

DATA PACKAGE

SUB DATA

PROJECT NAME : CTO WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : P5315

ATTENTION : Ernie Wu



Cover Page

Order ID : P5315

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

P5315-01

Client Sample Number

VPB190A-HYD-20241217

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:33 pm, Jan 21, 2025

Date: 1/21/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



ANALYTICAL REPORT

PREPARED FOR

Attn: Yazmeen Gomez
Chemtech Consulting Group Inc.
284 Sheffield Street
Mountainside NJ 07092

Generated 1/21/2025 11:04 AM

JOB DESCRIPTION

1,4 Dioxane

JOB NUMBER

810-132339-1

Eurofins Eaton Analytical South Bend

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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Authorization



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Authorized for release by
Nathan Trowbridge, Manager of Project Management
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Definitions/Glossary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

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
810-132339-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

Receipt

The sample was received on 12/19/2024 9:45 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C.

GC/MS Semi VOA

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

Detection Summary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Client Sample ID: VPB190A-HYD-20241217

Lab Sample ID: 810-132339-1

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Client Sample ID: VPB190A-HYD-20241217

Lab Sample ID: 810-132339-1

Date Collected: 12/17/24 10:00

Matrix: Water

Date Received: 12/19/24 09:45

Method: EPA 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.062		0.070	0.062	ug/L		12/26/24 08:09	12/26/24 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	99		70 - 130	12/26/24 08:09	12/26/24 22:27	1

Default Detection Limits

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Prep: 522

Analyte	RL	MDL
1,4-Dioxane	0.070 ug/L	0.062 ug/L

Job ID: 810-132339-1

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		DXE					
Lab Sample ID	Client Sample ID	(70-130)					
810-132339-1	VPB190A-HYD-20241217	99					
LCS 810-127766/3-A	Lab Control Sample	99					
LLCS 810-127766/2-A	Lab Control Sample	100					
MBL 810-127766/1-A	Method Blank	102					

Surrogate Legend

DXE = 1,4-Dioxane-d8 (Surr)

QC Sample Results

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MBL 810-127766/1-A

Matrix: Water

Analysis Batch: 127813

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 127766

Analyte	MBL Result	MBL Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<0.062		0.070	0.062	ug/L		12/26/24 08:09	12/26/24 15:13	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	102		70 - 130				12/26/24 08:09	12/26/24 15:13	1

Lab Sample ID: LCS 810-127766/3-A

Matrix: Water

Analysis Batch: 127813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 127766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.941		ug/L		94	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,4-Dioxane-d8 (Surr)	99		70 - 130				

Lab Sample ID: LLCS 810-127766/2-A

Matrix: Water

Analysis Batch: 127813

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 127766

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	0.0700	0.0826		ug/L		118	50 - 150
Surrogate	LLCS %Recovery	LLCS Qualifier	Limits				
1,4-Dioxane-d8 (Surr)	100		70 - 130				

QC Association Summary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

GC/MS Semi VOA

Prep Batch: 127766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-132339-1	VPB190A-HYD-20241217	Total/NA	Water	522	
MBL 810-127766/1-A	Method Blank	Total/NA	Water	522	
LCS 810-127766/3-A	Lab Control Sample	Total/NA	Water	522	
LLCS 810-127766/2-A	Lab Control Sample	Total/NA	Water	522	

Analysis Batch: 127813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
810-132339-1	VPB190A-HYD-20241217	Total/NA	Water	522	127766
MBL 810-127766/1-A	Method Blank	Total/NA	Water	522	127766
LCS 810-127766/3-A	Lab Control Sample	Total/NA	Water	522	127766
LLCS 810-127766/2-A	Lab Control Sample	Total/NA	Water	522	127766

Lab Chronicle

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Client Sample ID: VPB190A-HYD-20241217
Date Collected: 12/17/24 10:00
Date Received: 12/19/24 09:45

Lab Sample ID: 810-132339-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	522			127766	AM	EA SB	12/26/24 08:09
Total/NA	Analysis	522		1	127813	KO	EA SB	12/26/24 22:27

Laboratory References:
EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Accreditation/Certification Summary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Laboratory: Eurofins Eaton Analytical South Bend

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

Authority	Program	Identification Number	Expiration Date
South Carolina	State	95005001	06-30-25
The following analytes are included in this report, but the laboratory is not certified by South Carolina State 95005001. This list may include analytes for which the agency does not offer certification:			
Analysis Method	Prep Method	Matrix	Analyte
522	522	Water	1,4-Dioxane

Method Summary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Method	Method Description	Protocol	Laboratory
522	1,4 Dioxane (GC/MS SIM)	EPA	EA SB
522	Solid-Phase Extraction (SPE)	EPA	EA SB

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

Sample Summary

Client: Chemtech Consulting Group Inc.
Project/Site: 1,4 Dioxane

Job ID: 810-132339-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
810-132339-1	VPB190A-HYD-20241217	Water	12/17/24 10:00	12/19/24 09:45

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Eaton Analytical South Bend

Job No.: 810-132339-1

SDG No.:

Instrument ID: GCMS-FE

Analysis Batch Number: 123541

Lab Sample ID: IC 810-123437/4-A

Client Sample ID:

Date Analyzed: 11/20/24 15:07

Lab File ID: IC 007.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:57

Lab Sample ID: IC 810-123437/5-A

Client Sample ID:

Date Analyzed: 11/20/24 15:29

Lab File ID: IC 01.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:57

Lab Sample ID: IC 810-123437/6-A

Client Sample ID:

Date Analyzed: 11/20/24 15:51

Lab File ID: IC 02.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:58

Lab Sample ID: IC 810-123437/7-A

Client Sample ID:

Date Analyzed: 11/20/24 16:12

Lab File ID: IC 05.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:58

Lab Sample ID: ICISAV 810-123437/8-A

Client Sample ID:

Date Analyzed: 11/20/24 16:34

Lab File ID: IC 1.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:58

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Eaton Analytical South BendJob No.: 810-132339-1

SDG No.: _____

Instrument ID: GCMS-FEAnalysis Batch Number: 123541Lab Sample ID: IC 810-123437/9-A

Client Sample ID: _____

Date Analyzed: 11/20/24 16:56Lab File ID: IC 2.DGC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 09:59

Lab Sample ID: IC 810-123437/10-A

Client Sample ID: _____

Date Analyzed: 11/20/24 17:18Lab File ID: IC 5.DGC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.35	Incomplete Integration	JH8B	11/21/24 09:59

Lab Sample ID: IC 810-123437/11-A

Client Sample ID: _____

Date Analyzed: 11/20/24 17:40Lab File ID: IC 10.DGC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.35	Incomplete Integration	JH8B	11/21/24 09:59

Lab Sample ID: ICV 810-123437/13-A

Client Sample ID: _____

Date Analyzed: 11/20/24 19:07Lab File ID: ICV.DGC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.36	Incomplete Integration	JH8B	11/21/24 10:08

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Eaton Analytical South Bend

Job No.: 810-132339-1

SDG No.:

Instrument ID: GCMS-FE

Analysis Batch Number: 127813

Lab Sample ID: CCVLIS 810-127767/1-A

Client Sample ID:

Date Analyzed: 12/26/24 14:30

Lab File ID: CCVL.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.38	Incomplete Integration	JH8B	12/27/24 06:11

Lab Sample ID: MBL 810-127766/1-A

Client Sample ID:

Date Analyzed: 12/26/24 15:13

Lab File ID: MBL.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Incomplete Integration	JH8B	12/27/24 06:13

Lab Sample ID: LLCS 810-127766/2-A

Client Sample ID:

Date Analyzed: 12/26/24 15:35

Lab File ID: LLCS.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.38	Incomplete Integration	JH8B	12/27/24 06:13

Lab Sample ID: LCS 810-127766/3-A

Client Sample ID:

Date Analyzed: 12/26/24 15:57

Lab File ID: LCS.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.38	Incomplete Integration	JH8B	12/27/24 06:14

Lab Sample ID: CCVL 810-127767/2-A

Client Sample ID:

Date Analyzed: 12/26/24 19:55

Lab File ID: CCVM.D

GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.38	Incomplete Integration	JH8B	12/27/24 06:19

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.: _____
Instrument ID: GCMS-FE Analysis Batch Number: 127813
Lab Sample ID: 810-132339-1 Client Sample ID: VPB190A-HYD-20241217
Date Analyzed: 12/26/24 22:27 Lab File ID: 810-132339-A-1-A.D GC Column: CPSelect 624 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.38	Incomplete Integration	JH8B	12/27/24 06:17

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
522 IS SS 00219	12/02/24	11/18/24	MeCl2, Lot EJ007-US	2 mL	522 IS Stock 00030	200 uL	Tetrahydrofuran-d8	100 ug/mL
.522 IS Stock 00030	10/25/28	11/11/24	Methanol, Lot na	1 mL	522-IS-Stock_00008	1 mL	Tetrahydrofuran-d8	1000 ug/mL
..522-IS-Stock_00008	10/25/28		Absolute Standards Inc., Lot 102523		(Purchased Reagent)		Tetrahydrofuran-d8	1000 ug/mL
522 IS SS 00222	01/02/25	12/19/24	MeCl2, Lot EJ007-US	2 mL	522 IS Stock 00030	200 uL	Tetrahydrofuran-d8	100 ug/mL
.522 IS Stock 00030	10/25/28	11/11/24	Methanol, Lot na	1 mL	522-IS-Stock_00008	1 mL	Tetrahydrofuran-d8	1000 ug/mL
..522-IS-Stock_00008	10/25/28		Absolute Standards Inc., Lot 102523		(Purchased Reagent)		Tetrahydrofuran-d8	1000 ug/mL
522-Sur-SS_00116	05/11/25	11/11/24	Methanol, Lot 24G0262002	2 mL	522-SUR-Stock_00017	100 uL	1,4-Dioxane-d8 (Surr)	100 ug/mL
.522-SUR-Stock_00017	12/31/26	03/22/24		1 mL	522-SUR-Stock_00018	1 mL	1,4-Dioxane-d8 (Surr)	2000 ug/mL
..522-SUR-Stock_00018	12/31/26		Restek, Lot A0206061		(Purchased Reagent)		1,4-Dioxane-d8 (Surr)	2000 ug/mL
522-Sur-SS_00120	06/26/25	12/26/24	Methanol, Lot 24G0262002	2 mL	522-SUR-Stock_00021	100 uL	1,4-Dioxane-d8 (Surr)	100 ug/mL
.522-SUR-Stock_00021	02/28/26	12/26/24		1 mL	522-SUR-Stock_00011	1 mL	1,4-Dioxane-d8 (Surr)	2000 ug/mL
..522-SUR-Stock_00011	02/28/26		Restek, Lot A0195206		(Purchased Reagent)		1,4-Dioxane-d8 (Surr)	2000 ug/mL
O-522 CalM_00015	04/22/25	10/22/24	Methanol, Lot 24G0262002	2 mL	522 AnalyteST_00003	10 uL	1,4-Dioxane	10 ug/mL
.522 AnalyteST_00003	05/31/26	10/22/24	Methanol, Lot na	1 mL	522-Analyte_00003	1 mL	1,4-Dioxane	2000 ug/mL
..522-Analyte_00003	05/31/26		Restek, Lot A0172836		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
O-522-CalH_00012	04/22/25	10/22/24	Methanol, Lot 24G0262002	2 mL	522 AnalyteST_00003	100 uL	1,4-Dioxane	100 ug/mL
.522 AnalyteST_00003	05/31/26	10/22/24	Methanol, Lot na	1 mL	522-Analyte_00003	1 mL	1,4-Dioxane	2000 ug/mL
..522-Analyte_00003	05/31/26		Restek, Lot A0172836		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL
O-522-QCS-Sub_00007	12/02/24	08/29/24	Methanol, Lot 23I0762004	2 mL	522-QCS_00001	20 uL	1,4-Dioxane	10 ug/mL
.522-QCS_00001	12/02/24		AccuStandard, Lot 214121041		(Purchased Reagent)		1,4-Dioxane	1000 ug/mL
O-522BFBSub_00015	01/14/25	10/14/24	MeCl2, Lot EI661-US	2 mL	o-522-bfb_00004	2 uL	BFB	2.005 ug/mL
.o-522-bfb_00004	09/30/28	07/21/22	METHANOL, Lot NA	1 mL	O-522-BFB_00003	1 mL	BFB	2005 ug/mL
..O-522-BFB_00003	09/30/28		Agilent, Lot 6629793		(Purchased Reagent)		BFB	2005 ug/mL
O522-CalL_00016	04/22/25	10/22/24	Methanol, Lot 24G0262002	2 mL	O-522-CalH_00012	20 uL	1,4-Dioxane	1 ug/mL
.O-522-CalH_00012	04/22/25	10/22/24	Methanol, Lot 24G0262002	2 mL	522 AnalyteST_00003	100 uL	1,4-Dioxane	100 ug/mL
..522 AnalyteST_00003	05/31/26	10/22/24	Methanol, Lot na	1 mL	522-Analyte_00003	1 mL	1,4-Dioxane	2000 ug/mL
...522-Analyte_00003	05/31/26		Restek, Lot A0172836		(Purchased Reagent)		1,4-Dioxane	2000 ug/mL

Reagent

522-Analyte_00003



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



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. : 30287 Lot No.: A0172836
Description : 1,4-Dioxane Standard
1,4-Dioxane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : May 31, 2026 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Dioxane CAS # 123-91-1 Purity 99% (Lot SHBM5092)	2,019.2 µg/mL	+/- 11.8498 µg/mL Gravimetric +/- 43.2613 µg/mL Unstressed +/- 44.5173 µg/mL Stressed

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

Rec'd: 12/14/2021 Hms

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:

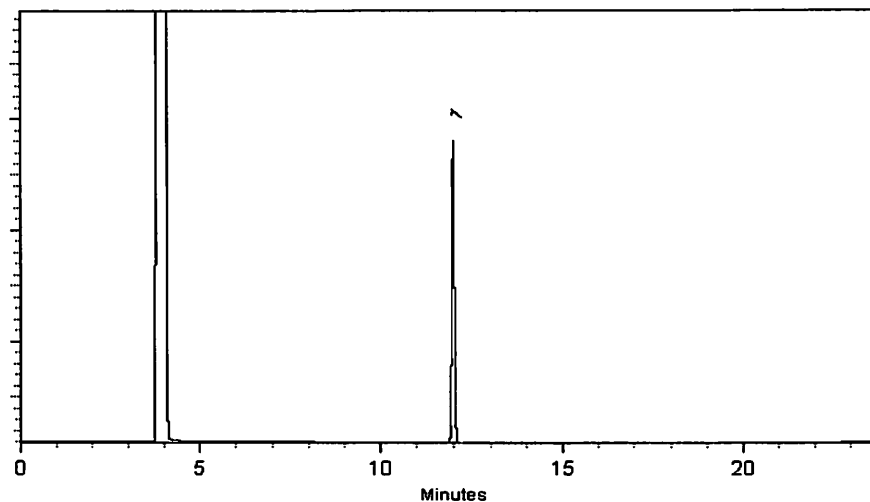
200°C

Det. Temp:

250°C

Det. Type:

FID



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

Walker Workman - Operations Technician I

Date Mixed: 27-May-2021

Balance: 1128360905

Marlene Cowan - Operations Tech I

Date Passed: 01-Jun-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

522-IS-Stock_00008



CERTIFIED WEIGHT REPORT

Part Number: **72261**
 Lot Number: **102523**
 Description: **Tetrahydrofuran-d8**

Solvent(s):
 Methanol
 Lot#: EG359-US

Recd 03/08/2024 Hmk

<i>Eli Allaga</i>		102523
Formulated By:	Eli Allaga	DATE
<i>Pedro L. Rentas</i>		102523
Reviewed By:	Pedro L. Rentas	DATE

Expiration Date: 102528

Recommended Storage: Refrigerate (4 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

5E-05 Balance Uncertainty

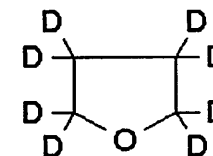
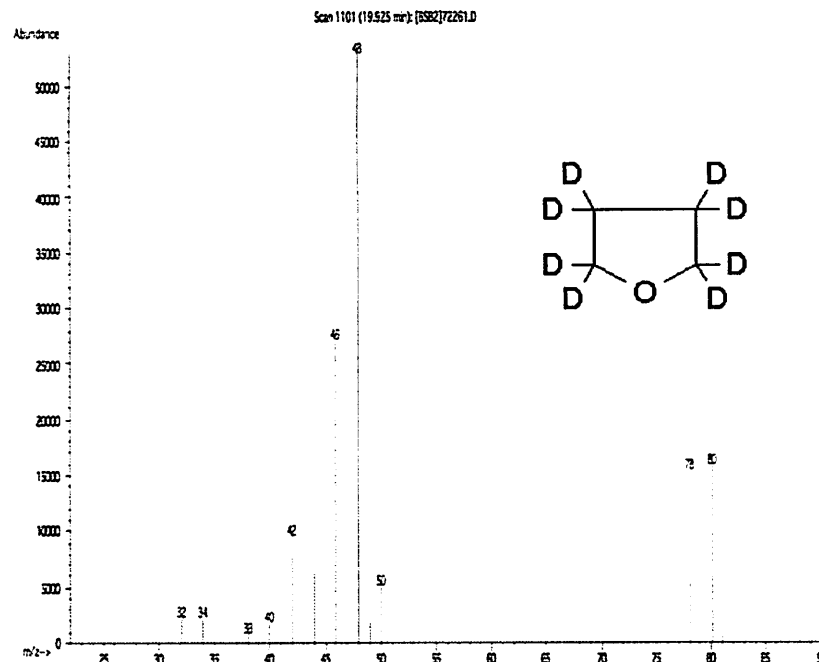
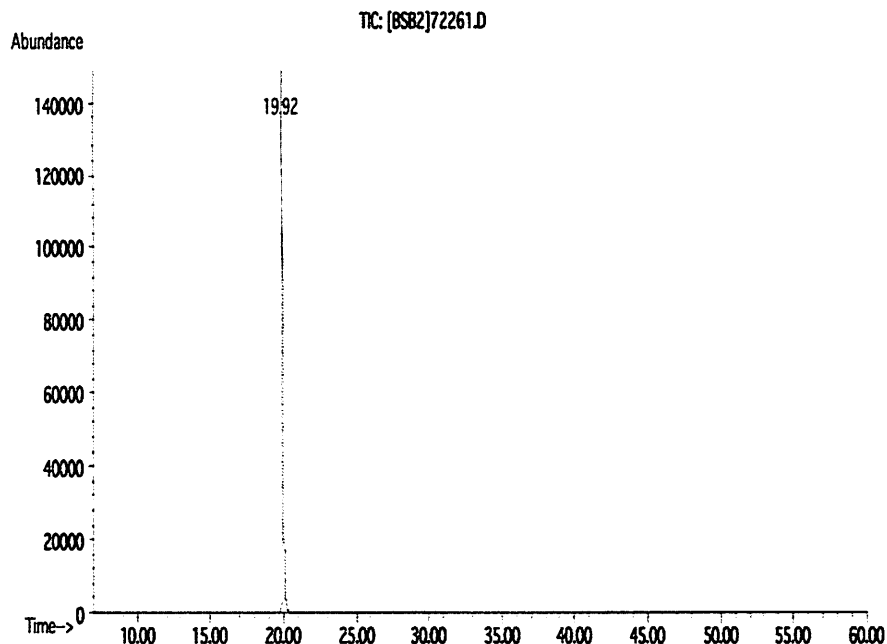
Weight(s) shown below were combined and diluted to (mL): 100.0

0.021 Flask Uncertainty

Expanded
 SDS Information
 (Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) µg/mL	CAS#	OSHA PEL (TWA)	LD50
1. Tetrahydrofuran-d8	2261	I-24862H	1000	99.6	0.2	0.10045	0.10054	1000.9	4.2	1693-74-9	N/A	N/A

Method: GC6MSD-1. Detector: MSD (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1=35°C (10 min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=200°C. Analyst: Candice Warren.



