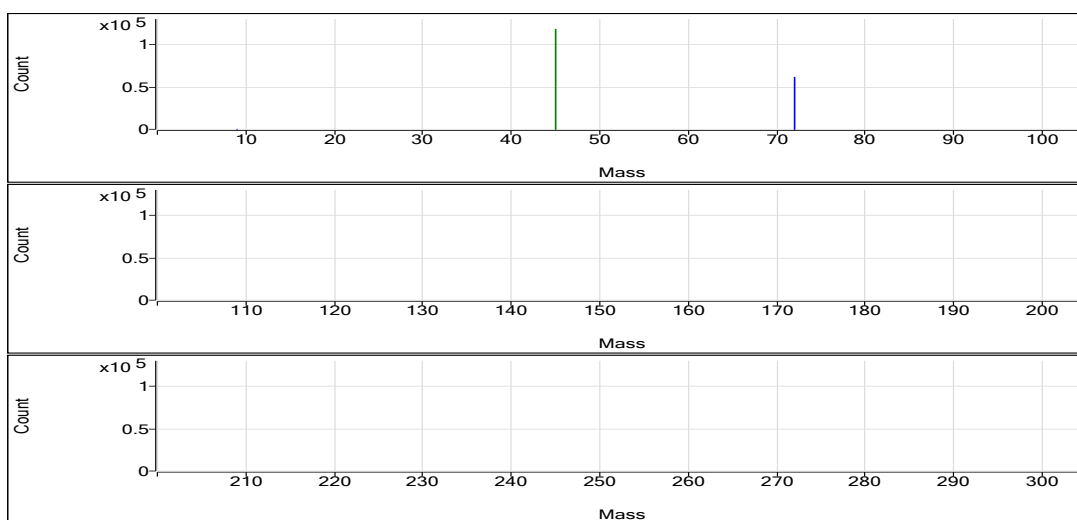
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.038	ppb	105.6	72.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.010	ppb	108.3	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	29.735	ppb	7.0	9946.59	0.2271	Pulse	0.1000	3
Mg	24	72	He	9.145	ppb	26.3	653.37	0.0149	Pulse	0.1000	3
Al	27	72	He	-3.498	ppb	N/A	56.67	0.0013	Pulse	0.1000	3
K	39	72	He	24.007	ppb	330.8	15993.26	0.3654	Pulse	0.5000	3
Ca	44	72	He	-12.250	ppb	N/A	101.33	0.0023	Pulse	0.5000	3
Ti	47	72	He	0.372	ppb	37.9	10.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.026	ppb	138.6	379.34	0.0087	Pulse	0.5000	3
Cr	52	72	He	-0.050	ppb	N/A	906.72	0.0207	Pulse	0.1000	3
Mn	55	72	He	0.200	ppb	26.1	165.33	0.0038	Pulse	0.5000	3
Fe	57	72	He	0.946	ppb	107.1	133.34	0.0030	Pulse	0.1000	3
Co	59	72	He	0.014	ppb	63.2	105.33	0.0024	Pulse	0.5000	3
Ni	60	72	He	-0.030	ppb	N/A	125.33	0.0029	Pulse	0.5000	3
Cu	63	72	He	-0.025	ppb	N/A	133.33	0.0030	Pulse	0.5000	3
Zn	66	72	He	-0.291	ppb	N/A	49.33	0.0011	Pulse	0.5000	3
As	75	72	He	-0.041	ppb	N/A	29.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.061	ppb	N/A	130.01	0.0034	Pulse	0.1000	3
Mo	98	115	He	-0.077	ppb	N/A	80.00	0.0021	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	255.4	26.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.249	ppb	N/A	2153.56	0.0567	Pulse	0.1000	3
Sb	121	115	He	0.019	ppb	75.9	32.22	0.0008	Pulse	0.3000	3
Ba	137	115	He	-0.083	ppb	N/A	26.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	0.011	ppb	76.9	126.67	0.0009	Pulse	0.1000	3
Pb	208	159	He	-0.015	ppb	N/A	176.67	0.0012	Pulse	0.1000	3
U	238	159	He	0.006	ppb	52.6	146.68	0.0010	Pulse	0.1000	3

ISTD Table:

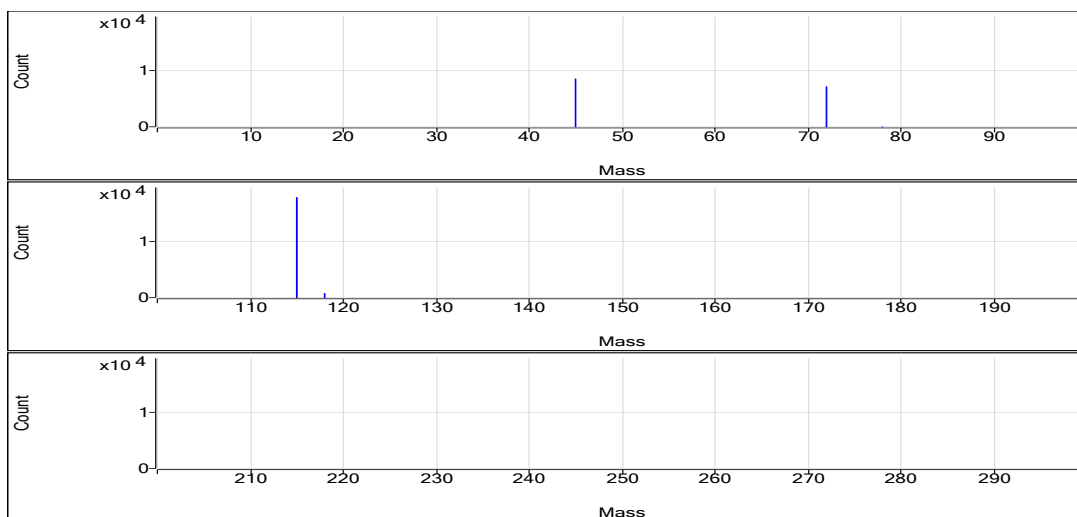
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1184353.16	1.7	90.6	Analog	0.1000	3
No Gas	Ge	72	616306.88	1.3	94.1	Pulse	0.1000	3
H2	Sc	45	85623.70	0.7	104.2	Pulse	0.1000	3
H2	Ge	72	71573.40	2.2	104.7	Pulse	0.1000	3
H2	In	115	178810.57	1.2	104.8	Pulse	0.1000	3
He	Sc	45	24221.85	0.8	94.6	Pulse	0.1000	3
He	Ge	72	43810.53	1.0	92.2	Pulse	0.1000	3
He	In	115	38032.34	2.2	92.9	Pulse	0.1000	3
He	Tb	159	148354.69	0.2	93.0	Pulse	0.1000	3
He	Bi	209	109235.14	0.5	93.4	Pulse	0.1000	3

No Gas

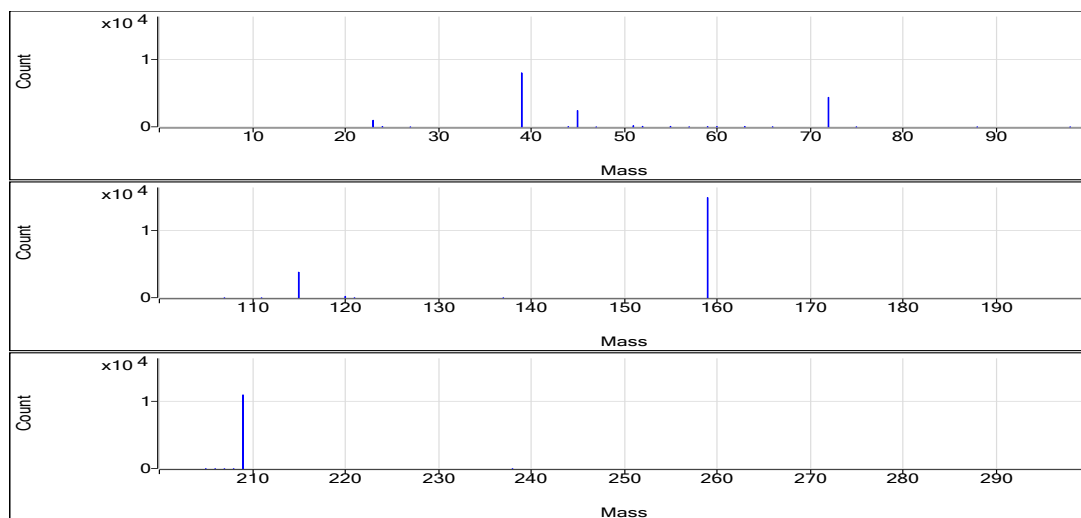


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.001	0.0001	48.00	0.0011	7.835E-05
Be	9	1	No Gas	0.036	0.0001	72.00	0.0011	7.835E-05
Be	9	1	No Gas	0.078	0.0002	98.00	0.0011	7.835E-05
Se	78	2	H2	0.023	0	2.67	0.0005	2.594E-05
Se	78	2	H2	0.005	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.003	0	2.00	0.0005	2.594E-05
Na	23	3	He	31.2	0.2297	9953.26	0.0018	0.1731
Na	23	3	He	30.657	0.2287	10073.33	0.0018	0.1731
Na	23	3	He	27.349	0.2227	9813.19	0.0018	0.1731
Mg	24	3	He	9.743	0.0155	670.03	0.0009	0.006537
Mg	24	3	He	6.496	0.0125	550.03	0.0009	0.006537
Mg	24	3	He	11.197	0.0168	740.04	0.0009	0.006537
Al	27	3	He	-3.186	0.0014	60.00	0.0003	0.00231
Al	27	3	He	-4.826	0.0009	40.00	0.0003	0.00231
Al	27	3	He	-2.483	0.0016	70.00	0.0003	0.00231
K	39	3	He	113.835	0.4326	18742.74	0.0007	0.3475
K	39	3	He	-4.938	0.3438	15140.98	0.0007	0.3475
K	39	3	He	-36.877	0.3199	14096.06	0.0007	0.3475
Ca	44	3	He	-0.929	0.0028	120.00	0	0.002807
Ca	44	3	He	-20.163	0.002	88.00	0	0.002807
Ca	44	3	He	-15.658	0.0022	96.00	0	0.002807
Ti	47	3	He	0.233	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.369	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.515	0.0003	12.00	0.0003	0.0001123
V	51	3	He	0.058	0.0091	394.01	0.0137	0.008308
V	51	3	He	-0.013	0.0081	358.01	0.0137	0.008308
V	51	3	He	0.033	0.0088	386.01	0.0137	0.008308
Cr	52	3	He	0.062	0.0226	980.06	0.0171	0.02156
Cr	52	3	He	0.014	0.0218	960.06	0.0171	0.02156
Cr	52	3	He	-0.226	0.0177	780.04	0.0171	0.02156
Mn	55	3	He	0.246	0.0041	178.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.212	0.0039	170.00	0.0073	0.002316
Mn	55	3	He	0.143	0.0034	148.00	0.0073	0.002316
Fe	57	3	He	0.104	0.0028	120.00	0.0003	0.002736
Fe	57	3	He	2.07	0.0034	150.01	0.0003	0.002736
Fe	57	3	He	0.663	0.003	130.00	0.0003	0.002736
Co	59	3	He	0.005	0.0021	90.00	0.0332	0.001922
Co	59	3	He	0.023	0.0027	118.00	0.0332	0.001922
Co	59	3	He	0.016	0.0025	108.00	0.0332	0.001922
Ni	60	3	He	-0.03	0.0029	124.00	0.0093	0.003141
Ni	60	3	He	0.014	0.0033	144.00	0.0093	0.003141
Ni	60	3	He	-0.074	0.0025	108.00	0.0093	0.003141
Cu	63	3	He	-0.001	0.0037	160.00	0.027	0.003732
Cu	63	3	He	-0.036	0.0028	122.00	0.027	0.003732
Cu	63	3	He	-0.039	0.0027	118.00	0.027	0.003732
Zn	66	3	He	-0.326	0.001	44.00	0.0031	0.002032
Zn	66	3	He	-0.273	0.0012	52.00	0.0031	0.002032
Zn	66	3	He	-0.273	0.0012	52.00	0.0031	0.002032
As	75	3	He	-0.122	0.0005	20.00	0.0025	0.0007733
As	75	3	He	-0.018	0.0007	32.00	0.0025	0.0007733
As	75	3	He	0.017	0.0008	36.00	0.0025	0.0007733
Sr	88	3	He	0.02	0.0043	160.01	0.0105	0.004071
Sr	88	3	He	-0.144	0.0026	100.00	0.0105	0.004071
Sr	88	3	He	-0.06	0.0034	130.01	0.0105	0.004071
Mo	98	3	He	-0.11	0.0013	50.00	0.0234	0.003908
Mo	98	3	He	-0.079	0.0021	80.00	0.0234	0.003908
Mo	98	3	He	-0.043	0.0029	110.01	0.0234	0.003908
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.017	0.0013	50.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	0.072	0.0621	2320.27	0.0169	0.0609
Sn	120	3	He	-0.597	0.0508	1980.18	0.0169	0.0609
Sn	120	3	He	-0.222	0.0572	2160.23	0.0169	0.0609
Sb	121	3	He	0.022	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.003	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	0.032	0.0011	40.00	0.0161	0.0005433
Ba	137	3	He	-0.013	0.0011	40.00	0.0053	0.001141
Ba	137	3	He	-0.07	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	-0.166	0.0003	10.00	0.0053	0.001141
Tl	205	3	He	0.009	0.0008	120.00	0.0248	0.0005854
Tl	205	3	He	0.02	0.0011	160.01	0.0248	0.0005854
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	-0.015	0.0012	110.00	0.0332	0.001693
Pb	208	3	He	-0.012	0.0013	80.00	0.0332	0.001693
Pb	208	3	He	-0.018	0.0011	60.00	0.0332	0.001693
U	238	3	He	0.008	0.0011	160.01	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.01	0.0338	0.0007949
U	238	3	He	0.006	0.001	150.01	0.0338	0.0007949
Sc	45	1	No Gas			1205076.00		
Sc	45	1	No Gas			1182601.62		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1165381.86		
Ge	72	1	No Gas			623114.72		
Ge	72	1	No Gas			618219.09		
Ge	72	1	No Gas			607586.83		
Sc	45	2	H2			85885.72		
Sc	45	2	H2			84969.88		
Sc	45	2	H2			86015.50		
Ge	72	2	H2			71238.47		
Ge	72	2	H2			70173.50		
Ge	72	2	H2			73308.24		
In	115	2	H2			177886.68		
In	115	2	H2			181175.93		
In	115	2	H2			177369.10		
Sc	45	3	He			24428.84		
Sc	45	3	He			24068.21		
Sc	45	3	He			24168.50		
Ge	72	3	He			43329.25		
Ge	72	3	He			44041.15		
Ge	72	3	He			44061.19		
In	115	3	He			37365.61		
In	115	3	He			38970.20		
In	115	3	He			37806.44		
Tb	159	3	He			148619.03		
Tb	159	3	He			148222.27		
Tb	159	3	He			148222.76		
Bi	209	3	He			109440.79		
Bi	209	3	He			109630.77		
Bi	209	3	He			108633.85		

Quantitation Report

Data File Name 273SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:15:11 PM
Sample Name 410-234748-F-1-B@100
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

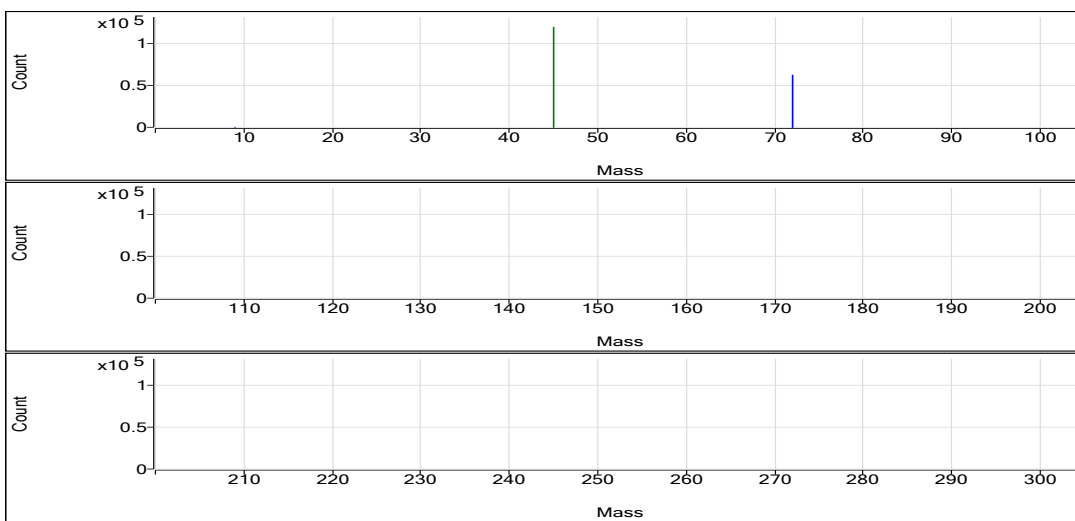
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.012	ppb	53.3	57.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.033	ppb	N/A	0.67	0.0000	Pulse	1.5000	3
Na	23	72	He	2849.178	ppb	0.9	242916.39	5.3473	Pulse	0.1000	3
Mg	24	72	He	6.954	ppb	23.3	586.69	0.0129	Pulse	0.1000	3
Al	27	72	He	440.108	ppb	3.2	5911.22	0.1301	Pulse	0.1000	3
K	39	72	He	13.311	ppb	515.5	16254.86	0.3574	Pulse	0.5000	3
Ca	44	72	He	8.946	ppb	203.3	144.00	0.0032	Pulse	0.5000	3
Ti	47	72	He	1.292	ppb	18.0	23.33	0.0005	Pulse	0.5000	3
V	51	72	He	-0.010	ppb	N/A	371.34	0.0082	Pulse	0.5000	3
Cr	52	72	He	0.701	ppb	8.2	1523.46	0.0335	Pulse	0.1000	3
Mn	55	72	He	1.186	ppb	11.5	498.01	0.0110	Pulse	0.5000	3
Fe	57	72	He	117.608	ppb	9.3	1853.50	0.0408	Pulse	0.1000	3
Co	59	72	He	0.092	ppb	30.1	226.00	0.0050	Pulse	0.5000	3
Ni	60	72	He	436.009	ppb	1.8	184886.63	4.0703	Pulse	0.5000	3
Cu	63	72	He	-0.010	ppb	N/A	156.67	0.0035	Pulse	0.5000	3
Zn	66	72	He	0.550	ppb	29.7	170.00	0.0037	Pulse	0.5000	3
As	75	72	He	-0.067	ppb	N/A	27.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.060	ppb	N/A	133.34	0.0034	Pulse	0.1000	3
Mo	98	115	He	701.453	ppb	2.2	634996.07	16.4145	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.046	ppb	52.6	10.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	-0.092	ppb	N/A	2296.93	0.0593	Pulse	0.1000	3
Sb	121	115	He	0.014	ppb	100.0	30.00	0.0008	Pulse	0.3000	3
Ba	137	115	He	-0.151	ppb	N/A	13.33	0.0003	Pulse	0.1000	3
Tl	205	159	He	-0.003	ppb	N/A	76.67	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.013	ppb	N/A	186.67	0.0013	Pulse	0.1000	3
U	238	159	He	-0.005	ppb	N/A	93.33	0.0006	Pulse	0.1000	3

ISTD Table:

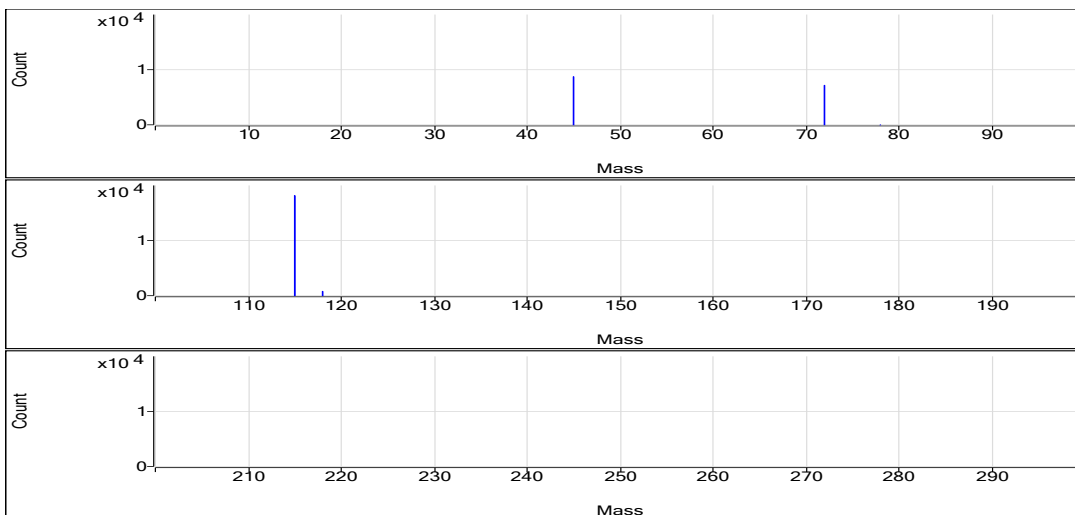
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1197575.03	0.5	91.6	Analog	0.1000	3
No Gas	Ge	72	625399.07	1.1	95.4	Pulse	0.1000	3
H2	Sc	45	86722.40	1.5	105.6	Pulse	0.1000	3
H2	Ge	72	71255.27	0.2	104.3	Pulse	0.1000	3
H2	In	115	180298.95	0.5	105.7	Pulse	0.1000	3
He	Sc	45	24088.35	2.0	94.1	Pulse	0.1000	3
He	Ge	72	45431.77	1.4	95.6	Pulse	0.1000	3
He	In	115	38693.03	1.5	94.5	Pulse	0.1000	3
He	Tb	159	148460.63	0.9	93.1	Pulse	0.1000	3
He	Bi	209	112274.79	0.7	96.0	Pulse	0.1000	3

No Gas

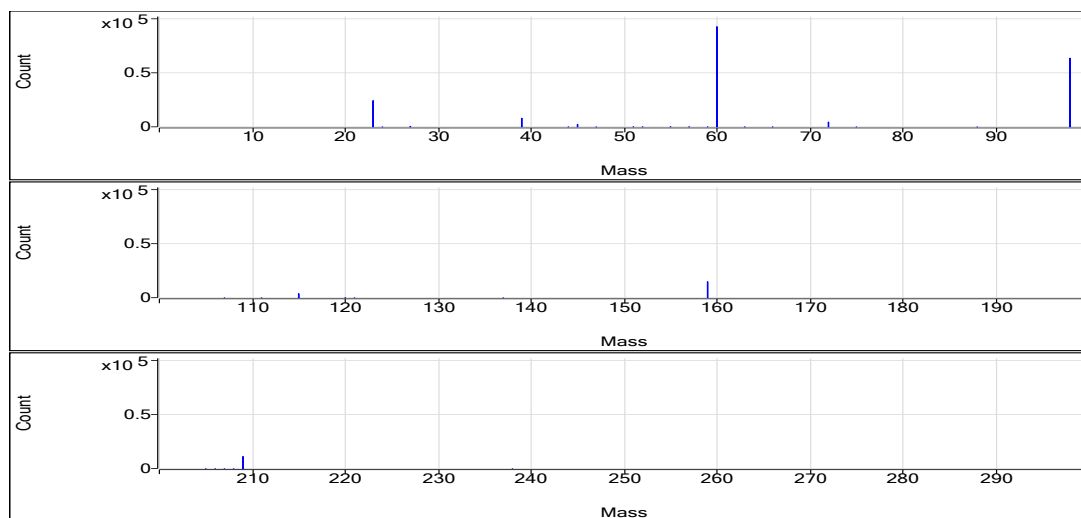


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.014	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	0.018	0.0001	62.00	0.0011	7.835E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Na	23	3	He	2822.218	5.2983	244344.10	0.0018	0.1731
Na	23	3	He	2875.952	5.3959	241863.55	0.0018	0.1731
Na	23	3	He	2849.363	5.3476	242541.52	0.0018	0.1731
Mg	24	3	He	8.249	0.0141	650.03	0.0009	0.006537
Mg	24	3	He	7.476	0.0134	600.03	0.0009	0.006537
Mg	24	3	He	5.138	0.0112	510.02	0.0009	0.006537
Al	27	3	He	425.9	0.126	5811.18	0.0003	0.00231
Al	27	3	He	440.73	0.1303	5841.22	0.0003	0.00231
Al	27	3	He	453.694	0.1341	6081.26	0.0003	0.00231
K	39	3	He	88.028	0.4133	19059.12	0.0007	0.3475
K	39	3	He	-1.193	0.3466	15535.36	0.0007	0.3475
K	39	3	He	-46.902	0.3124	14170.10	0.0007	0.3475
Ca	44	3	He	13.281	0.0033	154.00	0	0.002807
Ca	44	3	He	-11.019	0.0024	106.00	0	0.002807
Ca	44	3	He	24.576	0.0038	172.00	0	0.002807
Ti	47	3	He	1.034	0.0004	20.00	0.0003	0.0001123
Ti	47	3	He	1.361	0.0005	24.00	0.0003	0.0001123
Ti	47	3	He	1.482	0.0006	26.00	0.0003	0.0001123
V	51	3	He	-0.043	0.0077	356.01	0.0137	0.008308
V	51	3	He	0.006	0.0084	376.01	0.0137	0.008308
V	51	3	He	0.008	0.0084	382.01	0.0137	0.008308
Cr	52	3	He	0.744	0.0343	1580.13	0.0171	0.02156
Cr	52	3	He	0.723	0.0339	1520.12	0.0171	0.02156
Cr	52	3	He	0.635	0.0324	1470.12	0.0171	0.02156
Mn	55	3	He	1.044	0.0099	458.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.315	0.0119	534.01	0.0073	0.002316
Mn	55	3	He	1.2	0.0111	502.01	0.0073	0.002316
Fe	57	3	He	105.367	0.0369	1700.15	0.0003	0.002736
Fe	57	3	He	126.563	0.0437	1960.19	0.0003	0.002736
Fe	57	3	He	120.895	0.0419	1900.17	0.0003	0.002736
Co	59	3	He	0.067	0.0042	192.00	0.0332	0.001922
Co	59	3	He	0.122	0.006	268.00	0.0332	0.001922
Co	59	3	He	0.087	0.0048	218.00	0.0332	0.001922
Ni	60	3	He	427.945	3.995	184239.13	0.0093	0.003141
Ni	60	3	He	443.923	4.1441	185751.34	0.0093	0.003141
Ni	60	3	He	436.159	4.0717	184669.44	0.0093	0.003141
Cu	63	3	He	-0.031	0.0029	134.00	0.027	0.003732
Cu	63	3	He	0.007	0.0039	176.00	0.027	0.003732
Cu	63	3	He	-0.008	0.0035	160.00	0.027	0.003732
Zn	66	3	He	0.434	0.0034	156.00	0.0031	0.002032
Zn	66	3	He	0.737	0.0043	194.00	0.0031	0.002032
Zn	66	3	He	0.48	0.0035	160.00	0.0031	0.002032
As	75	3	He	-0.116	0.0005	22.00	0.0025	0.0007733
As	75	3	He	-0.163	0.0004	16.00	0.0025	0.0007733
As	75	3	He	0.077	0.001	44.00	0.0025	0.0007733
Sr	88	3	He	-0.023	0.0038	150.01	0.0105	0.004071
Sr	88	3	He	-0.038	0.0037	140.00	0.0105	0.004071
Sr	88	3	He	-0.118	0.0028	110.00	0.0105	0.004071
Mo	98	3	He	684.259	16.0122	627734.95	0.0234	0.003908
Mo	98	3	He	714.969	16.7307	636971.20	0.0234	0.003908
Mo	98	3	He	705.132	16.5006	640282.06	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.036	0.0002	8.00	0.0056	0
Cd	111	3	He	0.028	0.0002	6.00	0.0056	0
Cd	111	3	He	0.073	0.0004	16.00	0.0056	0
Sn	120	3	He	0.065	0.062	2430.27	0.0169	0.0609
Sn	120	3	He	-0.138	0.0586	2230.24	0.0169	0.0609
Sn	120	3	He	-0.203	0.0575	2230.28	0.0169	0.0609
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Sb	121	3	He	0.021	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.025	0.0009	36.67	0.0161	0.0005433
Ba	137	3	He	-0.119	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	-0.216	0	0.00	0.0053	0.001141
Ba	137	3	He	-0.118	0.0005	20.00	0.0053	0.001141
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Pb	208	3	He	-0.012	0.0013	100.00	0.0332	0.001693
Pb	208	3	He	-0.002	0.0016	120.00	0.0332	0.001693
Pb	208	3	He	-0.025	0.0009	80.00	0.0332	0.001693
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	0.001	0.0008	120.00	0.0338	0.0007949
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
Sc	45	1	No Gas			1193954.67		
Sc	45	1	No Gas			1203974.28		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1194796.15		
Ge	72	1	No Gas			619095.15		
Ge	72	1	No Gas			624220.54		
Ge	72	1	No Gas			632881.51		
Sc	45	2	H2			85332.00		
Sc	45	2	H2			87965.59		
Sc	45	2	H2			86869.60		
Ge	72	2	H2			71419.21		
Ge	72	2	H2			71107.82		
Ge	72	2	H2			71238.77		
In	115	2	H2			180134.06		
In	115	2	H2			179533.57		
In	115	2	H2			181229.22		
Sc	45	3	He			23687.50		
Sc	45	3	He			23958.30		
Sc	45	3	He			24619.26		
Ge	72	3	He			46117.08		
Ge	72	3	He			44823.35		
Ge	72	3	He			45354.88		
In	115	3	He			39220.44		
In	115	3	He			38087.63		
In	115	3	He			38819.24		
Tb	159	3	He			147721.03		
Tb	159	3	He			147739.52		
Tb	159	3	He			149921.35		
Bi	209	3	He			111403.96		
Bi	209	3	He			112462.75		
Bi	209	3	He			112957.65		

Quantitation Report

Data File Name 274SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:17:23 PM
Sample Name 410-234748-F-1-C DU@100
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

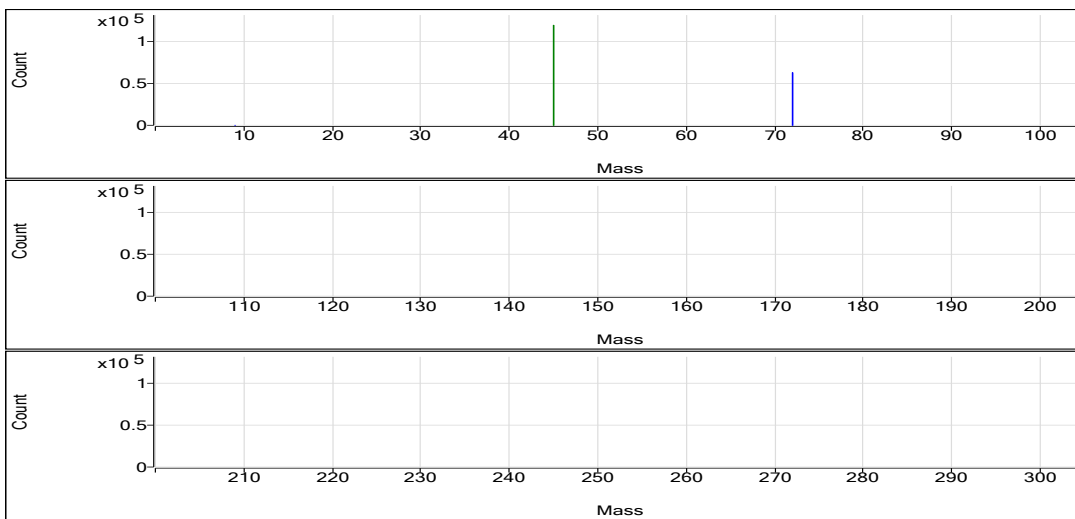
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.022	ppb	27.6	64.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.009	ppb	N/A	1.55	0.0000	Pulse	1.5000	3
Na	23	72	He	2924.976	ppb	0.7	244630.15	5.4850	Pulse	0.1000	3
Mg	24	72	He	8.205	ppb	12.2	626.70	0.0141	Pulse	0.1000	3
Al	27	72	He	470.995	ppb	7.0	6207.98	0.1391	Pulse	0.1000	3
K	39	72	He	21.058	ppb	448.0	16188.85	0.3632	Pulse	0.5000	3
Ca	44	72	He	6.047	ppb	34.0	136.00	0.0030	Pulse	0.5000	3
Ti	47	72	He	0.506	ppb	58.1	12.00	0.0003	Pulse	0.5000	3
V	51	72	He	0.011	ppb	296.3	377.34	0.0085	Pulse	0.5000	3
Cr	52	72	He	0.567	ppb	24.2	1393.44	0.0312	Pulse	0.1000	3
Mn	55	72	He	1.187	ppb	11.0	489.34	0.0110	Pulse	0.5000	3
Fe	57	72	He	132.910	ppb	6.8	2043.52	0.0458	Pulse	0.1000	3
Co	59	72	He	0.095	ppb	5.3	226.00	0.0051	Pulse	0.5000	3
Ni	60	72	He	447.406	ppb	2.1	186255.40	4.1766	Pulse	0.5000	3
Cu	63	72	He	0.008	ppb	167.6	176.00	0.0039	Pulse	0.5000	3
Zn	66	72	He	0.941	ppb	7.1	221.33	0.0050	Pulse	0.5000	3
As	75	72	He	-0.057	ppb	N/A	28.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.064	ppb	N/A	130.01	0.0034	Pulse	0.1000	3
Mo	98	115	He	716.611	ppb	2.8	640563.05	16.7691	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	6.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.043	ppb	23.3	9.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	0.020	ppb	177.4	2340.26	0.0612	Pulse	0.1000	3
Sb	121	115	He	-0.003	ppb	N/A	18.89	0.0005	Pulse	0.3000	3
Ba	137	115	He	0.032	ppb	561.6	50.00	0.0013	Pulse	0.1000	3
Tl	205	159	He	-0.005	ppb	N/A	70.00	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.021	ppb	N/A	150.00	0.0010	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	100.00	0.0007	Pulse	0.1000	3

ISTD Table:

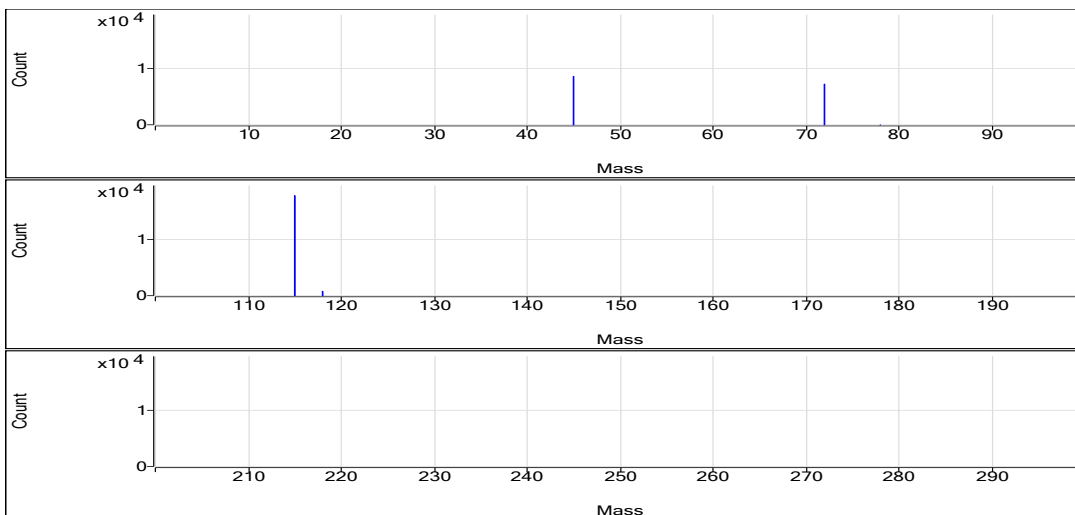
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1193773.34	0.5	91.3	Analog	0.1000	3
No Gas	Ge	72	628469.65	0.5	95.9	Pulse	0.1000	3
H2	Sc	45	86317.59	2.2	105.1	Pulse	0.1000	3
H2	Ge	72	72648.21	0.8	106.3	Pulse	0.1000	3
H2	In	115	178160.88	0.8	104.4	Pulse	0.1000	3
He	Sc	45	23437.32	2.5	91.5	Pulse	0.1000	3
He	Ge	72	44602.58	1.5	93.9	Pulse	0.1000	3
He	In	115	38208.08	1.3	93.3	Pulse	0.1000	3
He	Tb	159	148333.02	1.1	93.0	Pulse	0.1000	3
He	Bi	209	113245.24	1.2	96.8	Pulse	0.1000	3

No Gas

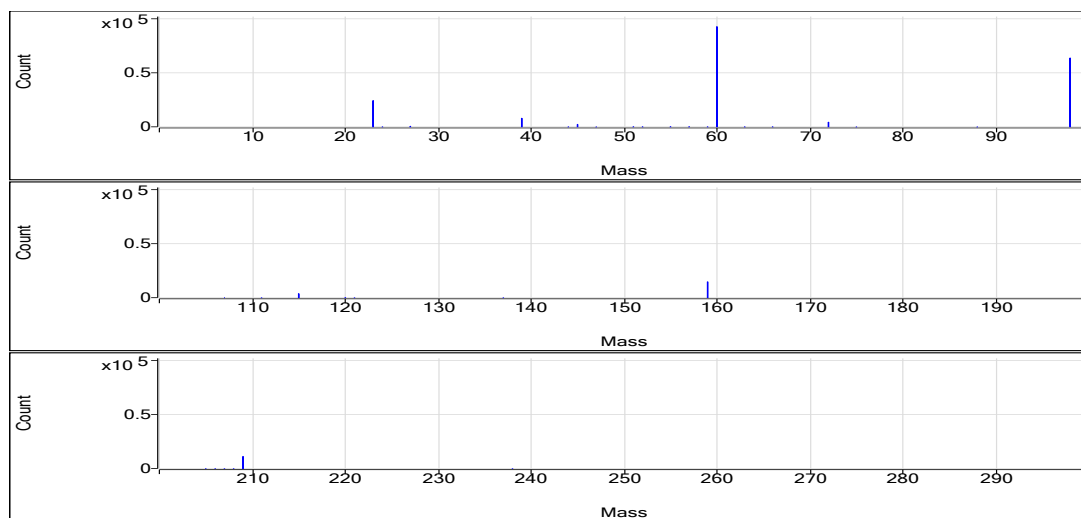


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0.0001	68.00	0.0011	7.835E-05
Be	9	1	No Gas	0.016	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	0.022	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.003	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Na	23	3	He	2938.913	5.5103	245329.06	0.0018	0.1731
Na	23	3	He	2933.059	5.4996	241879.51	0.0018	0.1731
Na	23	3	He	2902.955	5.445	246681.87	0.0018	0.1731
Mg	24	3	He	9.291	0.015	670.03	0.0009	0.006537
Mg	24	3	He	8.004	0.0139	610.04	0.0009	0.006537
Mg	24	3	He	7.32	0.0132	600.03	0.0009	0.006537
Al	27	3	He	446.08	0.1319	5871.16	0.0003	0.00231
Al	27	3	He	458.718	0.1355	5961.23	0.0003	0.00231
Al	27	3	He	508.187	0.1499	6791.56	0.0003	0.00231
K	39	3	He	125.707	0.4414	19653.82	0.0007	0.3475
K	39	3	He	-5.04	0.3437	15116.97	0.0007	0.3475
K	39	3	He	-57.492	0.3045	13795.77	0.0007	0.3475
Ca	44	3	He	8.423	0.0031	140.00	0	0.002807
Ca	44	3	He	4.852	0.003	132.00	0	0.002807
Ca	44	3	He	4.867	0.003	136.00	0	0.002807
Ti	47	3	He	0.795	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.516	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	0.207	0.0002	8.00	0.0003	0.0001123
V	51	3	He	0.036	0.0088	392.01	0.0137	0.008308
V	51	3	He	-0.026	0.008	350.01	0.0137	0.008308
V	51	3	He	0.022	0.0086	390.01	0.0137	0.008308
Cr	52	3	He	0.723	0.0339	1510.13	0.0171	0.02156
Cr	52	3	He	0.468	0.0296	1300.10	0.0171	0.02156
Cr	52	3	He	0.508	0.0302	1370.10	0.0171	0.02156
Mn	55	3	He	1.333	0.012	536.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	1.147	0.0107	470.01	0.0073	0.002316
Mn	55	3	He	1.08	0.0102	462.01	0.0073	0.002316
Fe	57	3	He	132.33	0.0456	2030.19	0.0003	0.002736
Fe	57	3	He	124.233	0.043	1890.16	0.0003	0.002736
Fe	57	3	He	142.167	0.0488	2210.22	0.0003	0.002736
Co	59	3	He	0.09	0.0049	218.00	0.0332	0.001922
Co	59	3	He	0.1	0.0052	230.00	0.0332	0.001922
Co	59	3	He	0.095	0.0051	230.00	0.0332	0.001922
Ni	60	3	He	441.056	4.1173	183312.63	0.0093	0.003141
Ni	60	3	He	458.466	4.2797	188226.78	0.0093	0.003141
Ni	60	3	He	442.695	4.1326	187226.80	0.0093	0.003141
Cu	63	3	He	-0.007	0.0035	158.00	0.027	0.003732
Cu	63	3	He	0.012	0.004	178.00	0.027	0.003732
Cu	63	3	He	0.019	0.0042	192.00	0.027	0.003732
Zn	66	3	He	0.934	0.0049	220.00	0.0031	0.002032
Zn	66	3	He	1.012	0.0052	228.00	0.0031	0.002032
Zn	66	3	He	0.878	0.0048	216.00	0.0031	0.002032
As	75	3	He	-0.074	0.0006	26.00	0.0025	0.0007733
As	75	3	He	-0.054	0.0006	28.00	0.0025	0.0007733
As	75	3	He	-0.044	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	-0.044	0.0036	140.01	0.0105	0.004071
Sr	88	3	He	-0.137	0.0026	100.00	0.0105	0.004071
Sr	88	3	He	-0.011	0.004	150.01	0.0105	0.004071
Mo	98	3	He	694.275	16.2466	630238.19	0.0234	0.003908
Mo	98	3	He	732.528	17.1415	649849.05	0.0234	0.003908
Mo	98	3	He	723.031	16.9193	641601.90	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.055	0.0003	12.00	0.0056	0
Cd	111	3	He	0.038	0.0002	8.00	0.0056	0
Cd	111	3	He	0.038	0.0002	8.00	0.0056	0
Sn	120	3	He	0.058	0.0619	2400.26	0.0169	0.0609
Sn	120	3	He	0.018	0.0612	2320.27	0.0169	0.0609
Sn	120	3	He	-0.014	0.0607	2300.24	0.0169	0.0609
Sb	121	3	He	-0.018	0.0003	10.00	0.0161	0.0005433
Sb	121	3	He	0.01	0.0007	26.67	0.0161	0.0005433
Sb	121	3	He	-0.001	0.0005	20.00	0.0161	0.0005433
Ba	137	3	He	-0.021	0.001	40.00	0.0053	0.001141
Ba	137	3	He	0.234	0.0024	90.00	0.0053	0.001141
Ba	137	3	He	-0.116	0.0005	20.00	0.0053	0.001141
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	-0.014	0.0012	130.01	0.0332	0.001693
Pb	208	3	He	-0.029	0.0007	60.00	0.0332	0.001693
Pb	208	3	He	-0.019	0.0011	100.00	0.0332	0.001693
U	238	3	He	-0.011	0.0004	60.00	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.00	0.0338	0.0007949
Sc	45	1	No Gas			1190847.79		
Sc	45	1	No Gas			1200218.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1190254.20		
Ge	72	1	No Gas			626143.47		
Ge	72	1	No Gas			627145.65		
Ge	72	1	No Gas			632119.83		
Sc	45	2	H2			84166.11		
Sc	45	2	H2			87273.01		
Sc	45	2	H2			87513.65		
Ge	72	2	H2			72031.81		
Ge	72	2	H2			72695.26		
Ge	72	2	H2			73217.55		
In	115	2	H2			179768.92		
In	115	2	H2			177838.16		
In	115	2	H2			176875.56		
Sc	45	3	He			23707.84		
Sc	45	3	He			22756.20		
Sc	45	3	He			23847.92		
Ge	72	3	He			44522.17		
Ge	72	3	He			43981.00		
Ge	72	3	He			45304.58		
In	115	3	He			38808.88		
In	115	3	He			37927.13		
In	115	3	He			37937.36		
Tb	159	3	He			146891.66		
Tb	159	3	He			147971.72		
Tb	159	3	He			150135.67		
Bi	209	3	He			112170.91		
Bi	209	3	He			112734.01		
Bi	209	3	He			114830.80		

Quantitation Report

Data File Name 275SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:19:35 PM
Sample Name 410-234748-F-1-D MS@100
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

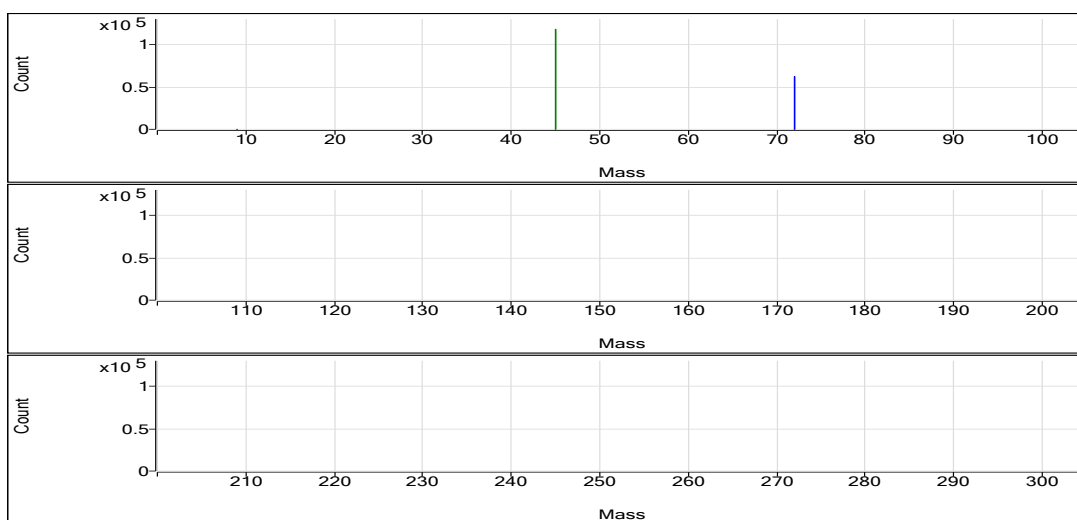
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.539	ppb	6.3	406.01	0.0007	Pulse	0.5000	3
Se	78	72	H2	0.949	ppb	18.2	36.44	0.0005	Pulse	1.5000	3
Na	23	72	He	2916.736	ppb	1.7	245151.60	5.4700	Pulse	0.1000	3
Mg	24	72	He	54.031	ppb	6.3	2513.60	0.0560	Pulse	0.1000	3
Al	27	72	He	531.345	ppb	3.9	7018.36	0.1566	Pulse	0.1000	3
K	39	72	He	64.725	ppb	138.1	17718.37	0.3959	Pulse	0.5000	3
Ca	44	72	He	43.433	ppb	11.1	204.00	0.0045	Pulse	0.5000	3
Ti	47	72	He	4.410	ppb	24.3	66.67	0.0015	Pulse	0.5000	3
V	51	72	He	4.766	ppb	2.5	3291.01	0.0734	Pulse	0.5000	3
Cr	52	72	He	5.587	ppb	3.3	5247.68	0.1170	Pulse	0.1000	3
Mn	55	72	He	5.925	ppb	2.9	2040.81	0.0455	Pulse	0.5000	3
Fe	57	72	He	160.320	ppb	2.9	2450.26	0.0547	Pulse	0.1000	3
Co	59	72	He	4.885	ppb	2.8	7359.70	0.1642	Pulse	0.5000	3
Ni	60	72	He	439.670	ppb	2.5	183927.47	4.1044	Pulse	0.5000	3
Cu	63	72	He	4.805	ppb	4.4	5983.80	0.1335	Pulse	0.5000	3
Zn	66	72	He	6.075	ppb	4.3	940.03	0.0210	Pulse	0.5000	3
As	75	72	He	4.582	ppb	5.8	558.01	0.0125	Pulse	0.5000	3
Sr	88	115	He	0.337	ppb	27.4	290.01	0.0076	Pulse	0.1000	3
Mo	98	115	He	706.439	ppb	0.6	631562.66	16.5311	Pulse	0.1000	3
Ag	107	115	He	0.530	ppb	6.9	1016.73	0.0266	Pulse	0.1000	3
Cd	111	115	He	0.593	ppb	14.7	127.33	0.0033	Pulse	0.5000	3
Sn	120	115	He	1.269	ppb	23.4	3143.75	0.0823	Pulse	0.1000	3
Sb	121	115	He	0.906	ppb	6.0	578.90	0.0152	Pulse	0.3000	3
Ba	137	115	He	5.432	ppb	9.5	1140.08	0.0298	Pulse	0.1000	3
Tl	205	159	He	0.940	ppb	5.8	3563.87	0.0239	Pulse	0.1000	3
Pb	208	159	He	0.460	ppb	3.8	2533.51	0.0170	Pulse	0.1000	3
U	238	159	He	0.484	ppb	5.9	2556.99	0.0171	Pulse	0.1000	3

ISTD Table:

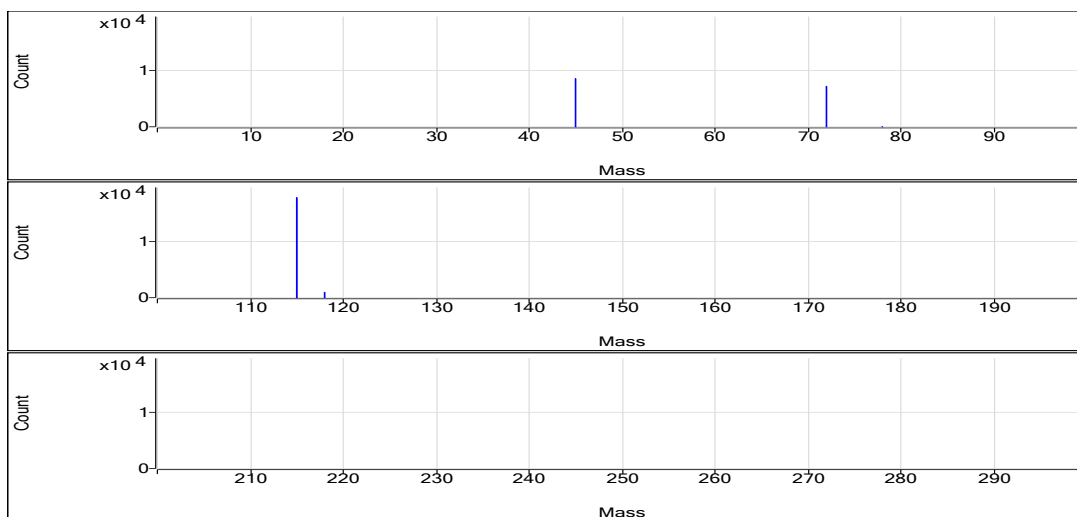
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1180957.51	0.6	90.3	Analog	0.1000	3
No Gas	Ge	72	623805.54	0.6	95.2	Pulse	0.1000	3
H2	Sc	45	85526.59	0.4	104.1	Pulse	0.1000	3
H2	Ge	72	71951.57	0.8	105.3	Pulse	0.1000	3
H2	In	115	177539.48	1.3	104.1	Pulse	0.1000	3
He	Sc	45	24525.70	1.7	95.8	Pulse	0.1000	3
He	Ge	72	44826.86	2.0	94.3	Pulse	0.1000	3
He	In	115	38205.85	1.1	93.3	Pulse	0.1000	3
He	Tb	159	149358.99	0.4	93.7	Pulse	0.1000	3
He	Bi	209	112186.88	1.7	95.9	Pulse	0.1000	3

No Gas

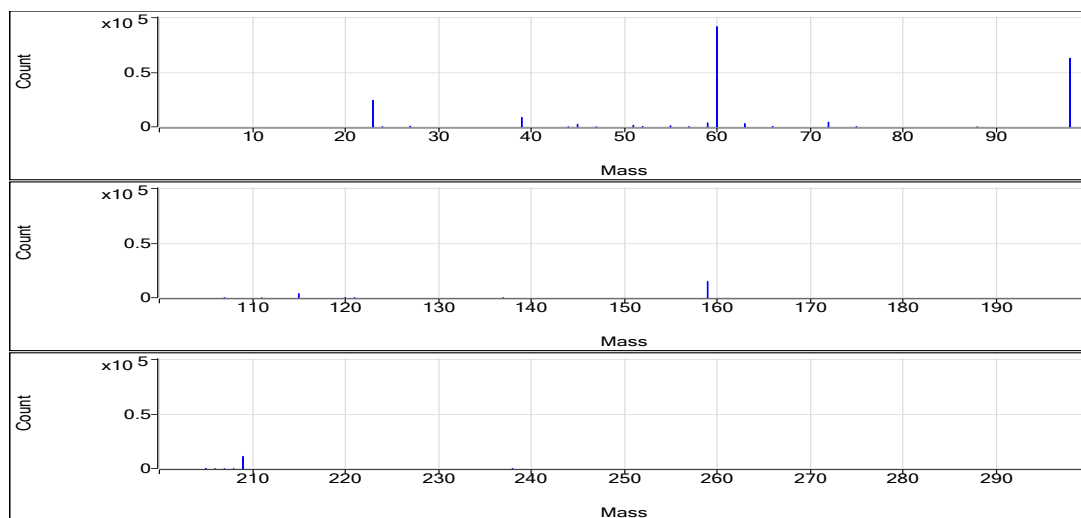


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.5	0.0006	378.01	0.0011	7.835E-05
Be	9	1	No Gas	0.564	0.0007	422.01	0.0011	7.835E-05
Be	9	1	No Gas	0.553	0.0007	418.01	0.0011	7.835E-05
Se	78	2	H2	1.145	0.0006	43.33	0.0005	2.594E-05
Se	78	2	H2	0.819	0.0004	32.00	0.0005	2.594E-05
Se	78	2	H2	0.883	0.0005	34.00	0.0005	2.594E-05
Na	23	3	He	2955.682	5.5407	245798.12	0.0018	0.1731
Na	23	3	He	2933.508	5.5005	243515.80	0.0018	0.1731
Na	23	3	He	2861.017	5.3688	246140.89	0.0018	0.1731
Mg	24	3	He	54.871	0.0568	2520.25	0.0009	0.006537
Mg	24	3	He	50.312	0.0526	2330.23	0.0009	0.006537
Mg	24	3	He	56.912	0.0587	2690.32	0.0009	0.006537
Al	27	3	He	530.027	0.1563	6931.67	0.0003	0.00231
Al	27	3	He	552.902	0.1629	7211.73	0.0003	0.00231
Al	27	3	He	511.106	0.1508	6911.67	0.0003	0.00231
K	39	3	He	164.072	0.4701	20855.23	0.0007	0.3475
K	39	3	He	39.309	0.3769	16684.47	0.0007	0.3475
K	39	3	He	-9.206	0.3406	15615.40	0.0007	0.3475
Ca	44	3	He	39.059	0.0044	194.00	0	0.002807
Ca	44	3	He	42.66	0.0045	200.00	0	0.002807
Ca	44	3	He	48.582	0.0048	218.00	0	0.002807
Ti	47	3	He	3.263	0.0011	50.00	0.0003	0.0001123
Ti	47	3	He	4.578	0.0015	68.00	0.0003	0.0001123
Ti	47	3	He	5.39	0.0018	82.00	0.0003	0.0001123
V	51	3	He	4.627	0.0715	3172.32	0.0137	0.008308
V	51	3	He	4.836	0.0744	3292.34	0.0137	0.008308
V	51	3	He	4.834	0.0743	3408.37	0.0137	0.008308
Cr	52	3	He	5.547	0.1163	5160.99	0.0171	0.02156
Cr	52	3	He	5.429	0.1143	5060.95	0.0171	0.02156
Cr	52	3	He	5.786	0.1204	5521.11	0.0171	0.02156
Mn	55	3	He	5.986	0.046	2040.14	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6.06	0.0465	2060.14	0.0073	0.002316
Mn	55	3	He	5.728	0.0441	2022.14	0.0073	0.002316
Fe	57	3	He	165.551	0.0564	2500.27	0.0003	0.002736
Fe	57	3	He	156.837	0.0535	2370.23	0.0003	0.002736
Fe	57	3	He	158.571	0.0541	2480.27	0.0003	0.002736
Co	59	3	He	4.811	0.1618	7175.62	0.0332	0.001922
Co	59	3	He	5.041	0.1694	7499.76	0.0332	0.001922
Co	59	3	He	4.803	0.1615	7403.72	0.0332	0.001922
Ni	60	3	He	443.286	4.1381	183576.23	0.0093	0.003141
Ni	60	3	He	448.484	4.1866	185349.98	0.0093	0.003141
Ni	60	3	He	427.239	3.9884	182856.20	0.0093	0.003141
Cu	63	3	He	4.76	0.1323	5871.09	0.027	0.003732
Cu	63	3	He	5.033	0.1397	6185.20	0.027	0.003732
Cu	63	3	He	4.621	0.1286	5895.10	0.027	0.003732
Zn	66	3	He	5.947	0.0206	912.03	0.0031	0.002032
Zn	66	3	He	5.902	0.0204	904.03	0.0031	0.002032
Zn	66	3	He	6.377	0.0219	1004.04	0.0031	0.002032
As	75	3	He	4.824	0.0131	580.01	0.0025	0.0007733
As	75	3	He	4.622	0.0126	556.01	0.0025	0.0007733
As	75	3	He	4.299	0.0117	538.01	0.0025	0.0007733
Sr	88	3	He	0.237	0.0066	250.01	0.0105	0.004071
Sr	88	3	He	0.353	0.0078	300.01	0.0105	0.004071
Sr	88	3	He	0.419	0.0085	320.02	0.0105	0.004071
Mo	98	3	He	705.844	16.5172	630071.79	0.0234	0.003908
Mo	98	3	He	702.881	16.4479	635504.33	0.0234	0.003908
Mo	98	3	He	710.592	16.6283	629111.87	0.0234	0.003908
Ag	107	3	He	0.543	0.0273	1040.07	0.0493	0.0004851
Ag	107	3	He	0.489	0.0246	950.05	0.0493	0.0004851
Ag	107	3	He	0.558	0.028	1060.08	0.0493	0.0004851
Cd	111	3	He	0.589	0.0033	126.00	0.0056	0
Cd	111	3	He	0.683	0.0038	148.00	0.0056	0
Cd	111	3	He	0.509	0.0029	108.00	0.0056	0
Sn	120	3	He	1.145	0.0802	3060.38	0.0169	0.0609
Sn	120	3	He	1.054	0.0787	3040.41	0.0169	0.0609
Sn	120	3	He	1.607	0.088	3330.45	0.0169	0.0609
Sb	121	3	He	0.936	0.0156	596.68	0.0161	0.0005433
Sb	121	3	He	0.844	0.0141	546.68	0.0161	0.0005433
Sb	121	3	He	0.939	0.0157	593.35	0.0161	0.0005433
Ba	137	3	He	5.494	0.0301	1150.08	0.0053	0.001141
Ba	137	3	He	5.912	0.0324	1250.09	0.0053	0.001141
Ba	137	3	He	4.89	0.027	1020.07	0.0053	0.001141
Tl	205	3	He	1.002	0.0254	3780.59	0.0248	0.0005854
Tl	205	3	He	0.912	0.0232	3460.51	0.0248	0.0005854
Tl	205	3	He	0.905	0.023	3450.52	0.0248	0.0005854
Pb	208	3	He	0.447	0.0165	1240.10	0.0332	0.001693
Pb	208	3	He	0.479	0.0176	1320.10	0.0332	0.001693
Pb	208	3	He	0.453	0.0167	1370.12	0.0332	0.001693
U	238	3	He	0.47	0.0167	2480.30	0.0338	0.0007949
U	238	3	He	0.516	0.0182	2720.35	0.0338	0.0007949
U	238	3	He	0.464	0.0165	2470.31	0.0338	0.0007949
Sc	45	1	No Gas			1174677.64		
Sc	45	1	No Gas			1180009.04		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1188185.84		
Ge	72	1	No Gas			620317.92		
Ge	72	1	No Gas			623030.62		
Ge	72	1	No Gas			628068.08		
Sc	45	2	H2			85924.85		
Sc	45	2	H2			85222.03		
Sc	45	2	H2			85432.90		
Ge	72	2	H2			71458.85		
Ge	72	2	H2			72584.27		
Ge	72	2	H2			71811.58		
In	115	2	H2			178693.90		
In	115	2	H2			174833.73		
In	115	2	H2			179090.80		
Sc	45	3	He			24198.31		
Sc	45	3	He			24378.95		
Sc	45	3	He			24999.85		
Ge	72	3	He			44362.12		
Ge	72	3	He			44271.97		
Ge	72	3	He			45846.50		
In	115	3	He			38167.77		
In	115	3	He			38658.70		
In	115	3	He			37857.09		
Tb	159	3	He			148780.88		
Tb	159	3	He			149252.49		
Tb	159	3	He			150043.61		
Bi	209	3	He			114064.38		
Bi	209	3	He			112281.39		
Bi	209	3	He			110214.87		

Quantitation Report

Data File Name 276SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:21:48 PM
Sample Name 410-234748-F-1-E MSD@100
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

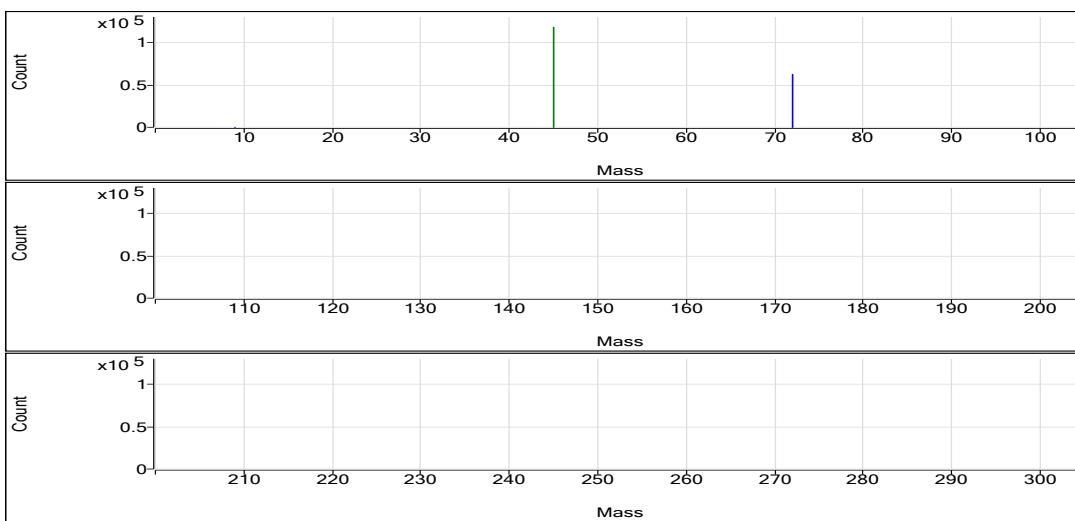
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.437	ppb	12.1	340.01	0.0005	Pulse	0.5000	3
Se	78	72	H2	0.952	ppb	21.4	36.67	0.0005	Pulse	1.5000	3
Na	23	72	He	2831.468	ppb	0.7	241688.40	5.3151	Pulse	0.1000	3
Mg	24	72	He	50.666	ppb	7.8	2410.24	0.0530	Pulse	0.1000	3
Al	27	72	He	487.042	ppb	5.3	6538.15	0.1438	Pulse	0.1000	3
K	39	72	He	54.788	ppb	175.1	17628.96	0.3884	Pulse	0.5000	3
Ca	44	72	He	43.784	ppb	24.7	207.33	0.0046	Pulse	0.5000	3
Ti	47	72	He	5.487	ppb	6.5	82.67	0.0018	Pulse	0.5000	3
V	51	72	He	4.612	ppb	5.0	3241.67	0.0713	Pulse	0.5000	3
Cr	52	72	He	4.980	ppb	6.9	4847.56	0.1067	Pulse	0.1000	3
Mn	55	72	He	5.450	ppb	1.8	1914.12	0.0421	Pulse	0.5000	3
Fe	57	72	He	177.299	ppb	9.3	2737.00	0.0602	Pulse	0.1000	3
Co	59	72	He	4.718	ppb	3.1	7213.64	0.1587	Pulse	0.5000	3
Ni	60	72	He	426.641	ppb	1.9	181081.00	3.9829	Pulse	0.5000	3
Cu	63	72	He	4.696	ppb	3.0	5937.79	0.1306	Pulse	0.5000	3
Zn	66	72	He	5.159	ppb	3.9	823.36	0.0181	Pulse	0.5000	3
As	75	72	He	4.246	ppb	5.1	527.34	0.0116	Pulse	0.5000	3
Sr	88	115	He	0.356	ppb	32.4	296.68	0.0078	Pulse	0.1000	3
Mo	98	115	He	695.288	ppb	2.7	619073.92	16.2703	Pulse	0.1000	3
Ag	107	115	He	0.501	ppb	9.0	956.73	0.0252	Pulse	0.1000	3
Cd	111	115	He	0.553	ppb	8.4	118.00	0.0031	Pulse	0.5000	3
Sn	120	115	He	1.344	ppb	13.4	3180.45	0.0836	Pulse	0.1000	3
Sb	121	115	He	0.992	ppb	13.3	630.02	0.0165	Pulse	0.3000	3
Ba	137	115	He	4.797	ppb	6.3	1006.74	0.0265	Pulse	0.1000	3
Tl	205	159	He	0.976	ppb	4.3	3653.91	0.0248	Pulse	0.1000	3
Pb	208	159	He	0.487	ppb	3.7	2636.86	0.0179	Pulse	0.1000	3
U	238	159	He	0.496	ppb	3.6	2587.00	0.0175	Pulse	0.1000	3

ISTD Table:

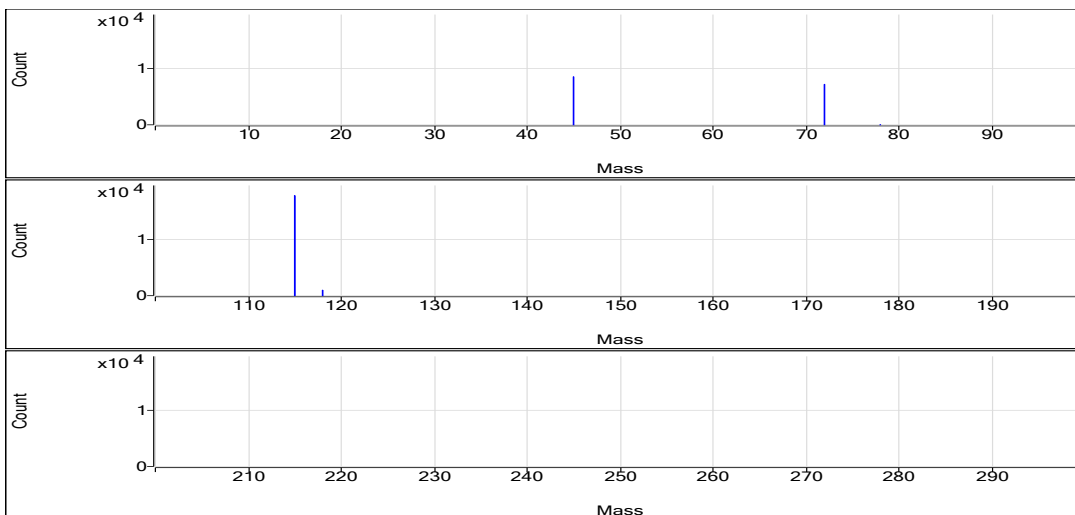
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1184880.66	1.6	90.6	Analog	0.1000	3
No Gas	Ge	72	627287.54	1.2	95.7	Pulse	0.1000	3
H2	Sc	45	85473.10	1.0	104.0	Pulse	0.1000	3
H2	Ge	72	72102.68	0.3	105.5	Pulse	0.1000	3
H2	In	115	177992.22	0.9	104.3	Pulse	0.1000	3
He	Sc	45	24248.62	1.2	94.7	Pulse	0.1000	3
He	Ge	72	45475.32	1.8	95.7	Pulse	0.1000	3
He	In	115	38068.60	2.8	93.0	Pulse	0.1000	3
He	Tb	159	147509.52	0.8	92.5	Pulse	0.1000	3
He	Bi	209	111780.58	0.5	95.6	Pulse	0.1000	3

No Gas

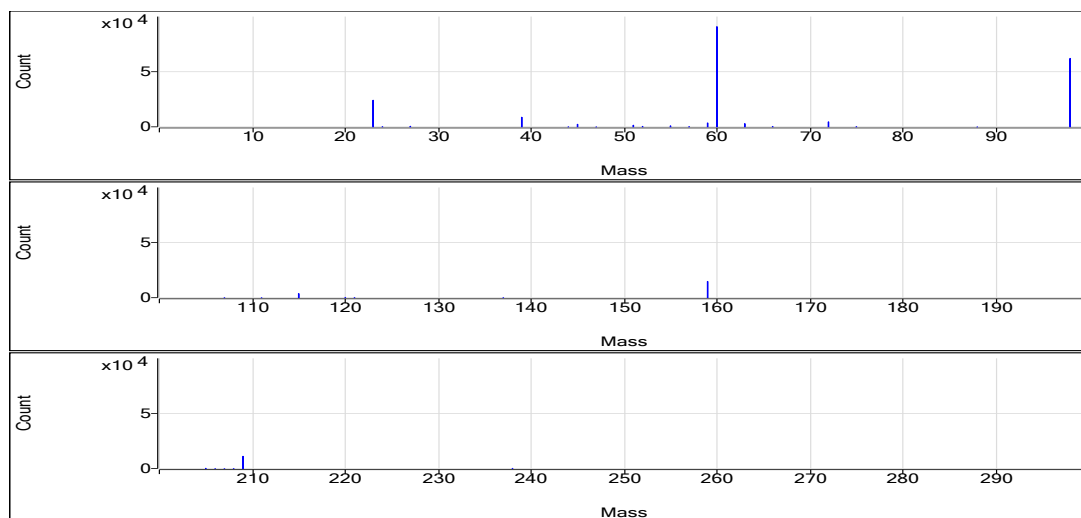


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.386	0.0005	306.00	0.0011	7.835E-05
Be	9	1	No Gas	0.433	0.0005	342.01	0.0011	7.835E-05
Be	9	1	No Gas	0.491	0.0006	372.01	0.0011	7.835E-05
Se	78	2	H2	0.919	0.0005	35.33	0.0005	2.594E-05
Se	78	2	H2	0.767	0.0004	30.00	0.0005	2.594E-05
Se	78	2	H2	1.171	0.0006	44.67	0.0005	2.594E-05
Na	23	3	He	2854.013	5.3561	238735.86	0.0018	0.1731
Na	23	3	He	2817.049	5.289	244123.69	0.0018	0.1731
Na	23	3	He	2823.342	5.3004	242205.64	0.0018	0.1731
Mg	24	3	He	46.496	0.0491	2190.21	0.0009	0.006537
Mg	24	3	He	54.351	0.0563	2600.25	0.0009	0.006537
Mg	24	3	He	51.15	0.0534	2440.26	0.0009	0.006537
Al	27	3	He	493.482	0.1456	6491.49	0.0003	0.00231
Al	27	3	He	509.102	0.1502	6931.64	0.0003	0.00231
Al	27	3	He	458.542	0.1355	6191.33	0.0003	0.00231
K	39	3	He	164.165	0.4702	20957.40	0.0007	0.3475
K	39	3	He	15.463	0.359	16572.31	0.0007	0.3475
K	39	3	He	-15.264	0.3361	15357.18	0.0007	0.3475
Ca	44	3	He	54.207	0.005	222.00	0	0.002807
Ca	44	3	He	44.542	0.0046	212.00	0	0.002807
Ca	44	3	He	32.602	0.0041	188.00	0	0.002807
Ti	47	3	He	5.699	0.0019	84.00	0.0003	0.0001123
Ti	47	3	He	5.073	0.0017	78.00	0.0003	0.0001123
Ti	47	3	He	5.691	0.0019	86.00	0.0003	0.0001123
V	51	3	He	4.829	0.0743	3310.36	0.0137	0.008308
V	51	3	He	4.639	0.0717	3308.35	0.0137	0.008308
V	51	3	He	4.368	0.068	3106.31	0.0137	0.008308
Cr	52	3	He	5.213	0.1106	4930.92	0.0171	0.02156
Cr	52	3	He	4.585	0.0999	4610.86	0.0171	0.02156
Cr	52	3	He	5.143	0.1094	5000.91	0.0171	0.02156
Mn	55	3	He	5.341	0.0413	1840.11	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	5.539	0.0427	1972.13	0.0073	0.002316
Mn	55	3	He	5.472	0.0422	1930.12	0.0073	0.002316
Fe	57	3	He	176.507	0.0599	2670.32	0.0003	0.002736
Fe	57	3	He	194.242	0.0657	3030.40	0.0003	0.002736
Fe	57	3	He	161.149	0.0549	2510.28	0.0003	0.002736
Co	59	3	He	4.813	0.1618	7213.64	0.0332	0.001922
Co	59	3	He	4.55	0.1531	7065.57	0.0332	0.001922
Co	59	3	He	4.791	0.1611	7361.71	0.0332	0.001922
Ni	60	3	He	435.316	4.0638	181134.53	0.0093	0.003141
Ni	60	3	He	419.029	3.9119	180560.66	0.0093	0.003141
Ni	60	3	He	425.579	3.973	181547.80	0.0093	0.003141
Cu	63	3	He	4.837	0.1344	5991.15	0.027	0.003732
Cu	63	3	He	4.698	0.1307	6031.15	0.027	0.003732
Cu	63	3	He	4.553	0.1267	5791.07	0.027	0.003732
Zn	66	3	He	5.037	0.0177	790.02	0.0031	0.002032
Zn	66	3	He	5.05	0.0178	820.02	0.0031	0.002032
Zn	66	3	He	5.389	0.0188	860.03	0.0031	0.002032
As	75	3	He	4.378	0.0119	532.01	0.0025	0.0007733
As	75	3	He	3.996	0.011	506.01	0.0025	0.0007733
As	75	3	He	4.366	0.0119	544.01	0.0025	0.0007733
Sr	88	3	He	0.39	0.0081	300.01	0.0105	0.004071
Sr	88	3	He	0.228	0.0065	250.01	0.0105	0.004071
Sr	88	3	He	0.452	0.0088	340.01	0.0105	0.004071
Mo	98	3	He	716.535	16.7673	617409.25	0.0234	0.003908
Mo	98	3	He	681.523	15.9482	617771.16	0.0234	0.003908
Mo	98	3	He	687.805	16.0952	622041.36	0.0234	0.003908
Ag	107	3	He	0.547	0.0274	1010.07	0.0493	0.0004851
Ag	107	3	He	0.456	0.023	890.06	0.0493	0.0004851
Ag	107	3	He	0.499	0.0251	970.06	0.0493	0.0004851
Cd	111	3	He	0.6	0.0034	124.00	0.0056	0
Cd	111	3	He	0.552	0.0031	120.00	0.0056	0
Cd	111	3	He	0.507	0.0028	110.00	0.0056	0
Sn	120	3	He	1.493	0.0861	3170.44	0.0169	0.0609
Sn	120	3	He	1.394	0.0844	3270.48	0.0169	0.0609
Sn	120	3	He	1.145	0.0802	3100.43	0.0169	0.0609
Sb	121	3	He	0.949	0.0158	583.35	0.0161	0.0005433
Sb	121	3	He	1.141	0.0189	733.36	0.0161	0.0005433
Sb	121	3	He	0.886	0.0148	573.35	0.0161	0.0005433
Ba	137	3	He	5.082	0.028	1030.07	0.0053	0.001141
Ba	137	3	He	4.478	0.0248	960.07	0.0053	0.001141
Ba	137	3	He	4.832	0.0267	1030.08	0.0053	0.001141
Tl	205	3	He	1.012	0.0257	3750.60	0.0248	0.0005854
Tl	205	3	He	0.93	0.0236	3510.53	0.0248	0.0005854
Tl	205	3	He	0.988	0.0251	3700.61	0.0248	0.0005854
Pb	208	3	He	0.505	0.0185	1490.13	0.0332	0.001693
Pb	208	3	He	0.488	0.0179	1500.14	0.0332	0.001693
Pb	208	3	He	0.469	0.0173	1290.11	0.0332	0.001693
U	238	3	He	0.516	0.0182	2660.35	0.0338	0.0007949
U	238	3	He	0.493	0.0174	2590.34	0.0338	0.0007949
U	238	3	He	0.48	0.017	2510.30	0.0338	0.0007949
Sc	45	1	No Gas			1192771.15		
Sc	45	1	No Gas			1198167.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1163703.81		
Ge	72	1	No Gas			627210.85		
Ge	72	1	No Gas			634882.06		
Ge	72	1	No Gas			619769.72		
Sc	45	2	H2			84980.75		
Sc	45	2	H2			84959.61		
Sc	45	2	H2			86478.95		
Ge	72	2	H2			71840.83		
Ge	72	2	H2			72334.13		
Ge	72	2	H2			72133.09		
In	115	2	H2			177181.40		
In	115	2	H2			176976.97		
In	115	2	H2			179818.30		
Sc	45	3	He			24358.69		
Sc	45	3	He			24479.07		
Sc	45	3	He			23908.10		
Ge	72	3	He			44572.84		
Ge	72	3	He			46157.25		
Ge	72	3	He			45695.86		
In	115	3	He			36844.31		
In	115	3	He			38758.95		
In	115	3	He			38669.33		
Tb	159	3	He			146213.32		
Tb	159	3	He			148607.29		
Tb	159	3	He			147707.94		
Bi	209	3	He			112121.49		
Bi	209	3	He			112018.06		
Bi	209	3	He			111202.19		

Quantitation Report

Data File Name 277SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:24:00 PM
Sample Name LB 410-679797/1-B
Sample Type Sample
Comment MS-C3
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

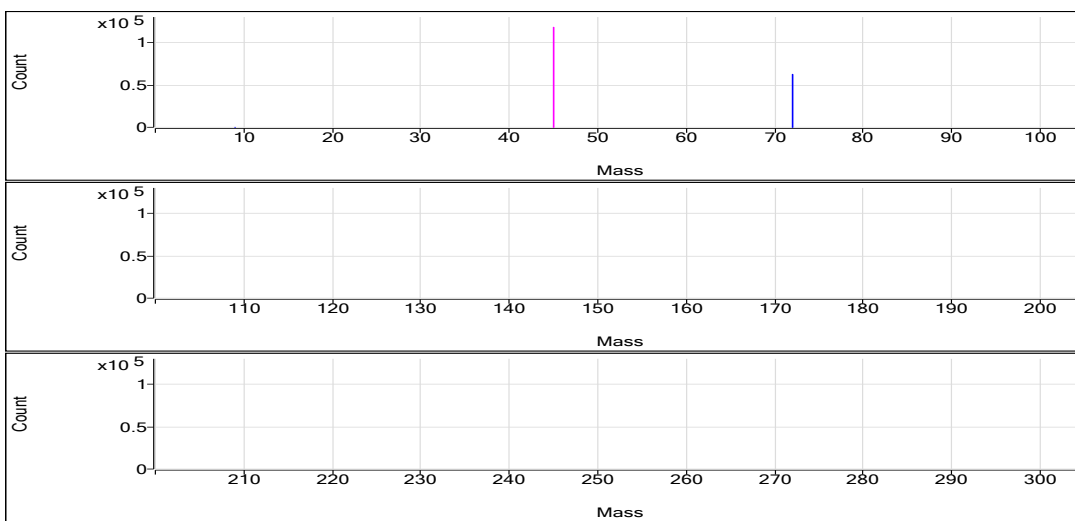
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.008	ppb	193.1	54.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.027	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	296675.743	ppb	1.1	24302489.64	538.9514	Analog	0.1000	3
Mg	24	72	He	8.682	ppb	20.9	653.36	0.0145	Pulse	0.1000	3
Al	27	72	He	-1.857	ppb	N/A	80.00	0.0018	Pulse	0.1000	3
K	39	72	He	28.625	ppb	259.5	16657.28	0.3689	Pulse	0.5000	3
Ca	44	72	He	-3.566	ppb	N/A	120.00	0.0027	Pulse	0.5000	3
Ti	47	72	He	-0.024	ppb	N/A	4.67	0.0001	Pulse	0.5000	3
V	51	72	He	-0.009	ppb	N/A	368.68	0.0082	Pulse	0.5000	3
Cr	52	72	He	-0.160	ppb	N/A	850.05	0.0188	Pulse	0.1000	3
Mn	55	72	He	1.026	ppb	17.8	441.34	0.0098	Pulse	0.5000	3
Fe	57	72	He	87.275	ppb	13.0	1396.77	0.0310	Pulse	0.1000	3
Co	59	72	He	0.006	ppb	120.6	96.00	0.0021	Pulse	0.5000	3
Ni	60	72	He	0.208	ppb	19.3	229.33	0.0051	Pulse	0.5000	3
Cu	63	72	He	0.106	ppb	10.2	297.34	0.0066	Pulse	0.5000	3
Zn	66	72	He	0.274	ppb	46.2	130.00	0.0029	Pulse	0.5000	3
As	75	72	He	-0.013	ppb	N/A	33.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.048	ppb	201.3	173.34	0.0046	Pulse	0.1000	3
Mo	98	115	He	4.927	ppb	9.5	4514.12	0.1192	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	1211.3	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	116.6	2.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.715	ppb	N/A	1846.85	0.0488	Pulse	0.1000	3
Sb	121	115	He	0.006	ppb	216.6	24.44	0.0006	Pulse	0.3000	3
Ba	137	115	He	0.464	ppb	31.4	136.67	0.0036	Pulse	0.1000	3
Tl	205	159	He	-0.014	ppb	N/A	36.67	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.018	ppb	7.5	336.68	0.0023	Pulse	0.1000	3
U	238	159	He	-0.005	ppb	N/A	90.00	0.0006	Pulse	0.1000	3

ISTD Table:

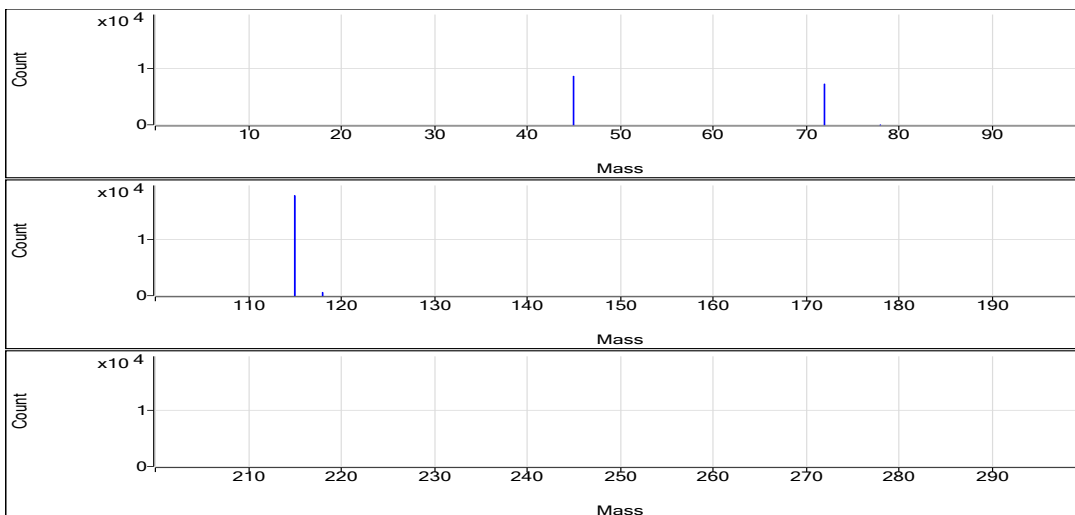
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1182248.76	2.8	90.4	Mix	0.1000	3
No Gas	Ge	72	626370.37	2.2	95.6	Pulse	0.1000	3
H2	Sc	45	86598.77	0.9	105.4	Pulse	0.1000	3
H2	Ge	72	72691.45	1.8	106.4	Pulse	0.1000	3
H2	In	115	177975.97	1.5	104.3	Pulse	0.1000	3
He	Sc	45	23550.89	0.8	92.0	Pulse	0.1000	3
He	Ge	72	45097.58	1.6	94.9	Pulse	0.1000	3
He	In	115	37917.57	2.8	92.6	Pulse	0.1000	3
He	Tb	159	147314.91	1.8	92.4	Pulse	0.1000	3
He	Bi	209	109728.54	0.4	93.8	Pulse	0.1000	3