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Reagent

522-QCS_00001

125 Market Street
New Haven, CT 06513
USA



AccuStandard®, Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-096-10X

Description: p-Dioxane Standard

Lot: 214121041

Solvent: Methanol

Hazards: **HIGHLY FLAMMABLE** - Refer to SDS for safety info

Date Certified: Dec 2, 2014

Expiration: Dec 2, 2024

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes



Danger 2

Component	CAS #	Purity %	Prepared Concentration ¹	Certified Analyte Concentration ²
		(MFG)	(µg/mL)	(µg/mL)
p-Dioxane	123-91-1	99.0	1005	995

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

¹ All weights are traceable through NIST, Test No. 822-275872-11

² Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is $\pm 0.24\%$. The CRM Uncertainty calculated for this product is $\pm 5\%$. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of $K=2$ is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values:

A comma (,) is used to separate units of one-thousand or greater.

A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By:

Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Page 1 of 1

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORGANO-001
Rev. 7/11

Reagent

522-SUR-Stock_00018



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



Recd 03/21/2024
Hms

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. : 30614 Lot No.: A0206061
Description : 1,4-dioxane-d8 Standard
1,4-dioxane-d8 Standard 2000 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : December 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	1,4-Dioxane-d8	17647-74-4	RP230605	99%	2,010.4 µg/mL	+/- 25.0198

* 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:

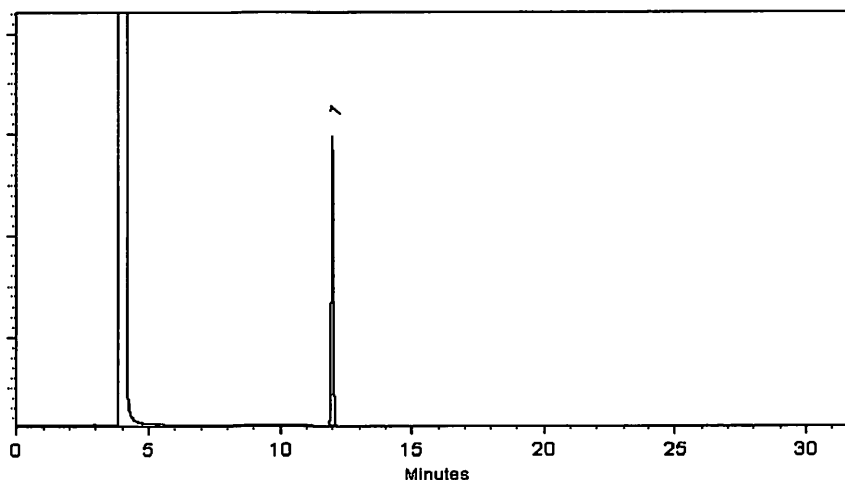
FID

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.

W. Torres
Wilner Torres - Operation Tech I

Date Mixed: 29-Dec-2023

Balance Serial # 1128342314

Christie Mills
Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 04-Jan-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:

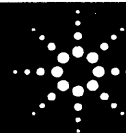
- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability 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

O-522-BFB_00003

Recd at 07/06/2022
07/06/2022
HMS

ISO 17034



Agilent

Trusted Answers

Reference Material Certificate

Product Name: 4-Bromofluorobenzene Standard

Lot Number: 0006629793

Product Number: STS-110N-1

Lot Issue Date: 10-Aug-2021

Storage Conditions: Store Frozen (-25° to -10°C).

Expiration Date: 30-Sep-2028

Component Name	CERTIFIED VALUES		CAS#	Analyte Lot
	Concentration	Expanded Uncertainty		
4-bromofluorobenzene	2009	± 10 µg/mL	000460-00-4	RM12184

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

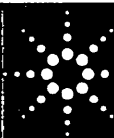
Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

ISO 17034



Agilent

Trusted Answers

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:



Monica Bourgeois

QMS Representative



ISO 17034 Cert
No. AR-1936

P5315

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015
Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/

CSD-QA-015.1

Page 36 of 130



ISO 17025 Cert
No. AT-1937

38 of 133

Method 522

1,4 Dioxane (GC/MS SIM) by Method
522

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): CPSelect 62 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DXE #
VPB190A-HYD-20241217	810-132339-1	99
	LCS 810-127766/3-A	99
	LLCS 810-127766/2-A	100
	MBL 810-127766/1-A	102

DXE = 1,4-Dioxane-d8 (Surr)

QC LIMITS
70-130

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Eaton Analytical South Job No.: 810-132339-1
Bend

SDG No.:

Matrix: Water Level: Low Lab File ID: LCS.D

Lab ID: LCS 810-127766/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	0.941	94	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LOW LEVEL CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Eaton Analytical South Job No.: 810-132339-1
Bend

SDG No.:

Matrix: Water Level: Low Lab File ID: LLC.S.D

Lab ID: LLC.S 810-127766/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LLCS CONCENTRATION (ug/L)	LLCS % REC	QC LIMITS REC	#
1,4-Dioxane	0.0700	0.0826	118	50-150	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Eaton Analytical South Bend
Job No.: 810-132339-1
SDG No.:
Lab File ID: MBL.D
Lab Sample ID: MBL 810-127766/1-A
Matrix: Water
Date Extracted: 12/26/2024 08:09
Instrument ID: GCMS-FE
Date Analyzed: 12/26/2024 15:13
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LLCS 810-127766/2-A	LLCS.D	12/26/2024 15:35
	LCS 810-127766/3-A	LCS.D	12/26/2024 15:57
VPB190A-HYD-20241217	810-132339-1	810-132339-A-1-A.D	12/26/2024 22:27

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

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1

SDG No.:

Lab File ID: BFB 1.D BFB Injection Date: 11/20/2024

Instrument ID: GCMS-FE BFB Injection Time: 14:40

Analysis Batch No.: 123541

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.4
75	30.0 - 80.0 % of mass 95	50.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.7 (0.8) 1
174	>50.0 % of mass 95	83.5
175	5.0 - 9.0 % of mass 174	6.2 (7.4) 1
176	>95.0 but <101.0 % of mass 174	80.3 (96.2) 1
177	5.0 - 9.0 % of mass 176	5.1 (6.4) 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 810-123437/4-A	IC 007.D	11/20/2024	15:07
	IC 810-123437/5-A	IC 01.D	11/20/2024	15:29
	IC 810-123437/6-A	IC 02.D	11/20/2024	15:51
	IC 810-123437/7-A	IC 05.D	11/20/2024	16:12
	ICISAV 810-123437/8-A	IC 1.D	11/20/2024	16:34
	IC 810-123437/9-A	IC 2.D	11/20/2024	16:56
	IC 810-123437/10-A	IC 5.D	11/20/2024	17:18
	IC 810-123437/11-A	IC 10.D	11/20/2024	17:40
	IC 810-123437/12-A	IC 20.D	11/20/2024	18:02
	ICV 810-123437/13-A	ICV.D	11/20/2024	19:07

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

Lab Name: Eurofins Eaton Analytical South Job No.: 810-132339-1
Bend

SDG No.:

Instrument I GCMS-FE Calibration Start Date: 11/20/2024 15:07

GC Column: CPSelect 624 MS ID: 0.25 (mm) Calibration End Date: 11/20/2024 18:02

Calibration ID: 13962

		THFd8					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MEAN AREA AND MEAN RT		174363	6.20				
UPPER LIMIT		261545	6.70				
LOWER LIMIT		87182	5.70				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 810-123437/13-A		172753	6.20				
CCVLIS 810-127767/1-A		139780	6.20				
MBL 810-127766/1-A		153082	6.21				
LLCS 810-127766/2-A		156403	6.21				
LCS 810-127766/3-A		156453	6.21				
CCVL 810-127767/2-A		153582	6.22				
810-132339-1	VPB190A-HYD-2024121 7	157232	6.22				
CCV 810-127767/3-A		147999	6.22				

THFd8 = Tetrahydrofuran-d8

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII

Lab Name: Eurofins Eaton Analytical South Bend

Job No.: 810-132339-1

SDG No. :

Sample No.: CCVLIS 810-127767/1-A

Date Analyzed: 12/26/2024 14:30

Instrument ID: GCMS-FE

GC Column: CPSelect 624 MS ID: 0.25 (mm)

Lab File ID (Standard): CCVL.D

Heated Purge: (Y/N) N

Calibration ID: 13962

		THFd8					
		AREA #	RT #	#	RT #	#	RT #
Low Level 12/24 HOUR STD		139780	6.20				
UPPER LIMIT		181714	6.70				
LOWER LIMIT		97846	5.70				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MBL 810-127766/1-A		153082	6.21				
LLCS 810-127766/2-A		156403	6.21				
LCS 810-127766/3-A		156453	6.21				
810-132339-1	VPB190A-HYD-20241217	157232	6.22				
CCV 810-127767/3-A		147999	6.22				

THFd8 = Tetrahydrofuran-d8

Area Limit = 70%-130% of internal standard area
RT Limit = $\pm$ 0.5 minutes of internal standard R

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.:
Client Sample ID: VPB190A-HYD-20241217 Lab Sample ID: 810-132339-1
Matrix: Water Lab File ID: 810-132339-A-1-A.D
Analysis Method: 522 Date Collected: 12/17/2024 10:00
Extract. Method: 522 Date Extracted: 12/26/2024 08:09
Sample wt/vol: 100 (mL) Date Analyzed: 12/26/2024 22:27
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) GC Column: CPSelect 624 MS ID: 0.25 (mm)
% Moisture: % Solids: GPC Cleanup: (Y/N) N
Cleanup Factor: Level: (low/med) Low
Analysis Batch No.: 127813 Units: ug/L
Preparation Batch No.: 127766 Instrument ID: GCMS-FE

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	<0.062		0.070	0.062

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	99		70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\810-132339-A-1-A.D
Lims ID: 810-132339-A-1-A
Client ID: VPB190A-HYD-20241217
Sample Type: Client
Inject. Date: 26-Dec-2024 22:27:48 ALS Bottle#: 23 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-022
Misc. Info.: 810-132339-A-1-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:24:05 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:17:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.220	6.220	0.000	24	157232	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.310	8.300	0.010	100	141298	496.8	
11 1,4-Dioxane	88	8.383	8.383	0.000	80	547	1.97	M
10 BFB								

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\810-132339-A-1-A.D

Injection Date: 26-Dec-2024 22:27:48

Instrument ID: GCMS-FE

Lims ID: 810-132339-A-1-A

Lab Sample ID: 810-132339-1

Client ID: VPB190A-HYD-20241217

Operator ID: BC

ALS Bottle#: 23

Worklist Smp#: 22

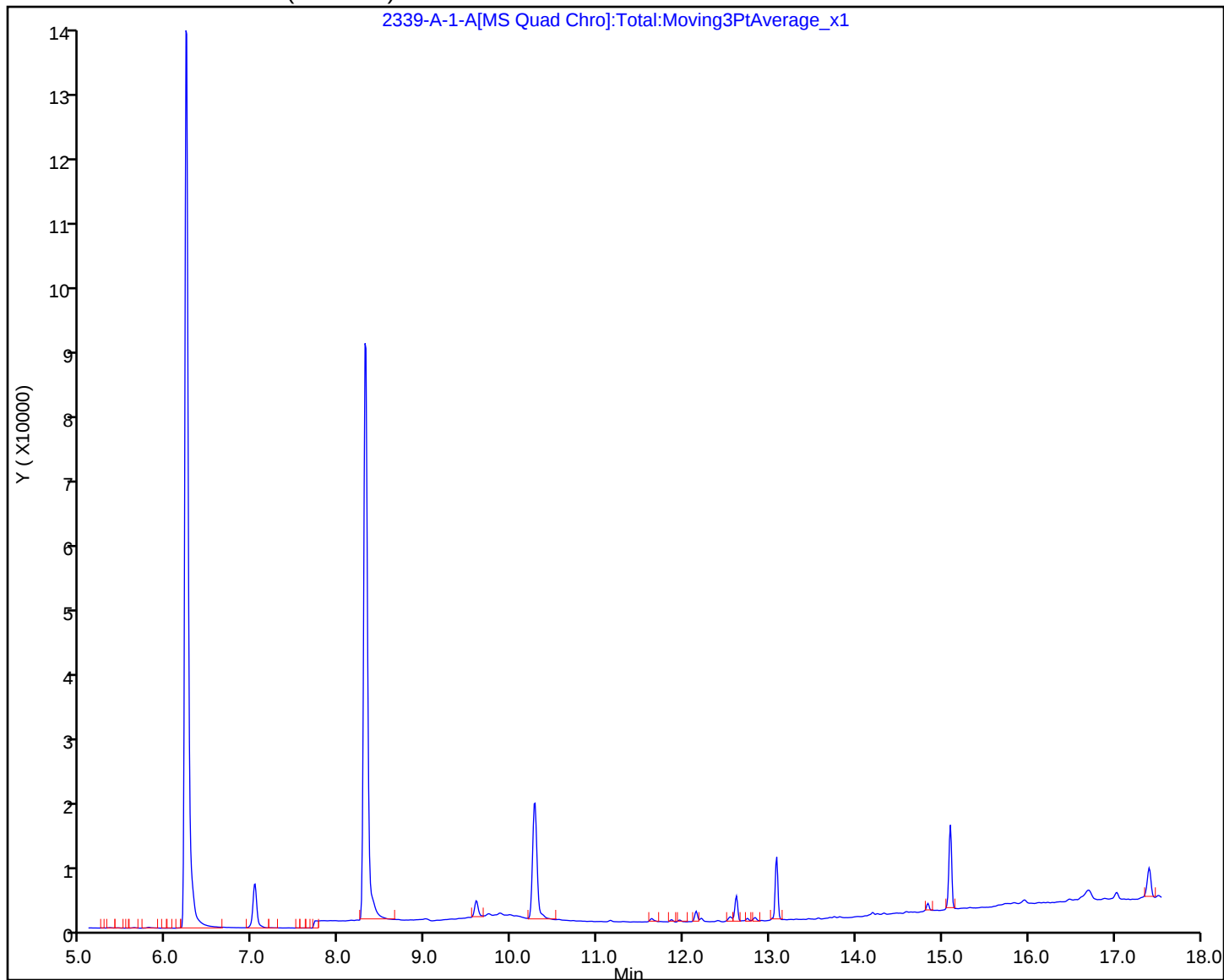
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend
Recovery Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\810-132339-A-1-A.D
Lims ID: 810-132339-A-1-A
Client ID: VPB190A-HYD-20241217
Sample Type: Client
Inject. Date: 26-Dec-2024 22:27:48 ALS Bottle#: 23 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-022
Misc. Info.: 810-132339-A-1-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:24:05 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:17:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,4-Dioxane-d8 (Surr)	500.0	496.8	99.37

Eurofins Eaton Analytical South Bend

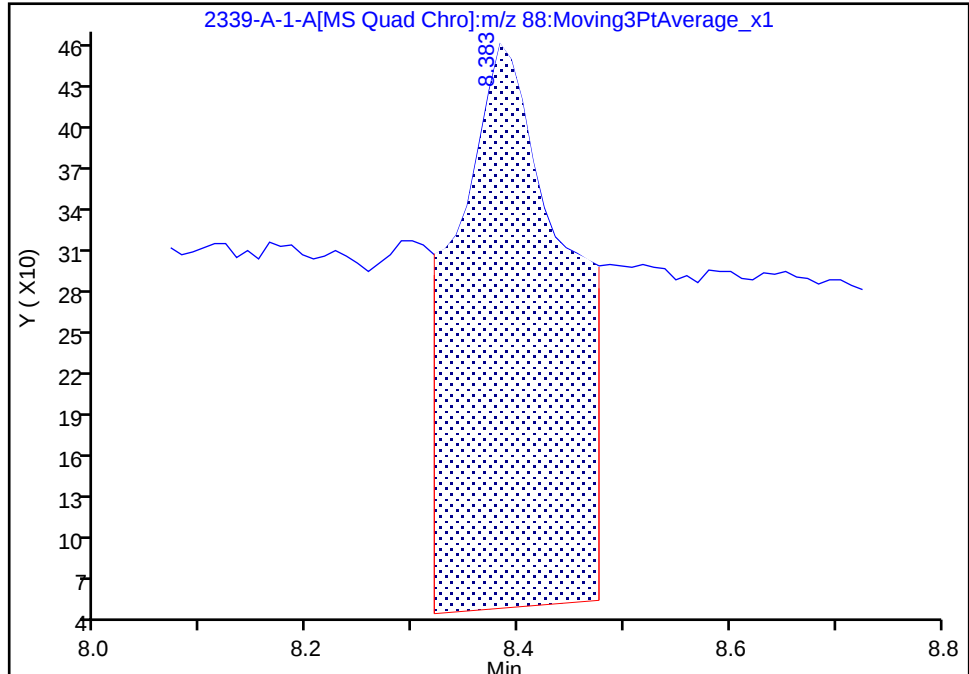
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\810-132339-A-1-A.D
Injection Date: 26-Dec-2024 22:27:48 Instrument ID: GCMS-FE
Lims ID: 810-132339-A-1-A Lab Sample ID: 810-132339-1
Client ID: VPB190A-HYD-20241217
Operator ID: BC ALS Bottle#: 23 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

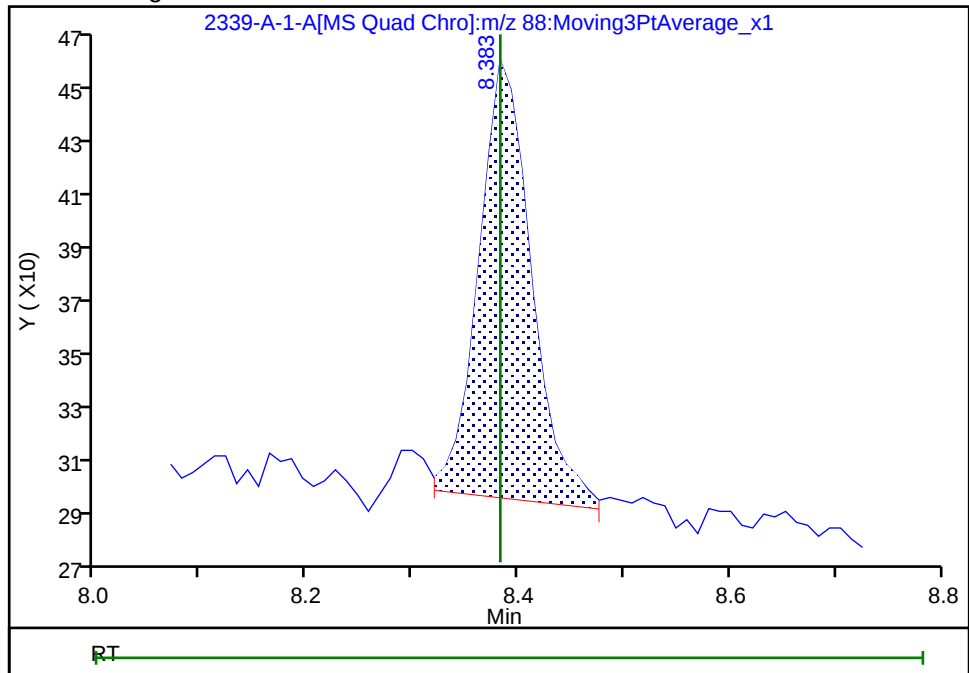
RT: 8.38
Area: 2991
Amount: 10.280947
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 547
Amount: 1.970279
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:17:08 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Eaton Analytical South Job No.: 810-132339-1 Analy Batch No.: 123541
Bend

SDG No.:

Instrument ID: GCMS-FE GC Column: CPSelect 62 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2024 15:07 Calibration End Date: 11/20/2024 18:02 Calibration ID: 13962

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 810-123437/4-A	IC 007.D
Level 2	IC 810-123437/5-A	IC 01.D
Level 3	IC 810-123437/6-A	IC 02.D
Level 4	IC 810-123437/7-A	IC 05.D
Level 5	ICISAV 810-123437/8-A	IC 1.D
Level 6	IC 810-123437/9-A	IC 2.D
Level 7	IC 810-123437/10-A	IC 5.D
Level 8	IC 810-123437/11-A	IC 10.D
Level 9	IC 810-123437/12-A	IC 20.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								
1,4-Dioxane	0.9297 0.9095	0.9057 0.9716	0.8986 0.9397	0.9310 0.9260	0.9365	Lin1	-0.10 3	0.935 2				2.4					
1,4-Dioxane-d8 (Surr)	0.9342 0.8988	0.8953 0.9039	0.9077 0.8921	0.9079 0.8960	0.9032	Ave		0.904 4				1.4		30.0			

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 SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1 Analy Batch No.: 123541

SDG No.:

Instrument ID: GCMS-FE GC Column: CPSelect 6 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/20/2024 15:07 Calibration End Date: 11/20/2024 18:02 Calibration ID: 13962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 810-123437/4-A	IC 007.D
Level 2	IC 810-123437/5-A	IC 01.D
Level 3	IC 810-123437/6-A	IC 02.D
Level 4	IC 810-123437/7-A	IC 05.D
Level 5	ICISAV 810-123437/8-A	IC 1.D
Level 6	IC 810-123437/9-A	IC 2.D
Level 7	IC 810-123437/10-A	IC 5.D
Level 8	IC 810-123437/11-A	IC 10.D
Level 9	IC 810-123437/12-A	IC 20.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
1,4-Dioxane	THFd8	Lin1	1141 32014	1616 83938	3160 162242	8014 319816	16239	3.50 100	5.00 250	10.0 500	25.0 1000	50.0
1,4-Dioxane-d8 (Surr)	THFd8	Ave	163801 158173	159755 156175	159608 154029	156310 154721	156621	500 500	500 500	500 500	500 500	500

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1 Analy Batch No.: 123541
SDG No.: _____
Instrument ID: GCMS-FE GC Column: CPSelect 62 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 11/20/2024 15:07 Calibration End Date: 11/20/2024 18:02 Calibration ID: 13962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 810-123437/4-A	IC 007.D
Level 2	IC 810-123437/5-A	IC 01.D
Level 3	IC 810-123437/6-A	IC 02.D
Level 4	IC 810-123437/7-A	IC 05.D
Level 5	ICISAV 810-123437/8-A	IC 1.D
Level 6	IC 810-123437/9-A	IC 2.D
Level 7	IC 810-123437/10-A	IC 5.D
Level 8	IC 810-123437/11-A	IC 10.D
Level 9	IC 810-123437/12-A	IC 20.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			
1,4-Dioxane	2.6	-0.9	-2.8	0.0	0.4	-2.6	40	20	20	20	20	20
	3.9	0.5	-1.0				20	20	20			

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 007.D
Lims ID: IC 810-123437/4-A
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 20-Nov-2024 15:07:10 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-003
Misc. Info.: IC 810-123437/4-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:40 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:57:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.212	-0.008	24	175331	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	163801	500.0	516.5	
11 1,4-Dioxane	88	8.362	8.362	0.000	80	1141	3.50	3.59	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 007.D

Injection Date: 20-Nov-2024 15:07:10

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/4-A

Client ID:

Operator ID: BC

ALS Bottle#:

3

Worklist Smp#:

3

Injection Vol: 1.0 ul

Dil. Factor:

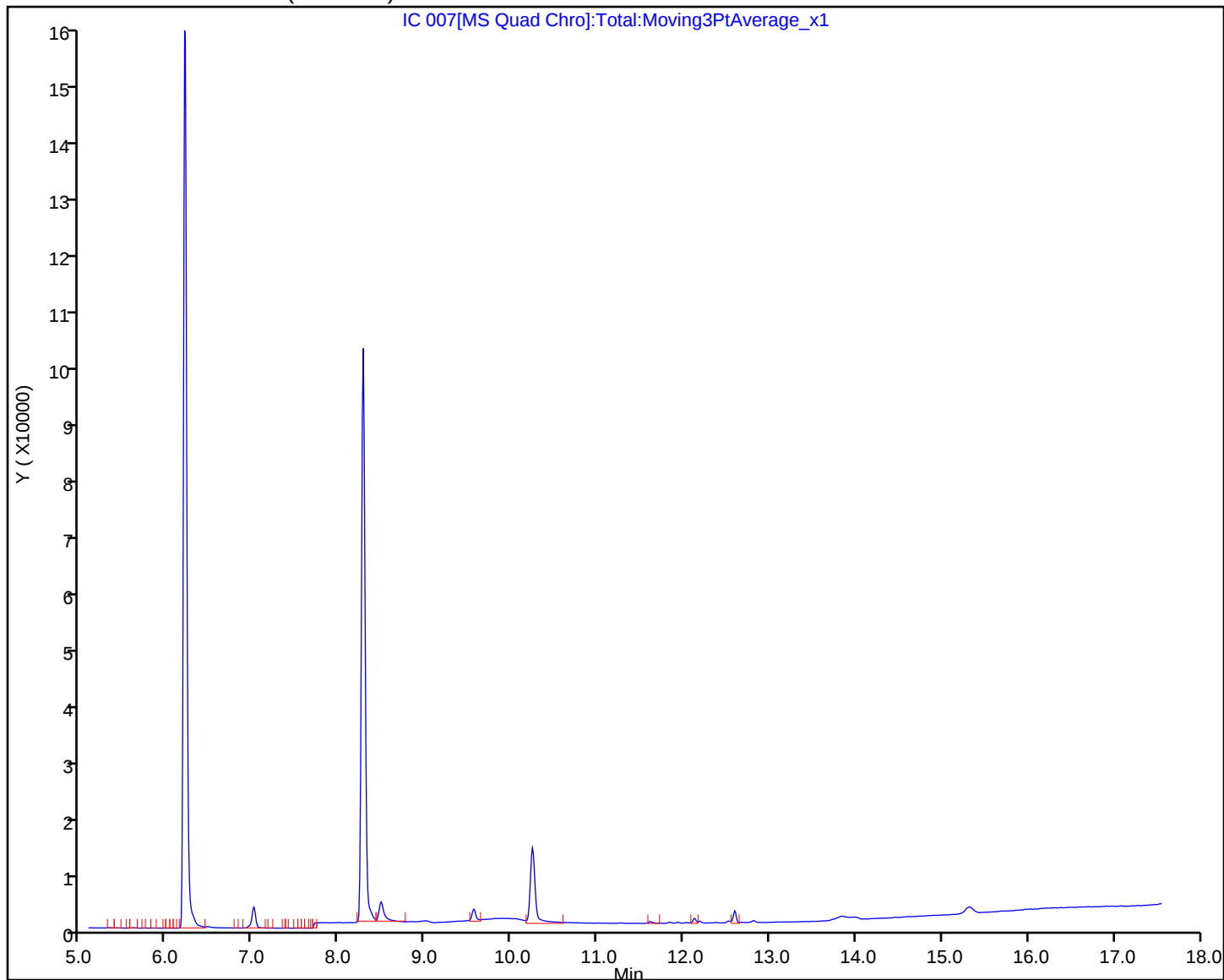
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 007.D

Injection Date: 20-Nov-2024 15:07:10

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/4-A

Client ID:

Operator ID: BC

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)

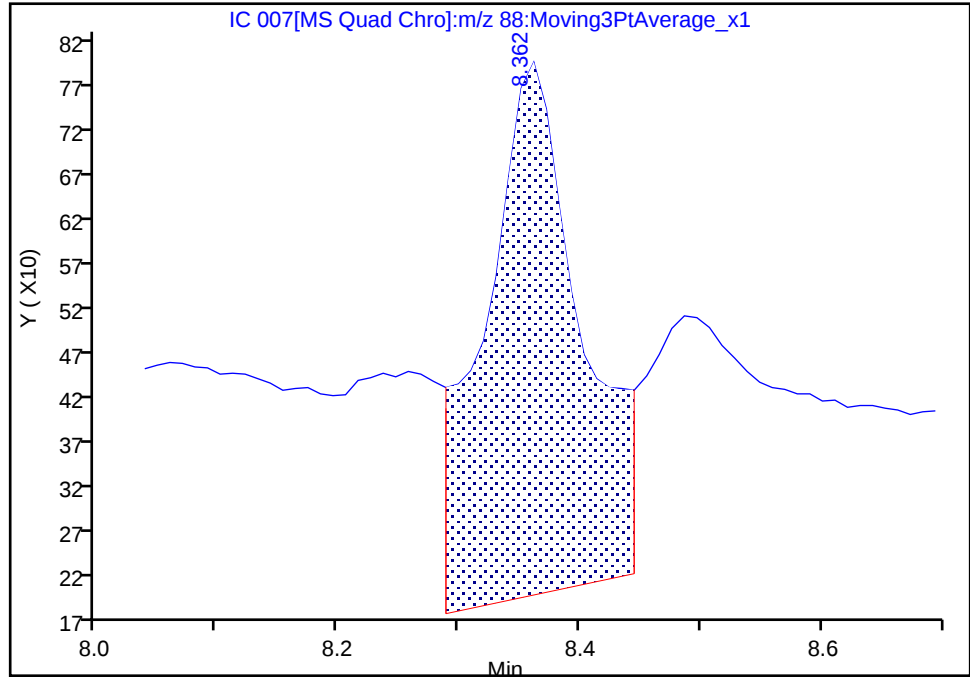
Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

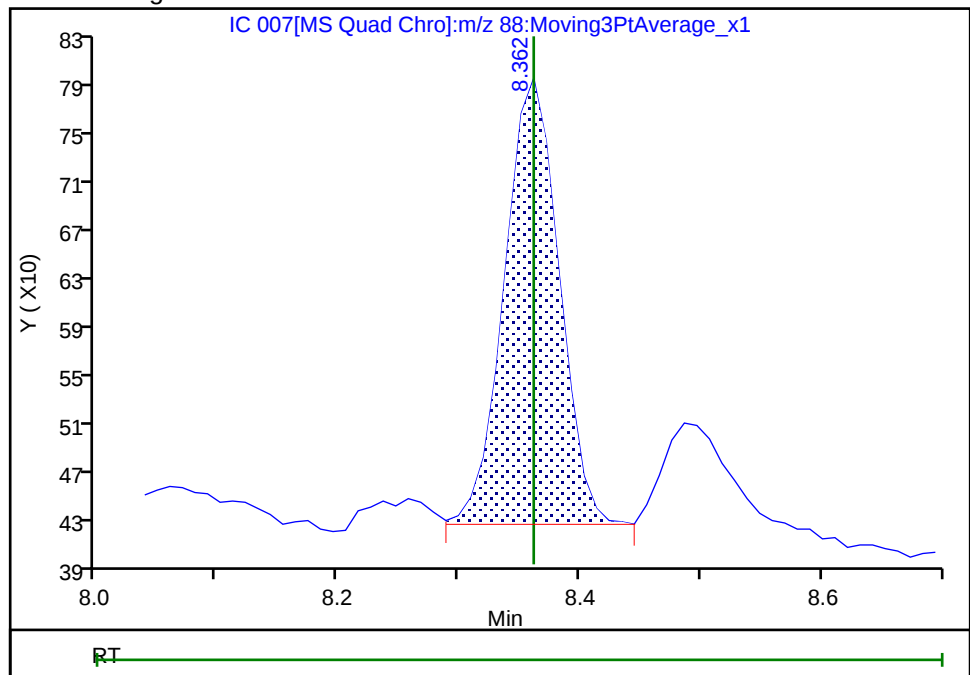
RT: 8.36
Area: 3421
Amount: 4.285229
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 1141
Amount: 3.589626
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:57:27 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 007.D

Injection Date: 20-Nov-2024 15:07:10

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/4-A

Client ID:

Operator ID: BC

ALS Bottle#:

3

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)

Detector

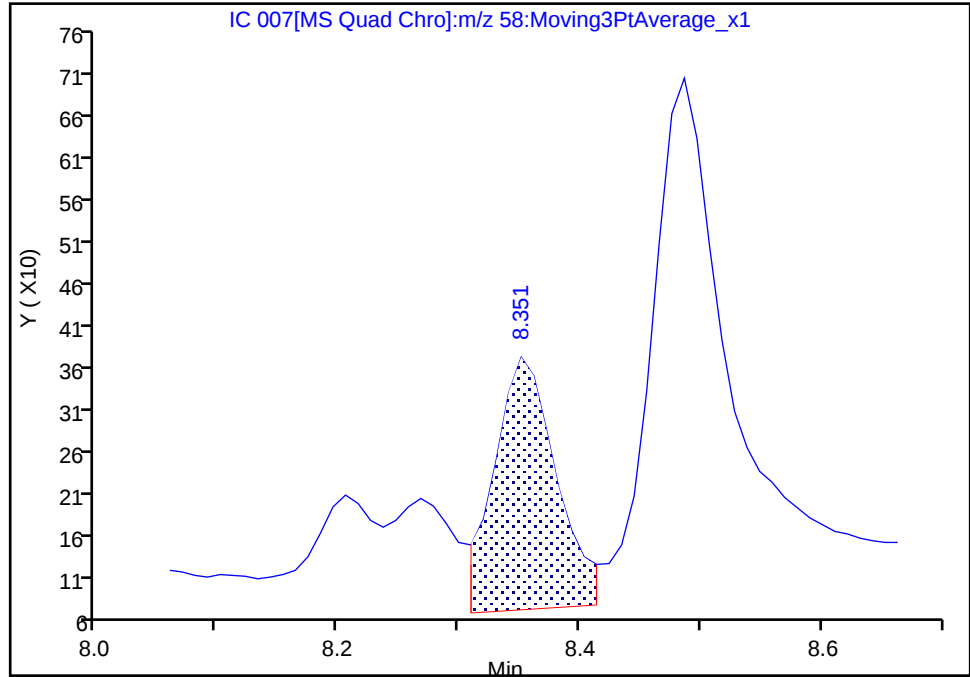
MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 2

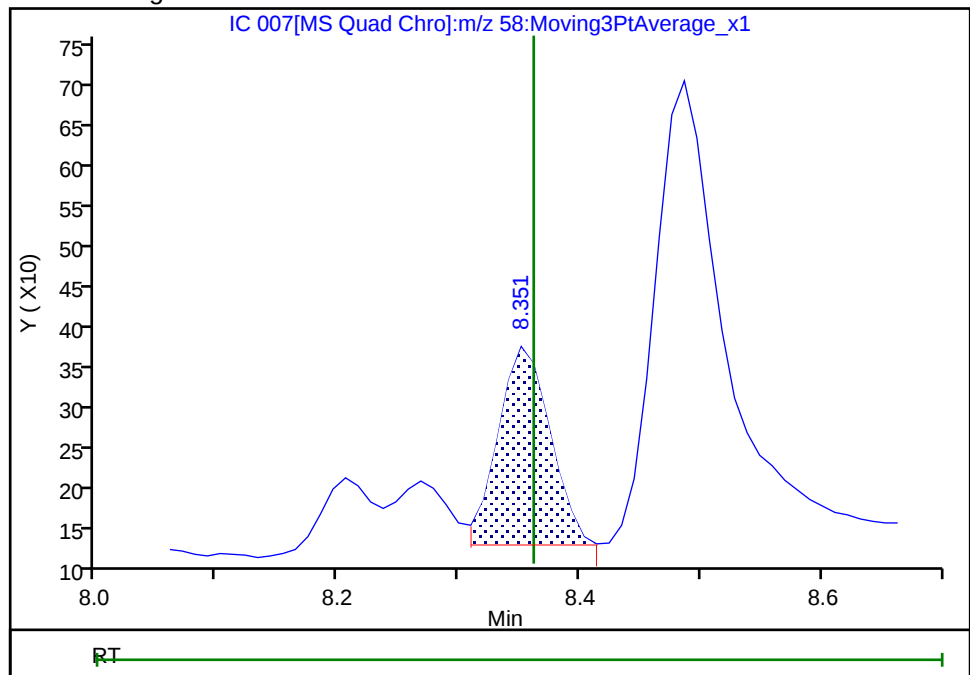
RT: 8.35
Area: 1097
Amount: 4.285229
Amount Units: ug/l

Processing Integration Results



RT: 8.35
Area: 748
Amount: 3.589626
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:57:42 -05:00:00 (UTC)

Audit Action: Manually Integrated

P5315

Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 01.D
Lims ID: IC 810-123437/5-A
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 20-Nov-2024 15:29:08 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-004
Misc. Info.: IC 810-123437/5-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:41 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:57:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.212	-0.008	24	178429	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	159755	500.0	495.0	
11 1,4-Dioxane	88	8.362	8.362	0.000	80	1616	5.00	4.95	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 01.D

Injection Date: 20-Nov-2024 15:29:08

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/5-A

Client ID:

Operator ID: BC

ALS Bottle#:

4

Worklist Smp#:

4

Injection Vol: 1.0 ul

Dil. Factor:

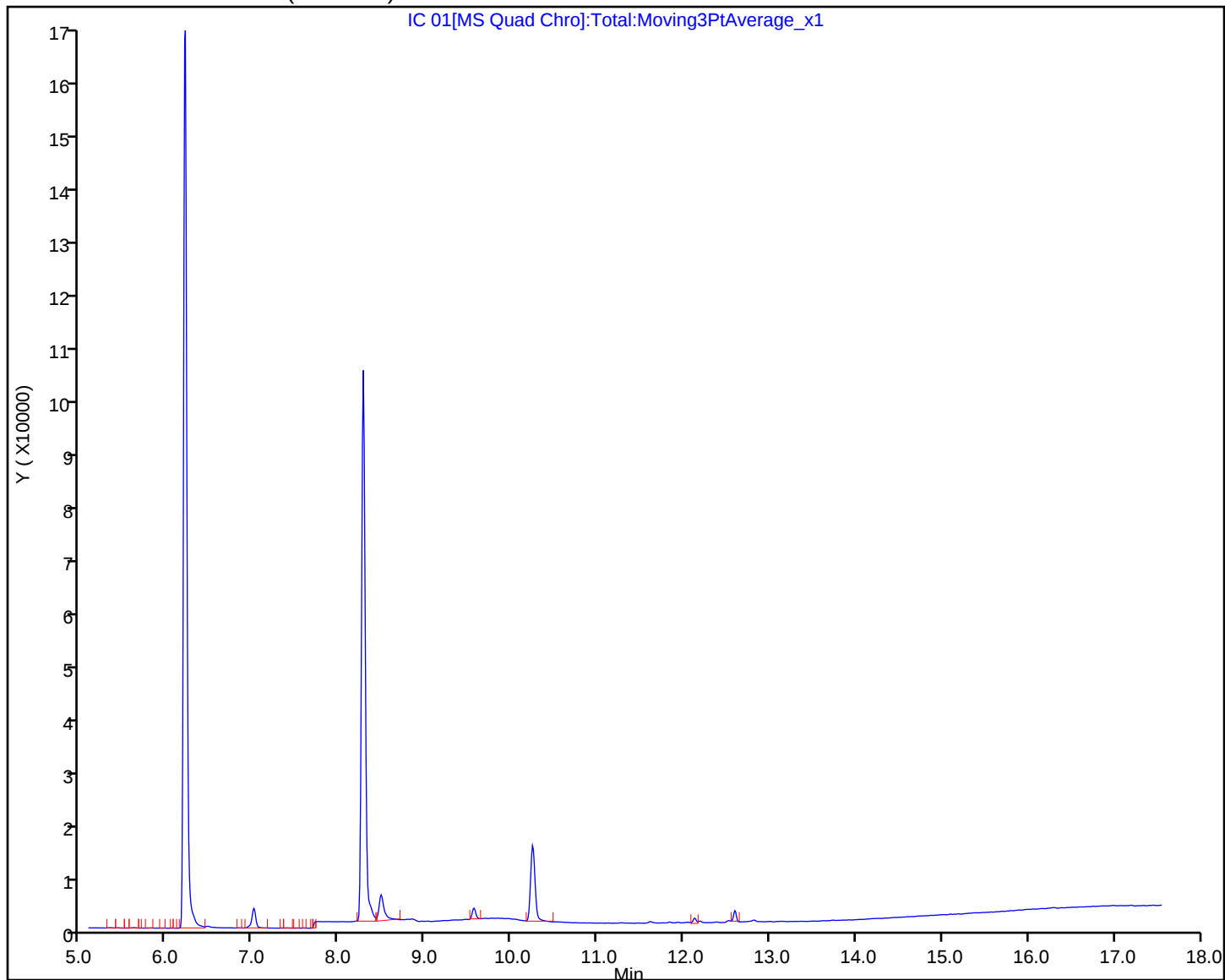
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

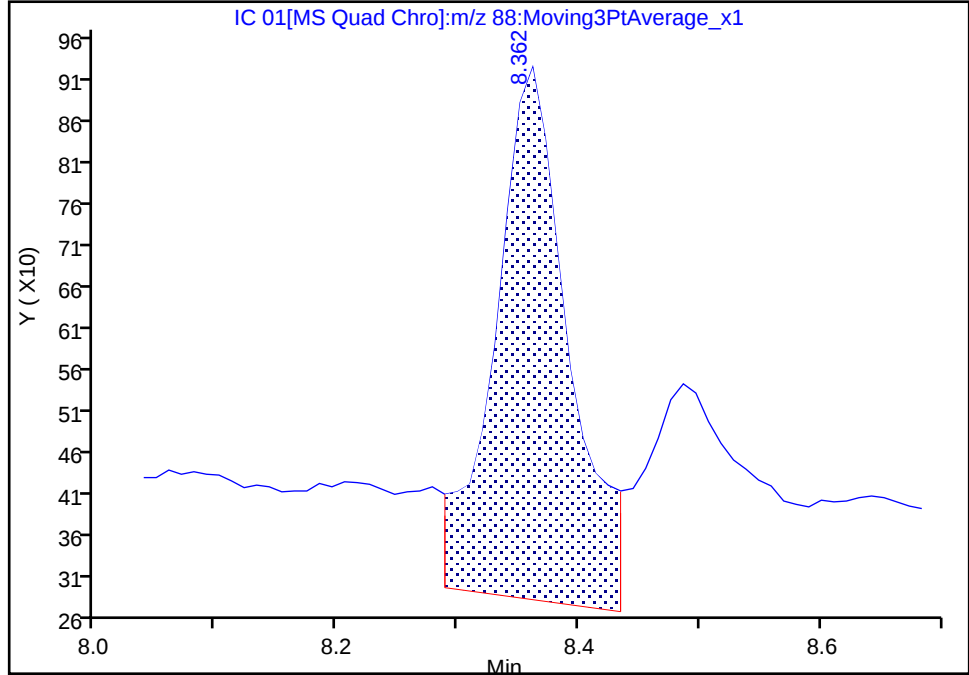
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 01.D
Injection Date: 20-Nov-2024 15:29:08 Instrument ID: GCMS-FE
Lims ID: IC 810-123437/5-A
Client ID:
Operator ID: BC ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

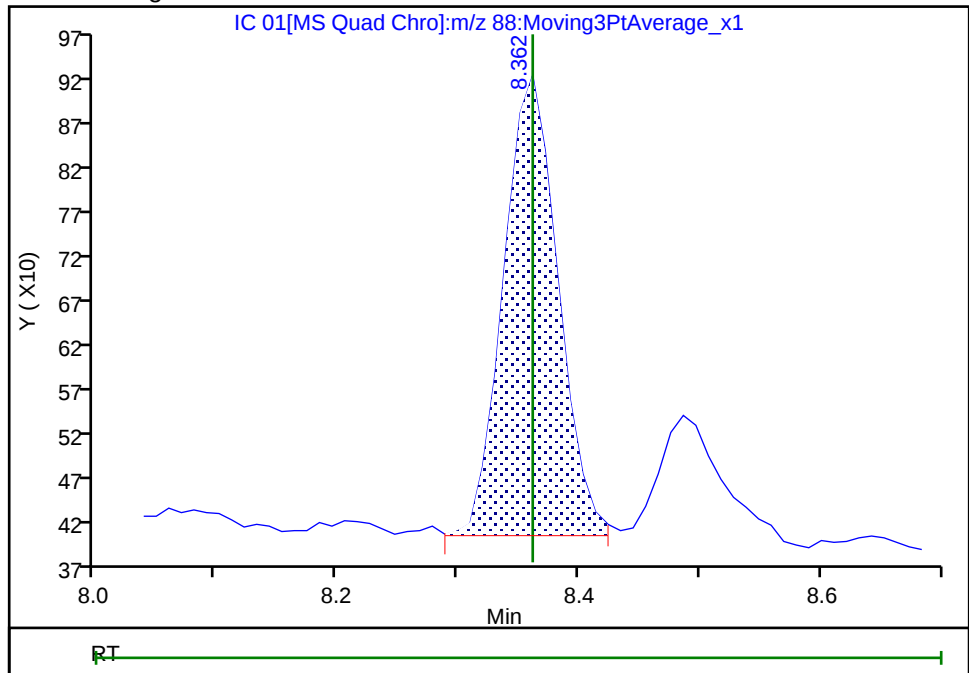
RT: 8.36
Area: 2776
Amount: 5.246577
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 1616
Amount: 4.952539
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:57:51 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 02.D
Lims ID: IC 810-123437/6-A
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Nov-2024 15:51:02 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-005
Misc. Info.: IC 810-123437/5-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:42 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:58:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.212	-0.008	24	175831	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	159608	500.0	501.9	
11 1,4-Dioxane	88	8.362	8.362	0.000	80	3160	10.0	9.72	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 02.D

Injection Date: 20-Nov-2024 15:51:02

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/6-A

Client ID:

Operator ID: BC

ALS Bottle#: 5

Worklist Smp#: 5

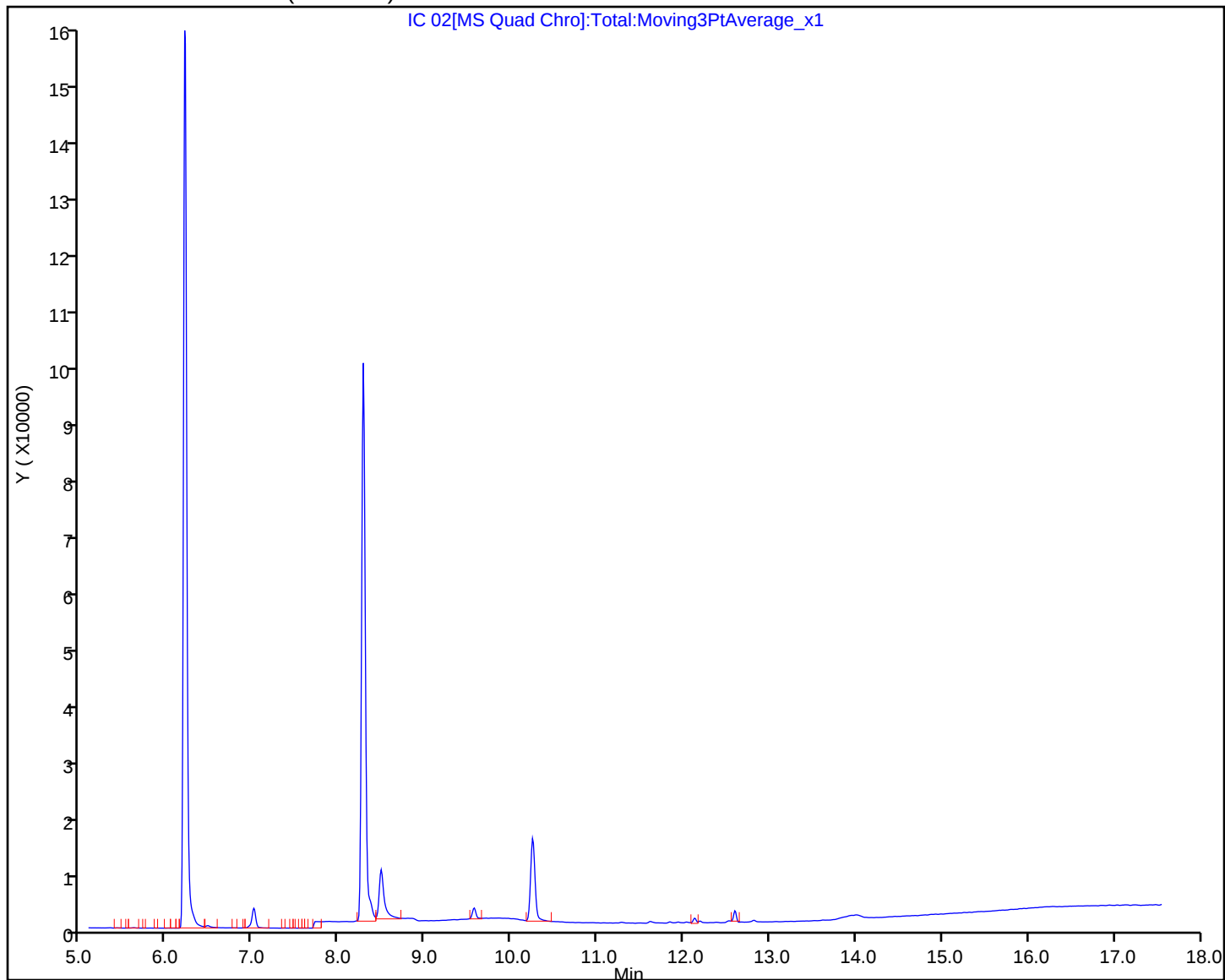
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 02.D

Injection Date: 20-Nov-2024 15:51:02

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/6-A

Client ID:

Operator ID: BC

ALS Bottle#:

5

Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)

Detector

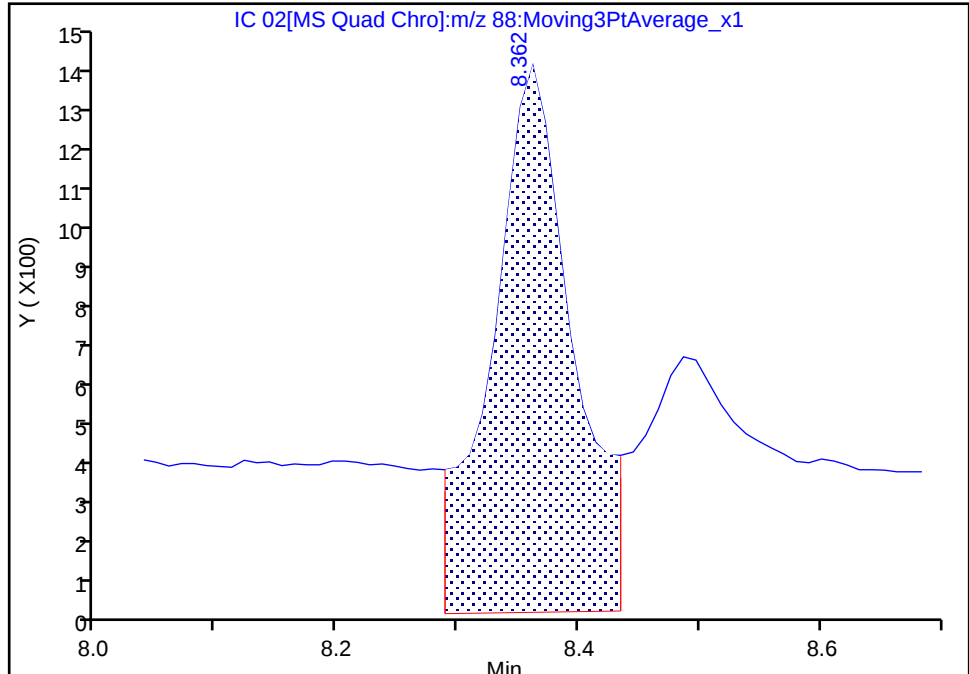
MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

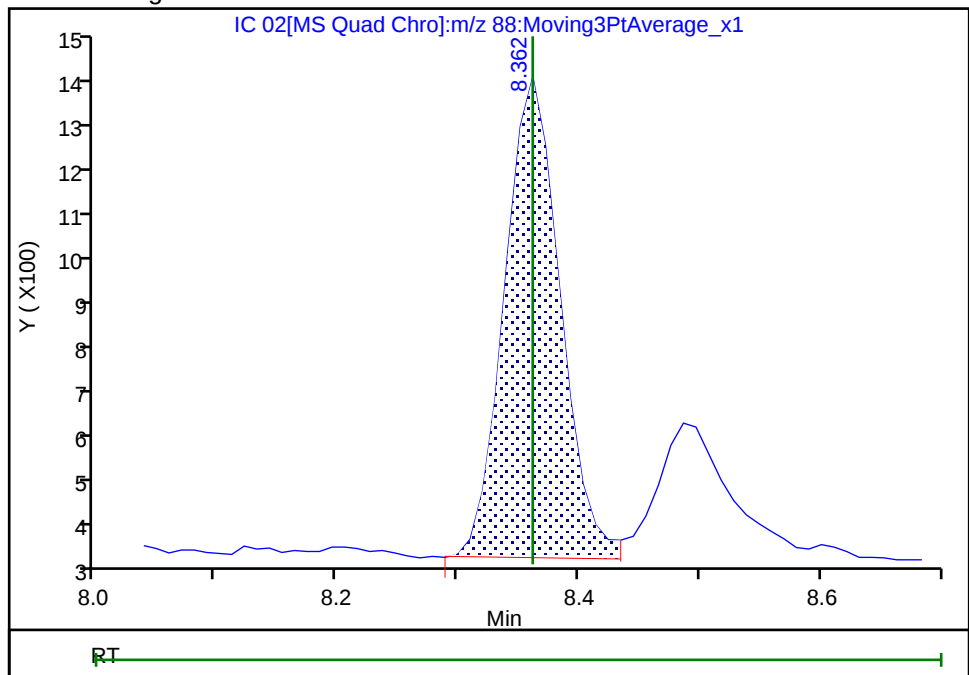
RT: 8.36
Area: 6368
Amount: 17.029397
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 3160
Amount: 9.718999
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:58:12 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 05.D
 Lims ID: IC 810-123437/7-A
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 20-Nov-2024 16:12:56 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 810-0031576-006
 Misc. Info.: IC 810-123437/6-A
 Operator ID: BC Instrument ID: GCMS-FE
 Sublist: chrom-522_GCMS-FE*sub1
 Raw Data: Smoothed
 Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
 Limit Group: MSS - 522
 Last Update: 21-Nov-2024 10:07:43 Calib Date: 20-Nov-2024 18:02:23
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
 Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
 Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:58:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.212	-0.008	24	172164	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	156310	500.0	502.0	
11 1,4-Dioxane	88	8.362	8.362	0.000	82	8014	25.0	25.0	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 05.D

Injection Date: 20-Nov-2024 16:12:56

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/7-A

Client ID:

Operator ID: BC

ALS Bottle#:

6

Worklist Smp#:

6

Injection Vol: 1.0 ul

Dil. Factor:

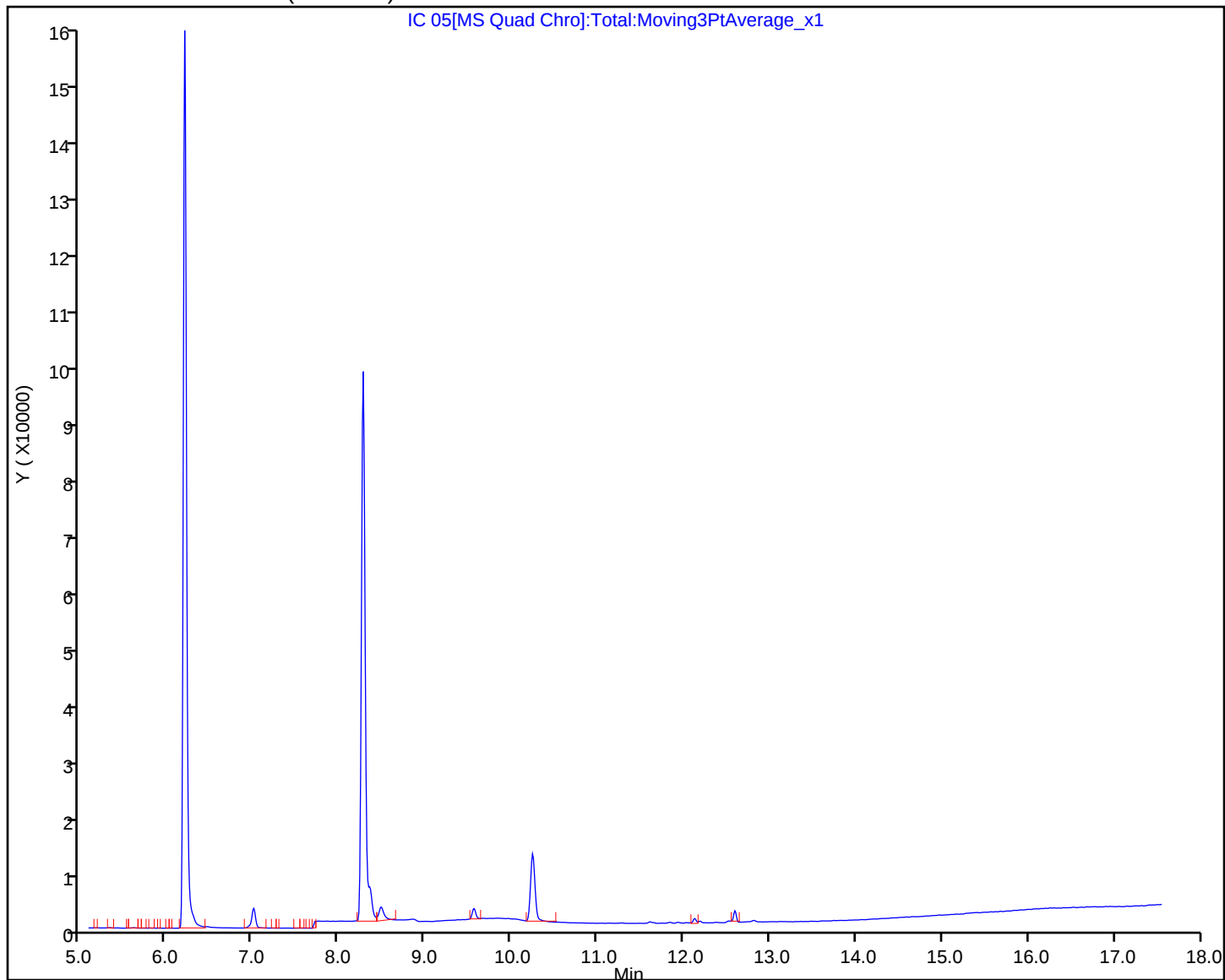
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 05.D