No Gas

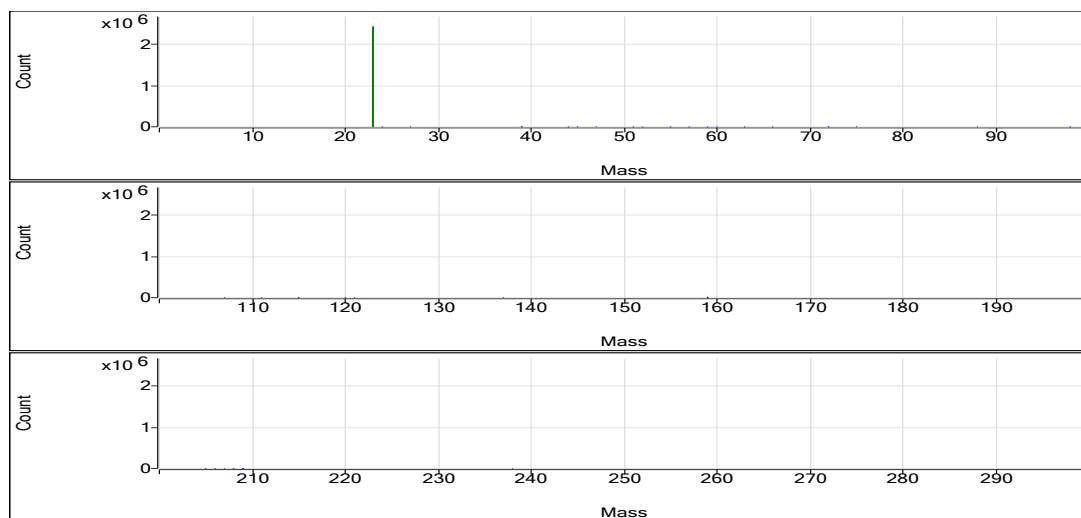


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.01	0.0001	42.00	0.0011	7.835E-05
Be	9	1	No Gas	0.02	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.016	0	1.33	0.0005	2.594E-05
Na	23	3	He	294758.02	535.4687	24468824.64	0.0018	0.1731
Na	23	3	He	294700.615	535.3644	24265274.64	0.0018	0.1731
Na	23	3	He	300568.596	546.021	24173369.64	0.0018	0.1731
Mg	24	3	He	9.824	0.0155	710.03	0.0009	0.006537
Mg	24	3	He	6.592	0.0126	570.03	0.0009	0.006537
Mg	24	3	He	9.63	0.0154	680.03	0.0009	0.006537
Al	27	3	He	0.335	0.0024	110.00	0.0003	0.00231
Al	27	3	He	-3.396	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-2.509	0.0016	70.00	0.0003	0.00231
K	39	3	He	113.524	0.4323	19755.92	0.0007	0.3475
K	39	3	He	-3.192	0.3451	15641.44	0.0007	0.3475
K	39	3	He	-24.456	0.3292	14574.47	0.0007	0.3475
Ca	44	3	He	-13.236	0.0023	104.00	0	0.002807
Ca	44	3	He	0.432	0.0028	128.00	0	0.002807
Ca	44	3	He	2.107	0.0029	128.00	0	0.002807
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.365	0.0002	10.00	0.0003	0.0001123
V	51	3	He	-0.015	0.0081	370.01	0.0137	0.008308
V	51	3	He	-0.036	0.0078	354.01	0.0137	0.008308
V	51	3	He	0.024	0.0086	382.01	0.0137	0.008308
Cr	52	3	He	-0.071	0.0204	930.05	0.0171	0.02156
Cr	52	3	He	-0.074	0.0203	920.06	0.0171	0.02156
Cr	52	3	He	-0.336	0.0158	700.04	0.0171	0.02156
Mn	55	3	He	0.924	0.0091	414.01	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.916	0.009	408.01	0.0073	0.002316
Mn	55	3	He	1.237	0.0113	502.01	0.0073	0.002316
Fe	57	3	He	84.794	0.0302	1380.10	0.0003	0.002736
Fe	57	3	He	77.383	0.0278	1260.09	0.0003	0.002736
Fe	57	3	He	99.649	0.035	1550.12	0.0003	0.002736
Co	59	3	He	-0.001	0.0019	86.00	0.0332	0.001922
Co	59	3	He	0.014	0.0024	108.00	0.0332	0.001922
Co	59	3	He	0.006	0.0021	94.00	0.0332	0.001922
Ni	60	3	He	0.226	0.0053	240.00	0.0093	0.003141
Ni	60	3	He	0.236	0.0053	242.00	0.0093	0.003141
Ni	60	3	He	0.162	0.0047	206.00	0.0093	0.003141
Cu	63	3	He	0.118	0.0069	316.01	0.027	0.003732
Cu	63	3	He	0.097	0.0064	288.00	0.027	0.003732
Cu	63	3	He	0.103	0.0065	288.00	0.027	0.003732
Zn	66	3	He	0.134	0.0025	112.00	0.0031	0.002032
Zn	66	3	He	0.382	0.0032	146.00	0.0031	0.002032
Zn	66	3	He	0.305	0.003	132.00	0.0031	0.002032
As	75	3	He	-0.011	0.0007	34.00	0.0025	0.0007733
As	75	3	He	-0.113	0.0005	22.00	0.0025	0.0007733
As	75	3	He	0.087	0.001	44.00	0.0025	0.0007733
Sr	88	3	He	-0.064	0.0034	130.00	0.0105	0.004071
Sr	88	3	He	0.103	0.0052	200.01	0.0105	0.004071
Sr	88	3	He	0.105	0.0052	190.01	0.0105	0.004071
Mo	98	3	He	5.271	0.1272	4860.92	0.0234	0.003908
Mo	98	3	He	4.394	0.1067	4140.67	0.0234	0.003908
Mo	98	3	He	5.116	0.1236	4540.78	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.029	0.0002	6.00	0.0056	0
Sn	120	3	He	-0.956	0.0448	1710.16	0.0169	0.0609
Sn	120	3	He	-0.967	0.0446	1730.16	0.0169	0.0609
Sn	120	3	He	-0.221	0.0572	2100.22	0.0169	0.0609
Sb	121	3	He	0.02	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	-0.007	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	0.006	0.0006	23.33	0.0161	0.0005433
Ba	137	3	He	0.577	0.0042	160.01	0.0053	0.001141
Ba	137	3	He	0.516	0.0039	150.00	0.0053	0.001141
Ba	137	3	He	0.299	0.0027	100.00	0.0053	0.001141
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	0.018	0.0023	180.01	0.0332	0.001693
Pb	208	3	He	0.019	0.0023	200.01	0.0332	0.001693
Pb	208	3	He	0.017	0.0022	160.01	0.0332	0.001693
U	238	3	He	-0.007	0.0006	80.00	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	-0.003	0.0007	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1148970.06		
Sc	45	1	No Gas			1182897.56		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1214878.65		
Ge	72	1	No Gas			617351.59		
Ge	72	1	No Gas			619234.21		
Ge	72	1	No Gas			642525.30		
Sc	45	2	H2			87432.93		
Sc	45	2	H2			85975.06		
Sc	45	2	H2			86388.33		
Ge	72	2	H2			73117.27		
Ge	72	2	H2			71248.03		
Ge	72	2	H2			73709.04		
In	115	2	H2			180266.66		
In	115	2	H2			178666.50		
In	115	2	H2			174994.76		
Sc	45	3	He			23367.24		
Sc	45	3	He			23727.87		
Sc	45	3	He			23557.57		
Ge	72	3	He			45696.09		
Ge	72	3	He			45324.78		
Ge	72	3	He			44271.87		
In	115	3	He			38217.88		
In	115	3	He			38819.34		
In	115	3	He			36754.27		
Tb	159	3	He			144902.25		
Tb	159	3	He			150040.13		
Tb	159	3	He			147002.35		
Bi	209	3	He			110216.35		
Bi	209	3	He			109287.62		
Bi	209	3	He			109681.66		

Quantitation Report

Data File Name 279_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:28:24 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

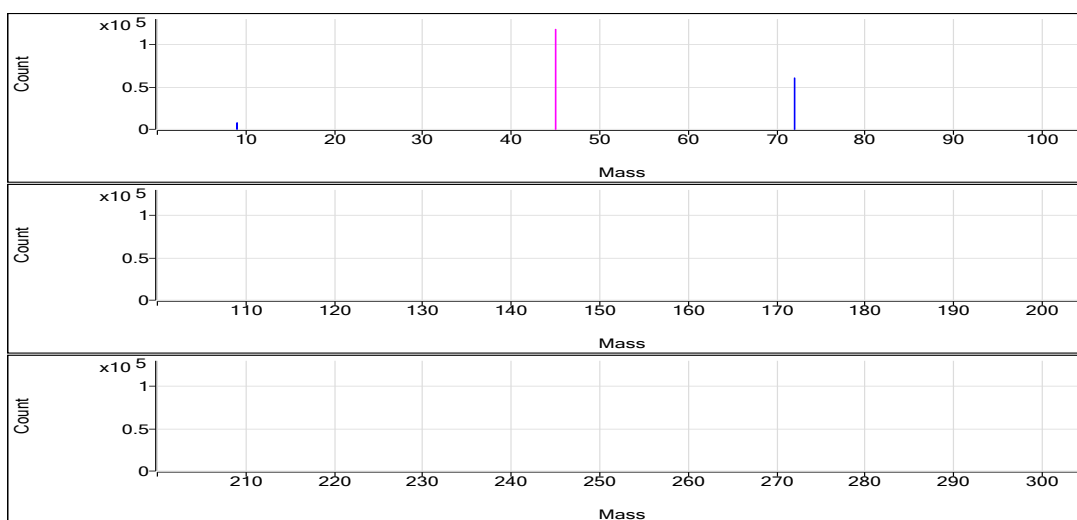
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.134	ppb	6.1	15604.60	0.0257	Pulse	0.5000	3
Se	78	72	H2	25.043	ppb	4.4	881.81	0.0127	Pulse	1.5000	3
Na	23	72	He	2517.569	ppb	1.0	204251.17	4.7451	Pulse	0.1000	3
Mg	24	72	He	2496.399	ppb	2.0	98721.16	2.2938	Pulse	0.1000	3
Al	27	72	He	2504.210	ppb	5.4	31390.29	0.7296	Pulse	0.1000	3
K	39	72	He	2484.101	ppb	2.2	94871.34	2.2042	Pulse	0.5000	3
Ca	44	72	He	2468.472	ppb	2.4	4381.94	0.1018	Pulse	0.5000	3
Ti	47	72	He	2466.405	ppb	2.3	33015.81	0.7671	Pulse	0.5000	3
V	51	72	He	247.129	ppb	2.1	145637.08	3.3839	Pulse	0.5000	3
Cr	52	72	He	245.365	ppb	1.6	181368.66	4.2139	Pulse	0.1000	3
Mn	55	72	He	246.672	ppb	1.6	77561.03	1.8021	Pulse	0.5000	3
Fe	57	72	He	2455.119	ppb	2.2	34343.76	0.7980	Pulse	0.1000	3
Co	59	72	He	248.494	ppb	1.5	355419.51	8.2577	Pulse	0.5000	3
Ni	60	72	He	246.732	ppb	1.5	99195.56	2.3047	Pulse	0.5000	3
Cu	63	72	He	247.553	ppb	1.5	288028.03	6.6919	Pulse	0.5000	3
Zn	66	72	He	246.539	ppb	0.8	33150.55	0.7701	Pulse	0.5000	3
As	75	72	He	249.222	ppb	1.6	27386.65	0.6363	Pulse	0.5000	3
Sr	88	115	He	25.241	ppb	1.6	10246.97	0.2681	Pulse	0.1000	3
Mo	98	115	He	25.531	ppb	3.4	22977.35	0.6012	Pulse	0.1000	3
Ag	107	115	He	25.562	ppb	1.4	48185.24	1.2608	Pulse	0.1000	3
Cd	111	115	He	25.057	ppb	4.9	5371.63	0.1406	Pulse	0.5000	3
Sn	120	115	He	25.455	ppb	5.3	18741.87	0.4905	Pulse	0.1000	3
Sb	121	115	He	25.036	ppb	2.3	15447.81	0.4042	Pulse	0.3000	3
Ba	137	115	He	250.930	ppb	2.4	50674.89	1.3261	Pulse	0.1000	3
Tl	205	159	He	24.874	ppb	1.5	92258.00	0.6169	Pulse	0.1000	3
Pb	208	159	He	25.437	ppb	1.4	126653.93	0.8469	Pulse	0.1000	3
U	238	159	He	25.725	ppb	0.3	129975.42	0.8691	Pulse	0.1000	3

ISTD Table:

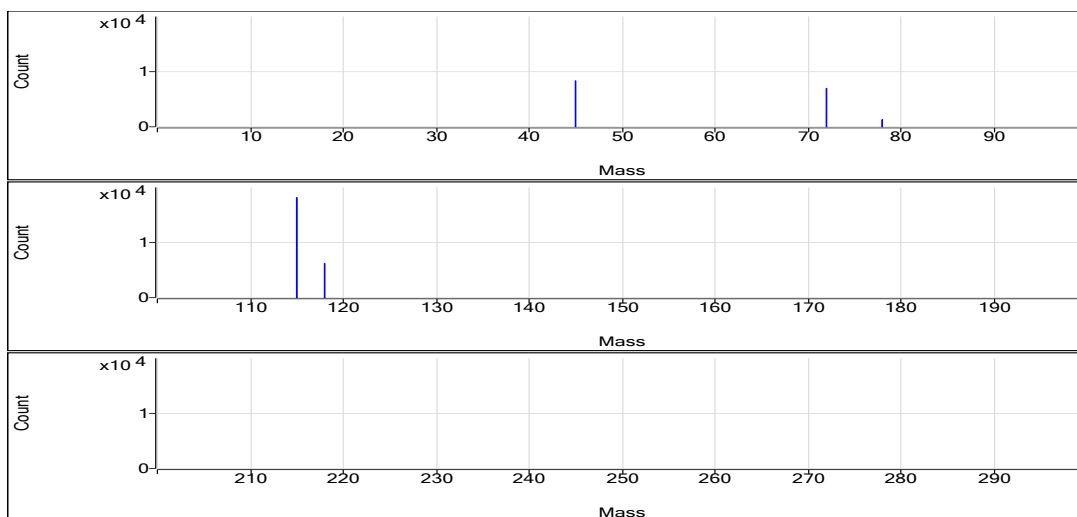
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1180721.65	0.6	90.3	Mix	0.1000	3
No Gas	Ge	72	606729.95	0.6	92.6	Pulse	0.1000	3
H2	Sc	45	82732.06	1.7	100.7	Pulse	0.1000	3
H2	Ge	72	69363.32	1.2	101.5	Pulse	0.1000	3
H2	In	115	180186.99	0.3	105.6	Pulse	0.1000	3
He	Sc	45	23517.53	2.9	91.8	Pulse	0.1000	3
He	Ge	72	43048.65	1.8	90.6	Pulse	0.1000	3
He	In	115	38223.54	1.5	93.4	Pulse	0.1000	3
He	Tb	159	149549.86	0.5	93.8	Pulse	0.1000	3
He	Bi	209	112476.63	1.3	96.2	Pulse	0.1000	3

No Gas

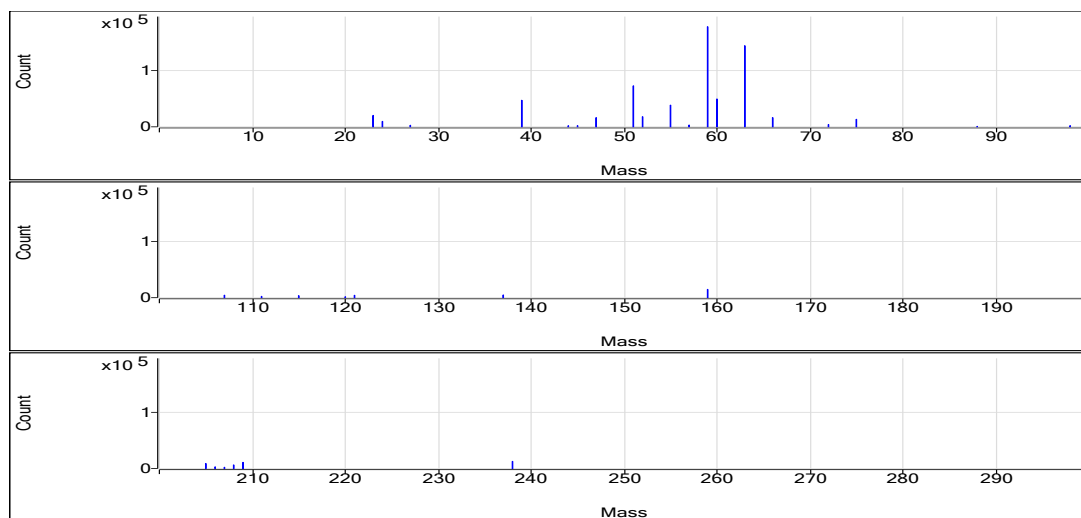


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	22.725	0.0242	14600.37	0.0011	7.835E-05
Be	9	1	No Gas	24.028	0.0256	15563.21	0.0011	7.835E-05
Be	9	1	No Gas	25.649	0.0273	16650.23	0.0011	7.835E-05
Se	78	2	H2	25.231	0.0128	884.03	0.0005	2.594E-05
Se	78	2	H2	26.051	0.0132	910.03	0.0005	2.594E-05
Se	78	2	H2	23.848	0.0121	851.36	0.0005	2.594E-05
Na	23	3	He	2489.895	4.6948	204175.54	0.0018	0.1731
Na	23	3	He	2540.166	4.7861	201718.30	0.0018	0.1731
Na	23	3	He	2522.645	4.7543	206859.66	0.0018	0.1731
Mg	24	3	He	2456.555	2.2573	98168.45	0.0009	0.006537
Mg	24	3	He	2554.04	2.3466	98901.43	0.0009	0.006537
Mg	24	3	He	2478.601	2.2775	99093.59	0.0009	0.006537
Al	27	3	He	2389.941	0.6964	30288.20	0.0003	0.00231
Al	27	3	He	2654.615	0.7733	32592.80	0.0003	0.00231
Al	27	3	He	2468.075	0.7191	31289.88	0.0003	0.00231
K	39	3	He	2505.018	2.2198	96537.30	0.0007	0.3475
K	39	3	He	2526.228	2.2356	94224.36	0.0007	0.3475
K	39	3	He	2421.056	2.157	93852.36	0.0007	0.3475
Ca	44	3	He	2401.598	0.0991	4310.60	0	0.002807
Ca	44	3	He	2492.18	0.1028	4330.59	0	0.002807
Ca	44	3	He	2511.638	0.1035	4504.64	0	0.002807
Ti	47	3	He	2417.887	0.7521	32706.57	0.0003	0.0001123
Ti	47	3	He	2529.342	0.7867	33157.45	0.0003	0.0001123
Ti	47	3	He	2451.986	0.7627	33183.40	0.0003	0.0001123
V	51	3	He	243.392	3.3329	144945.02	0.0137	0.008308
V	51	3	He	252.976	3.4638	145986.23	0.0137	0.008308
V	51	3	He	245.018	3.3551	145979.98	0.0137	0.008308
Cr	52	3	He	242.952	4.1727	181468.96	0.0171	0.02156
Cr	52	3	He	250.021	4.2935	180955.47	0.0171	0.02156
Cr	52	3	He	243.123	4.1756	181681.56	0.0171	0.02156
Mn	55	3	He	244.26	1.7845	77605.45	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	251.353	1.8362	77390.15	0.0073	0.002316
Mn	55	3	He	244.403	1.7855	77687.48	0.0073	0.002316
Fe	57	3	He	2442.582	0.7939	34527.57	0.0003	0.002736
Fe	57	3	He	2514.057	0.8171	34437.12	0.0003	0.002736
Fe	57	3	He	2408.718	0.783	34066.58	0.0003	0.002736
Co	59	3	He	246.274	8.1839	355914.69	0.0332	0.001922
Co	59	3	He	252.744	8.3989	353983.47	0.0332	0.001922
Co	59	3	He	246.466	8.1903	356360.38	0.0332	0.001922
Ni	60	3	He	245.466	2.2929	99715.27	0.0093	0.003141
Ni	60	3	He	250.801	2.3426	98733.57	0.0093	0.003141
Ni	60	3	He	243.927	2.2785	99137.83	0.0093	0.003141
Cu	63	3	He	246.494	6.6633	289784.81	0.027	0.003732
Cu	63	3	He	251.714	6.8044	286779.66	0.027	0.003732
Cu	63	3	He	244.451	6.6081	287519.63	0.027	0.003732
Zn	66	3	He	244.511	0.7638	33218.00	0.0031	0.002032
Zn	66	3	He	248.462	0.7761	32710.95	0.0031	0.002032
Zn	66	3	He	246.644	0.7705	33522.70	0.0031	0.002032
As	75	3	He	244.7	0.6247	27169.00	0.0025	0.0007733
As	75	3	He	252.226	0.6439	27138.84	0.0025	0.0007733
As	75	3	He	250.741	0.6401	27852.12	0.0025	0.0007733
Sr	88	3	He	25.026	0.2659	10233.63	0.0105	0.004071
Sr	88	3	He	25.692	0.2728	10253.63	0.0105	0.004071
Sr	88	3	He	25.004	0.2656	10253.64	0.0105	0.004071
Mo	98	3	He	24.537	0.578	22246.19	0.0234	0.003908
Mo	98	3	He	25.967	0.6114	22977.40	0.0234	0.003908
Mo	98	3	He	26.087	0.6142	23708.47	0.0234	0.003908
Ag	107	3	He	25.344	1.25	48115.10	0.0493	0.0004851
Ag	107	3	He	25.969	1.2809	48135.22	0.0493	0.0004851
Ag	107	3	He	25.372	1.2515	48305.41	0.0493	0.0004851
Cd	111	3	He	24.701	0.1386	5334.95	0.0056	0
Cd	111	3	He	26.428	0.1483	5573.03	0.0056	0
Cd	111	3	He	24.04	0.1349	5206.90	0.0056	0
Sn	120	3	He	24.532	0.475	18281.30	0.0169	0.0609
Sn	120	3	He	27.013	0.5168	19422.81	0.0169	0.0609
Sn	120	3	He	24.821	0.4798	18521.49	0.0169	0.0609
Sb	121	3	He	24.385	0.3937	15154.19	0.0161	0.0005433
Sb	121	3	He	25.527	0.4121	15487.82	0.0161	0.0005433
Sb	121	3	He	25.196	0.4068	15701.41	0.0161	0.0005433
Ba	137	3	He	250.119	1.3218	50875.61	0.0053	0.001141
Ba	137	3	He	257.397	1.3602	51116.75	0.0053	0.001141
Ba	137	3	He	245.276	1.2962	50032.31	0.0053	0.001141
Tl	205	3	He	24.476	0.607	90430.57	0.0248	0.0005854
Tl	205	3	He	25.204	0.6251	93961.82	0.0248	0.0005854
Tl	205	3	He	24.941	0.6185	92381.60	0.0248	0.0005854
Pb	208	3	He	25.47	0.848	66040.44	0.0332	0.001693
Pb	208	3	He	25.076	0.8349	66552.80	0.0332	0.001693
Pb	208	3	He	25.766	0.8578	67968.66	0.0332	0.001693
U	238	3	He	25.822	0.8724	129959.86	0.0338	0.0007949
U	238	3	He	25.677	0.8675	130401.13	0.0338	0.0007949
U	238	3	He	25.678	0.8675	129565.28	0.0338	0.0007949
Sc	45	1	No Gas			1185786.62		
Sc	45	1	No Gas			1183664.90		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1172713.42		
Ge	72	1	No Gas			602896.05		
Ge	72	1	No Gas			607918.74		
Ge	72	1	No Gas			609375.07		
Sc	45	2	H2			81261.50		
Sc	45	2	H2			83985.21		
Sc	45	2	H2			82949.46		
Ge	72	2	H2			68998.14		
Ge	72	2	H2			68797.33		
Ge	72	2	H2			70294.49		
In	115	2	H2			179781.19		
In	115	2	H2			180778.83		
In	115	2	H2			180000.95		
Sc	45	3	He			23527.34		
Sc	45	3	He			22836.69		
Sc	45	3	He			24188.55		
Ge	72	3	He			43489.47		
Ge	72	3	He			42146.50		
Ge	72	3	He			43509.98		
In	115	3	He			38618.62		
In	115	3	He			37716.49		
In	115	3	He			38729.08		
Tb	159	3	He			148974.03		
Tb	159	3	He			150321.69		
Tb	159	3	He			149353.86		
Bi	209	3	He			111132.35		
Bi	209	3	He			114065.02		
Bi	209	3	He			112232.53		

Quantitation Report

Data File Name 281_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:32:50 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

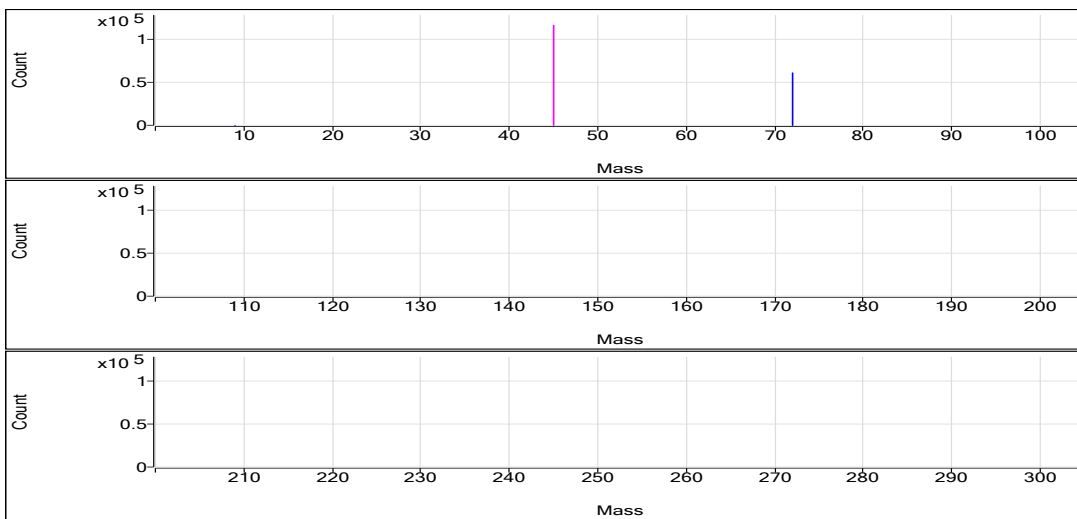
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.028	ppb	75.8	66.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.033	ppb	N/A	0.67	0.0000	Pulse	1.5000	3
Na	23	72	He	27.139	ppb	18.0	9749.78	0.2223	Pulse	0.1000	3
Mg	24	72	He	6.234	ppb	41.9	536.69	0.0122	Pulse	0.1000	3
Al	27	72	He	-1.412	ppb	N/A	83.33	0.0019	Pulse	0.1000	3
K	39	72	He	11.335	ppb	755.4	15628.97	0.3560	Pulse	0.5000	3
Ca	44	72	He	-12.341	ppb	N/A	101.33	0.0023	Pulse	0.5000	3
Ti	47	72	He	0.225	ppb	129.0	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	-0.011	ppb	N/A	358.01	0.0082	Pulse	0.5000	3
Cr	52	72	He	-0.172	ppb	N/A	816.71	0.0186	Pulse	0.1000	3
Mn	55	72	He	0.168	ppb	13.8	155.33	0.0035	Pulse	0.5000	3
Fe	57	72	He	-2.833	ppb	N/A	80.00	0.0018	Pulse	0.1000	3
Co	59	72	He	0.007	ppb	120.6	94.00	0.0021	Pulse	0.5000	3
Ni	60	72	He	0.063	ppb	45.6	163.33	0.0037	Pulse	0.5000	3
Cu	63	72	He	-0.025	ppb	N/A	134.00	0.0031	Pulse	0.5000	3
Zn	66	72	He	-0.247	ppb	N/A	55.33	0.0013	Pulse	0.5000	3
As	75	72	He	-0.059	ppb	N/A	27.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.132	ppb	N/A	103.34	0.0027	Pulse	0.1000	3
Mo	98	115	He	0.300	ppb	31.7	420.02	0.0109	Pulse	0.1000	3
Ag	107	115	He	-0.010	ppb	0.0	0.00	0.0000	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.071	ppb	N/A	2290.24	0.0597	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	89.0	35.56	0.0009	Pulse	0.3000	3
Ba	137	115	He	-0.085	ppb	N/A	26.67	0.0007	Pulse	0.1000	3
Tl	205	159	He	-0.001	ppb	N/A	83.33	0.0006	Pulse	0.1000	3
Pb	208	159	He	-0.018	ppb	N/A	163.33	0.0011	Pulse	0.1000	3
U	238	159	He	-0.003	ppb	N/A	103.33	0.0007	Pulse	0.1000	3

ISTD Table:

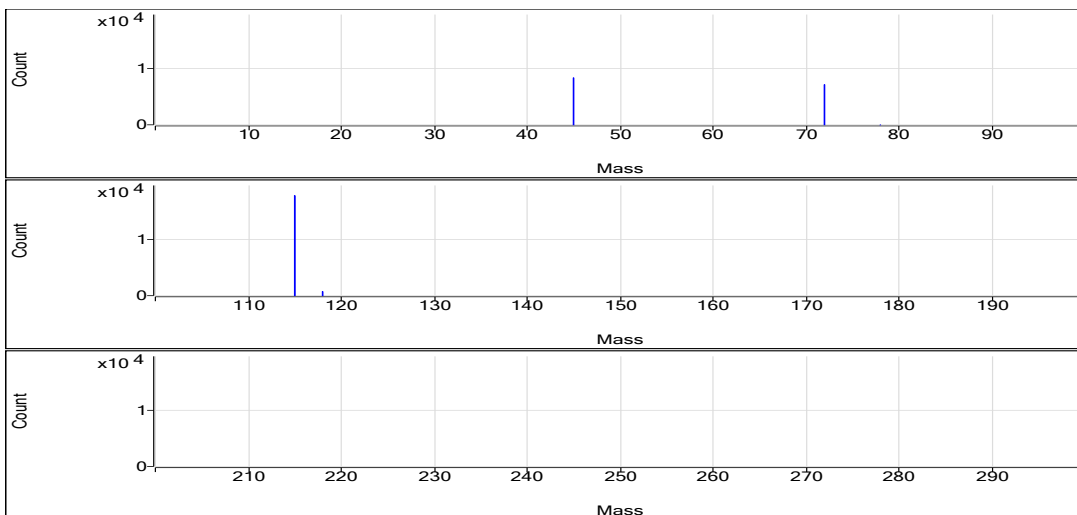
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1163302.54	0.2	89.0	Mix	0.1000	3
No Gas	Ge	72	609561.20	0.7	93.0	Pulse	0.1000	3
H2	Sc	45	83328.69	0.8	101.4	Pulse	0.1000	3
H2	Ge	72	71288.40	0.5	104.3	Pulse	0.1000	3
H2	In	115	177355.62	0.1	104.0	Pulse	0.1000	3
He	Sc	45	23430.59	2.5	91.5	Pulse	0.1000	3
He	Ge	72	43860.94	1.1	92.3	Pulse	0.1000	3
He	In	115	38365.65	1.4	93.7	Pulse	0.1000	3
He	Tb	159	149176.88	0.8	93.6	Pulse	0.1000	3
He	Bi	209	109708.82	0.9	93.8	Pulse	0.1000	3

No Gas

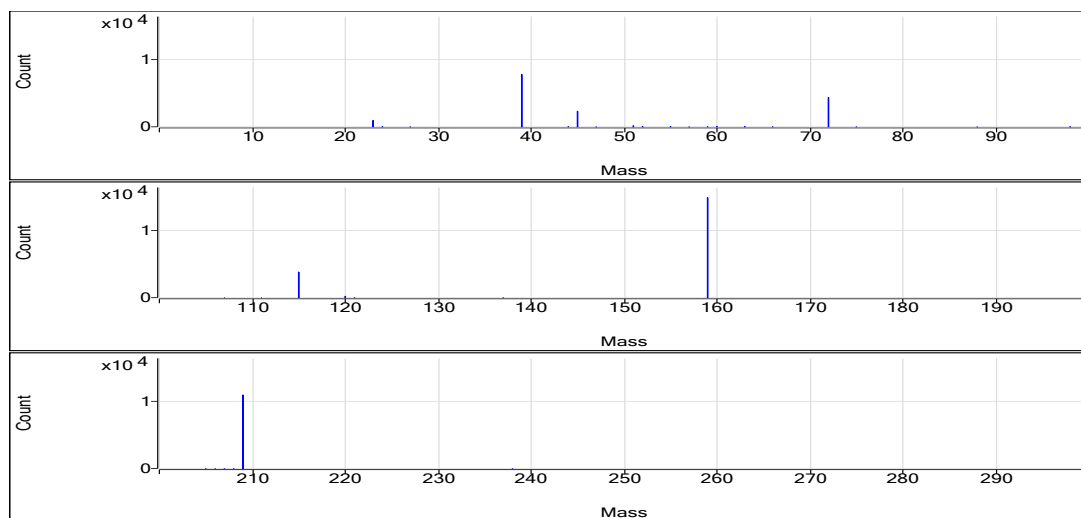


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.049	0.0001	80.00	0.0011	7.835E-05
Be	9	1	No Gas	0.006	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.029	0.0001	66.00	0.0011	7.835E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.014	0	1.33	0.0005	2.594E-05
Na	23	3	He	27.401	0.2228	9853.22	0.0018	0.1731
Na	23	3	He	22.122	0.2132	9392.89	0.0018	0.1731
Na	23	3	He	31.894	0.231	10003.22	0.0018	0.1731
Mg	24	3	He	3.232	0.0095	420.02	0.0009	0.006537
Mg	24	3	He	7.484	0.0134	590.03	0.0009	0.006537
Mg	24	3	He	7.986	0.0139	600.03	0.0009	0.006537
Al	27	3	He	-1.725	0.0018	80.00	0.0003	0.00231
Al	27	3	He	-0.919	0.002	90.00	0.0003	0.00231
Al	27	3	He	-1.594	0.0018	80.00	0.0003	0.00231
K	39	3	He	107.845	0.4281	18930.94	0.0007	0.3475
K	39	3	He	-18.299	0.3338	14704.63	0.0007	0.3475
K	39	3	He	-55.541	0.306	13251.35	0.0007	0.3475
Ca	44	3	He	-15.856	0.0022	96.00	0	0.002807
Ca	44	3	He	-14.514	0.0022	98.00	0	0.002807
Ca	44	3	He	-6.654	0.0025	110.00	0	0.002807
Ti	47	3	He	0.512	0.0003	12.00	0.0003	0.0001123
Ti	47	3	He	-0.069	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.233	0.0002	8.00	0.0003	0.0001123
V	51	3	He	-0.009	0.0082	362.01	0.0137	0.008308
V	51	3	He	0.04	0.0089	390.01	0.0137	0.008308
V	51	3	He	-0.064	0.0074	322.01	0.0137	0.008308
Cr	52	3	He	-0.176	0.0185	820.05	0.0171	0.02156
Cr	52	3	He	-0.239	0.0175	770.04	0.0171	0.02156
Cr	52	3	He	-0.1	0.0199	860.05	0.0171	0.02156
Mn	55	3	He	0.191	0.0037	164.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.168	0.0035	156.00	0.0073	0.002316
Mn	55	3	He	0.145	0.0034	146.00	0.0073	0.002316
Fe	57	3	He	-3.559	0.0016	70.00	0.0003	0.002736
Fe	57	3	He	1.366	0.0032	140.00	0.0003	0.002736
Fe	57	3	He	-6.307	0.0007	30.00	0.0003	0.002736
Co	59	3	He	0.009	0.0022	98.00	0.0332	0.001922
Co	59	3	He	0.013	0.0024	104.00	0.0332	0.001922
Co	59	3	He	-0.002	0.0018	80.00	0.0332	0.001922
Ni	60	3	He	0.056	0.0037	162.00	0.0093	0.003141
Ni	60	3	He	0.038	0.0035	154.00	0.0093	0.003141
Ni	60	3	He	0.094	0.004	174.00	0.0093	0.003141
Cu	63	3	He	-0.026	0.003	134.00	0.027	0.003732
Cu	63	3	He	-0.014	0.0034	148.00	0.027	0.003732
Cu	63	3	He	-0.036	0.0028	120.00	0.027	0.003732
Zn	66	3	He	-0.26	0.0012	54.00	0.0031	0.002032
Zn	66	3	He	-0.215	0.0014	60.00	0.0031	0.002032
Zn	66	3	He	-0.267	0.0012	52.00	0.0031	0.002032
As	75	3	He	-0.09	0.0005	24.00	0.0025	0.0007733
As	75	3	He	-0.072	0.0006	26.00	0.0025	0.0007733
As	75	3	He	-0.013	0.0007	32.00	0.0025	0.0007733
Sr	88	3	He	-0.191	0.0021	80.00	0.0105	0.004071
Sr	88	3	He	-0.161	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.043	0.0036	140.01	0.0105	0.004071
Mo	98	3	He	0.297	0.0109	420.02	0.0234	0.003908
Mo	98	3	He	0.207	0.0087	330.02	0.0234	0.003908
Mo	98	3	He	0.397	0.0132	510.03	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.007	0.0608	2350.25	0.0169	0.0609
Sn	120	3	He	-0.015	0.0607	2290.25	0.0169	0.0609
Sn	120	3	He	-0.192	0.0577	2230.23	0.0169	0.0609
Sb	121	3	He	0.014	0.0008	30.00	0.0161	0.0005433
Sb	121	3	He	0.048	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.009	0.0007	26.67	0.0161	0.0005433
Ba	137	3	He	-0.02	0.001	40.00	0.0053	0.001141
Ba	137	3	He	-0.116	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	-0.118	0.0005	20.00	0.0053	0.001141
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	0.009	0.0008	120.00	0.0248	0.0005854
Pb	208	3	He	-0.01	0.0014	80.00	0.0332	0.001693
Pb	208	3	He	-0.031	0.0007	70.00	0.0332	0.001693
Pb	208	3	He	-0.013	0.0013	70.00	0.0332	0.001693
U	238	3	He	0.002	0.0009	130.00	0.0338	0.0007949
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
Sc	45	1	No Gas			1164718.81		
Sc	45	1	No Gas			1163878.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1161310.22		
Ge	72	1	No Gas			613079.48		
Ge	72	1	No Gas			610451.01		
Ge	72	1	No Gas			605153.12		
Sc	45	2	H2			83995.07		
Sc	45	2	H2			82680.04		
Sc	45	2	H2			83310.95		
Ge	72	2	H2			71700.42		
Ge	72	2	H2			71077.64		
Ge	72	2	H2			71087.13		
In	115	2	H2			177493.85		
In	115	2	H2			177211.81		
In	115	2	H2			177361.19		
Sc	45	3	He			23176.86		
Sc	45	3	He			24088.34		
Sc	45	3	He			23026.56		
Ge	72	3	He			44222.03		
Ge	72	3	He			44051.47		
Ge	72	3	He			43309.31		
In	115	3	He			38679.35		
In	115	3	He			37776.46		
In	115	3	He			38689.22		
Tb	159	3	He			147870.87		
Tb	159	3	He			149287.20		
Tb	159	3	He			150372.58		
Bi	209	3	He			109953.89		
Bi	209	3	He			108634.55		
Bi	209	3	He			110538.02		

Quantitation Report

Data File Name 282SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:35:03 PM
Sample Name 410-235927-E-1-E
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

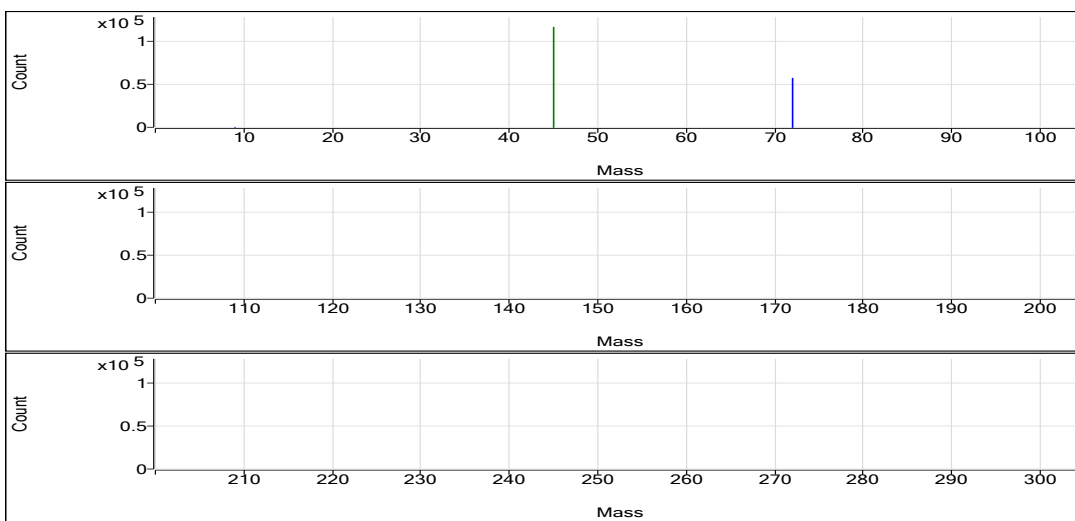
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.043	ppb	41.2	71.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.031	ppb	N/A	0.67	0.0000	Pulse	1.5000	3
Na	23	72	He	138278.015	ppb	1.1	10436158.80	251.2930	Analog	0.1000	3
Mg	24	72	He	1368.111	ppb	1.0	52329.54	1.2600	Pulse	0.1000	3
Al	27	72	He	12.765	ppb	35.8	250.01	0.0060	Pulse	0.1000	3
K	39	72	He	923.040	ppb	7.9	43086.04	1.0374	Pulse	0.5000	3
Ca	44	72	He	72685.534	ppb	1.2	121175.36	2.9177	Pulse	0.5000	3
Ti	47	72	He	0.258	ppb	59.0	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.015	ppb	75.8	353.34	0.0085	Pulse	0.5000	3
Cr	52	72	He	-0.350	ppb	N/A	646.70	0.0156	Pulse	0.1000	3
Mn	55	72	He	955.152	ppb	0.5	289517.84	6.9712	Pulse	0.5000	3
Fe	57	72	He	1379.888	ppb	5.0	18674.53	0.4497	Pulse	0.1000	3
Co	59	72	He	3.857	ppb	0.4	5401.59	0.1301	Pulse	0.5000	3
Ni	60	72	He	5.387	ppb	3.0	2217.50	0.0534	Pulse	0.5000	3
Cu	63	72	He	0.276	ppb	12.2	465.34	0.0112	Pulse	0.5000	3
Zn	66	72	He	201.365	ppb	1.7	26138.43	0.6294	Pulse	0.5000	3
As	75	72	He	0.748	ppb	13.8	111.33	0.0027	Pulse	0.5000	3
Sr	88	115	He	122.377	ppb	1.6	49598.24	1.2843	Pulse	0.1000	3
Mo	98	115	He	0.279	ppb	15.3	403.35	0.0104	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	6.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.046	ppb	68.5	10.00	0.0003	Pulse	0.5000	3
Sn	120	115	He	-0.718	ppb	N/A	1883.51	0.0488	Pulse	0.1000	3
Sb	121	115	He	0.273	ppb	5.6	191.11	0.0049	Pulse	0.3000	3
Ba	137	115	He	60.444	ppb	6.2	12372.09	0.3203	Pulse	0.1000	3
Tl	205	159	He	-0.012	ppb	N/A	43.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	35.639	ppb	0.8	179930.44	1.1859	Pulse	0.1000	3
U	238	159	He	0.498	ppb	9.1	2670.34	0.0176	Pulse	0.1000	3

ISTD Table:

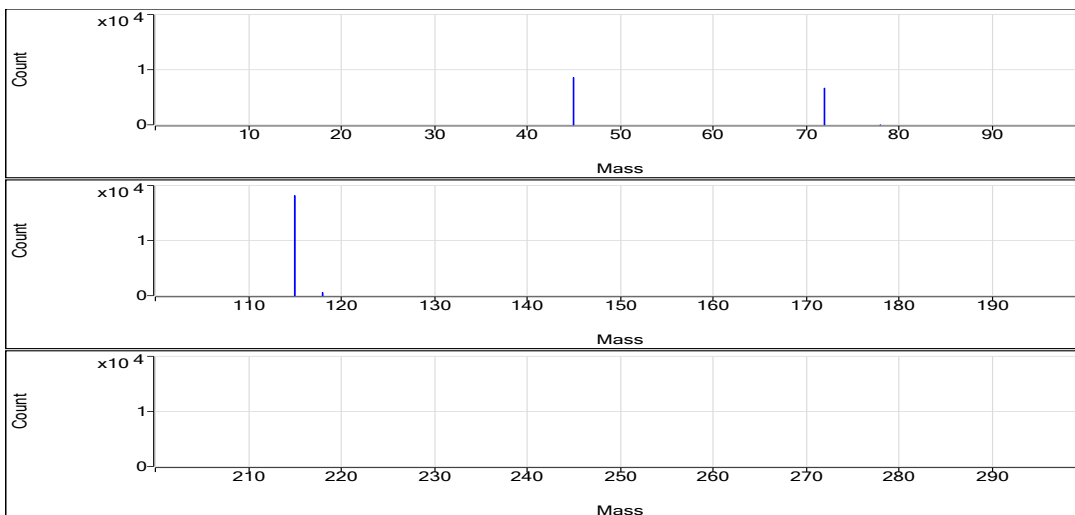
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1172297.43	0.4	89.7	Analog	0.1000	3
No Gas	Ge	72	576250.76	1.4	87.9	Pulse	0.1000	3
H2	Sc	45	86052.56	0.9	104.7	Pulse	0.1000	3
H2	Ge	72	66903.36	1.4	97.9	Pulse	0.1000	3
H2	In	115	181989.78	1.3	106.7	Pulse	0.1000	3
He	Sc	45	24241.90	3.3	94.7	Pulse	0.1000	3
He	Ge	72	41531.04	0.4	87.4	Pulse	0.1000	3
He	In	115	38618.95	0.7	94.3	Pulse	0.1000	3
He	Tb	159	151734.71	1.4	95.2	Pulse	0.1000	3
He	Bi	209	112328.19	0.1	96.0	Pulse	0.1000	3

No Gas

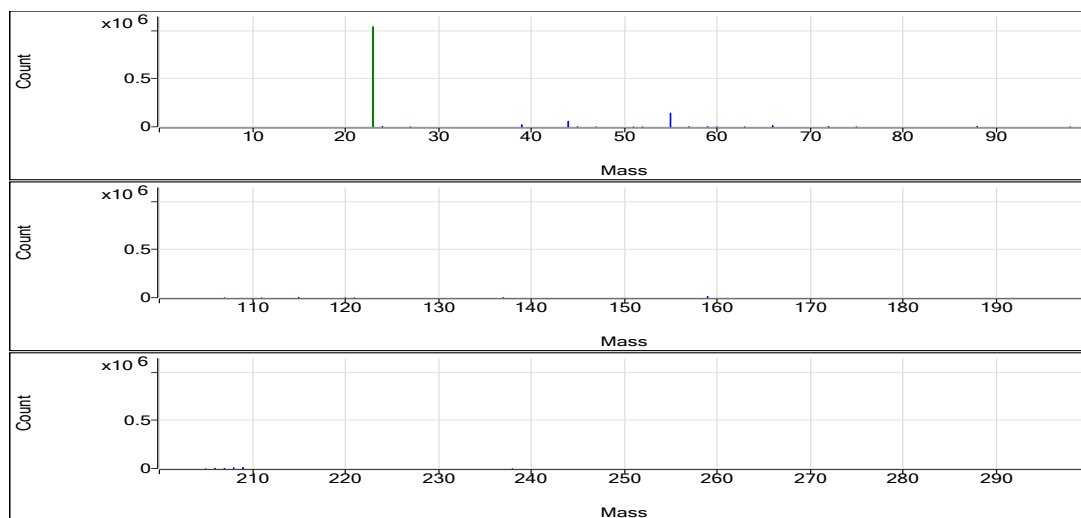


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.063	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.03	0.0001	64.00	0.0011	7.835E-05
Be	9	1	No Gas	0.036	0.0001	66.00	0.0011	7.835E-05
Se	78	2	H2	-0.012	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Na	23	3	He	138401.589	251.5174	10449149.84	0.0018	0.1731
Na	23	3	He	136757.255	248.5312	10362456.72	0.0018	0.1731
Na	23	3	He	139675.2	253.8304	10496869.84	0.0018	0.1731
Mg	24	3	He	1356.392	1.2493	51901.32	0.0009	0.006537
Mg	24	3	He	1365.401	1.2576	52433.29	0.0009	0.006537
Mg	24	3	He	1382.541	1.2733	52654.02	0.0009	0.006537
Al	27	3	He	16.91	0.0072	300.01	0.0003	0.00231
Al	27	3	He	13.517	0.0062	260.01	0.0003	0.00231
Al	27	3	He	7.866	0.0046	190.01	0.0003	0.00231
K	39	3	He	1002.815	1.097	45574.57	0.0007	0.3475
K	39	3	He	907.694	1.0259	42775.20	0.0007	0.3475
K	39	3	He	858.61	0.9892	40908.34	0.0007	0.3475
Ca	44	3	He	71702.164	2.8783	119576.76	0	0.002807
Ca	44	3	He	73093.889	2.9341	122336.60	0	0.002807
Ca	44	3	He	73260.55	2.9408	121612.73	0	0.002807
Ti	47	3	He	0.258	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	0.41	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.106	0.0001	6.00	0.0003	0.0001123
V	51	3	He	0.009	0.0084	350.01	0.0137	0.008308
V	51	3	He	0.027	0.0087	362.01	0.0137	0.008308
V	51	3	He	0.008	0.0084	348.01	0.0137	0.008308
Cr	52	3	He	-0.445	0.014	580.03	0.0171	0.02156
Cr	52	3	He	-0.363	0.0154	640.03	0.0171	0.02156
Cr	52	3	He	-0.243	0.0174	720.04	0.0171	0.02156
Mn	55	3	He	952.657	6.953	288858.69	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	952.123	6.9491	289741.81	0.0073	0.002316
Mn	55	3	He	960.675	7.0115	289953.03	0.0073	0.002316
Fe	57	3	He	1335.134	0.4352	18080.48	0.0003	0.002736
Fe	57	3	He	1345.863	0.4387	18290.82	0.0003	0.002736
Fe	57	3	He	1458.666	0.4752	19652.28	0.0003	0.002736
Co	59	3	He	3.87	0.1305	5420.95	0.0332	0.001922
Co	59	3	He	3.843	0.1296	5402.92	0.0332	0.001922
Co	59	3	He	3.859	0.1301	5380.91	0.0332	0.001922
Ni	60	3	He	5.568	0.0551	2288.18	0.0093	0.003141
Ni	60	3	He	5.253	0.0521	2174.16	0.0093	0.003141
Ni	60	3	He	5.341	0.053	2190.16	0.0093	0.003141
Cu	63	3	He	0.293	0.0117	484.01	0.027	0.003732
Cu	63	3	He	0.299	0.0118	492.01	0.027	0.003732
Cu	63	3	He	0.238	0.0102	420.01	0.027	0.003732
Zn	66	3	He	198.496	0.6205	25776.48	0.0031	0.002032
Zn	66	3	He	200.307	0.6261	26105.02	0.0031	0.002032
Zn	66	3	He	205.292	0.6416	26533.78	0.0031	0.002032
As	75	3	He	0.867	0.003	124.00	0.0025	0.0007733
As	75	3	He	0.694	0.0025	106.00	0.0025	0.0007733
As	75	3	He	0.683	0.0025	104.00	0.0025	0.0007733
Sr	88	3	He	120.069	1.2601	48534.87	0.0105	0.004071
Sr	88	3	He	123.33	1.2942	50380.61	0.0105	0.004071
Sr	88	3	He	123.731	1.2984	49879.25	0.0105	0.004071
Mo	98	3	He	0.233	0.0093	360.02	0.0234	0.003908
Mo	98	3	He	0.316	0.0113	440.02	0.0234	0.003908
Mo	98	3	He	0.289	0.0107	410.02	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.028	0.0002	6.00	0.0056	0
Cd	111	3	He	0.082	0.0005	18.00	0.0056	0
Cd	111	3	He	0.028	0.0002	6.00	0.0056	0
Sn	120	3	He	-0.731	0.0486	1870.20	0.0169	0.0609
Sn	120	3	He	-0.792	0.0475	1850.16	0.0169	0.0609
Sn	120	3	He	-0.631	0.0502	1930.17	0.0169	0.0609
Sb	121	3	He	0.272	0.0049	190.00	0.0161	0.0005433
Sb	121	3	He	0.258	0.0047	183.34	0.0161	0.0005433
Sb	121	3	He	0.289	0.0052	200.00	0.0161	0.0005433
Ba	137	3	He	56.997	0.3021	11634.87	0.0053	0.001141
Ba	137	3	He	64.476	0.3416	13296.20	0.0053	0.001141
Ba	137	3	He	59.86	0.3172	12185.19	0.0053	0.001141
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	35.459	1.1799	95099.15	0.0332	0.001693
Pb	208	3	He	35.952	1.1963	95270.34	0.0332	0.001693
Pb	208	3	He	35.505	1.1815	96096.04	0.0332	0.001693
U	238	3	He	0.533	0.0188	2860.37	0.0338	0.0007949
U	238	3	He	0.514	0.0181	2710.36	0.0338	0.0007949
U	238	3	He	0.447	0.0159	2440.29	0.0338	0.0007949
Sc	45	1	No Gas			1177938.19		
Sc	45	1	No Gas			1169425.61		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1169528.50		
Ge	72	1	No Gas			579165.23		
Ge	72	1	No Gas			582172.02		
Ge	72	1	No Gas			567415.03		
Sc	45	2	H2			86920.51		
Sc	45	2	H2			85825.25		
Sc	45	2	H2			85411.91		
Ge	72	2	H2			67091.02		
Ge	72	2	H2			65855.65		
Ge	72	2	H2			67763.40		
In	115	2	H2			184614.70		
In	115	2	H2			181578.28		
In	115	2	H2			179776.36		
Sc	45	3	He			23527.51		
Sc	45	3	He			25109.86		
Sc	45	3	He			24088.33		
Ge	72	3	He			41544.44		
Ge	72	3	He			41694.79		
Ge	72	3	He			41353.88		
In	115	3	He			38528.66		
In	115	3	He			38939.57		
In	115	3	He			38428.17		
Tb	159	3	He			152140.78		
Tb	159	3	He			149436.53		
Tb	159	3	He			153626.81		
Bi	209	3	He			112221.70		
Bi	209	3	He			112320.04		
Bi	209	3	He			112442.83		

Quantitation Report

Data File Name 283SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:37:15 PM
Sample Name 410-235927-E-1-F DU
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

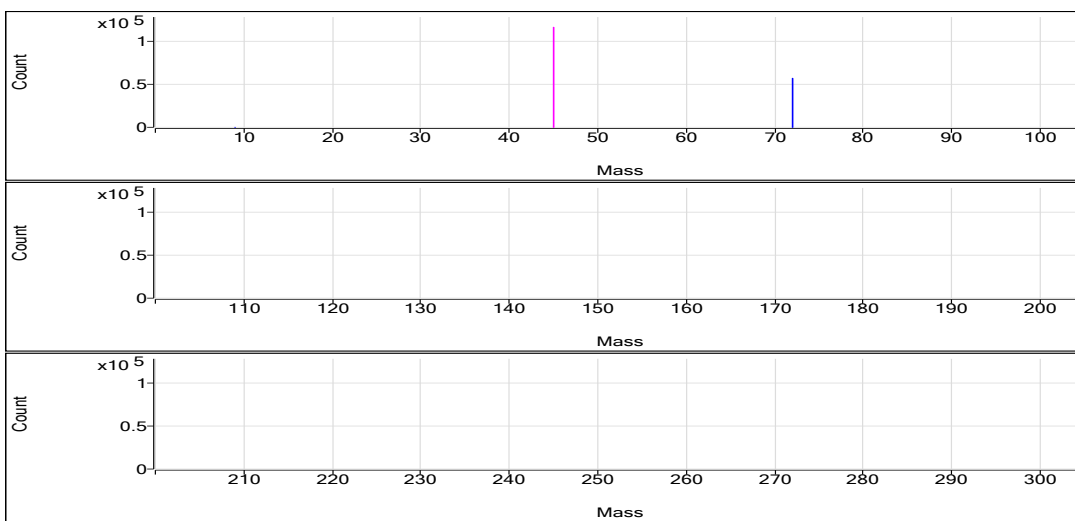
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.058	ppb	23.7	80.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.013	ppb	228.6	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	127762.330	ppb	3.1	9695694.02	232.1960	Analog	0.1000	3
Mg	24	72	He	1266.643	ppb	3.6	48728.72	1.1671	Pulse	0.1000	3
Al	27	72	He	11.868	ppb	27.7	240.01	0.0058	Pulse	0.1000	3
K	39	72	He	856.158	ppb	14.2	41187.99	0.9874	Pulse	0.5000	3
Ca	44	72	He	66710.104	ppb	1.6	111860.39	2.6781	Pulse	0.5000	3
Ti	47	72	He	0.052	ppb	361.9	5.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.040	ppb	N/A	324.01	0.0078	Pulse	0.5000	3
Cr	52	72	He	-0.220	ppb	N/A	743.37	0.0178	Pulse	0.1000	3
Mn	55	72	He	880.489	ppb	2.1	268394.62	6.4265	Pulse	0.5000	3
Fe	57	72	He	1313.290	ppb	4.3	17880.33	0.4281	Pulse	0.1000	3
Co	59	72	He	3.637	ppb	3.6	5124.84	0.1227	Pulse	0.5000	3
Ni	60	72	He	4.825	ppb	1.1	2011.47	0.0481	Pulse	0.5000	3
Cu	63	72	He	0.282	ppb	10.5	474.01	0.0114	Pulse	0.5000	3
Zn	66	72	He	185.478	ppb	2.8	24216.15	0.5799	Pulse	0.5000	3
As	75	72	He	0.696	ppb	43.5	106.00	0.0025	Pulse	0.5000	3
Sr	88	115	He	110.802	ppb	1.9	45348.77	1.1632	Pulse	0.1000	3
Mo	98	115	He	0.136	ppb	19.9	276.68	0.0071	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	13.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.027	ppb	57.4	6.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.823	ppb	N/A	1833.50	0.0470	Pulse	0.1000	3
Sb	121	115	He	0.223	ppb	30.7	161.11	0.0041	Pulse	0.3000	3
Ba	137	115	He	55.560	ppb	2.7	11481.35	0.2945	Pulse	0.1000	3
Tl	205	159	He	-0.007	ppb	N/A	63.33	0.0004	Pulse	0.1000	3
Pb	208	159	He	33.220	ppb	1.1	166993.31	1.1055	Pulse	0.1000	3
U	238	159	He	0.449	ppb	7.5	2410.28	0.0160	Pulse	0.1000	3

ISTD Table:

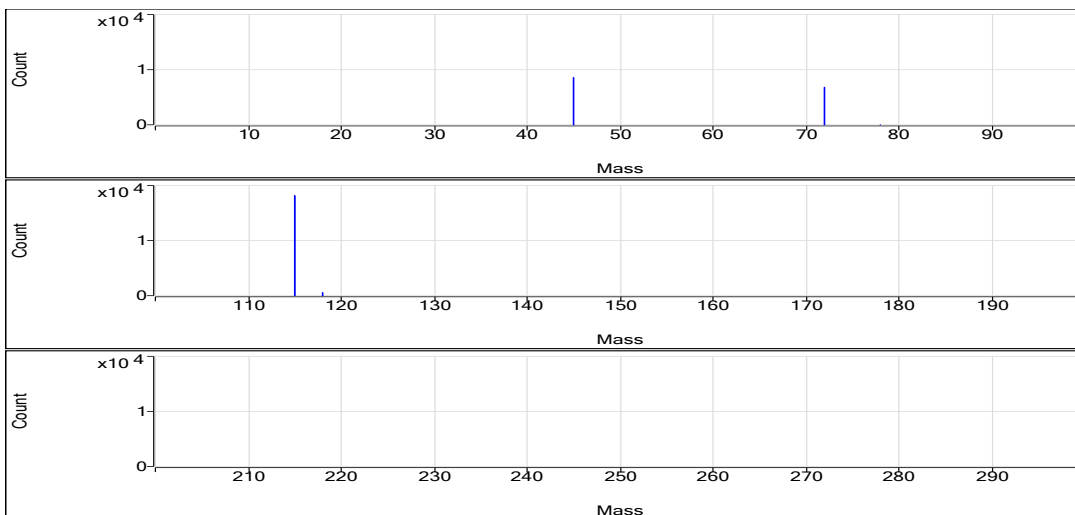
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1172071.47	0.8	89.7	Mix	0.1000	3
No Gas	Ge	72	575060.64	1.7	87.8	Pulse	0.1000	3
H2	Sc	45	85982.28	0.9	104.7	Pulse	0.1000	3
H2	Ge	72	68336.17	0.8	100.0	Pulse	0.1000	3
H2	In	115	181852.17	0.5	106.6	Pulse	0.1000	3
He	Sc	45	23848.03	2.1	93.1	Pulse	0.1000	3
He	Ge	72	41778.50	2.5	87.9	Pulse	0.1000	3
He	In	115	38986.65	0.3	95.2	Pulse	0.1000	3
He	Tb	159	151047.12	0.5	94.7	Pulse	0.1000	3
He	Bi	209	114096.15	1.5	97.6	Pulse	0.1000	3

No Gas

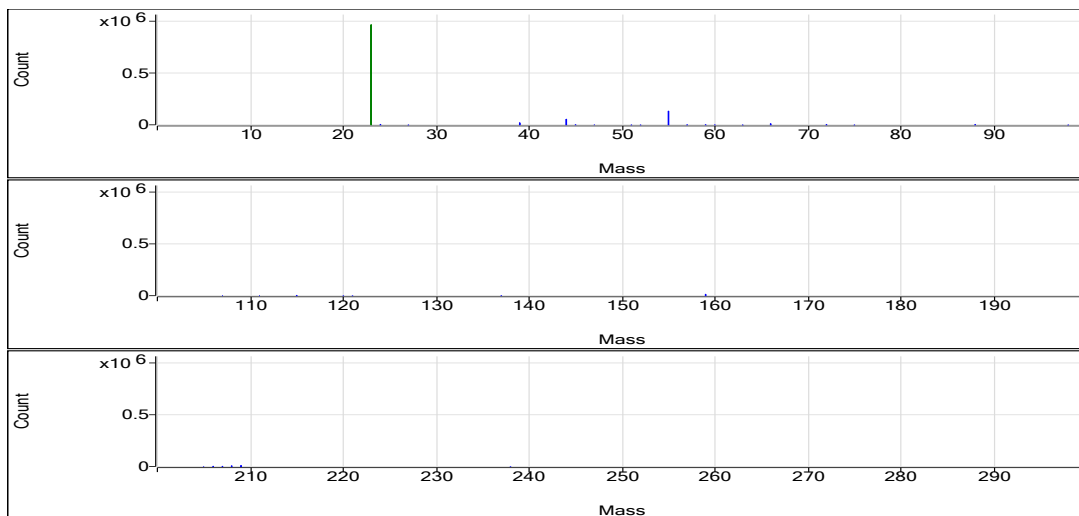


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.07	0.0002	86.00	0.0011	7.835E-05
Be	9	1	No Gas	0.062	0.0001	84.00	0.0011	7.835E-05
Be	9	1	No Gas	0.043	0.0001	72.00	0.0011	7.835E-05
Se	78	2	H2	0.046	0	3.33	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.007	0	2.00	0.0005	2.594E-05
Na	23	3	He	131891.274	239.6943	9756122.98	0.0018	0.1731
Na	23	3	He	127460.043	231.647	9686351.73	0.0018	0.1731
Na	23	3	He	123935.673	225.2466	9644607.36	0.0018	0.1731
Mg	24	3	He	1315.489	1.2118	49323.93	0.0009	0.006537
Mg	24	3	He	1260.131	1.1611	48551.54	0.0009	0.006537
Mg	24	3	He	1224.31	1.1283	48310.68	0.0009	0.006537
Al	27	3	He	13.195	0.0061	250.01	0.0003	0.00231
Al	27	3	He	14.279	0.0065	270.01	0.0003	0.00231
Al	27	3	He	8.13	0.0047	200.01	0.0003	0.00231
K	39	3	He	985.592	1.0841	44126.84	0.0007	0.3475
K	39	3	He	838.562	0.9742	40738.05	0.0007	0.3475
K	39	3	He	744.321	0.9038	38699.07	0.0007	0.3475
Ca	44	3	He	67360.219	2.7042	110065.67	0	0.002807
Ca	44	3	He	67286.952	2.7012	112951.97	0	0.002807
Ca	44	3	He	65483.14	2.6289	112563.53	0	0.002807
Ti	47	3	He	0.271	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.053	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.061	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.04	0.0078	316.01	0.0137	0.008308
V	51	3	He	-0.03	0.0079	330.01	0.0137	0.008308
V	51	3	He	-0.051	0.0076	326.01	0.0137	0.008308
Cr	52	3	He	-0.212	0.0179	730.04	0.0171	0.02156
Cr	52	3	He	-0.142	0.0191	800.05	0.0171	0.02156
Cr	52	3	He	-0.305	0.0163	700.03	0.0171	0.02156
Mn	55	3	He	897.19	6.5483	266531.81	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	883.47	6.4482	269632.81	0.0073	0.002316
Mn	55	3	He	860.806	6.2829	269019.25	0.0073	0.002316
Fe	57	3	He	1315.101	0.4287	17449.88	0.0003	0.002736
Fe	57	3	He	1368.569	0.446	18651.15	0.0003	0.002736
Fe	57	3	He	1256.2	0.4096	17539.97	0.0003	0.002736
Co	59	3	He	3.779	0.1275	5188.86	0.0332	0.001922
Co	59	3	He	3.611	0.1219	5096.83	0.0332	0.001922
Co	59	3	He	3.519	0.1188	5088.82	0.0332	0.001922
Ni	60	3	He	4.789	0.0478	1946.13	0.0093	0.003141
Ni	60	3	He	4.883	0.0487	2036.14	0.0093	0.003141
Ni	60	3	He	4.801	0.0479	2052.14	0.0093	0.003141
Cu	63	3	He	0.278	0.0113	458.01	0.027	0.003732
Cu	63	3	He	0.313	0.0122	510.01	0.027	0.003732
Cu	63	3	He	0.254	0.0106	454.01	0.027	0.003732
Zn	66	3	He	191.355	0.5982	24348.34	0.0031	0.002032
Zn	66	3	He	183.739	0.5745	24021.84	0.0031	0.002032
Zn	66	3	He	181.342	0.567	24278.27	0.0031	0.002032
As	75	3	He	1.046	0.0034	140.00	0.0025	0.0007733
As	75	3	He	0.541	0.0022	90.00	0.0025	0.0007733
As	75	3	He	0.503	0.0021	88.00	0.0025	0.0007733
Sr	88	3	He	113.263	1.1889	46328.69	0.0105	0.004071
Sr	88	3	He	109.835	1.1531	45114.99	0.0105	0.004071
Sr	88	3	He	109.306	1.1475	44602.63	0.0105	0.004071
Mo	98	3	He	0.107	0.0064	250.01	0.0234	0.003908
Mo	98	3	He	0.161	0.0077	300.01	0.0234	0.003908
Mo	98	3	He	0.141	0.0072	280.01	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.046	0.0003	10.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.78	0.0477	1860.16	0.0169	0.0609
Sn	120	3	He	-0.564	0.0514	2010.19	0.0169	0.0609
Sn	120	3	He	-1.123	0.0419	1630.15	0.0169	0.0609
Sb	121	3	He	0.179	0.0034	133.34	0.0161	0.0005433
Sb	121	3	He	0.188	0.0036	140.00	0.0161	0.0005433
Sb	121	3	He	0.301	0.0054	210.00	0.0161	0.0005433
Ba	137	3	He	53.951	0.286	11144.52	0.0053	0.001141
Ba	137	3	He	55.813	0.2958	11574.72	0.0053	0.001141
Ba	137	3	He	56.916	0.3017	11724.81	0.0053	0.001141
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.008	0.0004	60.00	0.0248	0.0005854
Pb	208	3	He	33.141	1.1029	87231.88	0.0332	0.001693
Pb	208	3	He	32.886	1.0944	87150.13	0.0332	0.001693
Pb	208	3	He	33.633	1.1193	90944.45	0.0332	0.001693
U	238	3	He	0.446	0.0158	2380.27	0.0338	0.0007949
U	238	3	He	0.485	0.0172	2590.32	0.0338	0.0007949
U	238	3	He	0.417	0.0149	2260.25	0.0338	0.0007949
Sc	45	1	No Gas			1164473.50		
Sc	45	1	No Gas			1182281.86		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1169459.05		
Ge	72	1	No Gas			563816.16		
Ge	72	1	No Gas			580862.26		
Ge	72	1	No Gas			580503.51		
Sc	45	2	H2			85161.02		
Sc	45	2	H2			86790.19		
Sc	45	2	H2			85995.63		
Ge	72	2	H2			67935.12		
Ge	72	2	H2			68978.62		
Ge	72	2	H2			68094.77		
In	115	2	H2			180810.82		
In	115	2	H2			182793.12		
In	115	2	H2			181952.58		
Sc	45	3	He			23287.14		
Sc	45	3	He			24248.71		
Sc	45	3	He			24008.24		
Ge	72	3	He			40702.35		
Ge	72	3	He			41815.14		
Ge	72	3	He			42818.00		
In	115	3	He			38979.35		
In	115	3	He			39139.78		
In	115	3	He			38879.31		
Tb	159	3	He			150292.88		
Tb	159	3	He			150969.76		
Tb	159	3	He			151878.71		
Bi	209	3	He			112254.14		
Bi	209	3	He			115525.98		
Bi	209	3	He			114508.32		

Quantitation Report

Data File Name 284SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:39:27 PM
Sample Name 410-235927-E-1-G MS@10
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

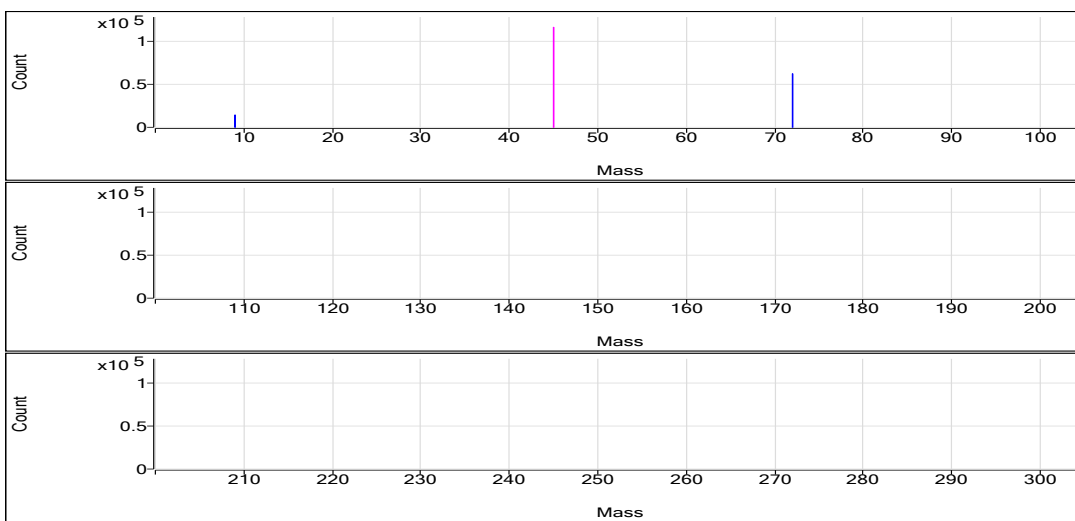
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	43.656	ppb	5.5	29137.14	0.0464	Pulse	0.5000	3
Se	78	72	H2	8.844	ppb	10.5	326.89	0.0045	Pulse	1.5000	3
Na	23	72	He	13507.353	ppb	1.3	1113033.81	24.7031	Analog	0.1000	3
Mg	24	72	He	567.615	ppb	4.4	23724.30	0.5266	Pulse	0.1000	3
Al	27	72	He	92.638	ppb	5.1	1316.76	0.0292	Pulse	0.1000	3
K	39	72	He	518.864	ppb	14.9	33132.67	0.7353	Pulse	0.5000	3
Ca	44	72	He	7091.085	ppb	3.4	12937.81	0.2872	Pulse	0.5000	3
Ti	47	72	He	87.551	ppb	7.3	1231.39	0.0273	Pulse	0.5000	3
V	51	72	He	42.118	ppb	0.7	26296.46	0.5836	Pulse	0.5000	3
Cr	52	72	He	43.448	ppb	1.1	34423.74	0.7639	Pulse	0.1000	3
Mn	55	72	He	132.405	ppb	0.4	43636.15	0.9684	Pulse	0.5000	3
Fe	57	72	He	160.877	ppb	8.1	2470.28	0.0548	Pulse	0.1000	3
Co	59	72	He	44.003	ppb	1.1	65955.57	1.4638	Pulse	0.5000	3
Ni	60	72	He	44.343	ppb	2.3	18777.55	0.4168	Pulse	0.5000	3
Cu	63	72	He	43.833	ppb	1.3	53527.20	1.1880	Pulse	0.5000	3
Zn	66	72	He	64.239	ppb	2.1	9109.27	0.2022	Pulse	0.5000	3
As	75	72	He	42.451	ppb	1.4	4912.11	0.1090	Pulse	0.5000	3
Sr	88	115	He	57.739	ppb	3.3	23675.01	0.6081	Pulse	0.1000	3
Mo	98	115	He	87.700	ppb	1.7	80026.46	2.0557	Pulse	0.1000	3
Ag	107	115	He	46.167	ppb	1.0	88637.24	2.2767	Pulse	0.1000	3
Cd	111	115	He	9.339	ppb	1.0	2040.15	0.0524	Pulse	0.5000	3
Sn	120	115	He	446.422	ppb	1.0	295717.81	7.5957	Pulse	0.1000	3
Sb	121	115	He	45.133	ppb	1.1	28352.67	0.7282	Pulse	0.3000	3
Ba	137	115	He	906.251	ppb	0.4	186329.79	4.7861	Pulse	0.1000	3
Tl	205	159	He	45.790	ppb	1.8	170892.94	1.1351	Pulse	0.1000	3
Pb	208	159	He	45.393	ppb	1.1	227354.33	1.5100	Pulse	0.1000	3
U	238	159	He	0.038	ppb	23.2	313.35	0.0021	Pulse	0.1000	3

ISTD Table:

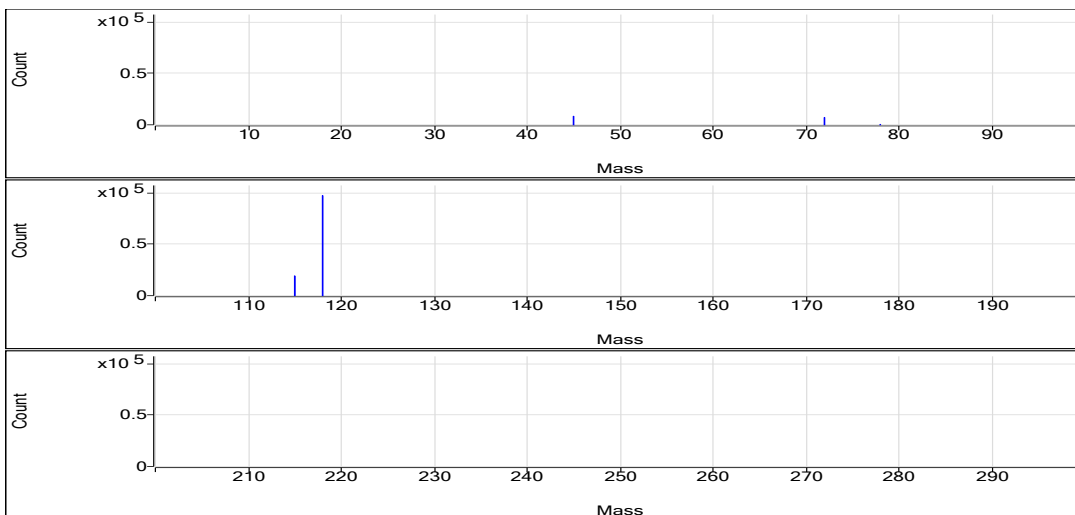
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1170866.02	0.7	89.6	Mix	0.1000	3
No Gas	Ge	72	627183.12	1.1	95.7	Pulse	0.1000	3
H2	Sc	45	85043.86	1.0	103.5	Pulse	0.1000	3
H2	Ge	72	72618.18	2.0	106.3	Pulse	0.1000	3
H2	In	115	194072.03	0.7	113.8	Pulse	0.1000	3
He	Sc	45	23397.27	3.3	91.4	Pulse	0.1000	3
He	Ge	72	45060.53	1.2	94.8	Pulse	0.1000	3
He	In	115	38931.53	0.8	95.1	Pulse	0.1000	3
He	Tb	159	150580.51	1.8	94.4	Pulse	0.1000	3
He	Bi	209	114168.86	0.9	97.6	Pulse	0.1000	3

No Gas

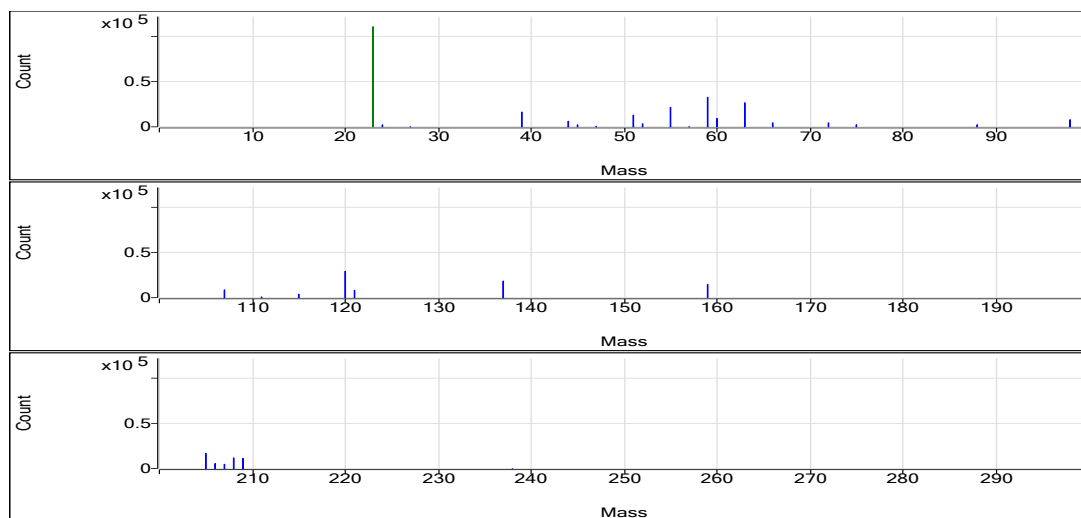


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	41.282	0.0439	27274.00	0.0011	7.835E-05
Be	9	1	No Gas	43.573	0.0464	29395.51	0.0011	7.835E-05
Be	9	1	No Gas	46.111	0.0491	30741.90	0.0011	7.835E-05
Se	78	2	H2	7.817	0.004	295.34	0.0005	2.594E-05
Se	78	2	H2	9.625	0.0049	349.34	0.0005	2.594E-05
Se	78	2	H2	9.088	0.0046	336.00	0.0005	2.594E-05
Na	23	3	He	13421.104	24.5465	1107638.19	0.0018	0.1731
Na	23	3	He	13703.687	25.0596	1115459.28	0.0018	0.1731
Na	23	3	He	13397.269	24.5032	1116003.97	0.0018	0.1731
Mg	24	3	He	542.553	0.5036	22726.20	0.0009	0.006537
Mg	24	3	He	592.346	0.5493	24448.71	0.0009	0.006537
Mg	24	3	He	567.947	0.5269	23997.99	0.0009	0.006537
Al	27	3	He	97.349	0.0306	1380.09	0.0003	0.00231
Al	27	3	He	87.968	0.0279	1240.09	0.0003	0.00231
Al	27	3	He	92.597	0.0292	1330.11	0.0003	0.00231
K	39	3	He	607.817	0.8018	36179.54	0.0007	0.3475
K	39	3	He	482.633	0.7082	31524.08	0.0007	0.3475
K	39	3	He	466.142	0.6959	31694.38	0.0007	0.3475
Ca	44	3	He	6904.345	0.2797	12620.88	0	0.002807
Ca	44	3	He	7364.66	0.2982	13271.41	0	0.002807
Ca	44	3	He	7004.248	0.2837	12921.14	0	0.002807
Ti	47	3	He	91.283	0.0285	1286.06	0.0003	0.0001123
Ti	47	3	He	91.242	0.0285	1268.06	0.0003	0.0001123
Ti	47	3	He	80.127	0.025	1140.05	0.0003	0.0001123
V	51	3	He	41.927	0.581	26217.03	0.0137	0.008308
V	51	3	He	42.452	0.5882	26180.90	0.0137	0.008308
V	51	3	He	41.975	0.5817	26491.45	0.0137	0.008308
Cr	52	3	He	42.961	0.7556	34096.21	0.0171	0.02156
Cr	52	3	He	43.517	0.7651	34056.60	0.0171	0.02156
Cr	52	3	He	43.866	0.7711	35118.41	0.0171	0.02156
Mn	55	3	He	132.6	0.9698	43760.56	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	131.772	0.9637	42898.17	0.0073	0.002316
Mn	55	3	He	132.843	0.9716	44249.72	0.0073	0.002316
Fe	57	3	He	150.296	0.0514	2320.24	0.0003	0.002736
Fe	57	3	He	175.372	0.0595	2650.32	0.0003	0.002736
Fe	57	3	He	156.964	0.0536	2440.27	0.0003	0.002736
Co	59	3	He	43.863	1.4592	65844.48	0.0332	0.001922
Co	59	3	He	44.547	1.4819	65962.84	0.0332	0.001922
Co	59	3	He	43.599	1.4504	66059.40	0.0332	0.001922
Ni	60	3	He	43.407	0.408	18412.46	0.0093	0.003141
Ni	60	3	He	45.46	0.4272	19015.16	0.0093	0.003141
Ni	60	3	He	44.162	0.4151	18905.03	0.0093	0.003141
Cu	63	3	He	43.378	1.1757	53052.39	0.027	0.003732
Cu	63	3	He	44.485	1.2056	53664.21	0.027	0.003732
Cu	63	3	He	43.636	1.1827	53864.99	0.027	0.003732
Zn	66	3	He	65.476	0.206	9296.70	0.0031	0.002032
Zn	66	3	He	64.408	0.2027	9022.56	0.0031	0.002032
Zn	66	3	He	62.834	0.1978	9008.54	0.0031	0.002032
As	75	3	He	43.003	0.1104	4982.80	0.0025	0.0007733
As	75	3	He	42.558	0.1093	4864.76	0.0025	0.0007733
As	75	3	He	41.792	0.1073	4888.77	0.0025	0.0007733
Sr	88	3	He	58.077	0.6116	23618.09	0.0105	0.004071
Sr	88	3	He	55.692	0.5867	22857.19	0.0105	0.004071
Sr	88	3	He	59.449	0.626	24549.74	0.0105	0.004071
Mo	98	3	He	87.822	2.0585	79490.65	0.0234	0.003908
Mo	98	3	He	89.093	2.0882	81359.87	0.0234	0.003908
Mo	98	3	He	86.184	2.0202	79228.87	0.0234	0.003908
Ag	107	3	He	46.215	2.2791	88007.73	0.0493	0.0004851
Ag	107	3	He	45.679	2.2527	87765.42	0.0493	0.0004851
Ag	107	3	He	46.606	2.2984	90138.57	0.0493	0.0004851
Cd	111	3	He	9.314	0.0523	2018.15	0.0056	0
Cd	111	3	He	9.442	0.053	2064.15	0.0056	0
Cd	111	3	He	9.262	0.052	2038.15	0.0056	0
Sn	120	3	He	443.163	7.5407	291189.25	0.0169	0.0609
Sn	120	3	He	451.341	7.6788	299170.84	0.0169	0.0609
Sn	120	3	He	444.763	7.5677	296793.34	0.0169	0.0609
Sb	121	3	He	44.706	0.7213	27855.11	0.0161	0.0005433
Sb	121	3	He	45.033	0.7266	28309.29	0.0161	0.0005433
Sb	121	3	He	45.661	0.7367	28893.61	0.0161	0.0005433
Ba	137	3	He	909.356	4.8025	185452.15	0.0053	0.001141
Ba	137	3	He	902.774	4.7678	185756.48	0.0053	0.001141
Ba	137	3	He	906.622	4.7881	187780.74	0.0053	0.001141
Tl	205	3	He	44.853	1.1119	170829.33	0.0248	0.0005854
Tl	205	3	He	46.386	1.1499	171101.81	0.0248	0.0005854
Tl	205	3	He	46.133	1.1436	170747.67	0.0248	0.0005854
Pb	208	3	He	44.902	1.4937	121625.04	0.0332	0.001693
Pb	208	3	He	45.337	1.5081	117813.03	0.0332	0.001693
Pb	208	3	He	45.939	1.5282	120032.82	0.0332	0.001693
U	238	3	He	0.029	0.0018	270.01	0.0338	0.0007949
U	238	3	He	0.04	0.0022	320.02	0.0338	0.0007949
U	238	3	He	0.046	0.0023	350.02	0.0338	0.0007949
Sc	45	1	No Gas			1180078.34		
Sc	45	1	No Gas			1168336.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1164183.42		
Ge	72	1	No Gas			620870.54		
Ge	72	1	No Gas			634036.20		
Ge	72	1	No Gas			626642.61		
Sc	45	2	H2			85342.14		
Sc	45	2	H2			85664.01		
Sc	45	2	H2			84125.44		
Ge	72	2	H2			74071.91		
Ge	72	2	H2			71238.77		
Ge	72	2	H2			72543.87		
In	115	2	H2			195680.25		
In	115	2	H2			193258.59		
In	115	2	H2			193277.26		
Sc	45	3	He			23747.83		
Sc	45	3	He			22505.98		
Sc	45	3	He			23938.01		
Ge	72	3	He			45124.15		
Ge	72	3	He			44512.17		
Ge	72	3	He			45545.28		
In	115	3	He			40653.83		
In	115	3	He			41055.01		
In	115	3	He			41295.82		
Tb	159	3	He			153637.07		
Tb	159	3	He			148798.74		
Tb	159	3	He			149305.71		
Bi	209	3	He			114568.03		
Bi	209	3	He			113047.17		
Bi	209	3	He			114891.39		

Quantitation Report

Data File Name 285SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:41:39 PM
Sample Name 410-235927-E-1-H MSD@10
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

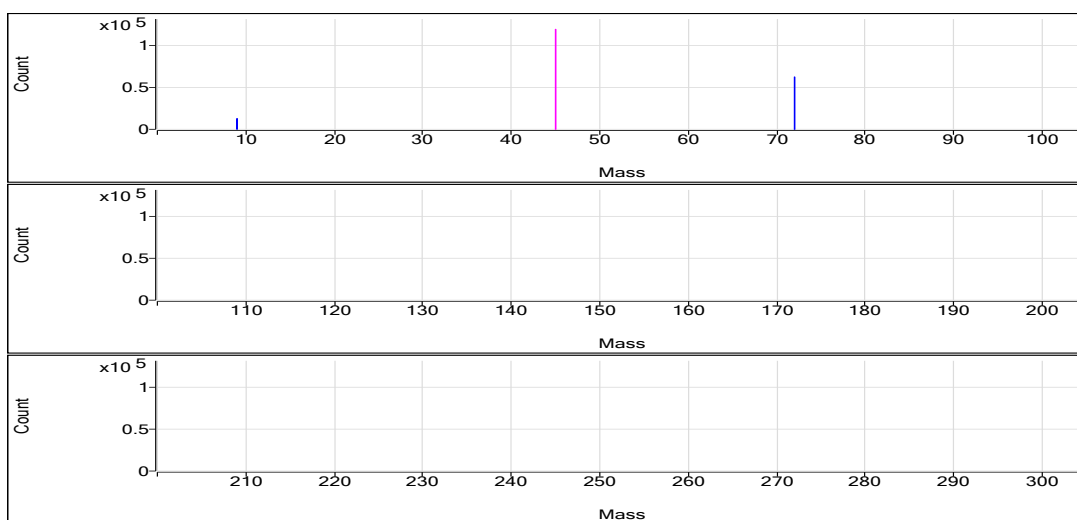
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	38.867	ppb	6.6	25976.74	0.0414	Pulse	0.5000	3
Se	78	72	H2	7.795	ppb	9.1	287.56	0.0040	Pulse	1.5000	3
Na	23	72	He	12377.801	ppb	2.2	993176.70	22.6518	Mix	0.1000	3
Mg	24	72	He	521.492	ppb	5.1	21230.75	0.4843	Pulse	0.1000	3
Al	27	72	He	87.000	ppb	6.6	1210.08	0.0276	Pulse	0.1000	3
K	39	72	He	478.549	ppb	13.3	30931.66	0.7052	Pulse	0.5000	3
Ca	44	72	He	6575.461	ppb	2.3	11684.84	0.2665	Pulse	0.5000	3
Ti	47	72	He	78.203	ppb	4.3	1071.37	0.0244	Pulse	0.5000	3
V	51	72	He	39.340	ppb	1.0	23928.83	0.5457	Pulse	0.5000	3
Cr	52	72	He	39.999	ppb	2.6	30909.96	0.7050	Pulse	0.1000	3
Mn	55	72	He	121.794	ppb	1.7	39066.63	0.8909	Pulse	0.5000	3
Fe	57	72	He	166.484	ppb	6.1	2483.61	0.0567	Pulse	0.1000	3
Co	59	72	He	40.783	ppb	1.2	59498.84	1.3568	Pulse	0.5000	3
Ni	60	72	He	40.974	ppb	1.2	16897.48	0.3854	Pulse	0.5000	3
Cu	63	72	He	40.960	ppb	2.3	48684.14	1.1104	Pulse	0.5000	3
Zn	66	72	He	58.769	ppb	2.1	8117.40	0.1851	Pulse	0.5000	3
As	75	72	He	38.933	ppb	2.6	4386.62	0.1000	Pulse	0.5000	3
Sr	88	115	He	50.457	ppb	5.0	20807.50	0.5319	Pulse	0.1000	3
Mo	98	115	He	79.116	ppb	3.5	72584.56	1.8548	Pulse	0.1000	3
Ag	107	115	He	40.960	ppb	4.6	79026.03	2.0200	Pulse	0.1000	3
Cd	111	115	He	8.014	ppb	3.6	1760.11	0.0450	Pulse	0.5000	3
Sn	120	115	He	393.406	ppb	4.2	262195.73	6.7009	Pulse	0.1000	3
Sb	121	115	He	40.445	ppb	3.6	25538.90	0.6526	Pulse	0.3000	3
Ba	137	115	He	803.127	ppb	3.7	165982.80	4.2416	Pulse	0.1000	3
Tl	205	159	He	41.229	ppb	1.7	152995.64	1.0221	Pulse	0.1000	3
Pb	208	159	He	40.349	ppb	1.0	200938.12	1.3424	Pulse	0.1000	3
U	238	159	He	0.035	ppb	7.6	296.68	0.0020	Pulse	0.1000	3