Injection Date: 20-Nov-2024 16:12:56

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/7-A

Client ID:

Operator ID: BC

ALS Bottle#:

6

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)

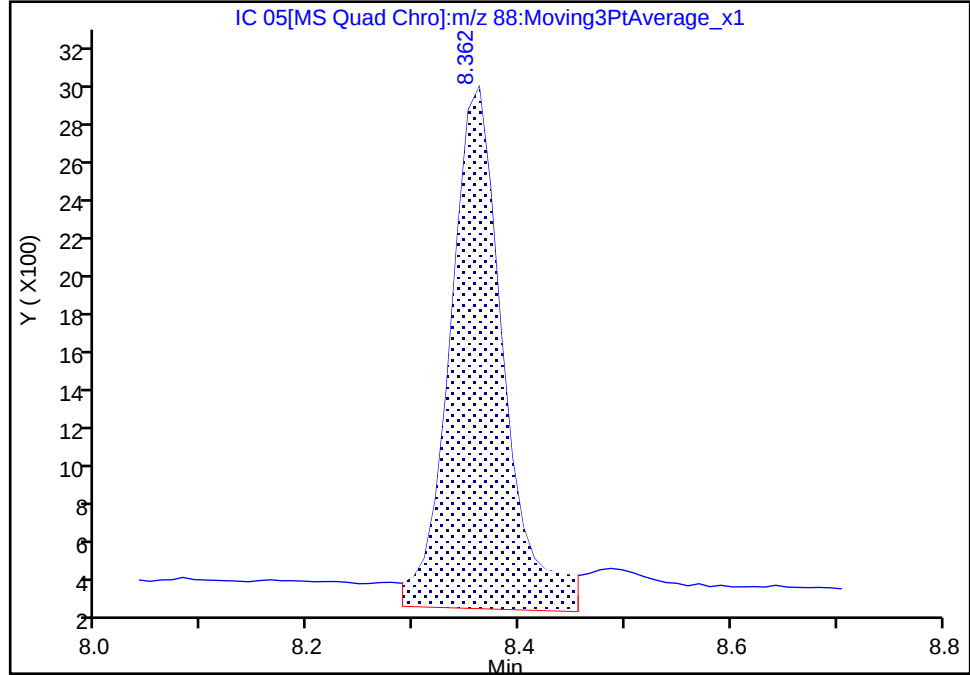
Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

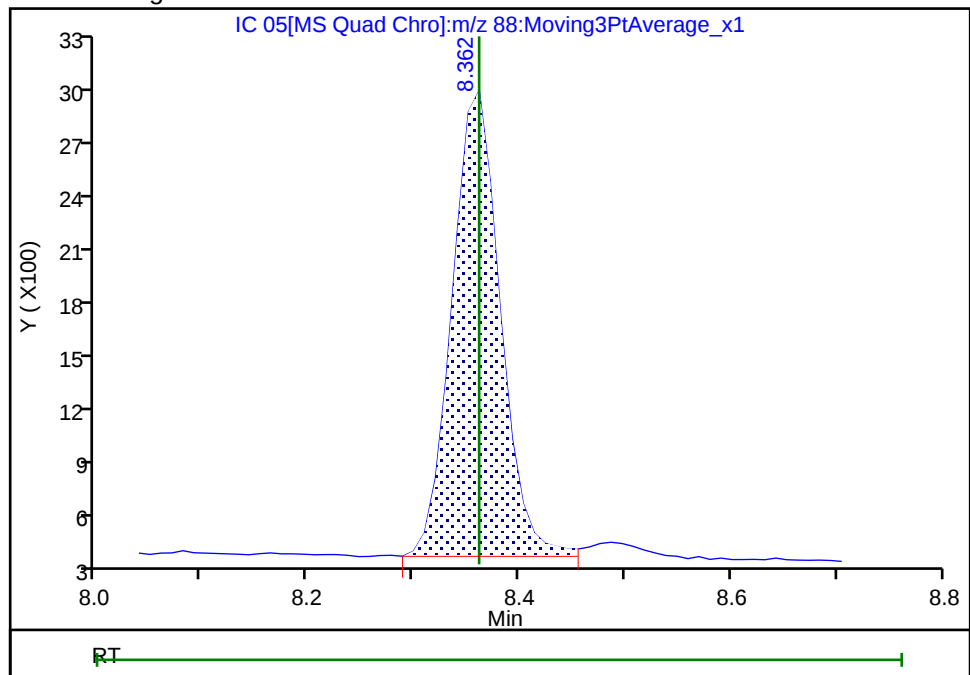
RT: 8.36
Area: 9392
Amount: 27.962934
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 8014
Amount: 24.997818
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:58:25 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 1.D
Lims ID: ICISAV 810-123437/8-A
Client ID:
Sample Type: ICISAV Calib Level: 5
Inject. Date: 20-Nov-2024 16:34:55 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-007
Misc. Info.: ICISAV 810-123437/8-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:44 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:58:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.204	0.000	23	173400	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	156621	500.0	499.4	
11 1,4-Dioxane	88	8.362	8.362	0.000	82	16239	50.0	50.2	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 1.D

Injection Date: 20-Nov-2024 16:34:55

Instrument ID: GCMS-FE

Lims ID: ICISAV 810-123437/8-A

Client ID:

Operator ID: BC

ALS Bottle#:

7

Worklist Smp#:

7

Injection Vol: 1.0 ul

Dil. Factor:

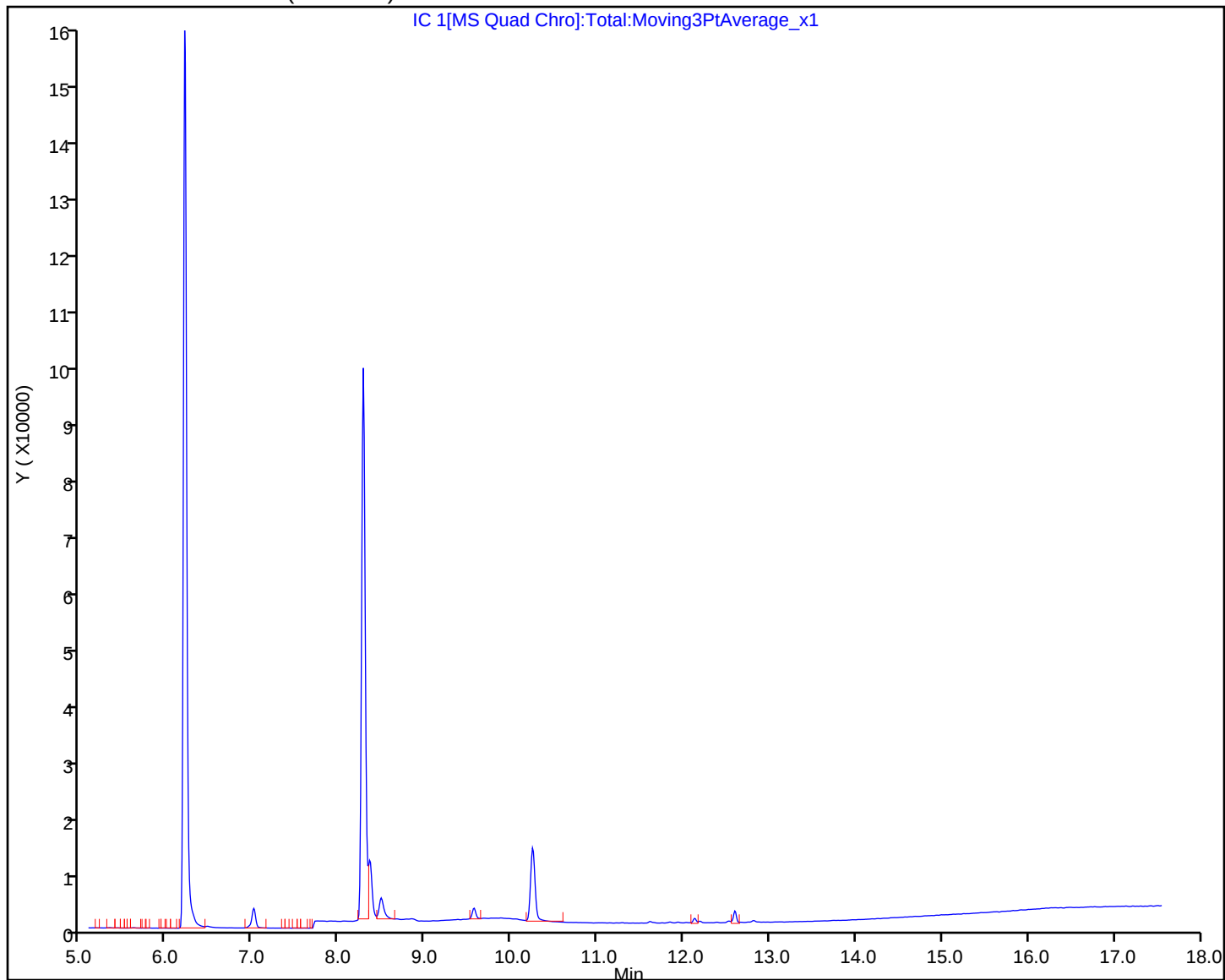
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

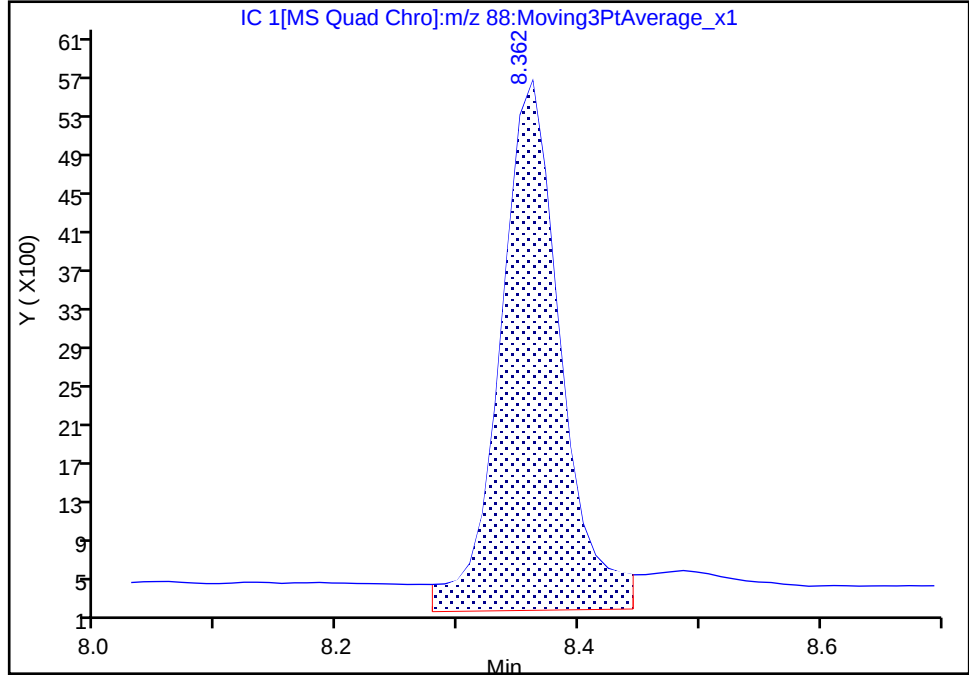
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 1.D
Injection Date: 20-Nov-2024 16:34:55 Instrument ID: GCMS-FE
Lims ID: ICISAV 810-123437/8-A
Client ID:
Operator ID: BC ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

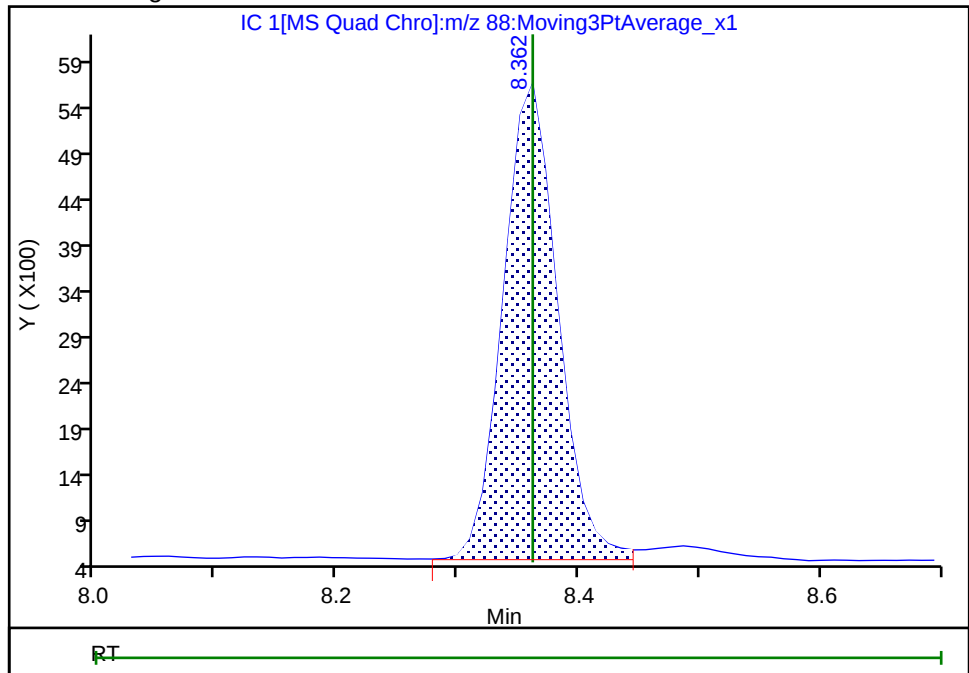
RT: 8.36
Area: 18942
Amount: 56.626774
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 16239
Amount: 50.181190
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:58:33 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 2.D
Lims ID: IC 810-123437/9-A
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Nov-2024 16:56:49 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-008
Misc. Info.: IC 810-123437/9-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:44 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:59:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.204	0.000	24	175990	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	158173	500.0	496.9	
11 1,4-Dioxane	88	8.362	8.362	0.000	81	32014	100.0	97.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 2.D

Injection Date: 20-Nov-2024 16:56:49

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/9-A

Client ID:

Operator ID: BC

ALS Bottle#: 8

Worklist Smp#: 8

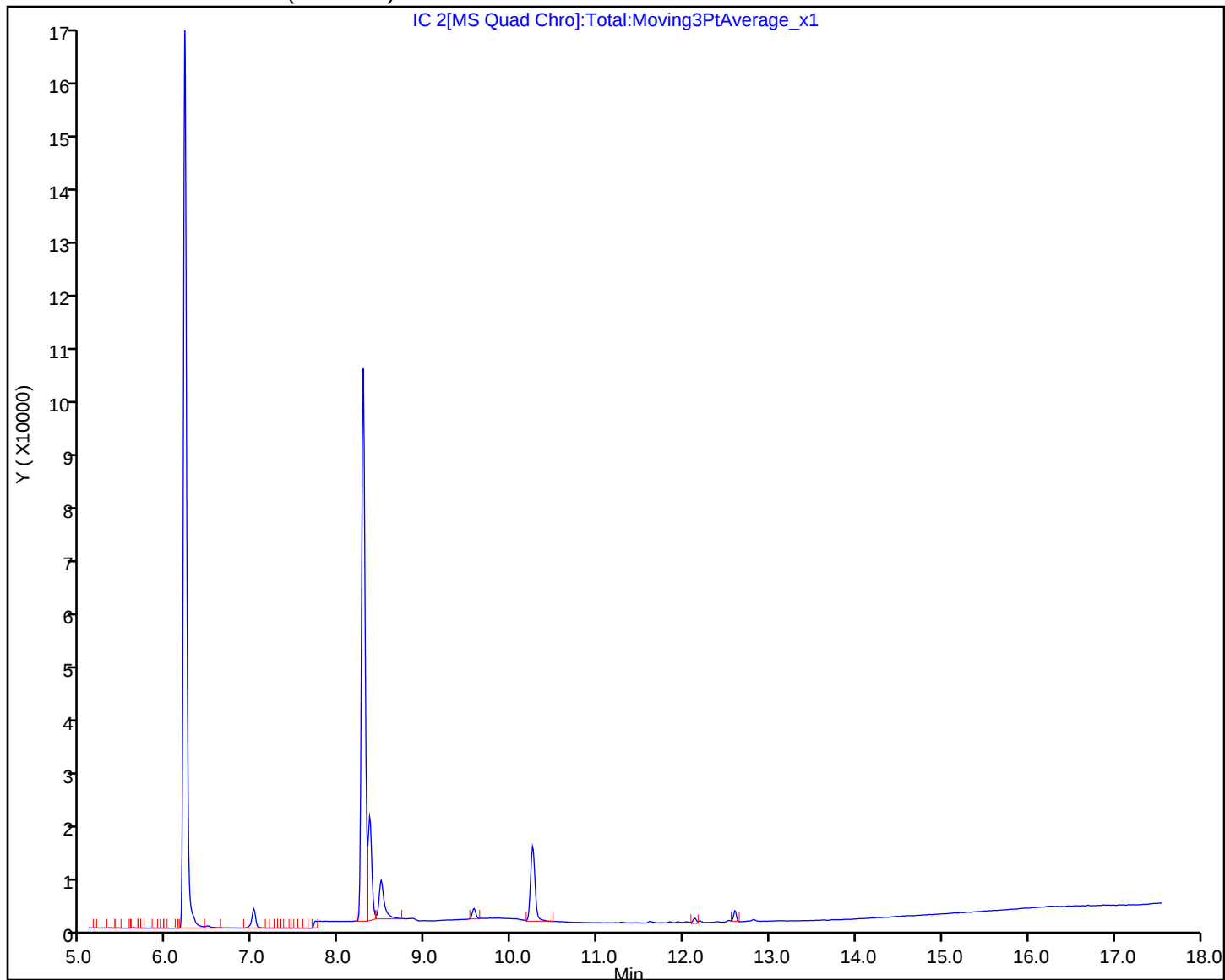
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