ISTD Table:

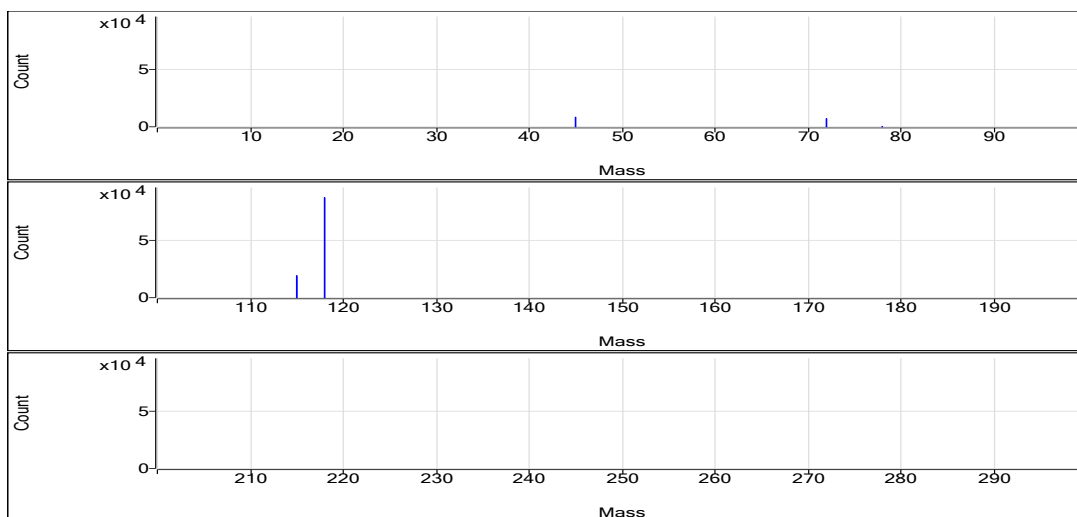
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1197788.00	1.8	91.6	Mix	0.1000	3
No Gas	Ge	72	627414.16	2.8	95.7	Pulse	0.1000	3
H2	Sc	45	85446.21	1.5	104.0	Pulse	0.1000	3
H2	Ge	72	72350.47	0.8	105.9	Pulse	0.1000	3
H2	In	115	192759.24	0.8	113.0	Pulse	0.1000	3
He	Sc	45	23907.99	0.4	93.4	Pulse	0.1000	3
He	Ge	72	43854.02	1.3	92.3	Pulse	0.1000	3
He	In	115	39166.24	3.7	95.7	Pulse	0.1000	3
He	Tb	159	149692.23	0.9	93.9	Pulse	0.1000	3
He	Bi	209	112409.16	0.5	96.1	Pulse	0.1000	3

No Gas

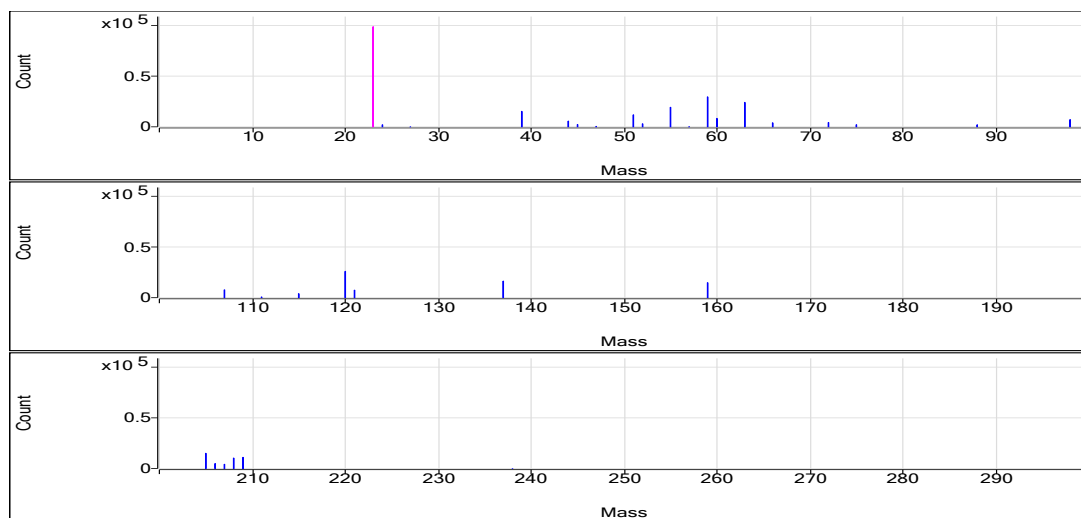


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	36.622	0.039	23654.55	0.0011	7.835E-05
Be	9	1	No Gas	38.316	0.0408	25986.00	0.0011	7.835E-05
Be	9	1	No Gas	41.662	0.0443	28289.67	0.0011	7.835E-05
Se	78	2	H2	7.979	0.0041	292.67	0.0005	2.594E-05
Se	78	2	H2	8.393	0.0043	308.67	0.0005	2.594E-05
Se	78	2	H2	7.014	0.0036	261.34	0.0005	2.594E-05
Na	23	3	He	12173.17	22.2802	987282.02	0.0018	0.1731
Na	23	3	He	12687.125	23.2135	1002566.78	0.0018	0.1731
Na	23	3	He	12273.108	22.4616	989681.31	0.0018	0.1731
Mg	24	3	He	502.31	0.4668	20683.42	0.0009	0.006537
Mg	24	3	He	551.743	0.5121	22115.20	0.0009	0.006537
Mg	24	3	He	510.422	0.4742	20893.62	0.0009	0.006537
Al	27	3	He	91.509	0.0289	1280.09	0.0003	0.00231
Al	27	3	He	80.542	0.0257	1110.08	0.0003	0.00231
Al	27	3	He	88.949	0.0281	1240.08	0.0003	0.00231
K	39	3	He	548.14	0.7572	33552.02	0.0007	0.3475
K	39	3	He	463.803	0.6941	29979.10	0.0007	0.3475
K	39	3	He	423.704	0.6642	29263.86	0.0007	0.3475
Ca	44	3	He	6482.508	0.2628	11644.15	0	0.002807
Ca	44	3	He	6753.451	0.2736	11818.26	0	0.002807
Ca	44	3	He	6490.424	0.2631	11592.12	0	0.002807
Ti	47	3	He	80.334	0.0251	1112.04	0.0003	0.0001123
Ti	47	3	He	79.901	0.025	1078.04	0.0003	0.0001123
Ti	47	3	He	74.372	0.0232	1024.04	0.0003	0.0001123
V	51	3	He	38.877	0.5393	23899.48	0.0137	0.008308
V	51	3	He	39.476	0.5475	23647.12	0.0137	0.008308
V	51	3	He	39.668	0.5501	24239.90	0.0137	0.008308
Cr	52	3	He	39.166	0.6908	30609.40	0.0171	0.02156
Cr	52	3	He	41.182	0.7252	31320.76	0.0171	0.02156
Cr	52	3	He	39.65	0.699	30799.72	0.0171	0.02156
Mn	55	3	He	119.475	0.874	38729.81	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	123.348	0.9023	38968.37	0.0073	0.002316
Mn	55	3	He	122.56	0.8965	39501.71	0.0073	0.002316
Fe	57	3	He	160.174	0.0546	2420.28	0.0003	0.002736
Fe	57	3	He	178.141	0.0604	2610.28	0.0003	0.002736
Fe	57	3	He	161.135	0.0549	2420.27	0.0003	0.002736
Co	59	3	He	40.223	1.3383	59301.45	0.0332	0.001922
Co	59	3	He	41.081	1.3667	59028.45	0.0332	0.001922
Co	59	3	He	41.044	1.3655	60166.63	0.0332	0.001922
Ni	60	3	He	40.614	0.382	16926.85	0.0093	0.003141
Ni	60	3	He	41.535	0.3906	16868.76	0.0093	0.003141
Ni	60	3	He	40.774	0.3835	16896.82	0.0093	0.003141
Cu	63	3	He	40.035	1.0854	48095.00	0.027	0.003732
Cu	63	3	He	41.922	1.1364	49078.03	0.027	0.003732
Cu	63	3	He	40.923	1.1094	48879.39	0.027	0.003732
Zn	66	3	He	58.556	0.1845	8174.10	0.0031	0.002032
Zn	66	3	He	60.066	0.1892	8170.09	0.0031	0.002032
Zn	66	3	He	57.684	0.1817	8008.02	0.0031	0.002032
As	75	3	He	37.811	0.0972	4306.60	0.0025	0.0007733
As	75	3	He	39.711	0.102	4406.63	0.0025	0.0007733
As	75	3	He	39.275	0.1009	4446.65	0.0025	0.0007733
Sr	88	3	He	52.249	0.5507	21094.57	0.0105	0.004071
Sr	88	3	He	51.53	0.5431	20824.16	0.0105	0.004071
Sr	88	3	He	47.591	0.5019	20503.78	0.0105	0.004071
Mo	98	3	He	80.994	1.8988	72738.76	0.0234	0.003908
Mo	98	3	He	80.421	1.8854	72286.42	0.0234	0.003908
Mo	98	3	He	75.934	1.7804	72728.51	0.0234	0.003908
Ag	107	3	He	41.933	2.068	79220.05	0.0493	0.0004851
Ag	107	3	He	42.168	2.0796	79733.18	0.0493	0.0004851
Ag	107	3	He	38.78	1.9125	78124.87	0.0493	0.0004851
Cd	111	3	He	7.909	0.0444	1700.11	0.0056	0
Cd	111	3	He	8.339	0.0468	1794.11	0.0056	0
Cd	111	3	He	7.792	0.0437	1786.11	0.0056	0
Sn	120	3	He	397.335	6.7672	259240.46	0.0169	0.0609
Sn	120	3	He	407.411	6.9373	265982.46	0.0169	0.0609
Sn	120	3	He	375.47	6.3982	261364.27	0.0169	0.0609
Sb	121	3	He	41.2	0.6648	25467.70	0.0161	0.0005433
Sb	121	3	He	41.364	0.6675	25591.21	0.0161	0.0005433
Sb	121	3	He	38.771	0.6257	25557.80	0.0161	0.0005433
Ba	137	3	He	827.597	4.3708	167438.79	0.0053	0.001141
Ba	137	3	He	811.456	4.2856	164314.43	0.0053	0.001141
Ba	137	3	He	770.327	4.0685	166195.17	0.0053	0.001141
Tl	205	3	He	41.976	1.0406	155338.02	0.0248	0.0005854
Tl	205	3	He	41.081	1.0184	151360.03	0.0248	0.0005854
Tl	205	3	He	40.632	1.0073	152288.87	0.0248	0.0005854
Pb	208	3	He	40.714	1.3545	106549.49	0.0332	0.001693
Pb	208	3	He	40.397	1.344	105824.39	0.0332	0.001693
Pb	208	3	He	39.934	1.3286	104775.65	0.0332	0.001693
U	238	3	He	0.034	0.0019	290.01	0.0338	0.0007949
U	238	3	He	0.038	0.0021	310.01	0.0338	0.0007949
U	238	3	He	0.033	0.0019	290.01	0.0338	0.0007949
Sc	45	1	No Gas			1174177.72		
Sc	45	1	No Gas			1202357.01		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1216829.28		
Ge	72	1	No Gas			606858.19		
Ge	72	1	No Gas			637261.59		
Ge	72	1	No Gas			638122.69		
Sc	45	2	H2			84096.37		
Sc	45	2	H2			85693.97		
Sc	45	2	H2			86548.29		
Ge	72	2	H2			71921.81		
Ge	72	2	H2			72133.11		
Ge	72	2	H2			72996.49		
In	115	2	H2			192509.37		
In	115	2	H2			191325.93		
In	115	2	H2			194442.42		
Sc	45	3	He			23877.82		
Sc	45	3	He			24008.29		
Sc	45	3	He			23837.87		
Ge	72	3	He			44312.18		
Ge	72	3	He			43188.92		
Ge	72	3	He			44060.95		
In	115	3	He			40122.82		
In	115	3	He			40202.80		
In	115	3	He			42679.21		
Tb	159	3	He			149274.15		
Tb	159	3	He			148619.45		
Tb	159	3	He			151183.10		
Bi	209	3	He			112291.31		
Bi	209	3	He			111908.74		
Bi	209	3	He			113027.42		

Quantitation Report

Data File Name 286SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:43:51 PM
Sample Name 410-235514-A-1-C
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

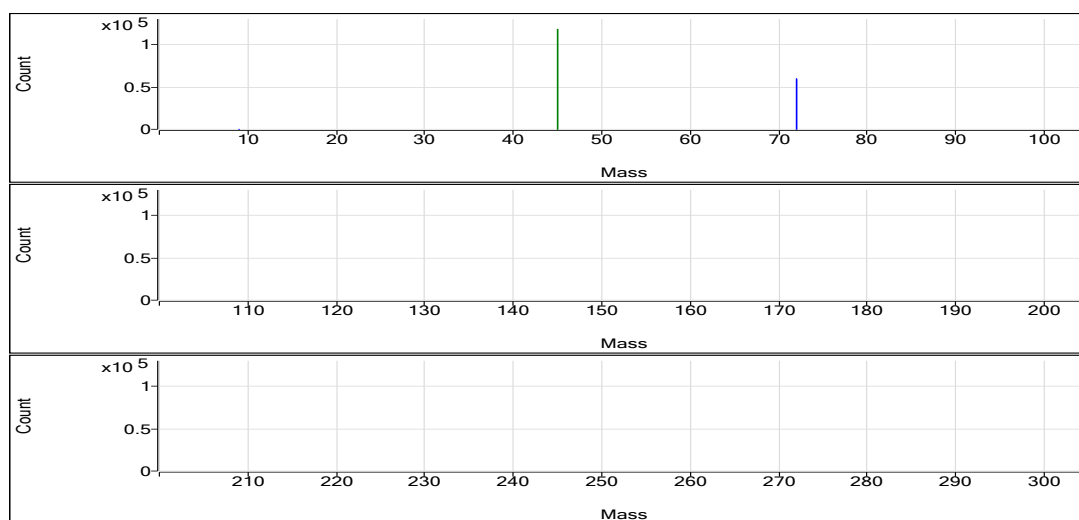
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.381	ppb	12.6	288.00	0.0005	Pulse	0.5000	3
Se	78	72	H2	0.007	ppb	11.2	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	166829.451	ppb	1.5	12747080.23	303.1439	Analog	0.1000	3
Mg	24	72	He	272.012	ppb	4.6	10757.15	0.2558	Pulse	0.1000	3
Al	27	72	He	4.366	ppb	79.7	150.00	0.0036	Pulse	0.1000	3
K	39	72	He	254.870	ppb	39.9	22597.70	0.5380	Pulse	0.5000	3
Ca	44	72	He	1936.688	ppb	2.4	3383.70	0.0805	Pulse	0.5000	3
Ti	47	72	He	-0.054	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	0.121	ppb	39.1	418.68	0.0100	Pulse	0.5000	3
Cr	52	72	He	-0.272	ppb	N/A	710.04	0.0169	Pulse	0.1000	3
Mn	55	72	He	157.430	ppb	2.3	48391.44	1.1509	Pulse	0.5000	3
Fe	57	72	He	6.431	ppb	81.7	203.34	0.0048	Pulse	0.1000	3
Co	59	72	He	5.239	ppb	3.2	7399.04	0.1760	Pulse	0.5000	3
Ni	60	72	He	22.282	ppb	2.7	8871.13	0.2110	Pulse	0.5000	3
Cu	63	72	He	0.258	ppb	7.2	450.01	0.0107	Pulse	0.5000	3
Zn	66	72	He	10.746	ppb	5.7	1493.41	0.0355	Pulse	0.5000	3
As	75	72	He	9.088	ppb	3.1	1006.71	0.0239	Pulse	0.5000	3
Sr	88	115	He	71.247	ppb	4.3	29364.67	0.7494	Pulse	0.1000	3
Mo	98	115	He	0.553	ppb	2.0	660.04	0.0168	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	977.9	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.021	ppb	107.7	4.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.086	ppb	N/A	2330.26	0.0595	Pulse	0.1000	3
Sb	121	115	He	1.016	ppb	1.2	663.36	0.0169	Pulse	0.3000	3
Ba	137	115	He	38.413	ppb	3.0	7992.37	0.2040	Pulse	0.1000	3
Tl	205	159	He	0.107	ppb	17.5	493.36	0.0032	Pulse	0.1000	3
Pb	208	159	He	0.573	ppb	9.4	3163.57	0.0207	Pulse	0.1000	3
U	238	159	He	-0.011	ppb	N/A	66.67	0.0004	Pulse	0.1000	3

ISTD Table:

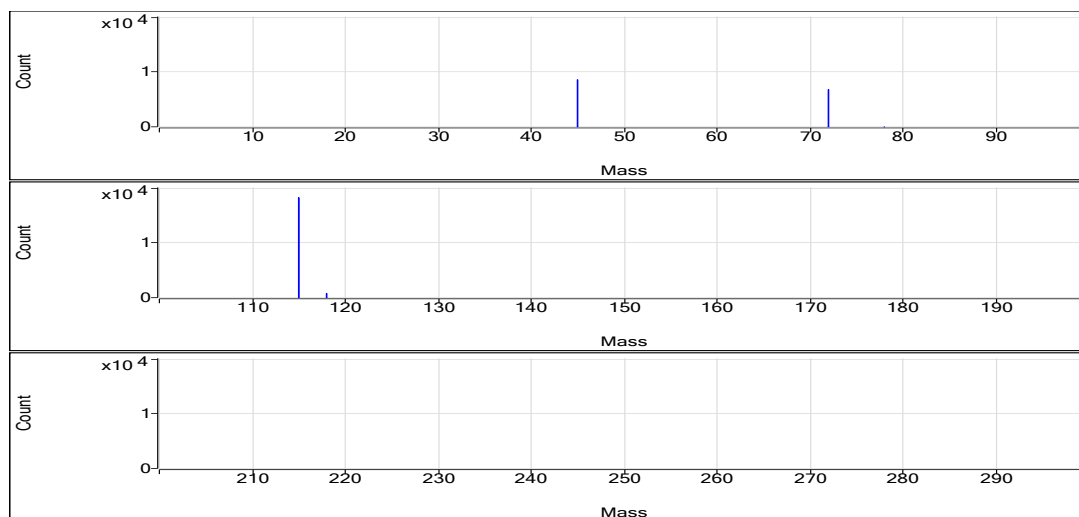
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1180921.99	0.6	90.3	Analog	0.1000	3
No Gas	Ge	72	596247.44	0.4	91.0	Pulse	0.1000	3
H2	Sc	45	86247.36	0.2	105.0	Pulse	0.1000	3
H2	Ge	72	68332.32	1.3	100.0	Pulse	0.1000	3
H2	In	115	183171.42	0.1	107.4	Pulse	0.1000	3
He	Sc	45	23266.97	0.6	90.8	Pulse	0.1000	3
He	Ge	72	42055.63	1.7	88.5	Pulse	0.1000	3
He	In	115	39187.21	0.8	95.7	Pulse	0.1000	3
He	Tb	159	152687.61	0.5	95.8	Pulse	0.1000	3
He	Bi	209	112184.18	0.9	95.9	Pulse	0.1000	3

No Gas

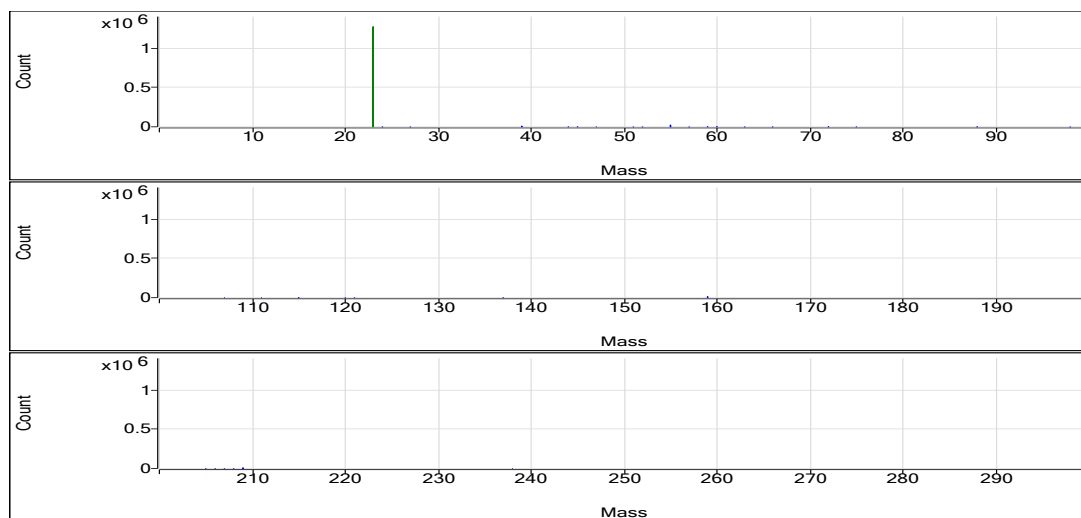


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.339	0.0004	262.00	0.0011	7.835E-05
Be	9	1	No Gas	0.37	0.0005	280.00	0.0011	7.835E-05
Be	9	1	No Gas	0.433	0.0005	322.00	0.0011	7.835E-05
Se	78	2	H2	0.007	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Na	23	3	He	169738.897	308.4276	12754741.06	0.0018	0.1731
Na	23	3	He	165437.541	300.6161	12853564.81	0.0018	0.1731
Na	23	3	He	165311.916	300.3879	12632934.81	0.0018	0.1731
Mg	24	3	He	262.688	0.2472	10223.48	0.0009	0.006537
Mg	24	3	He	267.112	0.2513	10743.73	0.0009	0.006537
Mg	24	3	He	286.237	0.2688	11304.24	0.0009	0.006537
Al	27	3	He	7.866	0.0046	190.01	0.0003	0.00231
Al	27	3	He	0.904	0.0026	110.00	0.0003	0.00231
Al	27	3	He	4.327	0.0036	150.00	0.0003	0.00231
K	39	3	He	370.46	0.6244	25820.36	0.0007	0.3475
K	39	3	He	214.246	0.5076	21704.28	0.0007	0.3475
K	39	3	He	179.904	0.4819	20268.47	0.0007	0.3475
Ca	44	3	He	1988.818	0.0826	3414.38	0	0.002807
Ca	44	3	He	1916.576	0.0797	3406.37	0	0.002807
Ca	44	3	He	1904.668	0.0792	3330.36	0	0.002807
Ti	47	3	He	0.106	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.06	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.208	0	2.00	0.0003	0.0001123
V	51	3	He	0.15	0.0103	428.01	0.0137	0.008308
V	51	3	He	0.066	0.0092	394.01	0.0137	0.008308
V	51	3	He	0.147	0.0103	434.01	0.0137	0.008308
Cr	52	3	He	-0.13	0.0193	800.04	0.0171	0.02156
Cr	52	3	He	-0.413	0.0145	620.03	0.0171	0.02156
Cr	52	3	He	-0.274	0.0169	710.04	0.0171	0.02156
Mn	55	3	He	160.438	1.1729	48503.73	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	153.31	1.1209	47926.00	0.0073	0.002316
Mn	55	3	He	158.542	1.1591	48744.59	0.0073	0.002316
Fe	57	3	He	3.5	0.0039	160.01	0.0003	0.002736
Fe	57	3	He	12.494	0.0068	290.01	0.0003	0.002736
Fe	57	3	He	3.301	0.0038	160.01	0.0003	0.002736
Co	59	3	He	5.433	0.1824	7543.78	0.0332	0.001922
Co	59	3	He	5.155	0.1732	7405.72	0.0332	0.001922
Co	59	3	He	5.129	0.1723	7247.63	0.0332	0.001922
Ni	60	3	He	22.503	0.213	8810.43	0.0093	0.003141
Ni	60	3	He	21.598	0.2046	8748.38	0.0093	0.003141
Ni	60	3	He	22.744	0.2153	9054.57	0.0093	0.003141
Cu	63	3	He	0.263	0.0108	448.01	0.027	0.003732
Cu	63	3	He	0.238	0.0102	434.01	0.027	0.003732
Cu	63	3	He	0.274	0.0111	468.01	0.027	0.003732
Zn	66	3	He	10.385	0.0344	1422.07	0.0031	0.002032
Zn	66	3	He	10.398	0.0344	1472.08	0.0031	0.002032
Zn	66	3	He	11.453	0.0377	1586.09	0.0031	0.002032
As	75	3	He	9.332	0.0246	1016.04	0.0025	0.0007733
As	75	3	He	8.778	0.0232	990.04	0.0025	0.0007733
As	75	3	He	9.153	0.0241	1014.04	0.0025	0.0007733
Sr	88	3	He	73.135	0.7692	29868.80	0.0105	0.004071
Sr	88	3	He	72.884	0.7665	30219.53	0.0105	0.004071
Sr	88	3	He	67.724	0.7125	28005.68	0.0105	0.004071
Mo	98	3	He	0.559	0.017	660.03	0.0234	0.003908
Mo	98	3	He	0.559	0.017	670.04	0.0234	0.003908
Mo	98	3	He	0.54	0.0165	650.04	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.045	0.0003	10.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.175	0.0579	2250.24	0.0169	0.0609
Sn	120	3	He	-0.091	0.0594	2340.26	0.0169	0.0609
Sn	120	3	He	0.01	0.0611	2400.27	0.0169	0.0609
Sb	121	3	He	1.02	0.017	660.02	0.0161	0.0005433
Sb	121	3	He	1.026	0.0171	673.36	0.0161	0.0005433
Sb	121	3	He	1.003	0.0167	656.69	0.0161	0.0005433
Ba	137	3	He	38.91	0.2066	8022.42	0.0053	0.001141
Ba	137	3	He	39.237	0.2083	8212.48	0.0053	0.001141
Ba	137	3	He	37.091	0.197	7742.22	0.0053	0.001141
Tl	205	3	He	0.128	0.0038	570.03	0.0248	0.0005854
Tl	205	3	He	0.1	0.0031	470.02	0.0248	0.0005854
Tl	205	3	He	0.092	0.0029	440.02	0.0248	0.0005854
Pb	208	3	He	0.6	0.0216	1620.15	0.0332	0.001693
Pb	208	3	He	0.511	0.0187	1510.12	0.0332	0.001693
Pb	208	3	He	0.608	0.0219	1820.17	0.0332	0.001693
U	238	3	He	-0.012	0.0004	60.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	-0.012	0.0004	60.00	0.0338	0.0007949
Sc	45	1	No Gas			1175365.45		
Sc	45	1	No Gas			1188195.76		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1179204.75		
Ge	72	1	No Gas			597378.35		
Ge	72	1	No Gas			593421.94		
Ge	72	1	No Gas			597942.02		
Sc	45	2	H2			86137.26		
Sc	45	2	H2			86398.02		
Sc	45	2	H2			86206.81		
Ge	72	2	H2			67381.73		
Ge	72	2	H2			69078.77		
Ge	72	2	H2			68536.47		
In	115	2	H2			183278.94		
In	115	2	H2			182915.23		
In	115	2	H2			183320.09		
Sc	45	3	He			23437.18		
Sc	45	3	He			23176.95		
Sc	45	3	He			23186.79		
Ge	72	3	He			41354.09		
Ge	72	3	He			42757.41		
Ge	72	3	He			42055.40		
In	115	3	He			38849.12		
In	115	3	He			39440.70		
In	115	3	He			39320.74		
Tb	159	3	He			151728.53		
Tb	159	3	He			153283.12		
Tb	159	3	He			153051.19		
Bi	209	3	He			111898.81		
Bi	209	3	He			111345.37		
Bi	209	3	He			113308.36		

Quantitation Report

Data File Name 287SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:46:03 PM
Sample Name LB 410-682149/1-B
Sample Type Sample
Comment D1
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

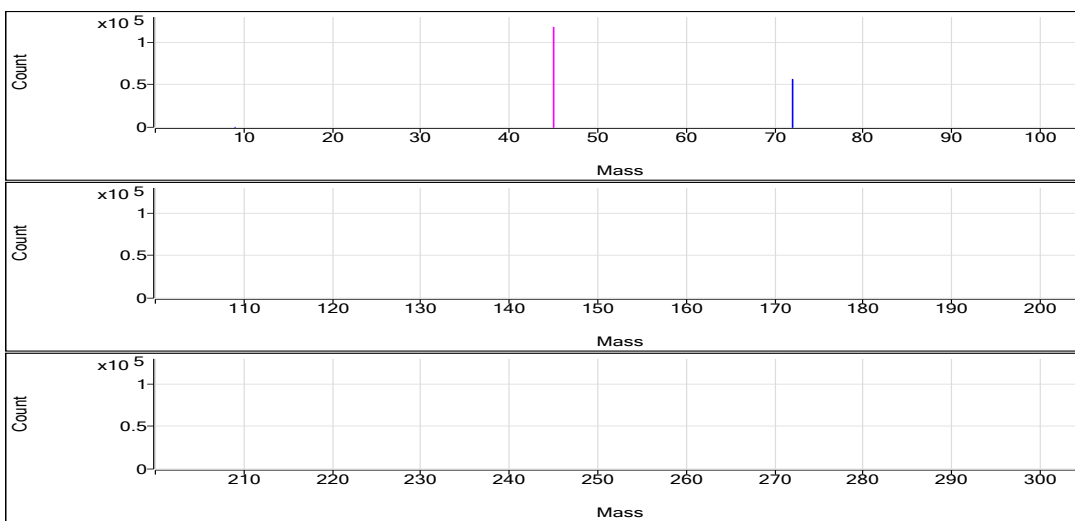
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.020	ppb	107.4	56.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.024	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	166700.312	ppb	1.5	12177135.65	302.9093	Analog	0.1000	3
Mg	24	72	He	9.755	ppb	25.6	623.36	0.0155	Pulse	0.1000	3
Al	27	72	He	-2.539	ppb	N/A	63.33	0.0016	Pulse	0.1000	3
K	39	72	He	67.227	ppb	138.8	15966.58	0.3977	Pulse	0.5000	3
Ca	44	72	He	29.152	ppb	32.1	160.00	0.0040	Pulse	0.5000	3
Ti	47	72	He	-0.043	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.039	ppb	N/A	312.67	0.0078	Pulse	0.5000	3
Cr	52	72	He	-0.146	ppb	N/A	766.71	0.0191	Pulse	0.1000	3
Mn	55	72	He	0.393	ppb	22.4	208.67	0.0052	Pulse	0.5000	3
Fe	57	72	He	1.499	ppb	209.6	130.00	0.0032	Pulse	0.1000	3
Co	59	72	He	0.004	ppb	355.5	82.67	0.0021	Pulse	0.5000	3
Ni	60	72	He	0.115	ppb	41.4	169.33	0.0042	Pulse	0.5000	3
Cu	63	72	He	0.197	ppb	15.2	363.34	0.0090	Pulse	0.5000	3
Zn	66	72	He	3.705	ppb	5.4	546.01	0.0136	Pulse	0.5000	3
As	75	72	He	0.030	ppb	322.1	34.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.001	ppb	11348.4	160.01	0.0041	Pulse	0.1000	3
Mo	98	115	He	0.049	ppb	33.8	196.68	0.0050	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.605	ppb	N/A	1976.87	0.0507	Pulse	0.1000	3
Sb	121	115	He	0.118	ppb	0.6	95.56	0.0024	Pulse	0.3000	3
Ba	137	115	He	0.381	ppb	49.4	123.34	0.0032	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	63.1	133.34	0.0009	Pulse	0.1000	3
Pb	208	159	He	0.553	ppb	5.4	3040.24	0.0201	Pulse	0.1000	3
U	238	159	He	-0.009	ppb	N/A	76.67	0.0005	Pulse	0.1000	3

ISTD Table:

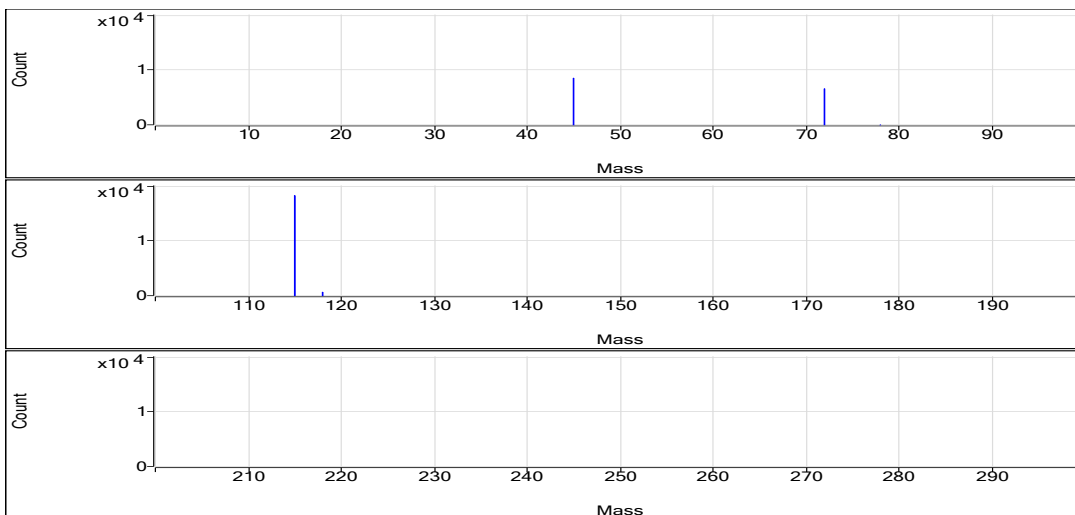
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1176920.08	0.8	90.0	Mix	0.1000	3
No Gas	Ge	72	564913.23	1.8	86.2	Pulse	0.1000	3
H2	Sc	45	85499.88	0.3	104.1	Pulse	0.1000	3
H2	Ge	72	65963.05	1.3	96.5	Pulse	0.1000	3
H2	In	115	182992.48	0.9	107.3	Pulse	0.1000	3
He	Sc	45	24041.58	3.2	93.9	Pulse	0.1000	3
He	Ge	72	40207.84	1.9	84.6	Pulse	0.1000	3
He	In	115	39002.45	1.7	95.3	Pulse	0.1000	3
He	Tb	159	151350.40	0.6	94.9	Pulse	0.1000	3
He	Bi	209	114058.94	1.1	97.5	Pulse	0.1000	3

No Gas

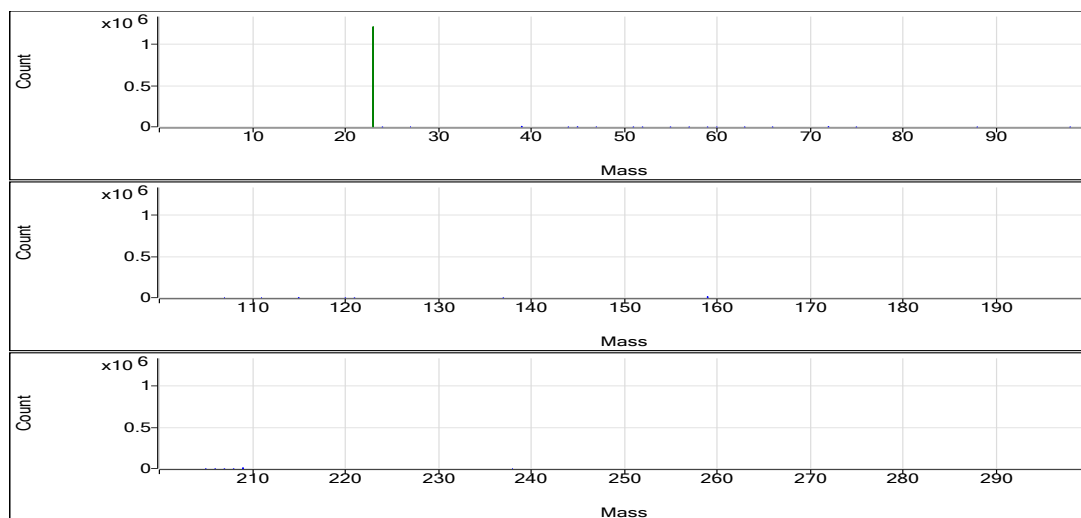


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.028	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.004	0.0001	42.00	0.0011	7.835E-05
Be	9	1	No Gas	0.035	0.0001	66.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	0.009	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Na	23	3	He	168618.97	306.3937	12099322.32	0.0018	0.1731
Na	23	3	He	163956.788	297.927	12215904.82	0.0018	0.1731
Na	23	3	He	167525.179	304.4073	12216179.82	0.0018	0.1731
Mg	24	3	He	7.791	0.0137	540.02	0.0009	0.006537
Mg	24	3	He	12.564	0.018	740.04	0.0009	0.006537
Mg	24	3	He	8.912	0.0147	590.03	0.0009	0.006537
Al	27	3	He	-3.594	0.0013	50.00	0.0003	0.00231
Al	27	3	He	-2.075	0.0017	70.00	0.0003	0.00231
Al	27	3	He	-1.948	0.0017	70.00	0.0003	0.00231
K	39	3	He	173.568	0.4772	18844.81	0.0007	0.3475
K	39	3	He	29.145	0.3693	15141.02	0.0007	0.3475
K	39	3	He	-1.031	0.3467	13913.92	0.0007	0.3475
Ca	44	3	He	18.416	0.0035	140.00	0	0.002807
Ca	44	3	He	33.397	0.0041	170.00	0	0.002807
Ca	44	3	He	35.643	0.0042	170.00	0	0.002807
Ti	47	3	He	-0.198	0.0001	2.00	0.0003	0.0001123
Ti	47	3	He	0.11	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.04	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.019	0.0081	318.01	0.0137	0.008308
V	51	3	He	-0.058	0.0075	308.01	0.0137	0.008308
V	51	3	He	-0.039	0.0078	312.00	0.0137	0.008308
Cr	52	3	He	-0.135	0.0192	760.05	0.0171	0.02156
Cr	52	3	He	-0.163	0.0188	770.05	0.0171	0.02156
Cr	52	3	He	-0.139	0.0192	770.04	0.0171	0.02156
Mn	55	3	He	0.293	0.0045	176.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.425	0.0054	222.00	0.0073	0.002316
Mn	55	3	He	0.461	0.0057	228.00	0.0073	0.002316
Fe	57	3	He	-0.628	0.0025	100.00	0.0003	0.002736
Fe	57	3	He	5.108	0.0044	180.01	0.0003	0.002736
Fe	57	3	He	0.017	0.0027	110.00	0.0003	0.002736
Co	59	3	He	0.021	0.0026	104.00	0.0332	0.001922
Co	59	3	He	-0.005	0.0018	72.00	0.0332	0.001922
Co	59	3	He	-0.004	0.0018	72.00	0.0332	0.001922
Ni	60	3	He	0.136	0.0044	174.00	0.0093	0.003141
Ni	60	3	He	0.061	0.0037	152.00	0.0093	0.003141
Ni	60	3	He	0.149	0.0045	182.00	0.0093	0.003141
Cu	63	3	He	0.231	0.01	394.01	0.027	0.003732
Cu	63	3	He	0.181	0.0086	354.01	0.027	0.003732
Cu	63	3	He	0.177	0.0085	342.01	0.027	0.003732
Zn	66	3	He	3.672	0.0135	532.01	0.0031	0.002032
Zn	66	3	He	3.919	0.0142	584.01	0.0031	0.002032
Zn	66	3	He	3.523	0.013	522.01	0.0031	0.002032
As	75	3	He	0.114	0.0011	42.00	0.0025	0.0007733
As	75	3	He	-0.074	0.0006	24.00	0.0025	0.0007733
As	75	3	He	0.049	0.0009	36.00	0.0025	0.0007733
Sr	88	3	He	0.119	0.0053	210.01	0.0105	0.004071
Sr	88	3	He	0.049	0.0046	180.01	0.0105	0.004071
Sr	88	3	He	-0.164	0.0024	90.00	0.0105	0.004071
Mo	98	3	He	0.038	0.0048	190.01	0.0234	0.003908
Mo	98	3	He	0.04	0.0048	190.01	0.0234	0.003908
Mo	98	3	He	0.068	0.0055	210.01	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.399	0.0542	2140.23	0.0169	0.0609
Sn	120	3	He	-0.921	0.0454	1780.17	0.0169	0.0609
Sn	120	3	He	-0.494	0.0526	2010.21	0.0169	0.0609
Sb	121	3	He	0.118	0.0024	96.67	0.0161	0.0005433
Sb	121	3	He	0.119	0.0025	96.67	0.0161	0.0005433
Sb	121	3	He	0.118	0.0024	93.33	0.0161	0.0005433
Ba	137	3	He	0.599	0.0043	170.01	0.0053	0.001141
Ba	137	3	He	0.266	0.0025	100.00	0.0053	0.001141
Ba	137	3	He	0.279	0.0026	100.00	0.0053	0.001141
Tl	205	3	He	0.016	0.001	150.01	0.0248	0.0005854
Tl	205	3	He	0.016	0.001	150.01	0.0248	0.0005854
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	0.583	0.0211	1600.16	0.0332	0.001693
Pb	208	3	He	0.553	0.0201	1520.15	0.0332	0.001693
Pb	208	3	He	0.524	0.0191	1530.13	0.0332	0.001693
U	238	3	He	-0.014	0.0003	50.00	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
Sc	45	1	No Gas			1165939.90		
Sc	45	1	No Gas			1184392.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1180427.95		
Ge	72	1	No Gas			552978.04		
Ge	72	1	No Gas			570276.12		
Ge	72	1	No Gas			571485.54		
Sc	45	2	H2			85714.63		
Sc	45	2	H2			85221.78		
Sc	45	2	H2			85563.23		
Ge	72	2	H2			66950.60		
Ge	72	2	H2			65524.62		
Ge	72	2	H2			65413.92		
In	115	2	H2			184947.91		
In	115	2	H2			182215.93		
In	115	2	H2			181813.61		
Sc	45	3	He			23607.54		
Sc	45	3	He			23577.56		
Sc	45	3	He			24939.64		
Ge	72	3	He			39489.46		
Ge	72	3	He			41003.02		
Ge	72	3	He			40131.03		
In	115	3	He			39530.96		
In	115	3	He			39259.86		
In	115	3	He			38258.04		
Tb	159	3	He			151819.14		
Tb	159	3	He			151989.23		
Tb	159	3	He			150242.84		
Bi	209	3	He			113086.93		
Bi	209	3	He			113542.97		
Bi	209	3	He			115546.92		

Quantitation Report

Data File Name 289_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:50:28 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

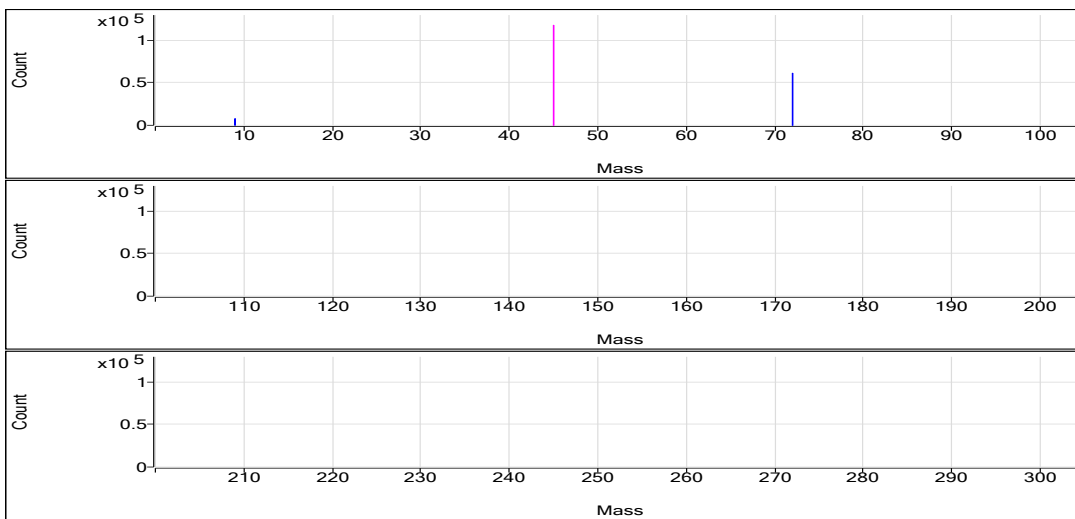
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.212	ppb	4.0	15844.15	0.0258	Pulse	0.5000	3
Se	78	72	H2	25.413	ppb	3.5	903.58	0.0129	Pulse	1.5000	3
Na	23	72	He	2475.978	ppb	1.1	203466.47	4.6696	Pulse	0.1000	3
Mg	24	72	He	2453.010	ppb	1.0	98222.26	2.2540	Pulse	0.1000	3
Al	27	72	He	2438.909	ppb	3.2	30959.49	0.7107	Pulse	0.1000	3
K	39	72	He	2456.160	ppb	4.4	95095.42	2.1833	Pulse	0.5000	3
Ca	44	72	He	2476.479	ppb	2.7	4449.96	0.1021	Pulse	0.5000	3
Ti	47	72	He	2454.324	ppb	1.3	33265.65	0.7634	Pulse	0.5000	3
V	51	72	He	243.565	ppb	3.0	145294.39	3.3352	Pulse	0.5000	3
Cr	52	72	He	242.807	ppb	2.7	181666.48	4.1702	Pulse	0.1000	3
Mn	55	72	He	243.273	ppb	3.3	77417.22	1.7773	Pulse	0.5000	3
Fe	57	72	He	2413.533	ppb	1.0	34190.13	0.7845	Pulse	0.1000	3
Co	59	72	He	245.136	ppb	2.4	354885.84	8.1461	Pulse	0.5000	3
Ni	60	72	He	243.118	ppb	2.2	98939.42	2.2710	Pulse	0.5000	3
Cu	63	72	He	242.421	ppb	1.9	285516.96	6.5533	Pulse	0.5000	3
Zn	66	72	He	243.752	ppb	2.4	33172.63	0.7615	Pulse	0.5000	3
As	75	72	He	244.847	ppb	2.2	27233.10	0.6251	Pulse	0.5000	3
Sr	88	115	He	24.183	ppb	5.3	9946.75	0.2571	Pulse	0.1000	3
Mo	98	115	He	24.771	ppb	2.8	22563.47	0.5834	Pulse	0.1000	3
Ag	107	115	He	25.556	ppb	3.9	48746.98	1.2605	Pulse	0.1000	3
Cd	111	115	He	24.669	ppb	2.6	5354.29	0.1384	Pulse	0.5000	3
Sn	120	115	He	24.138	ppb	2.9	18114.47	0.4683	Pulse	0.1000	3
Sb	121	115	He	24.466	ppb	1.2	15281.00	0.3950	Pulse	0.3000	3
Ba	137	115	He	250.571	ppb	2.9	51209.71	1.3242	Pulse	0.1000	3
Tl	205	159	He	24.879	ppb	1.1	92996.17	0.6170	Pulse	0.1000	3
Pb	208	159	He	24.861	ppb	1.3	124761.44	0.8278	Pulse	0.1000	3
U	238	159	He	25.397	ppb	0.8	129323.77	0.8580	Pulse	0.1000	3

ISTD Table:

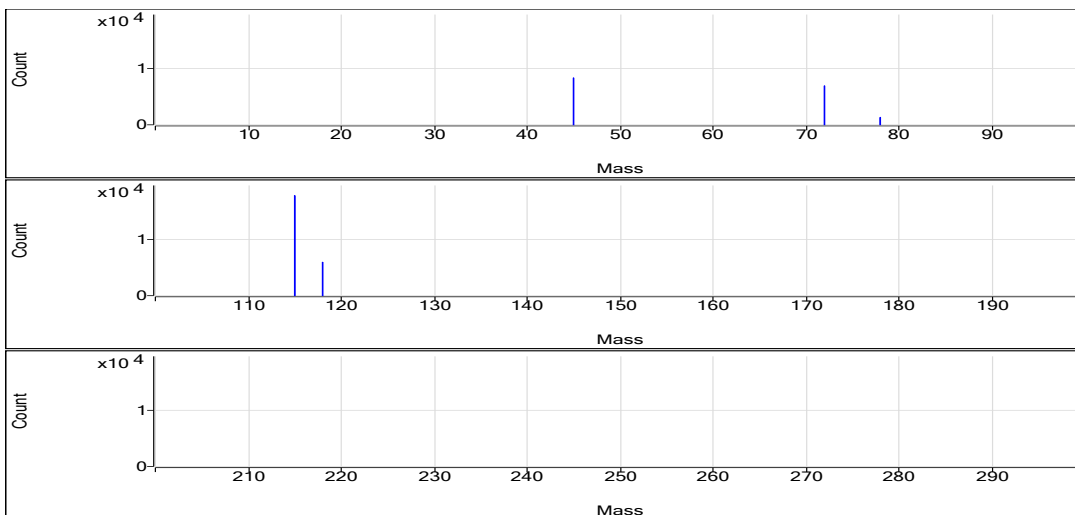
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1177360.17	0.8	90.1	Mix	0.1000	3
No Gas	Ge	72	614431.49	1.6	93.8	Pulse	0.1000	3
H2	Sc	45	84260.30	0.8	102.6	Pulse	0.1000	3
H2	Ge	72	70009.76	1.0	102.4	Pulse	0.1000	3
H2	In	115	179654.24	0.4	105.3	Pulse	0.1000	3
He	Sc	45	24258.56	2.5	94.7	Pulse	0.1000	3
He	Ge	72	43579.99	2.2	91.7	Pulse	0.1000	3
He	In	115	38692.50	2.6	94.5	Pulse	0.1000	3
He	Tb	159	150721.21	0.7	94.5	Pulse	0.1000	3
He	Bi	209	112416.01	1.9	96.1	Pulse	0.1000	3

No Gas

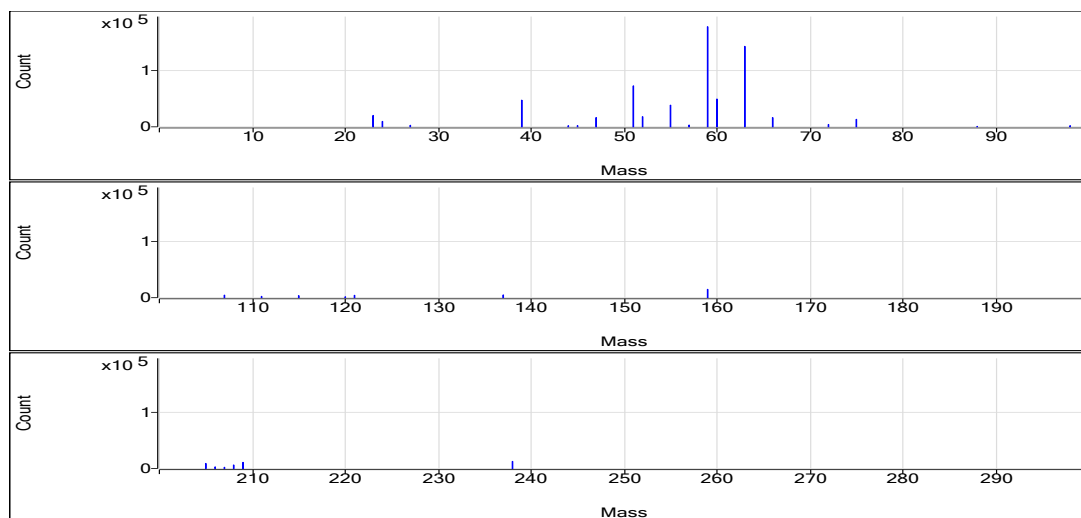


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.393	0.0249	15447.09	0.0011	7.835E-05
Be	9	1	No Gas	23.966	0.0255	15847.49	0.0011	7.835E-05
Be	9	1	No Gas	25.278	0.0269	16237.87	0.0011	7.835E-05
Se	78	2	H2	26.296	0.0134	936.03	0.0005	2.594E-05
Se	78	2	H2	25.45	0.0129	913.36	0.0005	2.594E-05
Se	78	2	H2	24.493	0.0124	861.36	0.0005	2.594E-05
Na	23	3	He	2496.425	4.7067	202332.93	0.0018	0.1731
Na	23	3	He	2487.948	4.6913	202049.72	0.0018	0.1731
Na	23	3	He	2443.561	4.6107	206016.77	0.0018	0.1731
Mg	24	3	He	2481.199	2.2799	98008.03	0.0009	0.006537
Mg	24	3	He	2441.602	2.2436	96629.50	0.0009	0.006537
Mg	24	3	He	2436.228	2.2387	100029.26	0.0009	0.006537
Al	27	3	He	2433.133	0.709	30478.51	0.0003	0.00231
Al	27	3	He	2519.058	0.734	31610.57	0.0003	0.00231
Al	27	3	He	2364.537	0.6891	30789.39	0.0003	0.00231
K	39	3	He	2537.014	2.2437	96453.09	0.0007	0.3475
K	39	3	He	2499.144	2.2154	95415.08	0.0007	0.3475
K	39	3	He	2332.323	2.0907	93418.09	0.0007	0.3475
Ca	44	3	He	2424.6	0.1	4300.59	0	0.002807
Ca	44	3	He	2553.124	0.1052	4530.65	0	0.002807
Ca	44	3	He	2451.713	0.1011	4518.65	0	0.002807
Ti	47	3	He	2436.627	0.7579	32580.27	0.0003	0.0001123
Ti	47	3	He	2489.811	0.7744	33353.79	0.0003	0.0001123
Ti	47	3	He	2436.534	0.7579	33862.90	0.0003	0.0001123
V	51	3	He	244.09	3.3424	143684.73	0.0137	0.008308
V	51	3	He	250.524	3.4303	147739.78	0.0137	0.008308
V	51	3	He	236.08	3.233	144458.67	0.0137	0.008308
Cr	52	3	He	247.26	4.2463	182542.63	0.0171	0.02156
Cr	52	3	He	245.997	4.2247	181955.90	0.0171	0.02156
Cr	52	3	He	235.164	4.0396	180500.90	0.0171	0.02156
Mn	55	3	He	245.542	1.7938	77113.32	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	250.036	1.8266	78670.41	0.0073	0.002316
Mn	55	3	He	234.241	1.7114	76467.92	0.0073	0.002316
Fe	57	3	He	2387.662	0.7761	33365.01	0.0003	0.002736
Fe	57	3	He	2436.334	0.7919	34106.65	0.0003	0.002736
Fe	57	3	He	2416.603	0.7855	35098.72	0.0003	0.002736
Co	59	3	He	247.643	8.2294	353770.16	0.0332	0.001922
Co	59	3	He	249.327	8.2854	356843.25	0.0332	0.001922
Co	59	3	He	238.437	7.9236	354044.13	0.0332	0.001922
Ni	60	3	He	243.735	2.2767	97872.38	0.0093	0.003141
Ni	60	3	He	248.201	2.3184	99850.16	0.0093	0.003141
Ni	60	3	He	237.417	2.2178	99095.71	0.0093	0.003141
Cu	63	3	He	243.636	6.5861	283126.13	0.027	0.003732
Cu	63	3	He	246.298	6.658	286754.72	0.027	0.003732
Cu	63	3	He	237.329	6.4157	286670.03	0.027	0.003732
Zn	66	3	He	247.519	0.7732	33238.11	0.0031	0.002032
Zn	66	3	He	246.576	0.7703	33173.98	0.0031	0.002032
Zn	66	3	He	237.16	0.7409	33105.80	0.0031	0.002032
As	75	3	He	248.432	0.6342	27265.14	0.0025	0.0007733
As	75	3	He	247.528	0.6319	27217.05	0.0025	0.0007733
As	75	3	He	238.58	0.6091	27217.12	0.0025	0.0007733
Sr	88	3	He	23.085	0.2456	9302.97	0.0105	0.004071
Sr	88	3	He	25.585	0.2717	10433.76	0.0105	0.004071
Sr	88	3	He	23.88	0.2539	10103.51	0.0105	0.004071
Mo	98	3	He	25.182	0.5931	22466.78	0.0234	0.003908
Mo	98	3	He	25.165	0.5926	22757.07	0.0234	0.003908
Mo	98	3	He	23.964	0.5646	22466.57	0.0234	0.003908
Ag	107	3	He	25.702	1.2677	48024.89	0.0493	0.0004851
Ag	107	3	He	26.464	1.3053	50121.09	0.0493	0.0004851
Ag	107	3	He	24.502	1.2086	48094.96	0.0493	0.0004851
Cd	111	3	He	24.655	0.1383	5240.92	0.0056	0
Cd	111	3	He	25.308	0.142	5452.99	0.0056	0
Cd	111	3	He	24.044	0.1349	5368.95	0.0056	0
Sn	120	3	He	24.153	0.4686	17750.67	0.0169	0.0609
Sn	120	3	He	24.83	0.48	18431.48	0.0169	0.0609
Sn	120	3	He	23.43	0.4564	18161.25	0.0169	0.0609
Sb	121	3	He	24.706	0.3989	15110.82	0.0161	0.0005433
Sb	121	3	He	24.562	0.3966	15227.61	0.0161	0.0005433
Sb	121	3	He	24.131	0.3896	15504.56	0.0161	0.0005433
Ba	137	3	He	257.49	1.3607	51547.08	0.0053	0.001141
Ba	137	3	He	251.258	1.3278	50985.71	0.0053	0.001141
Ba	137	3	He	242.963	1.284	51096.35	0.0053	0.001141
Tl	205	3	He	25.156	0.6239	94042.02	0.0248	0.0005854
Tl	205	3	He	24.619	0.6106	92664.64	0.0248	0.0005854
Tl	205	3	He	24.863	0.6166	92281.86	0.0248	0.0005854
Pb	208	3	He	24.509	0.8161	65025.60	0.0332	0.001693
Pb	208	3	He	24.918	0.8297	66834.77	0.0332	0.001693
Pb	208	3	He	25.157	0.8376	66100.59	0.0332	0.001693
U	238	3	He	25.175	0.8506	128212.27	0.0338	0.0007949
U	238	3	He	25.543	0.863	130969.92	0.0338	0.0007949
U	238	3	He	25.472	0.8606	128789.12	0.0338	0.0007949
Sc	45	1	No Gas			1184642.72		
Sc	45	1	No Gas			1180665.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1166771.94		
Ge	72	1	No Gas			619701.01		
Ge	72	1	No Gas			620602.45		
Ge	72	1	No Gas			602991.01		
Sc	45	2	H2			83594.08		
Sc	45	2	H2			84900.09		
Sc	45	2	H2			84286.72		
Ge	72	2	H2			70103.47		
Ge	72	2	H2			70675.89		
Ge	72	2	H2			69249.92		
In	115	2	H2			179315.39		
In	115	2	H2			179181.19		
In	115	2	H2			180466.13		
Sc	45	3	He			24178.65		
Sc	45	3	He			24909.39		
Sc	45	3	He			23687.64		
Ge	72	3	He			42988.40		
Ge	72	3	He			43069.10		
Ge	72	3	He			44682.48		
In	115	3	He			38007.39		
In	115	3	He			38528.23		
In	115	3	He			39922.27		
Tb	159	3	He			150739.62		
Tb	159	3	He			151767.22		
Tb	159	3	He			149656.78		
Bi	209	3	He			110055.05		
Bi	209	3	He			113096.72		
Bi	209	3	He			114096.25		

Quantitation Report

Data File Name 291_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:54:52 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

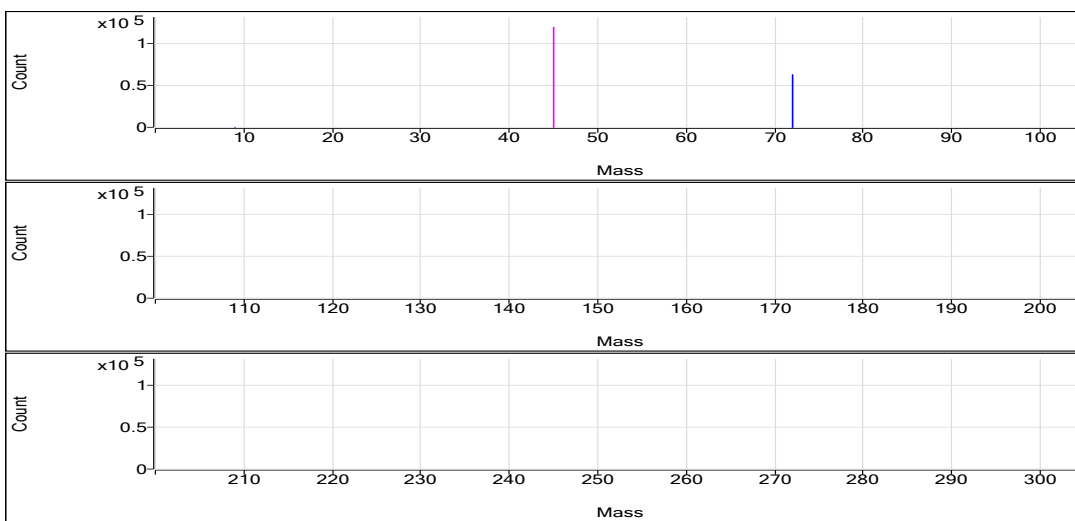
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.018	ppb	138.8	60.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.026	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	16.490	ppb	23.7	8992.67	0.2030	Pulse	0.1000	3
Mg	24	72	He	3.051	ppb	20.9	413.35	0.0093	Pulse	0.1000	3
Al	27	72	He	-3.807	ppb	N/A	53.33	0.0012	Pulse	0.1000	3
K	39	72	He	2.368	ppb	3285.0	15476.11	0.3493	Pulse	0.5000	3
Ca	44	72	He	-13.410	ppb	N/A	100.67	0.0023	Pulse	0.5000	3
Ti	47	72	He	0.466	ppb	69.1	11.33	0.0003	Pulse	0.5000	3
V	51	72	He	0.009	ppb	602.5	374.01	0.0084	Pulse	0.5000	3
Cr	52	72	He	-0.207	ppb	N/A	800.05	0.0180	Pulse	0.1000	3
Mn	55	72	He	0.166	ppb	52.2	156.00	0.0035	Pulse	0.5000	3
Fe	57	72	He	-1.287	ppb	N/A	103.34	0.0023	Pulse	0.1000	3
Co	59	72	He	-0.001	ppb	N/A	84.00	0.0019	Pulse	0.5000	3
Ni	60	72	He	0.033	ppb	187.6	152.67	0.0034	Pulse	0.5000	3
Cu	63	72	He	-0.026	ppb	N/A	134.00	0.0030	Pulse	0.5000	3
Zn	66	72	He	-0.251	ppb	N/A	55.33	0.0012	Pulse	0.5000	3
As	75	72	He	0.033	ppb	21.3	38.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.076	ppb	N/A	123.34	0.0033	Pulse	0.1000	3
Mo	98	115	He	0.131	ppb	77.6	263.35	0.0070	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	597.2	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.372	ppb	56.3	2530.35	0.0672	Pulse	0.1000	3
Sb	121	115	He	0.056	ppb	78.4	54.44	0.0015	Pulse	0.3000	3
Ba	137	115	He	-0.015	ppb	N/A	40.00	0.0011	Pulse	0.1000	3
Tl	205	159	He	0.006	ppb	174.7	110.00	0.0007	Pulse	0.1000	3
Pb	208	159	He	-0.016	ppb	N/A	170.00	0.0011	Pulse	0.1000	3
U	238	159	He	-0.006	ppb	N/A	86.67	0.0006	Pulse	0.1000	3

ISTD Table:

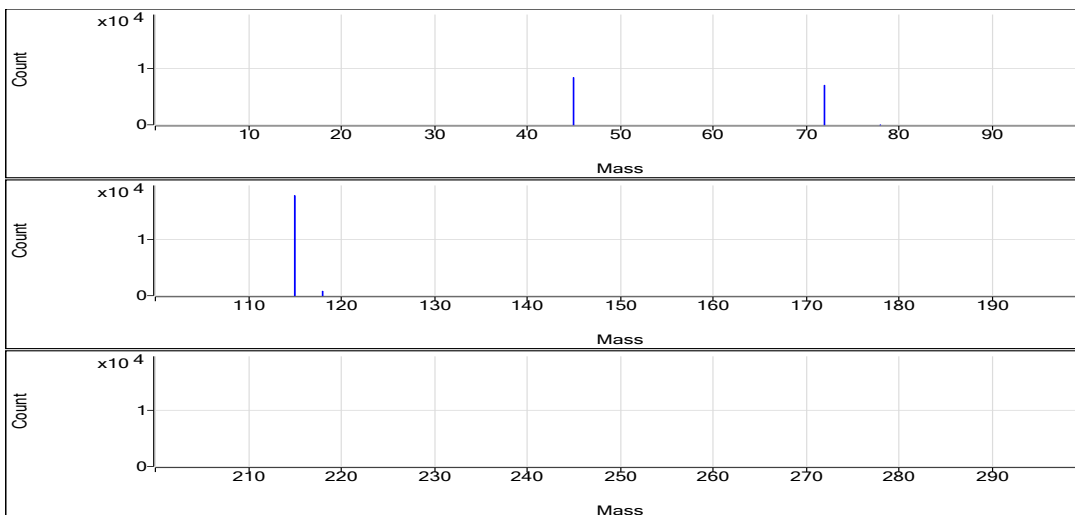
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1190114.12	1.9	91.0	Mix	0.1000	3
No Gas	Ge	72	625140.17	0.7	95.4	Pulse	0.1000	3
H2	Sc	45	83978.86	0.9	102.2	Pulse	0.1000	3
H2	Ge	72	70341.21	3.0	102.9	Pulse	0.1000	3
H2	In	115	177740.16	1.3	104.2	Pulse	0.1000	3
He	Sc	45	23056.84	2.4	90.0	Pulse	0.1000	3
He	Ge	72	44318.42	2.1	93.3	Pulse	0.1000	3
He	In	115	37685.46	1.5	92.0	Pulse	0.1000	3
He	Tb	159	148300.59	0.8	93.0	Pulse	0.1000	3
He	Bi	209	110205.57	0.4	94.2	Pulse	0.1000	3

No Gas

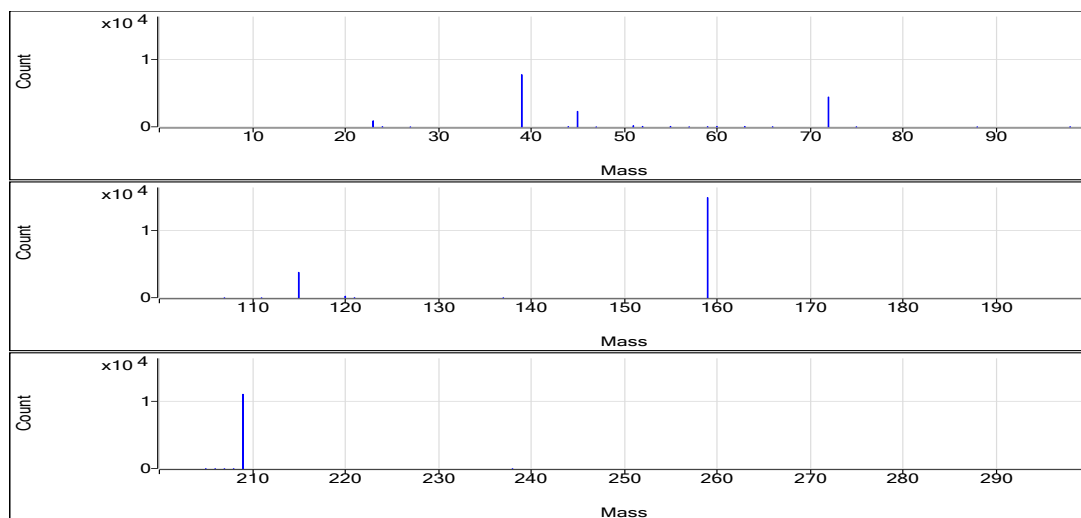


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.041	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.019	0.0001	62.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.007	0.0001	44.00	0.0011	7.835E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Na	23	3	He	13.703	0.1979	8812.56	0.0018	0.1731
Na	23	3	He	20.954	0.2111	9142.77	0.0018	0.1731
Na	23	3	He	14.814	0.2	9022.69	0.0018	0.1731
Mg	24	3	He	2.426	0.0088	390.02	0.0009	0.006537
Mg	24	3	He	3.702	0.0099	430.02	0.0009	0.006537
Mg	24	3	He	3.024	0.0093	420.02	0.0009	0.006537
Al	27	3	He	-2.54	0.0016	70.00	0.0003	0.00231
Al	27	3	He	-3.978	0.0012	50.00	0.0003	0.00231
Al	27	3	He	-4.901	0.0009	40.00	0.0003	0.00231
K	39	3	He	89.3	0.4142	18442.37	0.0007	0.3475
K	39	3	He	-21.591	0.3313	14350.27	0.0007	0.3475
K	39	3	He	-60.607	0.3022	13635.68	0.0007	0.3475
Ca	44	3	He	-12.86	0.0023	102.00	0	0.002807
Ca	44	3	He	-18.169	0.0021	90.00	0	0.002807
Ca	44	3	He	-9.201	0.0024	110.00	0	0.002807
Ti	47	3	He	0.361	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	0.827	0.0004	16.00	0.0003	0.0001123
Ti	47	3	He	0.209	0.0002	8.00	0.0003	0.0001123
V	51	3	He	0.023	0.0086	384.01	0.0137	0.008308
V	51	3	He	-0.05	0.0076	330.01	0.0137	0.008308
V	51	3	He	0.054	0.009	408.01	0.0137	0.008308
Cr	52	3	He	-0.368	0.0153	680.04	0.0171	0.02156
Cr	52	3	He	-0.262	0.0171	740.04	0.0171	0.02156
Cr	52	3	He	0.009	0.0217	980.06	0.0171	0.02156
Mn	55	3	He	0.07	0.0028	126.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.24	0.0041	176.00	0.0073	0.002316
Mn	55	3	He	0.187	0.0037	166.00	0.0073	0.002316
Fe	57	3	He	-3.592	0.0016	70.00	0.0003	0.002736
Fe	57	3	He	-3.456	0.0016	70.00	0.0003	0.002736
Fe	57	3	He	3.186	0.0038	170.01	0.0003	0.002736
Co	59	3	He	-0.005	0.0018	78.00	0.0332	0.001922
Co	59	3	He	-0.004	0.0018	78.00	0.0332	0.001922
Co	59	3	He	0.006	0.0021	96.00	0.0332	0.001922
Ni	60	3	He	-0.038	0.0028	124.00	0.0093	0.003141
Ni	60	3	He	0.069	0.0038	164.00	0.0093	0.003141
Ni	60	3	He	0.067	0.0038	170.00	0.0093	0.003141
Cu	63	3	He	-0.005	0.0036	160.00	0.027	0.003732
Cu	63	3	He	-0.036	0.0028	120.00	0.027	0.003732
Cu	63	3	He	-0.038	0.0027	122.00	0.027	0.003732
Zn	66	3	He	-0.205	0.0014	62.00	0.0031	0.002032
Zn	66	3	He	-0.267	0.0012	52.00	0.0031	0.002032
Zn	66	3	He	-0.282	0.0012	52.00	0.0031	0.002032
As	75	3	He	0.031	0.0009	38.00	0.0025	0.0007733
As	75	3	He	0.041	0.0009	38.00	0.0025	0.0007733
As	75	3	He	0.027	0.0008	38.00	0.0025	0.0007733
Sr	88	3	He	-0.162	0.0024	90.00	0.0105	0.004071
Sr	88	3	He	-0.054	0.0035	130.00	0.0105	0.004071
Sr	88	3	He	-0.013	0.0039	150.01	0.0105	0.004071
Mo	98	3	He	0.059	0.0053	200.01	0.0234	0.003908
Mo	98	3	He	0.087	0.0059	220.01	0.0234	0.003908
Mo	98	3	He	0.247	0.0097	370.02	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	0.245	0.065	2460.28	0.0169	0.0609
Sn	120	3	He	0.613	0.0713	2640.47	0.0169	0.0609
Sn	120	3	He	0.257	0.0652	2490.29	0.0169	0.0609
Sb	121	3	He	0.021	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.106	0.0022	83.33	0.0161	0.0005433
Sb	121	3	He	0.042	0.0012	46.67	0.0161	0.0005433
Ba	137	3	He	0.034	0.0013	50.00	0.0053	0.001141
Ba	137	3	He	-0.063	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	-0.018	0.001	40.00	0.0053	0.001141
Tl	205	3	He	0.018	0.001	150.01	0.0248	0.0005854
Tl	205	3	He	0.006	0.0007	110.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Pb	208	3	He	-0.018	0.0011	70.00	0.0332	0.001693
Pb	208	3	He	-0.023	0.0009	90.00	0.0332	0.001693
Pb	208	3	He	-0.009	0.0014	90.00	0.0332	0.001693
U	238	3	He	-0.02	0.0001	20.00	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.01	0.0338	0.0007949
Sc	45	1	No Gas			1179916.08		
Sc	45	1	No Gas			1174045.61		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1216380.68		
Ge	72	1	No Gas			620894.05		
Ge	72	1	No Gas			629707.26		
Ge	72	1	No Gas			624819.21		
Sc	45	2	H2			84759.33		
Sc	45	2	H2			83896.14		
Sc	45	2	H2			83281.11		
Ge	72	2	H2			72714.62		
Ge	72	2	H2			68777.69		
Ge	72	2	H2			69531.32		
In	115	2	H2			179991.70		
In	115	2	H2			177687.05		
In	115	2	H2			175541.74		
Sc	45	3	He			22606.04		
Sc	45	3	He			22896.71		
Sc	45	3	He			23667.78		
Ge	72	3	He			44522.33		
Ge	72	3	He			43309.11		
Ge	72	3	He			45123.81		
In	115	3	He			37846.61		
In	115	3	He			37075.40		
In	115	3	He			38187.50		
Tb	159	3	He			147123.17		
Tb	159	3	He			148283.69		
Tb	159	3	He			149494.91		
Bi	209	3	He			109934.59		
Bi	209	3	He			110003.96		
Bi	209	3	He			110678.16		

Quantitation Report

Data File Name 292SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:57:05 PM
Sample Name 410-235808-A-1-U
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

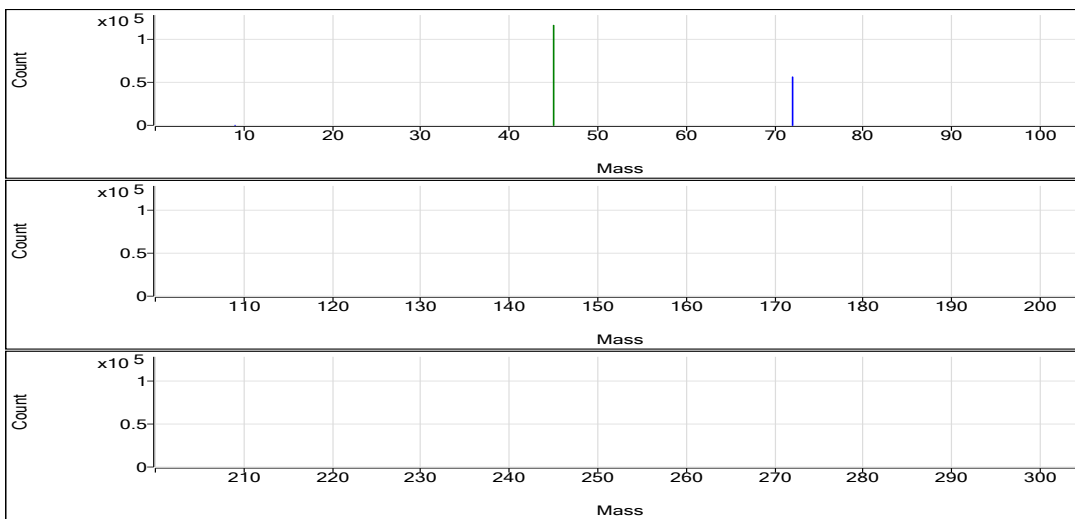
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.224	ppb	20.9	178.67	0.0003	Pulse	0.5000	3
Se	78	72	H2	-0.006	ppb	N/A	1.56	0.0000	Pulse	1.5000	3
Na	23	72	He	127667.568	ppb	1.1	9329683.40	232.0239	Analog	0.1000	3
Mg	24	72	He	193.203	ppb	5.0	7381.89	0.1836	Pulse	0.1000	3
Al	27	72	He	39.145	ppb	4.6	550.03	0.0137	Pulse	0.1000	3
K	39	72	He	277.935	ppb	31.6	22327.26	0.5552	Pulse	0.5000	3
Ca	44	72	He	244.674	ppb	7.5	507.34	0.0126	Pulse	0.5000	3
Ti	47	72	He	-0.255	ppb	N/A	1.33	0.0000	Pulse	0.5000	3
V	51	72	He	-0.004	ppb	N/A	332.01	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.106	ppb	46.0	940.06	0.0234	Pulse	0.1000	3
Mn	55	72	He	56.574	ppb	1.9	16690.57	0.4151	Pulse	0.5000	3
Fe	57	72	He	177.333	ppb	8.0	2420.27	0.0602	Pulse	0.1000	3
Co	59	72	He	1.409	ppb	1.5	1959.47	0.0487	Pulse	0.5000	3
Ni	60	72	He	1.723	ppb	5.1	772.69	0.0192	Pulse	0.5000	3
Cu	63	72	He	1.587	ppb	8.8	1874.12	0.0466	Pulse	0.5000	3
Zn	66	72	He	5.521	ppb	4.5	773.36	0.0192	Pulse	0.5000	3
As	75	72	He	0.373	ppb	3.7	69.33	0.0017	Pulse	0.5000	3
Sr	88	115	He	1.005	ppb	27.2	580.03	0.0146	Pulse	0.1000	3
Mo	98	115	He	-0.078	ppb	N/A	83.33	0.0021	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.927	ppb	N/A	1803.50	0.0453	Pulse	0.1000	3
Sb	121	115	He	0.048	ppb	39.1	52.22	0.0013	Pulse	0.3000	3
Ba	137	115	He	4.977	ppb	1.6	1093.41	0.0274	Pulse	0.1000	3
Tl	205	159	He	-0.009	ppb	N/A	53.33	0.0004	Pulse	0.1000	3
Pb	208	159	He	4.288	ppb	2.0	21820.49	0.1442	Pulse	0.1000	3
U	238	159	He	0.051	ppb	21.8	380.02	0.0025	Pulse	0.1000	3

ISTD Table:

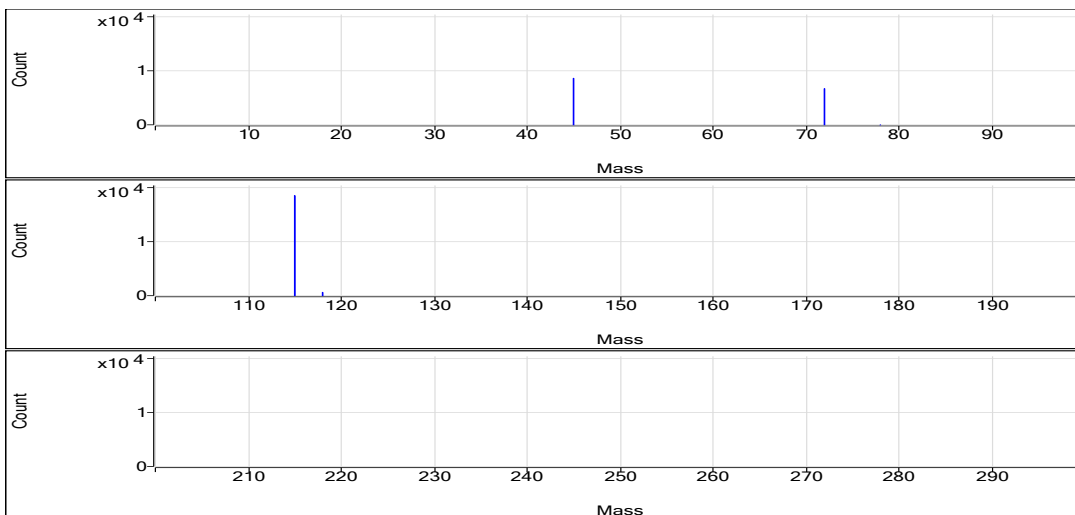
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1168621.73	2.0	89.4	Analog	0.1000	3
No Gas	Ge	72	565499.41	2.2	86.3	Pulse	0.1000	3
H2	Sc	45	86414.39	0.1	105.2	Pulse	0.1000	3
H2	Ge	72	67181.09	0.5	98.3	Pulse	0.1000	3
H2	In	115	185597.62	0.3	108.8	Pulse	0.1000	3
He	Sc	45	23620.94	1.5	92.2	Pulse	0.1000	3
He	Ge	72	40211.11	0.4	84.6	Pulse	0.1000	3
He	In	115	39866.08	2.2	97.4	Pulse	0.1000	3
He	Tb	159	151334.33	0.9	94.9	Pulse	0.1000	3
He	Bi	209	115072.87	1.2	98.4	Pulse	0.1000	3

No Gas

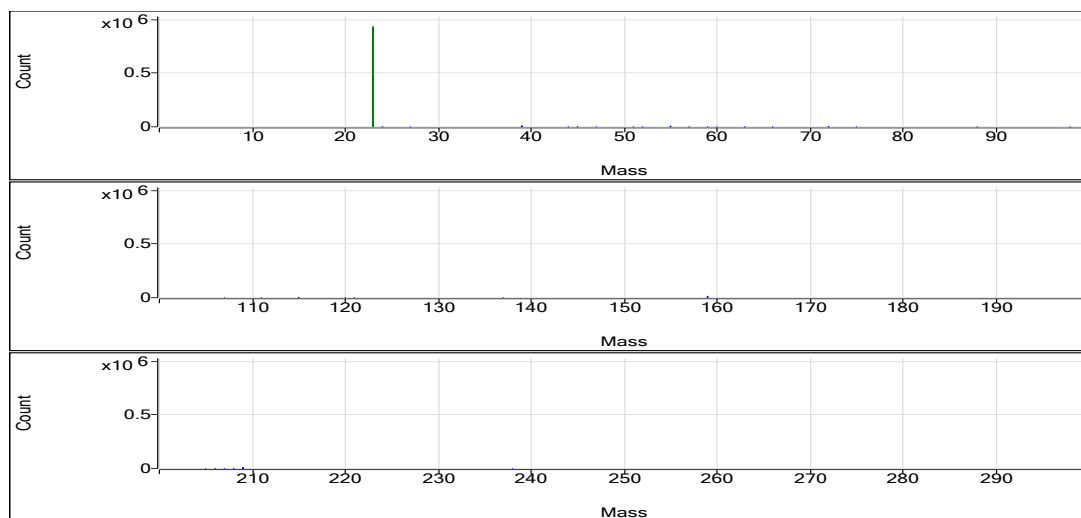


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.181	0.0003	154.00	0.0011	7.835E-05
Be	9	1	No Gas	0.217	0.0003	178.00	0.0011	7.835E-05
Be	9	1	No Gas	0.274	0.0004	204.00	0.0011	7.835E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.007	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.007	0	2.00	0.0005	2.594E-05
Na	23	3	He	127051.277	230.9047	9284974.24	0.0018	0.1731
Na	23	3	He	126671.951	230.2158	9294154.24	0.0018	0.1731
Na	23	3	He	129279.475	234.9512	9409921.73	0.0018	0.1731
Mg	24	3	He	191.87	0.1823	7331.86	0.0009	0.006537
Mg	24	3	He	203.524	0.193	7792.14	0.0009	0.006537
Mg	24	3	He	184.216	0.1753	7021.67	0.0009	0.006537
Al	27	3	He	40.855	0.0142	570.03	0.0003	0.00231
Al	27	3	He	37.249	0.0131	530.03	0.0003	0.00231
Al	27	3	He	39.331	0.0137	550.03	0.0003	0.00231
K	39	3	He	377.335	0.6295	25313.45	0.0007	0.3475
K	39	3	He	245.158	0.5307	21425.92	0.0007	0.3475
K	39	3	He	211.312	0.5054	20242.40	0.0007	0.3475
Ca	44	3	He	240.077	0.0124	500.01	0	0.002807
Ca	44	3	He	228.964	0.012	484.01	0	0.002807
Ca	44	3	He	264.981	0.0134	538.01	0	0.002807
Ti	47	3	He	-0.201	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.202	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
V	51	3	He	-0.011	0.0082	328.01	0.0137	0.008308
V	51	3	He	-0.003	0.0083	334.01	0.0137	0.008308
V	51	3	He	0.002	0.0083	334.01	0.0137	0.008308
Cr	52	3	He	0.15	0.0241	970.06	0.0171	0.02156
Cr	52	3	He	0.116	0.0235	950.06	0.0171	0.02156
Cr	52	3	He	0.054	0.0225	900.06	0.0171	0.02156
Mn	55	3	He	55.726	0.4089	16442.33	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	56.238	0.4126	16658.53	0.0073	0.002316
Mn	55	3	He	57.759	0.4237	16970.84	0.0073	0.002316
Fe	57	3	He	176.602	0.0599	2410.27	0.0003	0.002736
Fe	57	3	He	191.929	0.0649	2620.30	0.0003	0.002736
Fe	57	3	He	163.467	0.0557	2230.23	0.0003	0.002736
Co	59	3	He	1.39	0.0481	1934.13	0.0332	0.001922
Co	59	3	He	1.405	0.0486	1962.13	0.0332	0.001922
Co	59	3	He	1.432	0.0495	1982.14	0.0332	0.001922
Ni	60	3	He	1.791	0.0198	798.02	0.0093	0.003141
Ni	60	3	He	1.756	0.0195	788.02	0.0093	0.003141
Ni	60	3	He	1.623	0.0183	732.02	0.0093	0.003141
Cu	63	3	He	1.467	0.0434	1744.10	0.027	0.003732
Cu	63	3	He	1.74	0.0507	2048.14	0.027	0.003732
Cu	63	3	He	1.553	0.0457	1830.11	0.027	0.003732
Zn	66	3	He	5.366	0.0188	754.02	0.0031	0.002032
Zn	66	3	He	5.39	0.0188	760.02	0.0031	0.002032
Zn	66	3	He	5.807	0.0201	806.03	0.0031	0.002032
As	75	3	He	0.379	0.0017	70.00	0.0025	0.0007733
As	75	3	He	0.357	0.0017	68.00	0.0025	0.0007733
As	75	3	He	0.382	0.0017	70.00	0.0025	0.0007733
Sr	88	3	He	0.895	0.0134	530.03	0.0105	0.004071
Sr	88	3	He	1.316	0.0178	700.04	0.0105	0.004071
Sr	88	3	He	0.803	0.0125	510.02	0.0105	0.004071
Mo	98	3	He	-0.07	0.0023	90.00	0.0234	0.003908
Mo	98	3	He	-0.08	0.002	80.00	0.0234	0.003908
Mo	98	3	He	-0.083	0.002	80.00	0.0234	0.003908
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.891	0.0459	1810.17	0.0169	0.0609
Sn	120	3	He	-0.891	0.0459	1800.18	0.0169	0.0609
Sn	120	3	He	-0.999	0.044	1800.16	0.0169	0.0609
Sb	121	3	He	0.029	0.001	40.00	0.0161	0.0005433
Sb	121	3	He	0.066	0.0016	63.33	0.0161	0.0005433
Sb	121	3	He	0.047	0.0013	53.33	0.0161	0.0005433
Ba	137	3	He	4.919	0.0271	1070.08	0.0053	0.001141
Ba	137	3	He	4.948	0.0273	1070.08	0.0053	0.001141
Ba	137	3	He	5.066	0.0279	1140.08	0.0053	0.001141
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	4.222	0.142	11284.77	0.0332	0.001693
Pb	208	3	He	4.383	0.1473	11534.92	0.0332	0.001693
Pb	208	3	He	4.259	0.1432	11445.02	0.0332	0.001693
U	238	3	He	0.061	0.0029	430.02	0.0338	0.0007949
U	238	3	He	0.052	0.0026	390.02	0.0338	0.0007949
U	238	3	He	0.039	0.0021	320.01	0.0338	0.0007949
Sc	45	1	No Gas			1166220.84		
Sc	45	1	No Gas			1193009.12		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1146635.22		
Ge	72	1	No Gas			568162.14		
Ge	72	1	No Gas			576419.72		
Ge	72	1	No Gas			551916.36		
Sc	45	2	H2			86508.19		
Sc	45	2	H2			86457.96		
Sc	45	2	H2			86277.01		
Ge	72	2	H2			66779.60		
Ge	72	2	H2			67441.66		
Ge	72	2	H2			67322.01		
In	115	2	H2			185239.18		
In	115	2	H2			186130.68		
In	115	2	H2			185423.01		
Sc	45	3	He			23397.15		
Sc	45	3	He			23427.37		
Sc	45	3	He			24038.29		
Ge	72	3	He			40211.29		
Ge	72	3	He			40371.49		
Ge	72	3	He			40050.54		
In	115	3	He			39480.84		
In	115	3	He			39260.53		
In	115	3	He			40894.75		
Tb	159	3	He			150081.17		
Tb	159	3	He			152848.84		
Tb	159	3	He			151072.97		
Bi	209	3	He			114216.36		
Bi	209	3	He			116714.04		
Bi	209	3	He			114288.22		

Quantitation Report

Data File Name 293SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 10:59:17 PM
Sample Name 410-235808-A-1-V DU
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

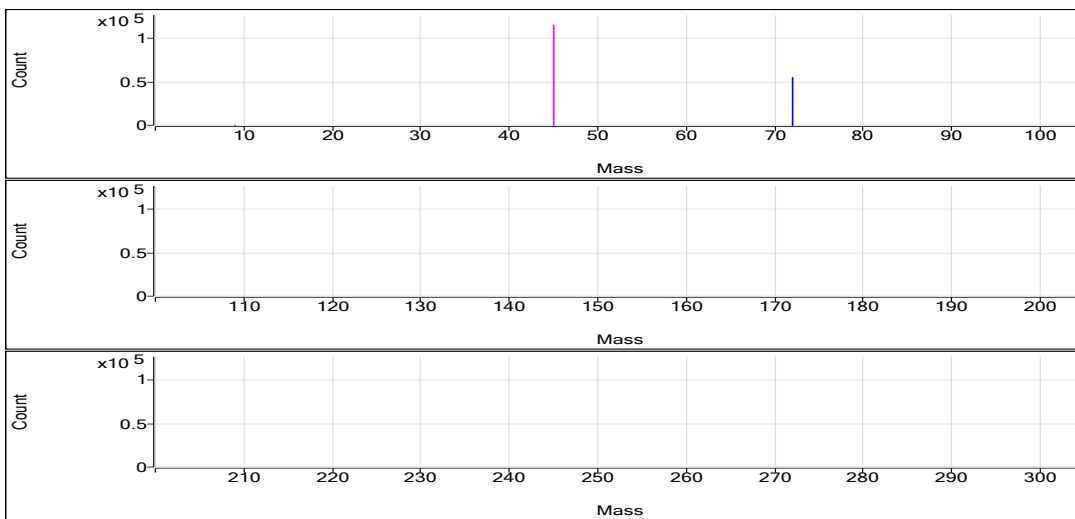
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.287	ppb	13.7	210.67	0.0004	Pulse	0.5000	3
Se	78	72	H2	-0.024	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	122388.318	ppb	1.4	9115057.16	222.4365	Analog	0.1000	3
Mg	24	72	He	188.187	ppb	8.2	7331.83	0.1790	Pulse	0.1000	3
Al	27	72	He	38.530	ppb	11.7	553.36	0.0135	Pulse	0.1000	3
K	39	72	He	267.131	ppb	37.4	22402.03	0.5471	Pulse	0.5000	3
Ca	44	72	He	258.717	ppb	19.1	540.01	0.0132	Pulse	0.5000	3
Ti	47	72	He	-0.050	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.025	ppb	N/A	326.01	0.0080	Pulse	0.5000	3
Cr	52	72	He	-0.008	ppb	N/A	876.72	0.0214	Pulse	0.1000	3
Mn	55	72	He	55.175	ppb	3.4	16587.14	0.4049	Pulse	0.5000	3
Fe	57	72	He	186.972	ppb	8.4	2593.63	0.0633	Pulse	0.1000	3
Co	59	72	He	1.326	ppb	3.8	1885.45	0.0460	Pulse	0.5000	3
Ni	60	72	He	1.700	ppb	1.5	778.69	0.0190	Pulse	0.5000	3
Cu	63	72	He	1.551	ppb	2.0	1869.45	0.0456	Pulse	0.5000	3
Zn	66	72	He	5.966	ppb	4.2	845.36	0.0206	Pulse	0.5000	3
As	75	72	He	0.200	ppb	25.1	52.67	0.0013	Pulse	0.5000	3
Sr	88	115	He	1.080	ppb	16.2	593.37	0.0154	Pulse	0.1000	3
Mo	98	115	He	-0.071	ppb	N/A	86.67	0.0022	Pulse	0.1000	3
Ag	107	115	He	-0.006	ppb	N/A	6.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	0.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.684	ppb	N/A	1903.52	0.0494	Pulse	0.1000	3
Sb	121	115	He	0.057	ppb	17.7	56.67	0.0015	Pulse	0.3000	3
Ba	137	115	He	5.962	ppb	22.6	1256.76	0.0326	Pulse	0.1000	3
Tl	205	159	He	-0.016	ppb	N/A	30.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	4.084	ppb	0.9	20813.05	0.1374	Pulse	0.1000	3
U	238	159	He	0.042	ppb	27.6	333.35	0.0022	Pulse	0.1000	3

ISTD Table:

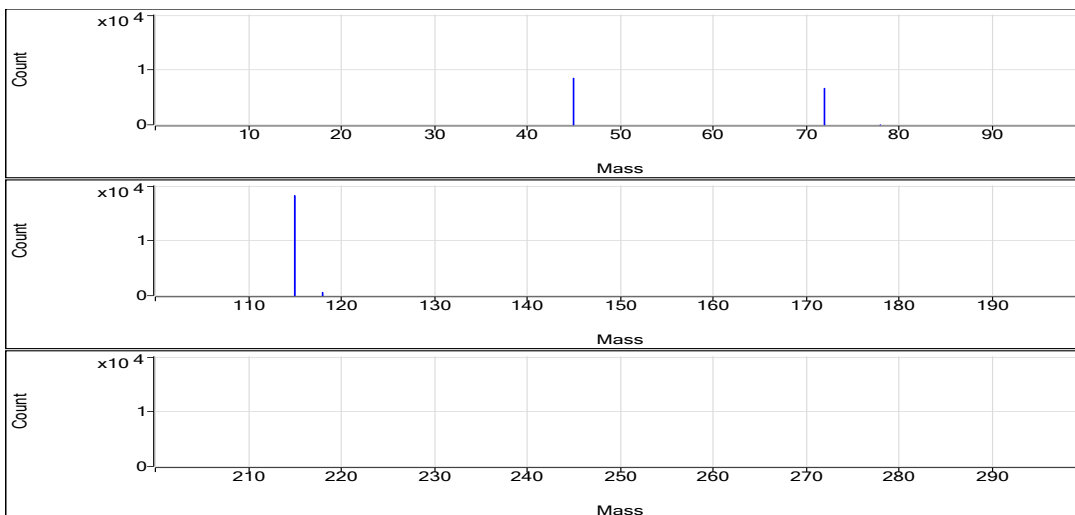
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1151340.40	1.2	88.1	Mix	0.1000	3
No Gas	Ge	72	548854.03	1.1	83.8	Pulse	0.1000	3
H2	Sc	45	85462.76	1.1	104.0	Pulse	0.1000	3
H2	Ge	72	66836.26	2.7	97.8	Pulse	0.1000	3
H2	In	115	182952.90	1.8	107.2	Pulse	0.1000	3
He	Sc	45	23477.47	2.2	91.7	Pulse	0.1000	3
He	Ge	72	40983.19	1.9	86.3	Pulse	0.1000	3
He	In	115	38575.40	1.6	94.2	Pulse	0.1000	3
He	Tb	159	151478.77	2.0	95.0	Pulse	0.1000	3
He	Bi	209	113406.66	1.5	97.0	Pulse	0.1000	3

No Gas

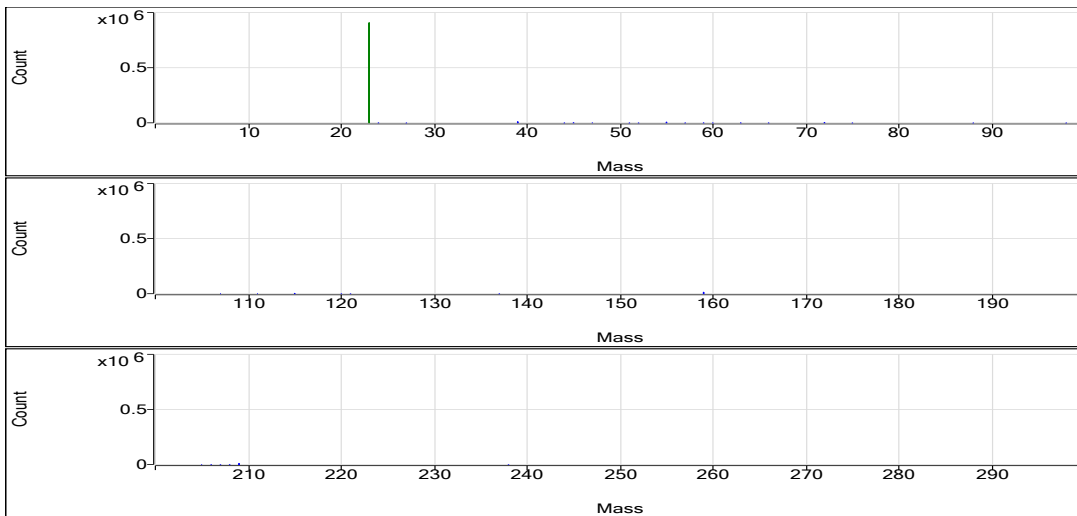


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.33	0.0004	238.00	0.0011	7.835E-05
Be	9	1	No Gas	0.252	0.0003	190.00	0.0011	7.835E-05
Be	9	1	No Gas	0.28	0.0004	204.00	0.0011	7.835E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	0.009	0	2.00	0.0005	2.594E-05
Na	23	3	He	122114.343	221.9389	8973357.37	0.0018	0.1731
Na	23	3	He	120813.628	219.5768	9190486.74	0.0018	0.1731
Na	23	3	He	124236.982	225.7938	9181327.36	0.0018	0.1731
Mg	24	3	He	178.902	0.1705	6891.64	0.0009	0.006537
Mg	24	3	He	179.617	0.1711	7161.76	0.0009	0.006537
Mg	24	3	He	206.042	0.1953	7942.09	0.0009	0.006537
Al	27	3	He	42.292	0.0146	590.03	0.0003	0.00231
Al	27	3	He	39.76	0.0139	580.03	0.0003	0.00231
Al	27	3	He	33.538	0.0121	490.02	0.0003	0.00231
K	39	3	He	382.224	0.6332	25599.89	0.0007	0.3475
K	39	3	He	216.718	0.5095	21323.77	0.0007	0.3475
K	39	3	He	202.452	0.4988	20282.42	0.0007	0.3475
Ca	44	3	He	223.586	0.0118	476.01	0	0.002807
Ca	44	3	He	237.429	0.0123	516.01	0	0.002807
Ca	44	3	He	315.137	0.0154	628.02	0	0.002807
Ti	47	3	He	-0.202	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.254	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.203	0	2.00	0.0003	0.0001123
V	51	3	He	0.036	0.0088	356.01	0.0137	0.008308
V	51	3	He	-0.097	0.007	292.00	0.0137	0.008308
V	51	3	He	-0.014	0.0081	330.01	0.0137	0.008308
Cr	52	3	He	0.374	0.028	1130.08	0.0171	0.02156
Cr	52	3	He	-0.157	0.0189	790.04	0.0171	0.02156
Cr	52	3	He	-0.24	0.0175	710.04	0.0171	0.02156
Mn	55	3	He	55.529	0.4075	16474.32	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	53.17	0.3903	16334.22	0.0073	0.002316
Mn	55	3	He	56.825	0.4169	16952.88	0.0073	0.002316
Fe	57	3	He	175.594	0.0596	2410.27	0.0003	0.002736
Fe	57	3	He	180.397	0.0612	2560.27	0.0003	0.002736
Fe	57	3	He	204.925	0.0691	2810.36	0.0003	0.002736
Co	59	3	He	1.324	0.0459	1856.12	0.0332	0.001922
Co	59	3	He	1.378	0.0477	1996.13	0.0332	0.001922
Co	59	3	He	1.278	0.0444	1804.11	0.0332	0.001922
Ni	60	3	He	1.721	0.0192	776.02	0.0093	0.003141
Ni	60	3	He	1.707	0.0191	798.02	0.0093	0.003141
Ni	60	3	He	1.672	0.0187	762.02	0.0093	0.003141
Cu	63	3	He	1.583	0.0465	1880.12	0.027	0.003732
Cu	63	3	He	1.521	0.0448	1876.12	0.027	0.003732
Cu	63	3	He	1.548	0.0455	1852.11	0.027	0.003732
Zn	66	3	He	5.858	0.0203	820.03	0.0031	0.002032
Zn	66	3	He	6.25	0.0215	900.03	0.0031	0.002032
Zn	66	3	He	5.789	0.0201	816.03	0.0031	0.002032
As	75	3	He	0.143	0.0011	46.00	0.0025	0.0007733
As	75	3	He	0.221	0.0013	56.00	0.0025	0.0007733
As	75	3	He	0.237	0.0014	56.00	0.0025	0.0007733
Sr	88	3	He	1.267	0.0173	670.05	0.0105	0.004071
Sr	88	3	He	0.922	0.0137	520.03	0.0105	0.004071
Sr	88	3	He	1.052	0.0151	590.03	0.0105	0.004071
Mo	98	3	He	-0.068	0.0023	90.00	0.0234	0.003908
Mo	98	3	He	-0.066	0.0024	90.01	0.0234	0.003908
Mo	98	3	He	-0.08	0.002	80.00	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.727	0.0486	1880.20	0.0169	0.0609
Sn	120	3	He	-0.593	0.0509	1930.19	0.0169	0.0609
Sn	120	3	He	-0.732	0.0486	1900.17	0.0169	0.0609
Sb	121	3	He	0.047	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.059	0.0015	56.67	0.0161	0.0005433
Sb	121	3	He	0.067	0.0016	63.33	0.0161	0.0005433
Ba	137	3	He	4.584	0.0253	980.06	0.0053	0.001141
Ba	137	3	He	7.276	0.0396	1500.13	0.0053	0.001141
Ba	137	3	He	6.027	0.033	1290.09	0.0053	0.001141
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	4.072	0.137	10734.25	0.0332	0.001693
Pb	208	3	He	4.057	0.1365	10874.31	0.0332	0.001693
Pb	208	3	He	4.124	0.1387	10844.35	0.0332	0.001693
U	238	3	He	0.03	0.0018	270.01	0.0338	0.0007949
U	238	3	He	0.053	0.0026	400.02	0.0338	0.0007949
U	238	3	He	0.042	0.0022	330.02	0.0338	0.0007949
Sc	45	1	No Gas			1161780.22		
Sc	45	1	No Gas			1156093.73		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1136147.25		
Ge	72	1	No Gas			555000.97		
Ge	72	1	No Gas			548986.20		
Ge	72	1	No Gas			542574.91		
Sc	45	2	H2			84548.93		
Sc	45	2	H2			86407.03		
Sc	45	2	H2			85432.33		
Ge	72	2	H2			66227.27		
Ge	72	2	H2			68878.03		
Ge	72	2	H2			65403.48		
In	115	2	H2			182499.72		
In	115	2	H2			186507.22		
In	115	2	H2			179851.77		
Sc	45	3	He			23567.59		
Sc	45	3	He			22926.47		
Sc	45	3	He			23938.34		
Ge	72	3	He			40431.65		
Ge	72	3	He			41855.46		
Ge	72	3	He			40662.45		
In	115	3	He			38679.05		
In	115	3	He			37936.92		
In	115	3	He			39150.19		
Tb	159	3	He			149313.28		
Tb	159	3	He			154979.58		
Tb	159	3	He			150143.45		
Bi	209	3	He			111797.67		
Bi	209	3	He			113178.90		
Bi	209	3	He			115243.42		

Quantitation Report

Data File Name 294SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:01:28 PM
Sample Name 410-235808-A-1-W MS@10
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

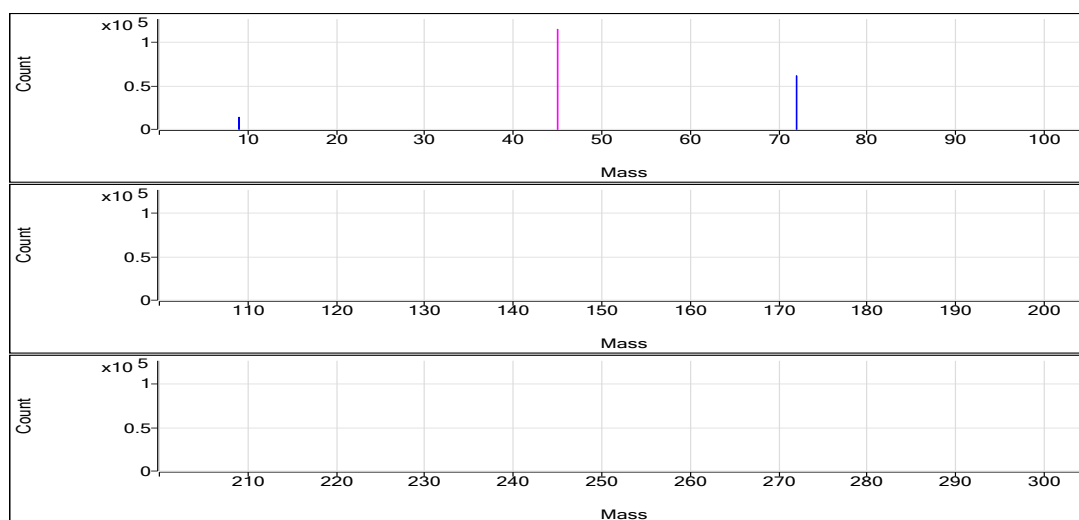
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	42.997	ppb	4.1	28196.20	0.0458	Pulse	0.5000	3
Se	78	72	H2	9.157	ppb	5.3	345.34	0.0047	Pulse	1.5000	3
Na	23	72	He	11564.437	ppb	1.2	943769.02	21.1747	Pulse	0.1000	3
Mg	24	72	He	456.871	ppb	1.9	18947.93	0.4251	Pulse	0.1000	3
Al	27	72	He	92.236	ppb	5.6	1296.76	0.0291	Pulse	0.1000	3
K	39	72	He	454.162	ppb	14.6	30618.44	0.6869	Pulse	0.5000	3
Ca	44	72	He	542.069	ppb	1.5	1094.04	0.0245	Pulse	0.5000	3
Ti	47	72	He	86.098	ppb	8.2	1198.72	0.0269	Pulse	0.5000	3
V	51	72	He	43.460	ppb	1.4	26828.68	0.6019	Pulse	0.5000	3
Cr	52	72	He	42.750	ppb	0.5	33518.53	0.7520	Pulse	0.1000	3
Mn	55	72	He	48.455	ppb	1.4	15861.09	0.3559	Pulse	0.5000	3
Fe	57	72	He	52.528	ppb	9.9	880.05	0.0198	Pulse	0.1000	3
Co	59	72	He	43.550	ppb	0.3	64576.72	1.4488	Pulse	0.5000	3
Ni	60	72	He	44.056	ppb	0.4	18457.18	0.4141	Pulse	0.5000	3
Cu	63	72	He	43.828	ppb	0.7	52943.95	1.1878	Pulse	0.5000	3
Zn	66	72	He	46.362	ppb	1.7	6528.68	0.1465	Pulse	0.5000	3
As	75	72	He	43.931	ppb	0.5	5027.48	0.1128	Pulse	0.5000	3
Sr	88	115	He	44.266	ppb	2.5	18384.61	0.4671	Pulse	0.1000	3
Mo	98	115	He	87.713	ppb	0.8	80918.25	2.0560	Pulse	0.1000	3
Ag	107	115	He	42.493	ppb	0.9	82480.81	2.0956	Pulse	0.1000	3
Cd	111	115	He	9.102	ppb	1.9	2010.15	0.0511	Pulse	0.5000	3
Sn	120	115	He	445.031	ppb	0.8	298028.50	7.5723	Pulse	0.1000	3
Sb	121	115	He	43.908	ppb	0.5	27885.16	0.7085	Pulse	0.3000	3
Ba	137	115	He	889.110	ppb	0.9	184809.24	4.6956	Pulse	0.1000	3
Tl	205	159	He	45.533	ppb	0.3	169104.86	1.1288	Pulse	0.1000	3
Pb	208	159	He	46.877	ppb	1.6	233589.13	1.5593	Pulse	0.1000	3
U	238	159	He	-0.004	ppb	N/A	100.00	0.0007	Pulse	0.1000	3

ISTD Table:

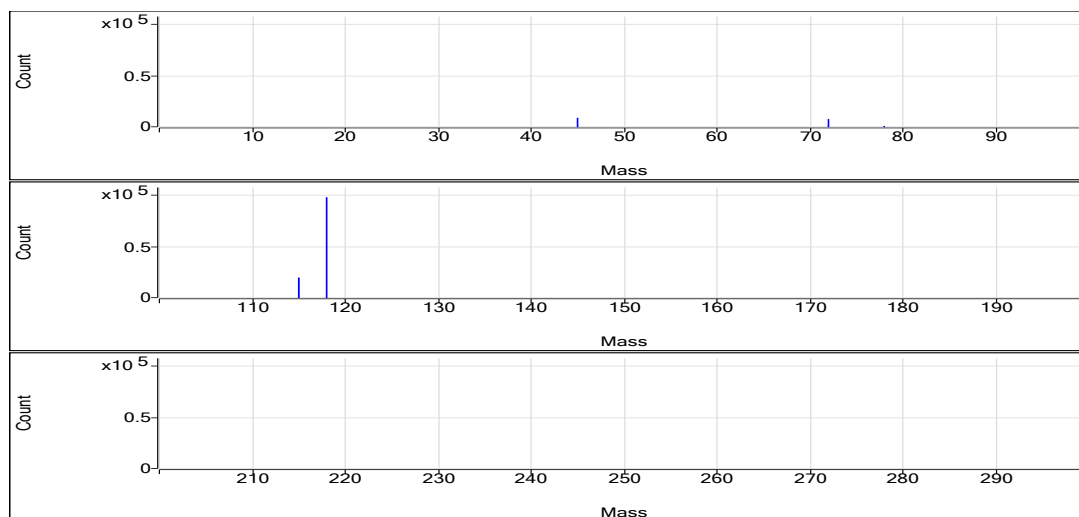
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1151002.43	0.5	88.1	Mix	0.1000	3
No Gas	Ge	72	616007.48	1.9	94.0	Pulse	0.1000	3
H2	Sc	45	86655.65	1.5	105.5	Pulse	0.1000	3
H2	Ge	72	74021.55	0.8	108.3	Pulse	0.1000	3
H2	In	115	194648.33	1.4	114.1	Pulse	0.1000	3
He	Sc	45	23270.43	2.8	90.9	Pulse	0.1000	3
He	Ge	72	44572.69	0.6	93.8	Pulse	0.1000	3
He	In	115	39359.61	0.8	96.1	Pulse	0.1000	3
He	Tb	159	149817.44	1.1	94.0	Pulse	0.1000	3
He	Bi	209	111706.71	1.1	95.5	Pulse	0.1000	3

No Gas

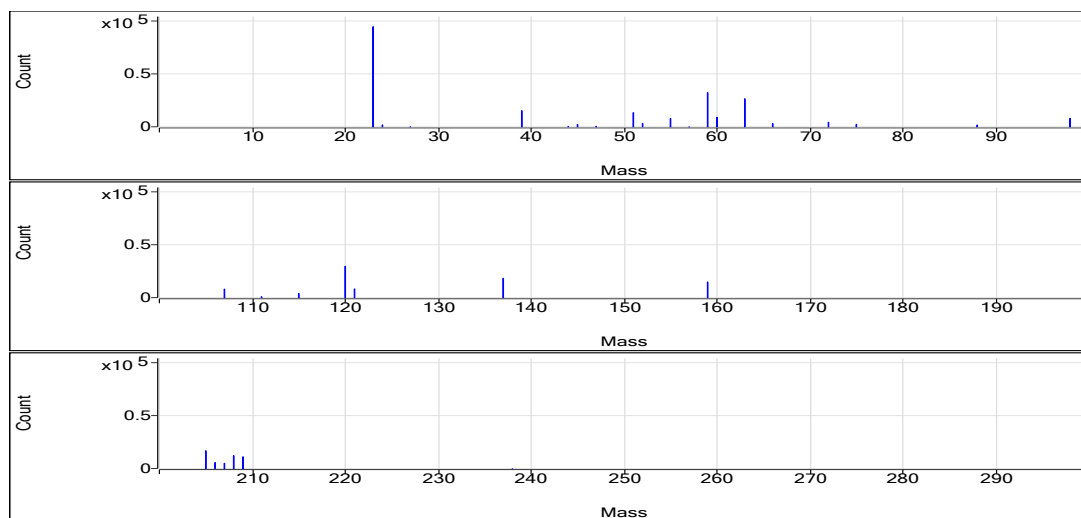


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	41.218	0.0439	26600.88	0.0011	7.835E-05
Be	9	1	No Gas	43.041	0.0458	28061.32	0.0011	7.835E-05
Be	9	1	No Gas	44.732	0.0476	29926.39	0.0011	7.835E-05
Se	78	2	H2	8.596	0.0044	326.67	0.0005	2.594E-05
Se	78	2	H2	9.391	0.0048	354.67	0.0005	2.594E-05
Se	78	2	H2	9.484	0.0048	354.67	0.0005	2.594E-05
Na	23	3	He	11645.209	21.3213	949285.38	0.0018	0.1731
Na	23	3	He	11407.636	20.8899	937403.97	0.0018	0.1731
Na	23	3	He	11640.465	21.3127	944617.72	0.0018	0.1731
Mg	24	3	He	460.874	0.4288	19091.41	0.0009	0.006537
Mg	24	3	He	446.989	0.4161	18670.97	0.0009	0.006537
Mg	24	3	He	462.751	0.4305	19081.42	0.0009	0.006537
Al	27	3	He	94.132	0.0296	1320.09	0.0003	0.00231
Al	27	3	He	86.428	0.0274	1230.09	0.0003	0.00231
Al	27	3	He	96.148	0.0302	1340.09	0.0003	0.00231
K	39	3	He	529.68	0.7434	33097.18	0.0007	0.3475
K	39	3	He	426.549	0.6663	29898.99	0.0007	0.3475
K	39	3	He	406.258	0.6511	28859.16	0.0007	0.3475
Ca	44	3	He	551.709	0.0249	1110.04	0	0.002807
Ca	44	3	He	536.847	0.0243	1092.04	0	0.002807
Ca	44	3	He	537.65	0.0244	1080.04	0	0.002807
Ti	47	3	He	78.797	0.0246	1096.04	0.0003	0.0001123
Ti	47	3	He	92.941	0.029	1302.06	0.0003	0.0001123
Ti	47	3	He	86.557	0.027	1198.05	0.0003	0.0001123
V	51	3	He	43.74	0.6058	26970.23	0.0137	0.008308
V	51	3	He	42.785	0.5927	26597.63	0.0137	0.008308
V	51	3	He	43.855	0.6073	26918.18	0.0137	0.008308
Cr	52	3	He	42.571	0.7489	33345.10	0.0171	0.02156
Cr	52	3	He	42.725	0.7516	33725.47	0.0171	0.02156
Cr	52	3	He	42.955	0.7555	33485.03	0.0171	0.02156
Mn	55	3	He	49.245	0.3616	16100.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	48.008	0.3526	15821.71	0.0073	0.002316
Mn	55	3	He	48.114	0.3534	15661.55	0.0073	0.002316
Fe	57	3	He	50.497	0.0191	850.05	0.0003	0.002736
Fe	57	3	He	48.66	0.0185	830.05	0.0003	0.002736
Fe	57	3	He	58.427	0.0217	960.06	0.0003	0.002736
Co	59	3	He	43.56	1.4491	64519.13	0.0332	0.001922
Co	59	3	He	43.66	1.4524	65175.75	0.0332	0.001922
Co	59	3	He	43.429	1.4448	64035.29	0.0332	0.001922
Ni	60	3	He	44.171	0.4152	18484.53	0.0093	0.003141
Ni	60	3	He	43.871	0.4124	18504.59	0.0093	0.003141
Ni	60	3	He	44.126	0.4147	18382.41	0.0093	0.003141
Cu	63	3	He	43.831	1.1879	52889.75	0.027	0.003732
Cu	63	3	He	43.509	1.1792	52915.98	0.027	0.003732
Cu	63	3	He	44.144	1.1964	53026.11	0.027	0.003732
Zn	66	3	He	45.496	0.1438	6401.31	0.0031	0.002032
Zn	66	3	He	46.495	0.1469	6591.37	0.0031	0.002032
Zn	66	3	He	47.096	0.1488	6593.36	0.0031	0.002032
As	75	3	He	43.958	0.1129	5024.82	0.0025	0.0007733
As	75	3	He	44.136	0.1133	5084.83	0.0025	0.0007733
As	75	3	He	43.698	0.1122	4972.80	0.0025	0.0007733
Sr	88	3	He	45.487	0.4799	18781.72	0.0105	0.004071
Sr	88	3	He	44.016	0.4645	18211.07	0.0105	0.004071
Sr	88	3	He	43.296	0.457	18161.04	0.0105	0.004071
Mo	98	3	He	88.18	2.0669	80888.51	0.0234	0.003908
Mo	98	3	He	88.081	2.0646	80938.15	0.0234	0.003908
Mo	98	3	He	86.879	2.0364	80928.09	0.0234	0.003908
Ag	107	3	He	42.901	2.1157	82798.48	0.0493	0.0004851
Ag	107	3	He	42.099	2.0761	81391.80	0.0493	0.0004851
Ag	107	3	He	42.48	2.0949	83252.15	0.0493	0.0004851
Cd	111	3	He	9.299	0.0522	2042.15	0.0056	0
Cd	111	3	He	8.974	0.0504	1974.14	0.0056	0
Cd	111	3	He	9.032	0.0507	2014.15	0.0056	0
Sn	120	3	He	446.158	7.5913	297088.96	0.0169	0.0609
Sn	120	3	He	448.08	7.6237	298875.60	0.0169	0.0609
Sn	120	3	He	440.856	7.5018	298120.95	0.0169	0.0609
Sb	121	3	He	44.18	0.7129	27898.47	0.0161	0.0005433
Sb	121	3	He	43.729	0.7056	27661.46	0.0161	0.0005433
Sb	121	3	He	43.815	0.707	28095.55	0.0161	0.0005433
Ba	137	3	He	894.938	4.7264	184970.43	0.0053	0.001141
Ba	137	3	He	891.965	4.7107	184675.39	0.0053	0.001141
Ba	137	3	He	880.427	4.6498	184781.89	0.0053	0.001141
Tl	205	3	He	45.557	1.1293	168958.79	0.0248	0.0005854
Tl	205	3	He	45.665	1.132	167889.12	0.0248	0.0005854
Tl	205	3	He	45.378	1.1249	170466.66	0.0248	0.0005854
Pb	208	3	He	47.369	1.5757	126444.46	0.0332	0.001693
Pb	208	3	He	47.262	1.5721	122704.09	0.0332	0.001693
Pb	208	3	He	46	1.5302	122653.73	0.0332	0.001693
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	0	0.0008	120.01	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
Sc	45	1	No Gas			1147176.70		
Sc	45	1	No Gas			1147860.92		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1157969.67		
Ge	72	1	No Gas			606483.39		
Ge	72	1	No Gas			612740.19		
Ge	72	1	No Gas			628798.86		
Sc	45	2	H2			85261.40		
Sc	45	2	H2			87825.86		
Sc	45	2	H2			86879.70		
Ge	72	2	H2			74543.65		
Ge	72	2	H2			74121.94		
Ge	72	2	H2			73399.07		
In	115	2	H2			191881.13		
In	115	2	H2			197317.83		
In	115	2	H2			194746.03		
Sc	45	3	He			23207.00		
Sc	45	3	He			23957.90		
Sc	45	3	He			22646.39		
Ge	72	3	He			44522.77		
Ge	72	3	He			44873.55		
Ge	72	3	He			44321.76		
In	115	3	He			41215.18		
In	115	3	He			41295.49		
In	115	3	He			41826.76		
Tb	159	3	He			149607.36		
Tb	159	3	He			148307.41		
Tb	159	3	He			151537.56		
Bi	209	3	He			111776.45		
Bi	209	3	He			112886.05		
Bi	209	3	He			110457.62		

Quantitation Report

Data File Name 295SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:03:40 PM
Sample Name 410-235808-A-1-X MSD@10
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

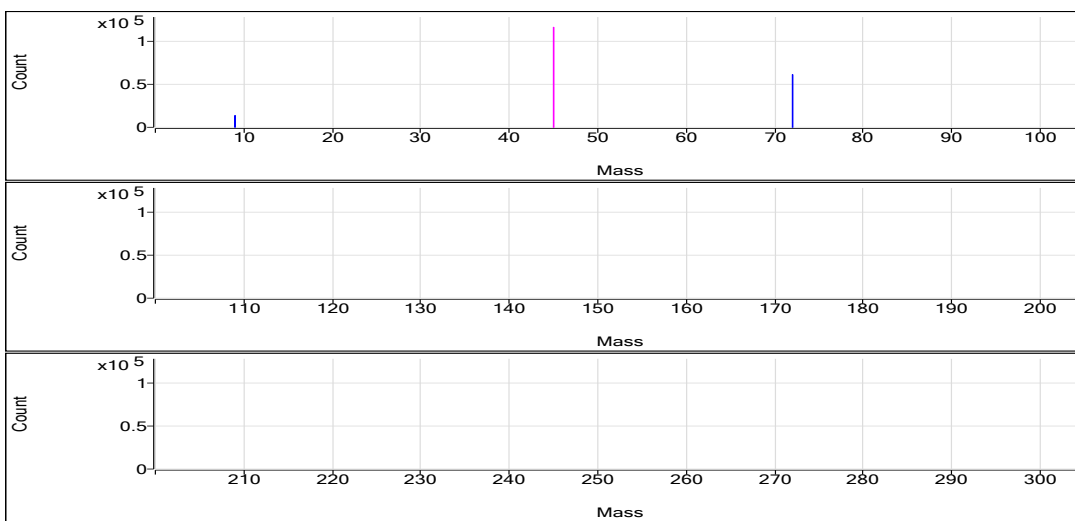
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	42.424	ppb	3.9	27695.36	0.0451	Pulse	0.5000	3
Se	78	72	H2	8.850	ppb	4.5	326.00	0.0045	Pulse	1.5000	3
Na	23	72	He	11193.074	ppb	1.6	926902.85	20.5002	Pulse	0.1000	3
Mg	24	72	He	428.677	ppb	3.3	18053.59	0.3993	Pulse	0.1000	3
Al	27	72	He	86.650	ppb	7.5	1243.42	0.0275	Pulse	0.1000	3
K	39	72	He	442.022	ppb	15.9	30649.14	0.6779	Pulse	0.5000	3
Ca	44	72	He	506.237	ppb	2.9	1044.71	0.0231	Pulse	0.5000	3
Ti	47	72	He	82.246	ppb	3.0	1161.38	0.0257	Pulse	0.5000	3
V	51	72	He	42.037	ppb	0.4	26340.55	0.5825	Pulse	0.5000	3
Cr	52	72	He	41.161	ppb	1.5	32773.55	0.7248	Pulse	0.1000	3
Mn	55	72	He	46.606	ppb	0.9	15482.07	0.3424	Pulse	0.5000	3
Fe	57	72	He	56.890	ppb	4.3	956.73	0.0212	Pulse	0.1000	3
Co	59	72	He	42.596	ppb	1.4	64074.67	1.4171	Pulse	0.5000	3
Ni	60	72	He	42.190	ppb	1.8	17936.62	0.3967	Pulse	0.5000	3
Cu	63	72	He	42.798	ppb	0.7	52454.41	1.1600	Pulse	0.5000	3
Zn	66	72	He	44.669	ppb	0.4	6385.29	0.1412	Pulse	0.5000	3
As	75	72	He	42.839	ppb	0.9	4974.80	0.1100	Pulse	0.5000	3
Sr	88	115	He	43.032	ppb	2.7	17860.52	0.4542	Pulse	0.1000	3
Mo	98	115	He	88.118	ppb	1.4	81233.15	2.0654	Pulse	0.1000	3
Ag	107	115	He	41.777	ppb	1.8	81023.52	2.0603	Pulse	0.1000	3
Cd	111	115	He	8.788	ppb	3.1	1938.80	0.0493	Pulse	0.5000	3
Sn	120	115	He	437.479	ppb	2.3	292756.04	7.4448	Pulse	0.1000	3
Sb	121	115	He	43.228	ppb	2.1	27429.90	0.6975	Pulse	0.3000	3
Ba	137	115	He	876.562	ppb	3.5	182005.02	4.6294	Pulse	0.1000	3
Tl	205	159	He	44.626	ppb	1.6	167108.32	1.1063	Pulse	0.1000	3
Pb	208	159	He	45.493	ppb	1.0	228601.39	1.5133	Pulse	0.1000	3
U	238	159	He	-0.007	ppb	N/A	83.33	0.0006	Pulse	0.1000	3

ISTD Table:

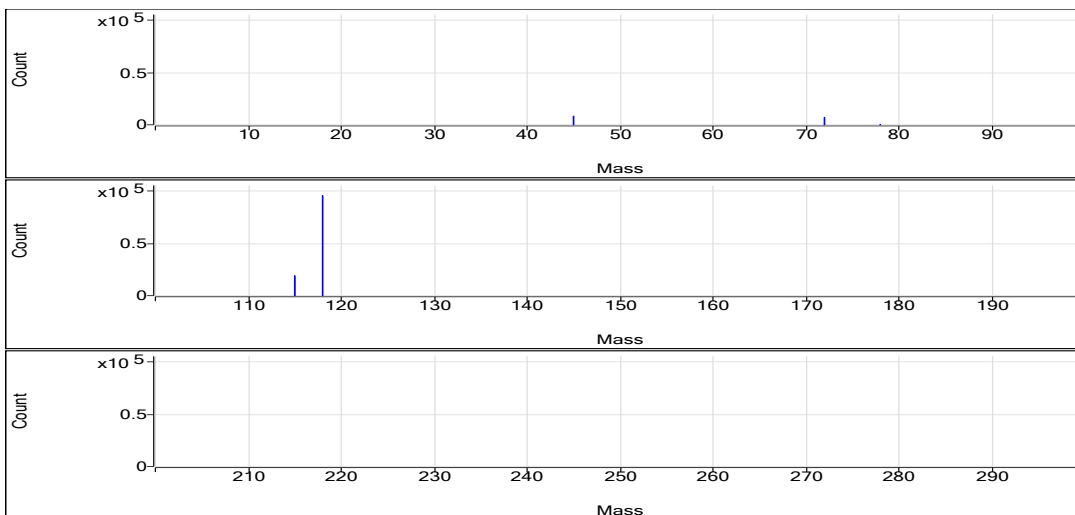
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1164064.33	0.7	89.1	Mix	0.1000	3
No Gas	Ge	72	613506.34	0.5	93.6	Pulse	0.1000	3
H2	Sc	45	84846.36	1.4	103.3	Pulse	0.1000	3
H2	Ge	72	72236.40	2.2	105.7	Pulse	0.1000	3
H2	In	115	192843.11	0.2	113.0	Pulse	0.1000	3
He	Sc	45	23677.74	0.7	92.5	Pulse	0.1000	3
He	Ge	72	45221.18	1.6	95.2	Pulse	0.1000	3
He	In	115	39340.22	2.9	96.1	Pulse	0.1000	3
He	Tb	159	151065.63	0.9	94.7	Pulse	0.1000	3
He	Bi	209	112500.41	2.3	96.2	Pulse	0.1000	3

No Gas

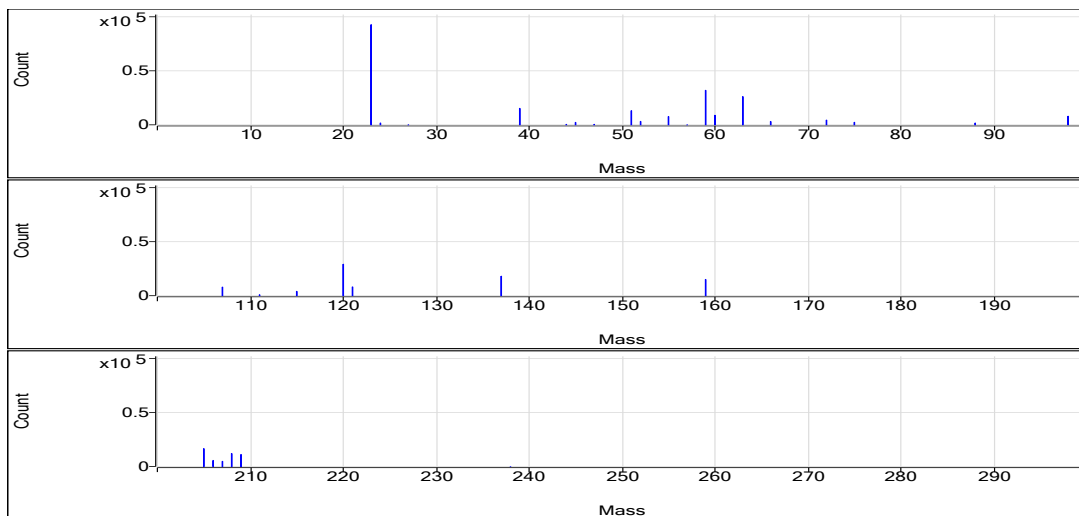


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	40.802	0.0434	26699.10	0.0011	7.835E-05
Be	9	1	No Gas	42.398	0.0451	27504.37	0.0011	7.835E-05
Be	9	1	No Gas	44.073	0.0469	28882.61	0.0011	7.835E-05
Se	78	2	H2	9.236	0.0047	348.67	0.0005	2.594E-05
Se	78	2	H2	8.443	0.0043	308.00	0.0005	2.594E-05
Se	78	2	H2	8.87	0.0045	321.34	0.0005	2.594E-05
Na	23	3	He	11088.669	20.3106	920974.60	0.0018	0.1731
Na	23	3	He	11395.947	20.8687	927459.36	0.0018	0.1731
Na	23	3	He	11094.607	20.3214	932274.60	0.0018	0.1731
Mg	24	3	He	413.597	0.3855	17479.58	0.0009	0.006537
Mg	24	3	He	441.803	0.4113	18280.48	0.0009	0.006537
Mg	24	3	He	430.632	0.4011	18400.71	0.0009	0.006537
Al	27	3	He	86.207	0.0273	1240.09	0.0003	0.00231
Al	27	3	He	80.37	0.0257	1140.08	0.0003	0.00231
Al	27	3	He	93.372	0.0294	1350.10	0.0003	0.00231
K	39	3	He	518.808	0.7353	33339.52	0.0007	0.3475
K	39	3	He	425.963	0.6659	29592.43	0.0007	0.3475
K	39	3	He	381.294	0.6325	29015.47	0.0007	0.3475
Ca	44	3	He	501.949	0.0229	1040.04	0	0.002807
Ca	44	3	He	522.531	0.0238	1056.04	0	0.002807
Ca	44	3	He	494.23	0.0226	1038.04	0	0.002807
Ti	47	3	He	82.469	0.0258	1168.05	0.0003	0.0001123
Ti	47	3	He	84.584	0.0264	1174.05	0.0003	0.0001123
Ti	47	3	He	79.686	0.0249	1142.05	0.0003	0.0001123
V	51	3	He	42.111	0.5835	26459.38	0.0137	0.008308
V	51	3	He	42.163	0.5842	25964.63	0.0137	0.008308
V	51	3	He	41.837	0.5798	26597.64	0.0137	0.008308
Cr	52	3	He	40.794	0.7186	32583.31	0.0171	0.02156
Cr	52	3	He	41.858	0.7368	32743.50	0.0171	0.02156
Cr	52	3	He	40.83	0.7192	32993.84	0.0171	0.02156
Mn	55	3	He	47.076	0.3458	15679.58	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	46.408	0.3409	15151.10	0.0073	0.002316
Mn	55	3	He	46.335	0.3404	15615.53	0.0073	0.002316
Fe	57	3	He	54.876	0.0205	930.06	0.0003	0.002736
Fe	57	3	He	59.634	0.0221	980.06	0.0003	0.002736
Fe	57	3	He	56.161	0.0209	960.06	0.0003	0.002736
Co	59	3	He	42.174	1.4031	63621.45	0.0332	0.001922
Co	59	3	He	43.28	1.4398	63988.94	0.0332	0.001922
Co	59	3	He	42.335	1.4084	64613.62	0.0332	0.001922
Ni	60	3	He	41.424	0.3895	17663.63	0.0093	0.003141
Ni	60	3	He	42.962	0.4039	17949.95	0.0093	0.003141
Ni	60	3	He	42.184	0.3966	18196.27	0.0093	0.003141
Cu	63	3	He	42.559	1.1536	52307.89	0.027	0.003732
Cu	63	3	He	43.142	1.1693	51966.85	0.027	0.003732
Cu	63	3	He	42.694	1.1572	53088.48	0.027	0.003732
Zn	66	3	He	44.504	0.1407	6379.29	0.0031	0.002032
Zn	66	3	He	44.654	0.1412	6273.25	0.0031	0.002032
Zn	66	3	He	44.848	0.1418	6503.34	0.0031	0.002032
As	75	3	He	42.429	0.109	4940.79	0.0025	0.0007733
As	75	3	He	42.872	0.1101	4892.77	0.0025	0.0007733
As	75	3	He	43.216	0.111	5090.84	0.0025	0.0007733
Sr	88	3	He	44.298	0.4675	17880.51	0.0105	0.004071
Sr	88	3	He	42.823	0.452	17740.39	0.0105	0.004071
Sr	88	3	He	41.974	0.4432	17960.65	0.0105	0.004071
Mo	98	3	He	89.284	2.0927	80043.93	0.0234	0.003908
Mo	98	3	He	88.252	2.0686	81179.51	0.0234	0.003908
Mo	98	3	He	86.819	2.0351	82476.01	0.0234	0.003908
Ag	107	3	He	42.537	2.0977	80236.01	0.0493	0.0004851
Ag	107	3	He	41.774	2.0602	80849.47	0.0493	0.0004851
Ag	107	3	He	41.02	2.0229	81985.08	0.0493	0.0004851
Cd	111	3	He	9.077	0.0509	1948.14	0.0056	0
Cd	111	3	He	8.756	0.0491	1928.13	0.0056	0
Cd	111	3	He	8.531	0.0479	1940.13	0.0056	0
Sn	120	3	He	448.859	7.6369	292101.25	0.0169	0.0609
Sn	120	3	He	434.438	7.3935	290152.28	0.0169	0.0609
Sn	120	3	He	429.139	7.304	296014.59	0.0169	0.0609
Sb	121	3	He	44.182	0.7129	27267.42	0.0161	0.0005433
Sb	121	3	He	43.103	0.6955	27294.12	0.0161	0.0005433
Sb	121	3	He	42.401	0.6842	27728.16	0.0161	0.0005433
Ba	137	3	He	910.363	4.8078	183894.29	0.0053	0.001141
Ba	137	3	He	867.784	4.583	179857.95	0.0053	0.001141
Ba	137	3	He	851.54	4.4973	182262.81	0.0053	0.001141
Tl	205	3	He	45.095	1.1179	167280.88	0.0248	0.0005854
Tl	205	3	He	43.784	1.0854	165357.32	0.0248	0.0005854
Tl	205	3	He	45	1.1155	168686.76	0.0248	0.0005854
Pb	208	3	He	45.952	1.5286	122370.96	0.0332	0.001693
Pb	208	3	He	45.072	1.4993	121888.96	0.0332	0.001693
Pb	208	3	He	45.455	1.5121	120777.38	0.0332	0.001693
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1169061.23		
Sc	45	1	No Gas			1154396.86		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1168734.90		
Ge	72	1	No Gas			614925.03		
Ge	72	1	No Gas			609667.92		
Ge	72	1	No Gas			615926.08		
Sc	45	2	H2			84759.29		
Sc	45	2	H2			83724.00		
Sc	45	2	H2			86055.78		
Ge	72	2	H2			74081.18		
Ge	72	2	H2			71549.95		
Ge	72	2	H2			71078.06		
In	115	2	H2			192498.18		
In	115	2	H2			192963.08		
In	115	2	H2			193068.06		
Sc	45	3	He			23787.83		
Sc	45	3	He			23747.90		
Sc	45	3	He			23497.50		
Ge	72	3	He			45344.44		
Ge	72	3	He			44442.66		
Ge	72	3	He			45876.44		
In	115	3	He			40293.49		
In	115	3	He			41275.42		
In	115	3	He			42599.64		
Tb	159	3	He			149637.98		
Tb	159	3	He			152344.48		
Tb	159	3	He			151214.42		
Bi	209	3	He			111537.08		
Bi	209	3	He			110558.67		
Bi	209	3	He			115405.49		

Quantitation Report

Data File Name 296SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:05:53 PM
Sample Name LB 410-682145/1-E
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

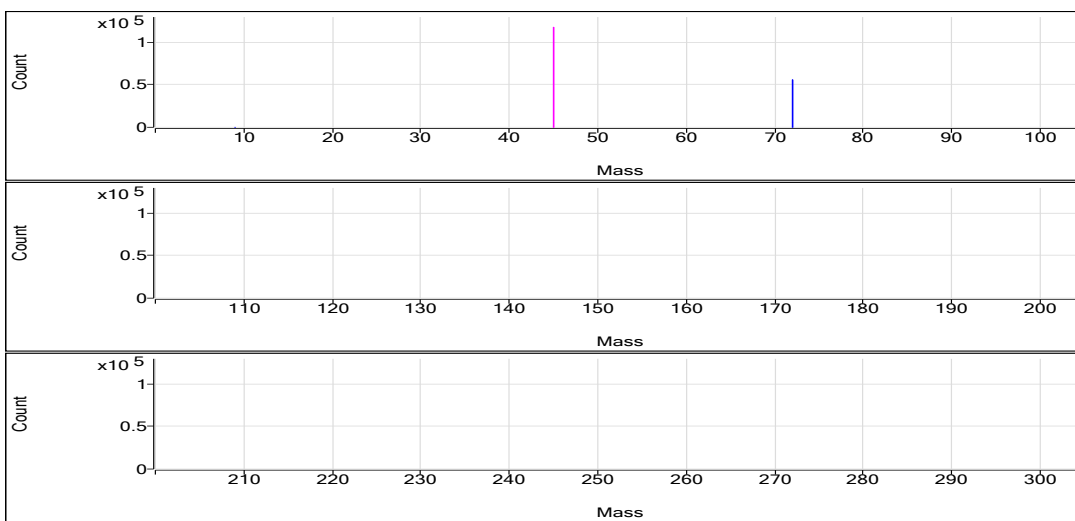
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.114	ppb	32.6	111.33	0.0002	Pulse	0.5000	3
Se	78	72	H2	0.037	ppb	28.3	2.89	0.0000	Pulse	1.5000	3
Na	23	72	He	124925.608	ppb	1.5	9109497.57	227.0443	Analog	0.1000	3
Mg	24	72	He	9.377	ppb	22.8	606.70	0.0151	Pulse	0.1000	3
Al	27	72	He	1.775	ppb	75.5	113.33	0.0028	Pulse	0.1000	3
K	39	72	He	71.955	ppb	134.5	16110.77	0.4013	Pulse	0.5000	3
Ca	44	72	He	6.638	ppb	89.8	123.33	0.0031	Pulse	0.5000	3
Ti	47	72	He	0.282	ppb	249.4	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	-0.022	ppb	N/A	321.34	0.0080	Pulse	0.5000	3
Cr	52	72	He	-0.221	ppb	N/A	713.37	0.0178	Pulse	0.1000	3
Mn	55	72	He	0.204	ppb	34.3	152.67	0.0038	Pulse	0.5000	3
Fe	57	72	He	-1.283	ppb	N/A	93.34	0.0023	Pulse	0.1000	3
Co	59	72	He	0.003	ppb	289.8	81.33	0.0020	Pulse	0.5000	3
Ni	60	72	He	0.098	ppb	18.6	162.67	0.0041	Pulse	0.5000	3
Cu	63	72	He	0.262	ppb	3.8	434.01	0.0108	Pulse	0.5000	3
Zn	66	72	He	1.838	ppb	1.0	311.34	0.0078	Pulse	0.5000	3
As	75	72	He	-0.049	ppb	N/A	26.00	0.0006	Pulse	0.5000	3
Sr	88	115	He	-0.001	ppb	N/A	156.68	0.0041	Pulse	0.1000	3
Mo	98	115	He	0.339	ppb	25.0	456.69	0.0118	Pulse	0.1000	3
Ag	107	115	He	0.013	ppb	85.8	43.33	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	1.078	ppb	9.3	3053.74	0.0791	Pulse	0.1000	3
Sb	121	115	He	0.292	ppb	30.5	203.34	0.0053	Pulse	0.3000	3
Ba	137	115	He	0.341	ppb	59.9	113.34	0.0029	Pulse	0.1000	3
Tl	205	159	He	0.089	ppb	12.1	420.03	0.0028	Pulse	0.1000	3
Pb	208	159	He	2.835	ppb	0.7	14446.60	0.0959	Pulse	0.1000	3
U	238	159	He	-0.005	ppb	N/A	96.67	0.0006	Pulse	0.1000	3

ISTD Table:

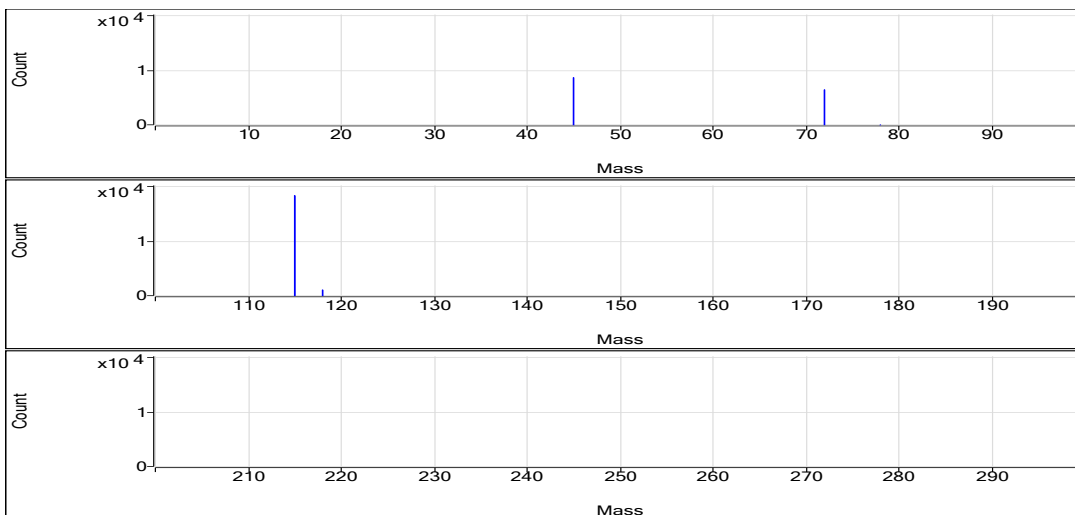
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1177743.57	0.9	90.1	Mix	0.1000	3
No Gas	Ge	72	559617.42	1.1	85.4	Pulse	0.1000	3
H2	Sc	45	86763.35	1.7	105.6	Pulse	0.1000	3
H2	Ge	72	64446.84	1.3	94.3	Pulse	0.1000	3
H2	In	115	183892.92	1.0	107.8	Pulse	0.1000	3
He	Sc	45	24228.37	1.9	94.6	Pulse	0.1000	3
He	Ge	72	40124.20	0.6	84.5	Pulse	0.1000	3
He	In	115	38614.18	1.2	94.3	Pulse	0.1000	3
He	Tb	159	150623.98	1.1	94.5	Pulse	0.1000	3
He	Bi	209	113719.13	0.8	97.2	Pulse	0.1000	3

No Gas

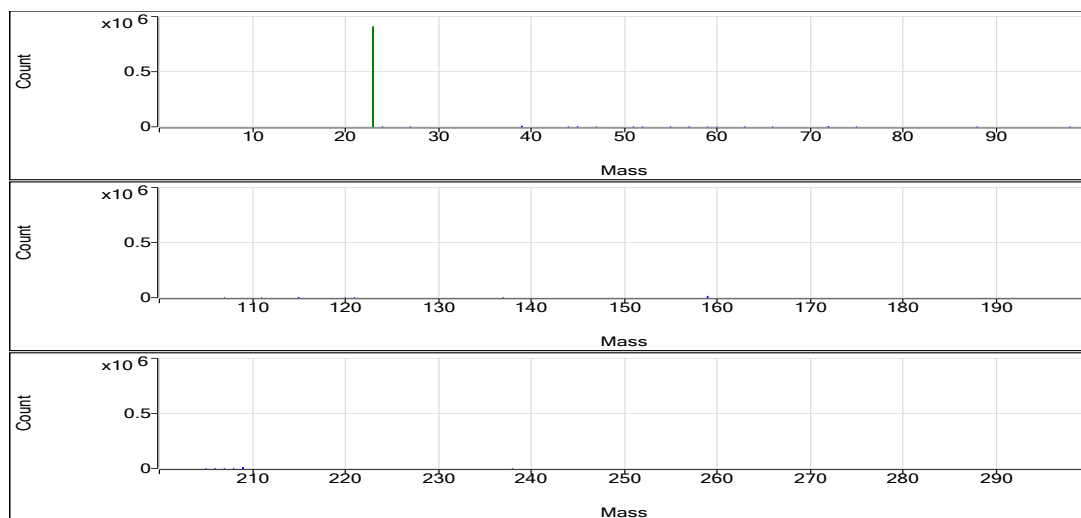


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.155	0.0002	136.00	0.0011	7.835E-05
Be	9	1	No Gas	0.083	0.0002	94.00	0.0011	7.835E-05
Be	9	1	No Gas	0.103	0.0002	104.00	0.0011	7.835E-05
Se	78	2	H2	0.031	0	2.67	0.0005	2.594E-05
Se	78	2	H2	0.031	0	2.67	0.0005	2.594E-05
Se	78	2	H2	0.049	0.0001	3.33	0.0005	2.594E-05
Na	23	3	He	123535.419	224.5197	9068648.61	0.0018	0.1731
Na	23	3	He	127031.372	230.8685	9214082.36	0.0018	0.1731
Na	23	3	He	124210.032	225.7448	9045761.74	0.0018	0.1731
Mg	24	3	He	7.187	0.0131	530.03	0.0009	0.006537
Mg	24	3	He	11.462	0.017	680.03	0.0009	0.006537
Mg	24	3	He	9.481	0.0152	610.03	0.0009	0.006537
Al	27	3	He	0.571	0.0025	100.00	0.0003	0.00231
Al	27	3	He	1.536	0.0028	110.00	0.0003	0.00231
Al	27	3	He	3.217	0.0032	130.00	0.0003	0.00231
K	39	3	He	182.263	0.4837	19537.67	0.0007	0.3475
K	39	3	He	32.199	0.3715	14828.71	0.0007	0.3475
K	39	3	He	1.404	0.3485	13965.93	0.0007	0.3475
Ca	44	3	He	11.503	0.0033	132.00	0	0.002807
Ca	44	3	He	-0.011	0.0028	112.00	0	0.002807
Ca	44	3	He	8.421	0.0031	126.00	0	0.002807
Ti	47	3	He	-0.043	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	1.089	0.0005	18.00	0.0003	0.0001123
Ti	47	3	He	-0.2	0	2.00	0.0003	0.0001123
V	51	3	He	-0.01	0.0082	330.01	0.0137	0.008308
V	51	3	He	-0.043	0.0077	308.00	0.0137	0.008308
V	51	3	He	-0.013	0.0081	326.01	0.0137	0.008308
Cr	52	3	He	-0.189	0.0183	740.04	0.0171	0.02156
Cr	52	3	He	-0.147	0.019	760.05	0.0171	0.02156
Cr	52	3	He	-0.327	0.016	640.03	0.0171	0.02156
Mn	55	3	He	0.124	0.0032	130.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.239	0.0041	162.00	0.0073	0.002316
Mn	55	3	He	0.25	0.0041	166.00	0.0073	0.002316
Fe	57	3	He	4.549	0.0042	170.01	0.0003	0.002736
Fe	57	3	He	-3.804	0.0015	60.00	0.0003	0.002736
Fe	57	3	He	-4.593	0.0012	50.00	0.0003	0.002736
Co	59	3	He	0.002	0.002	80.00	0.0332	0.001922
Co	59	3	He	0.013	0.0024	94.00	0.0332	0.001922
Co	59	3	He	-0.005	0.0017	70.00	0.0332	0.001922
Ni	60	3	He	0.083	0.0039	158.00	0.0093	0.003141
Ni	60	3	He	0.093	0.004	160.00	0.0093	0.003141
Ni	60	3	He	0.118	0.0042	170.00	0.0093	0.003141
Cu	63	3	He	0.263	0.0108	438.01	0.027	0.003732
Cu	63	3	He	0.272	0.0111	442.01	0.027	0.003732
Cu	63	3	He	0.252	0.0105	422.01	0.027	0.003732
Zn	66	3	He	1.859	0.0078	316.00	0.0031	0.002032
Zn	66	3	He	1.825	0.0077	308.00	0.0031	0.002032
Zn	66	3	He	1.831	0.0077	310.01	0.0031	0.002032
As	75	3	He	-0.109	0.0005	20.00	0.0025	0.0007733
As	75	3	He	0.05	0.0009	36.00	0.0025	0.0007733
As	75	3	He	-0.088	0.0005	22.00	0.0025	0.0007733
Sr	88	3	He	0.055	0.0046	180.01	0.0105	0.004071
Sr	88	3	He	0.012	0.0042	160.01	0.0105	0.004071
Sr	88	3	He	-0.07	0.0033	130.01	0.0105	0.004071
Mo	98	3	He	0.241	0.0096	370.02	0.0234	0.003908
Mo	98	3	He	0.394	0.0131	500.02	0.0234	0.003908
Mo	98	3	He	0.381	0.0128	500.03	0.0234	0.003908
Ag	107	3	He	0.016	0.0013	50.00	0.0493	0.0004851
Ag	107	3	He	0.022	0.0016	60.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	0.981	0.0775	3000.37	0.0169	0.0609
Sn	120	3	He	1.181	0.0808	3080.42	0.0169	0.0609
Sn	120	3	He	1.072	0.079	3080.43	0.0169	0.0609
Sb	121	3	He	0.271	0.0049	190.00	0.0161	0.0005433
Sb	121	3	He	0.216	0.004	153.34	0.0161	0.0005433
Sb	121	3	He	0.39	0.0068	266.67	0.0161	0.0005433
Ba	137	3	He	0.371	0.0031	120.00	0.0053	0.001141
Ba	137	3	He	0.53	0.0039	150.01	0.0053	0.001141
Ba	137	3	He	0.124	0.0018	70.00	0.0053	0.001141
Tl	205	3	He	0.098	0.003	450.03	0.0248	0.0005854
Tl	205	3	He	0.077	0.0025	380.02	0.0248	0.0005854
Tl	205	3	He	0.091	0.0028	430.03	0.0248	0.0005854
Pb	208	3	He	2.812	0.0951	7282.02	0.0332	0.001693
Pb	208	3	He	2.841	0.0961	7762.30	0.0332	0.001693
Pb	208	3	He	2.853	0.0965	7692.26	0.0332	0.001693
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
Sc	45	1	No Gas			1187810.29		
Sc	45	1	No Gas			1167268.03		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1178152.40		
Ge	72	1	No Gas			560711.12		
Ge	72	1	No Gas			565236.71		
Ge	72	1	No Gas			552904.44		
Sc	45	2	H2			85040.53		
Sc	45	2	H2			87806.22		
Sc	45	2	H2			87443.31		
Ge	72	2	H2			63747.21		
Ge	72	2	H2			64259.76		
Ge	72	2	H2			65333.55		
In	115	2	H2			182832.42		
In	115	2	H2			186052.32		
In	115	2	H2			182794.02		
Sc	45	3	He			23827.71		
Sc	45	3	He			24118.24		
Sc	45	3	He			24739.16		
Ge	72	3	He			40391.33		
Ge	72	3	He			39910.52		
Ge	72	3	He			40070.74		
In	115	3	He			38759.36		
In	115	3	He			38127.55		
In	115	3	He			39019.76		
Tb	159	3	He			148768.73		
Tb	159	3	He			151952.13		
Tb	159	3	He			151151.07		
Bi	209	3	He			114580.39		
Bi	209	3	He			113782.81		
Bi	209	3	He			112794.20		

Quantitation Report

Data File Name 297SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:08:04 PM
Sample Name 410-235808-A-2-H
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

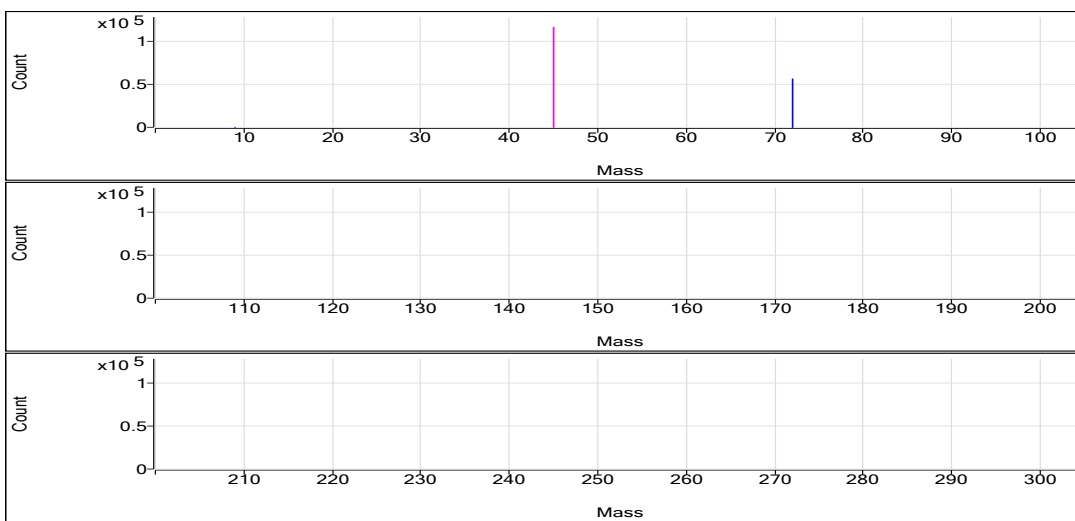
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.130	ppb	23.1	122.00	0.0002	Pulse	0.5000	3
Se	78	72	H2	-0.013	ppb	N/A	1.34	0.0000	Pulse	1.5000	3
Na	23	72	He	133112.224	ppb	1.8	10077621.93	241.9116	Analog	0.1000	3
Mg	24	72	He	308.635	ppb	4.7	12054.74	0.2893	Pulse	0.1000	3
Al	27	72	He	128.079	ppb	2.1	1646.80	0.0395	Pulse	0.1000	3
K	39	72	He	373.864	ppb	20.0	26120.75	0.6269	Pulse	0.5000	3
Ca	44	72	He	2099.144	ppb	3.9	3623.75	0.0870	Pulse	0.5000	3
Ti	47	72	He	-0.049	ppb	N/A	4.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.057	ppb	N/A	314.01	0.0075	Pulse	0.5000	3
Cr	52	72	He	0.324	ppb	81.6	1126.74	0.0271	Pulse	0.1000	3
Mn	55	72	He	266.453	ppb	3.5	81060.63	1.9464	Pulse	0.5000	3
Fe	57	72	He	48.925	ppb	11.2	773.37	0.0186	Pulse	0.1000	3
Co	59	72	He	7.683	ppb	4.7	10709.56	0.2572	Pulse	0.5000	3
Ni	60	72	He	6.089	ppb	7.0	2494.87	0.0599	Pulse	0.5000	3
Cu	63	72	He	2.843	ppb	3.1	3355.03	0.0805	Pulse	0.5000	3
Zn	66	72	He	8.754	ppb	8.1	1220.72	0.0293	Pulse	0.5000	3
As	75	72	He	0.041	ppb	219.9	36.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	10.660	ppb	10.5	4437.43	0.1156	Pulse	0.1000	3
Mo	98	115	He	0.074	ppb	44.5	216.68	0.0057	Pulse	0.1000	3
Ag	107	115	He	-0.003	ppb	N/A	13.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.025	ppb	44.8	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.162	ppb	N/A	2236.91	0.0582	Pulse	0.1000	3
Sb	121	115	He	0.124	ppb	19.5	97.78	0.0025	Pulse	0.3000	3
Ba	137	115	He	15.414	ppb	4.2	3173.77	0.0825	Pulse	0.1000	3
Tl	205	159	He	0.007	ppb	56.5	116.67	0.0008	Pulse	0.1000	3
Pb	208	159	He	3.507	ppb	4.5	18128.24	0.1182	Pulse	0.1000	3
U	238	159	He	0.155	ppb	24.8	923.39	0.0060	Pulse	0.1000	3

ISTD Table:

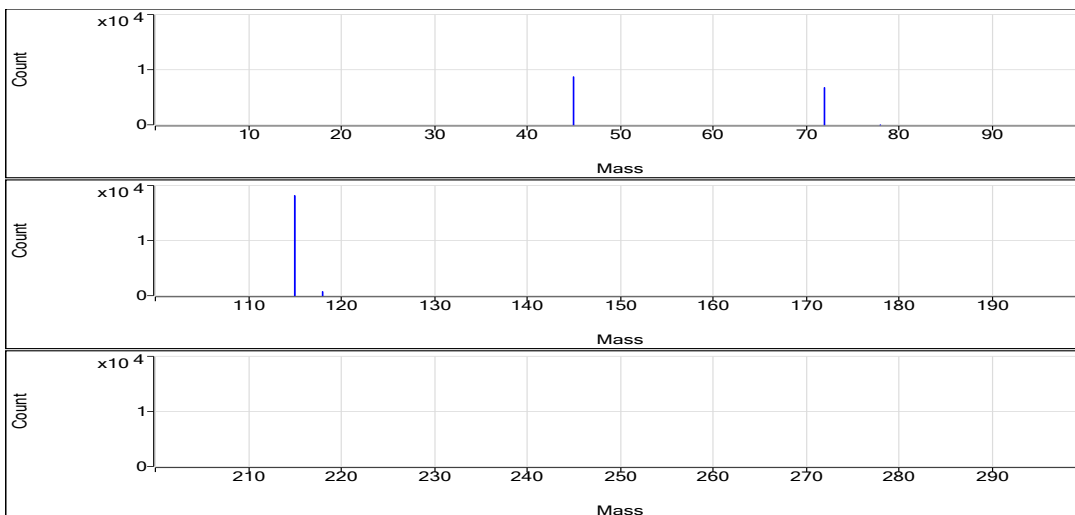
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1165282.82	1.0	89.1	Mix	0.1000	3
No Gas	Ge	72	563611.90	1.8	86.0	Pulse	0.1000	3
H2	Sc	45	87537.16	1.1	106.6	Pulse	0.1000	3
H2	Ge	72	67927.89	2.3	99.4	Pulse	0.1000	3
H2	In	115	182465.66	0.3	107.0	Pulse	0.1000	3
He	Sc	45	23664.33	2.3	92.4	Pulse	0.1000	3
He	Ge	72	41668.41	2.3	87.7	Pulse	0.1000	3
He	In	115	38462.95	3.4	93.9	Pulse	0.1000	3
He	Tb	159	153320.37	0.1	96.2	Pulse	0.1000	3
He	Bi	209	113790.05	2.1	97.3	Pulse	0.1000	3

No Gas

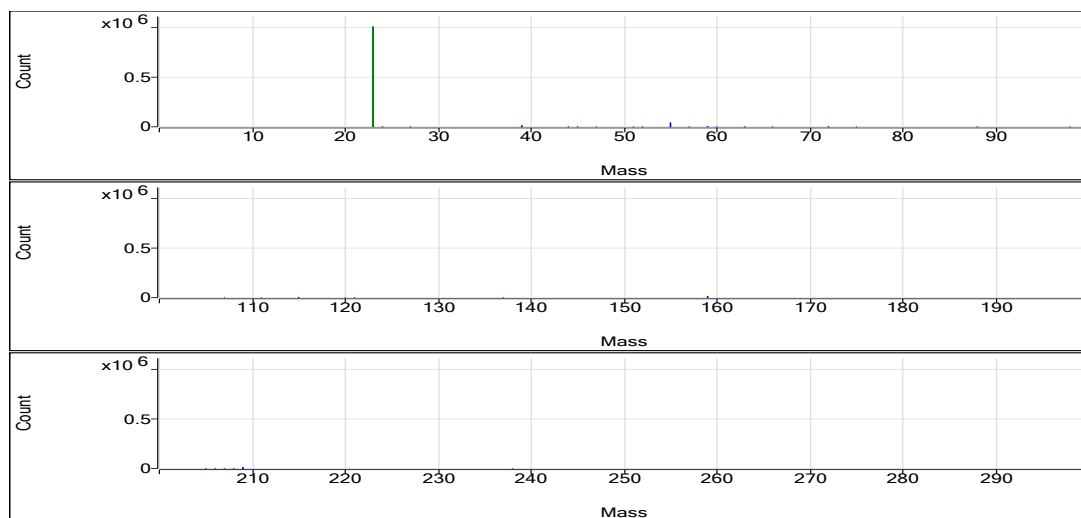


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.162	0.0003	140.00	0.0011	7.835E-05
Be	9	1	No Gas	0.102	0.0002	104.00	0.0011	7.835E-05
Be	9	1	No Gas	0.126	0.0002	122.00	0.0011	7.835E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.025	0	2.67	0.0005	2.594E-05
Na	23	3	He	131823.595	239.5714	9974511.10	0.0018	0.1731
Na	23	3	He	131619.783	239.2013	10201423.60	0.0018	0.1731
Na	23	3	He	135893.293	246.9622	10056931.10	0.0018	0.1731
Mg	24	3	He	292.086	0.2742	11414.33	0.0009	0.006537
Mg	24	3	He	315.452	0.2956	12605.10	0.0009	0.006537
Mg	24	3	He	318.367	0.2982	12144.79	0.0009	0.006537
Al	27	3	He	127.678	0.0394	1640.12	0.0003	0.00231
Al	27	3	He	130.917	0.0403	1720.15	0.0003	0.00231
Al	27	3	He	125.643	0.0388	1580.12	0.0003	0.00231
K	39	3	He	460.035	0.6913	28783.09	0.0007	0.3475
K	39	3	He	329.151	0.5935	25311.37	0.0007	0.3475
K	39	3	He	332.407	0.5959	24267.80	0.0007	0.3475
Ca	44	3	He	2016.867	0.0837	3484.39	0	0.002807
Ca	44	3	He	2101.804	0.0871	3714.44	0	0.002807
Ca	44	3	He	2178.759	0.0902	3672.43	0	0.002807
Ti	47	3	He	0.102	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	0.113	0.0001	6.00	0.0003	0.0001123
V	51	3	He	-0.035	0.0078	326.01	0.0137	0.008308
V	51	3	He	-0.055	0.0076	322.01	0.0137	0.008308
V	51	3	He	-0.08	0.0072	294.00	0.0137	0.008308
Cr	52	3	He	0.116	0.0235	980.06	0.0171	0.02156
Cr	52	3	He	0.234	0.0256	1090.07	0.0171	0.02156
Cr	52	3	He	0.621	0.0322	1310.10	0.0171	0.02156
Mn	55	3	He	263.397	1.9241	80108.98	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	258.903	1.8913	80659.92	0.0073	0.002316
Mn	55	3	He	277.059	2.0238	82412.98	0.0073	0.002316
Fe	57	3	He	45.686	0.0175	730.03	0.0003	0.002736
Fe	57	3	He	45.849	0.0176	750.04	0.0003	0.002736
Fe	57	3	He	55.239	0.0206	840.05	0.0003	0.002736
Co	59	3	He	7.517	0.2516	10477.39	0.0332	0.001922
Co	59	3	He	7.434	0.2489	10615.50	0.0332	0.001922
Co	59	3	He	8.099	0.271	11035.78	0.0332	0.001922
Ni	60	3	He	6.075	0.0598	2490.20	0.0093	0.003141
Ni	60	3	He	5.671	0.056	2390.19	0.0093	0.003141
Ni	60	3	He	6.519	0.064	2604.22	0.0093	0.003141
Cu	63	3	He	2.764	0.0784	3264.34	0.027	0.003732
Cu	63	3	He	2.829	0.0802	3418.38	0.027	0.003732
Cu	63	3	He	2.936	0.0831	3382.37	0.027	0.003732
Zn	66	3	He	7.982	0.0269	1120.05	0.0031	0.002032
Zn	66	3	He	8.906	0.0298	1270.06	0.0031	0.002032
Zn	66	3	He	9.374	0.0312	1272.06	0.0031	0.002032
As	75	3	He	-0.058	0.0006	26.00	0.0025	0.0007733
As	75	3	He	0.12	0.0011	46.00	0.0025	0.0007733
As	75	3	He	0.063	0.0009	38.00	0.0025	0.0007733
Sr	88	3	He	10.709	0.1161	4360.73	0.0105	0.004071
Sr	88	3	He	11.751	0.127	4810.90	0.0105	0.004071
Sr	88	3	He	9.519	0.1037	4140.65	0.0105	0.004071
Mo	98	3	He	0.095	0.0061	230.01	0.0234	0.003908
Mo	98	3	He	0.092	0.0061	230.01	0.0234	0.003908
Mo	98	3	He	0.036	0.0048	190.01	0.0234	0.003908
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.019	0.0001	4.00	0.0056	0
Cd	111	3	He	0.038	0.0002	8.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.043	0.0602	2260.24	0.0169	0.0609
Sn	120	3	He	-0.277	0.0562	2130.24	0.0169	0.0609
Sn	120	3	He	-0.167	0.0581	2320.24	0.0169	0.0609
Sb	121	3	He	0.098	0.0021	80.00	0.0161	0.0005433
Sb	121	3	He	0.146	0.0029	110.00	0.0161	0.0005433
Sb	121	3	He	0.127	0.0026	103.33	0.0161	0.0005433
Ba	137	3	He	16.073	0.086	3230.44	0.0053	0.001141
Ba	137	3	He	14.785	0.0792	3000.42	0.0053	0.001141
Ba	137	3	He	15.385	0.0824	3290.44	0.0053	0.001141
Tl	205	3	He	0.011	0.0008	130.01	0.0248	0.0005854
Tl	205	3	He	0.008	0.0008	120.00	0.0248	0.0005854
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	3.374	0.1138	8993.01	0.0332	0.001693
Pb	208	3	He	3.468	0.1169	8983.06	0.0332	0.001693
Pb	208	3	He	3.68	0.124	9843.63	0.0332	0.001693
U	238	3	He	0.121	0.0049	750.05	0.0338	0.0007949
U	238	3	He	0.197	0.0074	1140.08	0.0338	0.0007949
U	238	3	He	0.147	0.0057	880.05	0.0338	0.0007949
Sc	45	1	No Gas			1156778.73		
Sc	45	1	No Gas			1159834.05		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1179235.69		
Ge	72	1	No Gas			559424.48		
Ge	72	1	No Gas			556411.79		
Ge	72	1	No Gas			574999.44		
Sc	45	2	H2			86458.42		
Sc	45	2	H2			88418.52		
Sc	45	2	H2			87734.53		
Ge	72	2	H2			66087.01		
Ge	72	2	H2			68898.71		
Ge	72	2	H2			68797.95		
In	115	2	H2			181809.74		
In	115	2	H2			182522.48		
In	115	2	H2			183064.76		
Sc	45	3	He			23667.63		
Sc	45	3	He			24198.45		
Sc	45	3	He			23126.92		
Ge	72	3	He			41634.81		
Ge	72	3	He			42647.86		
Ge	72	3	He			40722.55		
In	115	3	He			37576.33		
In	115	3	He			37896.86		
In	115	3	He			39962.64		
Tb	159	3	He			153443.89		
Tb	159	3	He			153304.00		
Tb	159	3	He			153213.22		
Bi	209	3	He			112724.17		
Bi	209	3	He			116554.55		
Bi	209	3	He			112091.43		

Quantitation Report

Data File Name 298SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:10:16 PM
Sample Name 410-235808-D-3-G
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

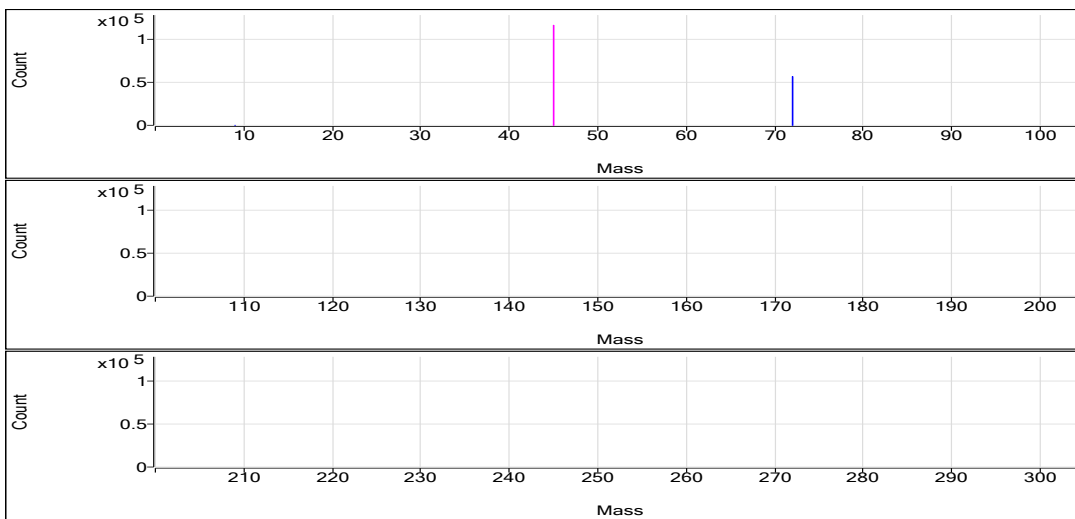
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.211	ppb	8.0	171.33	0.0003	Pulse	0.5000	3
Se	78	72	H2	-0.025	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	156319.549	ppb	1.7	11653782.75	284.0573	Analog	0.1000	3
Mg	24	72	He	548.261	ppb	3.2	20873.59	0.5089	Pulse	0.1000	3
Al	27	72	He	98.614	ppb	0.8	1270.09	0.0310	Pulse	0.1000	3
K	39	72	He	429.611	ppb	21.6	27420.24	0.6686	Pulse	0.5000	3
Ca	44	72	He	3151.675	ppb	2.6	5300.22	0.1292	Pulse	0.5000	3
Ti	47	72	He	-0.204	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
V	51	72	He	-0.041	ppb	N/A	318.01	0.0077	Pulse	0.5000	3
Cr	52	72	He	-0.018	ppb	N/A	873.38	0.0212	Pulse	0.1000	3
Mn	55	72	He	114.442	ppb	1.4	34352.05	0.8373	Pulse	0.5000	3
Fe	57	72	He	77.762	ppb	9.2	1146.75	0.0279	Pulse	0.1000	3
Co	59	72	He	3.888	ppb	1.1	5378.92	0.1311	Pulse	0.5000	3
Ni	60	72	He	2.066	ppb	3.5	919.36	0.0224	Pulse	0.5000	3
Cu	63	72	He	1.877	ppb	2.8	2234.17	0.0544	Pulse	0.5000	3
Zn	66	72	He	11.145	ppb	0.7	1508.08	0.0368	Pulse	0.5000	3
As	75	72	He	0.022	ppb	244.7	34.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	10.778	ppb	5.7	4527.48	0.1168	Pulse	0.1000	3
Mo	98	115	He	-0.031	ppb	N/A	123.34	0.0032	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	1877.8	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	78.3	5.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.572	ppb	N/A	1983.54	0.0513	Pulse	0.1000	3
Sb	121	115	He	0.060	ppb	29.4	58.89	0.0015	Pulse	0.3000	3
Ba	137	115	He	17.153	ppb	5.6	3553.86	0.0917	Pulse	0.1000	3
Tl	205	159	He	0.000	ppb	N/A	86.67	0.0006	Pulse	0.1000	3
Pb	208	159	He	1.863	ppb	0.7	9484.87	0.0636	Pulse	0.1000	3
U	238	159	He	0.088	ppb	6.9	563.36	0.0038	Pulse	0.1000	3

ISTD Table:

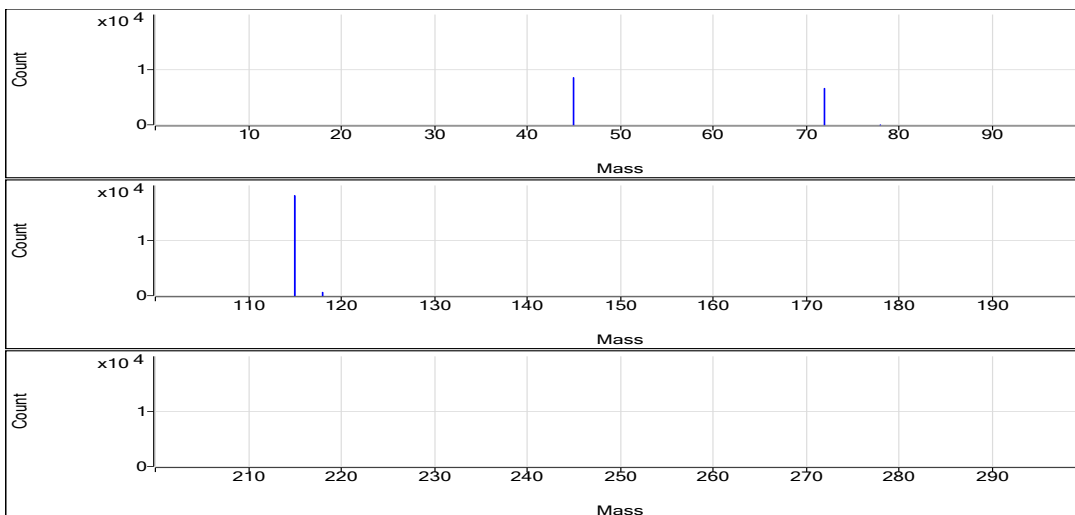
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1163295.03	2.0	89.0	Mix	0.1000	3
No Gas	Ge	72	567594.59	3.7	86.6	Pulse	0.1000	3
H2	Sc	45	85660.50	1.8	104.3	Pulse	0.1000	3
H2	Ge	72	66227.09	1.0	96.9	Pulse	0.1000	3
H2	In	115	181565.48	0.7	106.4	Pulse	0.1000	3
He	Sc	45	23590.86	2.4	92.1	Pulse	0.1000	3
He	Ge	72	41033.20	1.6	86.4	Pulse	0.1000	3
He	In	115	38781.61	2.0	94.7	Pulse	0.1000	3
He	Tb	159	149141.82	0.9	93.5	Pulse	0.1000	3
He	Bi	209	111710.47	0.8	95.5	Pulse	0.1000	3