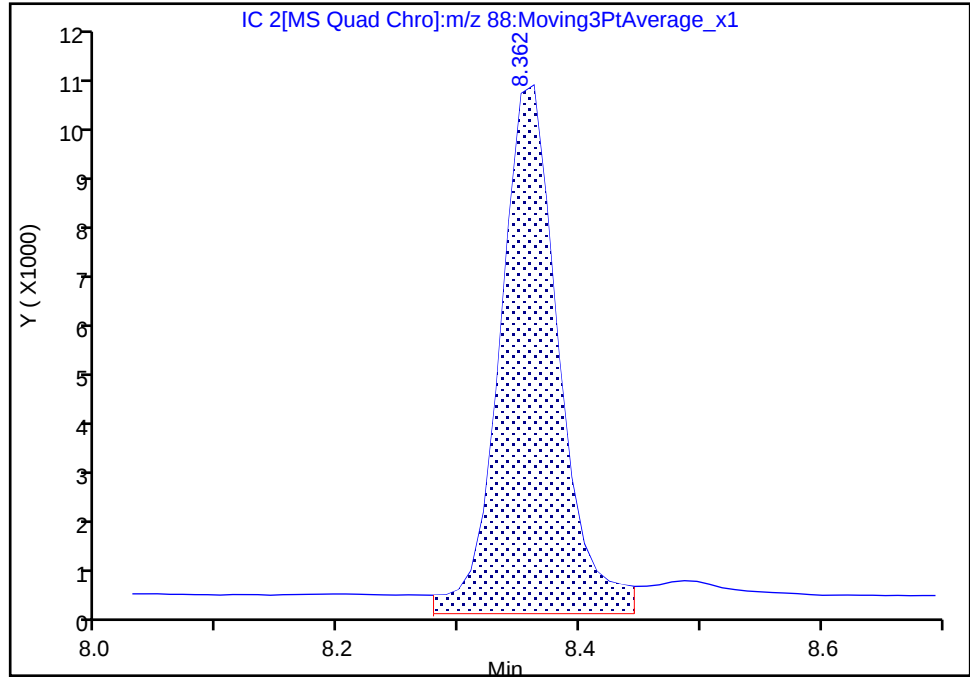
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 2.D
Injection Date: 20-Nov-2024 16:56:49 Instrument ID: GCMS-FE
Lims ID: IC 810-123437/9-A
Client ID:
Operator ID: BC ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

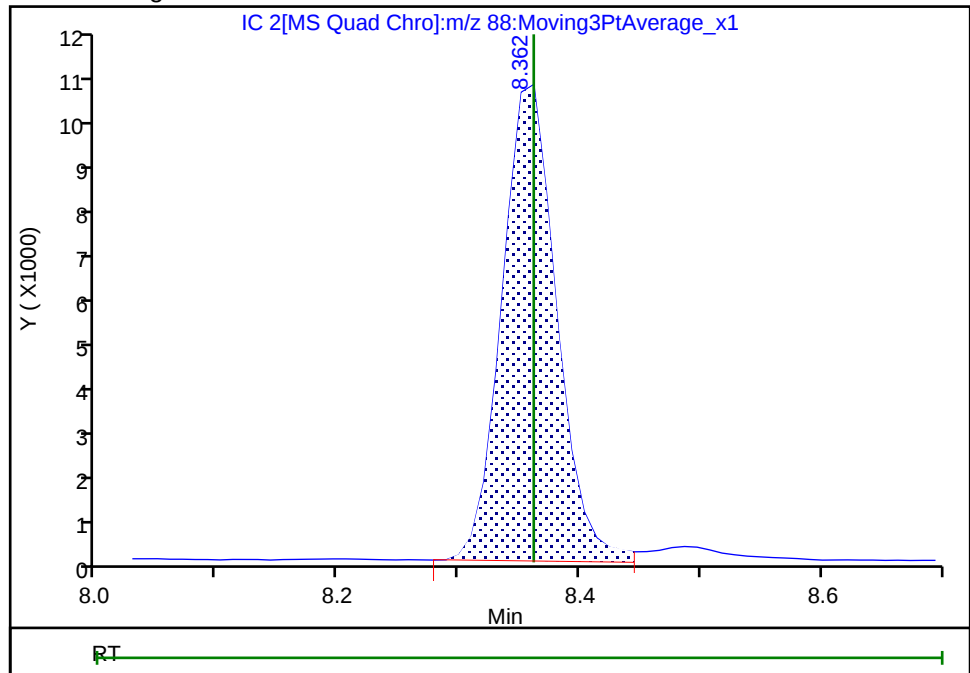
RT: 8.36
Area: 35768
Amount: 105.9835
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 32014
Amount: 97.368745
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:59:00 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 5.D
 Lims ID: IC 810-123437/10-A
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 20-Nov-2024 17:18:33 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 810-0031576-009
 Misc. Info.: IC 810-123437/10-A
 Operator ID: BC Instrument ID: GCMS-FE
 Sublist: chrom-522_GCMS-FE*sub1
 Raw Data: Smoothed
 Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
 Limit Group: MSS - 522
 Last Update: 21-Nov-2024 10:07:45 Calib Date: 20-Nov-2024 18:02:23
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
 Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
 Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:59:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.204	0.000	24	172784	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	156175	500.0	499.7	
11 1,4-Dioxane	88	8.351	8.362	-0.011	81	83938	250.0	259.8	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 5.D

Injection Date: 20-Nov-2024 17:18:33

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/10-A

Client ID:

Operator ID: BC

ALS Bottle#:

9

Worklist Smp#:

9

Injection Vol: 1.0 ul

Dil. Factor:

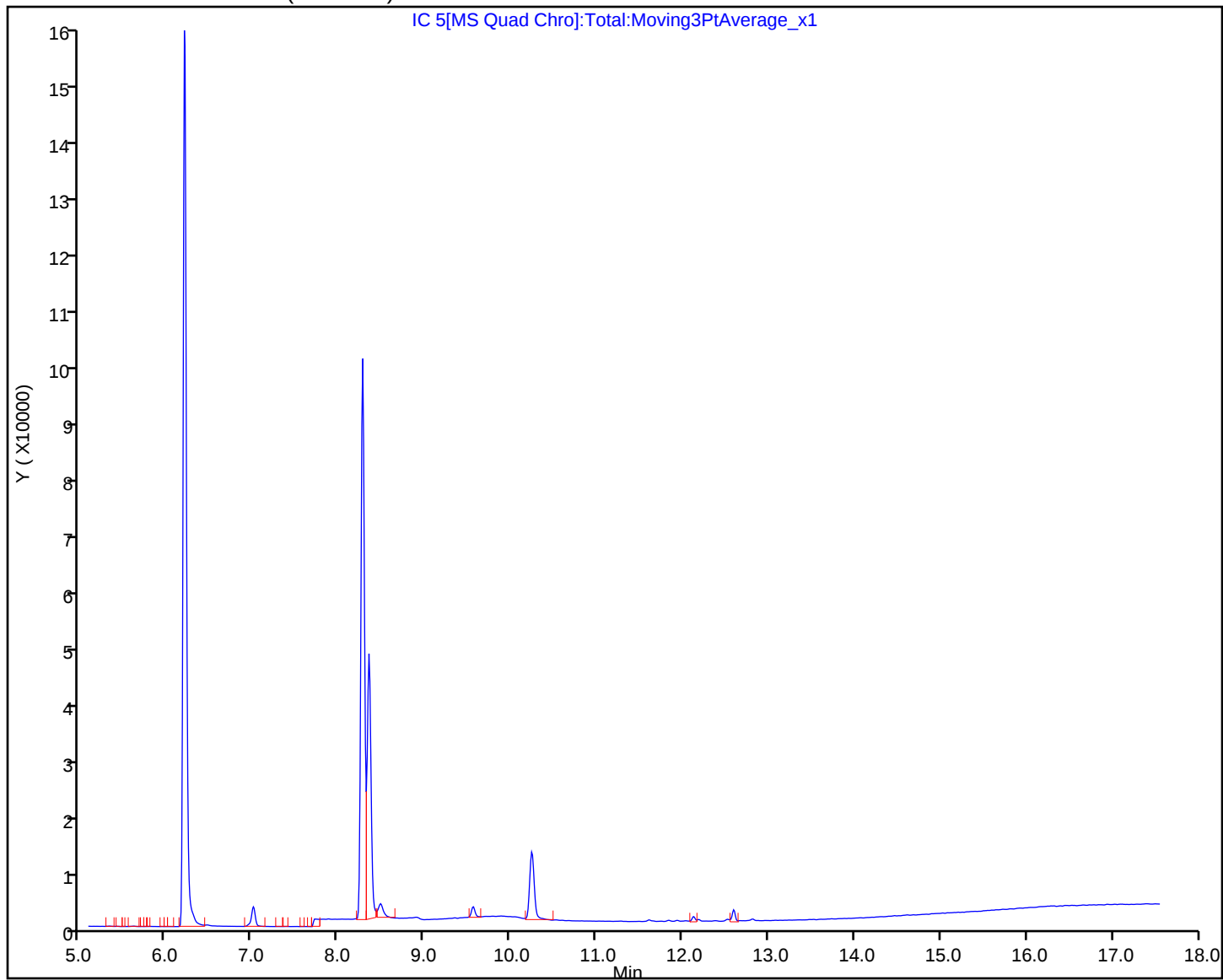
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

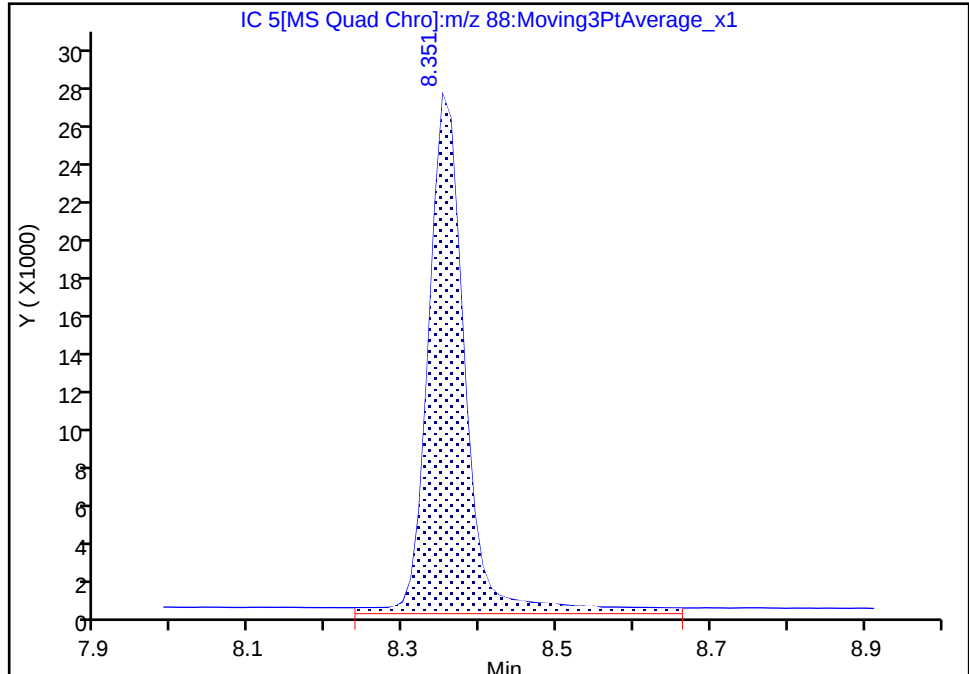
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 5.D
Injection Date: 20-Nov-2024 17:18:33 Instrument ID: GCMS-FE
Lims ID: IC 810-123437/10-A
Client ID:
Operator ID: BC ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

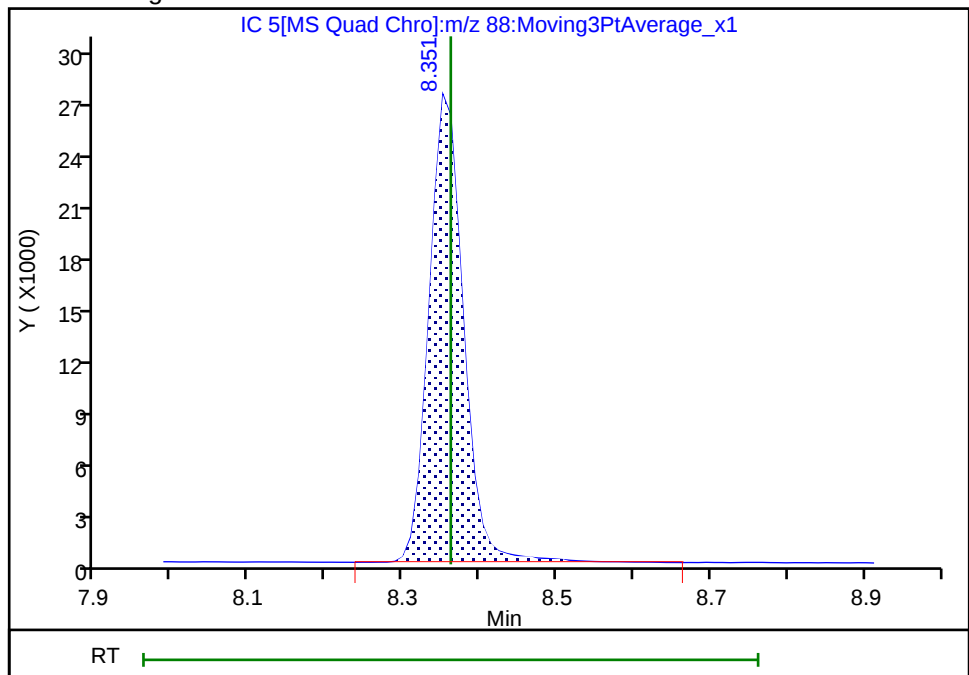
RT: 8.35
Area: 91599
Amount: 277.8506
Amount Units: ug/l

Processing Integration Results



RT: 8.35
Area: 83938
Amount: 259.8454
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:59:20 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 10.D
Lims ID: IC 810-123437/11-A
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Nov-2024 17:40:28 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-010
Misc. Info.: IC 810-123437/11-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:46 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 09:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.204	0.000	24	172651	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	154029	500.0	493.2	
11 1,4-Dioxane	88	8.352	8.362	-0.010	81	162242	500.0	502.5	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 10.D

Injection Date: 20-Nov-2024 17:40:28

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/11-A

Client ID:

Operator ID: BC

ALS Bottle#: 10

Worklist Smp#: 10

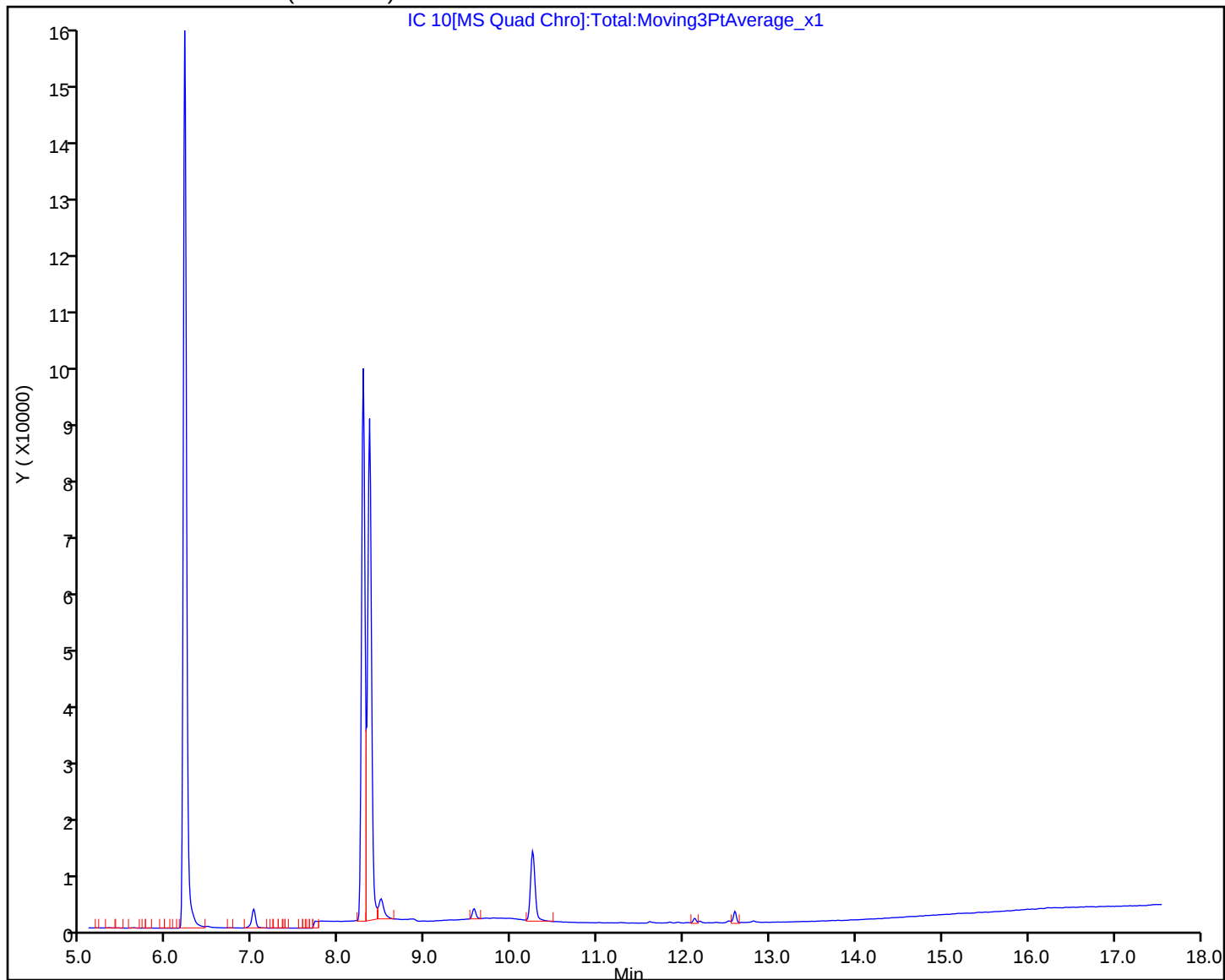
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 10.D

Injection Date: 20-Nov-2024 17:40:28

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/11-A

Client ID:

Operator ID: BC

ALS Bottle#:

10

Worklist Smp#: 10

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)

Detector

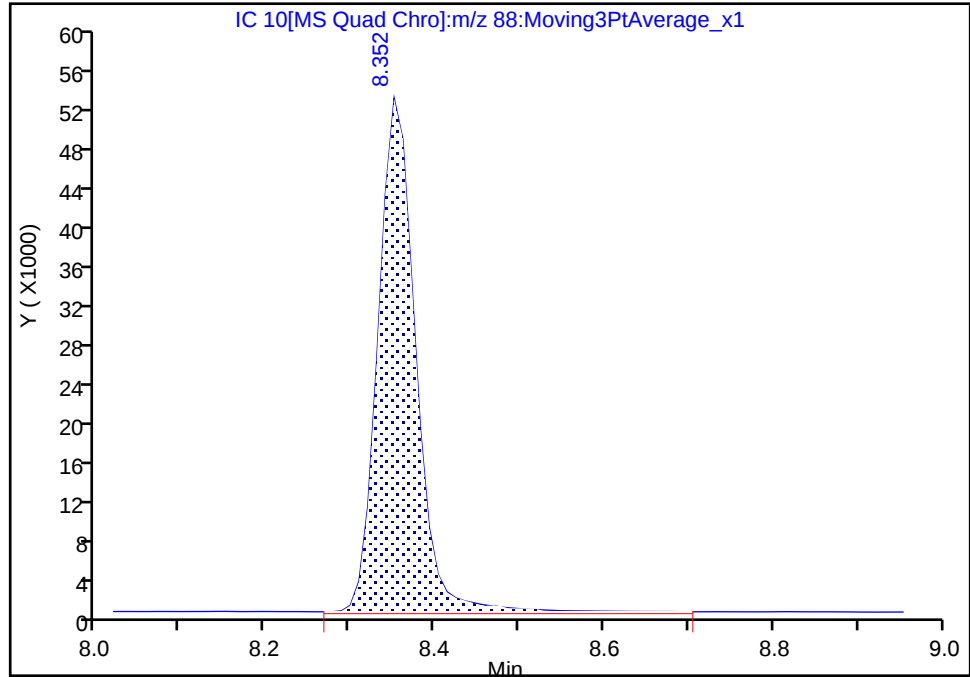
MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