No Gas

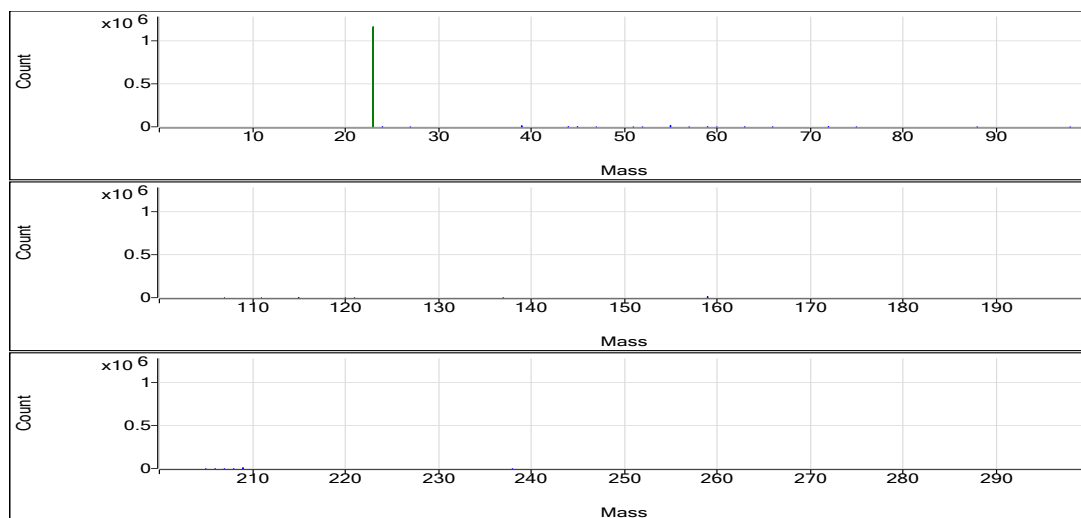


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.202	0.0003	162.00	0.0011	7.835E-05
Be	9	1	No Gas	0.23	0.0003	180.00	0.0011	7.835E-05
Be	9	1	No Gas	0.2	0.0003	172.00	0.0011	7.835E-05
Se	78	2	H2	-0.012	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Na	23	3	He	157234.418	285.7188	11721096.08	0.0018	0.1731
Na	23	3	He	158328.365	287.7054	11615123.58	0.0018	0.1731
Na	23	3	He	153395.864	278.7478	11625128.58	0.0018	0.1731
Mg	24	3	He	552.742	0.513	21043.79	0.0009	0.006537
Mg	24	3	He	562.862	0.5222	21083.85	0.0009	0.006537
Mg	24	3	He	529.18	0.4914	20493.12	0.0009	0.006537
Al	27	3	He	97.804	0.0307	1260.09	0.0003	0.00231
Al	27	3	He	98.659	0.031	1250.09	0.0003	0.00231
Al	27	3	He	99.379	0.0312	1300.10	0.0003	0.00231
K	39	3	He	525.775	0.7405	30375.96	0.0007	0.3475
K	39	3	He	422.184	0.663	26767.65	0.0007	0.3475
K	39	3	He	340.874	0.6023	25117.10	0.0007	0.3475
Ca	44	3	He	3201.986	0.1312	5382.91	0	0.002807
Ca	44	3	He	3194.248	0.1309	5284.88	0	0.002807
Ca	44	3	He	3058.791	0.1255	5232.86	0	0.002807
Ti	47	3	He	-0.204	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.202	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.207	0	2.00	0.0003	0.0001123
V	51	3	He	-0.026	0.0079	326.01	0.0137	0.008308
V	51	3	He	-0.079	0.0072	292.01	0.0137	0.008308
V	51	3	He	-0.018	0.0081	336.01	0.0137	0.008308
Cr	52	3	He	0.108	0.0234	960.06	0.0171	0.02156
Cr	52	3	He	-0.276	0.0168	680.03	0.0171	0.02156
Cr	52	3	He	0.114	0.0235	980.06	0.0171	0.02156
Mn	55	3	He	114.534	0.838	34376.14	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	115.966	0.8484	34251.83	0.0073	0.002316
Mn	55	3	He	112.828	0.8255	34428.19	0.0073	0.002316
Fe	57	3	He	81.114	0.029	1190.08	0.0003	0.002736
Fe	57	3	He	69.559	0.0253	1020.07	0.0003	0.002736
Fe	57	3	He	82.612	0.0295	1230.09	0.0003	0.002736
Co	59	3	He	3.895	0.1313	5386.92	0.0332	0.001922
Co	59	3	He	3.927	0.1324	5344.91	0.0332	0.001922
Co	59	3	He	3.843	0.1296	5404.93	0.0332	0.001922
Ni	60	3	He	2.083	0.0226	926.03	0.0093	0.003141
Ni	60	3	He	2.128	0.023	928.03	0.0093	0.003141
Ni	60	3	He	1.987	0.0217	904.03	0.0093	0.003141
Cu	63	3	He	1.894	0.0549	2252.17	0.027	0.003732
Cu	63	3	He	1.817	0.0528	2132.15	0.027	0.003732
Cu	63	3	He	1.919	0.0556	2318.18	0.027	0.003732
Zn	66	3	He	11.053	0.0365	1496.08	0.0031	0.002032
Zn	66	3	He	11.21	0.037	1492.08	0.0031	0.002032
Zn	66	3	He	11.17	0.0368	1536.08	0.0031	0.002032
As	75	3	He	0.06	0.0009	38.00	0.0025	0.0007733
As	75	3	He	0.046	0.0009	36.00	0.0025	0.0007733
As	75	3	He	-0.04	0.0007	28.00	0.0025	0.0007733
Sr	88	3	He	11.254	0.1218	4630.87	0.0105	0.004071
Sr	88	3	He	10.089	0.1096	4340.72	0.0105	0.004071
Sr	88	3	He	10.993	0.1191	4610.84	0.0105	0.004071
Mo	98	3	He	-0.01	0.0037	140.01	0.0234	0.003908
Mo	98	3	He	-0.038	0.003	120.01	0.0234	0.003908
Mo	98	3	He	-0.046	0.0028	110.00	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.046	0.0003	10.00	0.0056	0
Sn	120	3	He	-0.086	0.0594	2260.24	0.0169	0.0609
Sn	120	3	He	-1.035	0.0434	1720.17	0.0169	0.0609
Sn	120	3	He	-0.594	0.0509	1970.22	0.0169	0.0609
Sb	121	3	He	0.064	0.0016	60.00	0.0161	0.0005433
Sb	121	3	He	0.076	0.0018	70.00	0.0161	0.0005433
Sb	121	3	He	0.041	0.0012	46.67	0.0161	0.0005433
Ba	137	3	He	18.118	0.0968	3680.55	0.0053	0.001141
Ba	137	3	He	16.191	0.0866	3430.50	0.0053	0.001141
Ba	137	3	He	17.149	0.0917	3550.53	0.0053	0.001141
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Pb	208	3	He	1.848	0.0631	4990.99	0.0332	0.001693
Pb	208	3	He	1.872	0.0639	5191.12	0.0332	0.001693
Pb	208	3	He	1.868	0.0638	5181.09	0.0332	0.001693
U	238	3	He	0.091	0.0039	570.03	0.0338	0.0007949
U	238	3	He	0.093	0.0039	590.03	0.0338	0.0007949
U	238	3	He	0.081	0.0035	530.03	0.0338	0.0007949
Sc	45	1	No Gas			1145338.42		
Sc	45	1	No Gas			1155147.64		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1189399.04		
Ge	72	1	No Gas			553245.54		
Ge	72	1	No Gas			557845.23		
Ge	72	1	No Gas			591693.00		
Sc	45	2	H2			87462.87		
Sc	45	2	H2			84598.52		
Sc	45	2	H2			84920.12		
Ge	72	2	H2			66719.02		
Ge	72	2	H2			66508.22		
Ge	72	2	H2			65454.03		
In	115	2	H2			181074.49		
In	115	2	H2			182995.13		
In	115	2	H2			180626.81		
Sc	45	3	He			23477.31		
Sc	45	3	He			24198.36		
Sc	45	3	He			23096.90		
Ge	72	3	He			41023.19		
Ge	72	3	He			40371.58		
Ge	72	3	He			41704.83		
In	115	3	He			38036.88		
In	115	3	He			39610.86		
In	115	3	He			38738.73		
Tb	159	3	He			147557.03		
Tb	159	3	He			150243.13		
Tb	159	3	He			149625.31		
Bi	209	3	He			112552.38		
Bi	209	3	He			111727.76		
Bi	209	3	He			110851.28		

Quantitation Report

Data File Name 299SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:12:29 PM
Sample Name LB 410-682887/1-B
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

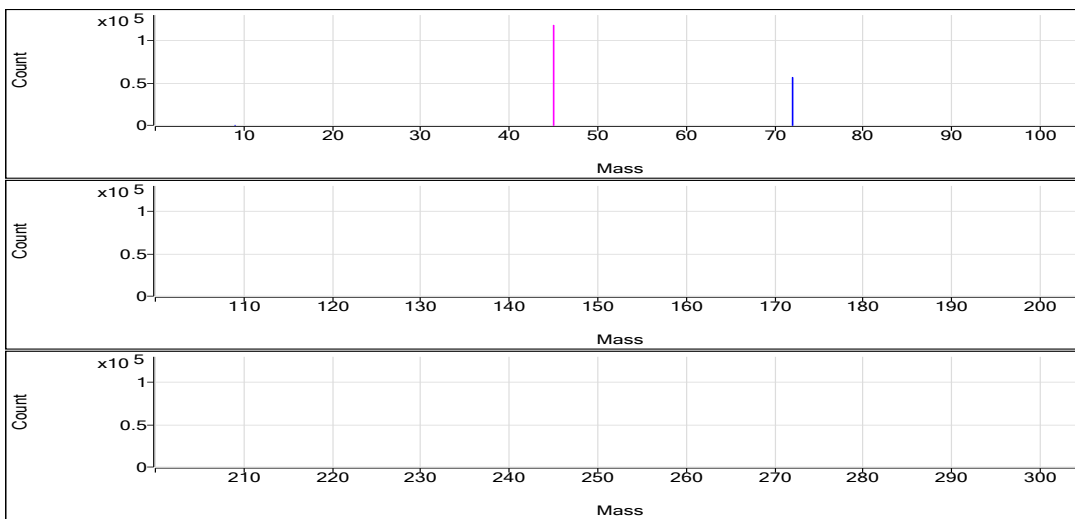
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	72.8	52.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.044	ppb	N/A	0.22	0.0000	Pulse	1.5000	3
Na	23	72	He	113563.841	ppb	0.8	8212223.21	206.4108	Analog	0.1000	3
Mg	24	72	He	7.725	ppb	45.8	543.36	0.0136	Pulse	0.1000	3
Al	27	72	He	2.706	ppb	163.2	123.34	0.0031	Pulse	0.1000	3
K	39	72	He	90.095	ppb	103.9	16490.45	0.4148	Pulse	0.5000	3
Ca	44	72	He	22.937	ppb	68.0	148.00	0.0037	Pulse	0.5000	3
Ti	47	72	He	-0.200	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
V	51	72	He	-0.003	ppb	N/A	328.68	0.0083	Pulse	0.5000	3
Cr	52	72	He	0.007	ppb	837.5	863.39	0.0217	Pulse	0.1000	3
Mn	55	72	He	0.406	ppb	17.2	210.00	0.0053	Pulse	0.5000	3
Fe	57	72	He	-0.705	ppb	N/A	100.00	0.0025	Pulse	0.1000	3
Co	59	72	He	0.000	ppb	N/A	76.67	0.0019	Pulse	0.5000	3
Ni	60	72	He	0.141	ppb	23.6	177.33	0.0045	Pulse	0.5000	3
Cu	63	72	He	0.040	ppb	64.6	191.33	0.0048	Pulse	0.5000	3
Zn	66	72	He	0.418	ppb	28.0	132.67	0.0033	Pulse	0.5000	3
As	75	72	He	-0.027	ppb	N/A	28.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.091	ppb	N/A	120.00	0.0031	Pulse	0.1000	3
Mo	98	115	He	-0.012	ppb	N/A	140.01	0.0036	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	191.9	26.67	0.0007	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.613	ppb	N/A	1956.85	0.0506	Pulse	0.1000	3
Sb	121	115	He	0.016	ppb	106.1	31.11	0.0008	Pulse	0.3000	3
Ba	137	115	He	0.593	ppb	47.6	166.67	0.0043	Pulse	0.1000	3
Tl	205	159	He	-0.002	ppb	N/A	80.00	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.023	ppb	N/A	143.34	0.0009	Pulse	0.1000	3
U	238	159	He	-0.011	ppb	N/A	66.67	0.0004	Pulse	0.1000	3

ISTD Table:

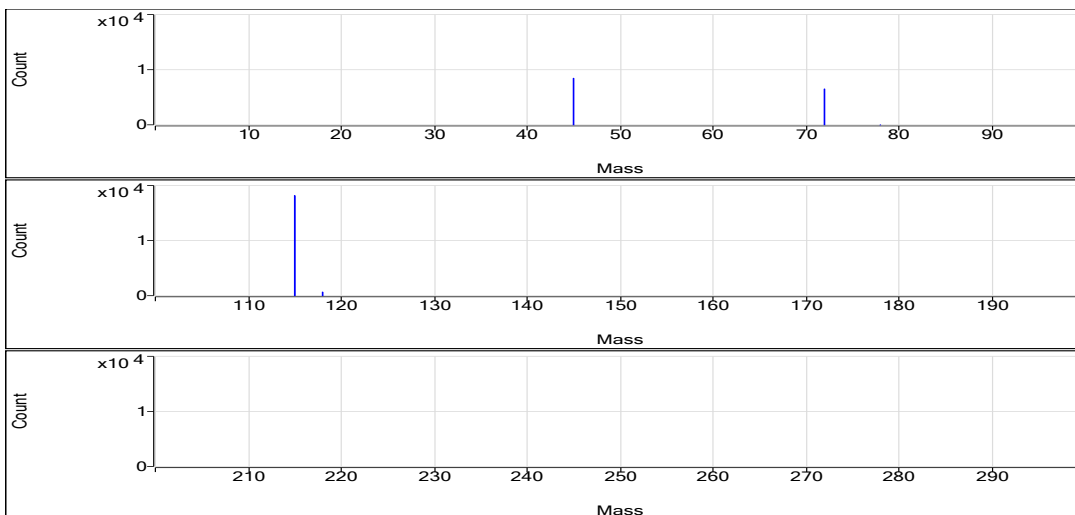
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1180876.44	0.7	90.3	Mix	0.1000	3
No Gas	Ge	72	565492.43	0.7	86.3	Pulse	0.1000	3
H2	Sc	45	84733.30	0.8	103.1	Pulse	0.1000	3
H2	Ge	72	65260.16	1.0	95.5	Pulse	0.1000	3
H2	In	115	181852.64	0.9	106.6	Pulse	0.1000	3
He	Sc	45	23684.47	3.4	92.5	Pulse	0.1000	3
He	Ge	72	39790.02	2.0	83.7	Pulse	0.1000	3
He	In	115	38765.48	2.9	94.7	Pulse	0.1000	3
He	Tb	159	152326.79	1.0	95.5	Pulse	0.1000	3
He	Bi	209	112902.56	1.4	96.5	Pulse	0.1000	3

No Gas

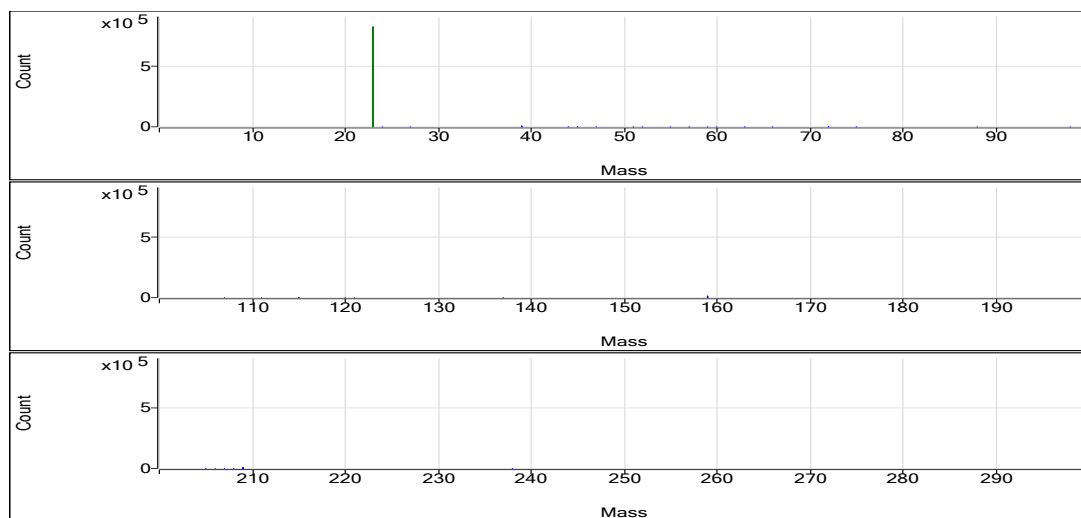


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.01	0.0001	50.00	0.0011	7.835E-05
Be	9	1	No Gas	0.023	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	0.006	0.0001	48.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.031	0	0.67	0.0005	2.594E-05
Na	23	3	He	113808.394	206.8549	8224530.50	0.0018	0.1731
Na	23	3	He	114343.589	207.8269	8109006.75	0.0018	0.1731
Na	23	3	He	112539.539	204.5506	8303132.38	0.0018	0.1731
Mg	24	3	He	8.787	0.0146	580.03	0.0009	0.006537
Mg	24	3	He	3.775	0.01	390.02	0.0009	0.006537
Mg	24	3	He	10.612	0.0163	660.04	0.0009	0.006537
Al	27	3	He	7.635	0.0045	180.01	0.0003	0.00231
Al	27	3	He	-0.894	0.0021	80.00	0.0003	0.00231
Al	27	3	He	1.377	0.0027	110.00	0.0003	0.00231
K	39	3	He	189.777	0.4893	19455.54	0.0007	0.3475
K	39	3	He	76.382	0.4046	15785.64	0.0007	0.3475
K	39	3	He	4.125	0.3506	14230.18	0.0007	0.3475
Ca	44	3	He	32.866	0.0041	164.00	0	0.002807
Ca	44	3	He	30.987	0.004	158.00	0	0.002807
Ca	44	3	He	4.957	0.003	122.00	0	0.002807
Ti	47	3	He	-0.037	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	-0.203	0	2.00	0.0003	0.0001123
V	51	3	He	-0.001	0.0083	330.01	0.0137	0.008308
V	51	3	He	0.019	0.0086	334.01	0.0137	0.008308
V	51	3	He	-0.027	0.0079	322.01	0.0137	0.008308
Cr	52	3	He	-0.025	0.0211	840.05	0.0171	0.02156
Cr	52	3	He	-0.032	0.021	820.05	0.0171	0.02156
Cr	52	3	He	0.079	0.0229	930.07	0.0171	0.02156
Mn	55	3	He	0.475	0.0058	230.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.336	0.0048	186.00	0.0073	0.002316
Mn	55	3	He	0.405	0.0053	214.00	0.0073	0.002316
Fe	57	3	He	0.872	0.003	120.00	0.0003	0.002736
Fe	57	3	He	-2.907	0.0018	70.00	0.0003	0.002736
Fe	57	3	He	-0.08	0.0027	110.00	0.0003	0.002736
Co	59	3	He	0.009	0.0022	88.00	0.0332	0.001922
Co	59	3	He	-0.018	0.0013	52.00	0.0332	0.001922
Co	59	3	He	0.009	0.0022	90.00	0.0332	0.001922
Ni	60	3	He	0.154	0.0046	182.00	0.0093	0.003141
Ni	60	3	He	0.103	0.0041	160.00	0.0093	0.003141
Ni	60	3	He	0.165	0.0047	190.00	0.0093	0.003141
Cu	63	3	He	0.067	0.0055	220.00	0.027	0.003732
Cu	63	3	He	0.038	0.0048	186.00	0.027	0.003732
Cu	63	3	He	0.015	0.0041	168.00	0.027	0.003732
Zn	66	3	He	0.284	0.0029	116.00	0.0031	0.002032
Zn	66	3	He	0.467	0.0035	136.00	0.0031	0.002032
Zn	66	3	He	0.502	0.0036	146.00	0.0031	0.002032
As	75	3	He	-0.047	0.0007	26.00	0.0025	0.0007733
As	75	3	He	0.018	0.0008	32.00	0.0025	0.0007733
As	75	3	He	-0.052	0.0006	26.00	0.0025	0.0007733
Sr	88	3	He	-0.012	0.0039	150.01	0.0105	0.004071
Sr	88	3	He	-0.064	0.0034	130.00	0.0105	0.004071
Sr	88	3	He	-0.198	0.002	80.00	0.0105	0.004071
Mo	98	3	He	-0.01	0.0037	140.01	0.0234	0.003908
Mo	98	3	He	0.012	0.0042	160.01	0.0234	0.003908
Mo	98	3	He	-0.039	0.003	120.00	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.01	0.001	40.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.338	0.0552	2100.22	0.0169	0.0609
Sn	120	3	He	-0.644	0.05	1910.17	0.0169	0.0609
Sn	120	3	He	-0.857	0.0464	1860.17	0.0169	0.0609
Sb	121	3	He	0.021	0.0009	33.33	0.0161	0.0005433
Sb	121	3	He	0.031	0.001	40.00	0.0161	0.0005433
Sb	121	3	He	-0.003	0.0005	20.00	0.0161	0.0005433
Ba	137	3	He	0.431	0.0034	130.01	0.0053	0.001141
Ba	137	3	He	0.429	0.0034	130.00	0.0053	0.001141
Ba	137	3	He	0.919	0.006	240.01	0.0053	0.001141
Tl	205	3	He	0.008	0.0008	120.01	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Pb	208	3	He	-0.021	0.001	90.00	0.0332	0.001693
Pb	208	3	He	-0.015	0.0012	100.01	0.0332	0.001693
Pb	208	3	He	-0.031	0.0007	40.00	0.0332	0.001693
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
U	238	3	He	-0.014	0.0003	50.00	0.0338	0.0007949
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
Sc	45	1	No Gas			1172936.15		
Sc	45	1	No Gas			1179332.40		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1190360.76		
Ge	72	1	No Gas			565016.67		
Ge	72	1	No Gas			562012.92		
Ge	72	1	No Gas			569447.69		
Sc	45	2	H2			83954.65		
Sc	45	2	H2			85233.25		
Sc	45	2	H2			85012.01		
Ge	72	2	H2			66016.26		
Ge	72	2	H2			65002.31		
Ge	72	2	H2			64761.92		
In	115	2	H2			180952.48		
In	115	2	H2			183744.67		
In	115	2	H2			180860.78		
Sc	45	3	He			24619.10		
Sc	45	3	He			23297.42		
Sc	45	3	He			23136.89		
Ge	72	3	He			39759.90		
Ge	72	3	He			39018.09		
Ge	72	3	He			40592.07		
In	115	3	He			38067.46		
In	115	3	He			38197.59		
In	115	3	He			40072.48		
Tb	159	3	He			152837.19		
Tb	159	3	He			150647.50		
Tb	159	3	He			153495.68		
Bi	209	3	He			112332.36		
Bi	209	3	He			111686.63		
Bi	209	3	He			114688.68		

Quantitation Report

Data File Name 300SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:14:41 PM
Sample Name LB 410-682771/1-D
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

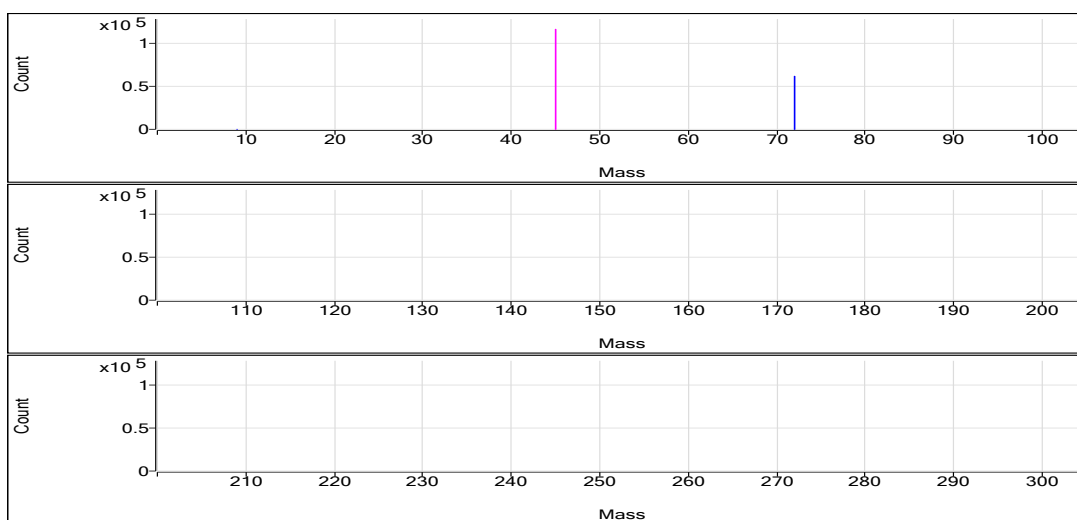
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	67.3	56.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.027	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	333.708	ppb	1.9	34389.41	0.7791	Pulse	0.1000	3
Mg	24	72	He	4.737	ppb	60.1	480.03	0.0109	Pulse	0.1000	3
Al	27	72	He	-3.000	ppb	N/A	63.33	0.0014	Pulse	0.1000	3
K	39	72	He	11.809	ppb	593.3	15744.36	0.3563	Pulse	0.5000	3
Ca	44	72	He	-18.103	ppb	N/A	92.00	0.0021	Pulse	0.5000	3
Ti	47	72	He	-0.119	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.054	ppb	N/A	334.01	0.0076	Pulse	0.5000	3
Cr	52	72	He	-0.343	ppb	N/A	693.37	0.0157	Pulse	0.1000	3
Mn	55	72	He	0.140	ppb	29.3	147.33	0.0033	Pulse	0.5000	3
Fe	57	72	He	0.417	ppb	918.5	126.67	0.0029	Pulse	0.1000	3
Co	59	72	He	-0.010	ppb	N/A	70.00	0.0016	Pulse	0.5000	3
Ni	60	72	He	0.023	ppb	180.9	148.00	0.0034	Pulse	0.5000	3
Cu	63	72	He	0.006	ppb	93.8	172.00	0.0039	Pulse	0.5000	3
Zn	66	72	He	0.001	ppb	8687.7	90.00	0.0020	Pulse	0.5000	3
As	75	72	He	-0.018	ppb	N/A	32.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	-0.178	ppb	N/A	86.67	0.0022	Pulse	0.1000	3
Mo	98	115	He	-0.124	ppb	N/A	40.00	0.0010	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	1216.9	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.840	ppb	N/A	1846.84	0.0467	Pulse	0.1000	3
Sb	121	115	He	0.020	ppb	126.9	34.45	0.0009	Pulse	0.3000	3
Ba	137	115	He	-0.040	ppb	N/A	36.67	0.0009	Pulse	0.1000	3
Tl	205	159	He	-0.003	ppb	N/A	76.67	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.017	ppb	N/A	170.00	0.0011	Pulse	0.1000	3
U	238	159	He	-0.001	ppb	N/A	113.34	0.0007	Pulse	0.1000	3

ISTD Table:

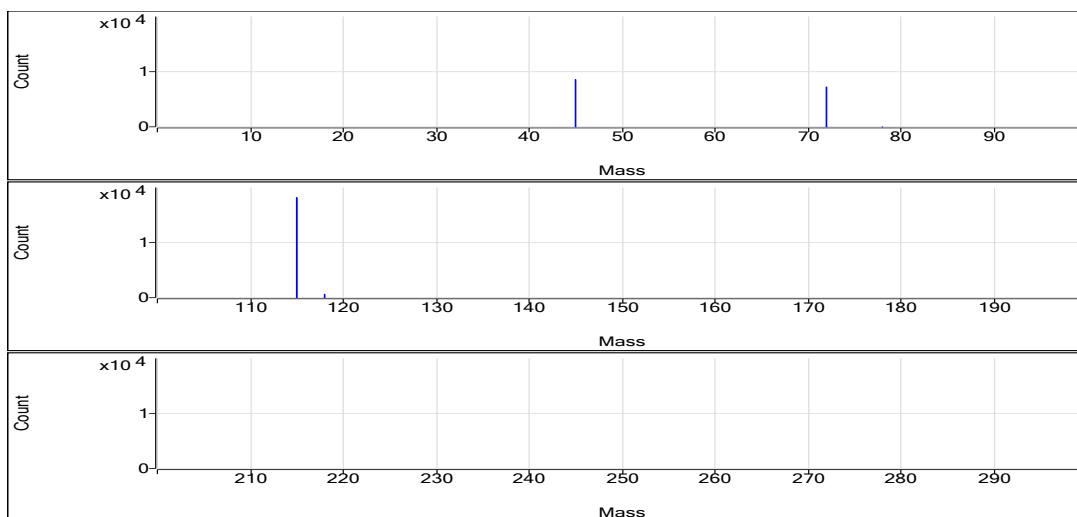
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1158731.28	1.2	88.6	Mix	0.1000	3
No Gas	Ge	72	615744.95	2.2	94.0	Pulse	0.1000	3
H2	Sc	45	85600.51	0.5	104.2	Pulse	0.1000	3
H2	Ge	72	72189.74	1.6	105.6	Pulse	0.1000	3
H2	In	115	181251.53	0.5	106.2	Pulse	0.1000	3
He	Sc	45	23380.64	2.3	91.3	Pulse	0.1000	3
He	Ge	72	44147.92	1.7	92.9	Pulse	0.1000	3
He	In	115	39531.56	1.7	96.6	Pulse	0.1000	3
He	Tb	159	151563.21	0.8	95.1	Pulse	0.1000	3
He	Bi	209	114833.61	2.0	98.2	Pulse	0.1000	3

No Gas

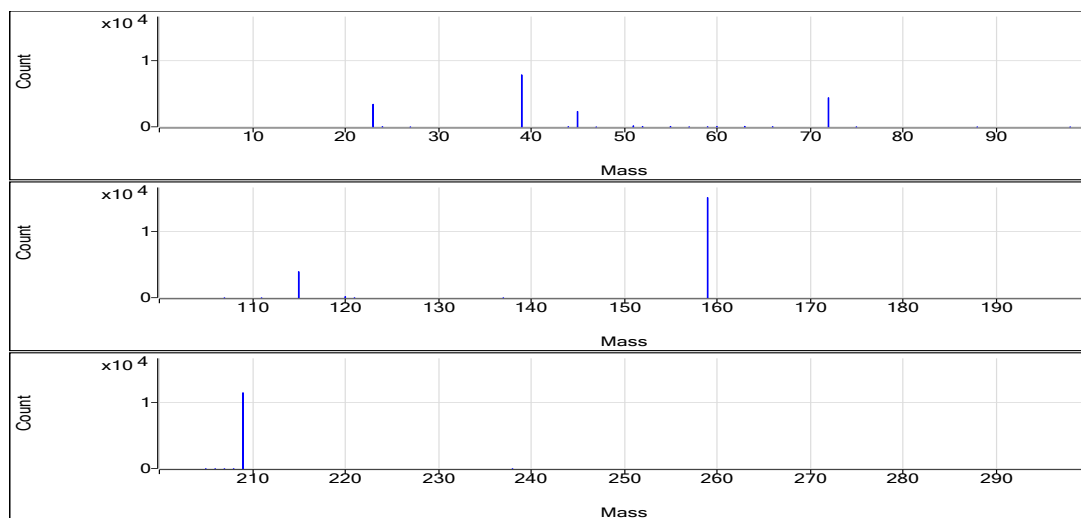


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.005	0.0001	52.00	0.0011	7.835E-05
Be	9	1	No Gas	0.011	0.0001	54.00	0.0011	7.835E-05
Be	9	1	No Gas	0.022	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.003	0	2.00	0.0005	2.594E-05
Na	23	3	He	331.865	0.7757	34576.35	0.0018	0.1731
Na	23	3	He	328.554	0.7697	34316.07	0.0018	0.1731
Na	23	3	He	340.706	0.7918	34275.80	0.0018	0.1731
Mg	24	3	He	1.681	0.0081	360.02	0.0009	0.006537
Mg	24	3	He	7.31	0.0132	590.04	0.0009	0.006537
Mg	24	3	He	5.22	0.0113	490.02	0.0009	0.006537
Al	27	3	He	-4.091	0.0011	50.00	0.0003	0.00231
Al	27	3	He	-3.32	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-1.591	0.0018	80.00	0.0003	0.00231
K	39	3	He	92.586	0.4167	18572.57	0.0007	0.3475
K	39	3	He	-24.701	0.329	14668.54	0.0007	0.3475
K	39	3	He	-32.458	0.3232	13991.96	0.0007	0.3475
Ca	44	3	He	-11.806	0.0023	104.00	0	0.002807
Ca	44	3	He	-16.293	0.0022	96.00	0	0.002807
Ca	44	3	He	-26.21	0.0018	76.00	0	0.002807
Ti	47	3	He	0.216	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	-0.212	0	2.00	0.0003	0.0001123
V	51	3	He	-0.017	0.0081	360.01	0.0137	0.008308
V	51	3	He	-0.106	0.0069	306.00	0.0137	0.008308
V	51	3	He	-0.04	0.0078	336.01	0.0137	0.008308
Cr	52	3	He	-0.29	0.0166	740.04	0.0171	0.02156
Cr	52	3	He	-0.382	0.015	670.04	0.0171	0.02156
Cr	52	3	He	-0.356	0.0155	670.03	0.0171	0.02156
Mn	55	3	He	0.101	0.0031	136.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.138	0.0033	148.00	0.0073	0.002316
Mn	55	3	He	0.183	0.0036	158.00	0.0073	0.002316
Fe	57	3	He	4.022	0.004	180.01	0.0003	0.002736
Fe	57	3	He	-3.598	0.0016	70.00	0.0003	0.002736
Fe	57	3	He	0.826	0.003	130.00	0.0003	0.002736
Co	59	3	He	-0.02	0.0013	56.00	0.0332	0.001922
Co	59	3	He	-0.007	0.0017	76.00	0.0332	0.001922
Co	59	3	He	-0.004	0.0018	78.00	0.0332	0.001922
Ni	60	3	He	-0.024	0.0029	130.00	0.0093	0.003141
Ni	60	3	He	0.038	0.0035	156.00	0.0093	0.003141
Ni	60	3	He	0.055	0.0036	158.00	0.0093	0.003141
Cu	63	3	He	0.008	0.0039	176.00	0.027	0.003732
Cu	63	3	He	0	0.0037	166.00	0.027	0.003732
Cu	63	3	He	0.011	0.004	174.00	0.027	0.003732
Zn	66	3	He	0.025	0.0021	94.00	0.0031	0.002032
Zn	66	3	He	0.082	0.0023	102.00	0.0031	0.002032
Zn	66	3	He	-0.104	0.0017	74.00	0.0031	0.002032
As	75	3	He	-0.145	0.0004	18.00	0.0025	0.0007733
As	75	3	He	0.049	0.0009	40.00	0.0025	0.0007733
As	75	3	He	0.041	0.0009	38.00	0.0025	0.0007733
Sr	88	3	He	-0.169	0.0023	90.00	0.0105	0.004071
Sr	88	3	He	-0.072	0.0033	130.00	0.0105	0.004071
Sr	88	3	He	-0.294	0.001	40.00	0.0105	0.004071
Mo	98	3	He	-0.123	0.001	40.00	0.0234	0.003908
Mo	98	3	He	-0.123	0.001	40.00	0.0234	0.003908
Mo	98	3	He	-0.125	0.001	40.00	0.0234	0.003908
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.82	0.0471	1840.19	0.0169	0.0609
Sn	120	3	He	-0.81	0.0472	1850.17	0.0169	0.0609
Sn	120	3	He	-0.89	0.0459	1850.17	0.0169	0.0609
Sb	121	3	He	0.024	0.0009	36.67	0.0161	0.0005433
Sb	121	3	He	-0.007	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	0.043	0.0012	50.00	0.0161	0.0005433
Ba	137	3	He	-0.119	0.0005	20.00	0.0053	0.001141
Ba	137	3	He	0.074	0.0015	60.00	0.0053	0.001141
Ba	137	3	He	-0.075	0.0007	30.00	0.0053	0.001141
Tl	205	3	He	0	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.008	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Pb	208	3	He	-0.021	0.001	80.00	0.0332	0.001693
Pb	208	3	He	-0.019	0.0011	110.00	0.0332	0.001693
Pb	208	3	He	-0.011	0.0013	110.00	0.0332	0.001693
U	238	3	He	-0.004	0.0007	100.00	0.0338	0.0007949
U	238	3	He	0.002	0.0009	130.01	0.0338	0.0007949
U	238	3	He	-0.002	0.0007	110.00	0.0338	0.0007949
Sc	45	1	No Gas			1157478.65		
Sc	45	1	No Gas			1145984.44		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1172730.76		
Ge	72	1	No Gas			618819.17		
Ge	72	1	No Gas			600866.83		
Ge	72	1	No Gas			627548.86		
Sc	45	2	H2			85402.78		
Sc	45	2	H2			85302.68		
Sc	45	2	H2			86096.08		
Ge	72	2	H2			70906.91		
Ge	72	2	H2			72514.15		
Ge	72	2	H2			73148.15		
In	115	2	H2			182213.83		
In	115	2	H2			180569.37		
In	115	2	H2			180971.40		
Sc	45	3	He			23818.05		
Sc	45	3	He			23527.59		
Sc	45	3	He			22796.29		
Ge	72	3	He			44572.40		
Ge	72	3	He			44582.44		
Ge	72	3	He			43288.93		
In	115	3	He			39110.25		
In	115	3	He			39190.28		
In	115	3	He			40332.93		
Tb	159	3	He			152899.77		
Tb	159	3	He			150607.11		
Tb	159	3	He			151182.75		
Bi	209	3	He			112231.20		
Bi	209	3	He			115675.97		
Bi	209	3	He			116593.67		

Quantitation Report

Data File Name 302_CC.V.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:19:05 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

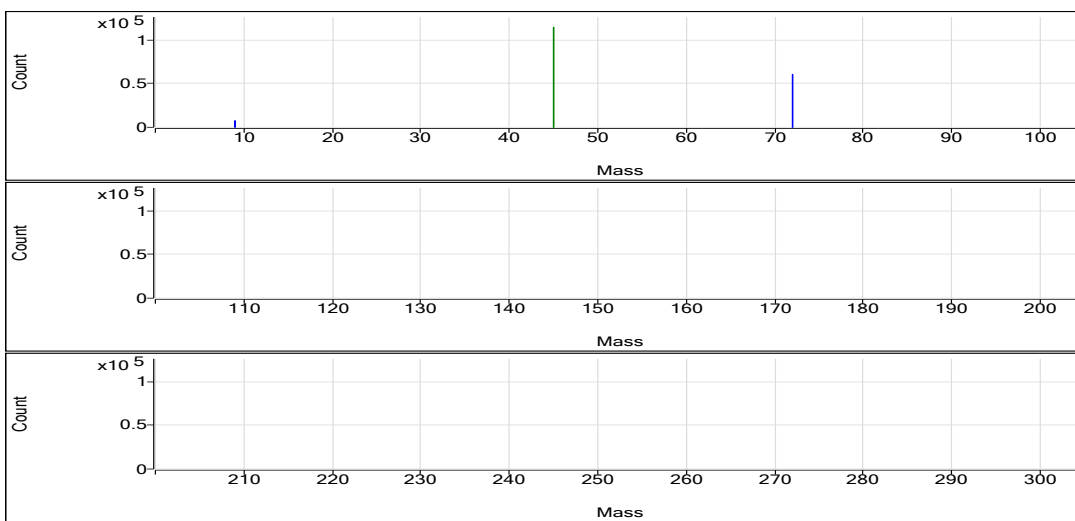
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	23.641	ppb	6.0	15266.95	0.0252	Pulse	0.5000	3
Se	78	72	H2	24.568	ppb	4.3	890.47	0.0125	Pulse	1.5000	3
Na	23	72	He	2418.568	ppb	1.5	200937.06	4.5653	Pulse	0.1000	3
Mg	24	72	He	2382.342	ppb	1.7	96358.29	2.1893	Pulse	0.1000	3
Al	27	72	He	2411.521	ppb	0.5	30932.64	0.7027	Pulse	0.1000	3
K	39	72	He	2402.822	ppb	4.1	94325.69	2.1434	Pulse	0.5000	3
Ca	44	72	He	2439.429	ppb	1.7	4429.95	0.1006	Pulse	0.5000	3
Ti	47	72	He	2405.914	ppb	0.3	32940.31	0.7483	Pulse	0.5000	3
V	51	72	He	240.082	ppb	0.6	144709.62	3.2877	Pulse	0.5000	3
Cr	52	72	He	238.199	ppb	1.0	180085.62	4.0915	Pulse	0.1000	3
Mn	55	72	He	239.340	ppb	1.2	76961.47	1.7486	Pulse	0.5000	3
Fe	57	72	He	2385.394	ppb	0.8	34133.38	0.7754	Pulse	0.1000	3
Co	59	72	He	239.757	ppb	0.8	350688.16	7.9674	Pulse	0.5000	3
Ni	60	72	He	240.238	ppb	0.9	98773.65	2.2441	Pulse	0.5000	3
Cu	63	72	He	238.418	ppb	0.4	283691.52	6.4451	Pulse	0.5000	3
Zn	66	72	He	238.524	ppb	0.5	32799.16	0.7452	Pulse	0.5000	3
As	75	72	He	241.684	ppb	0.3	27160.26	0.6170	Pulse	0.5000	3
Sr	88	115	He	25.521	ppb	1.8	10260.34	0.2711	Pulse	0.1000	3
Mo	98	115	He	24.999	ppb	2.4	22276.28	0.5888	Pulse	0.1000	3
Ag	107	115	He	25.447	ppb	2.0	47489.60	1.2551	Pulse	0.1000	3
Cd	111	115	He	25.242	ppb	3.0	5358.28	0.1416	Pulse	0.5000	3
Sn	120	115	He	25.637	ppb	0.8	18681.72	0.4936	Pulse	0.1000	3
Sb	121	115	He	25.451	ppb	2.0	15546.82	0.4109	Pulse	0.3000	3
Ba	137	115	He	251.032	ppb	1.2	50199.71	1.3266	Pulse	0.1000	3
Tl	205	159	He	25.282	ppb	1.1	92731.52	0.6270	Pulse	0.1000	3
Pb	208	159	He	25.315	ppb	1.5	124657.90	0.8429	Pulse	0.1000	3
U	238	159	He	25.815	ppb	1.9	128979.98	0.8722	Pulse	0.1000	3

ISTD Table:

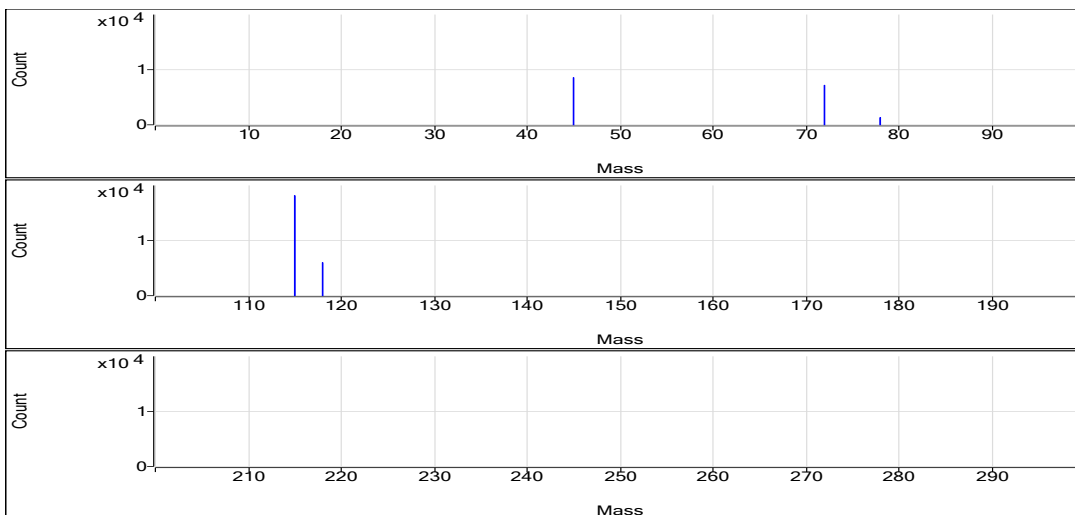
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1143592.79	0.6	87.5	Analog	0.1000	3
No Gas	Ge	72	605992.36	0.5	92.5	Pulse	0.1000	3
H2	Sc	45	85127.94	0.8	103.6	Pulse	0.1000	3
H2	Ge	72	71405.37	1.6	104.5	Pulse	0.1000	3
H2	In	115	180303.89	1.3	105.7	Pulse	0.1000	3
He	Sc	45	23387.39	2.1	91.3	Pulse	0.1000	3
He	Ge	72	44017.71	1.1	92.6	Pulse	0.1000	3
He	In	115	37846.52	2.1	92.4	Pulse	0.1000	3
He	Tb	159	147907.58	1.1	92.8	Pulse	0.1000	3
He	Bi	209	110937.67	1.3	94.9	Pulse	0.1000	3

No Gas

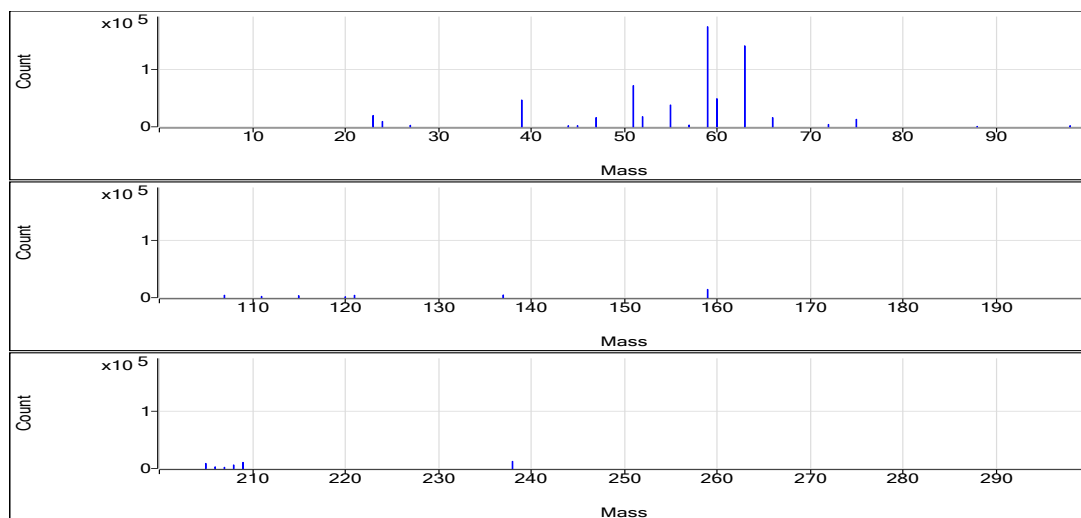


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	22.118	0.0236	14214.00	0.0011	7.835E-05
Be	9	1	No Gas	23.882	0.0254	15495.15	0.0011	7.835E-05
Be	9	1	No Gas	24.924	0.0266	16091.70	0.0011	7.835E-05
Se	78	2	H2	23.36	0.0119	862.69	0.0005	2.594E-05
Se	78	2	H2	25.194	0.0128	901.36	0.0005	2.594E-05
Se	78	2	H2	25.15	0.0128	907.36	0.0005	2.594E-05
Na	23	3	He	2439.966	4.6042	200137.93	0.0018	0.1731
Na	23	3	He	2376.722	4.4893	199560.84	0.0018	0.1731
Na	23	3	He	2439.017	4.6024	203112.42	0.0018	0.1731
Mg	24	3	He	2425.39	2.2287	96881.01	0.0009	0.006537
Mg	24	3	He	2374.283	2.1819	96991.62	0.0009	0.006537
Mg	24	3	He	2347.351	2.1572	95202.24	0.0009	0.006537
Al	27	3	He	2400.575	0.6995	30408.21	0.0003	0.00231
Al	27	3	He	2410.152	0.7023	31219.89	0.0003	0.00231
Al	27	3	He	2423.834	0.7063	31169.82	0.0003	0.00231
K	39	3	He	2515.845	2.2279	96843.64	0.0007	0.3475
K	39	3	He	2361.426	2.1125	93904.34	0.0007	0.3475
K	39	3	He	2331.195	2.0899	92229.09	0.0007	0.3475
Ca	44	3	He	2407.345	0.0993	4318.59	0	0.002807
Ca	44	3	He	2423.228	0.1	4444.62	0	0.002807
Ca	44	3	He	2487.713	0.1026	4526.65	0	0.002807
Ti	47	3	He	2403.755	0.7477	32500.13	0.0003	0.0001123
Ti	47	3	He	2412.747	0.7505	33359.81	0.0003	0.0001123
Ti	47	3	He	2401.24	0.7469	32960.98	0.0003	0.0001123
V	51	3	He	241.474	3.3067	143738.09	0.0137	0.008308
V	51	3	He	238.84	3.2707	145390.92	0.0137	0.008308
V	51	3	He	239.933	3.2856	144999.86	0.0137	0.008308
Cr	52	3	He	240.825	4.1364	179803.96	0.0171	0.02156
Cr	52	3	He	236.636	4.0648	180690.66	0.0171	0.02156
Cr	52	3	He	237.135	4.0733	179762.24	0.0171	0.02156
Mn	55	3	He	242.682	1.773	77068.55	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	237.92	1.7382	77267.64	0.0073	0.002316
Mn	55	3	He	237.418	1.7345	76548.23	0.0073	0.002316
Fe	57	3	He	2363.306	0.7683	33395.08	0.0003	0.002736
Fe	57	3	He	2392.254	0.7776	34567.52	0.0003	0.002736
Fe	57	3	He	2400.623	0.7803	34437.54	0.0003	0.002736
Co	59	3	He	241.865	8.0375	349380.34	0.0332	0.001922
Co	59	3	He	238.427	7.9232	352207.63	0.0332	0.001922
Co	59	3	He	238.981	7.9416	350476.53	0.0332	0.001922
Ni	60	3	He	242.252	2.2629	98365.15	0.0093	0.003141
Ni	60	3	He	238.083	2.224	98861.93	0.0093	0.003141
Ni	60	3	He	240.38	2.2454	99093.87	0.0093	0.003141
Cu	63	3	He	239.422	6.4722	281342.19	0.027	0.003732
Cu	63	3	He	237.722	6.4263	285666.50	0.027	0.003732
Cu	63	3	He	238.11	6.4368	284065.88	0.027	0.003732
Zn	66	3	He	239.685	0.7488	32548.71	0.0031	0.002032
Zn	66	3	He	237.217	0.7411	32943.46	0.0031	0.002032
Zn	66	3	He	238.67	0.7456	32905.32	0.0031	0.002032
As	75	3	He	241.742	0.6172	26828.35	0.0025	0.0007733
As	75	3	He	240.911	0.6151	27341.25	0.0025	0.0007733
As	75	3	He	242.398	0.6189	27311.17	0.0025	0.0007733
Sr	88	3	He	25.017	0.2658	9963.58	0.0105	0.004071
Sr	88	3	He	25.945	0.2755	10673.90	0.0105	0.004071
Sr	88	3	He	25.602	0.2719	10143.54	0.0105	0.004071
Mo	98	3	He	25.563	0.602	22566.70	0.0234	0.003908
Mo	98	3	He	24.364	0.5739	22236.18	0.0234	0.003908
Mo	98	3	He	25.069	0.5904	22025.96	0.0234	0.003908
Ag	107	3	He	25.653	1.2653	47432.75	0.0493	0.0004851
Ag	107	3	He	24.857	1.226	47502.66	0.0493	0.0004851
Ag	107	3	He	25.832	1.2741	47533.39	0.0493	0.0004851
Cd	111	3	He	25.504	0.1431	5364.95	0.0056	0
Cd	111	3	He	24.392	0.1369	5302.93	0.0056	0
Cd	111	3	He	25.829	0.1449	5406.97	0.0056	0
Sn	120	3	He	25.395	0.4895	18351.32	0.0169	0.0609
Sn	120	3	He	25.709	0.4948	19172.37	0.0169	0.0609
Sn	120	3	He	25.806	0.4965	18521.46	0.0169	0.0609
Sb	121	3	He	25.695	0.4148	15551.25	0.0161	0.0005433
Sb	121	3	He	24.871	0.4015	15557.92	0.0161	0.0005433
Sb	121	3	He	25.787	0.4163	15531.30	0.0161	0.0005433
Ba	137	3	He	253.874	1.3416	50293.73	0.0053	0.001141
Ba	137	3	He	247.884	1.31	50754.66	0.0053	0.001141
Ba	137	3	He	251.34	1.3282	49550.75	0.0053	0.001141
Tl	205	3	He	25.322	0.628	93248.38	0.0248	0.0005854
Tl	205	3	He	25.531	0.6332	92483.61	0.0248	0.0005854
Tl	205	3	He	24.993	0.6198	92462.57	0.0248	0.0005854
Pb	208	3	He	25.62	0.853	66622.99	0.0332	0.001693
Pb	208	3	He	25.43	0.8467	65759.94	0.0332	0.001693
Pb	208	3	He	24.894	0.8289	65136.14	0.0332	0.001693
U	238	3	He	25.53	0.8625	128071.91	0.0338	0.0007949
U	238	3	He	26.392	0.8916	130231.22	0.0338	0.0007949
U	238	3	He	25.525	0.8623	128636.81	0.0338	0.0007949
Sc	45	1	No Gas			1136689.98		
Sc	45	1	No Gas			1150705.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1143383.34		
Ge	72	1	No Gas			603002.65		
Ge	72	1	No Gas			608942.84		
Ge	72	1	No Gas			606031.59		
Sc	45	2	H2			84377.28		
Sc	45	2	H2			85654.11		
Sc	45	2	H2			85352.44		
Ge	72	2	H2			72714.79		
Ge	72	2	H2			70454.26		
Ge	72	2	H2			71047.06		
In	115	2	H2			180183.88		
In	115	2	H2			182620.54		
In	115	2	H2			178107.24		
Sc	45	3	He			23357.37		
Sc	45	3	He			22906.60		
Sc	45	3	He			23898.21		
Ge	72	3	He			43469.00		
Ge	72	3	He			44452.56		
Ge	72	3	He			44131.56		
In	115	3	He			37616.59		
In	115	3	He			38879.25		
In	115	3	He			37436.04		
Tb	159	3	He			148487.18		
Tb	159	3	He			146063.84		
Tb	159	3	He			149171.71		
Bi	209	3	He			110305.95		
Bi	209	3	He			112552.57		
Bi	209	3	He			109954.49		

Quantitation Report

Data File Name 304_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:23:30 PM
Sample Name CCB 8061842
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

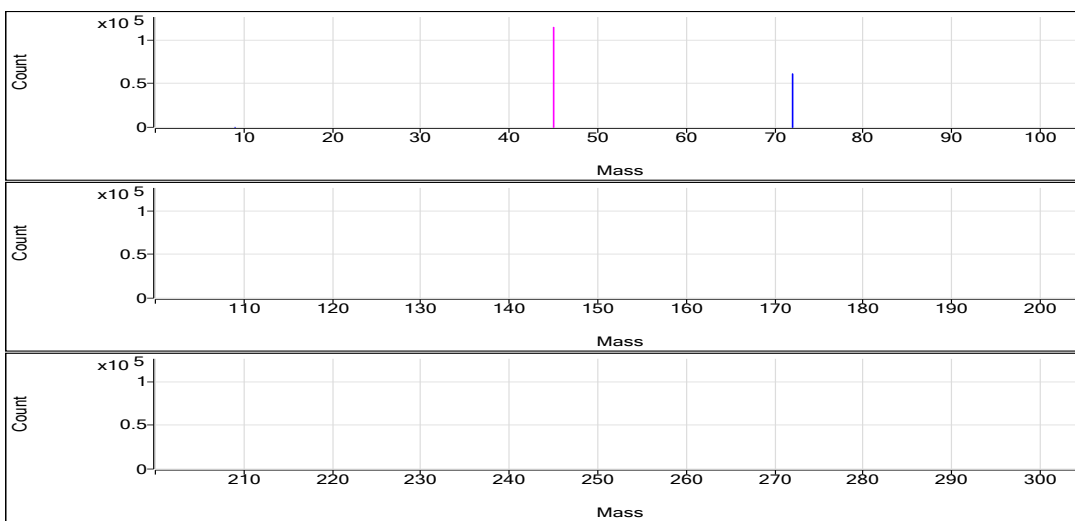
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.014	ppb	101.4	57.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.014	ppb	N/A	1.34	0.0000	Pulse	1.5000	3
Na	23	72	He	20.731	ppb	4.3	9129.46	0.2107	Pulse	0.1000	3
Mg	24	72	He	4.201	ppb	5.8	450.02	0.0104	Pulse	0.1000	3
Al	27	72	He	-2.922	ppb	N/A	63.33	0.0015	Pulse	0.1000	3
K	39	72	He	14.940	ppb	558.4	15538.86	0.3586	Pulse	0.5000	3
Ca	44	72	He	-14.343	ppb	N/A	96.67	0.0022	Pulse	0.5000	3
Ti	47	72	He	0.480	ppb	71.5	11.33	0.0003	Pulse	0.5000	3
V	51	72	He	0.043	ppb	42.5	385.34	0.0089	Pulse	0.5000	3
Cr	52	72	He	-0.370	ppb	N/A	660.03	0.0152	Pulse	0.1000	3
Mn	55	72	He	0.113	ppb	118.7	136.00	0.0031	Pulse	0.5000	3
Fe	57	72	He	-0.129	ppb	N/A	116.67	0.0027	Pulse	0.1000	3
Co	59	72	He	0.000	ppb	20592.7	83.33	0.0019	Pulse	0.5000	3
Ni	60	72	He	0.059	ppb	49.0	160.00	0.0037	Pulse	0.5000	3
Cu	63	72	He	-0.014	ppb	N/A	145.33	0.0034	Pulse	0.5000	3
Zn	66	72	He	-0.247	ppb	N/A	54.67	0.0013	Pulse	0.5000	3
As	75	72	He	0.047	ppb	198.7	38.67	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.098	ppb	N/A	116.67	0.0030	Pulse	0.1000	3
Mo	98	115	He	0.004	ppb	377.9	153.34	0.0040	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	318.2	23.33	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	92.1	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.068	ppb	N/A	2283.58	0.0598	Pulse	0.1000	3
Sb	121	115	He	0.024	ppb	57.1	35.56	0.0009	Pulse	0.3000	3
Ba	137	115	He	-0.034	ppb	N/A	36.67	0.0010	Pulse	0.1000	3
Tl	205	159	He	-0.004	ppb	N/A	70.00	0.0005	Pulse	0.1000	3
Pb	208	159	He	-0.023	ppb	N/A	136.67	0.0009	Pulse	0.1000	3
U	238	159	He	0.008	ppb	33.6	156.68	0.0011	Pulse	0.1000	3

ISTD Table:

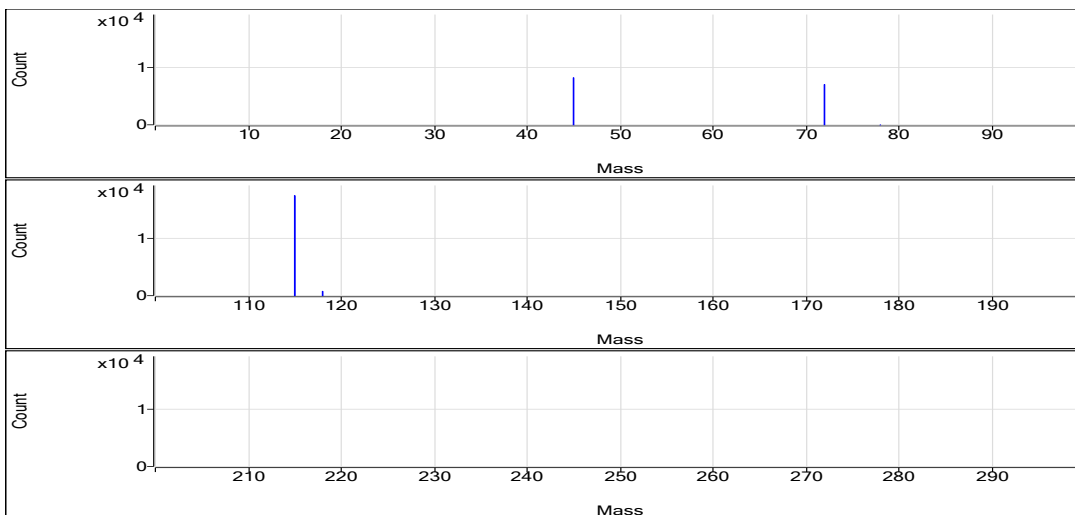
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1145446.49	2.3	87.6	Mix	0.1000	3
No Gas	Ge	72	612517.28	0.9	93.5	Pulse	0.1000	3
H2	Sc	45	82491.04	0.1	100.4	Pulse	0.1000	3
H2	Ge	72	70648.97	1.2	103.4	Pulse	0.1000	3
H2	In	115	175186.29	0.9	102.7	Pulse	0.1000	3
He	Sc	45	23400.61	3.0	91.4	Pulse	0.1000	3
He	Ge	72	43329.31	0.4	91.2	Pulse	0.1000	3
He	In	115	38238.57	1.1	93.4	Pulse	0.1000	3
He	Tb	159	147087.04	1.3	92.3	Pulse	0.1000	3
He	Bi	209	110195.86	1.0	94.2	Pulse	0.1000	3

No Gas

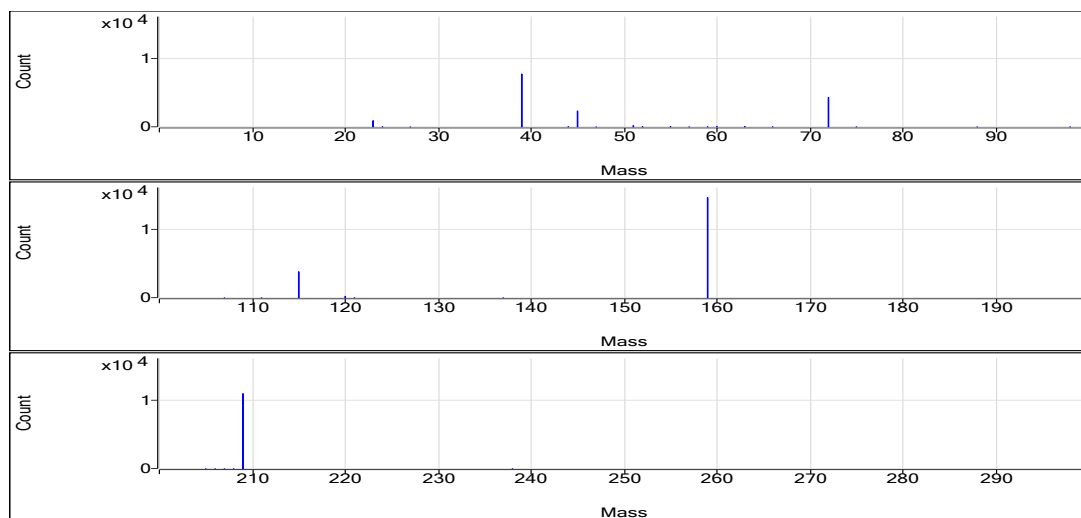


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.029	0.0001	66.00	0.0011	7.835E-05
Be	9	1	No Gas	0.015	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.001	0.0001	48.00	0.0011	7.835E-05
Se	78	2	H2	0.024	0	2.67	0.0005	2.594E-05
Se	78	2	H2	-0.032	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Na	23	3	He	21.683	0.2124	9212.85	0.0018	0.1731
Na	23	3	He	20.594	0.2105	9082.82	0.0018	0.1731
Na	23	3	He	19.917	0.2092	9092.71	0.0018	0.1731
Mg	24	3	He	3.939	0.0101	440.02	0.0009	0.006537
Mg	24	3	He	4.246	0.0104	450.02	0.0009	0.006537
Mg	24	3	He	4.418	0.0106	460.02	0.0009	0.006537
Al	27	3	He	-0.808	0.0021	90.00	0.0003	0.00231
Al	27	3	He	-3.965	0.0012	50.00	0.0003	0.00231
Al	27	3	He	-3.992	0.0012	50.00	0.0003	0.00231
K	39	3	He	103.293	0.4247	18418.36	0.0007	0.3475
K	39	3	He	4.032	0.3505	15127.00	0.0007	0.3475
K	39	3	He	-62.504	0.3008	13071.22	0.0007	0.3475
Ca	44	3	He	-12.492	0.0023	100.00	0	0.002807
Ca	44	3	He	-8.745	0.0025	106.00	0	0.002807
Ca	44	3	He	-21.791	0.0019	84.00	0	0.002807
Ti	47	3	He	0.084	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	0.682	0.0003	14.00	0.0003	0.0001123
Ti	47	3	He	0.675	0.0003	14.00	0.0003	0.0001123
V	51	3	He	0.064	0.0092	398.01	0.0137	0.008308
V	51	3	He	0.03	0.0087	376.01	0.0137	0.008308
V	51	3	He	0.035	0.0088	382.01	0.0137	0.008308
Cr	52	3	He	-0.439	0.0141	610.03	0.0171	0.02156
Cr	52	3	He	-0.367	0.0153	660.03	0.0171	0.02156
Cr	52	3	He	-0.306	0.0163	710.04	0.0171	0.02156
Mn	55	3	He	0.081	0.0029	126.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.261	0.0042	182.00	0.0073	0.002316
Mn	55	3	He	-0.002	0.0023	100.00	0.0073	0.002316
Fe	57	3	He	-2.751	0.0018	80.00	0.0003	0.002736
Fe	57	3	He	2.285	0.0035	150.01	0.0003	0.002736
Fe	57	3	He	0.079	0.0028	120.00	0.0003	0.002736
Co	59	3	He	-0.006	0.0017	74.00	0.0332	0.001922
Co	59	3	He	-0.002	0.0019	80.00	0.0332	0.001922
Co	59	3	He	0.009	0.0022	96.00	0.0332	0.001922
Ni	60	3	He	0.044	0.0036	154.00	0.0093	0.003141
Ni	60	3	He	0.041	0.0035	152.00	0.0093	0.003141
Ni	60	3	He	0.092	0.004	174.00	0.0093	0.003141
Cu	63	3	He	0.005	0.0039	168.00	0.027	0.003732
Cu	63	3	He	-0.018	0.0032	140.00	0.027	0.003732
Cu	63	3	He	-0.029	0.0029	128.00	0.027	0.003732
Zn	66	3	He	-0.282	0.0012	50.00	0.0031	0.002032
Zn	66	3	He	-0.176	0.0015	64.00	0.0031	0.002032
Zn	66	3	He	-0.283	0.0012	50.00	0.0031	0.002032
As	75	3	He	0.149	0.0012	50.00	0.0025	0.0007733
As	75	3	He	0.024	0.0008	36.00	0.0025	0.0007733
As	75	3	He	-0.033	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	-0.187	0.0021	80.00	0.0105	0.004071
Sr	88	3	He	-0.017	0.0039	150.01	0.0105	0.004071
Sr	88	3	He	-0.09	0.0031	120.00	0.0105	0.004071
Mo	98	3	He	0.003	0.004	150.01	0.0234	0.003908
Mo	98	3	He	0.021	0.0044	170.01	0.0234	0.003908
Mo	98	3	He	-0.011	0.0036	140.00	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.011	0.001	40.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.028	0.0002	6.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	0.267	0.0654	2470.27	0.0169	0.0609
Sn	120	3	He	-0.242	0.0568	2190.24	0.0169	0.0609
Sn	120	3	He	-0.228	0.057	2190.23	0.0169	0.0609
Sb	121	3	He	0.027	0.001	36.67	0.0161	0.0005433
Sb	121	3	He	0.009	0.0007	26.67	0.0161	0.0005433
Sb	121	3	He	0.036	0.0011	43.33	0.0161	0.0005433
Ba	137	3	He	-0.015	0.0011	40.00	0.0053	0.001141
Ba	137	3	He	-0.069	0.0008	30.00	0.0053	0.001141
Ba	137	3	He	-0.019	0.001	40.00	0.0053	0.001141
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.005	0.0005	70.00	0.0248	0.0005854
Tl	205	3	He	0.007	0.0007	110.00	0.0248	0.0005854
Pb	208	3	He	-0.024	0.0009	90.00	0.0332	0.001693
Pb	208	3	He	-0.031	0.0007	30.00	0.0332	0.001693
Pb	208	3	He	-0.014	0.0012	100.00	0.0332	0.001693
U	238	3	He	0.005	0.001	140.01	0.0338	0.0007949
U	238	3	He	0.01	0.0011	170.01	0.0338	0.0007949
U	238	3	He	0.009	0.0011	160.01	0.0338	0.0007949
Sc	45	1	No Gas			1114550.30		
Sc	45	1	No Gas			1161495.84		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1160293.34		
Ge	72	1	No Gas			607356.05		
Ge	72	1	No Gas			611752.22		
Ge	72	1	No Gas			618443.58		
Sc	45	2	H2			82367.05		
Sc	45	2	H2			82508.51		
Sc	45	2	H2			82597.55		
Ge	72	2	H2			70414.51		
Ge	72	2	H2			69962.64		
Ge	72	2	H2			71569.76		
In	115	2	H2			175378.40		
In	115	2	H2			173609.02		
In	115	2	H2			176571.46		
Sc	45	3	He			23517.47		
Sc	45	3	He			24028.22		
Sc	45	3	He			22656.14		
Ge	72	3	He			43369.37		
Ge	72	3	He			43158.80		
Ge	72	3	He			43459.76		
In	115	3	He			37786.76		
In	115	3	He			38568.71		
In	115	3	He			38408.20		
Tb	159	3	He			145223.69		
Tb	159	3	He			149083.52		
Tb	159	3	He			146953.92		
Bi	209	3	He			111042.36		
Bi	209	3	He			110537.98		
Bi	209	3	He			109007.24		

Quantitation Report

Data File Name 305SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:25:43 PM
Sample Name 580-152919-S-1-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

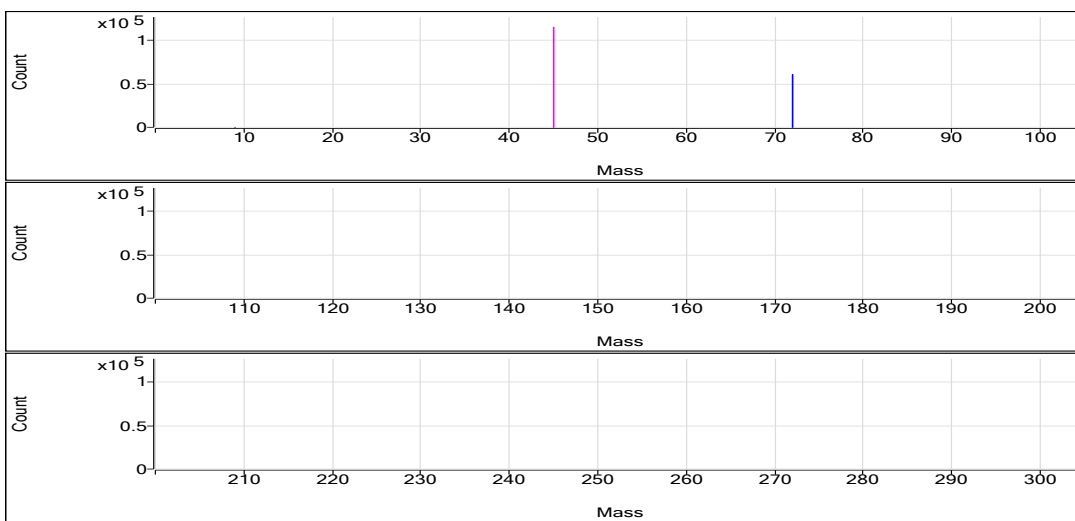
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.024	ppb	90.0	63.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.004	ppb	1330.7	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	2625.238	ppb	1.4	219146.95	4.9406	Pulse	0.1000	3
Mg	24	72	He	125.255	ppb	2.9	5381.02	0.1213	Pulse	0.1000	3
Al	27	72	He	-0.450	ppb	N/A	96.67	0.0022	Pulse	0.1000	3
K	39	72	He	230.643	ppb	32.0	23055.59	0.5199	Pulse	0.5000	3
Ca	44	72	He	385.811	ppb	3.7	810.69	0.0183	Pulse	0.5000	3
Ti	47	72	He	-0.120	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.059	ppb	N/A	332.67	0.0075	Pulse	0.5000	3
Cr	52	72	He	-0.315	ppb	N/A	716.71	0.0162	Pulse	0.1000	3
Mn	55	72	He	6.616	ppb	0.6	2244.16	0.0506	Pulse	0.5000	3
Fe	57	72	He	46.779	ppb	11.8	793.38	0.0179	Pulse	0.1000	3
Co	59	72	He	0.066	ppb	14.3	182.67	0.0041	Pulse	0.5000	3
Ni	60	72	He	0.762	ppb	11.9	454.68	0.0103	Pulse	0.5000	3
Cu	63	72	He	0.274	ppb	9.6	494.01	0.0111	Pulse	0.5000	3
Zn	66	72	He	36.841	ppb	1.2	5181.52	0.1168	Pulse	0.5000	3
As	75	72	He	-0.044	ppb	N/A	29.33	0.0007	Pulse	0.5000	3
Sr	88	115	He	2.031	ppb	18.7	986.73	0.0253	Pulse	0.1000	3
Mo	98	115	He	0.425	ppb	7.1	540.03	0.0139	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	931.6	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.015	ppb	34.3	3.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.455	ppb	N/A	2073.54	0.0532	Pulse	0.1000	3
Sb	121	115	He	0.076	ppb	47.0	68.89	0.0018	Pulse	0.3000	3
Ba	137	115	He	3.882	ppb	12.3	843.38	0.0216	Pulse	0.1000	3
Tl	205	159	He	-0.006	ppb	N/A	66.67	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.069	ppb	9.2	596.70	0.0040	Pulse	0.1000	3
U	238	159	He	-0.006	ppb	N/A	86.67	0.0006	Pulse	0.1000	3

ISTD Table:

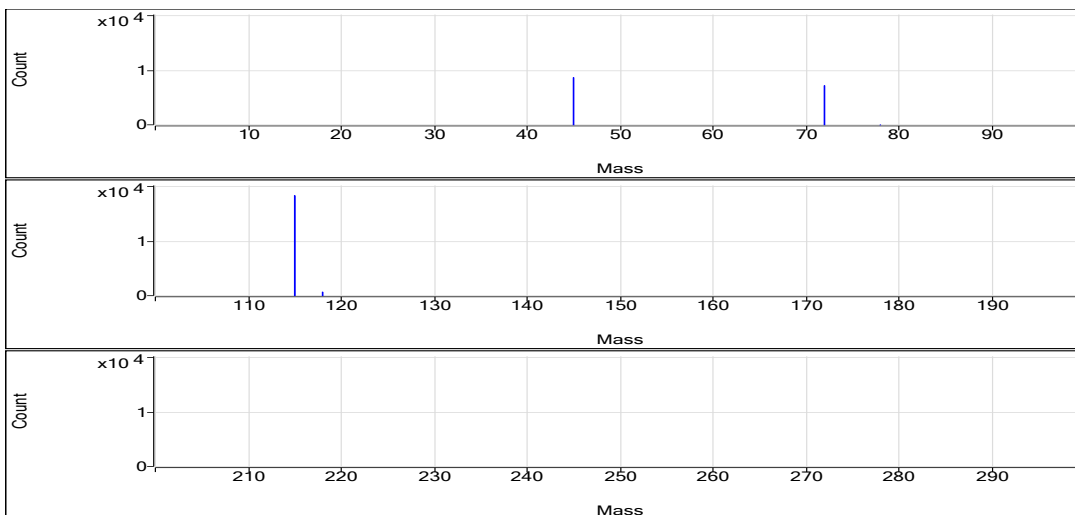
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1157375.27	3.1	88.5	Mix	0.1000	3
No Gas	Ge	72	611614.09	1.6	93.3	Pulse	0.1000	3
H2	Sc	45	87071.30	0.8	106.0	Pulse	0.1000	3
H2	Ge	72	72259.66	1.1	105.7	Pulse	0.1000	3
H2	In	115	184349.82	1.1	108.1	Pulse	0.1000	3
He	Sc	45	24088.18	3.6	94.1	Pulse	0.1000	3
He	Ge	72	44358.65	0.9	93.4	Pulse	0.1000	3
He	In	115	38964.83	0.5	95.2	Pulse	0.1000	3
He	Tb	159	149718.12	1.4	93.9	Pulse	0.1000	3
He	Bi	209	114542.62	0.7	97.9	Pulse	0.1000	3

No Gas

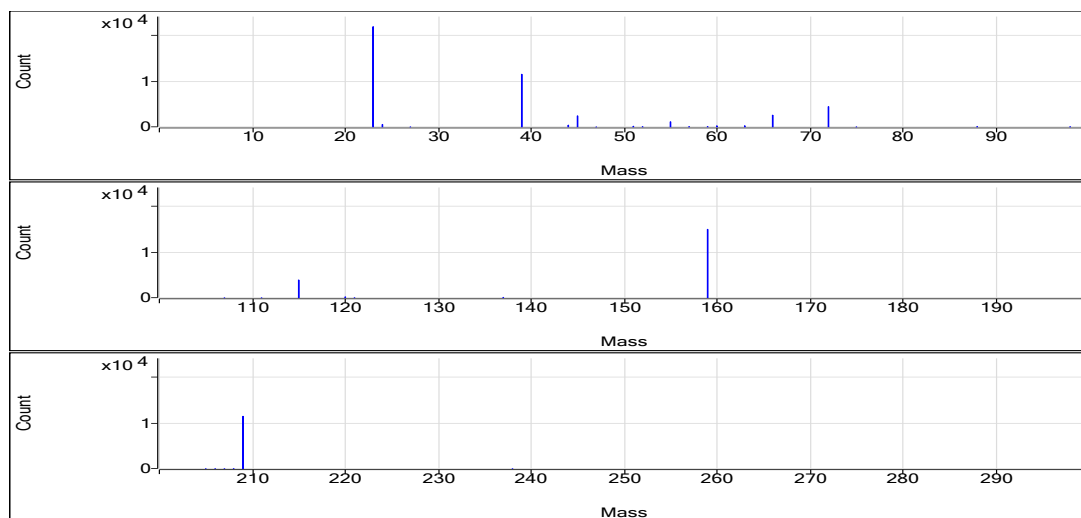


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.045	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.025	0.0001	64.00	0.0011	7.835E-05
Be	9	1	No Gas	0.002	0.0001	50.00	0.0011	7.835E-05
Se	78	2	H2	0.059	0.0001	4.00	0.0005	2.594E-05
Se	78	2	H2	-0.015	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Na	23	3	He	2616.242	4.9243	217117.07	0.0018	0.1731
Na	23	3	He	2592.848	4.8818	218769.51	0.0018	0.1731
Na	23	3	He	2666.624	5.0158	221554.27	0.0018	0.1731
Mg	24	3	He	127.306	0.1232	5431.05	0.0009	0.006537
Mg	24	3	He	127.332	0.1232	5521.08	0.0009	0.006537
Mg	24	3	He	121.128	0.1175	5190.93	0.0009	0.006537
Al	27	3	He	1.417	0.0027	120.00	0.0003	0.00231
Al	27	3	He	-0.27	0.0022	100.00	0.0003	0.00231
Al	27	3	He	-2.497	0.0016	70.00	0.0003	0.00231
K	39	3	He	312.948	0.5814	25633.99	0.0007	0.3475
K	39	3	He	208.739	0.5035	22563.46	0.0007	0.3475
K	39	3	He	170.242	0.4747	20969.32	0.0007	0.3475
Ca	44	3	He	400.561	0.0189	832.02	0	0.002807
Ca	44	3	He	371.839	0.0177	794.03	0	0.002807
Ca	44	3	He	385.033	0.0182	806.03	0	0.002807
Ti	47	3	He	-0.215	0	2.00	0.0003	0.0001123
Ti	47	3	He	-0.074	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.07	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.024	0.008	352.01	0.0137	0.008308
V	51	3	He	-0.069	0.0074	330.01	0.0137	0.008308
V	51	3	He	-0.084	0.0072	316.00	0.0137	0.008308
Cr	52	3	He	-0.24	0.0175	770.05	0.0171	0.02156
Cr	52	3	He	-0.517	0.0127	570.03	0.0171	0.02156
Cr	52	3	He	-0.188	0.0183	810.05	0.0171	0.02156
Mn	55	3	He	6.572	0.0503	2216.16	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6.644	0.0508	2276.17	0.0073	0.002316
Mn	55	3	He	6.634	0.0507	2240.16	0.0073	0.002316
Fe	57	3	He	42.671	0.0166	730.04	0.0003	0.002736
Fe	57	3	He	44.603	0.0172	770.04	0.0003	0.002736
Fe	57	3	He	53.062	0.0199	880.05	0.0003	0.002736
Co	59	3	He	0.061	0.0039	174.00	0.0332	0.001922
Co	59	3	He	0.06	0.0039	176.00	0.0332	0.001922
Co	59	3	He	0.077	0.0045	198.00	0.0332	0.001922
Ni	60	3	He	0.709	0.0098	430.01	0.0093	0.003141
Ni	60	3	He	0.711	0.0098	438.01	0.0093	0.003141
Ni	60	3	He	0.867	0.0112	496.01	0.0093	0.003141
Cu	63	3	He	0.273	0.0111	490.01	0.027	0.003732
Cu	63	3	He	0.248	0.0104	468.01	0.027	0.003732
Cu	63	3	He	0.301	0.0119	524.01	0.027	0.003732
Zn	66	3	He	37.296	0.1182	5212.86	0.0031	0.002032
Zn	66	3	He	36.785	0.1166	5226.87	0.0031	0.002032
Zn	66	3	He	36.442	0.1156	5104.83	0.0031	0.002032
As	75	3	He	-0.036	0.0007	30.00	0.0025	0.0007733
As	75	3	He	-0.058	0.0006	28.00	0.0025	0.0007733
As	75	3	He	-0.037	0.0007	30.00	0.0025	0.0007733
Sr	88	3	He	1.817	0.0231	900.06	0.0105	0.004071
Sr	88	3	He	2.468	0.0299	1170.08	0.0105	0.004071
Sr	88	3	He	1.806	0.023	890.05	0.0105	0.004071
Mo	98	3	He	0.392	0.0131	510.03	0.0234	0.003908
Mo	98	3	He	0.434	0.0141	550.03	0.0234	0.003908
Mo	98	3	He	0.451	0.0145	560.03	0.0234	0.003908
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.539	0.0518	2020.20	0.0169	0.0609
Sn	120	3	He	-0.611	0.0506	1980.19	0.0169	0.0609
Sn	120	3	He	-0.214	0.0573	2220.24	0.0169	0.0609
Sb	121	3	He	0.088	0.002	76.67	0.0161	0.0005433
Sb	121	3	He	0.104	0.0022	86.67	0.0161	0.0005433
Sb	121	3	He	0.036	0.0011	43.33	0.0161	0.0005433
Ba	137	3	He	4.01	0.0223	870.05	0.0053	0.001141
Ba	137	3	He	4.284	0.0238	930.06	0.0053	0.001141
Ba	137	3	He	3.352	0.0188	730.04	0.0053	0.001141
Tl	205	3	He	0.004	0.0007	100.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Pb	208	3	He	0.071	0.0041	340.02	0.0332	0.001693
Pb	208	3	He	0.074	0.0042	350.02	0.0332	0.001693
Pb	208	3	He	0.062	0.0037	300.02	0.0332	0.001693
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
Sc	45	1	No Gas			1119941.16		
Sc	45	1	No Gas			1160668.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1191516.08		
Ge	72	1	No Gas			602364.56		
Ge	72	1	No Gas			610688.00		
Ge	72	1	No Gas			621789.72		
Sc	45	2	H2			87814.91		
Sc	45	2	H2			86518.03		
Sc	45	2	H2			86880.95		
Ge	72	2	H2			71518.68		
Ge	72	2	H2			73077.07		
Ge	72	2	H2			72183.22		
In	115	2	H2			185031.74		
In	115	2	H2			182085.47		
In	115	2	H2			185932.26		
Sc	45	3	He			23948.02		
Sc	45	3	He			25009.50		
Sc	45	3	He			23307.03		
Ge	72	3	He			44091.13		
Ge	72	3	He			44813.33		
Ge	72	3	He			44171.48		
In	115	3	He			39009.49		
In	115	3	He			39159.82		
In	115	3	He			38768.72		
Tb	159	3	He			147729.04		
Tb	159	3	He			149394.53		
Tb	159	3	He			152030.80		
Bi	209	3	He			113895.48		
Bi	209	3	He			114297.17		
Bi	209	3	He			115435.21		

Quantitation Report

Data File Name 306SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:27:55 PM
Sample Name 580-152924-S-1-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

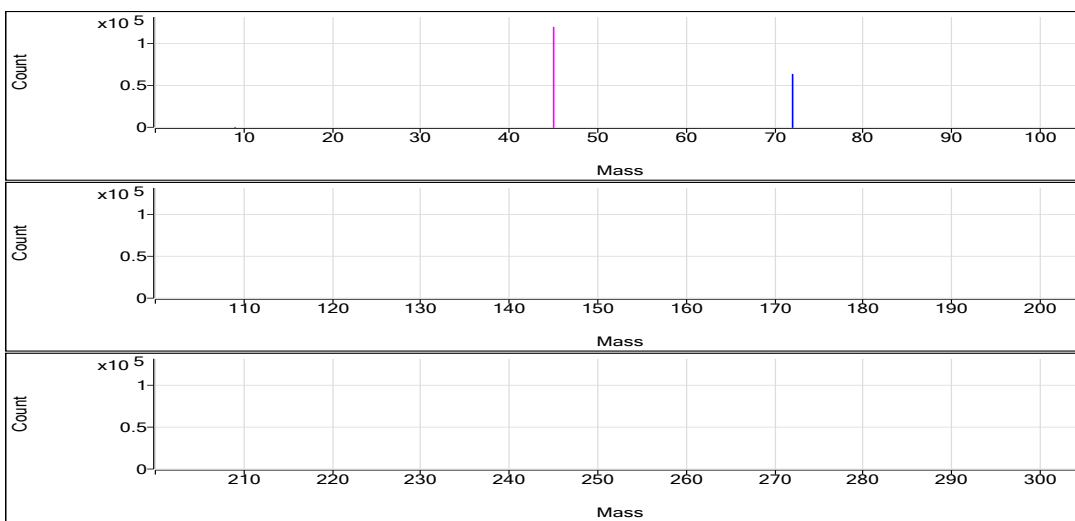
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.037	ppb	20.2	74.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.048	ppb	90.6	3.78	0.0001	Pulse	1.5000	3
Na	23	72	He	3551.940	ppb	2.4	297829.31	6.6236	Pulse	0.1000	3
Mg	24	72	He	1478.189	ppb	3.5	61186.41	1.3609	Pulse	0.1000	3
Al	27	72	He	-3.384	ppb	N/A	60.00	0.0013	Pulse	0.1000	3
K	39	72	He	98.483	ppb	78.0	18940.42	0.4211	Pulse	0.5000	3
Ca	44	72	He	5012.475	ppb	2.5	9164.59	0.2038	Pulse	0.5000	3
Ti	47	72	He	0.064	ppb	377.1	6.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.011	ppb	N/A	367.34	0.0082	Pulse	0.5000	3
Cr	52	72	He	-0.356	ppb	N/A	696.71	0.0155	Pulse	0.1000	3
Mn	55	72	He	3.572	ppb	6.9	1275.39	0.0284	Pulse	0.5000	3
Fe	57	72	He	0.705	ppb	40.8	133.33	0.0030	Pulse	0.1000	3
Co	59	72	He	0.050	ppb	31.4	160.67	0.0036	Pulse	0.5000	3
Ni	60	72	He	0.324	ppb	10.1	277.33	0.0062	Pulse	0.5000	3
Cu	63	72	He	1.253	ppb	5.7	1688.76	0.0376	Pulse	0.5000	3
Zn	66	72	He	1.243	ppb	8.8	265.33	0.0059	Pulse	0.5000	3
As	75	72	He	-0.006	ppb	N/A	34.00	0.0008	Pulse	0.5000	3
Sr	88	115	He	12.613	ppb	7.1	5317.74	0.1360	Pulse	0.1000	3
Mo	98	115	He	0.610	ppb	11.3	710.04	0.0182	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.033	ppb	63.0	7.33	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.686	ppb	N/A	1926.85	0.0493	Pulse	0.1000	3
Sb	121	115	He	0.007	ppb	557.3	25.56	0.0007	Pulse	0.3000	3
Ba	137	115	He	2.917	ppb	11.1	646.70	0.0165	Pulse	0.1000	3
Tl	205	159	He	-0.007	ppb	N/A	63.33	0.0004	Pulse	0.1000	3
Pb	208	159	He	0.063	ppb	16.8	573.36	0.0038	Pulse	0.1000	3
U	238	159	He	0.027	ppb	42.0	256.68	0.0017	Pulse	0.1000	3

ISTD Table:

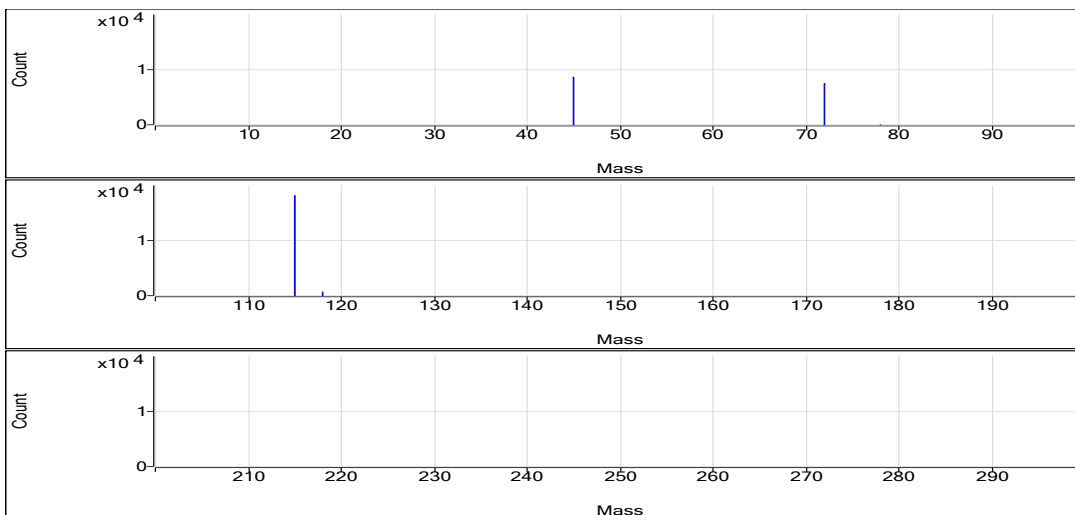
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1191232.77	0.7	91.1	Mix	0.1000	3
No Gas	Ge	72	631290.10	1.3	96.3	Pulse	0.1000	3
H2	Sc	45	86759.58	1.1	105.6	Pulse	0.1000	3
H2	Ge	72	75042.18	1.9	109.8	Pulse	0.1000	3
H2	In	115	181779.23	0.6	106.6	Pulse	0.1000	3
He	Sc	45	24151.72	2.3	94.3	Pulse	0.1000	3
He	Ge	72	44983.74	2.7	94.7	Pulse	0.1000	3
He	In	115	39083.07	0.9	95.5	Pulse	0.1000	3
He	Tb	159	150892.94	1.1	94.6	Pulse	0.1000	3
He	Bi	209	111686.53	0.5	95.5	Pulse	0.1000	3

No Gas

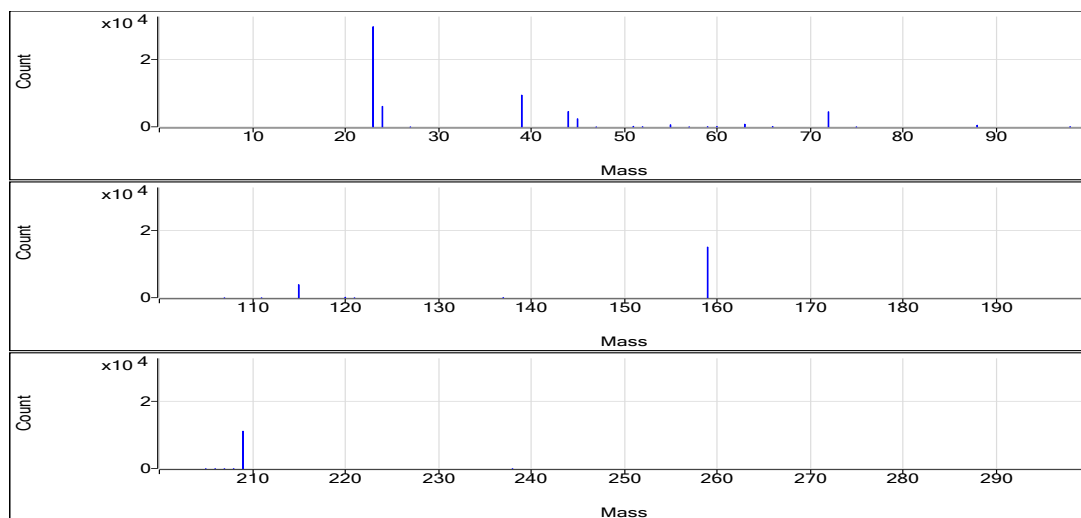


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.044	0.0001	78.00	0.0011	7.835E-05
Be	9	1	No Gas	0.029	0.0001	70.00	0.0011	7.835E-05
Be	9	1	No Gas	0.037	0.0001	74.00	0.0011	7.835E-05
Se	78	2	H2	0.052	0.0001	4.00	0.0005	2.594E-05
Se	78	2	H2	0.089	0.0001	5.33	0.0005	2.594E-05
Se	78	2	H2	0.002	0	2.00	0.0005	2.594E-05
Na	23	3	He	3496.937	6.5237	296205.31	0.0018	0.1731
Na	23	3	He	3651.226	6.8039	296646.27	0.0018	0.1731
Na	23	3	He	3507.658	6.5431	300636.34	0.0018	0.1731
Mg	24	3	He	1431.004	1.3177	59827.90	0.0009	0.006537
Mg	24	3	He	1533.023	1.4111	61524.83	0.0009	0.006537
Mg	24	3	He	1470.539	1.3539	62206.50	0.0009	0.006537
Al	27	3	He	0.388	0.0024	110.00	0.0003	0.00231
Al	27	3	He	-5.584	0.0007	30.00	0.0003	0.00231
Al	27	3	He	-4.956	0.0009	40.00	0.0003	0.00231
K	39	3	He	182.148	0.4836	21958.80	0.0007	0.3475
K	39	3	He	82.287	0.409	17831.63	0.0007	0.3475
K	39	3	He	31.015	0.3707	17030.82	0.0007	0.3475
Ca	44	3	He	4945.515	0.2011	9132.58	0	0.002807
Ca	44	3	He	5158.873	0.2097	9142.57	0	0.002807
Ca	44	3	He	4933.036	0.2006	9218.62	0	0.002807
Ti	47	3	He	0.206	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.213	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.199	0.0002	8.00	0.0003	0.0001123
V	51	3	He	-0.031	0.0079	358.01	0.0137	0.008308
V	51	3	He	-0.017	0.0081	352.01	0.0137	0.008308
V	51	3	He	0.016	0.0085	392.01	0.0137	0.008308
Cr	52	3	He	-0.295	0.0165	750.05	0.0171	0.02156
Cr	52	3	He	-0.389	0.0149	650.04	0.0171	0.02156
Cr	52	3	He	-0.383	0.015	690.05	0.0171	0.02156
Mn	55	3	He	3.329	0.0266	1208.05	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	3.82	0.0302	1316.06	0.0073	0.002316
Mn	55	3	He	3.567	0.0283	1302.06	0.0073	0.002316
Fe	57	3	He	0.394	0.0029	130.00	0.0003	0.002736
Fe	57	3	He	0.76	0.003	130.00	0.0003	0.002736
Fe	57	3	He	0.961	0.003	140.00	0.0003	0.002736
Co	59	3	He	0.048	0.0035	160.00	0.0332	0.001922
Co	59	3	He	0.066	0.0041	180.00	0.0332	0.001922
Co	59	3	He	0.035	0.0031	142.00	0.0332	0.001922
Ni	60	3	He	0.287	0.0058	264.00	0.0093	0.003141
Ni	60	3	He	0.342	0.0063	276.00	0.0093	0.003141
Ni	60	3	He	0.345	0.0064	292.00	0.0093	0.003141
Cu	63	3	He	1.192	0.0359	1632.09	0.027	0.003732
Cu	63	3	He	1.331	0.0397	1730.10	0.027	0.003732
Cu	63	3	He	1.235	0.0371	1704.10	0.027	0.003732
Zn	66	3	He	1.271	0.006	272.00	0.0031	0.002032
Zn	66	3	He	1.335	0.0062	270.00	0.0031	0.002032
Zn	66	3	He	1.122	0.0055	254.00	0.0031	0.002032
As	75	3	He	0.042	0.0009	40.00	0.0025	0.0007733
As	75	3	He	0.003	0.0008	34.00	0.0025	0.0007733
As	75	3	He	-0.064	0.0006	28.00	0.0025	0.0007733
Sr	88	3	He	12.1	0.1307	5060.94	0.0105	0.004071
Sr	88	3	He	12.086	0.1305	5101.00	0.0105	0.004071
Sr	88	3	He	13.652	0.1469	5791.29	0.0105	0.004071
Mo	98	3	He	0.616	0.0183	710.04	0.0234	0.003908
Mo	98	3	He	0.675	0.0197	770.04	0.0234	0.003908
Mo	98	3	He	0.538	0.0165	650.03	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.046	0.0003	10.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.045	0.0003	10.00	0.0056	0
Sn	120	3	He	-0.564	0.0514	1990.19	0.0169	0.0609
Sn	120	3	He	-0.637	0.0502	1960.18	0.0169	0.0609
Sn	120	3	He	-0.858	0.0464	1830.18	0.0169	0.0609
Sb	121	3	He	0.052	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	-0.007	0.0004	16.67	0.0161	0.0005433
Sb	121	3	He	-0.023	0.0002	6.67	0.0161	0.0005433
Ba	137	3	He	2.913	0.0165	640.03	0.0053	0.001141
Ba	137	3	He	2.594	0.0148	580.03	0.0053	0.001141
Ba	137	3	He	3.243	0.0183	720.05	0.0053	0.001141
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	0.003	0.0007	100.00	0.0248	0.0005854
Pb	208	3	He	0.067	0.0039	270.01	0.0332	0.001693
Pb	208	3	He	0.072	0.0041	300.01	0.0332	0.001693
Pb	208	3	He	0.051	0.0034	270.01	0.0332	0.001693
U	238	3	He	0.028	0.0017	260.01	0.0338	0.0007949
U	238	3	He	0.038	0.0021	310.01	0.0338	0.0007949
U	238	3	He	0.015	0.0013	200.01	0.0338	0.0007949
Sc	45	1	No Gas			1182839.83		
Sc	45	1	No Gas			1199941.31		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1190917.17		
Ge	72	1	No Gas			624285.23		
Ge	72	1	No Gas			640753.00		
Ge	72	1	No Gas			628832.06		
Sc	45	2	H2			87553.89		
Sc	45	2	H2			87030.89		
Sc	45	2	H2			85693.95		
Ge	72	2	H2			76391.39		
Ge	72	2	H2			75216.81		
Ge	72	2	H2			73518.34		
In	115	2	H2			182642.01		
In	115	2	H2			180640.70		
In	115	2	H2			182054.98		
Sc	45	3	He			24108.43		
Sc	45	3	He			23627.58		
Sc	45	3	He			24719.14		
Ge	72	3	He			45404.73		
Ge	72	3	He			43599.68		
Ge	72	3	He			45946.82		
In	115	3	He			38749.01		
In	115	3	He			39099.87		
In	115	3	He			39440.80		
Tb	159	3	He			150112.77		
Tb	159	3	He			149686.22		
Tb	159	3	He			152879.82		
Bi	209	3	He			112363.36		
Bi	209	3	He			111313.68		
Bi	209	3	He			111382.55		

Quantitation Report

Data File Name 307SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:30:07 PM
Sample Name 580-152924-S-3-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

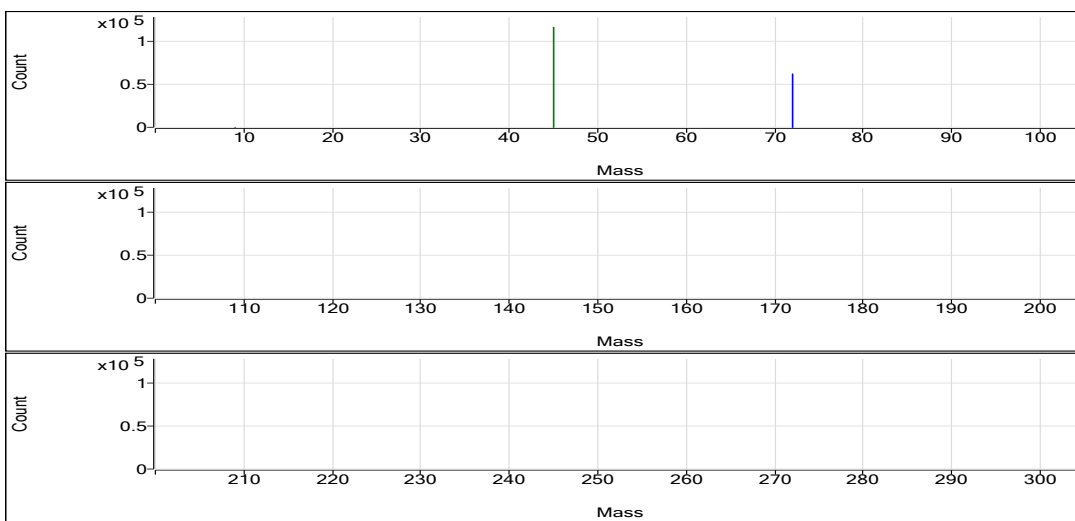
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.026	ppb	52.9	66.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.098	ppb	40.3	5.56	0.0001	Pulse	1.5000	3
Na	23	72	He	16526.059	ppb	0.5	1360844.77	30.1852	Analog	0.1000	3
Mg	24	72	He	1293.283	ppb	1.1	53714.03	1.1915	Pulse	0.1000	3
Al	27	72	He	-0.072	ppb	N/A	103.34	0.0023	Pulse	0.1000	3
K	39	72	He	297.400	ppb	28.4	25673.41	0.5698	Pulse	0.5000	3
Ca	44	72	He	3411.796	ppb	2.3	6295.24	0.1396	Pulse	0.5000	3
Ti	47	72	He	-0.172	ppb	N/A	2.67	0.0001	Pulse	0.5000	3
V	51	72	He	0.087	ppb	20.4	428.01	0.0095	Pulse	0.5000	3
Cr	52	72	He	-0.175	ppb	N/A	836.72	0.0186	Pulse	0.1000	3
Mn	55	72	He	13.481	ppb	1.1	4538.66	0.1007	Pulse	0.5000	3
Fe	57	72	He	6.828	ppb	86.5	223.34	0.0049	Pulse	0.1000	3
Co	59	72	He	0.268	ppb	7.8	487.34	0.0108	Pulse	0.5000	3
Ni	60	72	He	1.985	ppb	8.2	976.70	0.0217	Pulse	0.5000	3
Cu	63	72	He	4.262	ppb	2.9	5360.24	0.1189	Pulse	0.5000	3
Zn	66	72	He	10.711	ppb	3.1	1596.09	0.0354	Pulse	0.5000	3
As	75	72	He	0.091	ppb	76.2	45.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	6.098	ppb	5.2	2620.30	0.0679	Pulse	0.1000	3
Mo	98	115	He	2.815	ppb	3.2	2693.65	0.0698	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.157	ppb	20.9	34.00	0.0009	Pulse	0.5000	3
Sn	120	115	He	-0.540	ppb	N/A	2000.20	0.0518	Pulse	0.1000	3
Sb	121	115	He	1.016	ppb	13.3	653.36	0.0169	Pulse	0.3000	3
Ba	137	115	He	1.076	ppb	7.6	263.34	0.0068	Pulse	0.1000	3
Tl	205	159	He	-0.014	ppb	N/A	36.67	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.174	ppb	8.8	1103.39	0.0075	Pulse	0.1000	3
U	238	159	He	0.087	ppb	3.5	550.03	0.0037	Pulse	0.1000	3

ISTD Table:

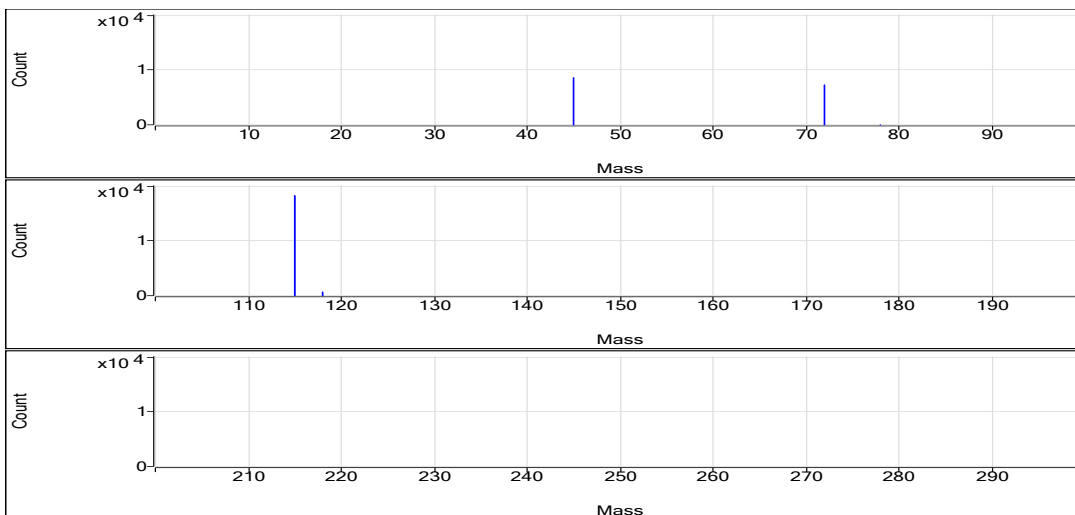
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1162456.73	1.5	88.9	Analog	0.1000	3
No Gas	Ge	72	620772.52	1.3	94.7	Pulse	0.1000	3
H2	Sc	45	86337.07	0.7	105.1	Pulse	0.1000	3
H2	Ge	72	73193.81	1.0	107.1	Pulse	0.1000	3
H2	In	115	183434.31	0.7	107.5	Pulse	0.1000	3
He	Sc	45	24101.72	2.0	94.1	Pulse	0.1000	3
He	Ge	72	45084.30	0.8	94.9	Pulse	0.1000	3
He	In	115	38611.44	0.7	94.3	Pulse	0.1000	3
He	Tb	159	147415.38	0.9	92.5	Pulse	0.1000	3
He	Bi	209	112214.77	0.6	95.9	Pulse	0.1000	3

No Gas

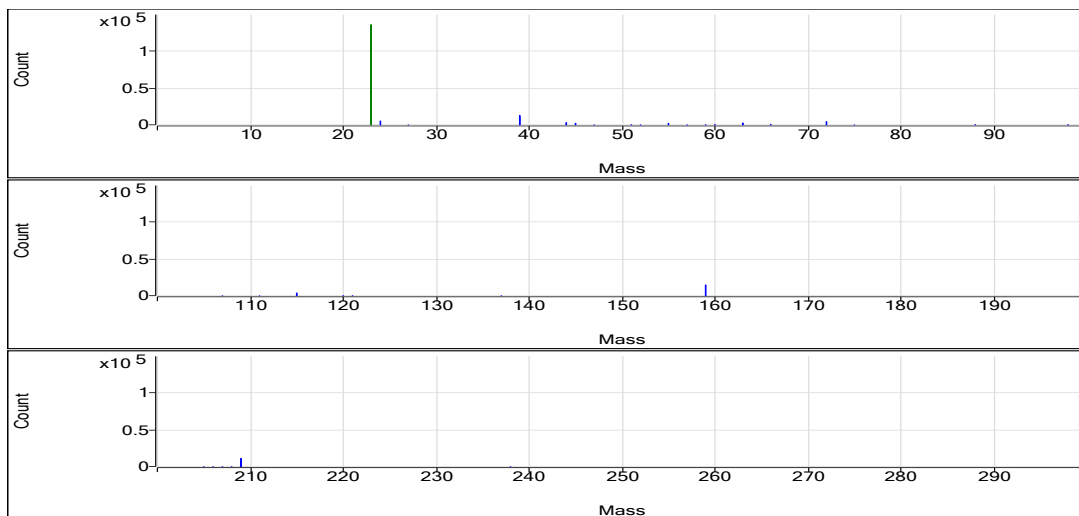


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.015	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	0.042	0.0001	76.00	0.0011	7.835E-05
Be	9	1	No Gas	0.022	0.0001	64.00	0.0011	7.835E-05
Se	78	2	H2	0.076	0.0001	4.67	0.0005	2.594E-05
Se	78	2	H2	0.144	0.0001	7.33	0.0005	2.594E-05
Se	78	2	H2	0.075	0.0001	4.67	0.0005	2.594E-05
Na	23	3	He	16620.239	30.3563	1356410.60	0.0018	0.1731
Na	23	3	He	16471.555	30.0862	1363359.04	0.0018	0.1731
Na	23	3	He	16486.383	30.1132	1362764.67	0.0018	0.1731
Mg	24	3	He	1307.421	1.2044	53817.54	0.0009	0.006537
Mg	24	3	He	1278.21	1.1777	53365.88	0.0009	0.006537
Mg	24	3	He	1294.218	1.1923	53958.66	0.0009	0.006537
Al	27	3	He	-2.56	0.0016	70.00	0.0003	0.00231
Al	27	3	He	-1.115	0.002	90.00	0.0003	0.00231
Al	27	3	He	3.46	0.0033	150.01	0.0003	0.00231
K	39	3	He	392.976	0.6412	28650.84	0.0007	0.3475
K	39	3	He	266.446	0.5466	24770.56	0.0007	0.3475
K	39	3	He	232.778	0.5215	23598.83	0.0007	0.3475
Ca	44	3	He	3390.639	0.1388	6201.20	0	0.002807
Ca	44	3	He	3346.785	0.137	6209.21	0	0.002807
Ca	44	3	He	3497.963	0.1431	6475.32	0	0.002807
Ti	47	3	He	-0.361	0	0.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
V	51	3	He	0.106	0.0098	436.01	0.0137	0.008308
V	51	3	He	0.083	0.0094	428.01	0.0137	0.008308
V	51	3	He	0.071	0.0093	420.01	0.0137	0.008308
Cr	52	3	He	-0.148	0.019	850.05	0.0171	0.02156
Cr	52	3	He	-0.383	0.015	680.04	0.0171	0.02156
Cr	52	3	He	0.006	0.0217	980.07	0.0171	0.02156
Mn	55	3	He	13.525	0.101	4512.66	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	13.313	0.0995	4506.65	0.0073	0.002316
Mn	55	3	He	13.604	0.1016	4596.68	0.0073	0.002316
Fe	57	3	He	1.919	0.0034	150.01	0.0003	0.002736
Fe	57	3	He	5.181	0.0044	200.01	0.0003	0.002736
Fe	57	3	He	13.385	0.0071	320.01	0.0003	0.002736
Co	59	3	He	0.278	0.0111	498.01	0.0332	0.001922
Co	59	3	He	0.244	0.01	454.01	0.0332	0.001922
Co	59	3	He	0.281	0.0113	510.01	0.0332	0.001922
Ni	60	3	He	1.914	0.021	938.03	0.0093	0.003141
Ni	60	3	He	2.171	0.0234	1060.04	0.0093	0.003141
Ni	60	3	He	1.871	0.0206	932.03	0.0093	0.003141
Cu	63	3	He	4.236	0.1182	5280.88	0.027	0.003732
Cu	63	3	He	4.398	0.1225	5552.97	0.027	0.003732
Cu	63	3	He	4.153	0.1159	5246.88	0.027	0.003732
Zn	66	3	He	10.856	0.0359	1602.09	0.0031	0.002032
Zn	66	3	He	10.951	0.0361	1638.09	0.0031	0.002032
Zn	66	3	He	10.328	0.0342	1548.08	0.0031	0.002032
As	75	3	He	0.083	0.001	44.00	0.0025	0.0007733
As	75	3	He	0.164	0.0012	54.00	0.0025	0.0007733
As	75	3	He	0.026	0.0008	38.00	0.0025	0.0007733
Sr	88	3	He	5.751	0.0642	2480.28	0.0105	0.004071
Sr	88	3	He	6.174	0.0687	2670.30	0.0105	0.004071
Sr	88	3	He	6.371	0.0707	2710.32	0.0105	0.004071
Mo	98	3	He	2.734	0.0679	2620.31	0.0234	0.003908
Mo	98	3	He	2.91	0.072	2800.34	0.0234	0.003908
Mo	98	3	He	2.8	0.0694	2660.31	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Cd	111	3	He	0.175	0.001	38.00	0.0056	0
Cd	111	3	He	0.119	0.0007	26.00	0.0056	0
Cd	111	3	He	0.177	0.001	38.00	0.0056	0
Sn	120	3	He	-0.278	0.0562	2170.21	0.0169	0.0609
Sn	120	3	He	-0.516	0.0522	2030.22	0.0169	0.0609
Sn	120	3	He	-0.825	0.047	1800.18	0.0169	0.0609
Sb	121	3	He	1.144	0.019	733.36	0.0161	0.0005433
Sb	121	3	He	0.875	0.0147	570.02	0.0161	0.0005433
Sb	121	3	He	1.029	0.0171	656.69	0.0161	0.0005433
Ba	137	3	He	1.01	0.0065	250.01	0.0053	0.001141
Ba	137	3	He	1.05	0.0067	260.01	0.0053	0.001141
Ba	137	3	He	1.168	0.0073	280.01	0.0053	0.001141
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Pb	208	3	He	0.19	0.008	590.04	0.0332	0.001693
Pb	208	3	He	0.174	0.0075	600.03	0.0332	0.001693
Pb	208	3	He	0.159	0.007	550.03	0.0332	0.001693
U	238	3	He	0.09	0.0038	560.03	0.0338	0.0007949
U	238	3	He	0.087	0.0037	550.03	0.0338	0.0007949
U	238	3	He	0.084	0.0036	540.03	0.0338	0.0007949
Sc	45	1	No Gas			1152708.97		
Sc	45	1	No Gas			1151608.50		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1183052.72		
Ge	72	1	No Gas			614315.58		
Ge	72	1	No Gas			618486.94		
Ge	72	1	No Gas			629515.03		
Sc	45	2	H2			86719.20		
Sc	45	2	H2			86658.34		
Sc	45	2	H2			85633.66		
Ge	72	2	H2			72674.79		
Ge	72	2	H2			74070.60		
Ge	72	2	H2			72836.04		
In	115	2	H2			183936.77		
In	115	2	H2			184432.34		
In	115	2	H2			181933.83		
Sc	45	3	He			23697.63		
Sc	45	3	He			24619.34		
Sc	45	3	He			23988.19		
Ge	72	3	He			44683.07		
Ge	72	3	He			45315.04		
Ge	72	3	He			45254.78		
In	115	3	He			38628.92		
In	115	3	He			38909.16		
In	115	3	He			38338.23		
Tb	159	3	He			146192.62		
Tb	159	3	He			147123.53		
Tb	159	3	He			148929.98		
Bi	209	3	He			112885.51		
Bi	209	3	He			111626.56		
Bi	209	3	He			112132.25		

Quantitation Report

Data File Name 308SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:32:19 PM
Sample Name 580-152924-S-11-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

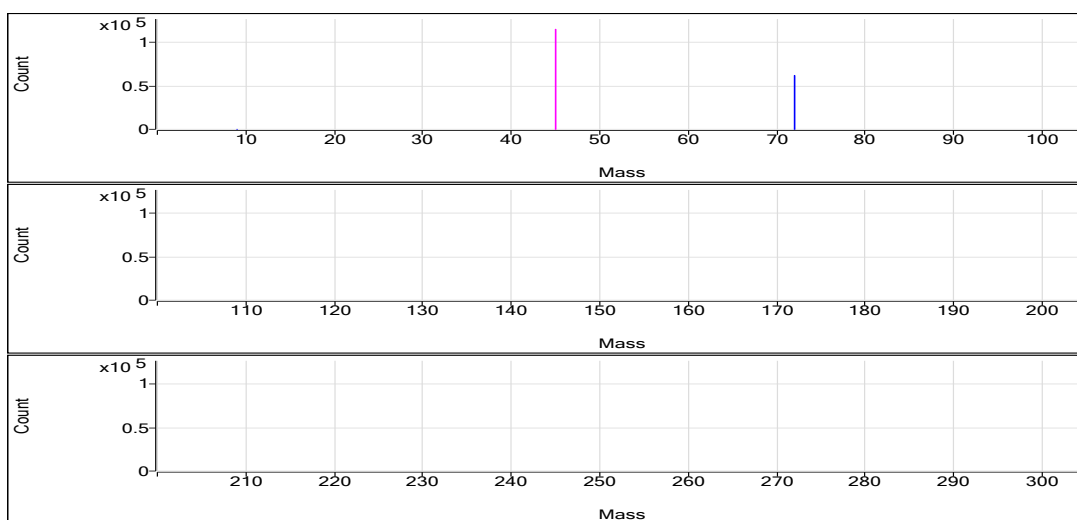
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	317.2	50.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.002	ppb	911.3	2.00	0.0000	Pulse	1.5000	3
Na	23	72	He	288.075	ppb	2.0	31350.07	0.6962	Pulse	0.1000	3
Mg	24	72	He	1480.951	ppb	1.8	61393.83	1.3634	Pulse	0.1000	3
Al	27	72	He	-2.598	ppb	N/A	70.00	0.0016	Pulse	0.1000	3
K	39	72	He	45.310	ppb	155.1	17179.78	0.3813	Pulse	0.5000	3
Ca	44	72	He	4998.109	ppb	3.5	9151.25	0.2032	Pulse	0.5000	3
Ti	47	72	He	-0.123	ppb	N/A	3.33	0.0001	Pulse	0.5000	3
V	51	72	He	-0.033	ppb	N/A	354.01	0.0079	Pulse	0.5000	3
Cr	52	72	He	-0.170	ppb	N/A	840.05	0.0187	Pulse	0.1000	3
Mn	55	72	He	6.146	ppb	3.8	2123.49	0.0472	Pulse	0.5000	3
Fe	57	72	He	-0.671	ppb	N/A	113.34	0.0025	Pulse	0.1000	3
Co	59	72	He	0.028	ppb	78.7	128.00	0.0028	Pulse	0.5000	3
Ni	60	72	He	0.152	ppb	35.7	205.33	0.0046	Pulse	0.5000	3
Cu	63	72	He	0.056	ppb	29.4	236.00	0.0052	Pulse	0.5000	3
Zn	66	72	He	10.684	ppb	5.6	1590.75	0.0353	Pulse	0.5000	3
As	75	72	He	-0.088	ppb	N/A	24.67	0.0005	Pulse	0.5000	3
Sr	88	115	He	12.996	ppb	7.8	5367.73	0.1400	Pulse	0.1000	3
Mo	98	115	He	0.019	ppb	51.9	166.68	0.0043	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	173.2	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.458	ppb	N/A	2040.20	0.0532	Pulse	0.1000	3
Sb	121	115	He	0.029	ppb	94.2	38.89	0.0010	Pulse	0.3000	3
Ba	137	115	He	1.446	ppb	39.6	336.68	0.0088	Pulse	0.1000	3
Tl	205	159	He	-0.012	ppb	N/A	43.33	0.0003	Pulse	0.1000	3
Pb	208	159	He	-0.016	ppb	N/A	176.67	0.0012	Pulse	0.1000	3
U	238	159	He	0.016	ppb	19.8	200.01	0.0013	Pulse	0.1000	3

ISTD Table:

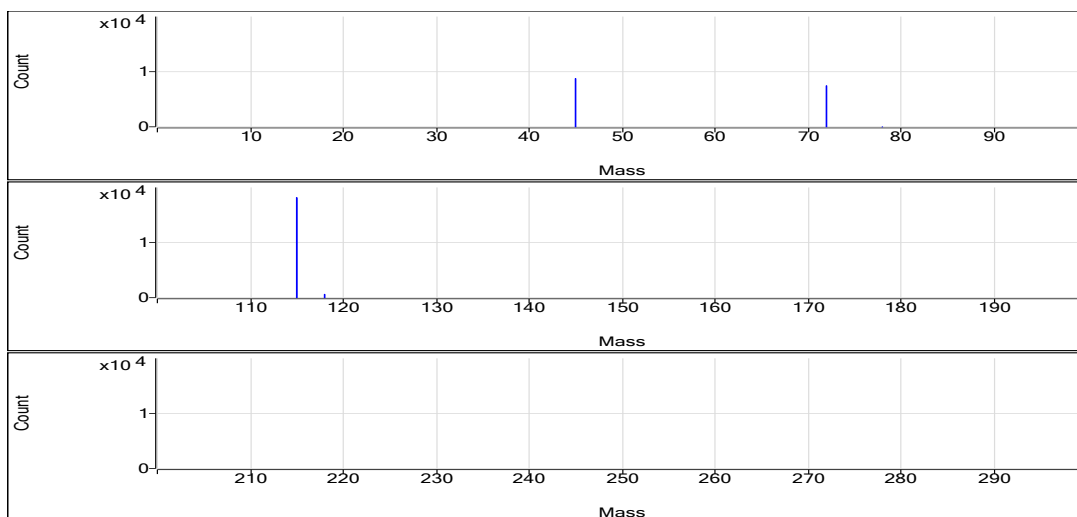
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1155324.98	0.4	88.4	Mix	0.1000	3
No Gas	Ge	72	621790.68	0.5	94.9	Pulse	0.1000	3
H2	Sc	45	87219.19	2.2	106.2	Pulse	0.1000	3
H2	Ge	72	74222.51	0.8	108.6	Pulse	0.1000	3
H2	In	115	180725.93	0.8	105.9	Pulse	0.1000	3
He	Sc	45	23307.19	1.0	91.0	Pulse	0.1000	3
He	Ge	72	45030.68	0.5	94.8	Pulse	0.1000	3
He	In	115	38377.48	2.3	93.7	Pulse	0.1000	3
He	Tb	159	150610.03	0.9	94.5	Pulse	0.1000	3
He	Bi	209	111038.29	1.0	94.9	Pulse	0.1000	3

No Gas

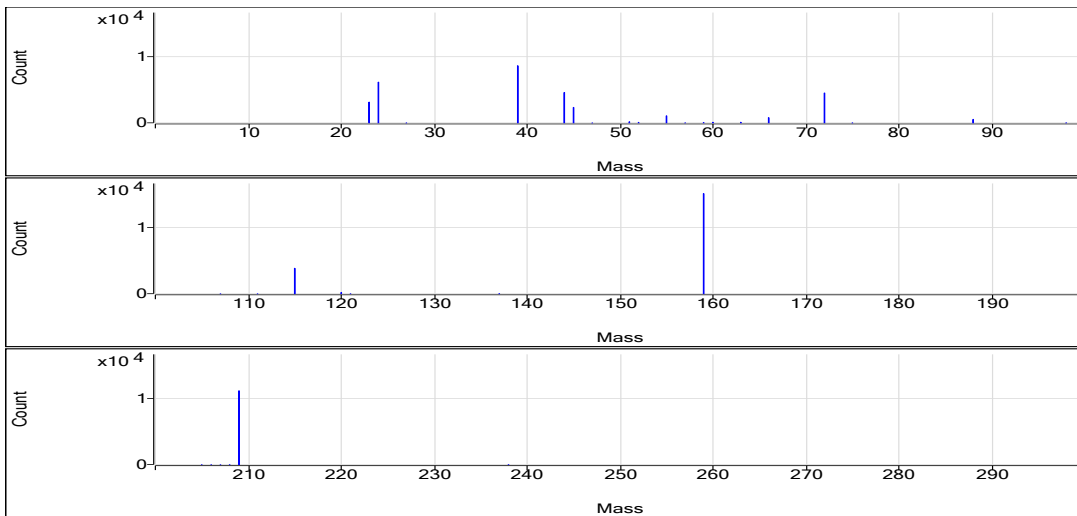


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.011	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.007	0.0001	44.00	0.0011	7.835E-05
Be	9	1	No Gas	0.005	0.0001	52.00	0.0011	7.835E-05
Se	78	2	H2	-0.016	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.002	0	2.00	0.0005	2.594E-05
Se	78	2	H2	0.019	0	2.67	0.0005	2.594E-05
Na	23	3	He	286.353	0.6931	31399.90	0.0018	0.1731
Na	23	3	He	294.467	0.7078	31741.00	0.0018	0.1731
Na	23	3	He	283.406	0.6877	30909.32	0.0018	0.1731
Mg	24	3	He	1460.549	1.3447	60922.39	0.0009	0.006537
Mg	24	3	He	1470.752	1.3541	60721.42	0.0009	0.006537
Mg	24	3	He	1511.554	1.3915	62537.67	0.0009	0.006537
Al	27	3	He	-3.394	0.0013	60.00	0.0003	0.00231
Al	27	3	He	-1.043	0.002	90.00	0.0003	0.00231
Al	27	3	He	-3.357	0.0013	60.00	0.0003	0.00231
K	39	3	He	122.839	0.4393	19902.09	0.0007	0.3475
K	39	3	He	27.268	0.3679	16496.27	0.0007	0.3475
K	39	3	He	-14.177	0.3369	15140.99	0.0007	0.3475
Ca	44	3	He	4799.093	0.1953	8846.42	0	0.002807
Ca	44	3	He	5080.611	0.2066	9262.64	0	0.002807
Ca	44	3	He	5114.624	0.2079	9344.70	0	0.002807
Ti	47	3	He	-0.219	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.069	0.0001	6.00	0.0003	0.0001123
Ti	47	3	He	-0.218	0	2.00	0.0003	0.0001123
V	51	3	He	-0.001	0.0083	376.01	0.0137	0.008308
V	51	3	He	-0.076	0.0073	326.01	0.0137	0.008308
V	51	3	He	-0.022	0.008	360.01	0.0137	0.008308
Cr	52	3	He	-0.254	0.0172	780.05	0.0171	0.02156
Cr	52	3	He	-0.218	0.0178	800.04	0.0171	0.02156
Cr	52	3	He	-0.038	0.0209	940.05	0.0171	0.02156
Mn	55	3	He	6.236	0.0478	2166.16	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	6.322	0.0484	2172.16	0.0073	0.002316
Mn	55	3	He	5.88	0.0452	2032.14	0.0073	0.002316
Fe	57	3	He	-2.994	0.0018	80.00	0.0003	0.002736
Fe	57	3	He	-2.938	0.0018	80.00	0.0003	0.002736
Fe	57	3	He	3.919	0.004	180.01	0.0003	0.002736
Co	59	3	He	0.039	0.0032	146.00	0.0332	0.001922
Co	59	3	He	0.003	0.002	90.00	0.0332	0.001922
Co	59	3	He	0.041	0.0033	148.00	0.0332	0.001922
Ni	60	3	He	0.165	0.0047	212.00	0.0093	0.003141
Ni	60	3	He	0.199	0.005	224.00	0.0093	0.003141
Ni	60	3	He	0.093	0.004	180.00	0.0093	0.003141
Cu	63	3	He	0.074	0.0057	260.00	0.027	0.003732
Cu	63	3	He	0.05	0.0051	228.00	0.027	0.003732
Cu	63	3	He	0.043	0.0049	220.00	0.027	0.003732
Zn	66	3	He	11.251	0.0371	1680.09	0.0031	0.002032
Zn	66	3	He	10.056	0.0334	1496.08	0.0031	0.002032
Zn	66	3	He	10.746	0.0355	1596.09	0.0031	0.002032
As	75	3	He	-0.078	0.0006	26.00	0.0025	0.0007733
As	75	3	He	-0.093	0.0005	24.00	0.0025	0.0007733
As	75	3	He	-0.094	0.0005	24.00	0.0025	0.0007733
Sr	88	3	He	12.366	0.1334	5170.99	0.0105	0.004071
Sr	88	3	He	12.451	0.1343	5241.01	0.0105	0.004071
Sr	88	3	He	14.172	0.1523	5691.18	0.0105	0.004071
Mo	98	3	He	0.02	0.0044	170.01	0.0234	0.003908
Mo	98	3	He	0.008	0.0041	160.01	0.0234	0.003908
Mo	98	3	He	0.027	0.0046	170.01	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.413	0.0539	2090.19	0.0169	0.0609
Sn	120	3	He	-0.541	0.0518	2020.21	0.0169	0.0609
Sn	120	3	He	-0.421	0.0538	2010.19	0.0169	0.0609
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Sb	121	3	He	0.051	0.0014	53.33	0.0161	0.0005433
Sb	121	3	He	0.038	0.0012	43.33	0.0161	0.0005433
Ba	137	3	He	0.81	0.0054	210.01	0.0053	0.001141
Ba	137	3	He	1.92	0.0113	440.02	0.0053	0.001141
Ba	137	3	He	1.609	0.0096	360.02	0.0053	0.001141
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	-0.029	0.0007	80.00	0.0332	0.001693
Pb	208	3	He	-0.007	0.0014	140.01	0.0332	0.001693
Pb	208	3	He	-0.011	0.0013	150.01	0.0332	0.001693
U	238	3	He	0.018	0.0014	210.01	0.0338	0.0007949
U	238	3	He	0.017	0.0014	210.01	0.0338	0.0007949
U	238	3	He	0.012	0.0012	180.01	0.0338	0.0007949
Sc	45	1	No Gas			1150086.62		
Sc	45	1	No Gas			1158503.58		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1157384.75		
Ge	72	1	No Gas			618765.85		
Ge	72	1	No Gas			621800.93		
Ge	72	1	No Gas			624805.26		
Sc	45	2	H2			85222.34		
Sc	45	2	H2			87453.60		
Sc	45	2	H2			88981.64		
Ge	72	2	H2			74062.49		
Ge	72	2	H2			73729.39		
Ge	72	2	H2			74875.66		
In	115	2	H2			179383.98		
In	115	2	H2			180688.08		
In	115	2	H2			182105.72		
Sc	45	3	He			23337.29		
Sc	45	3	He			23527.49		
Sc	45	3	He			23056.80		
Ge	72	3	He			45304.64		
Ge	72	3	He			44843.46		
Ge	72	3	He			44943.95		
In	115	3	He			38769.17		
In	115	3	He			39030.45		
In	115	3	He			37375.67		
Tb	159	3	He			150646.36		
Tb	159	3	He			151929.97		
Tb	159	3	He			149253.77		
Bi	209	3	He			110064.14		
Bi	209	3	He			112290.84		
Bi	209	3	He			110759.89		

Quantitation Report

Data File Name 309SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:34:30 PM
Sample Name 580-152919-S-2-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

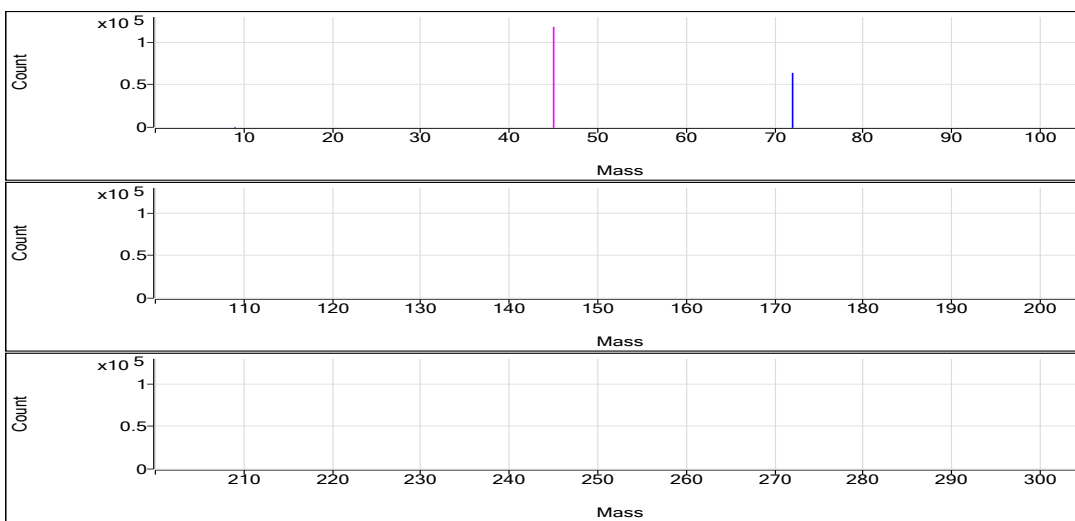
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.013	ppb	163.0	58.67	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.028	ppb	N/A	0.89	0.0000	Pulse	1.5000	3
Na	23	72	He	9234.502	ppb	0.5	772590.43	16.9434	Pulse	0.1000	3
Mg	24	72	He	395.993	ppb	7.5	16842.38	0.3694	Pulse	0.1000	3
Al	27	72	He	-2.165	ppb	N/A	76.67	0.0017	Pulse	0.1000	3
K	39	72	He	2863.005	ppb	2.4	113434.54	2.4874	Pulse	0.5000	3
Ca	44	72	He	1058.443	ppb	3.0	2063.48	0.0453	Pulse	0.5000	3
Ti	47	72	He	0.061	ppb	394.2	6.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.003	ppb	N/A	376.68	0.0083	Pulse	0.5000	3
Cr	52	72	He	-0.149	ppb	N/A	866.71	0.0190	Pulse	0.1000	3
Mn	55	72	He	25.308	ppb	0.6	8525.61	0.1870	Pulse	0.5000	3
Fe	57	72	He	571.469	ppb	5.8	8565.85	0.1878	Pulse	0.1000	3
Co	59	72	He	0.348	ppb	11.9	614.68	0.0135	Pulse	0.5000	3
Ni	60	72	He	3.038	ppb	2.4	1435.41	0.0315	Pulse	0.5000	3
Cu	63	72	He	0.966	ppb	6.1	1360.73	0.0298	Pulse	0.5000	3
Zn	66	72	He	396.408	ppb	0.9	56405.77	1.2371	Pulse	0.5000	3
As	75	72	He	0.236	ppb	24.1	62.67	0.0014	Pulse	0.5000	3
Sr	88	115	He	4.967	ppb	4.3	2173.55	0.0560	Pulse	0.1000	3
Mo	98	115	He	7.353	ppb	5.0	6821.69	0.1759	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	2814.4	20.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.018	ppb	1.7	4.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.475	ppb	N/A	2050.22	0.0529	Pulse	0.1000	3
Sb	121	115	He	0.555	ppb	10.8	368.89	0.0095	Pulse	0.3000	3
Ba	137	115	He	7.972	ppb	6.1	1676.82	0.0432	Pulse	0.1000	3
Tl	205	159	He	-0.019	ppb	N/A	16.67	0.0001	Pulse	0.1000	3
Pb	208	159	He	0.010	ppb	102.8	306.68	0.0020	Pulse	0.1000	3
U	238	159	He	-0.005	ppb	N/A	96.67	0.0006	Pulse	0.1000	3

ISTD Table:

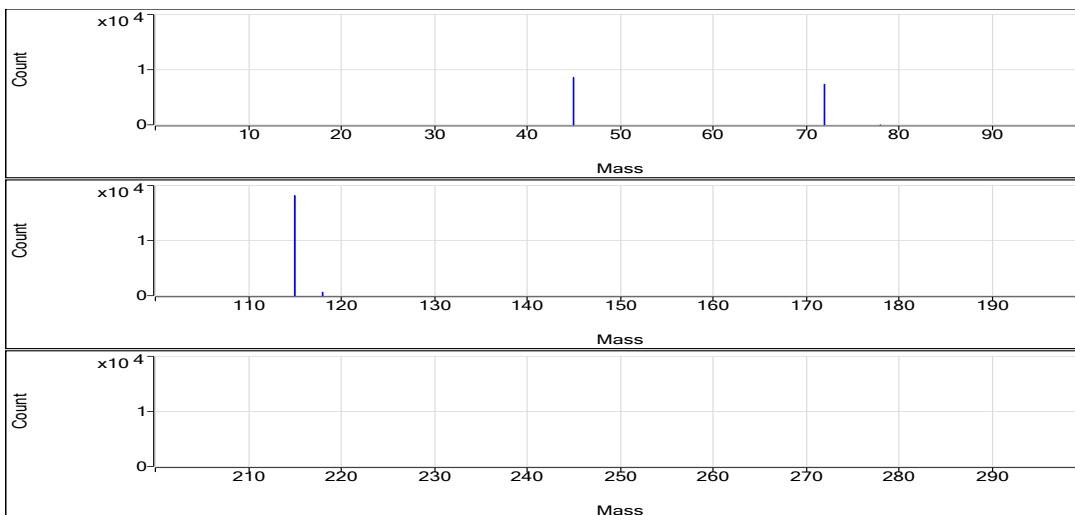
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1178077.48	2.6	90.1	Mix	0.1000	3
No Gas	Ge	72	637905.81	1.4	97.3	Pulse	0.1000	3
H2	Sc	45	86246.59	0.8	105.0	Pulse	0.1000	3
H2	Ge	72	74044.51	0.7	108.3	Pulse	0.1000	3
H2	In	115	182183.11	1.2	106.8	Pulse	0.1000	3
He	Sc	45	23804.49	1.3	92.9	Pulse	0.1000	3
He	Ge	72	45599.15	0.8	96.0	Pulse	0.1000	3
He	In	115	38794.86	1.7	94.8	Pulse	0.1000	3
He	Tb	159	150102.57	0.9	94.1	Pulse	0.1000	3
He	Bi	209	114408.34	0.1	97.8	Pulse	0.1000	3

No Gas

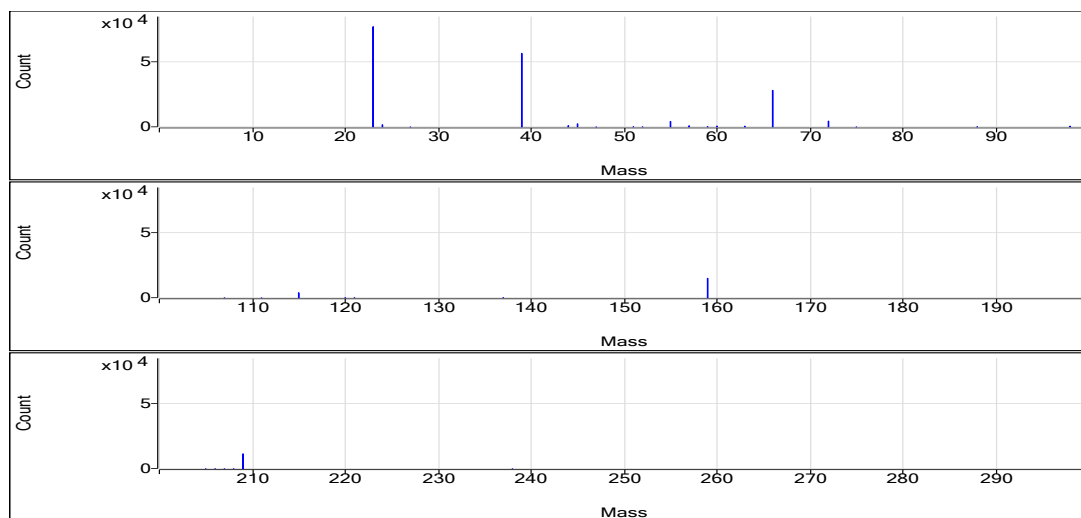


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.036	0.0001	74.00	0.0011	7.835E-05
Be	9	1	No Gas	0.008	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.005	0.0001	46.00	0.0011	7.835E-05
Se	78	2	H2	-0.016	0	1.33	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.016	0	1.33	0.0005	2.594E-05
Na	23	3	He	9187.747	16.8585	775779.52	0.0018	0.1731
Na	23	3	He	9285.99	17.0369	775612.96	0.0018	0.1731
Na	23	3	He	9229.768	16.9348	766378.82	0.0018	0.1731
Mg	24	3	He	408.399	0.3807	17519.76	0.0009	0.006537
Mg	24	3	He	362.25	0.3384	15407.61	0.0009	0.006537
Mg	24	3	He	417.329	0.3889	17599.76	0.0009	0.006537
Al	27	3	He	-1.968	0.0017	80.00	0.0003	0.00231
Al	27	3	He	-2.659	0.0015	70.00	0.0003	0.00231
Al	27	3	He	-1.867	0.0018	80.00	0.0003	0.00231
K	39	3	He	2938.004	2.5434	117040.54	0.0007	0.3475
K	39	3	He	2850.176	2.4778	112801.49	0.0007	0.3475
K	39	3	He	2800.835	2.4409	110461.60	0.0007	0.3475
Ca	44	3	He	1040.939	0.0446	2050.14	0	0.002807
Ca	44	3	He	1094.57	0.0467	2126.15	0	0.002807
Ca	44	3	He	1039.82	0.0445	2014.14	0	0.002807
Ti	47	3	He	0.338	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	-0.078	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	-0.077	0.0001	4.00	0.0003	0.0001123
V	51	3	He	-0.067	0.0074	340.01	0.0137	0.008308
V	51	3	He	0.035	0.0088	400.01	0.0137	0.008308
V	51	3	He	0.023	0.0086	390.01	0.0137	0.008308
Cr	52	3	He	-0.181	0.0185	850.05	0.0171	0.02156
Cr	52	3	He	-0.028	0.0211	960.05	0.0171	0.02156
Cr	52	3	He	-0.24	0.0175	790.04	0.0171	0.02156
Mn	55	3	He	25.465	0.1881	8656.34	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	25.274	0.1867	8500.27	0.0073	0.002316
Mn	55	3	He	25.184	0.1861	8420.21	0.0073	0.002316
Fe	57	3	He	588.823	0.1935	8902.74	0.0003	0.002736
Fe	57	3	He	533.527	0.1756	7992.19	0.0003	0.002736
Fe	57	3	He	592.056	0.1945	8802.62	0.0003	0.002736
Co	59	3	He	0.388	0.0148	682.02	0.0332	0.001922
Co	59	3	He	0.306	0.0121	550.01	0.0332	0.001922
Co	59	3	He	0.349	0.0135	612.01	0.0332	0.001922
Ni	60	3	He	2.972	0.0309	1420.07	0.0093	0.003141
Ni	60	3	He	3.026	0.0314	1428.07	0.0093	0.003141
Ni	60	3	He	3.117	0.0322	1458.08	0.0093	0.003141
Cu	63	3	He	0.991	0.0305	1404.07	0.027	0.003732
Cu	63	3	He	0.899	0.028	1276.06	0.027	0.003732
Cu	63	3	He	1.009	0.031	1402.07	0.027	0.003732
Zn	66	3	He	392.317	1.2243	56339.44	0.0031	0.002032
Zn	66	3	He	397.227	1.2396	56433.87	0.0031	0.002032
Zn	66	3	He	399.68	1.2473	56443.99	0.0031	0.002032
As	75	3	He	0.174	0.0012	56.00	0.0025	0.0007733
As	75	3	He	0.248	0.0014	64.00	0.0025	0.0007733
As	75	3	He	0.286	0.0015	68.00	0.0025	0.0007733
Sr	88	3	He	4.785	0.0541	2130.21	0.0105	0.004071
Sr	88	3	He	4.91	0.0554	2110.20	0.0105	0.004071
Sr	88	3	He	5.205	0.0585	2280.24	0.0105	0.004071
Mo	98	3	He	6.937	0.1662	6541.58	0.0234	0.003908
Mo	98	3	He	7.651	0.1829	6961.75	0.0234	0.003908
Mo	98	3	He	7.47	0.1787	6961.74	0.0234	0.003908
Ag	107	3	He	0.016	0.0013	50.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Cd	111	3	He	0.019	0.0001	4.00	0.0056	0
Cd	111	3	He	0.018	0.0001	4.00	0.0056	0
Sn	120	3	He	-0.733	0.0485	1910.21	0.0169	0.0609
Sn	120	3	He	-0.277	0.0562	2140.23	0.0169	0.0609
Sn	120	3	He	-0.415	0.0539	2100.22	0.0169	0.0609
Sb	121	3	He	0.618	0.0105	413.34	0.0161	0.0005433
Sb	121	3	He	0.499	0.0086	326.67	0.0161	0.0005433
Sb	121	3	He	0.55	0.0094	366.67	0.0161	0.0005433
Ba	137	3	He	8.206	0.0445	1750.17	0.0053	0.001141
Ba	137	3	He	8.293	0.0449	1710.15	0.0053	0.001141
Ba	137	3	He	7.416	0.0403	1570.14	0.0053	0.001141
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Tl	205	3	He	-0.018	0.0001	20.00	0.0248	0.0005854
Pb	208	3	He	0	0.0017	150.01	0.0332	0.001693
Pb	208	3	He	0.011	0.002	140.01	0.0332	0.001693
Pb	208	3	He	0.021	0.0024	200.01	0.0332	0.001693
U	238	3	He	-0.008	0.0005	80.00	0.0338	0.0007949
U	238	3	He	0.008	0.0011	160.01	0.0338	0.0007949
U	238	3	He	-0.014	0.0003	50.00	0.0338	0.0007949
Sc	45	1	No Gas			1161019.59		
Sc	45	1	No Gas			1213710.06		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1159502.80		
Ge	72	1	No Gas			636318.66		
Ge	72	1	No Gas			647403.58		
Ge	72	1	No Gas			629995.19		
Sc	45	2	H2			87080.33		
Sc	45	2	H2			85723.92		
Sc	45	2	H2			85935.51		
Ge	72	2	H2			73829.69		
Ge	72	2	H2			73679.30		
Ge	72	2	H2			74624.53		
In	115	2	H2			181131.13		
In	115	2	H2			184597.17		
In	115	2	H2			180821.03		
Sc	45	3	He			23807.74		
Sc	45	3	He			24108.37		
Sc	45	3	He			23497.36		
Ge	72	3	He			46017.20		
Ge	72	3	He			45525.52		
Ge	72	3	He			45254.72		
In	115	3	He			39370.94		
In	115	3	He			38077.37		
In	115	3	He			38979.32		
Tb	159	3	He			148689.18		
Tb	159	3	He			151516.93		
Tb	159	3	He			150101.60		
Bi	209	3	He			114358.51		
Bi	209	3	He			114568.99		
Bi	209	3	He			114297.51		

Quantitation Report

Data File Name 310SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:36:43 PM
Sample Name 580-152924-S-5-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

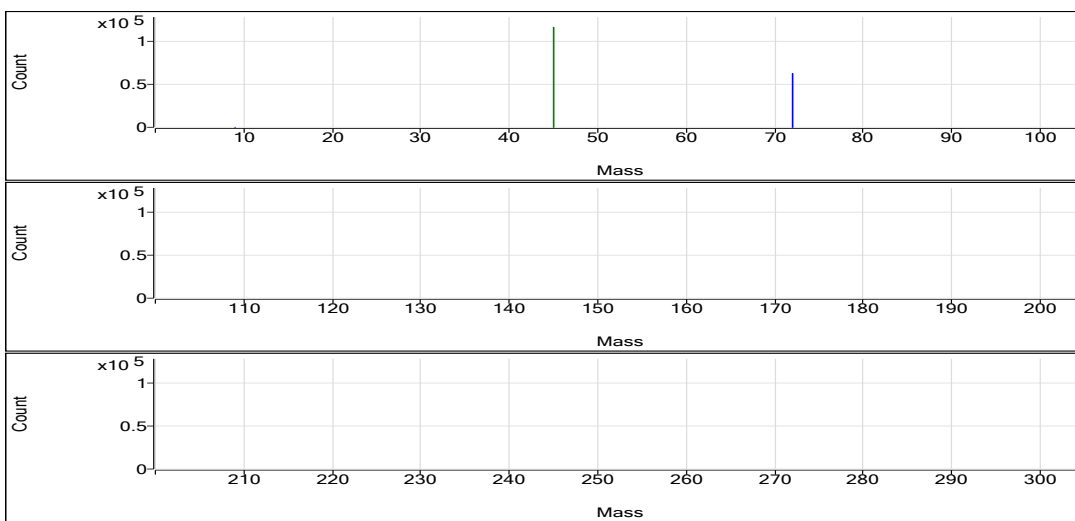
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.004	ppb	200.4	52.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.008	ppb	574.0	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	4620.492	ppb	1.3	379978.80	8.5641	Pulse	0.1000	3
Mg	24	72	He	1792.907	ppb	1.6	73174.41	1.6492	Pulse	0.1000	3
Al	27	72	He	3.425	ppb	46.4	146.67	0.0033	Pulse	0.1000	3
K	39	72	He	823.103	ppb	9.5	42719.86	0.9627	Pulse	0.5000	3
Ca	44	72	He	7266.465	ppb	1.3	13053.89	0.2942	Pulse	0.5000	3
Ti	47	72	He	0.025	ppb	663.3	5.33	0.0001	Pulse	0.5000	3
V	51	72	He	0.244	ppb	35.8	516.01	0.0116	Pulse	0.5000	3
Cr	52	72	He	-0.329	ppb	N/A	706.71	0.0159	Pulse	0.1000	3
Mn	55	72	He	43.621	ppb	1.0	14224.24	0.3206	Pulse	0.5000	3
Fe	57	72	He	731.140	ppb	0.9	10630.44	0.2396	Pulse	0.1000	3
Co	59	72	He	0.360	ppb	1.6	615.35	0.0139	Pulse	0.5000	3
Ni	60	72	He	1.531	ppb	11.8	772.69	0.0174	Pulse	0.5000	3
Cu	63	72	He	0.347	ppb	2.8	582.01	0.0131	Pulse	0.5000	3
Zn	66	72	He	4.934	ppb	6.4	772.02	0.0174	Pulse	0.5000	3
As	75	72	He	0.121	ppb	94.6	48.00	0.0011	Pulse	0.5000	3
Sr	88	115	He	17.213	ppb	3.9	7071.82	0.1841	Pulse	0.1000	3
Mo	98	115	He	7.166	ppb	1.5	6591.59	0.1716	Pulse	0.1000	3
Ag	107	115	He	-0.005	ppb	N/A	10.00	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.006	ppb	86.6	1.33	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.298	ppb	N/A	2146.89	0.0559	Pulse	0.1000	3
Sb	121	115	He	0.033	ppb	53.0	41.11	0.0011	Pulse	0.3000	3
Ba	137	115	He	1.251	ppb	25.3	296.68	0.0077	Pulse	0.1000	3
Tl	205	159	He	-0.016	ppb	N/A	30.00	0.0002	Pulse	0.1000	3
Pb	208	159	He	0.122	ppb	13.1	863.37	0.0058	Pulse	0.1000	3
U	238	159	He	0.007	ppb	20.9	153.34	0.0010	Pulse	0.1000	3

ISTD Table:

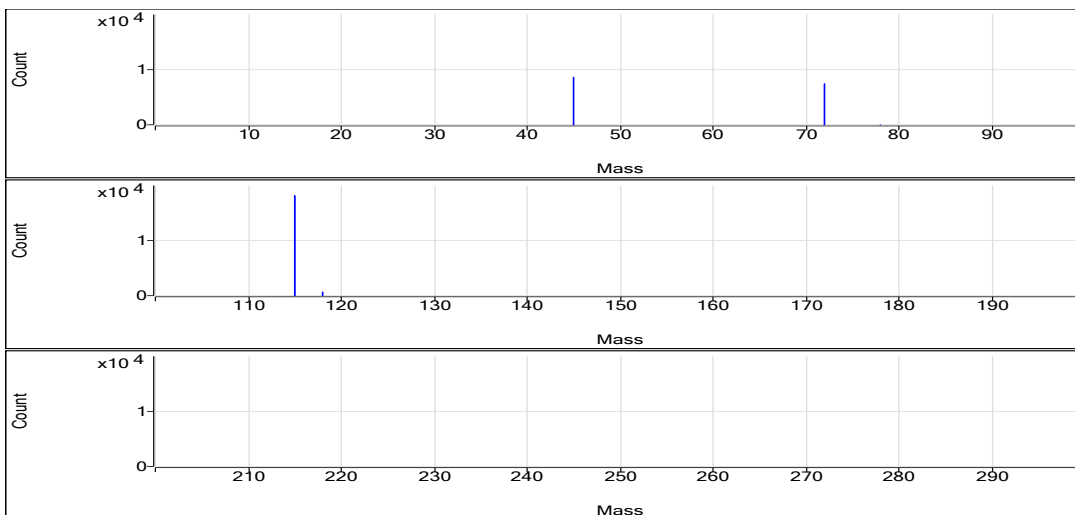
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1172554.77	1.5	89.7	Analog	0.1000	3
No Gas	Ge	72	630351.34	0.4	96.2	Pulse	0.1000	3
H2	Sc	45	86156.54	1.2	104.9	Pulse	0.1000	3
H2	Ge	72	74366.06	1.0	108.8	Pulse	0.1000	3
H2	In	115	181117.86	1.5	106.2	Pulse	0.1000	3
He	Sc	45	23944.89	1.2	93.5	Pulse	0.1000	3
He	Ge	72	44372.02	0.9	93.4	Pulse	0.1000	3
He	In	115	38433.37	2.9	93.9	Pulse	0.1000	3
He	Tb	159	150152.21	0.9	94.2	Pulse	0.1000	3
He	Bi	209	110480.03	0.4	94.5	Pulse	0.1000	3

No Gas

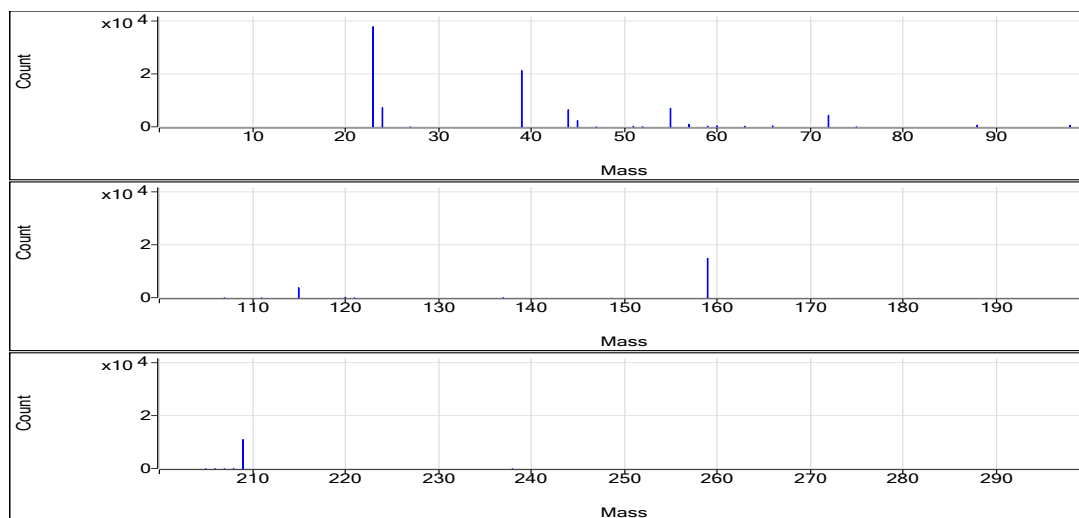


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.007	0.0001	54.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.005	0.0001	46.00	0.0011	7.835E-05
Be	9	1	No Gas	0.01	0.0001	56.00	0.0011	7.835E-05
Se	78	2	H2	0.054	0.0001	4.00	0.0005	2.594E-05
Se	78	2	H2	0.002	0	2.00	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Na	23	3	He	4602.227	8.5309	378791.99	0.0018	0.1731
Na	23	3	He	4573.011	8.4779	379411.44	0.0018	0.1731
Na	23	3	He	4686.237	8.6835	381732.96	0.0018	0.1731
Mg	24	3	He	1774.419	1.6323	72477.83	0.0009	0.006537
Mg	24	3	He	1779.322	1.6368	73251.72	0.0009	0.006537
Mg	24	3	He	1824.979	1.6786	73793.68	0.0009	0.006537
Al	27	3	He	5.229	0.0038	170.01	0.0003	0.00231
Al	27	3	He	2.817	0.0031	140.00	0.0003	0.00231
Al	27	3	He	2.228	0.003	130.00	0.0003	0.00231
K	39	3	He	912.645	1.0296	45717.07	0.0007	0.3475
K	39	3	He	790.814	0.9386	42003.21	0.0007	0.3475
K	39	3	He	765.851	0.9199	40439.30	0.0007	0.3475
Ca	44	3	He	7265.051	0.2942	13061.25	0	0.002807
Ca	44	3	He	7172.941	0.2905	12999.17	0	0.002807
Ca	44	3	He	7361.404	0.298	13101.26	0	0.002807
Ti	47	3	He	-0.071	0.0001	4.00	0.0003	0.0001123
Ti	47	3	He	0.214	0.0002	8.00	0.0003	0.0001123
Ti	47	3	He	-0.068	0.0001	4.00	0.0003	0.0001123
V	51	3	He	0.266	0.0119	530.01	0.0137	0.008308
V	51	3	He	0.148	0.0103	462.01	0.0137	0.008308
V	51	3	He	0.318	0.0126	556.01	0.0137	0.008308
Cr	52	3	He	-0.286	0.0167	740.04	0.0171	0.02156
Cr	52	3	He	-0.425	0.0143	640.04	0.0171	0.02156
Cr	52	3	He	-0.277	0.0168	740.04	0.0171	0.02156
Mn	55	3	He	44.053	0.3237	14374.37	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	43.159	0.3172	14196.22	0.0073	0.002316
Mn	55	3	He	43.65	0.3208	14102.14	0.0073	0.002316
Fe	57	3	He	728.814	0.2388	10603.72	0.0003	0.002736
Fe	57	3	He	738.219	0.2419	10823.88	0.0003	0.002736
Fe	57	3	He	726.386	0.238	10463.73	0.0003	0.002736
Co	59	3	He	0.364	0.014	622.02	0.0332	0.001922
Co	59	3	He	0.362	0.0139	624.02	0.0332	0.001922
Co	59	3	He	0.353	0.0136	600.02	0.0332	0.001922
Ni	60	3	He	1.484	0.017	754.02	0.0093	0.003141
Ni	60	3	He	1.378	0.016	716.02	0.0093	0.003141
Ni	60	3	He	1.731	0.0193	848.03	0.0093	0.003141
Cu	63	3	He	0.337	0.0128	570.01	0.027	0.003732
Cu	63	3	He	0.356	0.0134	598.01	0.027	0.003732
Cu	63	3	He	0.349	0.0131	578.02	0.027	0.003732
Zn	66	3	He	4.654	0.0165	734.02	0.0031	0.002032
Zn	66	3	He	4.87	0.0172	770.02	0.0031	0.002032
Zn	66	3	He	5.277	0.0185	812.03	0.0031	0.002032
As	75	3	He	0.227	0.0014	60.00	0.0025	0.0007733
As	75	3	He	0.135	0.0011	50.00	0.0025	0.0007733
As	75	3	He	0	0.0008	34.00	0.0025	0.0007733
Sr	88	3	He	17.032	0.1822	7011.73	0.0105	0.004071
Sr	88	3	He	17.96	0.192	7161.94	0.0105	0.004071
Sr	88	3	He	16.646	0.1782	7041.78	0.0105	0.004071
Mo	98	3	He	7.145	0.1711	6581.62	0.0234	0.003908
Mo	98	3	He	7.281	0.1743	6501.55	0.0234	0.003908
Mo	98	3	He	7.071	0.1693	6691.60	0.0234	0.003908
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.004	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Cd	111	3	He	0.01	0.0001	2.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Sn	120	3	He	-0.59	0.0509	1960.18	0.0169	0.0609
Sn	120	3	He	-0.114	0.059	2200.23	0.0169	0.0609
Sn	120	3	He	-0.189	0.0577	2280.25	0.0169	0.0609
Sb	121	3	He	0.047	0.0013	50.00	0.0161	0.0005433
Sb	121	3	He	0.038	0.0012	43.33	0.0161	0.0005433
Sb	121	3	He	0.013	0.0008	30.00	0.0161	0.0005433
Ba	137	3	He	1.458	0.0088	340.02	0.0053	0.001141
Ba	137	3	He	1.408	0.0086	320.02	0.0053	0.001141
Ba	137	3	He	0.886	0.0058	230.01	0.0053	0.001141
Tl	205	3	He	-0.01	0.0003	50.00	0.0248	0.0005854
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	0.104	0.0052	400.02	0.0332	0.001693
Pb	208	3	He	0.127	0.0059	490.03	0.0332	0.001693
Pb	208	3	He	0.135	0.0062	510.02	0.0332	0.001693
U	238	3	He	0.006	0.001	150.01	0.0338	0.0007949
U	238	3	He	0.006	0.001	150.01	0.0338	0.0007949
U	238	3	He	0.008	0.0011	160.01	0.0338	0.0007949
Sc	45	1	No Gas			1154468.73		
Sc	45	1	No Gas			1190179.83		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1173015.76		
Ge	72	1	No Gas			628081.98		
Ge	72	1	No Gas			629940.46		
Ge	72	1	No Gas			633031.59		
Sc	45	2	H2			87291.65		
Sc	45	2	H2			85342.10		
Sc	45	2	H2			85835.87		
Ge	72	2	H2			75075.61		
Ge	72	2	H2			73579.10		
Ge	72	2	H2			74443.46		
In	115	2	H2			183733.57		
In	115	2	H2			181447.42		
In	115	2	H2			178172.60		
Sc	45	3	He			23617.73		
Sc	45	3	He			24078.26		
Sc	45	3	He			24138.67		
Ge	72	3	He			44402.19		
Ge	72	3	He			44753.14		
Ge	72	3	He			43960.74		
In	115	3	He			38488.30		
In	115	3	He			37325.82		
In	115	3	He			39531.07		
Tb	159	3	He			151231.99		
Tb	159	3	He			150527.20		
Tb	159	3	He			148697.43		
Bi	209	3	He			110667.59		
Bi	209	3	He			109943.57		
Bi	209	3	He			110828.94		

Quantitation Report

Data File Name 311SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:38:55 PM
Sample Name 580-152924-S-7-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

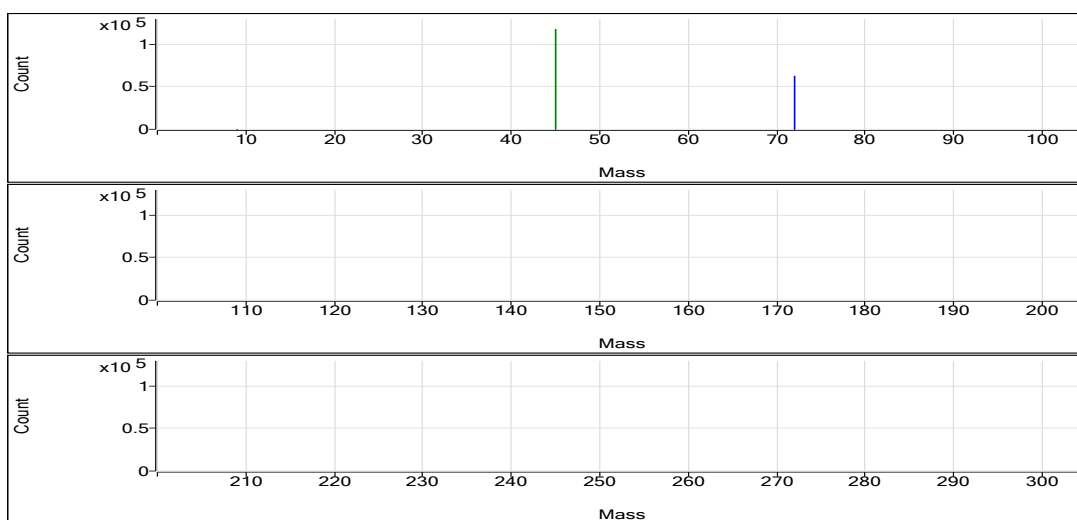
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.003	ppb	343.4	51.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	0.008	ppb	445.1	2.22	0.0000	Pulse	1.5000	3
Na	23	72	He	3196.547	ppb	3.1	262743.97	5.9781	Pulse	0.1000	3
Mg	24	72	He	1860.176	ppb	3.5	75190.14	1.7109	Pulse	0.1000	3
Al	27	72	He	0.130	ppb	837.9	103.34	0.0023	Pulse	0.1000	3
K	39	72	He	952.095	ppb	7.9	46554.05	1.0591	Pulse	0.5000	3
Ca	44	72	He	7125.716	ppb	5.0	12680.93	0.2886	Pulse	0.5000	3
Ti	47	72	He	0.083	ppb	621.6	6.00	0.0001	Pulse	0.5000	3
V	51	72	He	-0.087	ppb	N/A	312.67	0.0071	Pulse	0.5000	3
Cr	52	72	He	-0.267	ppb	N/A	746.71	0.0170	Pulse	0.1000	3
Mn	55	72	He	36.228	ppb	3.2	11718.92	0.2666	Pulse	0.5000	3
Fe	57	72	He	254.388	ppb	6.4	3740.57	0.0851	Pulse	0.1000	3
Co	59	72	He	0.265	ppb	5.8	470.68	0.0107	Pulse	0.5000	3
Ni	60	72	He	2.670	ppb	6.7	1232.72	0.0280	Pulse	0.5000	3
Cu	63	72	He	0.002	ppb	1112.7	166.67	0.0038	Pulse	0.5000	3
Zn	66	72	He	1.609	ppb	25.4	309.34	0.0070	Pulse	0.5000	3
As	75	72	He	0.072	ppb	71.0	42.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	21.426	ppb	2.1	8956.15	0.2282	Pulse	0.1000	3
Mo	98	115	He	12.468	ppb	3.9	11601.26	0.2956	Pulse	0.1000	3
Ag	107	115	He	-0.001	ppb	N/A	16.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.860	ppb	N/A	1820.16	0.0464	Pulse	0.1000	3
Sb	121	115	He	0.026	ppb	137.9	37.78	0.0010	Pulse	0.3000	3
Ba	137	115	He	5.833	ppb	9.0	1253.43	0.0319	Pulse	0.1000	3
Tl	205	159	He	-0.013	ppb	N/A	40.00	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.015	ppb	34.3	326.67	0.0022	Pulse	0.1000	3
U	238	159	He	0.073	ppb	16.7	486.69	0.0033	Pulse	0.1000	3

ISTD Table:

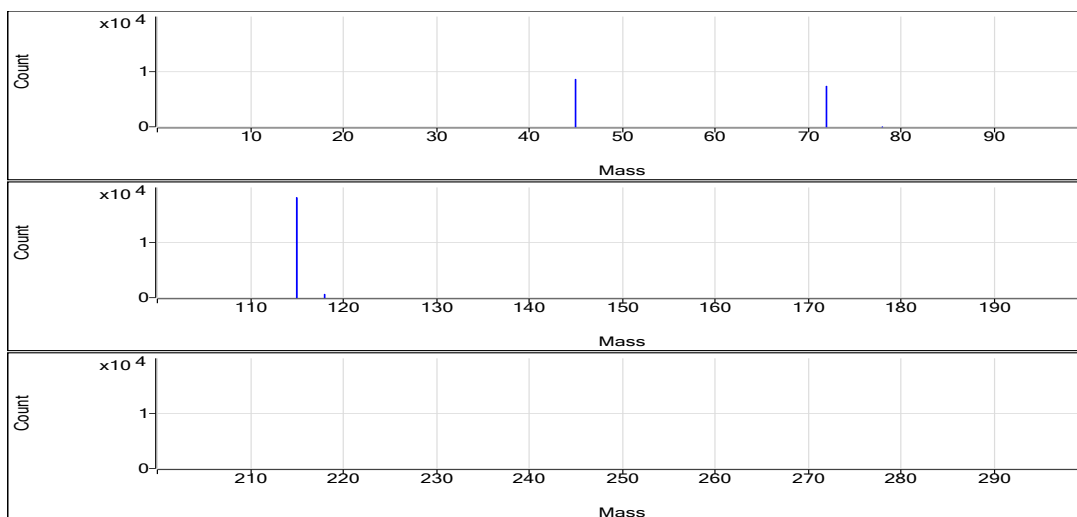
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1178231.10	1.7	90.1	Analog	0.1000	3
No Gas	Ge	72	626886.67	0.3	95.7	Pulse	0.1000	3
H2	Sc	45	85884.93	2.8	104.5	Pulse	0.1000	3
H2	Ge	72	73552.34	1.1	107.6	Pulse	0.1000	3
H2	In	115	180628.22	0.6	105.9	Pulse	0.1000	3
He	Sc	45	23410.66	1.8	91.4	Pulse	0.1000	3
He	Ge	72	43964.44	1.6	92.5	Pulse	0.1000	3
He	In	115	39244.51	0.2	95.8	Pulse	0.1000	3
He	Tb	159	149172.62	1.1	93.6	Pulse	0.1000	3
He	Bi	209	111169.16	1.1	95.1	Pulse	0.1000	3

No Gas

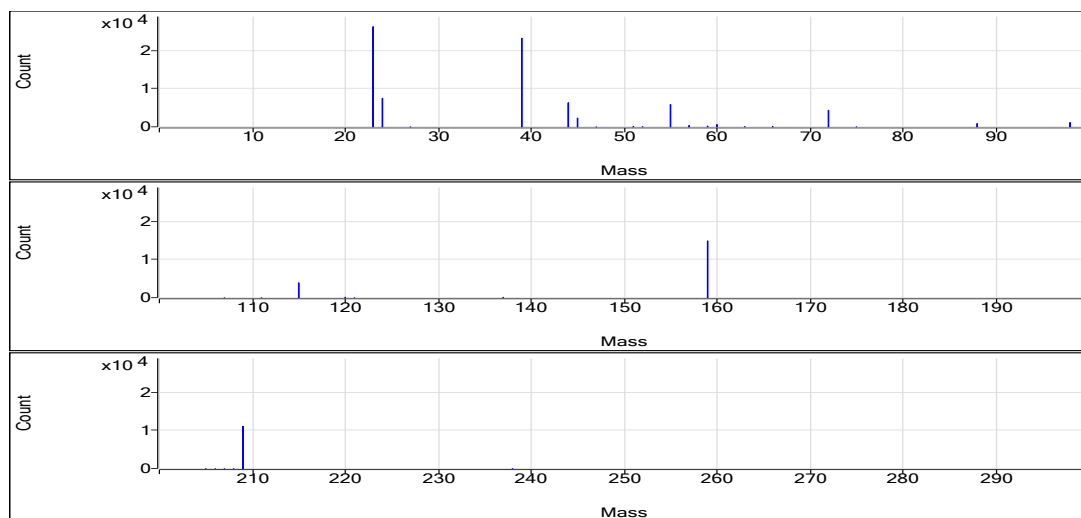


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.016	0.0001	60.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.002	0.0001	48.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.005	0.0001	46.00	0.0011	7.835E-05
Se	78	2	H2	0.021	0	2.67	0.0005	2.594E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	0.037	0	3.33	0.0005	2.594E-05
Na	23	3	He	3121.861	5.8425	258719.41	0.0018	0.1731
Na	23	3	He	3308.507	6.1815	266660.68	0.0018	0.1731
Na	23	3	He	3159.273	5.9105	262851.83	0.0018	0.1731
Mg	24	3	He	1812.418	1.6671	73823.70	0.0009	0.006537
Mg	24	3	He	1934.62	1.7791	76747.34	0.0009	0.006537
Mg	24	3	He	1833.491	1.6864	74999.37	0.0009	0.006537
Al	27	3	He	-0.178	0.0023	100.00	0.0003	0.00231
Al	27	3	He	-0.77	0.0021	90.00	0.0003	0.00231
Al	27	3	He	1.338	0.0027	120.01	0.0003	0.00231
K	39	3	He	1017.092	1.1077	49050.47	0.0007	0.3475
K	39	3	He	968.785	1.0716	46226.30	0.0007	0.3475
K	39	3	He	870.408	0.998	44385.38	0.0007	0.3475
Ca	44	3	He	6788.986	0.2751	12180.54	0	0.002807
Ca	44	3	He	7504.167	0.3037	13103.26	0	0.002807
Ca	44	3	He	7083.993	0.2869	12758.98	0	0.002807
Ti	47	3	He	-0.216	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.683	0.0003	14.00	0.0003	0.0001123
Ti	47	3	He	-0.216	0	2.00	0.0003	0.0001123
V	51	3	He	-0.082	0.0072	318.01	0.0137	0.008308
V	51	3	He	-0.069	0.0074	318.01	0.0137	0.008308
V	51	3	He	-0.111	0.0068	302.00	0.0137	0.008308
Cr	52	3	He	-0.337	0.0158	700.03	0.0171	0.02156
Cr	52	3	He	-0.231	0.0176	760.05	0.0171	0.02156
Cr	52	3	He	-0.235	0.0175	780.04	0.0171	0.02156
Mn	55	3	He	35.283	0.2597	11502.10	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	37.499	0.2759	11902.39	0.0073	0.002316
Mn	55	3	He	35.902	0.2643	11752.28	0.0073	0.002316
Fe	57	3	He	241.874	0.0811	3590.53	0.0003	0.002736
Fe	57	3	He	272.847	0.0911	3930.60	0.0003	0.002736
Fe	57	3	He	248.443	0.0832	3700.57	0.0003	0.002736
Co	59	3	He	0.248	0.0102	450.01	0.0332	0.001922
Co	59	3	He	0.278	0.0112	482.01	0.0332	0.001922
Co	59	3	He	0.267	0.0108	480.01	0.0332	0.001922
Ni	60	3	He	2.467	0.0262	1158.05	0.0093	0.003141
Ni	60	3	He	2.81	0.0293	1266.06	0.0093	0.003141
Ni	60	3	He	2.734	0.0286	1274.06	0.0093	0.003141
Cu	63	3	He	0.007	0.0039	174.00	0.027	0.003732
Cu	63	3	He	0.027	0.0045	192.00	0.027	0.003732
Cu	63	3	He	-0.027	0.003	134.00	0.027	0.003732
Zn	66	3	He	1.841	0.0078	344.01	0.0031	0.002032
Zn	66	3	He	1.848	0.0078	336.01	0.0031	0.002032
Zn	66	3	He	1.138	0.0056	248.00	0.0031	0.002032
As	75	3	He	0.016	0.0008	36.00	0.0025	0.0007733
As	75	3	He	0.115	0.0011	46.00	0.0025	0.0007733
As	75	3	He	0.085	0.001	44.00	0.0025	0.0007733
Sr	88	3	He	21.256	0.2264	8902.79	0.0105	0.004071
Sr	88	3	He	21.928	0.2335	9162.93	0.0105	0.004071
Sr	88	3	He	21.094	0.2247	8802.73	0.0105	0.004071
Mo	98	3	He	12.677	0.3005	11814.70	0.0234	0.003908
Mo	98	3	He	12.809	0.3036	11914.79	0.0234	0.003908
Mo	98	3	He	11.918	0.2827	11074.30	0.0234	0.003908
Ag	107	3	He	0	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	0.006	0.0008	30.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	-0.85	0.0465	1830.16	0.0169	0.0609
Sn	120	3	He	-0.77	0.0479	1880.17	0.0169	0.0609
Sn	120	3	He	-0.961	0.0447	1750.15	0.0169	0.0609
Sb	121	3	He	-0.002	0.0005	20.00	0.0161	0.0005433
Sb	121	3	He	0.066	0.0016	63.33	0.0161	0.0005433
Sb	121	3	He	0.014	0.0008	30.00	0.0161	0.0005433
Ba	137	3	He	6.336	0.0346	1360.10	0.0053	0.001141
Ba	137	3	He	5.286	0.029	1140.09	0.0053	0.001141
Ba	137	3	He	5.877	0.0322	1260.10	0.0053	0.001141
Tl	205	3	He	-0.016	0.0002	30.00	0.0248	0.0005854
Tl	205	3	He	-0.007	0.0004	60.00	0.0248	0.0005854
Tl	205	3	He	-0.015	0.0002	30.00	0.0248	0.0005854
Pb	208	3	He	0.009	0.002	160.01	0.0332	0.001693
Pb	208	3	He	0.017	0.0023	90.00	0.0332	0.001693
Pb	208	3	He	0.018	0.0023	120.00	0.0332	0.001693
U	238	3	He	0.073	0.0033	490.03	0.0338	0.0007949
U	238	3	He	0.085	0.0037	550.03	0.0338	0.0007949
U	238	3	He	0.061	0.0029	420.02	0.0338	0.0007949
Sc	45	1	No Gas			1171422.09		
Sc	45	1	No Gas			1201237.95		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1162033.26		
Ge	72	1	No Gas			626270.19		
Ge	72	1	No Gas			625666.08		
Ge	72	1	No Gas			628723.74		
Sc	45	2	H2			83312.11		
Sc	45	2	H2			86336.97		
Sc	45	2	H2			88005.70		
Ge	72	2	H2			73217.44		
Ge	72	2	H2			72966.34		
Ge	72	2	H2			74473.24		
In	115	2	H2			181833.38		
In	115	2	H2			180010.49		
In	115	2	H2			180040.80		
Sc	45	3	He			23056.87		
Sc	45	3	He			23887.97		
Sc	45	3	He			23287.15		
Ge	72	3	He			44282.23		
Ge	72	3	He			43138.72		
Ge	72	3	He			44472.37		
In	115	3	He			39330.46		
In	115	3	He			39260.72		
In	115	3	He			39180.57		
Tb	159	3	He			150395.52		
Tb	159	3	He			149787.02		
Tb	159	3	He			147335.31		
Bi	209	3	He			112602.22		
Bi	209	3	He			110709.87		
Bi	209	3	He			110195.39		

Quantitation Report

Data File Name 312SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:41:08 PM
Sample Name 580-152917-R-1-C
Sample Type Sample
Comment B7
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

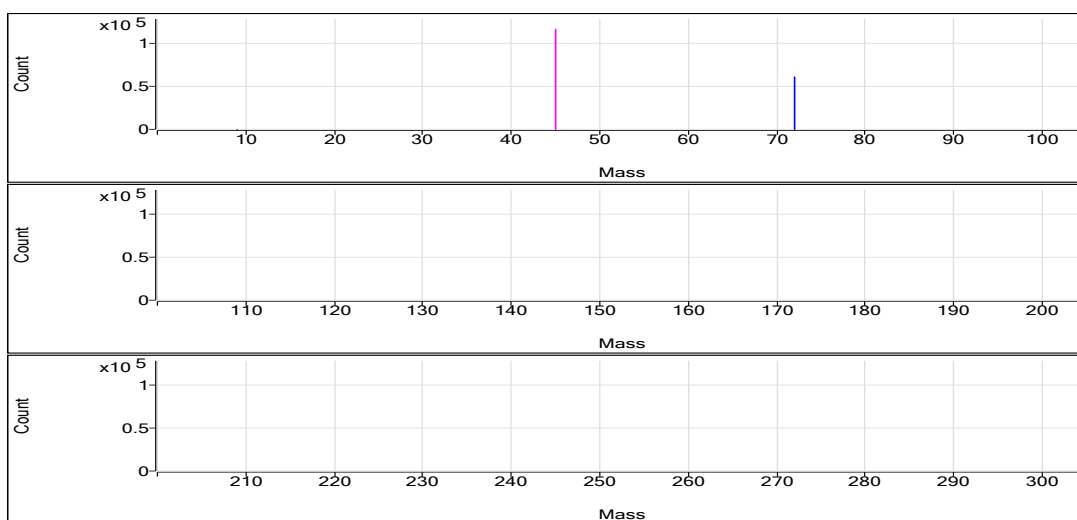
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	0.009	ppb	100.5	54.00	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.045	ppb	N/A	0.22	0.0000	Pulse	1.5000	3
Na	23	72	He	4556.397	ppb	2.3	365179.53	8.4477	Pulse	0.1000	3
Mg	24	72	He	195.715	ppb	4.1	8032.17	0.1859	Pulse	0.1000	3
Al	27	72	He	14.330	ppb	13.1	280.01	0.0065	Pulse	0.1000	3
K	39	72	He	267.396	ppb	38.0	23622.40	0.5473	Pulse	0.5000	3
Ca	44	72	He	543.550	ppb	3.0	1064.04	0.0246	Pulse	0.5000	3
Ti	47	72	He	8.747	ppb	36.0	122.00	0.0028	Pulse	0.5000	3
V	51	72	He	0.015	ppb	508.5	368.01	0.0085	Pulse	0.5000	3
Cr	52	72	He	0.094	ppb	179.7	1000.07	0.0232	Pulse	0.1000	3
Mn	55	72	He	11.062	ppb	2.1	3589.08	0.0830	Pulse	0.5000	3
Fe	57	72	He	98.609	ppb	7.0	1500.12	0.0347	Pulse	0.1000	3
Co	59	72	He	0.171	ppb	13.5	328.67	0.0076	Pulse	0.5000	3
Ni	60	72	He	1.117	ppb	5.8	586.68	0.0136	Pulse	0.5000	3
Cu	63	72	He	57.882	ppb	2.4	67760.57	1.5676	Pulse	0.5000	3
Zn	66	72	He	320.470	ppb	2.3	43248.24	1.0005	Pulse	0.5000	3
As	75	72	He	0.125	ppb	118.0	47.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.900	ppb	6.7	513.36	0.0135	Pulse	0.1000	3
Mo	98	115	He	0.128	ppb	21.9	263.34	0.0069	Pulse	0.1000	3
Ag	107	115	He	-0.008	ppb	N/A	3.33	0.0001	Pulse	0.1000	3
Cd	111	115	He	0.037	ppb	24.3	8.00	0.0002	Pulse	0.5000	3
Sn	120	115	He	-0.298	ppb	N/A	2126.88	0.0559	Pulse	0.1000	3
Sb	121	115	He	0.019	ppb	82.8	32.22	0.0008	Pulse	0.3000	3
Ba	137	115	He	2.811	ppb	19.2	606.70	0.0160	Pulse	0.1000	3
Tl	205	159	He	-0.011	ppb	N/A	46.67	0.0003	Pulse	0.1000	3
Pb	208	159	He	0.893	ppb	5.8	4707.13	0.0314	Pulse	0.1000	3
U	238	159	He	-0.003	ppb	N/A	103.34	0.0007	Pulse	0.1000	3

ISTD Table:

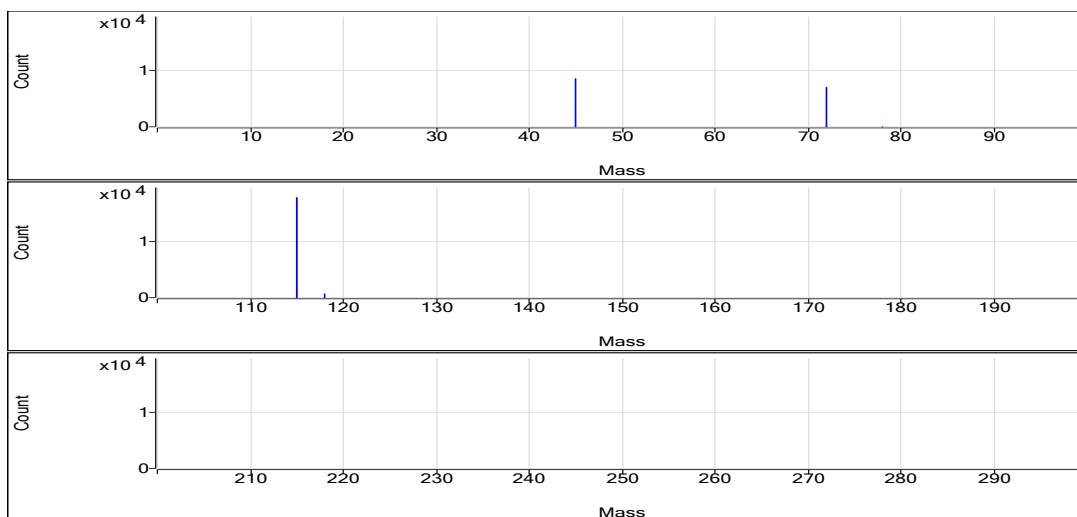
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1165381.10	0.7	89.2	Mix	0.1000	3
No Gas	Ge	72	610345.12	1.6	93.1	Pulse	0.1000	3
H2	Sc	45	85664.00	0.3	104.3	Pulse	0.1000	3
H2	Ge	72	70669.31	1.4	103.4	Pulse	0.1000	3
H2	In	115	178568.53	1.8	104.7	Pulse	0.1000	3
He	Sc	45	23814.56	2.6	93.0	Pulse	0.1000	3
He	Ge	72	43242.34	2.3	91.0	Pulse	0.1000	3
He	In	115	38052.59	2.2	92.9	Pulse	0.1000	3
He	Tb	159	150127.45	0.9	94.2	Pulse	0.1000	3
He	Bi	209	112627.15	1.3	96.3	Pulse	0.1000	3

No Gas

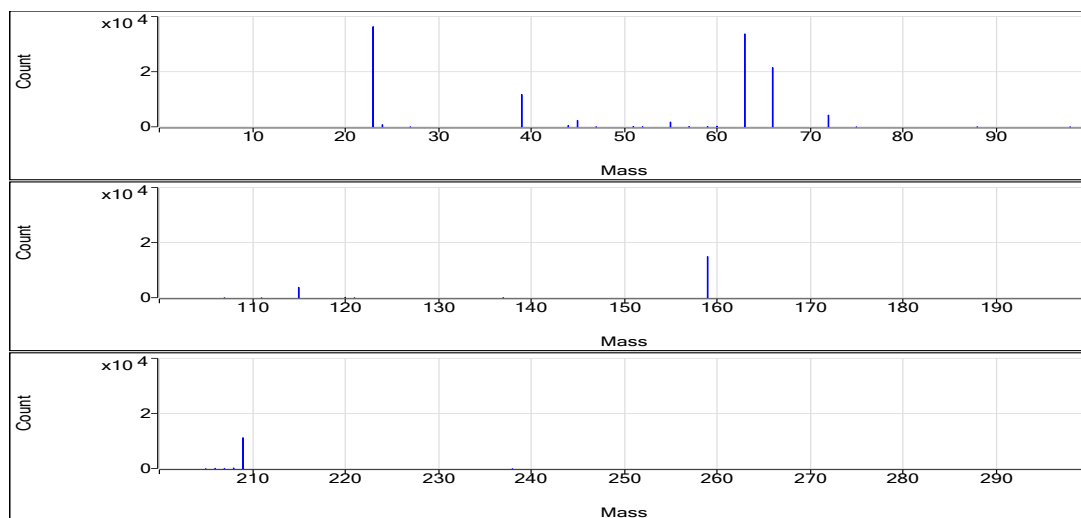


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	-0.002	0.0001	46.00	0.0011	7.835E-05
Be	9	1	No Gas	0.015	0.0001	58.00	0.0011	7.835E-05
Be	9	1	No Gas	0.015	0.0001	58.00	0.0011	7.835E-05
Se	78	2	H2	-0.033	0	0.67	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Na	23	3	He	4624.887	8.5721	363515.66	0.0018	0.1731
Na	23	3	He	4606.828	8.5393	367259.64	0.0018	0.1731
Na	23	3	He	4437.476	8.2317	364763.28	0.0018	0.1731
Mg	24	3	He	201.136	0.1908	8092.21	0.0009	0.006537
Mg	24	3	He	199.494	0.1893	8142.26	0.0009	0.006537
Mg	24	3	He	186.513	0.1774	7862.04	0.0009	0.006537
Al	27	3	He	12.345	0.0059	250.01	0.0003	0.00231
Al	27	3	He	16.064	0.007	300.01	0.0003	0.00231
Al	27	3	He	14.58	0.0065	290.01	0.0003	0.00231
K	39	3	He	377.398	0.6296	26697.61	0.0007	0.3475
K	39	3	He	247.914	0.5328	22913.87	0.0007	0.3475
K	39	3	He	176.878	0.4797	21255.71	0.0007	0.3475
Ca	44	3	He	553.327	0.025	1060.04	0	0.002807
Ca	44	3	He	524.899	0.0239	1026.04	0	0.002807
Ca	44	3	He	552.423	0.025	1106.05	0	0.002807
Ti	47	3	He	12.378	0.004	168.01	0.0003	0.0001123
Ti	47	3	He	6.966	0.0023	98.00	0.0003	0.0001123
Ti	47	3	He	6.896	0.0023	100.00	0.0003	0.0001123
V	51	3	He	-0.032	0.0079	334.01	0.0137	0.008308
V	51	3	He	0.103	0.0097	418.01	0.0137	0.008308
V	51	3	He	-0.027	0.0079	352.01	0.0137	0.008308
Cr	52	3	He	0.215	0.0252	1070.08	0.0171	0.02156
Cr	52	3	He	0.167	0.0244	1050.07	0.0171	0.02156
Cr	52	3	He	-0.099	0.0199	880.05	0.0171	0.02156
Mn	55	3	He	11.209	0.0841	3566.41	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	11.182	0.0839	3608.42	0.0073	0.002316
Mn	55	3	He	10.794	0.0811	3592.42	0.0073	0.002316
Fe	57	3	He	91.297	0.0323	1370.09	0.0003	0.002736
Fe	57	3	He	104.979	0.0367	1580.13	0.0003	0.002736
Fe	57	3	He	99.552	0.035	1550.13	0.0003	0.002736
Co	59	3	He	0.185	0.0081	342.01	0.0332	0.001922
Co	59	3	He	0.184	0.008	346.01	0.0332	0.001922
Co	59	3	He	0.145	0.0067	298.00	0.0332	0.001922
Ni	60	3	He	1.044	0.0129	546.01	0.0093	0.003141
Ni	60	3	He	1.139	0.0138	592.01	0.0093	0.003141
Ni	60	3	He	1.168	0.014	622.02	0.0093	0.003141
Cu	63	3	He	58.854	1.5938	67587.88	0.027	0.003732
Cu	63	3	He	58.506	1.5844	68142.12	0.027	0.003732
Cu	63	3	He	56.287	1.5245	67551.70	0.027	0.003732
Zn	66	3	He	324.876	1.0142	43008.97	0.0031	0.002032
Zn	66	3	He	324.65	1.0135	43588.47	0.0031	0.002032
Zn	66	3	He	311.884	0.9737	43147.29	0.0031	0.002032
As	75	3	He	0.141	0.0011	48.00	0.0025	0.0007733
As	75	3	He	-0.03	0.0007	30.00	0.0025	0.0007733
As	75	3	He	0.263	0.0014	64.00	0.0025	0.0007733
Sr	88	3	He	0.844	0.0129	480.02	0.0105	0.004071
Sr	88	3	He	0.963	0.0141	550.03	0.0105	0.004071
Sr	88	3	He	0.892	0.0134	510.02	0.0105	0.004071
Mo	98	3	He	0.097	0.0062	230.01	0.0234	0.003908
Mo	98	3	He	0.152	0.0075	290.01	0.0234	0.003908
Mo	98	3	He	0.136	0.0071	270.01	0.0234	0.003908
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Ag	107	3	He	-0.005	0.0003	10.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0.029	0.0002	6.00	0.0056	0
Cd	111	3	He	0.037	0.0002	8.00	0.0056	0
Cd	111	3	He	0.047	0.0003	10.00	0.0056	0
Sn	120	3	He	-0.393	0.0543	2020.19	0.0169	0.0609
Sn	120	3	He	-0.256	0.0566	2200.23	0.0169	0.0609
Sn	120	3	He	-0.245	0.0568	2160.22	0.0169	0.0609
Sb	121	3	He	0.005	0.0006	23.33	0.0161	0.0005433
Sb	121	3	He	0.035	0.0011	43.33	0.0161	0.0005433
Sb	121	3	He	0.015	0.0008	30.00	0.0161	0.0005433
Ba	137	3	He	3.346	0.0188	700.04	0.0053	0.001141
Ba	137	3	He	2.268	0.0131	510.02	0.0053	0.001141
Ba	137	3	He	2.82	0.016	610.03	0.0053	0.001141
Tl	205	3	He	-0.013	0.0003	40.00	0.0248	0.0005854
Tl	205	3	He	0.001	0.0006	90.00	0.0248	0.0005854
Tl	205	3	He	-0.021	0.0001	10.00	0.0248	0.0005854
Pb	208	3	He	0.845	0.0298	2380.26	0.0332	0.001693
Pb	208	3	He	0.887	0.0312	2600.31	0.0332	0.001693
Pb	208	3	He	0.947	0.0332	2510.33	0.0332	0.001693
U	238	3	He	-0.006	0.0006	90.00	0.0338	0.0007949
U	238	3	He	0.006	0.001	150.01	0.0338	0.0007949
U	238	3	He	-0.01	0.0005	70.00	0.0338	0.0007949
Sc	45	1	No Gas			1161907.25		
Sc	45	1	No Gas			1174091.47		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1160144.59		
Ge	72	1	No Gas			599397.26		
Ge	72	1	No Gas			618063.70		
Ge	72	1	No Gas			613574.40		
Sc	45	2	H2			85493.71		
Sc	45	2	H2			85975.58		
Sc	45	2	H2			85522.72		
Ge	72	2	H2			71128.12		
Ge	72	2	H2			69521.12		
Ge	72	2	H2			71358.70		
In	115	2	H2			178806.44		
In	115	2	H2			175167.79		
In	115	2	H2			181731.36		
Sc	45	3	He			23297.23		
Sc	45	3	He			24508.91		
Sc	45	3	He			23637.55		
Ge	72	3	He			42406.93		
Ge	72	3	He			43008.24		
Ge	72	3	He			44311.84		
In	115	3	He			37235.23		
In	115	3	He			38899.76		
In	115	3	He			38067.45		
Tb	159	3	He			151236.42		
Tb	159	3	He			150496.51		
Tb	159	3	He			148649.41		
Bi	209	3	He			114316.23		
Bi	209	3	He			111989.12		
Bi	209	3	He			111576.11		

Quantitation Report

Data File Name 314_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time 8/11/2025 11:45:32 PM
Sample Name CCV 8205653
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins23851
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 8/11/2025 4:01:42 PM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

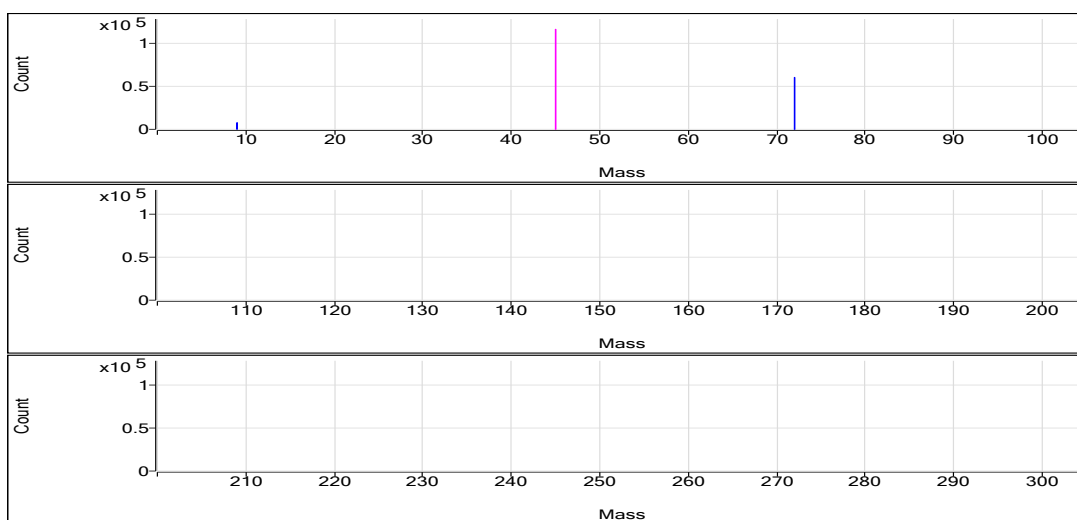
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	24.198	ppb	5.4	15650.64	0.0258	Pulse	0.5000	3
Se	78	72	H2	24.470	ppb	3.0	880.69	0.0124	Pulse	1.5000	3
Na	23	72	He	2448.911	ppb	1.4	198100.51	4.6204	Pulse	0.1000	3
Mg	24	72	He	2398.342	ppb	0.7	94497.68	2.2040	Pulse	0.1000	3
Al	27	72	He	2380.807	ppb	1.0	29747.11	0.6938	Pulse	0.1000	3
K	39	72	He	2429.678	ppb	4.1	92747.63	2.1635	Pulse	0.5000	3
Ca	44	72	He	2394.640	ppb	1.9	4237.90	0.0988	Pulse	0.5000	3
Ti	47	72	He	2421.328	ppb	1.2	32291.04	0.7531	Pulse	0.5000	3
V	51	72	He	242.167	ppb	0.0	142189.57	3.3161	Pulse	0.5000	3
Cr	52	72	He	240.053	ppb	0.5	176793.14	4.1232	Pulse	0.1000	3
Mn	55	72	He	241.742	ppb	0.9	75722.58	1.7661	Pulse	0.5000	3
Fe	57	72	He	2421.169	ppb	1.2	33742.41	0.7870	Pulse	0.1000	3
Co	59	72	He	241.739	ppb	0.8	344440.88	8.0333	Pulse	0.5000	3
Ni	60	72	He	240.888	ppb	0.5	96480.58	2.2502	Pulse	0.5000	3
Cu	63	72	He	242.239	ppb	0.9	280768.01	6.5484	Pulse	0.5000	3
Zn	66	72	He	241.186	ppb	0.4	32306.17	0.7535	Pulse	0.5000	3
As	75	72	He	241.137	ppb	1.0	26398.33	0.6156	Pulse	0.5000	3
Sr	88	115	He	24.658	ppb	6.3	9866.72	0.2620	Pulse	0.1000	3
Mo	98	115	He	24.971	ppb	4.4	22156.22	0.5881	Pulse	0.1000	3
Ag	107	115	He	25.287	ppb	5.0	46978.20	1.2473	Pulse	0.1000	3
Cd	111	115	He	24.966	ppb	3.1	5278.92	0.1401	Pulse	0.5000	3
Sn	120	115	He	25.243	ppb	4.1	18348.17	0.4870	Pulse	0.1000	3
Sb	121	115	He	24.939	ppb	2.9	15173.08	0.4026	Pulse	0.3000	3
Ba	137	115	He	247.546	ppb	3.5	49289.93	1.3082	Pulse	0.1000	3
Tl	205	159	He	24.929	ppb	1.0	91965.76	0.6182	Pulse	0.1000	3
Pb	208	159	He	24.967	ppb	0.9	123661.51	0.8313	Pulse	0.1000	3
U	238	159	He	25.205	ppb	0.7	126671.57	0.8516	Pulse	0.1000	3

ISTD Table:

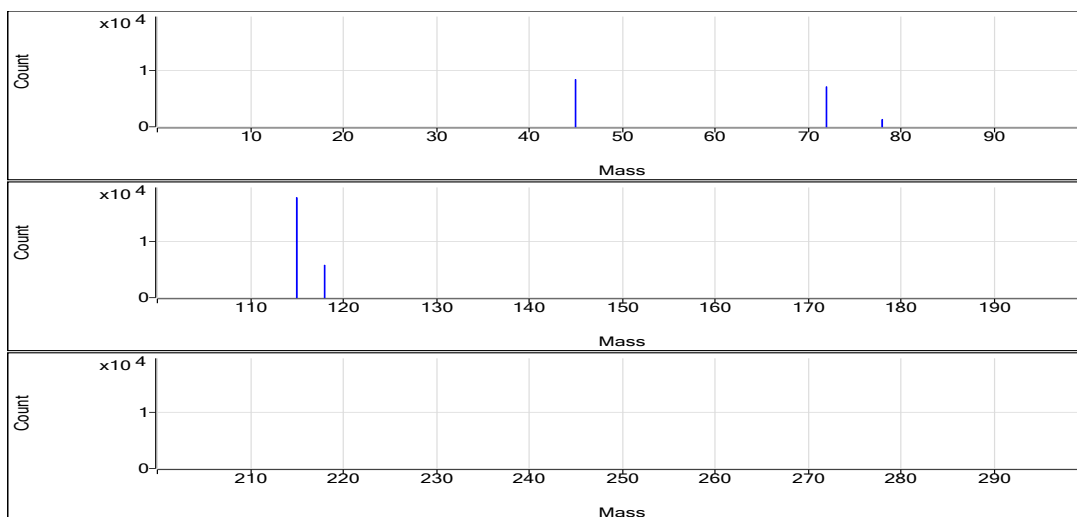
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1169894.15	0.7	89.5	Mix	0.1000	3
No Gas	Ge	72	607304.51	1.2	92.7	Pulse	0.1000	3
H2	Sc	45	83723.84	1.0	101.9	Pulse	0.1000	3
H2	Ge	72	70853.65	1.5	103.7	Pulse	0.1000	3
H2	In	115	176978.25	0.5	103.7	Pulse	0.1000	3
He	Sc	45	23083.46	2.9	90.1	Pulse	0.1000	3
He	Ge	72	42877.99	0.8	90.2	Pulse	0.1000	3
He	In	115	37708.51	3.5	92.1	Pulse	0.1000	3
He	Tb	159	148749.80	0.6	93.3	Pulse	0.1000	3
He	Bi	209	109073.72	1.0	93.3	Pulse	0.1000	3

No Gas

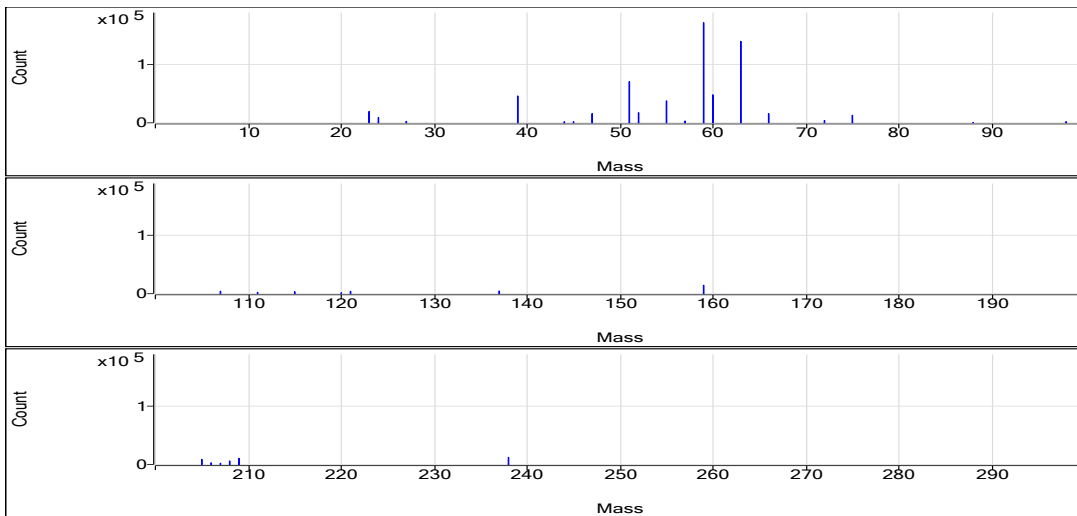


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	23.251	0.0248	15164.87	0.0011	7.835E-05
Be	9	1	No Gas	23.654	0.0252	15391.06	0.0011	7.835E-05
Be	9	1	No Gas	25.687	0.0274	16395.99	0.0011	7.835E-05
Se	78	2	H2	24.579	0.0125	892.69	0.0005	2.594E-05
Se	78	2	H2	23.686	0.012	837.36	0.0005	2.594E-05
Se	78	2	H2	25.144	0.0128	912.03	0.0005	2.594E-05
Na	23	3	He	2481.579	4.6797	198731.95	0.0018	0.1731
Na	23	3	He	2411.376	4.5522	196240.37	0.0018	0.1731
Na	23	3	He	2453.777	4.6292	199329.22	0.0018	0.1731
Mg	24	3	He	2416.39	2.2205	94296.73	0.0009	0.006537
Mg	24	3	He	2380.55	2.1877	94306.71	0.0009	0.006537
Mg	24	3	He	2398.088	2.2037	94889.60	0.0009	0.006537
Al	27	3	He	2404.651	0.7007	29757.26	0.0003	0.00231
Al	27	3	He	2358.296	0.6873	29626.73	0.0003	0.00231
Al	27	3	He	2379.474	0.6934	29857.34	0.0003	0.00231
K	39	3	He	2545.255	2.2499	95543.88	0.0007	0.3475
K	39	3	He	2366.221	2.116	91219.77	0.0007	0.3475
K	39	3	He	2377.559	2.1245	91479.23	0.0007	0.3475
Ca	44	3	He	2412.964	0.0996	4228.57	0	0.002807
Ca	44	3	He	2426.9	0.1001	4316.59	0	0.002807
Ca	44	3	He	2344.058	0.0968	4168.55	0	0.002807
Ti	47	3	He	2443.657	0.7601	32277.64	0.0003	0.0001123
Ti	47	3	He	2387.681	0.7427	32015.18	0.0003	0.0001123
Ti	47	3	He	2432.646	0.7566	32580.29	0.0003	0.0001123
V	51	3	He	242.228	3.317	140860.91	0.0137	0.008308
V	51	3	He	242.132	3.3157	142933.55	0.0137	0.008308
V	51	3	He	242.142	3.3158	142774.25	0.0137	0.008308
Cr	52	3	He	240.074	4.1235	175112.34	0.0171	0.02156
Cr	52	3	He	238.921	4.1038	176910.58	0.0171	0.02156
Cr	52	3	He	241.164	4.1422	178356.50	0.0171	0.02156
Mn	55	3	He	244.249	1.7844	75776.66	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	240.198	1.7548	75648.25	0.0073	0.002316
Mn	55	3	He	240.778	1.7591	75742.84	0.0073	0.002316
Fe	57	3	He	2454.99	0.7979	33886.15	0.0003	0.002736
Fe	57	3	He	2398.188	0.7795	33605.28	0.0003	0.002736
Fe	57	3	He	2410.33	0.7835	33735.79	0.0003	0.002736
Co	59	3	He	243.073	8.0776	343027.78	0.0332	0.001922
Co	59	3	He	239.468	7.9578	343050.34	0.0332	0.001922
Co	59	3	He	242.677	8.0644	347244.53	0.0332	0.001922
Ni	60	3	He	241.574	2.2566	95828.02	0.0093	0.003141
Ni	60	3	He	239.476	2.237	96433.33	0.0093	0.003141
Ni	60	3	He	241.614	2.2569	97180.40	0.0093	0.003141
Cu	63	3	He	244.318	6.6045	280471.59	0.027	0.003732
Cu	63	3	He	239.912	6.4855	279580.44	0.027	0.003732
Cu	63	3	He	242.486	6.555	282252.00	0.027	0.003732
Zn	66	3	He	242.086	0.7563	32115.76	0.0031	0.002032
Zn	66	3	He	241.112	0.7532	32470.47	0.0031	0.002032
Zn	66	3	He	240.361	0.7509	32332.29	0.0031	0.002032
As	75	3	He	239.74	0.6121	25992.98	0.0025	0.0007733
As	75	3	He	243.856	0.6226	26838.39	0.0025	0.0007733
As	75	3	He	239.815	0.6123	26363.61	0.0025	0.0007733
Sr	88	3	He	26.052	0.2766	10203.59	0.0105	0.004071
Sr	88	3	He	22.967	0.2443	9583.17	0.0105	0.004071
Sr	88	3	He	24.954	0.2651	9813.39	0.0105	0.004071
Mo	98	3	He	25.147	0.5922	21845.84	0.0234	0.003908
Mo	98	3	He	23.804	0.5608	21995.88	0.0234	0.003908
Mo	98	3	He	25.962	0.6113	22626.94	0.0234	0.003908
Ag	107	3	He	26.164	1.2905	47603.72	0.0493	0.0004851
Ag	107	3	He	23.844	1.1761	46129.42	0.0493	0.0004851
Ag	107	3	He	25.854	1.2752	47201.47	0.0493	0.0004851
Cd	111	3	He	25.272	0.1418	5230.91	0.0056	0
Cd	111	3	He	24.086	0.1352	5300.93	0.0056	0
Cd	111	3	He	25.541	0.1433	5304.93	0.0056	0
Sn	120	3	He	25.529	0.4918	18141.27	0.0169	0.0609
Sn	120	3	He	24.098	0.4676	18341.53	0.0169	0.0609
Sn	120	3	He	26.102	0.5015	18561.72	0.0169	0.0609
Sb	121	3	He	25.542	0.4124	15210.87	0.0161	0.0005433
Sb	121	3	He	24.151	0.3899	15294.30	0.0161	0.0005433
Sb	121	3	He	25.124	0.4056	15014.07	0.0161	0.0005433
Ba	137	3	He	252.493	1.3343	49219.67	0.0053	0.001141
Ba	137	3	He	237.648	1.2559	49259.80	0.0053	0.001141
Ba	137	3	He	252.496	1.3343	49390.31	0.0053	0.001141
Tl	205	3	He	24.708	0.6128	90611.12	0.0248	0.0005854
Tl	205	3	He	25.21	0.6252	93025.59	0.0248	0.0005854
Tl	205	3	He	24.869	0.6168	92260.58	0.0248	0.0005854
Pb	208	3	He	24.772	0.8248	62614.92	0.0332	0.001693
Pb	208	3	He	24.906	0.8293	64874.79	0.0332	0.001693
Pb	208	3	He	25.224	0.8398	65748.21	0.0332	0.001693
U	238	3	He	25.021	0.8453	125001.96	0.0338	0.0007949
U	238	3	He	25.206	0.8516	126708.93	0.0338	0.0007949
U	238	3	He	25.387	0.8577	128303.83	0.0338	0.0007949
Sc	45	1	No Gas			1177174.83		
Sc	45	1	No Gas			1171994.59		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1160513.03		
Ge	72	1	No Gas			612074.01		
Ge	72	1	No Gas			610652.18		
Ge	72	1	No Gas			599187.33		
Sc	45	2	H2			84085.68		
Sc	45	2	H2			82799.09		
Sc	45	2	H2			84286.76		
Ge	72	2	H2			71519.86		
Ge	72	2	H2			69611.38		
Ge	72	2	H2			71429.71		
In	115	2	H2			177948.12		
In	115	2	H2			176059.12		
In	115	2	H2			176927.52		
Sc	45	3	He			23777.67		
Sc	45	3	He			22455.86		
Sc	45	3	He			23016.85		
Ge	72	3	He			42466.59		
Ge	72	3	He			43108.60		
Ge	72	3	He			43058.77		
In	115	3	He			37014.96		
In	115	3	He			39350.56		
In	115	3	He			37145.33		
Tb	159	3	He			147871.38		
Tb	159	3	He			148788.68		
Tb	159	3	He			149589.33		
Bi	209	3	He			108330.95		
Bi	209	3	He			110286.58		
Bi	209	3	He			108603.62		

Quantitation Report

Data File Name	316_CCB.d
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\25H11A00.b
Acq Time	8/11/2025 11:49:57 PM
Sample Name	CCB 8061842
Sample Type	CCB
Comment	---
Prep Dilution	1.0000
Auto Dilution	1.0000
Total Dilution	1.0000
Operator Name	us19_usr_ins23851
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	8/11/2025 4:01:42 PM
Bkg File	---
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	---
VIS Fit	Point to Point

FullQuant Table

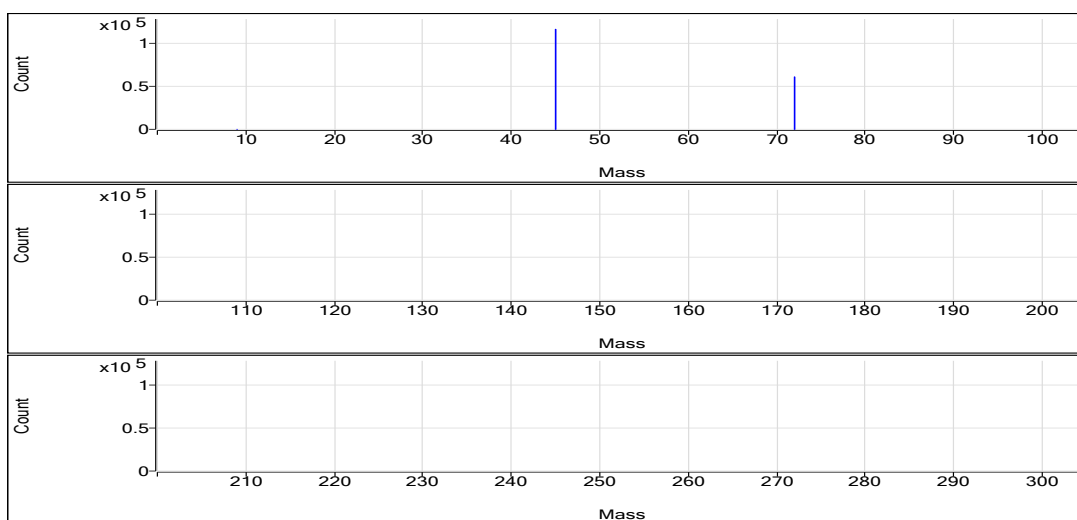
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	72	No Gas	-0.004	ppb	N/A	45.33	0.0001	Pulse	0.5000	3
Se	78	72	H2	-0.019	ppb	N/A	1.11	0.0000	Pulse	1.5000	3
Na	23	72	He	6.435	ppb	31.1	8075.55	0.1847	Pulse	0.1000	3
Mg	24	72	He	2.770	ppb	45.8	396.68	0.0091	Pulse	0.1000	3
Al	27	72	He	-4.539	ppb	N/A	43.33	0.0010	Pulse	0.1000	3
K	39	72	He	19.076	ppb	438.2	15797.76	0.3617	Pulse	0.5000	3
Ca	44	72	He	-13.368	ppb	N/A	99.33	0.0023	Pulse	0.5000	3
Ti	47	72	He	0.227	ppb	170.7	8.00	0.0002	Pulse	0.5000	3
V	51	72	He	0.016	ppb	129.7	372.68	0.0085	Pulse	0.5000	3
Cr	52	72	He	-0.199	ppb	N/A	793.38	0.0182	Pulse	0.1000	3
Mn	55	72	He	0.055	ppb	52.7	118.67	0.0027	Pulse	0.5000	3
Fe	57	72	He	-0.200	ppb	N/A	116.67	0.0027	Pulse	0.1000	3
Co	59	72	He	0.003	ppb	388.4	88.00	0.0020	Pulse	0.5000	3
Ni	60	72	He	-0.005	ppb	N/A	135.33	0.0031	Pulse	0.5000	3
Cu	63	72	He	-0.026	ppb	N/A	132.67	0.0030	Pulse	0.5000	3
Zn	66	72	He	-0.236	ppb	N/A	56.67	0.0013	Pulse	0.5000	3
As	75	72	He	0.056	ppb	167.1	40.00	0.0009	Pulse	0.5000	3
Sr	88	115	He	-0.128	ppb	N/A	100.00	0.0027	Pulse	0.1000	3
Mo	98	115	He	-0.025	ppb	N/A	123.34	0.0033	Pulse	0.1000	3
Ag	107	115	He	-0.002	ppb	N/A	13.33	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.003	ppb	173.2	0.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.003	ppb	10824.0	2250.25	0.0609	Pulse	0.1000	3
Sb	121	115	He	0.018	ppb	130.2	31.11	0.0008	Pulse	0.3000	3
Ba	137	115	He	0.022	ppb	99.3	46.67	0.0013	Pulse	0.1000	3
Tl	205	159	He	0.012	ppb	140.2	126.67	0.0009	Pulse	0.1000	3
Pb	208	159	He	-0.023	ppb	N/A	133.33	0.0009	Pulse	0.1000	3
U	238	159	He	-0.007	ppb	N/A	83.33	0.0006	Pulse	0.1000	3

ISTD Table:

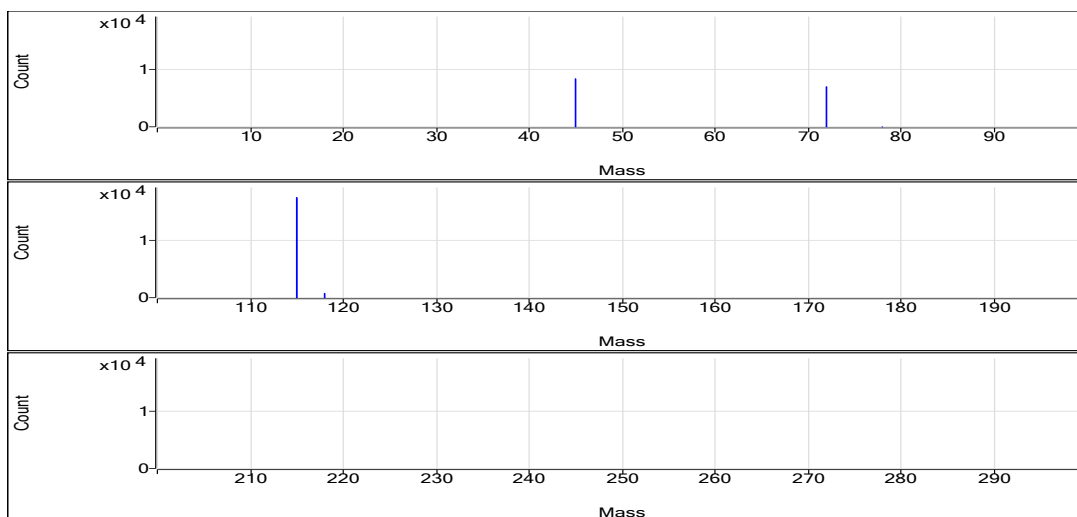
Quantitation Report

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1163711.99	0.7	89.0	Pulse	0.1000	3
No Gas	Ge	72	609972.12	1.0	93.1	Pulse	0.1000	3
H2	Sc	45	83281.87	2.3	101.4	Pulse	0.1000	3
H2	Ge	72	69524.14	1.2	101.7	Pulse	0.1000	3
H2	In	115	173654.29	1.1	101.8	Pulse	0.1000	3
He	Sc	45	22666.24	2.7	88.5	Pulse	0.1000	3
He	Ge	72	43710.21	0.8	92.0	Pulse	0.1000	3
He	In	115	36999.16	4.1	90.4	Pulse	0.1000	3
He	Tb	159	144602.70	2.0	90.7	Pulse	0.1000	3
He	Bi	209	108180.47	1.0	92.5	Pulse	0.1000	3

No Gas

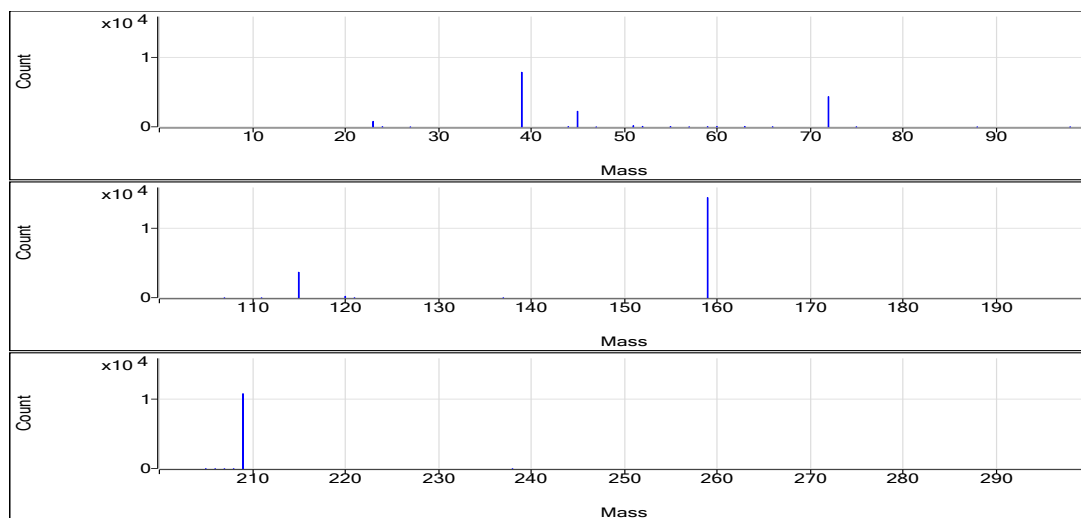


H2



Quantitation Report

He



Replicate:

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Be	9	1	No Gas	0.012	0.0001	56.00	0.0011	7.835E-05
Be	9	1	No Gas	-0.025	0.0001	32.00	0.0011	7.835E-05
Be	9	1	No Gas	0.001	0.0001	48.00	0.0011	7.835E-05
Se	78	2	H2	-0.051	0	0.00	0.0005	2.594E-05
Se	78	2	H2	-0.013	0	1.33	0.0005	2.594E-05
Se	78	2	H2	0.006	0	2.00	0.0005	2.594E-05
Na	23	3	He	4.198	0.1807	7832.09	0.0018	0.1731
Na	23	3	He	8.047	0.1877	8212.27	0.0018	0.1731
Na	23	3	He	7.06	0.1859	8182.29	0.0018	0.1731
Mg	24	3	He	3.188	0.0095	410.02	0.0009	0.006537
Mg	24	3	He	1.345	0.0078	340.01	0.0009	0.006537
Mg	24	3	He	3.775	0.01	440.02	0.0009	0.006537
Al	27	3	He	-3.982	0.0012	50.00	0.0003	0.00231
Al	27	3	He	-5.593	0.0007	30.00	0.0003	0.00231
Al	27	3	He	-4.043	0.0011	50.00	0.0003	0.00231
K	39	3	He	112.085	0.4313	18694.67	0.0007	0.3475
K	39	3	He	-5.109	0.3437	15038.90	0.0007	0.3475
K	39	3	He	-49.747	0.3103	13659.70	0.0007	0.3475
Ca	44	3	He	-26.27	0.0018	76.00	0	0.002807
Ca	44	3	He	-3.888	0.0027	116.00	0	0.002807
Ca	44	3	He	-9.944	0.0024	106.00	0	0.002807
Ti	47	3	He	0.381	0.0002	10.00	0.0003	0.0001123
Ti	47	3	He	-0.214	0	2.00	0.0003	0.0001123
Ti	47	3	He	0.516	0.0003	12.00	0.0003	0.0001123
V	51	3	He	-0.004	0.0083	358.01	0.0137	0.008308
V	51	3	He	0.038	0.0088	386.01	0.0137	0.008308
V	51	3	He	0.014	0.0085	374.01	0.0137	0.008308
Cr	52	3	He	-0.074	0.0203	880.05	0.0171	0.02156
Cr	52	3	He	-0.259	0.0171	750.04	0.0171	0.02156
Cr	52	3	He	-0.265	0.017	750.04	0.0171	0.02156
Mn	55	3	He	0.043	0.0026	114.00	0.0073	0.002316

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Mn	55	3	He	0.033	0.0026	112.00	0.0073	0.002316
Mn	55	3	He	0.087	0.003	130.00	0.0073	0.002316
Fe	57	3	He	0.813	0.003	130.00	0.0003	0.002736
Fe	57	3	He	0.02	0.0027	120.00	0.0003	0.002736
Fe	57	3	He	-1.432	0.0023	100.00	0.0003	0.002736
Co	59	3	He	-0.004	0.0018	78.00	0.0332	0.001922
Co	59	3	He	0.015	0.0024	106.00	0.0332	0.001922
Co	59	3	He	-0.003	0.0018	80.00	0.0332	0.001922
Ni	60	3	He	0.029	0.0034	148.00	0.0093	0.003141
Ni	60	3	He	-0.038	0.0028	122.00	0.0093	0.003141
Ni	60	3	He	-0.006	0.0031	136.00	0.0093	0.003141
Cu	63	3	He	-0.022	0.0031	136.00	0.027	0.003732
Cu	63	3	He	-0.038	0.0027	118.00	0.027	0.003732
Cu	63	3	He	-0.017	0.0033	144.00	0.027	0.003732
Zn	66	3	He	-0.149	0.0016	68.00	0.0031	0.002032
Zn	66	3	He	-0.271	0.0012	52.00	0.0031	0.002032
Zn	66	3	He	-0.288	0.0011	50.00	0.0031	0.002032
As	75	3	He	0.004	0.0008	34.00	0.0025	0.0007733
As	75	3	He	0.163	0.0012	52.00	0.0025	0.0007733
As	75	3	He	0	0.0008	34.00	0.0025	0.0007733
Sr	88	3	He	-0.039	0.0037	130.00	0.0105	0.004071
Sr	88	3	He	-0.105	0.003	110.00	0.0105	0.004071
Sr	88	3	He	-0.24	0.0016	60.00	0.0105	0.004071
Mo	98	3	He	-0.071	0.0023	80.00	0.0234	0.003908
Mo	98	3	He	0.006	0.0041	150.01	0.0234	0.003908
Mo	98	3	He	-0.012	0.0036	140.01	0.0234	0.003908
Ag	107	3	He	0.002	0.0006	20.00	0.0493	0.0004851
Ag	107	3	He	0.001	0.0005	20.00	0.0493	0.0004851
Ag	107	3	He	-0.01	0	0.00	0.0493	0.0004851
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0	0	0.00	0.0056	0
Cd	111	3	He	0.009	0.0001	2.00	0.0056	0
Sn	120	3	He	0.248	0.0651	2310.25	0.0169	0.0609
Sn	120	3	He	0.074	0.0622	2300.27	0.0169	0.0609
Sn	120	3	He	-0.314	0.0556	2140.22	0.0169	0.0609
Sb	121	3	He	0.019	0.0008	30.00	0.0161	0.0005433
Sb	121	3	He	-0.006	0.0005	16.67	0.0161	0.0005433
Sb	121	3	He	0.041	0.0012	46.67	0.0161	0.0005433
Ba	137	3	He	-0.003	0.0011	40.00	0.0053	0.001141
Ba	137	3	He	0.04	0.0014	50.00	0.0053	0.001141
Ba	137	3	He	0.03	0.0013	50.00	0.0053	0.001141
Tl	205	3	He	-0.002	0.0005	80.00	0.0248	0.0005854
Tl	205	3	He	0.031	0.0013	190.01	0.0248	0.0005854
Tl	205	3	He	0.007	0.0008	110.00	0.0248	0.0005854
Pb	208	3	He	-0.028	0.0008	50.00	0.0332	0.001693
Pb	208	3	He	-0.013	0.0013	100.00	0.0332	0.001693
Pb	208	3	He	-0.028	0.0008	80.00	0.0332	0.001693
U	238	3	He	-0.009	0.0005	70.00	0.0338	0.0007949
U	238	3	He	-0.011	0.0004	60.00	0.0338	0.0007949
U	238	3	He	0.001	0.0008	120.00	0.0338	0.0007949
Sc	45	1	No Gas			1165467.95		
Sc	45	1	No Gas			1170702.87		

Quantitation Report

Name	Mass	Tune Step	Tune Mode	Calc Conc.	Ratio	CPS	a	b (blank)
Sc	45	1	No Gas			1154965.14		
Ge	72	1	No Gas			612359.95		
Ge	72	1	No Gas			614331.94		
Ge	72	1	No Gas			603224.48		
Sc	45	2	H2			84448.16		
Sc	45	2	H2			84356.71		
Sc	45	2	H2			81040.74		
Ge	72	2	H2			70425.05		
Ge	72	2	H2			68887.74		
Ge	72	2	H2			69259.64		
In	115	2	H2			174235.74		
In	115	2	H2			171537.38		
In	115	2	H2			175189.76		
Sc	45	3	He			22455.92		
Sc	45	3	He			23357.31		
Sc	45	3	He			22185.48		
Ge	72	3	He			43349.25		
Ge	72	3	He			43760.50		
Ge	72	3	He			44020.89		
In	115	3	He			35511.43		
In	115	3	He			37024.99		
In	115	3	He			38508.31		
Tb	159	3	He			146325.48		
Tb	159	3	He			141186.15		
Tb	159	3	He			146296.46		
Bi	209	3	He			107595.81		
Bi	209	3	He			109480.10		
Bi	209	3	He			107465.50		

Shipping and Receiving Documents

HWMU5 Appendix - J
Radford Army Ammunition Plant (RFAAP)
Groundwater Corrective Action Semiannual Monitoring Event

ANALYTICAL METHOD: 8260D/5030C
TYPE METHOD: GCMS
CLASS: VOLATILE



Appendix – J Target Analyte List

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL
1.	Trichloroethene	79-01-6	1	0.3
2.	1,1-Dichloroethene	75-35-4	1	0.2
3.	Cis-1,2-Dichloroethene	156-59-2	1	0.1
4.	Trans-1,2-Dichloroethene	156-60-5	1	0.8
5.	Vinyl Chloride	75-01-4	1	0.2

JCF 9-13-2021 – revised to reflect 2021 Class 1 Permit Mod
JCF 6-30-2022 – correct list

JCF 6.25.25 it ✓ JWC

25 ml purge volume

*OK JWC
page 2/2
6.25.25*

Login Sample Receipt Checklist

Client: TRC, Engineers, Inc.

Job Number: 410-234463-1

Login Number: 234463

List Number: 1

Creator: Santiago, Nathaniel

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(<=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (<=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



Certifies that

**VA Laboratory ID#: 460182
Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601**

Owner: EUROFINS LANCASTER LABORATORIES ENVIRONMENT TESTING, LLC
Responsible Official: RICHARD KARAM

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2016 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

Certificate # 13605

Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)
Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

AIR

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 18	TOTAL GASEOUS ORGANIC COMPOUNDS	LA DEQ
EPA TO-15 2nd Ed.	1,1,1-TRICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	LA DEQ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,2,4-TRICHLOROBENZENE	LA DEQ
EPA TO-15 2nd Ed.	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE (FREON-114)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	LA DEQ
EPA TO-15 2nd Ed.	1,3,5-TRIMETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	LA DEQ
EPA TO-15 2nd Ed.	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	LA DEQ
EPA TO-15 2nd Ed.	ACROLEIN (PROPENAL)	LA DEQ
EPA TO-15 2nd Ed.	ALLYL CHLORIDE (3-CHLOROPROPENE)	LA DEQ
EPA TO-15 2nd Ed.	BENZYL CHLORIDE	LA DEQ
EPA TO-15 2nd Ed.	BROMOFORM	LA DEQ
EPA TO-15 2nd Ed.	CARBON TETRACHLORIDE	LA DEQ
EPA TO-15 2nd Ed.	CHLORODIBROMOMETHANE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROFORM	LA DEQ
EPA TO-15 2nd Ed.	CIS-1,3-DICHLOROPROPENE	LA DEQ
EPA TO-15 2nd Ed.	DICHLORODIFLUOROMETHANE (FREON-12)	LA DEQ
EPA TO-15 2nd Ed.	ETHYL ACRYLATE	LA DEQ
EPA TO-15 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	LA DEQ
EPA TO-15 2nd Ed.	IODOMETHANE (METHYL IODIDE)	LA DEQ
EPA TO-15 2nd Ed.	M+P-XYLENE	LA DEQ
EPA TO-15 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	METHYL TERT-BUTYL ETHER (MTBE)	LA DEQ
EPA TO-15 2nd Ed.	N-HEPTANE	LA DEQ
EPA TO-15 2nd Ed.	O-XYLENE	LA DEQ
EPA TO-15 2nd Ed.	STYRENE	LA DEQ

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 25	TOTAL GASEOUS NONMETHANE ORGANIC COMPOUNDS (TGNMO)	LA DEQ
EPA TO-15 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1,2-TRICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	1,2,4-TRIMETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROPROPANE	LA DEQ
EPA TO-15 2nd Ed.	1,3-BUTADIENE	LA DEQ
EPA TO-15 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	LA DEQ
EPA TO-15 2nd Ed.	ACETONITRILE	LA DEQ
EPA TO-15 2nd Ed.	ACRYLONITRILE	LA DEQ
EPA TO-15 2nd Ed.	BENZENE	LA DEQ
EPA TO-15 2nd Ed.	BROMODICHLOROMETHANE	LA DEQ
EPA TO-15 2nd Ed.	CARBON DISULFIDE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROBENZENE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	LA DEQ
EPA TO-15 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	CYCLOHEXANE	LA DEQ
EPA TO-15 2nd Ed.	ETHYL ACETATE	LA DEQ
EPA TO-15 2nd Ed.	ETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	HEXACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	ISOPROPYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	METHYL METHACRYLATE	LA DEQ
EPA TO-15 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	N-HEXANE	LA DEQ
EPA TO-15 2nd Ed.	PROPYLENE (PROPENE)	LA DEQ

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

AIR

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA TO-15 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	LA DEQ
EPA TO-15 2nd Ed.	TOLUENE	LA DEQ
EPA TO-15 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	LA DEQ
EPA TO-15 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHOROMETHANE, FREON 11)	LA DEQ
EPA TO-15 2nd Ed.	VINYL BROMIDE (BROMOETHENE)	LA DEQ
EPA TO-15 2nd Ed.	XYLENE (TOTAL)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	2-CHLOROTOLUENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	4-ETHYLTOLUENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ACETONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	DIISOPROPYLETHYER (DIPE, ISOPROPYL ETHER)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ETHANOL	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ISOOCTANE (2,2,4-TRIMETHYLPENTANE)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	N-BUTYLBENZENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	N-PENTANE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	NAPHTHALENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	TERT-AMYL METHYL ETHER (TAME)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	TERT-BUTYLBENZENE	LA DEQ

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA TO-15 2nd Ed.	TETRAHYDROFURAN (THF)	LA DEQ
EPA TO-15 2nd Ed.	TRANS-1,2-DICHLOROETHENE	LA DEQ
EPA TO-15 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	LA DEQ
EPA TO-15 2nd Ed.	VINYL ACETATE	LA DEQ
EPA TO-15 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	1,1,1,2-TETRACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	2-HEXANONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	CHLORODIFLUOROMETHANE (FREON-22)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ETHYL-T-BUTYLETHYER (2-ETHOXY-2-METHYLPROPANE, ETBE)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	N-OCTANE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	N-PROPYLBENZENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	SEC-BUTYLBENZENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	LA DEQ

DRINKING WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZO- P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 200.7 REV 4.4	BARIUM	PA
EPA 200.7 REV 4.4	CHROMIUM	PA
EPA 200.7 REV 4.4	IRON	PA
EPA 200.7 REV 4.4	MANGANESE	PA
EPA 200.7 REV 4.4	SILVER	PA
EPA 200.7 REV 4.4	ZINC	PA
EPA 200.8 REV 5.4	ANTIMONY	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 180.1 REV 2	TURBIDITY	PA
EPA 200.7 REV 4.4	CALCIUM	PA
EPA 200.7 REV 4.4	COPPER	PA
EPA 200.7 REV 4.4	MAGNESIUM	PA
EPA 200.7 REV 4.4	NICKEL	PA
EPA 200.7 REV 4.4	SODIUM	PA
EPA 200.8 REV 5.4	ALUMINUM	PA
EPA 200.8 REV 5.4	ARSENIC	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

DRINKING WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4	BARIUM	PA	EPA 200.8 REV 5.4	BERYLLIUM	PA
EPA 200.8 REV 5.4	CADMIUM	PA	EPA 200.8 REV 5.4	CHROMIUM	PA
EPA 200.8 REV 5.4	COPPER	PA	EPA 200.8 REV 5.4	IRON	PA
EPA 200.8 REV 5.4	LEAD	PA	EPA 200.8 REV 5.4	MANGANESE	PA
EPA 200.8 REV 5.4	NICKEL	PA	EPA 200.8 REV 5.4	SELENIUM	PA
EPA 200.8 REV 5.4	SODIUM	PA	EPA 200.8 REV 5.4	THALLIUM	PA
EPA 200.8 REV 5.4	ZINC	PA	EPA 245.1 REV 3	MERCURY	PA
EPA 300.0 REV 2.1	CHLORIDE	PA	EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA	EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA	EPA 335.4 REV 1.0	CYANIDE	PA
EPA 353.2 REV 2	NITRATE AS N	PA	EPA 353.2 REV 2	NITRATE-NITRITE AS N	PA
EPA 353.2 REV 2	NITRITE AS N	PA	EPA 524.2 REV 4.1	1,1,1-TRICHLOROETHANE	PA
EPA 524.2 REV 4.1	1,1,2-TRICHLOROETHANE	PA	EPA 524.2 REV 4.1	1,1-DICHLOROETHYLENE	PA
EPA 524.2 REV 4.1	1,2,4-TRICHLOROBENZENE	PA	EPA 524.2 REV 4.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 524.2 REV 4.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 524.2 REV 4.1	1,2-DICHLOROPROPANE	PA
EPA 524.2 REV 4.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 524.2 REV 4.1	BENZENE	PA
EPA 524.2 REV 4.1	BROMODICHLOROMETHANE	PA	EPA 524.2 REV 4.1	BROMOFORM	PA
EPA 524.2 REV 4.1	CARBON TETRACHLORIDE	PA	EPA 524.2 REV 4.1	CHLOROBENZENE	PA
EPA 524.2 REV 4.1	CHLORODIBROMOMETHANE	PA	EPA 524.2 REV 4.1	CHLOROFORM	PA
EPA 524.2 REV 4.1	CIS-1,2-DICHLOROETHYLENE	PA	EPA 524.2 REV 4.1	ETHYLBENZENE	PA
EPA 524.2 REV 4.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 524.2 REV 4.1	STYRENE	PA
EPA 524.2 REV 4.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 524.2 REV 4.1	TOLUENE	PA
EPA 524.2 REV 4.1	TOTAL TRIHALOMETHANES (TTHMS)	PA	EPA 524.2 REV 4.1	TRANS-1,2-DICHLOROETHENE	PA
EPA 524.2 REV 4.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA	EPA 524.2 REV 4.1	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 524.2 REV 4.1	XYLENE (TOTAL)	PA	EPA 531.1 REV 3.1	CARBOFURAN (FURADEN)	PA
EPA 531.1 REV 3.1	OXAMYL	PA	EPA 533	HEXAFLUOROPROPYLENE OXIDE DIMER ACID (HFPO-DA, GENX)	PA
EPA 533	PERFLUORO-1-BUTANESULFONIC ACID (PFBS)	PA	EPA 533	PERFLUORO-1-HEXANESULFONIC ACID (PFHXS)	PA
EPA 533	PERFLUORO-1-OCTANESULFONIC ACID (PFOS)	PA	EPA 533	PERFLUORONONANOIC ACID (PFNA)	PA
EPA 533	PERFLUOROOCTANOIC ACID (PFOA)	PA	EPA 537.1 REV 2	HEXAFLUOROPROPYLENE OXIDE DIMER ACID (HFPO-DA, GENX)	PA
EPA 537.1 REV 2	PERFLUORO-1-BUTANESULFONIC ACID (PFBS)	PA	EPA 537.1 REV 2	PERFLUORO-1-HEXANESULFONIC ACID (PFHXS)	PA
EPA 537.1 REV 2	PERFLUORO-1-OCTANESULFONIC ACID (PFOS)	PA	EPA 537.1 REV 2	PERFLUORONONANOIC ACID (PFNA)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

DRINKING WATER

METHOD	ANALYTE	PRIMARY
EPA 537.1 REV 2	PERFLUOROOCTANOIC ACID (PFOA)	PA
SM 2120 B-2021	COLOR	PA
SM 2320 B-2021	ALKALINITY AS CaCO ₃	PA
SM 2540 C-2020	RESIDUE-FILTERABLE (TDS)	PA
SM 4500-H+ B-2021	PH	PA
SM 4500-SiO ₂ C-2021	SILICA AS SiO ₂	PA
SM 5310 C-2014	TOTAL ORGANIC CARBON (TOC)	PA

METHOD	ANALYTE	PRIMARY
OIA-1677, DW	CYANIDE	PA
SM 2130 B-2020	TURBIDITY	PA
SM 2510 B-2021	CONDUCTIVITY	PA
SM 4500-F ⁻ C-2021	FLUORIDE	PA
SM 4500-P E-2021	ORTHOPHOSPHATE AS P	PA
SM 5310 C-2014	DISSOLVED ORGANIC CARBON (DOC)	PA
SM 5540 C-2021	SURFACTANTS - MBAS	PA

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	PA
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 1613 B	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZOF URAN (1,2,3,7,8,9-HXCDF)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PECDF)	PA
EPA 1613 B	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA
EPA 1613 B	TOTAL HEPTACHLORODIBENZOFURAN (HPCDF, TOTAL)	PA
EPA 1613 B	TOTAL HEXACHLORODIBENZOFURAN (HXCDF, TOTAL)	PA
EPA 1613 B	TOTAL PENTACHLORODIBENZOFURAN (PECDF, TOTAL)	PA
EPA 1613 B	TOTAL TETRACHLORODIBENZOFURAN (TCDF, TOTAL)	PA

METHOD	ANALYTE	PRIMARY
EPA 1010 B	FLASHPOINT	PA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE (SPLP)	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,6,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 1613 B	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 1613 B	TOTAL HEPTACHLORODIBENZO-P-DIOXIN (HPCDD, TOTAL)	PA
EPA 1613 B	TOTAL HEXACHLORODIBENZO-P-DIOXIN (HXCDD, TOTAL)	PA
EPA 1613 B	TOTAL PENTACHLORODIBENZO-P-DIOXIN (PECDD, TOTAL)	PA
EPA 1613 B	TOTAL TETRACHLORODIBENZO-P-DIOXIN (TCDD, TOTAL)	PA
EPA 1621	ADSORBABLE ORGANOFLUORINE (AOF) AS FLUORIDE	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1633A	11-CHLOROEICOSAFLUORO-3-OXA UNDECANE-1-SULFONIC ACID (11CL-PF3OUDS)	PA	EPA 1633A	1H, 1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID (8:2 FTS)	PA
EPA 1633A	1H, 1H, 2H, 2H-PERFLUOROHXANE SULFONIC ACID (4:2 FTS)	PA	EPA 1633A	1H, 1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID (6:2 FTS)	PA
EPA 1633A	2H,2H,3H,3H-PERFLUOROOCTANOI C ACID (5:3 FTCA)	PA	EPA 1633A	3-PERFLUOROHEPTYL PROPANOIC ACID (7:3 FTCA)	PA
EPA 1633A	3-PERFLUOROPROPYL PROPANOIC ACID (3:3 FTCA)	PA	EPA 1633A	4,8-DIOXA-3H-PERFLUORONONANO IC ACID (ADONA, DONA)	PA
EPA 1633A	9-CHLOROHEXADECAFLUORO-3-OX ANONANE-1-SULFONIC ACID (9CL-PF3ONS)	PA	EPA 1633A	HEXAFLUOROPROPYLENE OXIDE DIMER ACID (HFPO-DA, GENX)	PA
EPA 1633A	N-ETHYL PERFLUOROOCTANESULFONAMID E (NETFOSA, ETFOSAM)	PA	EPA 1633A	N-ETHYL PERFLUOROOCTANESULFONAMID OETHANOL (NETFOSE, ETFOSE)	PA
EPA 1633A	N-ETHYLPERFLUORO-1-OCTANESU LFONAMIDOACETIC ACID (N-ETFOSAA)	PA	EPA 1633A	N-METHYL PERFLUOROOCTANESULFONAMID E (NMEFOSA, MEFOSA)	PA
EPA 1633A	N-METHYL PERFLUOROOCTANESULFONAMID OETHANOL (NMEFOSE, MEFOSE)	PA	EPA 1633A	N-METHYLPERFLUORO-1-OCTANES ULFONAMIDOACETIC ACID (N-MEFOSAA)	PA
EPA 1633A	NONAFLUORO-3,6-DIOXAHEPTANOI C ACID (NFDHA)	PA	EPA 1633A	PERFLUORO(2-ETHOXYETHANE)SU LFONIC ACID (PFEESA)	PA
EPA 1633A	PERFLUORO-1-BUTANESULFONIC ACID (PFBS)	PA	EPA 1633A	PERFLUORO-1-DECANESULFONIC ACID (PFDS)	PA
EPA 1633A	PERFLUORO-1-HEPTANESULFONIC ACID (PFHPS)	PA	EPA 1633A	PERFLUORO-1-HEXANESULFONIC ACID (PFHXS)	PA
EPA 1633A	PERFLUORO-1-NONANESULFONIC ACID (PFNS)	PA	EPA 1633A	PERFLUORO-1-OCTANESULFONAMI DE (PFOSA, PFOSAM)	PA
EPA 1633A	PERFLUORO-1-OCTANESULFONIC ACID (PFOS)	PA	EPA 1633A	PERFLUORO-1-PENTANESULFONIC ACID (PFPEP)	PA
EPA 1633A	PERFLUORO-3-METHOXYPROPANO IC ACID (PFMPA)	PA	EPA 1633A	PERFLUORO-4-METHOXYBUTANOIC ACID (PFMBA)	PA
EPA 1633A	PERFLUOROBUTANOIC ACID (PFBA)	PA	EPA 1633A	PERFLUORODECANOIC ACID (PFDA)	PA
EPA 1633A	PERFLUORODODECANESULFONIC ACID (PFDOS)	PA	EPA 1633A	PERFLUORODODECANOIC ACID (PFDQA, PFDODA)	PA
EPA 1633A	PERFLUOROHEPTANOIC ACID (PFHPA)	PA	EPA 1633A	PERFLUOROHEXANOIC ACID (PFHXA)	PA
EPA 1633A	PERFLUORONONANOIC ACID (PFNA)	PA	EPA 1633A	PERFLUOROOCTANOIC ACID (PFOA)	PA
EPA 1633A	PERFLUOROPENTANOIC ACID (PFPEA)	PA	EPA 1633A	PERFLUOROTETRADECANOIC ACID (PFTA, PFTDA, PFTEDA)	PA
EPA 1633A	PERFLUOROTRIDECANOIC ACID (PFTRDA)	PA	EPA 1633A	PERFLUOROUNDECANOIC ACID (PFUNA, PFUNDA)	PA
EPA 1664 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA	EPA 1664 B	TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	PA
EPA 1666 A	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 1666 A	DHSOPROPYLETHYER (DIPE, ISOPROPYL ETHER)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1666 A	ETHYL ACETATE	PA	EPA 1666 A	ISOBUTYRALDEHYDE	PA
EPA 1666 A	ISOPROPYL ACETATE	PA	EPA 1666 A	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 1666 A	M+P-XYLENE	PA	EPA 1666 A	METHYL FORMATE	PA
EPA 1666 A	N-AMYL ACETATE	PA	EPA 1666 A	N-AMYL ALCOHOL	PA
EPA 1666 A	N-BUTYL-ACETATE	PA	EPA 1666 A	N-HEPTANE	PA
EPA 1666 A	N-HEXANE	PA	EPA 1666 A	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 1666 A	TETRAHYDROFURAN (THF)	PA	EPA 1666 A	XYLENE (TOTAL)	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6-NONACHLOROBIPH HENYL (BZ-206)	PA	EPA 1668 A	2,2',3,3',4,4',5,5',6-OCTACHLOROBIPH ENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPH ENYL (BZ-196)	PA	EPA 1668 A	2,2',3,3',4,4',5,6'-NONACHLOROBIPH HENYL (BZ-207)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHE NYL BZ-195)	PA	EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHE NYL (BZ-170)	PA
EPA 1668 A	2,2',3,3',4,4',6'-OCTACHLOROBIPH ENYL (BZ-197)	PA	EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHE NYL (BZ-171)	PA
EPA 1668 A	2,2',3,3',4,4'-HEXACHLOROBIPHENY L (BZ-128)	PA	EPA 1668 A	2,2',3,3',4,5',6'-HEPTACHLOROBIPHE NYL (BZ-177)	PA
EPA 1668 A	2,2',3,3',4,5',6'-OCTACHLOROBIPH ENYL (BZ-201)	PA	EPA 1668 A	2,2',3,3',4,5',6-HEPTACHLOROBIPHE NYL (BZ-175)	PA
EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENY L (BZ-130)	PA	EPA 1668 A	2,2',3,3',4,5',6'-OCTACHLOROBIPH ENYL (BZ-199)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-NONACHLOROBIPH HENYL (BZ-208)	PA	EPA 1668 A	2,2',3,3',4,5,5',6-OCTACHLOROBIPHE NYL (BZ-198)	PA
EPA 1668 A	2,2',3,3',4,5,5'-HEPTACHLOROBIPHE NYL (BZ-172)	PA	EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHE NYL (BZ-174)	PA
EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHE NYL (BZ-200)	PA	EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHE NYL (BZ-173)	PA
EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA	EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENY L (BZ-132)	PA
EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHE NYL (BZ-176)	PA	EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA
EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA	EPA 1668 A	2,2',3,3',5,5',6'-OCTACHLOROBIPH ENYL (BZ-202)	PA
EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHE NYL (BZ-178)	PA	EPA 1668 A	2,2',3,3',5,5',6-HEXACHLOROBIPHENY L (BZ-133)	PA
EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENY L (BZ-135)	PA	EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHE NYL (BZ-179)	PA
EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA	EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA
EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENY L (BZ-136)	PA	EPA 1668 A	2,2',3,3',6-PENTACHLOROBIPHENYL (BZ-84)	PA
EPA 1668 A	2,2',3,3',4-TETRACHLOROBIPHENYL (BZ-40)	PA	EPA 1668 A	2,2',3,4',5',6-HEXACHLOROBIPHENY L (BZ-149)	PA
EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-97)	PA	EPA 1668 A	2,2',3,4',5,5',6-HEPTACHLOROBIPHE NYL (BZ-187)	PA
EPA 1668 A	2,2',3,4',5,5'-HEXACHLOROBIPHENY L (BZ-146)	PA			

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (BZ-148)	PA	EPA 1668 A	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (BZ-188)	PA
EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA	EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-90)	PA
EPA 1668 A	2,2',3,4',6'-PENTACHLOROBIPHENYL (BZ-98)	PA	EPA 1668 A	2,2',3,4',6,6'-HEXACHLOROBIPHENYL (BZ-150)	PA
EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-91)	PA	EPA 1668 A	2,2',3,4'-TETRACHLOROBIPHENYL (BZ-42)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-183)	PA	EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENYL (BZ-138)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-203)	PA	EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-180)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (BZ-182)	PA	EPA 1668 A	2,2',3,4,4',5,6,6'-OCTACHLOROBIPHENYL (BZ-204)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-181)	PA	EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA
EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENYL (BZ-140)	PA	EPA 1668 A	2,2',3,4,4',6,6'-HEPTACHLOROBIPHENYL (BZ-184)	PA
EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA	EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA
EPA 1668 A	2,2',3,4,5',6-HEXACHLOROBIPHENYL (BZ-144)	PA	EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA
EPA 1668 A	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL (BZ-185)	PA	EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA	EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHENYL (BZ-186)	PA
EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-142)	PA	EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA	EPA 1668 A	2,2',3,4,6,6'-HEXACHLOROBIPHENYL (BZ-145)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA	EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA
EPA 1668 A	2,2',3,5',6-PENTACHLOROBIPHENYL (BZ-95)	PA	EPA 1668 A	2,2',3,5'-TETRACHLOROBIPHENYL (BZ-44)	PA
EPA 1668 A	2,2',3,5,5',6-HEXACHLOROBIPHENYL (BZ-151)	PA	EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA
EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA	EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA
EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA	EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA
EPA 1668 A	2,2',3,6'-TETRACHLOROBIPHENYL (BZ-46)	PA	EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA
EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA	EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA
EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-153)	PA	EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (BZ-154)	PA
EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA	EPA 1668 A	2,2',4,4',6,6'-HEXACHLOROBIPHENYL (BZ-155)	PA
EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA	EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2',4,5',6-PENTACHLOROBIPHENYL (BZ-103)	PA	EPA 1668 A	2,2',4,5'-TETRACHLOROBIPHENYL (BZ-49)	PA
EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA	EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA	EPA 1668 A	2,2',4,6'-TETRACHLOROBIPHENYL (BZ-51)	PA
EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA	EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA
EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA	EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA
EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA	EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA
EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA	EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA
EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA	EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-76)	PA	EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA
EPA 1668 A	2,3',4',5-TETRACHLOROBIPHENYL (BZ-70)	PA	EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA
EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-33)	PA	EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA
EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA	EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA
EPA 1668 A	2,3',4,4',5-PENTACHLOROBIPHENYL (BZ-118)	PA	EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA
EPA 1668 A	2,3',4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA	EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA
EPA 1668 A	2,3',4,5-TETRACHLOROBIPHENYL (BZ-68)	PA	EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA
EPA 1668 A	2,3',4,5-TETRACHLOROBIPHENYL (BZ-67)	PA	EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA
EPA 1668 A	2,3',4-TRICHLOROBIPHENYL (BZ-25)	PA	EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA
EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-34)	PA	EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA
EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-26)	PA	EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA
EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA	EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA	EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA
EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA	EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA
EPA 1668 A	2,3,3',4',5-PENTACHLOROBIPHENYL (BZ-107)	PA	EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA
EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA	EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA	EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,3,3',4,4',5,5'-HEPTACHLOROBIPHE NYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA
EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-58)	PA
EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA
EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA
EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA
EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA
EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA
EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA
EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA
EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA
EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA
EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA
EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA
EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA
EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHE NYL (BZ-190)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHE NYL (BZ-192)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA
EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA
EPA 1668 A	2,3,3',5',6-PENTACHLOROBIPHENYL (BZ-113)	PA
EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA
EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA
EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA
EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA
EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA
EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA
EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA
EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA
EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA
EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA
EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA
EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA
EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA
EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA
EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA
EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA
EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENY L (BZ-169)	PA
EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA
EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA	EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA
EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA	EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA
EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA	EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA
EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA	EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA
EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA	EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA
EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA	EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA
EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA	EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA
EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA	EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA
EPA 1671 A	2-METHOXYETHANOL (METHYL CELLOSOLVE)	PA	EPA 1671 A	ACETONITRILE	PA
EPA 1671 A	DIETHYLAMINE	PA	EPA 1671 A	DIMETHYL SULFOXIDE	PA
EPA 1671 A	ETHANOL	PA	EPA 1671 A	METHANOL	PA
EPA 1671 A	N-PROPANOL (1-PROPANOL)	PA	EPA 1671 A	TRIETHYLAMINE	PA
EPA 180.1 REV 2	TURBIDITY	PA	EPA 200.7 REV 4.4	ALUMINUM	PA
EPA 200.7 REV 4.4	ANTIMONY	PA	EPA 200.7 REV 4.4	ARSENIC	PA
EPA 200.7 REV 4.4	BARIUM	PA	EPA 200.7 REV 4.4	BERYLLIUM	PA
EPA 200.7 REV 4.4	BORON	PA	EPA 200.7 REV 4.4	CADMIUM	PA
EPA 200.7 REV 4.4	CALCIUM	PA	EPA 200.7 REV 4.4	CHROMIUM	PA
EPA 200.7 REV 4.4	COBALT	PA	EPA 200.7 REV 4.4	COPPER	PA
EPA 200.7 REV 4.4	IRON	PA	EPA 200.7 REV 4.4	LEAD	PA
EPA 200.7 REV 4.4	MAGNESIUM	PA	EPA 200.7 REV 4.4	MANGANESE	PA
EPA 200.7 REV 4.4	MOLYBDENUM	PA	EPA 200.7 REV 4.4	NICKEL	PA
EPA 200.7 REV 4.4	POTASSIUM	PA	EPA 200.7 REV 4.4	SELENIUM	PA
EPA 200.7 REV 4.4	SILVER	PA	EPA 200.7 REV 4.4	SODIUM	PA
EPA 200.7 REV 4.4	THALLIUM	PA	EPA 200.7 REV 4.4	TIN	PA
EPA 200.7 REV 4.4	TITANIUM	PA	EPA 200.7 REV 4.4	VANADIUM	PA
EPA 200.7 REV 4.4	ZINC	PA	EPA 200.8 REV 5.4	ALUMINUM	PA
EPA 200.8 REV 5.4	ANTIMONY	PA	EPA 200.8 REV 5.4	ARSENIC	PA
EPA 200.8 REV 5.4	BARIUM	PA	EPA 200.8 REV 5.4	BERYLLIUM	PA
EPA 200.8 REV 5.4	CADMIUM	PA	EPA 200.8 REV 5.4	CHROMIUM	PA
EPA 200.8 REV 5.4	COBALT	PA	EPA 200.8 REV 5.4	COPPER	PA
EPA 200.8 REV 5.4	LEAD	PA	EPA 200.8 REV 5.4	MANGANESE	PA
EPA 200.8 REV 5.4	MOLYBDENUM	PA	EPA 200.8 REV 5.4	NICKEL	PA
EPA 200.8 REV 5.4	SELENIUM	PA	EPA 200.8 REV 5.4	SILVER	PA
EPA 200.8 REV 5.4	THALLIUM	PA	EPA 200.8 REV 5.4	VANADIUM	PA
EPA 200.8 REV 5.4	ZINC	PA	EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4 - EXTENDED	IRON	PA	EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	PA	EPA 200.8 REV 5.4 - EXTENDED	SODIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	TIN	PA	EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	PA
EPA 218.6 REV 3.3	CHROMIUM VI	PA	EPA 245.1 REV 3	MERCURY	PA
EPA 300.0 REV 2.1	BROMIDE	PA	EPA 300.0 REV 2.1	CHLORIDE	PA
EPA 300.0 REV 2.1	FLUORIDE	PA	EPA 300.0 REV 2.1	NITRATE AS N	PA
EPA 300.0 REV 2.1	NITRITE AS N	PA	EPA 300.0 REV 2.1	SULFATE	PA
EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	PA	EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PA
EPA 3060 A	PREP: HEXAVALENT CHROMIUM	PA	EPA 335.4 REV 1.0	CYANIDE	PA
EPA 350.1 REV 2	AMMONIA AS N	PA	EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	PA
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	PA	EPA 3511	PREP: ORGANIC EXTRACTION AND SAMPLE PREPARATION	PA
EPA 353.2 REV 2	NITRATE AS N	PA	EPA 353.2 REV 2	NITRATE-NITRITE AS N	PA
EPA 353.2 REV 2	NITRITE AS N	PA	EPA 3620 C	PREP: FLORISIL CLEANUP	PA
EPA 3630 C	PREP: SILICA GEL CLEANUP	PA	EPA 3640 A	PREP: GEL PERMEATION CLEANUP	PA
EPA 365.1 REV 2	PHOSPHORUS, TOTAL	PA	EPA 365.3	ORTHOPHOSPHATE AS P	PA
EPA 3660 B	PREP: SULFUR CLEANUP	PA	EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	PA
EPA 420.4 REV 1	TOTAL PHENOLICS	PA	EPA 5030 C	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA
EPA 6010 D	ALUMINUM	PA	EPA 6010 D	ANTIMONY	PA
EPA 6010 D	ARSENIC	PA	EPA 6010 D	BARIUM	PA
EPA 6010 D	BERYLLIUM	PA	EPA 6010 D	BORON	PA
EPA 6010 D	CADMIUM	PA	EPA 6010 D	CALCIUM	PA
EPA 6010 D	CHROMIUM	PA	EPA 6010 D	COBALT	PA
EPA 6010 D	COPPER	PA	EPA 6010 D	IRON	PA
EPA 6010 D	LEAD	PA	EPA 6010 D	LITHIUM	PA
EPA 6010 D	MAGNESIUM	PA	EPA 6010 D	MANGANESE	PA
EPA 6010 D	MOLYBDENUM	PA	EPA 6010 D	NICKEL	PA
EPA 6010 D	POTASSIUM	PA	EPA 6010 D	SELENIUM	PA
EPA 6010 D	SILVER	PA	EPA 6010 D	SODIUM	PA
EPA 6010 D	STRONTIUM	PA	EPA 6010 D	THALLIUM	PA
EPA 6010 D	TIN	PA	EPA 6010 D	TITANIUM	PA
EPA 6010 D	VANADIUM	PA	EPA 6010 D	ZINC	PA
EPA 6010 D - EXTENDED	SULFUR	PA	EPA 6010 D - EXTENDED	THORIUM	PA
EPA 6010 D - EXTENDED	ZIRCONIUM	PA	EPA 6020 B	ALUMINUM	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6020 B	ANTIMONY	PA	EPA 6020 B	ARSENIC	PA
EPA 6020 B	BARIUM	PA	EPA 6020 B	BERYLLIUM	PA
EPA 6020 B	CADMIUM	PA	EPA 6020 B	CALCIUM	PA
EPA 6020 B	CHROMIUM	PA	EPA 6020 B	COBALT	PA
EPA 6020 B	COPPER	PA	EPA 6020 B	IRON	PA
EPA 6020 B	LEAD	PA	EPA 6020 B	MAGNESIUM	PA
EPA 6020 B	MANGANESE	PA	EPA 6020 B	MOLYBDENUM	PA
EPA 6020 B	NICKEL	PA	EPA 6020 B	POTASSIUM	PA
EPA 6020 B	SELENIUM	PA	EPA 6020 B	SILVER	PA
EPA 6020 B	SODIUM	PA	EPA 6020 B	THALLIUM	PA
EPA 6020 B	TIN	PA	EPA 6020 B	VANADIUM	PA
EPA 6020 B	ZINC	PA	EPA 6020 B - EXTENDED	STRONTIUM	PA
EPA 6020 B - EXTENDED	TITANIUM	PA	EPA 6020 B - EXTENDED	URANIUM (MASS)	PA
EPA 608.3	4,4'-DDD	PA	EPA 608.3	4,4'-DDE	PA
EPA 608.3	4,4'-DDT	PA	EPA 608.3	ALDRIN	PA
EPA 608.3	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA	EPA 608.3	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 608.3	AROCLOR-1016 (PCB-1016)	PA	EPA 608.3	AROCLOR-1221 (PCB-1221)	PA
EPA 608.3	AROCLOR-1232 (PCB-1232)	PA	EPA 608.3	AROCLOR-1242 (PCB-1242)	PA
EPA 608.3	AROCLOR-1248 (PCB-1248)	PA	EPA 608.3	AROCLOR-1254 (PCB-1254)	PA
EPA 608.3	AROCLOR-1260 (PCB-1260)	PA	EPA 608.3	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	CHLORDANE, TOTAL	PA	EPA 608.3	DELTA-BHC	PA
EPA 608.3	DIELDRIN	PA	EPA 608.3	ENDOSULFAN I	PA
EPA 608.3	ENDOSULFAN II	PA	EPA 608.3	ENDOSULFAN SULFATE	PA
EPA 608.3	ENDRIN	PA	EPA 608.3	ENDRIN ALDEHYDE	PA
EPA 608.3	ENDRIN KETONE	PA	EPA 608.3	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	GAMMA-CHLORDANE (TRANS-CHLORDANE)	PA	EPA 608.3	HEPTACHLOR	PA
EPA 608.3	HEPTACHLOR EPOXIDE	PA	EPA 608.3	METHOXYCHLOR	PA
EPA 608.3	MIREX	PA	EPA 608.3	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 624.1	1,1,1,2-TETRACHLOROETHANE	PA	EPA 624.1	1,1,1-TRICHLOROETHANE	PA
EPA 624.1	1,1,2,2-TETRACHLOROETHANE	PA	EPA 624.1	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 624.1	1,1,2-TRICHLOROETHANE	PA	EPA 624.1	1,1-DICHLOROETHANE	PA
EPA 624.1	1,1-DICHLOROETHYLENE	PA	EPA 624.1	1,1-DICHLOROPROPENE	PA
EPA 624.1	1,2,3-TRICHLOROBENZENE	PA	EPA 624.1	1,2,3-TRICHLOROPROPANE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 624.1	1,2,4-TRIMETHYLBENZENE	PA	EPA 624.1	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 624.1	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 624.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 624.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 624.1	1,2-DICHLOROPROPANE	PA
EPA 624.1	1,3,5-TRIMETHYLBENZENE	PA	EPA 624.1	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 624.1	1,3-DICHLOROPROPANE	PA	EPA 624.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 624.1	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 624.1	2,2-DICHLOROPROPANE	PA
EPA 624.1	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA	EPA 624.1	2-CHLOROETHYL VINYL ETHER	PA
EPA 624.1	2-CHLOROTOLUENE	PA	EPA 624.1	2-HEXANONE	PA
EPA 624.1	4-CHLOROTOLUENE	PA	EPA 624.1	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 624.1	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 624.1	ACETONE	PA
EPA 624.1	ACETONITRILE	PA	EPA 624.1	ACROLEIN (PROPENAL)	PA
EPA 624.1	ACRYLONITRILE	PA	EPA 624.1	BENZENE	PA
EPA 624.1	BENZYL CHLORIDE	PA	EPA 624.1	BROMOBENZENE	PA
EPA 624.1	BROMOCHLOROMETHANE	PA	EPA 624.1	BROMODICHLOROMETHANE	PA
EPA 624.1	BROMOFORM	PA	EPA 624.1	CARBON DISULFIDE	PA
EPA 624.1	CARBON TETRACHLORIDE	PA	EPA 624.1	CHLOROBENZENE	PA
EPA 624.1	CHLORODIBROMOMETHANE	PA	EPA 624.1	CHLORODIFLUOROMETHANE (FREON-22)	PA
EPA 624.1	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 624.1	CHLOROFORM	PA
EPA 624.1	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA	EPA 624.1	CIS-1,2-DICHLOROETHYLENE	PA
EPA 624.1	CIS-1,3-DICHLOROPROPENE	PA	EPA 624.1	CIS-1,4-DICHLORO-2-BUTENE	PA
EPA 624.1	CYCLOHEXANE	PA	EPA 624.1	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 624.1	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 624.1	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 624.1	ETHYL ACETATE	PA	EPA 624.1	ETHYL METHACRYLATE	PA
EPA 624.1	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 624.1	ETHYLBENZENE	PA
EPA 624.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 624.1	IODOMETHANE (METHYL IODIDE)	PA
EPA 624.1	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 624.1	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 624.1	ISOPROPYLBENZENE	PA	EPA 624.1	M+P-XYLENE	PA
EPA 624.1	METHACRYLONITRILE	PA	EPA 624.1	METHYL BROMIDE (BROMOMETHANE)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 624.1	METHYL CHLORIDE (CHLOROMETHANE)	PA	EPA 624.1	METHYL METHACRYLATE	PA
EPA 624.1	METHYL TERT-BUTYL ETHER (MTBE)	PA	EPA 624.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 624.1	N-BUTYLBENZENE	PA	EPA 624.1	N-PROPYLBENZENE	PA
EPA 624.1	NAPHTHALENE	PA	EPA 624.1	O-XYLENE	PA
EPA 624.1	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 624.1	SEC-BUTYLBENZENE	PA
EPA 624.1	STYRENE	PA	EPA 624.1	TERT-AMYL ETHYL ETHER (TAEF)	PA
EPA 624.1	TERT-AMYL METHYL ETHER (TAME)	PA	EPA 624.1	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 624.1	TERT-BUTYLBENZENE	PA	EPA 624.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 624.1	TETRAHYDROFURAN (THF)	PA	EPA 624.1	TOLUENE	PA
EPA 624.1	TRANS-1,2-DICHLOROETHENE	PA	EPA 624.1	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 624.1	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 624.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 624.1	TRICHLOROFLUOROMETHANE (FLUOROTRICHOROMETHANE, FREON 11)	PA	EPA 624.1	VINYL ACETATE	PA
EPA 624.1	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 624.1	XYLENE (TOTAL)	PA
EPA 624.1 EXTENDED	1,2,4-TRICHLOROBENZENE	PA	EPA 624.1 EXTENDED	ISOPROPYL ACETATE	PA
EPA 624.1 EXTENDED	N-HEXANE	PA	EPA 625.1	1,1'-BIPHENYL (BZ-0)	PA
EPA 625.1	1,2,4,5-TETRACHLOROBENZENE	PA	EPA 625.1	1,2,4-TRICHLOROBENZENE	PA
EPA 625.1	1,2-DIPHENYLHYDRAZINE	PA	EPA 625.1	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 625.1	2,3,4,6-TETRACHLOROPHENOL	PA	EPA 625.1	2,3-DICHLOROANILINE	PA
EPA 625.1	2,4,5-TRICHLOROPHENOL	PA	EPA 625.1	2,4,6-TRICHLOROPHENOL	PA
EPA 625.1	2,4-DICHLOROPHENOL	PA	EPA 625.1	2,4-DIMETHYLPHENOL	PA
EPA 625.1	2,4-DINITROPHENOL	PA	EPA 625.1	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 625.1	2,6-DICHLOROPHENOL	PA	EPA 625.1	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 625.1	2-CHLORONAPHTHALENE	PA	EPA 625.1	2-CHLOROPHENOL	PA
EPA 625.1	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA	EPA 625.1	2-METHYLNAPHTHALENE	PA
EPA 625.1	2-METHYLPHENOL (O-CRESOL)	PA	EPA 625.1	2-NITROANILINE	PA
EPA 625.1	2-NITROPHENOL	PA	EPA 625.1	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 625.1	3,3'-DICHLOROBENZIDINE	PA	EPA 625.1	3-NITROANILINE	PA
EPA 625.1	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA	EPA 625.1	4-CHLORO-3-METHYLPHENOL	PA
EPA 625.1	4-CHLOROANILINE	PA	EPA 625.1	4-CHLOROPHENYL PHENYLETHER	PA
EPA 625.1	4-NITROANILINE	PA	EPA 625.1	4-NITROPHENOL	PA
EPA 625.1	ACENAPHTHENE	PA	EPA 625.1	ACENAPHTHYLENE	PA
EPA 625.1	ACETOPHENONE	PA	EPA 625.1	ALPHA-TERPINEOL	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 625.1	ANILINE	PA	EPA 625.1	ANTHRACENE	PA
EPA 625.1	BENZIDINE	PA	EPA 625.1	BENZO(A)ANTHRACENE	PA
EPA 625.1	BENZO(A)PYRENE	PA	EPA 625.1	BENZO(B)FLUORANTHENE	PA
EPA 625.1	BENZO(G,H,I)PERYLENE	PA	EPA 625.1	BENZO(K)FLUORANTHENE	PA
EPA 625.1	BENZOIC ACID	PA	EPA 625.1	BENZYL ALCOHOL	PA
EPA 625.1	BIS(2-CHLOROETHOXY)METHANE	PA	EPA 625.1	BIS(2-CHLOROETHYL) ETHER	PA
EPA 625.1	BIS(2-ETHYLHEXYL) PHTHALATE (D[(2-ETHYLHEXYL)PHTHALATE], (DEHP)	PA	EPA 625.1	BUTYL BENZYL PHTHALATE	PA
EPA 625.1	CARBAZOLE	PA	EPA 625.1	CHRYSENE	PA
EPA 625.1	DI-N-BUTYL PHTHALATE	PA	EPA 625.1	DI-N-OCTYL PHTHALATE	PA
EPA 625.1	DIBENZO(A,H) ANTHRACENE	PA	EPA 625.1	DIBENZOFURAN	PA
EPA 625.1	DIETHYL PHTHALATE	PA	EPA 625.1	DIMETHYL PHTHALATE	PA
EPA 625.1	DIPHENYL ETHER (DIPHENYL OXIDE)	PA	EPA 625.1	FLUORANTHENE	PA
EPA 625.1	FLUORENE	PA	EPA 625.1	HEXACHLOROBENZENE	PA
EPA 625.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 625.1	HEXACHLOROCYCLOPENTADIENE	PA
EPA 625.1	HEXACHLOROETHANE	PA	EPA 625.1	INDENO(1,2,3-CD) PYRENE	PA
EPA 625.1	ISOPHORONE	PA	EPA 625.1	N-DECANE	PA
EPA 625.1	N-DOCOSANE	PA	EPA 625.1	N-HEXADECANE	PA
EPA 625.1	N-NITROSO-DI-N-BUTYLAMINE	PA	EPA 625.1	N-NITROSODI-N-PROPYLAMINE	PA
EPA 625.1	N-NITROSODIETHYLAMINE	PA	EPA 625.1	N-NITROSODIMETHYLAMINE	PA
EPA 625.1	N-NITROSODIPHENYLAMINE	PA	EPA 625.1	N-NITROSOPYRROLIDINE	PA
EPA 625.1	N-OCTADECANE	PA	EPA 625.1	NAPHTHALENE	PA
EPA 625.1	NITROBENZENE	PA	EPA 625.1	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 625.1	PENTACHLOROBENZENE	PA	EPA 625.1	PENTACHLOROPHENOL	PA
EPA 625.1	PHENANTHRENE	PA	EPA 625.1	PHENOL	PA
EPA 625.1	PYRENE	PA	EPA 625.1	PYRIDINE	PA
EPA 625.1 EXTENDED	1-METHYLNAPHTHALENE	PA	EPA 6850	PERCHLORATE	PA
EPA 7196 A	CHROMIUM VI	PA	EPA 7199	CHROMIUM VI	PA
EPA 7470 A	MERCURY	PA	EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 C	ETHANOL	PA	EPA 8015 C	ETHYLENE GLYCOL	PA
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	PA	EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C	METHANOL	PA	EPA 8015 C - EXTENDED	PROPYLENE GLYCOL	PA
EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA	EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 D	ETHANOL	PA	EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8015 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA	EPA 8015 D	METHANOL	PA
EPA 8015 D	N-PROPANOL (1-PROPANOL)	PA	EPA 8015 D - EXTENDED	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	PA	EPA 8015 D - EXTENDED	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8015 D - EXTENDED	PROPYLENE GLYCOL	PA	EPA 8015 D - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDD	PA	EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	4,4'-DDT	PA	EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DELTA-BHC	PA	EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN I	PA	EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA	EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA	EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	GAMMA-CHLORDANE (TRANS-CHLORDANE)	PA
EPA 8081 B	HEPTACHLOR	PA	EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	METHOXYCHLOR	PA	EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B - EXTENDED	2,4'-DDD	PA	EPA 8081 B - EXTENDED	2,4'-DDE	PA
EPA 8081 B - EXTENDED	2,4'-DDT	PA	EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8081 B - EXTENDED	MIREX	PA	EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA	EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA	EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA
EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA	EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA	EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA
EPA 8151 A	2,4,5-T	PA	EPA 8151 A	2,4-D	PA
EPA 8151 A	2,4-DB	PA	EPA 8151 A	DALAPON	PA
EPA 8151 A	DICAMBA	PA	EPA 8151 A	DICHLOROPROP (DICHLORPROP)	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA	EPA 8151 A	MCPA	PA
EPA 8151 A	MCPP	PA	EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	PICLORAM	PA	EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA	EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA	EPA 8260 C	1,1,2-TRICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA	EPA 8260 C	1,1-DICHLOROETHYLENE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	1,1-DICHLOROPROPENE	PA	EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA	EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA	EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA	EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA	EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA	EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA	EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	2-HEXANONE	PA	EPA 8260 C	2-NITROPROPANE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA	EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 8260 C	ACETONE	PA
EPA 8260 C	ACETONITRILE	PA	EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ACRYLONITRILE	PA	EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZENE	PA	EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOBENZENE	PA	EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA	EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON DISULFIDE	PA	EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLOROBENZENE	PA	EPA 8260 C	CHLORODIBROMOMETHANE	PA
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA	EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA	EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	DIETHYL ETHER	PA	EPA 8260 C	ETHANOL	PA
EPA 8260 C	ETHYL ACETATE	PA	EPA 8260 C	ETHYL METHACRYLATE	PA
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 8260 C	ETHYLBENZENE	PA
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	ISOPROPYLBENZENE	PA	EPA 8260 C	M+P-XYLENE	PA
EPA 8260 C	METHACRYLONITRILE	PA	EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA	EPA 8260 C	METHYL METHACRYLATE	PA
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA	EPA 8260 C	METHYLCYCLOHEXANE	PA
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 8260 C	N-BUTYLBENZENE	PA
EPA 8260 C	N-PROPYLBENZENE	PA	EPA 8260 C	NAPHTHALENE	PA
EPA 8260 C	O-XYLENE	PA	EPA 8260 C	PENTACHLOROETHANE	PA
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 8260 C	SEC-BUTYLBENZENE	PA
EPA 8260 C	STYRENE	PA	EPA 8260 C	TERT-AMYL METHYL ETHER (TAME)	PA
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA	EPA 8260 C	TERT-BUTYLBENZENE	PA
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 8260 C	TOLUENE	PA
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA	EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA	EPA 8260 C	VINYL ACETATE	PA
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 8260 C	XYLENE (TOTAL)	PA
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA	EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 C - EXTENDED	1,2-DICHLORO-1,1,2-TRIFLUOROET HANE (FREON 123A)	PA	EPA 8260 C - EXTENDED	1,3,5-TRICHLOROBENZENE	PA
EPA 8260 C - EXTENDED	1,3-BUTADIENE	PA	EPA 8260 C - EXTENDED	3,3-DIMETHYL-1-BUTANOL	PA
EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA	EPA 8260 C - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 C - EXTENDED	DIMETHYL ETHER	PA	EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA	EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	N-HEPTANE	PA	EPA 8260 C - EXTENDED	N-HEXANE	PA
EPA 8260 C - EXTENDED	TERT-AMYL ALCOHOL (TAA)	PA	EPA 8260 C - EXTENDED	TERT-BUTYL FORMATE	PA
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA	EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	PA	EPA 8260 D	1,1,1-TRICHLOROETHANE	PA
EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	PA	EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 D	1,1,2-TRICHLOROETHANE	PA	EPA 8260 D	1,1-DICHLOROETHANE	PA
EPA 8260 D	1,1-DICHLOROETHYLENE	PA	EPA 8260 D	1,1-DICHLOROPROPENE	PA
EPA 8260 D	1,2,3-TRICHLOROBENZENE	PA	EPA 8260 D	1,2,3-TRICHLOROPROPANE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 D	1,2,3-TRIMETHYLBENZENE	PA	EPA 8260 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 D	1,2,4-TRIMETHYLBENZENE	PA	EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 8260 D	1,2-DICHLOROPROPANE	PA
EPA 8260 D	1,3,5-TRIMETHYLBENZENE	PA	EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 D	1,3-DICHLOROPROPANE	PA	EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 D	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 D	1-CHLOROHEXANE	PA	EPA 8260 D	2,2-DICHLOROPROPANE	PA
EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA	EPA 8260 D	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 D	2-CHLOROTOLUENE	PA	EPA 8260 D	2-HEXANONE	PA
EPA 8260 D	2-NITROPROPANE	PA	EPA 8260 D	4-CHLOROTOLUENE	PA
EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA	EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 D	ACETONE	PA	EPA 8260 D	ACETONITRILE	PA
EPA 8260 D	ACROLEIN (PROPENAL)	PA	EPA 8260 D	ACRYLONITRILE	PA
EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA	EPA 8260 D	BENZENE	PA
EPA 8260 D	BENZYL CHLORIDE	PA	EPA 8260 D	BROMOBENZENE	PA
EPA 8260 D	BROMOCHLOROMETHANE	PA	EPA 8260 D	BROMODICHLOROMETHANE	PA
EPA 8260 D	BROMOFORM	PA	EPA 8260 D	CARBON DISULFIDE	PA
EPA 8260 D	CARBON TETRACHLORIDE	PA	EPA 8260 D	CHLOROBENZENE	PA
EPA 8260 D	CHLORODIBROMOMETHANE	PA	EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 D	CHLOROFORM	PA	EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	PA	EPA 8260 D	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 D	CYCLOHEXANE	PA	EPA 8260 D	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 D	DIETHYL ETHER	PA	EPA 8260 D	ETHANOL	PA
EPA 8260 D	ETHYL ACETATE	PA	EPA 8260 D	ETHYL METHACRYLATE	PA
EPA 8260 D	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 8260 D	ETHYLBENZENE	PA
EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8260 D	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 8260 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 D	ISOPROPYLBENZENE	PA	EPA 8260 D	M+P-XYLENE	PA
EPA 8260 D	METHACRYLONITRILE	PA	EPA 8260 D	METHYL ACETATE	PA
EPA 8260 D	METHYL ACRYLATE	PA	EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	PA	EPA 8260 D	METHYL METHACRYLATE	PA
EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	PA	EPA 8260 D	METHYLCYCLOHEXANE	PA
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 8260 D	N-BUTYLBENZENE	PA
EPA 8260 D	N-PROPYLBENZENE	PA	EPA 8260 D	NAPHTHALENE	PA
EPA 8260 D	O-XYLENE	PA	EPA 8260 D	PENTACHLOROETHANE	PA
EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 8260 D	SEC-BUTYLBENZENE	PA
EPA 8260 D	STYRENE	PA	EPA 8260 D	TERT-AMYL METHYL ETHER (TAME)	PA
EPA 8260 D	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA	EPA 8260 D	TERT-BUTYLBENZENE	PA
EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 8260 D	TOLUENE	PA
EPA 8260 D	TRANS-1,2-DICHLOROETHENE	PA	EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA	EPA 8260 D	VINYL ACETATE	PA
EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 8260 D	XYLENE (TOTAL)	PA
EPA 8260 D - EXTENDED	1,2-DICHLORO-1,1,2-TRIFLUOROET HANE (FREON 123A)	PA	EPA 8260 D - EXTENDED	1,3,5-TRICHLOROBENZENE	PA
EPA 8260 D - EXTENDED	1,3-BUTADIENE	PA	EPA 8260 D - EXTENDED	1,3-DIETHYLBENZENE	PA
EPA 8260 D - EXTENDED	CYCLOHEXANONE	PA	EPA 8260 D - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	PA
EPA 8260 D - EXTENDED	DIMETHYL ETHER	PA	EPA 8260 D - EXTENDED	ETHYL ACRYLATE	PA
EPA 8260 D - EXTENDED	N-BUTYL-ACETATE	PA	EPA 8260 D - EXTENDED	N-HEPTANE	PA
EPA 8260 D - EXTENDED	N-HEXANE	PA	EPA 8260 D - EXTENDED	TERT-AMYL ALCOHOL (TAA)	PA
EPA 8260 D - EXTENDED	TERT-BUTYL FORMATE	PA	EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 D SIM	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA	EPA 8260 D SIM	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA	EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA	EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA	EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA	EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA	EPA 8270 D	1,4-NAPHTHOQUINONE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	1,4-PHENYLENEDIAMINE	PA	EPA 8270 D	1-CHLORONAPHTHALENE	PA
EPA 8270 D	1-NAPHTHYLAMINE	PA	EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA	EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA	EPA 8270 D	2,4-DICHLOROPHENOL	PA
EPA 8270 D	2,4-DIMETHYLPHENOL	PA	EPA 8270 D	2,4-DINITROPHENOL	PA
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 8270 D	2,6-DICHLOROPHENOL	PA
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA	EPA 8270 D	2-ACETYLAMINOFUORENE	PA
EPA 8270 D	2-CHLORONAPHTHALENE	PA	EPA 8270 D	2-CHLOROPHENOL	PA
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA	EPA 8270 D	2-METHYLNAPHTHALENE	PA
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA	EPA 8270 D	2-NAPHTHYLAMINE	PA
EPA 8270 D	2-NITROANILINE	PA	EPA 8270 D	2-NITROPHENOL	PA
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA	EPA 8270 D	3,3'-DICHLORO BENZIDINE	PA
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA	EPA 8270 D	3-METHYLCHOLANTHRENE	PA
EPA 8270 D	3-NITROANILINE	PA	EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA
EPA 8270 D	4-AMINOBIIPHENYL	PA	EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA	EPA 8270 D	4-CHLOROANILINE	PA
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	PA	EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 D	4-NITROANILINE	PA	EPA 8270 D	4-NITROPHENOL	PA
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA	EPA 8270 D	5-NITRO-O-TOLUIDINE	PA
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA	EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA
EPA 8270 D	ACENAPHTHENE	PA	EPA 8270 D	ACENAPHTHYLENE	PA
EPA 8270 D	ACETOPHENONE	PA	EPA 8270 D	ANILINE	PA
EPA 8270 D	ANTHRACENE	PA	EPA 8270 D	ARAMITE	PA
EPA 8270 D	BENZIDINE	PA	EPA 8270 D	BENZO(A)ANTHRACENE	PA
EPA 8270 D	BENZO(A)PYRENE	PA	EPA 8270 D	BENZO(B)FLUORANTHENE	PA
EPA 8270 D	BENZO(G,H,I)PERYLENE	PA	EPA 8270 D	BENZO(K)FLUORANTHENE	PA
EPA 8270 D	BENZOIC ACID	PA	EPA 8270 D	BENZYL ALCOHOL	PA
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA	EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA	EPA 8270 D	BUTYL BENZYL PHTHALATE	PA
EPA 8270 D	CHLOROBENZILATE	PA	EPA 8270 D	CHRYSENE	PA
EPA 8270 D	DI-N-BUTYL PHTHALATE	PA	EPA 8270 D	DI-N-OCTYL PHTHALATE	PA
EPA 8270 D	DIALATE	PA	EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA	EPA 8270 D	DIBENZOFURAN	PA
EPA 8270 D	DIETHYL PHTHALATE	PA	EPA 8270 D	DIMETHOATE	PA
EPA 8270 D	DIMETHYL PHTHALATE	PA			

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA	EPA 8270 D	DIPHENYLAMINE	PA
EPA 8270 D	DISULFOTON	PA	EPA 8270 D	ETHYL METHANESULFONATE	PA
EPA 8270 D	FAMPHUR	PA	EPA 8270 D	FLUORANTHENE	PA
EPA 8270 D	FLUORENE	PA	EPA 8270 D	HEXACHLOROBENZENE	PA
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 D	HEXACHLOROETHANE	PA	EPA 8270 D	HEXACHLOROPROPENE	PA
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 D	ISODRIN	PA
EPA 8270 D	ISOPHORONE	PA	EPA 8270 D	ISOSAFROLE	PA
EPA 8270 D	KEPONE	PA	EPA 8270 D	METHAPYRILENE	PA
EPA 8270 D	METHYL METHANESULFONATE	PA	EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA	EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 D	N-NITROSODIETHYLAMINE	PA	EPA 8270 D	N-NITROSODIMETHYLAMINE	PA
EPA 8270 D	N-NITROSODIPHENYLAMINE	PA	EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 D	N-NITROSOMORPHOLINE	PA	EPA 8270 D	N-NITROSOPIPERIDINE	PA
EPA 8270 D	N-NITROSOPYRROLIDINE	PA	EPA 8270 D	NAPHTHALENE	PA
EPA 8270 D	NITROBENZENE	PA	EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA	EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 D	PENTACHLOROBENZENE	PA	EPA 8270 D	PENTACHLORONITROBENZENE	PA
EPA 8270 D	PENTACHLOROPHENOL	PA	EPA 8270 D	PHENACETIN	PA
EPA 8270 D	PHENANTHRENE	PA	EPA 8270 D	PHENOL	PA
EPA 8270 D	PHORATE	PA	EPA 8270 D	PHTHALIC ANHYDRIDE	PA
EPA 8270 D	PRONAMIDE (KERB)	PA	EPA 8270 D	PYRENE	PA
EPA 8270 D	SAFROLE	PA	EPA 8270 D	SULFOTEP (TETRAETHYL DITHIOPYROPHOSPHATE, TEDP)	PA
EPA 8270 D	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	PA	EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA	EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA	EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	PA	EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	PA
EPA 8270 D - EXTENDED	ATRAZINE	PA	EPA 8270 D - EXTENDED	BENZALDEHYDE	PA
EPA 8270 D - EXTENDED	CAPROLACTAM	PA	EPA 8270 D - EXTENDED	CARBAZOLE	PA
EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	PA	EPA 8270 D - EXTENDED	INDENE	PA
EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA	EPA 8270 D - EXTENDED	PYRIDINE	PA
EPA 8270 D - EXTENDED	QUINOLINE	PA	EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 D SIM	ACENAPHTHENE	PA	EPA 8270 D SIM	ACENAPHTHYLENE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D SIM	ANTHRACENE	PA	EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)PYRENE	PA	EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA	EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 D SIM	CHRYSENE	PA	EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D SIM	FLUORANTHENE	PA	EPA 8270 D SIM	FLUORENE	PA
EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 D SIM	NAPHTHALENE	PA
EPA 8270 D SIM	PHENANTHRENE	PA	EPA 8270 D SIM	PYRENE	PA
EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 E	1,1'-BIPHENYL (BZ-0)	PA	EPA 8270 E	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 E	1,2,4-TRICHLOROBENZENE	PA	EPA 8270 E	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 E	1,2-DIPHENYLHYDRAZINE	PA	EPA 8270 E	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 E	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA	EPA 8270 E	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 E	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 8270 E	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 E	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8270 E	1,4-NAPHTHOQUINONE	PA
EPA 8270 E	1-CHLORONAPHTHALENE	PA	EPA 8270 E	1-METHYLNAPHTHALENE	PA
EPA 8270 E	1-NAPHTHYLAMINE	PA	EPA 8270 E	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 E	2,4,5-TRICHLOROPHENOL	PA	EPA 8270 E	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 E	2,4-DICHLOROPHENOL	PA	EPA 8270 E	2,4-DIMETHYLPHENOL	PA
EPA 8270 E	2,4-DINITROPHENOL	PA	EPA 8270 E	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 E	2,6-DICHLOROPHENOL	PA	EPA 8270 E	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 E	2-ACETYLAMINOFLUORENE	PA	EPA 8270 E	2-CHLORONAPHTHALENE	PA
EPA 8270 E	2-CHLOROPHENOL	PA	EPA 8270 E	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 E	2-METHYLNAPHTHALENE	PA	EPA 8270 E	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 E	2-NAPHTHYLAMINE	PA	EPA 8270 E	2-NITROANILINE	PA
EPA 8270 E	2-NITROPHENOL	PA	EPA 8270 E	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 E	3+4-METHYLPHENOL (M+P CRESOL)	PA	EPA 8270 E	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 E	3,3'-DIMETHYLBENZIDINE	PA	EPA 8270 E	3-METHYLCHOLANTHRENE	PA
EPA 8270 E	3-NITROANILINE	PA	EPA 8270 E	4,4'-METHYLENEBIS-2-CHLOROANILINE	PA
EPA 8270 E	4-AMINOBIIPHENYL	PA	EPA 8270 E	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 E	4-CHLORO-3-METHYLPHENOL	PA	EPA 8270 E	4-CHLOROANILINE	PA
EPA 8270 E	4-CHLOROPHENYL PHENYLETHER	PA	EPA 8270 E	4-NITROANILINE	PA
EPA 8270 E	4-NITROPHENOL	PA	EPA 8270 E	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 E	5-NITRO-O-TOLUIDINE	PA			

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA	EPA 8270 E	ACENAPHTHENE	PA
EPA 8270 E	ACENAPHTHYLENE	PA	EPA 8270 E	ACETOPHENONE	PA
EPA 8270 E	ANILINE	PA	EPA 8270 E	ANTHRACENE	PA
EPA 8270 E	ARAMITE	PA	EPA 8270 E	ATRAZINE	PA
EPA 8270 E	BENZALDEHYDE	PA	EPA 8270 E	BENZIDINE	PA
EPA 8270 E	BENZO(A)ANTHRACENE	PA	EPA 8270 E	BENZO(A)PYRENE	PA
EPA 8270 E	BENZO(B)FLUORANTHENE	PA	EPA 8270 E	BENZO(G,H,I)PERYLENE	PA
EPA 8270 E	BENZO(K)FLUORANTHENE	PA	EPA 8270 E	BENZOIC ACID	PA
EPA 8270 E	BENZYL ALCOHOL	PA	EPA 8270 E	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 E	BIS(2-CHLOROETHYL) ETHER	PA	EPA 8270 E	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 E	BUTYL BENZYL PHTHALATE	PA	EPA 8270 E	CAPROLACTAM	PA
EPA 8270 E	CARBAZOLE	PA	EPA 8270 E	CHLOROBENZILATE	PA
EPA 8270 E	CHRYSENE	PA	EPA 8270 E	DI-N-BUTYL PHTHALATE	PA
EPA 8270 E	DI-N-OCTYL PHTHALATE	PA	EPA 8270 E	DIALLATE	PA
EPA 8270 E	DIBENZ(A, J) ACRIDINE	PA	EPA 8270 E	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 E	DIBENZOFURAN	PA	EPA 8270 E	DIETHYL PHTHALATE	PA
EPA 8270 E	DIMETHOATE	PA	EPA 8270 E	DIMETHYL PHTHALATE	PA
EPA 8270 E	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA	EPA 8270 E	DIPHENYLAMINE	PA
EPA 8270 E	DISULFOTON	PA	EPA 8270 E	ETHYL METHANESULFONATE	PA
EPA 8270 E	FAMPHUR	PA	EPA 8270 E	FLUORANTHENE	PA
EPA 8270 E	FLUORENE	PA	EPA 8270 E	HEXACHLOROBENZENE	PA
EPA 8270 E	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8270 E	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 E	HEXACHLOROETHANE	PA	EPA 8270 E	HEXACHLOROPROPENE	PA
EPA 8270 E	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 E	ISODRIN	PA
EPA 8270 E	ISOPHORONE	PA	EPA 8270 E	ISOSAFROLE	PA
EPA 8270 E	KEPONE	PA	EPA 8270 E	METHYL METHANESULFONATE	PA
EPA 8270 E	METHYL PARATHION (PARATHION, METHYL)	PA	EPA 8270 E	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 E	N-NITROSODI-N-PROPYLAMINE	PA	EPA 8270 E	N-NITROSODIETHYLAMINE	PA
EPA 8270 E	N-NITROSODIMETHYLAMINE	PA	EPA 8270 E	N-NITROSODIPHENYLAMINE	PA
EPA 8270 E	N-NITROSOMETHYLETHYLAMINE	PA	EPA 8270 E	N-NITROSOMORPHOLINE	PA
EPA 8270 E	N-NITROSOPIPERIDINE	PA	EPA 8270 E	N-NITROSOPYRROLIDINE	PA
EPA 8270 E	NAPHTHALENE	PA	EPA 8270 E	NITROBENZENE	PA
EPA 8270 E	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA	EPA 8270 E	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 E	PARATHION (PARATHION - ETHYL)	PA	EPA 8270 E	PENTACHLOROBENZENE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	PENTACHLORONITROBENZENE	PA
EPA 8270 E	PHENACETIN	PA
EPA 8270 E	PHENOL	PA
EPA 8270 E	PRONAMIDE (KERB)	PA
EPA 8270 E	PYRIDINE	PA
EPA 8270 E	SULFOTEP (TETRAETHYL DITHIOPYROPHOSPHATE, TEDP)	PA
EPA 8270 E - EXTENDED	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 E - EXTENDED	6-METHYLCHRYSENE	PA
EPA 8270 E - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 E - EXTENDED	QUINOLINE	PA
EPA 8270 E - GC/MS-MS	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 E - GC/MS-MS	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 E - GC/MS-MS	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 E - GC/MS-MS	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 E - GC/MS-MS	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 E - GC/MS-MS	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 E - GC/MS-MS	1-CHLORONAPHTHALENE	PA
EPA 8270 E - GC/MS-MS	1-NAPHTHYLAMINE	PA
EPA 8270 E - GC/MS-MS	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2,4-DICHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2,4-DINITROPHENOL	PA
EPA 8270 E - GC/MS-MS	2,6-DICHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2-ACETYLAMINOFUORENE	PA
EPA 8270 E - GC/MS-MS	2-CHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2-METHYLNAPHTHALENE	PA
EPA 8270 E - GC/MS-MS	2-NAPHTHYLAMINE	PA
EPA 8270 E - GC/MS-MS	2-NITROPHENOL	PA
EPA 8270 E - GC/MS-MS	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 E - GC/MS-MS	3-METHYLCHOLANTHRENE	PA
EPA 8270 E - GC/MS-MS	4,4'-DDD	PA
EPA 8270 E - GC/MS-MS	4,4'-DDT	PA
EPA 8270 E - GC/MS-MS	4-AMINOBIIPHENYL	PA
EPA 8270 E - GC/MS-MS	4-CHLORO-3-METHYLPHENOL	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	PENTACHLOROPHENOL	PA
EPA 8270 E	PHENANTHRENE	PA
EPA 8270 E	PHORATE	PA
EPA 8270 E	PYRENE	PA
EPA 8270 E	SAFROLE	PA
EPA 8270 E	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	PA
EPA 8270 E - EXTENDED	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 E - EXTENDED	ALPHA-TERPINEOL	PA
EPA 8270 E - EXTENDED	INDENE	PA
EPA 8270 E - EXTENDED	TRIETHYLAMINE	PA
EPA 8270 E - GC/MS-MS	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 E - GC/MS-MS	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 E - GC/MS-MS	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 E - GC/MS-MS	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 E - GC/MS-MS	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 E - GC/MS-MS	1,4-NAPHTHOQUINONE	PA
EPA 8270 E - GC/MS-MS	1-METHYLNAPHTHALENE	PA
EPA 8270 E - GC/MS-MS	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	2,4-DIMETHYLPHENOL	PA
EPA 8270 E - GC/MS-MS	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 E - GC/MS-MS	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 E - GC/MS-MS	2-CHLORONAPHTHALENE	PA
EPA 8270 E - GC/MS-MS	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 E - GC/MS-MS	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 E - GC/MS-MS	2-NITROANILINE	PA
EPA 8270 E - GC/MS-MS	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 E - GC/MS-MS	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 E - GC/MS-MS	3-NITROANILINE	PA
EPA 8270 E - GC/MS-MS	4,4'-DDE	PA
EPA 8270 E - GC/MS-MS	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA
EPA 8270 E - GC/MS-MS	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 E - GC/MS-MS	4-CHLOROANILINE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E - GC/MS-MS	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 E - GC/MS-MS	4-NITROANILINE	PA
EPA 8270 E - GC/MS-MS	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 E - GC/MS-MS	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 E - GC/MS-MS	ACENAPHTHYLENE	PA
EPA 8270 E - GC/MS-MS	ALDRIN	PA
EPA 8270 E - GC/MS-MS	ANILINE	PA
EPA 8270 E - GC/MS-MS	ATRAZINE	PA
EPA 8270 E - GC/MS-MS	BENZIDINE	PA
EPA 8270 E - GC/MS-MS	BENZO(A)PYRENE	PA
EPA 8270 E - GC/MS-MS	BENZO(G,H,I)PERYLENE	PA
EPA 8270 E - GC/MS-MS	BENZOIC ACID	PA
EPA 8270 E - GC/MS-MS	BETA-BHC (BETA-HEXACHLOROCYCLOHEXAN E)	PA
EPA 8270 E - GC/MS-MS	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 E - GC/MS-MS	BUTYL BENZYL PHTHALATE	PA
EPA 8270 E - GC/MS-MS	CARBAZOLE	PA
EPA 8270 E - GC/MS-MS	CHRYSENE	PA
EPA 8270 E - GC/MS-MS	DI-N-BUTYL PHTHALATE	PA
EPA 8270 E - GC/MS-MS	DIALATE	PA
EPA 8270 E - GC/MS-MS	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 E - GC/MS-MS	DIELDRIN	PA
EPA 8270 E - GC/MS-MS	DIMETHOATE	PA
EPA 8270 E - GC/MS-MS	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8270 E - GC/MS-MS	ENDOSULFAN II	PA
EPA 8270 E - GC/MS-MS	ENDRIN	PA
EPA 8270 E - GC/MS-MS	ENDRIN KETONE	PA
EPA 8270 E - GC/MS-MS	FLUORANTHENE	PA
EPA 8270 E - GC/MS-MS	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXA NE)	PA
EPA 8270 E - GC/MS-MS	HEPTACHLOR EPOXIDE	PA
EPA 8270 E - GC/MS-MS	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 E - GC/MS-MS	HEXACHLOROETHANE	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E - GC/MS-MS	4-METHYLPHENOL (P-CRESOL)	PA
EPA 8270 E - GC/MS-MS	4-NITROPHENOL	PA
EPA 8270 E - GC/MS-MS	5-NITRO-O-TOLUIDINE	PA
EPA 8270 E - GC/MS-MS	ACENAPHTHENE	PA
EPA 8270 E - GC/MS-MS	ACETOPHENONE	PA
EPA 8270 E - GC/MS-MS	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXA NE)	PA
EPA 8270 E - GC/MS-MS	ANTHRACENE	PA
EPA 8270 E - GC/MS-MS	BENZALDEHYDE	PA
EPA 8270 E - GC/MS-MS	BENZO(A)ANTHRACENE	PA
EPA 8270 E - GC/MS-MS	BENZO(B)FLUORANTHENE	PA
EPA 8270 E - GC/MS-MS	BENZO(K)FLUORANTHENE	PA
EPA 8270 E - GC/MS-MS	BENZYL ALCOHOL	PA
EPA 8270 E - GC/MS-MS	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 E - GC/MS-MS	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 E - GC/MS-MS	CAPROLACTAM	PA
EPA 8270 E - GC/MS-MS	CHLOROBENZILATE	PA
EPA 8270 E - GC/MS-MS	DELTA-BHC	PA
EPA 8270 E - GC/MS-MS	DI-N-OCTYL PHTHALATE	PA
EPA 8270 E - GC/MS-MS	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 E - GC/MS-MS	DIBENZOFURAN	PA
EPA 8270 E - GC/MS-MS	DIETHYL PHTHALATE	PA
EPA 8270 E - GC/MS-MS	DIMETHYL PHTHALATE	PA
EPA 8270 E - GC/MS-MS	ENDOSULFAN I	PA
EPA 8270 E - GC/MS-MS	ENDOSULFAN SULFATE	PA
EPA 8270 E - GC/MS-MS	ENDRIN ALDEHYDE	PA
EPA 8270 E - GC/MS-MS	ETHYL METHANESULFONATE	PA
EPA 8270 E - GC/MS-MS	FLUORENE	PA
EPA 8270 E - GC/MS-MS	HEPTACHLOR	PA
EPA 8270 E - GC/MS-MS	HEXACHLOROBENZENE	PA
EPA 8270 E - GC/MS-MS	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 E - GC/MS-MS	HEXACHLOROPROPENE	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E - GC/MS-MS	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 E - GC/MS-MS	ISODRIN	PA
EPA 8270 E - GC/MS-MS	ISOPHORONE	PA	EPA 8270 E - GC/MS-MS	ISOSAFROLE	PA
EPA 8270 E - GC/MS-MS	METHOXYCHLOR	PA	EPA 8270 E - GC/MS-MS	METHYL METHANESULFONATE	PA
EPA 8270 E - GC/MS-MS	METHYL PARATHION (PARATHION, METHYL)	PA	EPA 8270 E - GC/MS-MS	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 E - GC/MS-MS	N-NITROSODI-N-PROPYLAMINE	PA	EPA 8270 E - GC/MS-MS	N-NITROSODIETHYLAMINE	PA
EPA 8270 E - GC/MS-MS	N-NITROSODIMETHYLAMINE	PA	EPA 8270 E - GC/MS-MS	N-NITROSODIPHENYLAMINE	PA
EPA 8270 E - GC/MS-MS	N-NITROSOMETHYLETHYLAMINE	PA	EPA 8270 E - GC/MS-MS	N-NITROSOMORPHOLINE	PA
EPA 8270 E - GC/MS-MS	N-NITROSOPIPERIDINE	PA	EPA 8270 E - GC/MS-MS	N-NITROSOPYRROLIDINE	PA
EPA 8270 E - GC/MS-MS	NAPHTHALENE	PA	EPA 8270 E - GC/MS-MS	NITROBENZENE	PA
EPA 8270 E - GC/MS-MS	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA	EPA 8270 E - GC/MS-MS	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 E - GC/MS-MS	PARATHION (PARATHION - ETHYL)	PA	EPA 8270 E - GC/MS-MS	PENTACHLOROBENZENE	PA
EPA 8270 E - GC/MS-MS	PENTACHLORONITROBENZENE	PA	EPA 8270 E - GC/MS-MS	PENTACHLOROPHENOL	PA
EPA 8270 E - GC/MS-MS	PHENACETIN	PA	EPA 8270 E - GC/MS-MS	PHENANTHRENE	PA
EPA 8270 E - GC/MS-MS	PHENOL	PA	EPA 8270 E - GC/MS-MS	PHORATE	PA
EPA 8270 E - GC/MS-MS	PRONAMIDE (KERB)	PA	EPA 8270 E - GC/MS-MS	PYRENE	PA
EPA 8270 E - GC/MS-MS	PYRIDINE	PA	EPA 8270 E - GC/MS-MS	SAFROLE	PA
EPA 8270 E - GC/MS-MS	SULFOTEP (TETRAETHYL DITHIOPYROPHOSPHATE, TEDP)	PA	EPA 8270 E - GC/MS-MS	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	PA
EPA 8270 E - GC/MS-MS - EXTENDED	2,2'-OXYBIS(1-CHLOROPROPANE)	PA	EPA 8270 E - GC/MS-MS - EXTENDED	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 E - GC/MS-MS - EXTENDED	6-METHYLCHRYSENE	PA	EPA 8270 E - GC/MS-MS - EXTENDED	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8270 E - GC/MS-MS - EXTENDED	ALPHA-TERPINEOL	PA	EPA 8270 E - GC/MS-MS - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 E - GC/MS-MS - EXTENDED	DIPHENYL ETHER (DIPHENYL OXIDE)	PA	EPA 8270 E - GC/MS-MS - EXTENDED	GAMMA-CHLORDANE (TRANS-CHLORDANE)	PA
EPA 8270 E - GC/MS-MS - EXTENDED	INDENE	PA	EPA 8270 E - GC/MS-MS - EXTENDED	OCTACHLOROSTYRENE	PA
EPA 8270 E - GC/MS-MS - EXTENDED	QUINOLINE	PA	EPA 8270 E SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 E SIM	1-METHYLNAPHTHALENE	PA	EPA 8270 E SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 E SIM	ACENAPHTHENE	PA	EPA 8270 E SIM	ACENAPHTHYLENE	PA
EPA 8270 E SIM	ANTHRACENE	PA	EPA 8270 E SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 E SIM	BENZO(A)PYRENE	PA	EPA 8270 E SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 E SIM	BENZO(G,H,I)PERYLENE	PA	EPA 8270 E SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 E SIM	CHRYSENE	PA	EPA 8270 E SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 E SIM	DIBENZOFURAN	PA	EPA 8270 E SIM	FLUORANTHENE	PA
EPA 8270 E SIM	FLUORENE	PA	EPA 8270 E SIM	HEXACHLOROBENZENE	PA
EPA 8270 E SIM	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 E SIM	NAPHTHALENE	PA
EPA 8270 E SIM	PHENANTHRENE	PA	EPA 8270 E SIM	PYRENE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA	EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA	EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA	EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA	EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA	EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZOF URAN (1,2,3,7,8,9-HXCDF)	PA	EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PECDF)	PA	EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA	EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO- P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA	EPA 8290 A - EXTENDED	TOTAL HEPTACHLORODIBENZO-P-DIOXIN (HPCDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL HEPTACHLORODIBENZOFURAN (HPCDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL HEXACHLORODIBENZO-P-DIOXIN (HXCDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL HEXACHLORODIBENZOFURAN (HXCDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL PENTACHLORODIBENZO-P-DIOXIN (PECDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL PENTACHLORODIBENZOFURAN (PECDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL TETRACHLORODIBENZO-P-DIOXIN (TCDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL TETRACHLORODIBENZOFURAN (TCDF, TOTAL)	PA	EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	FORMALDEHYDE	PA	EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA	EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA	EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3,5-DINITROANILINE	PA	EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA	EPA 8330 B	4-NITROTOLUENE	PA
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNIT RAMINE (TETRYL)	PA	EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	NITROGLYCERIN	PA	EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1 ,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	PA	EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5- TRIAZINE)	PA
EPA 8330 B - EXTENDED	2,4-DIAMINO-6-NITROTOLUENE	PA	EPA 8330 B - EXTENDED	2,6-DIAMINO-4-NITROTOLUENE	PA
EPA 9012 B	CYANIDE, TOTAL	PA	EPA 9040 C	PH	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

NON-POTABLE WATER

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 9050 A	CONDUCTIVITY	PA	EPA 9056 A	BROMIDE	PA
EPA 9056 A	CHLORIDE	PA	EPA 9056 A	FLUORIDE	PA
EPA 9056 A	NITRATE AS N	PA	EPA 9056 A	NITRITE AS N	PA
EPA 9056 A	SULFATE	PA	EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	PA
EPA 9066	TOTAL PHENOLICS	PA	EPA 9095 B	FREE LIQUID	PA
OIA-1677-09	CYANIDE, AVAILABLE	PA	OIA-1677-09	CYANIDE, FREE	PA
RSK-175	ETHANE	PA	RSK-175	ETHENE (ETHYLENE)	PA
RSK-175	METHANE	PA	SM 2120 B-2021	COLOR	PA
SM 2130 B-2020	TURBIDITY	PA	SM 2310 B-2020	ACIDITY, AS CaCO ₃	PA
SM 2320 B-2021	ALKALINITY AS CaCO ₃	PA	SM 2340 C-2021	TOTAL HARDNESS AS CaCO ₃	PA
SM 2510 B-2021	CONDUCTIVITY	PA	SM 2540 B-2020	RESIDUE-TOTAL (TS)	PA
SM 2540 C-2020	RESIDUE-FILTERABLE (TDS)	PA	SM 2540 D-2020	RESIDUE-NONFILTERABLE (TSS)	PA
SM 2540 F-2020	RESIDUE-SETTLABLE	PA	SM 3500-CR B-2020	CHROMIUM VI	PA
SM 4500-CL ⁻ C-2021	CHLORIDE	PA	SM 4500-F ⁻ B-2021	FLUORIDE	PA
SM 4500-F ⁻ C-2021	FLUORIDE	PA	SM 4500-NH ₃ B-2021	AMMONIA AS N	PA
SM 4500-NH ₃ C-2021	AMMONIA AS N	PA	SM 4500-NH ₃ D-2021	AMMONIA AS N	PA
SM 4500-P B 5-2021	PREP: TOTAL PHOSPHORUS	PA	SM 4500-P E-2021	ORTHOPHOSPHATE AS P	PA
SM 4500-P F-2021	PHOSPHORUS, TOTAL	PA	SM 4500-S ₂ ⁻ D-2021	SULFIDE	PA
SM 4500-S ₂ ⁻ F-2021	SULFIDE	PA	SM 4500-SiO ₂ C-2021	SILICA AS SiO ₂	PA
SM 5210 B-2016	BIOCHEMICAL OXYGEN DEMAND (BOD)	PA	SM 5210 B-2016	CARBONACEOUS BOD (CBOD)	PA
SM 5310 C-2014	TOTAL ORGANIC CARBON (TOC)	PA	SM 5540 C-2021	SURFACTANTS - MBAS	PA

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 B	FLASHPOINT	PA	EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP)	PA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE (SPLP)	PA	EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA	EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA	EPA 1613 B	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,4,7,8-HXCDD)	PA	EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,6,7,8-HXCDD)	PA	EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,7,8,9-HXCDD)	PA	EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZOF URAN (1,2,3,7,8,9-HXCDF)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (1,2,3,7,8-PECDD)	PA	EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PECDF)	PA
EPA 1613 B	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA	EPA 1613 B	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA	EPA 1613 B	2,3,7,8-TETRACHLORODIBENZOFURAN (2,3,7,8-TCDF)	PA
EPA 1633A	11-CHLOROEICOSAFLUORO-3-OXA UNDECANE-1-SULFONIC ACID (11CL-PF3OUDS)	PA	EPA 1633A	1H, 1H, 2H, 2H-PERFLUORODECANE SULFONIC ACID (8:2 FTS)	PA
EPA 1633A	1H, 1H, 2H, 2H-PERFLUOROHEXANE SULFONIC ACID (4:2 FTS)	PA	EPA 1633A	1H, 1H, 2H, 2H-PERFLUOROOCTANE SULFONIC ACID (6:2 FTS)	PA
EPA 1633A	2H,2H,3H,3H-PERFLUOROOCTANOIC ACID (5:3 FTCA)	PA	EPA 1633A	3-PERFLUOROHEPTYL PROPANOIC ACID (7:3 FTCA)	PA
EPA 1633A	3-PERFLUOROPROPYL PROPANOIC ACID (3:3 FTCA)	PA	EPA 1633A	4,8-DIOXA-3H-PERFLUORONONANOIC ACID (ADONA, DONA)	PA
EPA 1633A	9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID (9CL-PF3ONS)	PA	EPA 1633A	HEXAFLUOROPROPYLENE OXIDE DIMER ACID (HFPO-DA, GENX)	PA
EPA 1633A	N-ETHYL PERFLUOROOCTANESULFONAMIDE (NETFOSA, ETFOSAM)	PA	EPA 1633A	N-ETHYL PERFLUOROOCTANESULFONAMIDE OETHANOL (NETFOSE, ETFOSE)	PA
EPA 1633A	N-ETHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (N-ETFOSAA)	PA	EPA 1633A	N-METHYL PERFLUOROOCTANESULFONAMIDE (NMEFOSA, MEFOSA)	PA
EPA 1633A	N-METHYL PERFLUOROOCTANESULFONAMIDE OETHANOL (NMEFOSE, MEFOSE)	PA	EPA 1633A	N-METHYLPERFLUORO-1-OCTANESULFONAMIDOACETIC ACID (N-MEFOSAA)	PA
EPA 1633A	NONAFLUORO-3,6-DIOXAHEPTANOIC ACID (NFDHA)	PA	EPA 1633A	PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID (PFEESA)	PA
EPA 1633A	PERFLUORO-1-BUTANESULFONIC ACID (PFBS)	PA	EPA 1633A	PERFLUORO-1-DECANESULFONIC ACID (PFDS)	PA
EPA 1633A	PERFLUORO-1-HEPTANESULFONIC ACID (PFHPS)	PA	EPA 1633A	PERFLUORO-1-HEXANESULFONIC ACID (PFHXS)	PA
EPA 1633A	PERFLUORO-1-NONANESULFONIC ACID (PFNS)	PA	EPA 1633A	PERFLUORO-1-OCTANESULFONAMIDE (PFOSA, PFOSAM)	PA
EPA 1633A	PERFLUORO-1-OCTANESULFONIC ACID (PFOS)	PA	EPA 1633A	PERFLUORO-1-PENTANESULFONIC ACID (PFPEP)	PA
EPA 1633A	PERFLUORO-3-METHOXYPROPANOIC ACID (PFMPA)	PA	EPA 1633A	PERFLUORO-4-METHOXYBUTANOIC ACID (PFMBA)	PA
EPA 1633A	PERFLUOROBUTANOIC ACID (PFBA)	PA	EPA 1633A	PERFLUORODECANOIC ACID (PFDA)	PA
EPA 1633A	PERFLUORODODECANESULFONIC ACID (PFDOS)	PA	EPA 1633A	PERFLUORODODECANOIC ACID (PFDOA, PFDODA)	PA
EPA 1633A	PERFLUOROHEPTANOIC ACID (PFHPA)	PA	EPA 1633A	PERFLUOROHEXANOIC ACID (PFHXA)	PA
EPA 1633A	PERFLUORONONANOIC ACID (PFNA)	PA	EPA 1633A	PERFLUOROOCTANOIC ACID (PFOA)	PA
EPA 1633A	PERFLUOROPENTANOIC ACID (PFPEA)	PA	EPA 1633A	PERFLUOROTETRADECANOIC ACID (PFTA, PFTDA, PFTEDA)	PA
EPA 1633A	PERFLUOROTRIDECANOIC ACID (PFTRDA)	PA	EPA 1633A	PERFLUOROUNDECANOIC ACID (PFUNA, PFUNDA)	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL (BZ-206)	PA	EPA 1668 A	2,2',3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-196)	PA			

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2',3,3',4,4',5,6,6'-NONACHLOROBIPHENYL (BZ-207)	PA	EPA 1668 A	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL BZ-195)	PA
EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-170)	PA	EPA 1668 A	2,2',3,3',4,4',6,6'-OCTACHLOROBIPHENYL (BZ-197)	PA
EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL (BZ-171)	PA	EPA 1668 A	2,2',3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-128)	PA
EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-177)	PA	EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-201)	PA
EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-175)	PA	EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENYL (BZ-130)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPHENYL (BZ-199)	PA	EPA 1668 A	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (BZ-208)	PA
EPA 1668 A	2,2',3,3',4,5,5',6-OCTACHLOROBIPHENYL (BZ-198)	PA	EPA 1668 A	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (BZ-172)	PA
EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-174)	PA	EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-200)	PA
EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-173)	PA	EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA
EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (BZ-132)	PA	EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (BZ-176)	PA
EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA	EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA
EPA 1668 A	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (BZ-202)	PA	EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (BZ-178)	PA
EPA 1668 A	2,2',3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-133)	PA	EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENYL (BZ-135)	PA
EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (BZ-179)	PA	EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA
EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA	EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (BZ-136)	PA
EPA 1668 A	2,2',3,3',6-PENTACHLOROBIPHENYL (BZ-84)	PA	EPA 1668 A	2,2',3,3',6-TETRACHLOROBIPHENYL (BZ-40)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-149)	PA	EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-97)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-HEPTACHLOROBIPHENYL (BZ-187)	PA	EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-146)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEXACHLOROBIPHENYL (BZ-148)	PA	EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHENYL (BZ-188)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA	EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-90)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-98)	PA	EPA 1668 A	2,2',3,4,6,6'-HEXACHLOROBIPHENYL (BZ-150)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-91)	PA	EPA 1668 A	2,2',3,4'-TETRACHLOROBIPHENYL (BZ-42)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-183)	PA	EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENYL (BZ-138)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-203)	PA	EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-180)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (BZ-182)	PA	EPA 1668 A	2,2',3,4,4',5,6,6'-OCTACHLOROBIPHENYL (BZ-204)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHE NYL (BZ-181)	PA	EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA
EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENY L (BZ-140)	PA	EPA 1668 A	2,2',3,4,4',6'-HEPTACHLOROBIPHE NYL (BZ-184)	PA
EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA	EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA
EPA 1668 A	2,2',3,4,5',6-HEXACHLOROBIPHENYL (BZ-144)	PA	EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA
EPA 1668 A	2,2',3,4,5,5',6-HEPTACHLOROBIPHE NYL (BZ-185)	PA	EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA	EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHE NYL (BZ-186)	PA
EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-142)	PA	EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA	EPA 1668 A	2,2',3,4,6,6'-HEXACHLOROBIPHENYL (BZ-145)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA	EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA
EPA 1668 A	2,2',3,5',6-PENTACHLOROBIPHENYL (BZ-95)	PA	EPA 1668 A	2,2',3,5'-TETRACHLOROBIPHENYL (BZ-44)	PA
EPA 1668 A	2,2',3,5,5',6-HEXACHLOROBIPHENYL (BZ-151)	PA	EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA
EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA	EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA
EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA	EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA
EPA 1668 A	2,2',3,6'-TETRACHLOROBIPHENYL (BZ-46)	PA	EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA
EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA	EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA
EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENY L (BZ-153)	PA	EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENY L (BZ-154)	PA
EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA	EPA 1668 A	2,2',4,4',6,6'-HEXACHLOROBIPHENY L (BZ-155)	PA
EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA	EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA
EPA 1668 A	2,2',4,5',6-PENTACHLOROBIPHENYL (BZ-103)	PA	EPA 1668 A	2,2',4,5'-TETRACHLOROBIPHENYL (BZ-49)	PA
EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA	EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA	EPA 1668 A	2,2',4,6'-TETRACHLOROBIPHENYL (BZ-51)	PA
EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA	EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA
EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA	EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA
EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA	EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA
EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA	EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-76)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-70)	PA
EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-33)	PA
EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA
EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-118)	PA
EPA 1668 A	2,3',4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA
EPA 1668 A	2,3',4,5'-TETRACHLOROBIPHENYL (BZ-68)	PA
EPA 1668 A	2,3',4,5'-TETRACHLOROBIPHENYL (BZ-67)	PA
EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-25)	PA
EPA 1668 A	2,3',5'-TRICHLOROBIPHENYL (BZ-34)	PA
EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-26)	PA
EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA
EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-107)	PA
EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA
EPA 1668 A	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA
EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA
EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA
EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA
EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA
EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA
EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA
EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA
EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA
EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA
EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA
EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA
EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA
EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA
EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA
EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA
EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA
EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA
EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (BZ-190)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-192)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA
EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA
EPA 1668 A	2,3,3',5',6-PENTACHLOROBIPHENYL (BZ-113)	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1668 A	2,3,3',5'-TETRACHLOROBIPHENYL (BZ-58)	PA	EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA
EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA	EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA	EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA
EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA	EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA
EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA	EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA	EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA
EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA	EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA	EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA	EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA	EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA	EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA
EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA	EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA
EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA	EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA
EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA	EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA
EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA	EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA
EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA	EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA
EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA	EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA
EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA	EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-169)	PA
EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA	EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA
EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA	EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA
EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA	EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA
EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA	EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA
EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA	EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA
EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA	EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA
EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA	EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA
EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA	EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA
EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA	EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA
EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA	EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA
EPA 300.0 REV 2.1	CHLORIDE	PA	EPA 300.0 REV 2.1	FLUORIDE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 300.0 REV 2.1	NITRATE AS N	PA	EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA	EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	PA
EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	PA	EPA 3546	PREP: MICROWAVE EXTRACTION	PA
EPA 3550 C	PREP: ULTRASONIC EXTRACTION	PA	EPA 3580 A	PREP: WASTE DILUTION	PA
EPA 3620 C	PREP: FLORISIL CLEANUP	PA	EPA 3630 C	PREP: SILICA GEL CLEANUP	PA
EPA 3640 A	PREP: GEL PERMEATION CLEANUP	PA	EPA 365.1 REV 2	PHOSPHORUS, TOTAL	PA
EPA 3660 B	PREP: SULFUR CLEANUP	PA	EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	PA
EPA 5030	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA	EPA 5035 A	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	PA
EPA 6010 D	ALUMINUM	PA	EPA 6010 D	ANTIMONY	PA
EPA 6010 D	ARSENIC	PA	EPA 6010 D	BARIUM	PA
EPA 6010 D	BERYLLIUM	PA	EPA 6010 D	BORON	PA
EPA 6010 D	CADMIUM	PA	EPA 6010 D	CALCIUM	PA
EPA 6010 D	CHROMIUM	PA	EPA 6010 D	COBALT	PA
EPA 6010 D	COPPER	PA	EPA 6010 D	IRON	PA
EPA 6010 D	LEAD	PA	EPA 6010 D	LITHIUM	PA
EPA 6010 D	MAGNESIUM	PA	EPA 6010 D	MANGANESE	PA
EPA 6010 D	MOLYBDENUM	PA	EPA 6010 D	NICKEL	PA
EPA 6010 D	POTASSIUM	PA	EPA 6010 D	SELENIUM	PA
EPA 6010 D	SILICA AS SIO2	PA	EPA 6010 D	SILVER	PA
EPA 6010 D	SODIUM	PA	EPA 6010 D	STRONTIUM	PA
EPA 6010 D	THALLIUM	PA	EPA 6010 D	TIN	PA
EPA 6010 D	TITANIUM	PA	EPA 6010 D	VANADIUM	PA
EPA 6010 D	ZINC	PA	EPA 6010 D - EXTENDED	SULFUR	PA
EPA 6010 D - EXTENDED	THORIUM	PA	EPA 6010 D - EXTENDED	ZIRCONIUM	PA
EPA 6020 B	ALUMINUM	PA	EPA 6020 B	ANTIMONY	PA
EPA 6020 B	ARSENIC	PA	EPA 6020 B	BARIUM	PA
EPA 6020 B	BERYLLIUM	PA	EPA 6020 B	CADMIUM	PA
EPA 6020 B	CALCIUM	PA	EPA 6020 B	CHROMIUM	PA
EPA 6020 B	COBALT	PA	EPA 6020 B	COPPER	PA
EPA 6020 B	IRON	PA	EPA 6020 B	LEAD	PA
EPA 6020 B	MAGNESIUM	PA	EPA 6020 B	MANGANESE	PA
EPA 6020 B	MOLYBDENUM	PA	EPA 6020 B	NICKEL	PA
EPA 6020 B	POTASSIUM	PA	EPA 6020 B	SELENIUM	PA
EPA 6020 B	SILVER	PA	EPA 6020 B	SODIUM	PA
EPA 6020 B	THALLIUM	PA	EPA 6020 B	TIN	PA
EPA 6020 B	VANADIUM	PA	EPA 6020 B	ZINC	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6020 B - EXTENDED	STRONTIUM	PA	EPA 6020 B - EXTENDED	TITANIUM	PA
EPA 6020 B - EXTENDED	URANIUM (MASS)	PA	EPA 6850	PERCHLORATE	PA
EPA 7196 A	CHROMIUM VI	PA	EPA 7199	CHROMIUM VI	PA
EPA 7471 B	MERCURY	PA	EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 C	ETHANOL	PA	EPA 8015 C	ETHYLENE GLYCOL	PA
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	PA	EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C	METHANOL	PA	EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	PA	EPA 8015 D	ETHANOL	PA
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	PA	EPA 8015 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 D	METHANOL	PA	EPA 8015 D	N-PROPANOL (1-PROPANOL)	PA
EPA 8015 D - EXTENDED	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA	EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	PA
EPA 8015 D - EXTENDED	PROPYLENE GLYCOL	PA	EPA 8015 D - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8081 B	4,4'-DDD	PA	EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	4,4'-DDT	PA	EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DELTA-BHC	PA	EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN I	PA	EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA	EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA	EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA	EPA 8081 B	GAMMA-CHLORDANE (TRANS-CHLORDANE)	PA
EPA 8081 B	HEPTACHLOR	PA	EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	METHOXYCHLOR	PA	EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B - EXTENDED	2,4'-DDD	PA	EPA 8081 B - EXTENDED	2,4'-DDE	PA
EPA 8081 B - EXTENDED	2,4'-DDT	PA	EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8081 B - EXTENDED	MIREX	PA	EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA	EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA	EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA
EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA	EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA	EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8151 A	2,4,5-T	PA	EPA 8151 A	2,4-D	PA
EPA 8151 A	2,4-DB	PA	EPA 8151 A	DALAPON	PA
EPA 8151 A	DICAMBA	PA	EPA 8151 A	DICHLOROPROP (DICHLORPROP)	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA	EPA 8151 A	MCPA	PA
EPA 8151 A	MCPP	PA	EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	PICLORAM	PA	EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA	EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA	EPA 8260 C	1,1,2-TRICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA	EPA 8260 C	1,1-DICHLOROETHYLENE	PA
EPA 8260 C	1,1-DICHLOROPROPENE	PA	EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA	EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA	EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA	EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA	EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA	EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA	EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA	EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA	EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA	EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	2-HEXANONE	PA	EPA 8260 C	2-NITROPROPANE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA	EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 8260 C	ACETONE	PA
EPA 8260 C	ACETONITRILE	PA	EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ACRYLONITRILE	PA	EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZENE	PA	EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOBENZENE	PA	EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA	EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON DISULFIDE	PA	EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLOROBENZENE	PA	EPA 8260 C	CHLORODIBROMOMETHANE	PA
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA	EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA	EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA	EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	ETHANOL	PA	EPA 8260 C	ETHYL ACETATE	PA
EPA 8260 C	ETHYL METHACRYLATE	PA	EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 C	ETHYLBENZENE	PA	EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA	EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA	EPA 8260 C	ISOPROPYLBENZENE	PA
EPA 8260 C	M+P-XYLENE	PA	EPA 8260 C	METHACRYLONITRILE	PA
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA	EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 C	METHYL METHACRYLATE	PA	EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 C	METHYLCYCLOHEXANE	PA	EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 C	N-BUTYLBENZENE	PA	EPA 8260 C	N-PROPYLBENZENE	PA
EPA 8260 C	NAPHTHALENE	PA	EPA 8260 C	O-XYLENE	PA
EPA 8260 C	PENTACHLOROETHANE	PA	EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 C	SEC-BUTYLBENZENE	PA	EPA 8260 C	STYRENE	PA
EPA 8260 C	TERT-AMYL METHYL ETHER (TAME)	PA	EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 C	TERT-BUTYLBENZENE	PA	EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 C	TOLUENE	PA	EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA	EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA	EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 C	VINYL ACETATE	PA	EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 C	XYLENE (TOTAL)	PA	EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA	EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA
EPA 8260 C - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA	EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA	EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	N-HEXANE	PA	EPA 8260 C - EXTENDED	TERT-AMYL ALCOHOL (TAA)	PA
EPA 8260 C - EXTENDED	TERT-BUTYL FORMATE	PA	EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA	EPA 8260 D	1,1,1,2-TETRACHLOROETHANE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 D	1,1,1-TRICHLOROETHANE	PA	EPA 8260 D	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 D	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	PA	EPA 8260 D	1,1,2-TRICHLOROETHANE	PA
EPA 8260 D	1,1-DICHLOROETHANE	PA	EPA 8260 D	1,1-DICHLOROETHYLENE	PA
EPA 8260 D	1,1-DICHLOROPROPENE	PA	EPA 8260 D	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 D	1,2,3-TRICHLOROPROPANE	PA	EPA 8260 D	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 D	1,2,4-TRICHLOROBENZENE	PA	EPA 8260 D	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA	EPA 8260 D	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA	EPA 8260 D	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 D	1,2-DICHLOROPROPANE	PA	EPA 8260 D	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA	EPA 8260 D	1,3-DICHLOROPROPANE	PA
EPA 8260 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 8260 D	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 D	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA	EPA 8260 D	1-CHLOROHEXANE	PA
EPA 8260 D	2,2-DICHLOROPROPANE	PA	EPA 8260 D	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 D	2-CHLOROETHYL VINYL ETHER	PA	EPA 8260 D	2-CHLOROTOLUENE	PA
EPA 8260 D	2-HEXANONE	PA	EPA 8260 D	2-NITROPROPANE	PA
EPA 8260 D	4-CHLOROTOLUENE	PA	EPA 8260 D	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 D	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA	EPA 8260 D	ACETONE	PA
EPA 8260 D	ACETONITRILE	PA	EPA 8260 D	ACROLEIN (PROPENAL)	PA
EPA 8260 D	ACRYLONITRILE	PA	EPA 8260 D	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 D	BENZENE	PA	EPA 8260 D	BENZYL CHLORIDE	PA
EPA 8260 D	BROMOBENZENE	PA	EPA 8260 D	BROMOCHLOROMETHANE	PA
EPA 8260 D	BROMODICHLOROMETHANE	PA	EPA 8260 D	BROMOFORM	PA
EPA 8260 D	CARBON DISULFIDE	PA	EPA 8260 D	CARBON TETRACHLORIDE	PA
EPA 8260 D	CHLOROBENZENE	PA	EPA 8260 D	CHLORODIBROMOMETHANE	PA
EPA 8260 D	CHLOROETHANE (ETHYL CHLORIDE)	PA	EPA 8260 D	CHLOROFORM	PA
EPA 8260 D	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA	EPA 8260 D	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 D	CIS-1,3-DICHLOROPROPENE	PA	EPA 8260 D	CYCLOHEXANE	PA
EPA 8260 D	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA	EPA 8260 D	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 D	DICHLORODIFLUOROMETHANE (FREON-12)	PA	EPA 8260 D	ETHANOL	PA
EPA 8260 D	ETHYL ACETATE	PA	EPA 8260 D	ETHYL METHACRYLATE	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8260 D	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA	EPA 8260 D	ETHYLBENZENE	PA
EPA 8260 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA	EPA 8260 D	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 D	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA	EPA 8260 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 D	ISOPROPYLBENZENE	PA	EPA 8260 D	M+P-XYLENE	PA
EPA 8260 D	METHACRYLONITRILE	PA	EPA 8260 D	METHYL ACETATE	PA
EPA 8260 D	METHYL ACRYLATE	PA	EPA 8260 D	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 D	METHYL CHLORIDE (CHLOROMETHANE)	PA	EPA 8260 D	METHYL METHACRYLATE	PA
EPA 8260 D	METHYL TERT-BUTYL ETHER (MTBE)	PA	EPA 8260 D	METHYLCYCLOHEXANE	PA
EPA 8260 D	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA	EPA 8260 D	N-BUTYLBENZENE	PA
EPA 8260 D	N-PROPYLBENZENE	PA	EPA 8260 D	NAPHTHALENE	PA
EPA 8260 D	O-XYLENE	PA	EPA 8260 D	PENTACHLOROETHANE	PA
EPA 8260 D	PROPIONITRILE (ETHYL CYANIDE)	PA	EPA 8260 D	SEC-BUTYLBENZENE	PA
EPA 8260 D	STYRENE	PA	EPA 8260 D	TERT-AMYL METHYL ETHER (TAME)	PA
EPA 8260 D	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA	EPA 8260 D	TERT-BUTYLBENZENE	PA
EPA 8260 D	TETRACHLOROETHENE (PERCHLOROETHENE)	PA	EPA 8260 D	TOLUENE	PA
EPA 8260 D	TRANS-1,2-DICHLOROETHENE	PA	EPA 8260 D	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 D	TRANS-1,4-DICHLORO-2-BUTENE	PA	EPA 8260 D	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 D	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA	EPA 8260 D	VINYL ACETATE	PA
EPA 8260 D	VINYL CHLORIDE (CHLOROETHENE)	PA	EPA 8260 D	XYLENE (TOTAL)	PA
EPA 8260 D - EXTENDED	1,3,5-TRICHLOROBENZENE	PA	EPA 8260 D - EXTENDED	1,4-DIETHYLBENZENE (P-DIETHYLBENZENE)	PA
EPA 8260 D - EXTENDED	CYCLOHEXANONE	PA	EPA 8260 D - EXTENDED	ETHYL ACRYLATE	PA
EPA 8260 D - EXTENDED	ISOPROPYL ACETATE	PA	EPA 8260 D - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 D - EXTENDED	N-HEXANE	PA	EPA 8260 D - EXTENDED	N-PENTANE	PA
EPA 8260 D - EXTENDED	TETRAHYDROFURAN (THF)	PA	EPA 8260 D SIM	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA	EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA	EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA	EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA			

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA	EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 D	1,4-NAPHTHOQUINONE	PA	EPA 8270 D	1,4-PHENYLENEDIAMINE	PA
EPA 8270 D	1-CHLORONAPHTHALENE	PA	EPA 8270 D	1-NAPHTHYLAMINE	PA
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA	EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA	EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DICHLOROPHENOL	PA	EPA 8270 D	2,4-DIMETHYLPHENOL	PA
EPA 8270 D	2,4-DINITROPHENOL	PA	EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 D	2,6-DICHLOROPHENOL	PA	EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 D	2-ACETYLAMINOFLUORENE	PA	EPA 8270 D	2-CHLORONAPHTHALENE	PA
EPA 8270 D	2-CHLOROPHENOL	PA	EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 D	2-METHYLNAPHTHALENE	PA	EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 D	2-NAPHTHYLAMINE	PA	EPA 8270 D	2-NITROANILINE	PA
EPA 8270 D	2-NITROPHENOL	PA	EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	PA	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 D	3-METHYLCHOLANTHRENE	PA	EPA 8270 D	3-NITROANILINE	PA
EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA	EPA 8270 D	4-AMINOBIIPHENYL	PA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA	EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 D	4-CHLOROANILINE	PA	EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	PA	EPA 8270 D	4-NITROANILINE	PA
EPA 8270 D	4-NITROPHENOL	PA	EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 D	5-NITRO-O-TOLUIDINE	PA	EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA	EPA 8270 D	ACENAPHTHENE	PA
EPA 8270 D	ACENAPHTHYLENE	PA	EPA 8270 D	ACETOPHENONE	PA
EPA 8270 D	ANILINE	PA	EPA 8270 D	ANTHRACENE	PA
EPA 8270 D	ARAMITE	PA	EPA 8270 D	BENZIDINE	PA
EPA 8270 D	BENZO(A)ANTHRACENE	PA	EPA 8270 D	BENZO(A)PYRENE	PA
EPA 8270 D	BENZO(B)FLUORANTHENE	PA	EPA 8270 D	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D	BENZO(K)FLUORANTHENE	PA	EPA 8270 D	BENZOIC ACID	PA
EPA 8270 D	BENZYL ALCOHOL	PA	EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA	EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 D	BUTYL BENZYL PHTHALATE	PA	EPA 8270 D	CHLORO BENZILATE	PA
EPA 8270 D	CHRYSENE	PA	EPA 8270 D	DI-N-BUTYL PHTHALATE	PA
EPA 8270 D	DI-N-OCTYL PHTHALATE	PA	EPA 8270 D	DIALATE	PA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D	DIBENZOFURAN	PA	EPA 8270 D	DIETHYL PHTHALATE	PA
EPA 8270 D	DIMETHOATE	PA	EPA 8270 D	DIMETHYL PHTHALATE	PA
EPA 8270 D	DIPHENYLAMINE	PA	EPA 8270 D	DISULFOTON	PA
EPA 8270 D	ETHYL METHANESULFONATE	PA	EPA 8270 D	FAMPHUR	PA
EPA 8270 D	FLUORANTHENE	PA	EPA 8270 D	FLUORENE	PA
EPA 8270 D	HEXACHLOROBENZENE	PA	EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA	EPA 8270 D	HEXACHLOROETHANE	PA
EPA 8270 D	HEXACHLOROPROPENE	PA	EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D	ISODRIN	PA	EPA 8270 D	ISOPHORONE	PA
EPA 8270 D	ISOSAFROLE	PA	EPA 8270 D	KEPONE	PA
EPA 8270 D	METHAPYRILENE	PA	EPA 8270 D	METHYL METHANESULFONATE	PA
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA	EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA	EPA 8270 D	N-NITROSODIETHYLAMINE	PA
EPA 8270 D	N-NITROSODIMETHYLAMINE	PA	EPA 8270 D	N-NITROSODIPHENYLAMINE	PA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA	EPA 8270 D	N-NITROSOMORPHOLINE	PA
EPA 8270 D	N-NITROSOPIPERIDINE	PA	EPA 8270 D	N-NITROSOPYRROLIDINE	PA
EPA 8270 D	NAPHTHALENE	PA	EPA 8270 D	NITROBENZENE	PA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA	EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA	EPA 8270 D	PENTACHLOROBENZENE	PA
EPA 8270 D	PENTACHLORONITROBENZENE	PA	EPA 8270 D	PENTACHLOROPHENOL	PA
EPA 8270 D	PHENACETIN	PA	EPA 8270 D	PHENANTHRENE	PA
EPA 8270 D	PHENOL	PA	EPA 8270 D	PHORATE	PA
EPA 8270 D	PHTHALIC ANHYDRIDE	PA	EPA 8270 D	PRONAMIDE (KERB)	PA
EPA 8270 D	PYRENE	PA	EPA 8270 D	SAFROLE	PA
EPA 8270 D	SULFOTEP (TETRAETHYL DITHIOPYROPHOSPHATE, TEDP)	PA	EPA 8270 D	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	PA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA	EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA	EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA	EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	PA	EPA 8270 D - EXTENDED	ATRAZINE	PA
EPA 8270 D - EXTENDED	BENZALDEHYDE	PA	EPA 8270 D - EXTENDED	CAPROLACTAM	PA
EPA 8270 D - EXTENDED	CARBAZOLE	PA	EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 D - EXTENDED	INDENE	PA	EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA
EPA 8270 D - EXTENDED	PYRIDINE	PA	EPA 8270 D - EXTENDED	QUINOLINE	PA
EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA	EPA 8270 D SIM	ACENAPHTHENE	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 D SIM	ACENAPHTHYLENE	PA	EPA 8270 D SIM	ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA	EPA 8270 D SIM	BENZO(A)PYRENE	PA
EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA	EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA	EPA 8270 D SIM	CHRYSENE	PA
EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA	EPA 8270 D SIM	FLUORANTHENE	PA
EPA 8270 D SIM	FLUORENE	PA	EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D SIM	NAPHTHALENE	PA	EPA 8270 D SIM	PHENANTHRENE	PA
EPA 8270 D SIM	PYRENE	PA	EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA	EPA 8270 E	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 E	1,2,4,5-TETRACHLOROBENZENE	PA	EPA 8270 E	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 E	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA	EPA 8270 E	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 E	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA	EPA 8270 E	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 E	1,3-DINITROBENZENE (1,3-DNB)	PA	EPA 8270 E	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 E	1,4-DINITROBENZENE (1,4-DNB)	PA	EPA 8270 E	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 E	1,4-NAPHTHOQUINONE	PA	EPA 8270 E	1-CHLORONAPHTHALENE	PA
EPA 8270 E	1-METHYLNAPHTHALENE	PA	EPA 8270 E	1-NAPHTHYLAMINE	PA
EPA 8270 E	2,3,4,6-TETRACHLOROPHENOL	PA	EPA 8270 E	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 E	2,4,6-TRICHLOROPHENOL	PA	EPA 8270 E	2,4-DICHLOROPHENOL	PA
EPA 8270 E	2,4-DIMETHYLPHENOL	PA	EPA 8270 E	2,4-DINITROPHENOL	PA
EPA 8270 E	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 8270 E	2,6-DICHLOROPHENOL	PA
EPA 8270 E	2,6-DINITROTOLUENE (2,6-DNT)	PA	EPA 8270 E	2-ACETYLAMINOFLUORENE	PA
EPA 8270 E	2-CHLORONAPHTHALENE	PA	EPA 8270 E	2-CHLOROPHENOL	PA
EPA 8270 E	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA	EPA 8270 E	2-METHYLNAPHTHALENE	PA
EPA 8270 E	2-METHYLPHENOL (O-CRESOL)	PA	EPA 8270 E	2-NAPHTHYLAMINE	PA
EPA 8270 E	2-NITROANILINE	PA	EPA 8270 E	2-NITROPHENOL	PA
EPA 8270 E	2-PICOLINE (2-METHYLPYRIDINE)	PA	EPA 8270 E	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 8270 E	3,3'-DICHLOROBENZIDINE	PA	EPA 8270 E	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 E	3-METHYLCHOLANTHRENE	PA	EPA 8270 E	3-NITROANILINE	PA
EPA 8270 E	4,4'-METHYLENEBIS-2-CHLOROANIL INE	PA	EPA 8270 E	4-AMINOBIIPHENYL	PA
EPA 8270 E	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA	EPA 8270 E	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 E	4-CHLOROANILINE	PA	EPA 8270 E	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 E	4-NITROANILINE	PA	EPA 8270 E	4-NITROPHENOL	PA
EPA 8270 E	4-NITROQUINOLINE-1-OXIDE	PA	EPA 8270 E	5-NITRO-O-TOLUIDINE	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA	EPA 8270 E	ACENAPHTHENE	PA
EPA 8270 E	ACENAPHTHYLENE	PA	EPA 8270 E	ACETOPHENONE	PA
EPA 8270 E	ANILINE	PA	EPA 8270 E	ANTHRACENE	PA
EPA 8270 E	ATRAZINE	PA	EPA 8270 E	BENZALDEHYDE	PA
EPA 8270 E	BENZIDINE	PA	EPA 8270 E	BENZO(A)ANTHRACENE	PA
EPA 8270 E	BENZO(A)PYRENE	PA	EPA 8270 E	BENZO(B)FLUORANTHENE	PA
EPA 8270 E	BENZO(G,H,I)PERYLENE	PA	EPA 8270 E	BENZO(K)FLUORANTHENE	PA
EPA 8270 E	BENZOIC ACID	PA	EPA 8270 E	BENZYL ALCOHOL	PA
EPA 8270 E	BIS(2-CHLOROETHOXY)METHANE	PA	EPA 8270 E	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 E	BIS(2-ETHYLHEXYL) PHTHALATE (D(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA	EPA 8270 E	BUTYL BENZYL PHTHALATE	PA
EPA 8270 E	CAPROLACTAM	PA	EPA 8270 E	CARBAZOLE	PA
EPA 8270 E	CHLOROBENZILATE	PA	EPA 8270 E	CHRYSENE	PA
EPA 8270 E	DI-N-BUTYL PHTHALATE	PA	EPA 8270 E	DI-N-OCTYL PHTHALATE	PA
EPA 8270 E	DIALLATE	PA	EPA 8270 E	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 E	DIBENZO(A,H) ANTHRACENE	PA	EPA 8270 E	DIBENZOFURAN	PA
EPA 8270 E	DIETHYL PHTHALATE	PA	EPA 8270 E	DIMETHOATE	PA
EPA 8270 E	DIMETHYL PHTHALATE	PA	EPA 8270 E	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8270 E	DIPHENYLAMINE	PA	EPA 8270 E	ETHYL METHANESULFONATE	PA
EPA 8270 E	FLUORANTHENE	PA	EPA 8270 E	FLUORENE	PA
EPA 8270 E	HEXACHLOROBENZENE	PA	EPA 8270 E	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 E	HEXACHLOROCYCLOPENTADIENE	PA	EPA 8270 E	HEXACHLOROETHANE	PA
EPA 8270 E	HEXACHLOROPROPENE	PA	EPA 8270 E	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 E	ISODRIN	PA	EPA 8270 E	ISOPHORONE	PA
EPA 8270 E	ISOSAFROLE	PA	EPA 8270 E	METHAPYRILENE	PA
EPA 8270 E	METHYL METHANESULFONATE	PA	EPA 8270 E	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 E	N-NITROSO-DI-N-BUTYLAMINE	PA	EPA 8270 E	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 E	N-NITROSODIETHYLAMINE	PA	EPA 8270 E	N-NITROSODIMETHYLAMINE	PA
EPA 8270 E	N-NITROSODIPHENYLAMINE	PA	EPA 8270 E	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 E	N-NITROSOMORPHOLINE	PA	EPA 8270 E	N-NITROSOPIPERIDINE	PA
EPA 8270 E	N-NITROSOPYRROLIDINE	PA	EPA 8270 E	NAPHTHALENE	PA
EPA 8270 E	NITROBENZENE	PA	EPA 8270 E	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 E	O-TOLUIDINE (2-METHYLANILINE)	PA	EPA 8270 E	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 E	PENTACHLOROBENZENE	PA	EPA 8270 E	PENTACHLORONITROBENZENE	PA
EPA 8270 E	PENTACHLOROPHENOL	PA	EPA 8270 E	PHENACETIN	PA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8270 E	PHENANTHRENE	PA	EPA 8270 E	PHENOL	PA
EPA 8270 E	PHORATE	PA	EPA 8270 E	PRONAMIDE (KERB)	PA
EPA 8270 E	PYRENE	PA	EPA 8270 E	PYRIDINE	PA
EPA 8270 E	SAFROLE	PA	EPA 8270 E	SULFOTEP (TETRAETHYL DITHIOPYROPHOSPHATE, TEDP)	PA
EPA 8270 E	THIONAZIN (ZINOPHOS, DIETHYL-O-2-PYRAZINYL PHOSPHOROTHIONATE)	PA	EPA 8270 E	THIOPHENOL (BENZENETHIOL)	PA
EPA 8270 E - EXTENDED	2,2'-OXYBIS(1-CHLOROPROPANE)	PA	EPA 8270 E - EXTENDED	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 E - EXTENDED	6-METHYLCHRYSENE	PA	EPA 8270 E - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 E - EXTENDED	DIPHENYL ETHER (DIPHENYL OXIDE)	PA	EPA 8270 E - EXTENDED	INDENE	PA
EPA 8270 E - EXTENDED	QUINOLINE	PA	EPA 8270 E SIM	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	PA
EPA 8270 E SIM	1-METHYLNAPHTHALENE	PA	EPA 8270 E SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 E SIM	ACENAPHTHENE	PA	EPA 8270 E SIM	ACENAPHTHYLENE	PA
EPA 8270 E SIM	ANTHRACENE	PA	EPA 8270 E SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 E SIM	BENZO(A)PYRENE	PA	EPA 8270 E SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 E SIM	BENZO(G,H,I)PERYLENE	PA	EPA 8270 E SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 E SIM	CHRYSENE	PA	EPA 8270 E SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 E SIM	FLUORANTHENE	PA	EPA 8270 E SIM	FLUORENE	PA
EPA 8270 E SIM	INDENO(1,2,3-CD) PYRENE	PA	EPA 8270 E SIM	NAPHTHALENE	PA
EPA 8270 E SIM	PHENANTHRENE	PA	EPA 8270 E SIM	PYRENE	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ O-P-DIOXIN (OCDD)	PA	EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZ OFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ O-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA	EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZ OFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZ OFURAN (1,2,3,4,7,8,9-HPCDF)	PA	EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZOF URAN (1,2,3,4,7,8-HXCDF)	PA	EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P -DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZOF URAN (1,2,3,6,7,8-HXCDF)	PA	EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P -DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZOF URAN (1,2,3,7,8,9-HXCDF)	PA	EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P -DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZOF URAN (1,2,3,7,8-PECDF)	PA	EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOF URAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOF URAN	PA	EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO- P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFUR AN (2,3,7,8-TCDF)	PA	EPA 8290 A - EXTENDED	TOTAL HEPTACHLORODIBENZO-P-DIOXIN (HPCDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL HEPTACHLORODIBENZOFURAN (HPCDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL HEXACHLORODIBENZO-P-DIOXIN (HXCDD, TOTAL)	PA



Commonwealth of Virginia
Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 13605

Eurofins Lancaster Laboratories Environment Testing, LLC

2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182

Effective Date: July 21, 2025

Expiration Date: June 14, 2026

SOLID AND CHEMICAL MATERIALS

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8290 A - EXTENDED	TOTAL HEXACHLORODIBENZOFURAN (HXCDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL PENTACHLORODIBENZO-P-DIOXIN (PECDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL PENTACHLORODIBENZOFURAN (PECDF, TOTAL)	PA	EPA 8290 A - EXTENDED	TOTAL TETRACHLORODIBENZO-P-DIOXIN (TCDD, TOTAL)	PA
EPA 8290 A - EXTENDED	TOTAL TETRACHLORODIBENZOFURAN (TCDF, TOTAL)	PA	EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	FORMALDEHYDE	PA	EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA	EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA	EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA	EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3,5-DINITROANILINE	PA	EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA	EPA 8330 B	4-NITROTOLUENE	PA
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNIT RAMINE (TETRYL)	PA	EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	NITROGLYCERIN	PA	EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1 ,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	PA	EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5- TRIAZINE)	PA
EPA 8330 B - EXTENDED	2,4-DIAMINO-6-NITROTOLUENE	PA	EPA 8330 B - EXTENDED	2,6-DIAMINO-4-NITROTOLUENE	PA
EPA 9012 B	CYANIDE, TOTAL	PA	EPA 9045 D	PH	PA
EPA 9050 A	CONDUCTIVITY	PA	EPA 9056 A	CHLORIDE	PA
EPA 9056 A	FLUORIDE	PA	EPA 9056 A	NITRATE AS N	PA
EPA 9056 A	NITRITE AS N	PA	EPA 9056 A	SULFATE	PA
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA	EPA 9095 B	FREE LIQUID	PA
SM 2540 G-2015	RESIDUE-TOTAL (TS)	PA	SM 2540 G-2015	RESIDUE-VOLATILE	PA
SM 4500-NH3 B-2021	AMMONIA AS N	PA	SM 4500-NH3 C-2021	AMMONIA AS N	PA