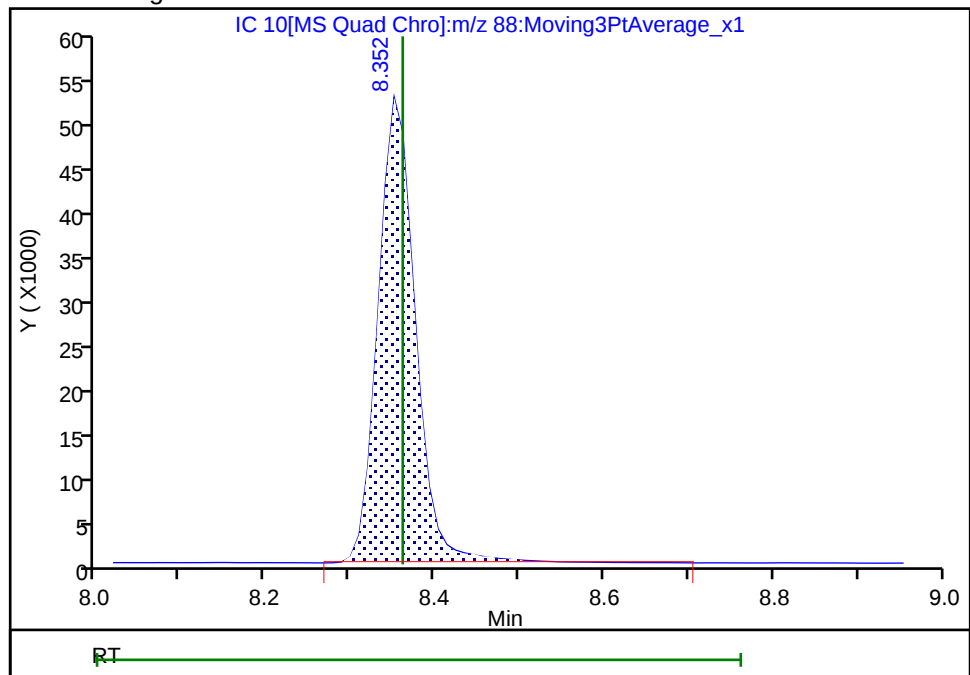
RT: 8.35
Area: 167404
Amount: 514.1962
Amount Units: ug/l

Processing Integration Results



RT: 8.35
Area: 162242
Amount: 502.5336
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 09:59:40 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Lims ID: IC 810-123437/12-A
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 20-Nov-2024 18:02:23 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0031576-011
Misc. Info.: IC 810-123437/12-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:07:47 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 10:07:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.204	0.000	24	172684	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	154721	500.0	495.4	
11 1,4-Dioxane	88	8.351	8.362	-0.011	81	319816	1000.0	990.3	

QC Flag Legend

Processing Flags

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D

Injection Date: 20-Nov-2024 18:02:23

Instrument ID: GCMS-FE

Lims ID: IC 810-123437/12-A

Client ID:

Operator ID: BC

ALS Bottle#: 11

Worklist Smp#: 11

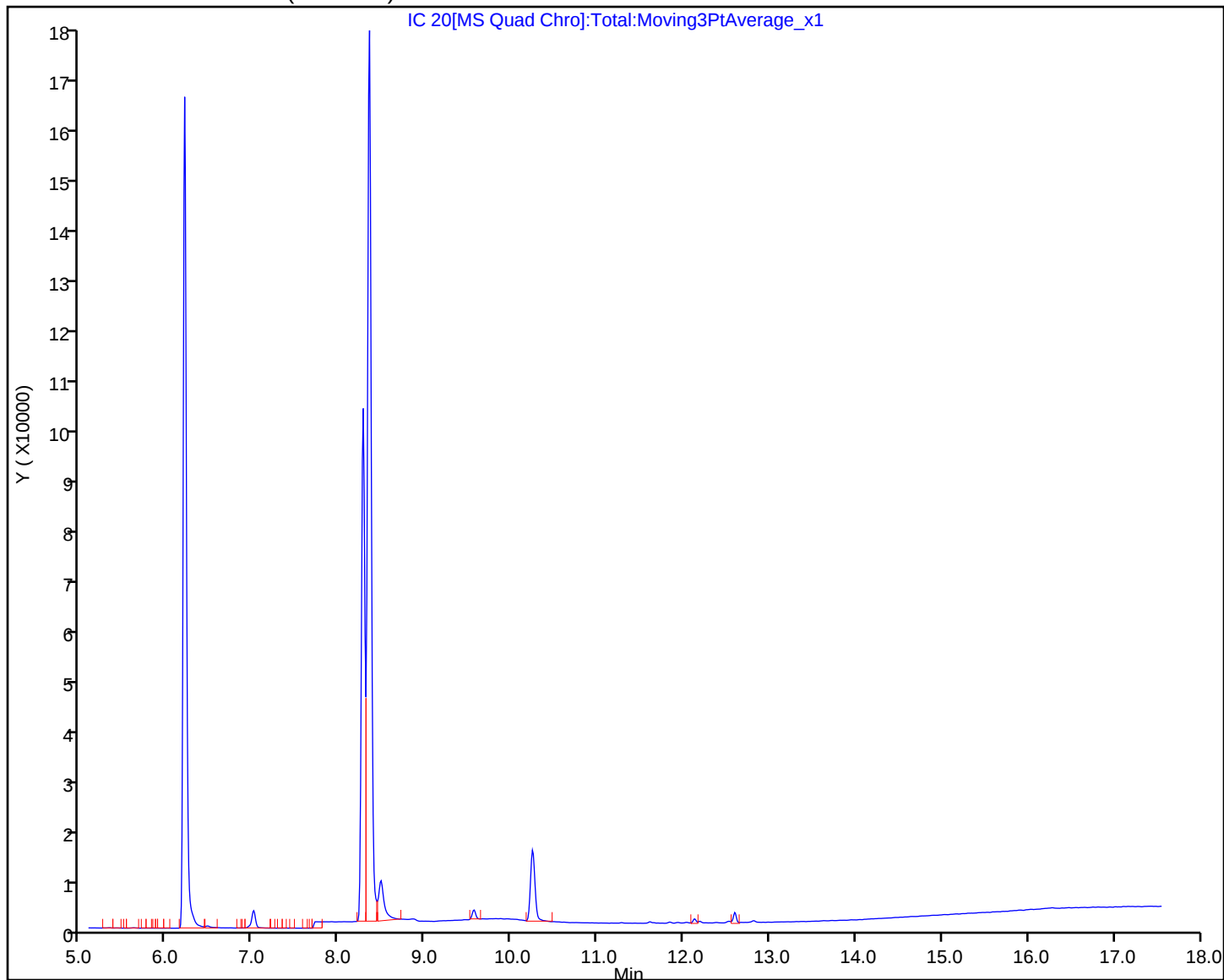
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Calibration

/ 1,4-Dioxane-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

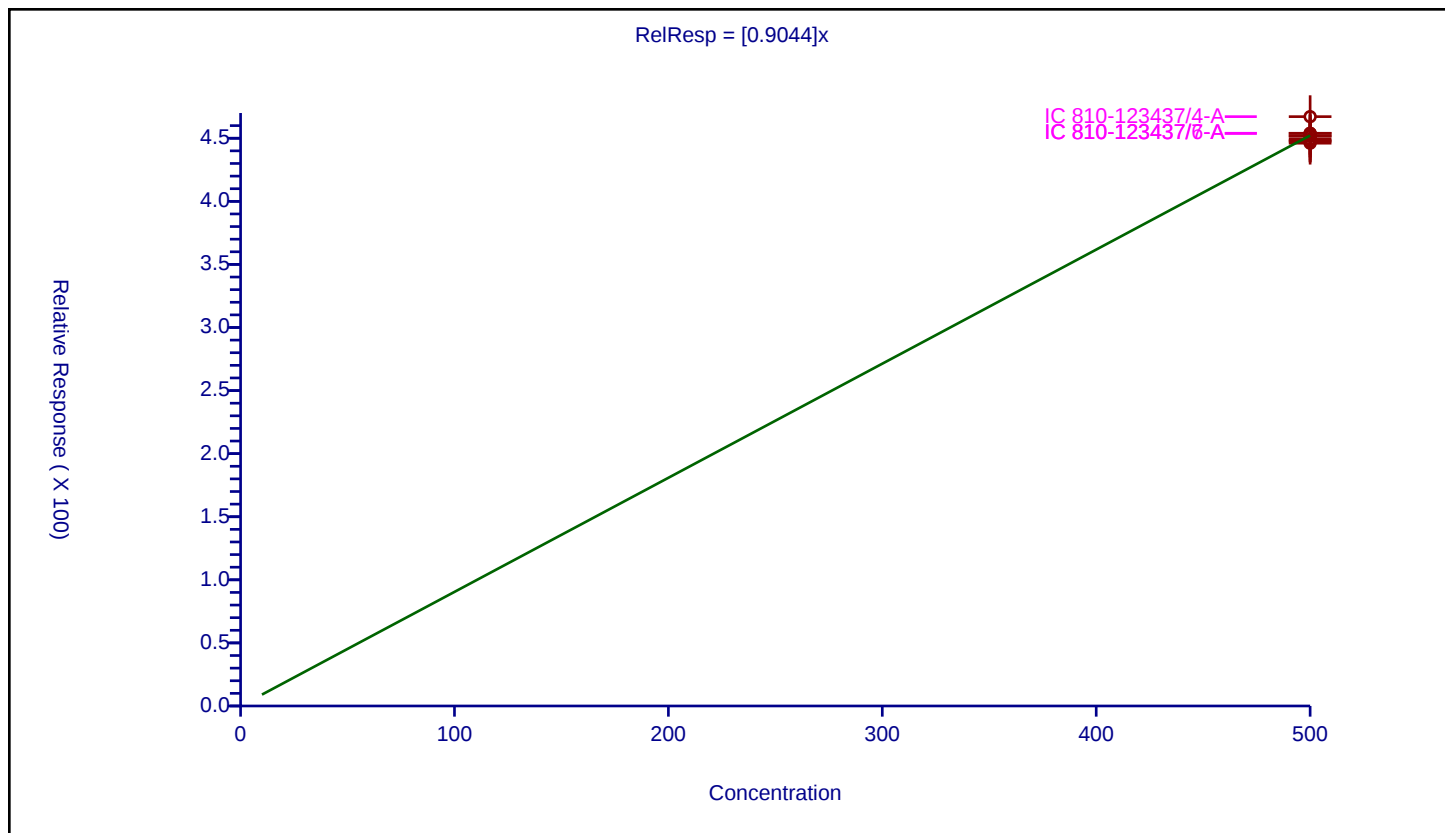
Curve Coefficients

Intercept: 0
 Slope: 0.9044

Error Coefficients

Relative Standard Deviation: 1.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 810-123437/4-A	500.0	467.119334	500.0	175331.0	0.934239	Y
2	IC 810-123437/5-A	500.0	447.671062	500.0	178429.0	0.895342	Y
3	IC 810-123437/6-A	500.0	453.867634	500.0	175831.0	0.907735	Y
4	IC 810-123437/7-A	500.0	453.956692	500.0	172164.0	0.907913	Y
5	ICISAV 810-123437/8-A	500.0	451.617647	500.0	173400.0	0.903235	Y
6	IC 810-123437/9-A	500.0	449.380647	500.0	175990.0	0.898761	Y
7	IC 810-123437/10-A	500.0	451.937101	500.0	172784.0	0.903874	Y
8	IC 810-123437/11-A	500.0	446.070396	500.0	172651.0	0.892141	Y
9	IC 810-123437/12-A	500.0	447.988812	500.0	172684.0	0.895978	Y



Calibration

/ 1,4-Dioxane

Curve Type: Linear
 Weighting: Conc
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

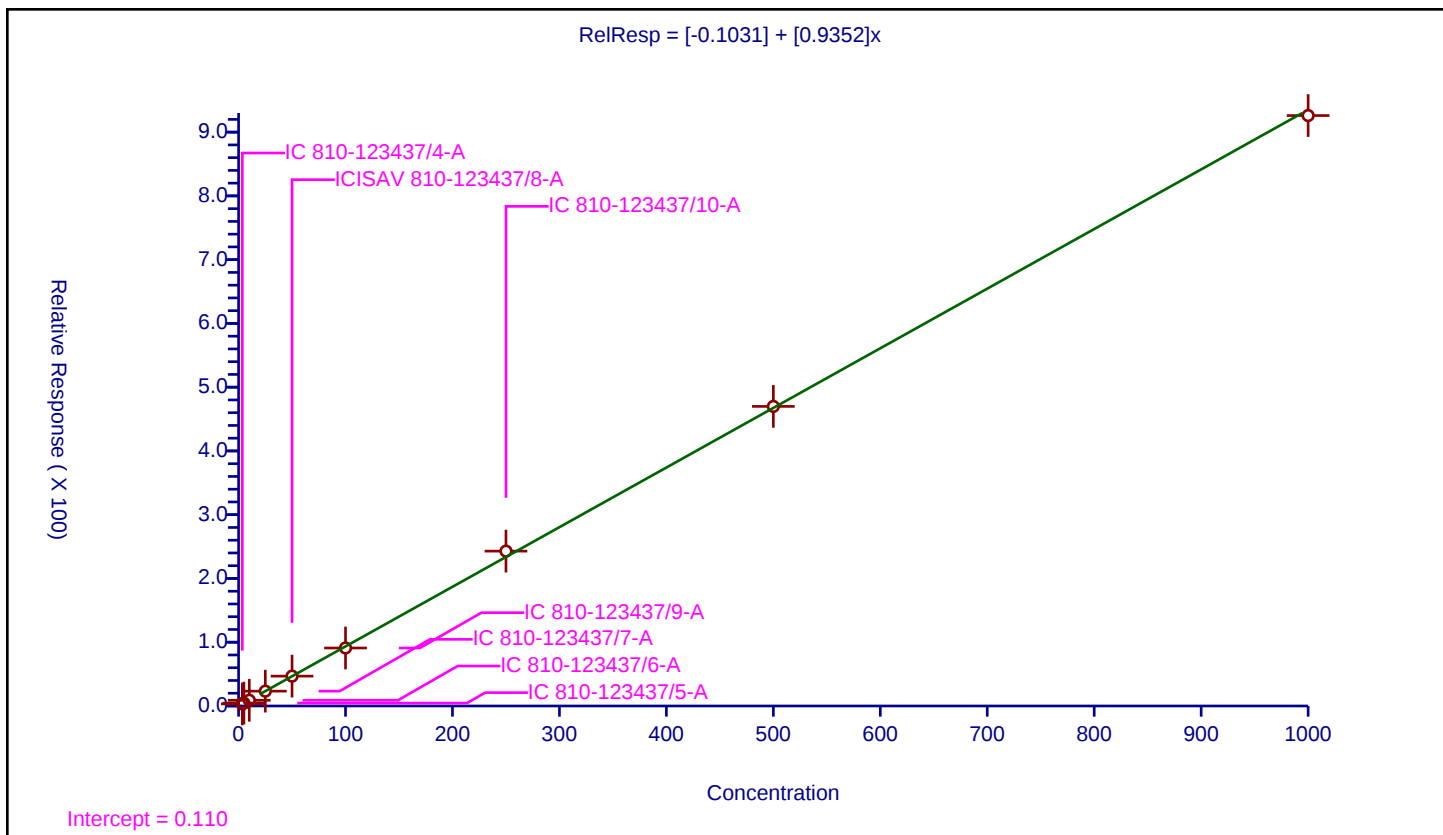
Curve Coefficients

Intercept: -0.1031
 Slope: 0.9352

Error Coefficients

Relative Standard Deviation: 2.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 810-123437/4-A	3.5	3.253846	500.0	175331.0	0.92967	Y
2	IC 810-123437/5-A	5.0	4.528412	500.0	178429.0	0.905682	Y
3	IC 810-123437/6-A	10.0	8.985901	500.0	175831.0	0.89859	Y
4	IC 810-123437/7-A	25.0	23.27432	500.0	172164.0	0.930973	Y
5	ICISAV 810-123437/8-A	50.0	46.82526	500.0	173400.0	0.936505	Y
6	IC 810-123437/9-A	100.0	90.954031	500.0	175990.0	0.90954	Y
7	IC 810-123437/10-A	250.0	242.898648	500.0	172784.0	0.971595	Y
8	IC 810-123437/11-A	500.0	469.855373	500.0	172651.0	0.939711	Y
9	IC 810-123437/12-A	1000.0	926.015149	500.0	172684.0	0.926015	Y



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.: _____
Lab Sample ID: ICV 810-123437/13-A Calibration Date: 11/20/2024 19:07
Instrument ID: GCMS-FE Calib Start Date: 11/20/2024 15:07
GC Column: CPSelect 624 MS ID: 0.25 (mm) Calib End Date: 11/20/2024 18:02
Lab File ID: ICV.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
1,4-Dioxane	Lin1		0.9411		50.4	50.0	101	80-120
1,4-Dioxane-d8 (Surr)	Ave	0.9044	0.8952		495	500	99	70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\ICV.D

Lims ID: ICV 810-123437/13-A

Client ID:

Sample Type: ICV

Inject. Date: 20-Nov-2024 19:07:59

ALS Bottle#: 13

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Sample Info: 810-0031576-013

Misc. Info.: ICV 810-123437/13-A

Operator ID: BC

Instrument ID: GCMS-FE

Sublist:

Raw Data: Smoothed

Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m

Limit Group: MSS - 522

Last Update: 21-Nov-2024 10:57:35

Calib Date: 20-Nov-2024 18:02:23

Integrator: RTE

ID Type: Deconvolution ID

Quant Method: Internal Standard

Quant By: Initial Calibration

Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D

Column 1 : CP Select 624 MS (0.25 mm)

Det: MS Quad

Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 10:08:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.212	-0.008	24	172753	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.279	8.279	0.000	99	154646	500.0	494.9	
11 1,4-Dioxane	88	8.362	8.362	0.000	81	16257	50.0	50.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\ICV.D

Injection Date: 20-Nov-2024 19:07:59

Instrument ID: GCMS-FE

Lims ID: ICV 810-123437/13-A

Client ID:

Operator ID: BC

ALS Bottle#: 13

Worklist Smp#: 13

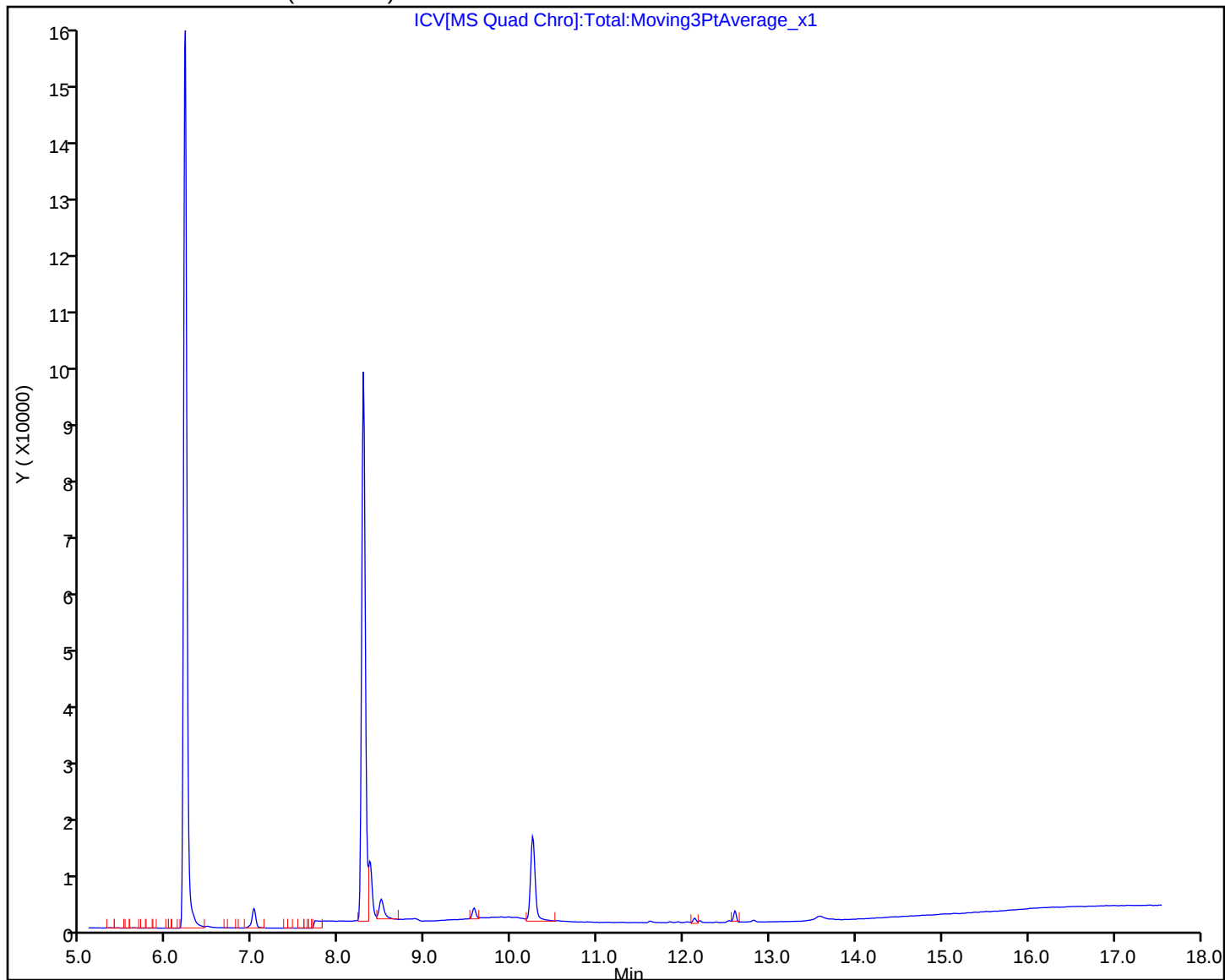
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\ICV.D

Injection Date: 20-Nov-2024 19:07:59

Instrument ID: GCMS-FE

Lims ID: ICV 810-123437/13-A

Client ID:

Operator ID: BC

ALS Bottle#:

13

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)

Detector

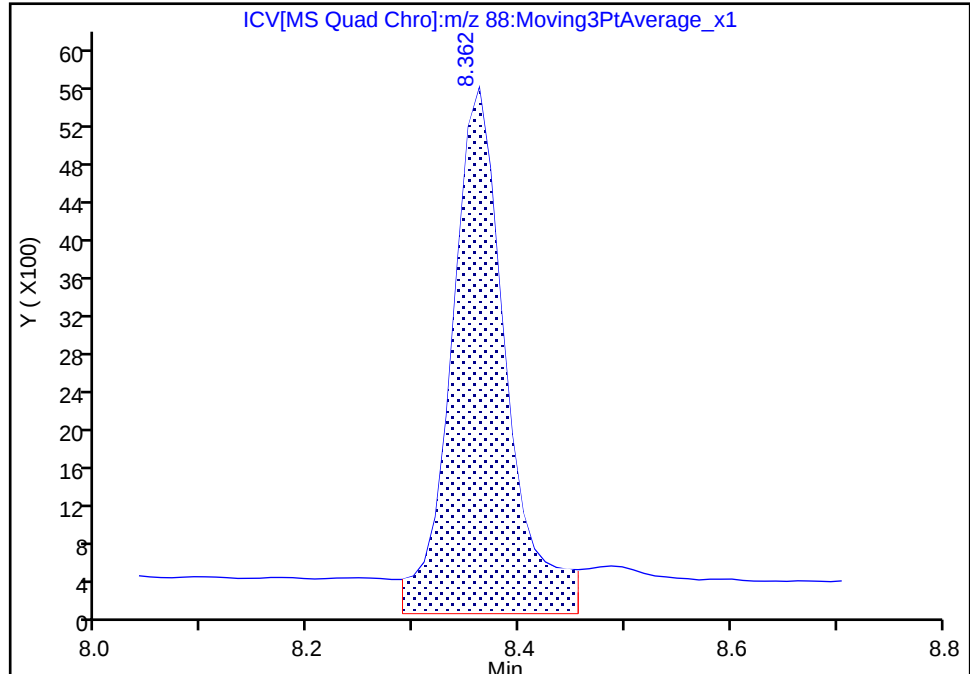
MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

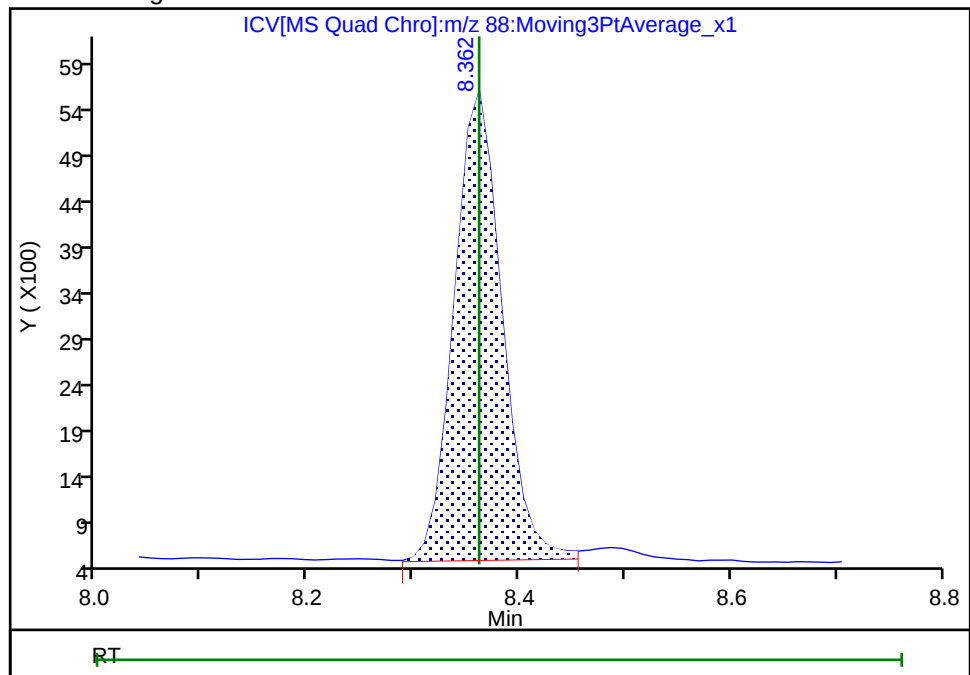
RT: 8.36
Area: 20047
Amount: 62.154189
Amount Units: ug/l

Processing Integration Results



RT: 8.36
Area: 16257
Amount: 50.424426
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 21-Nov-2024 10:08:04 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.: _____
Lab Sample ID: CCVLIS 810-127767/1- Calibration Date: 12/26/2024 14:30
Instrument ID: GCMS-FE Calib Start Date: 11/20/2024 15:07
GC Column: CPSelect 624 MS ID: 0.25 (mm) Calib End Date: 11/20/2024 18:02
Lab File ID: CCVL.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
1,4-Dioxane	Lin1		0.8912		3.45	3.50	98	50-150
1,4-Dioxane-d8 (Surr)	Ave	0.9044	1.034		571	500	114	70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVL.D
Lims ID: CCVLIS 810-127767/1-A
Client ID:
Sample Type: CCVLIS
Inject. Date: 26-Dec-2024 14:30:06 ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-001
Misc. Info.: CCVLIS 810-127767/1-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:23:55 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:12:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.204	6.220	-0.016	24	139780	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.299	8.300	-0.001	98	144486	500.0	571.5	
11 1,4-Dioxane	88	8.383	8.383	0.000	80	872	3.50	3.45	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVL.D

Injection Date: 26-Dec-2024 14:30:06

Instrument ID: GCMS-FE

Lims ID: CCVLIS 810-127767/1-A

Client ID:

Operator ID: BC

ALS Bottle#:

2

Worklist Smp#:

1

Injection Vol: 1.0 ul

Dil. Factor:

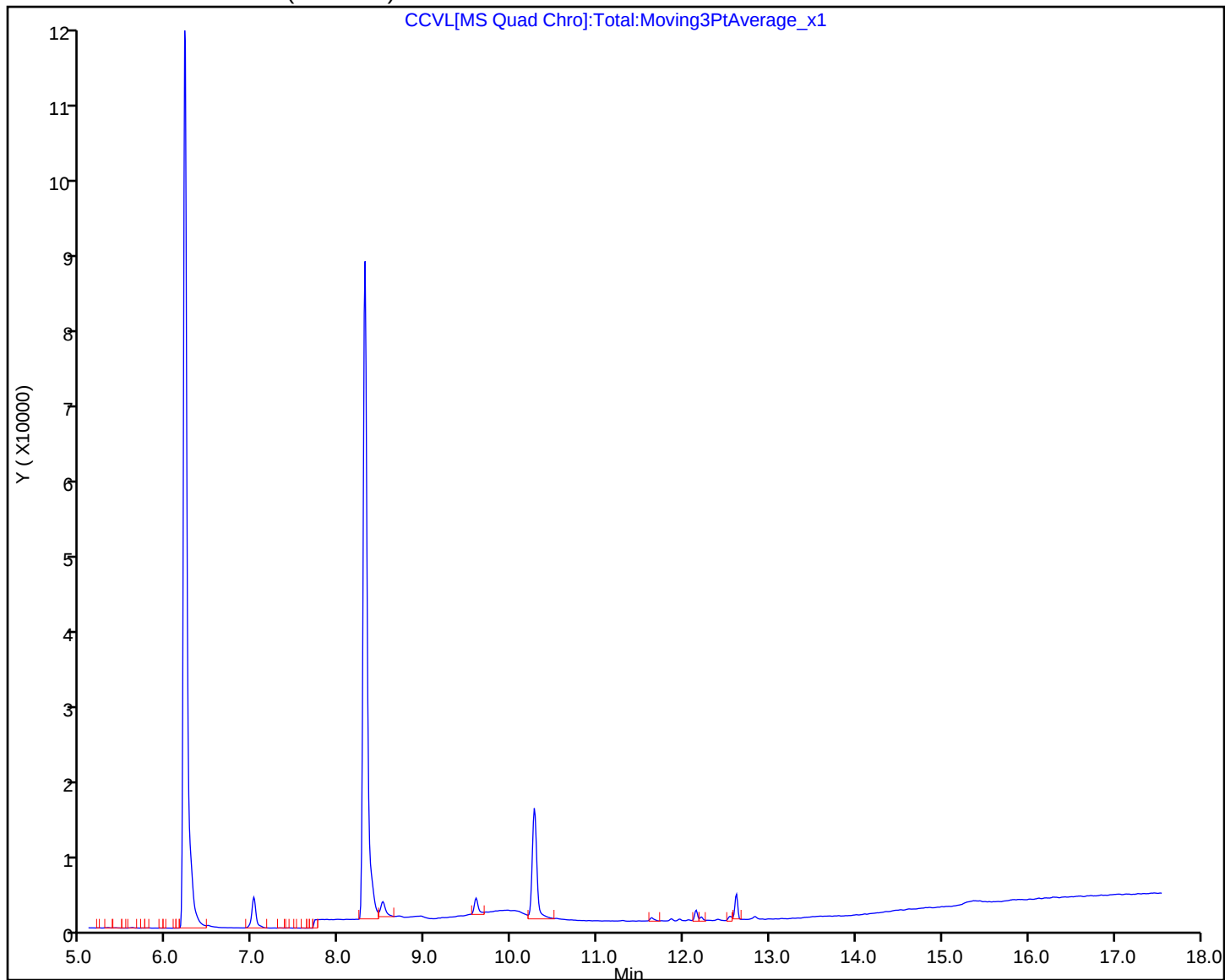
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

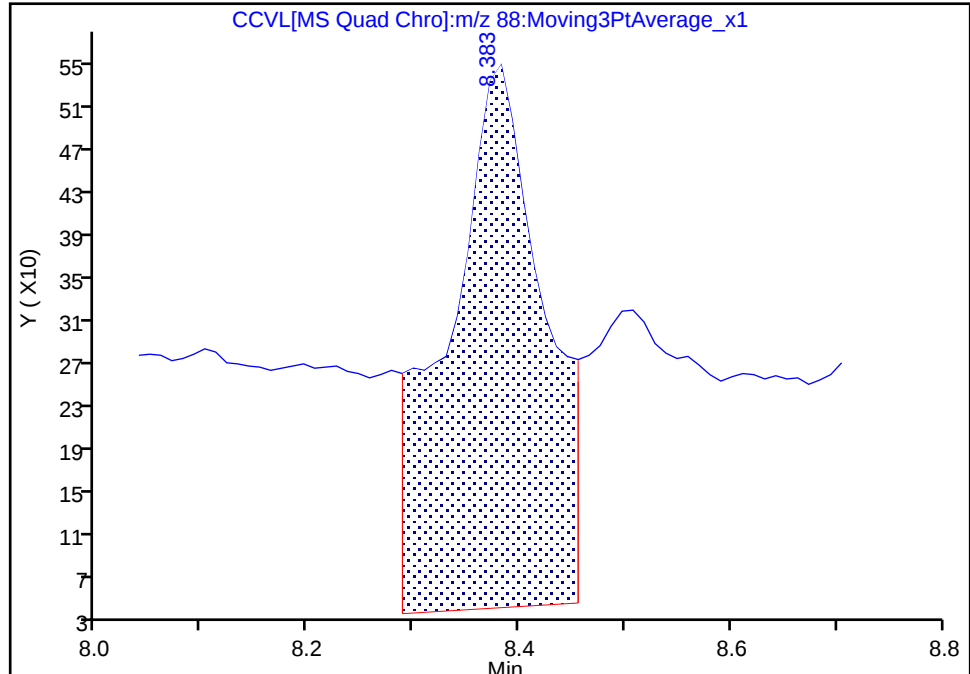
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVL.D
Injection Date: 26-Dec-2024 14:30:06 Instrument ID: GCMS-FE
Lims ID: CCVLIS 810-127767/1-A
Client ID:
Operator ID: BC ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

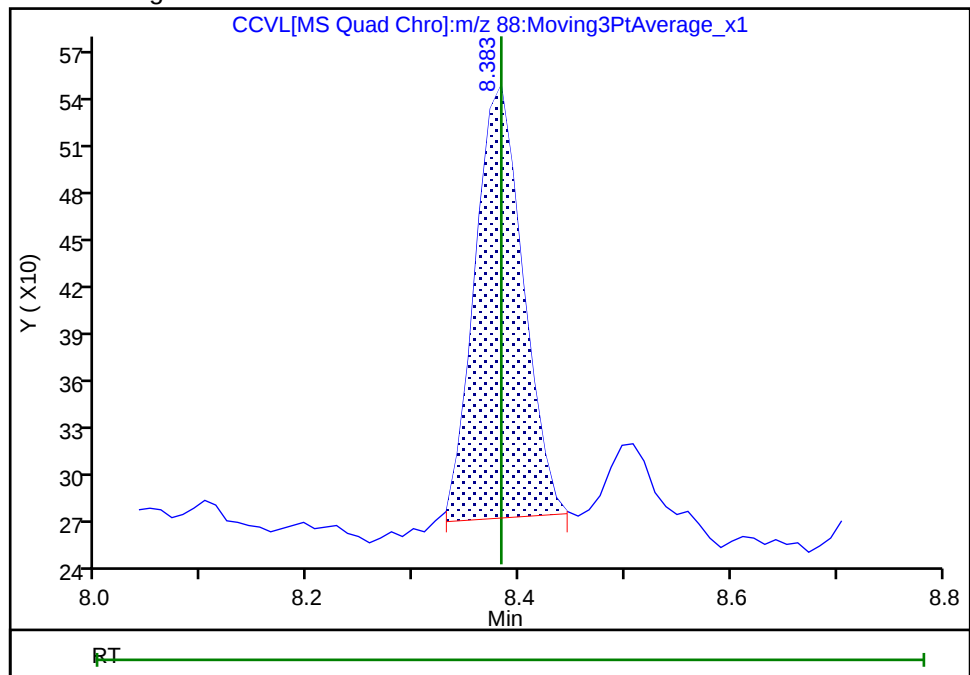
RT: 8.38
Area: 3300
Amount: 12.732716
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 872
Amount: 3.445634
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:11:53 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend

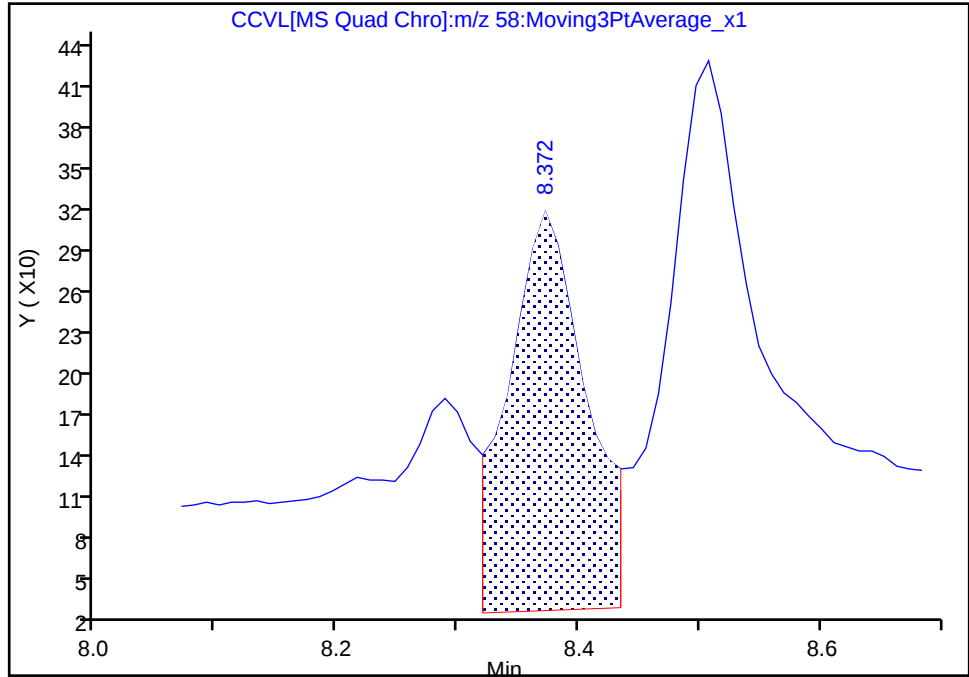
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVL.D
Injection Date: 26-Dec-2024 14:30:06 Instrument ID: GCMS-FE
Lims ID: CCVLIS 810-127767/1-A
Client ID:
Operator ID: BC ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 2

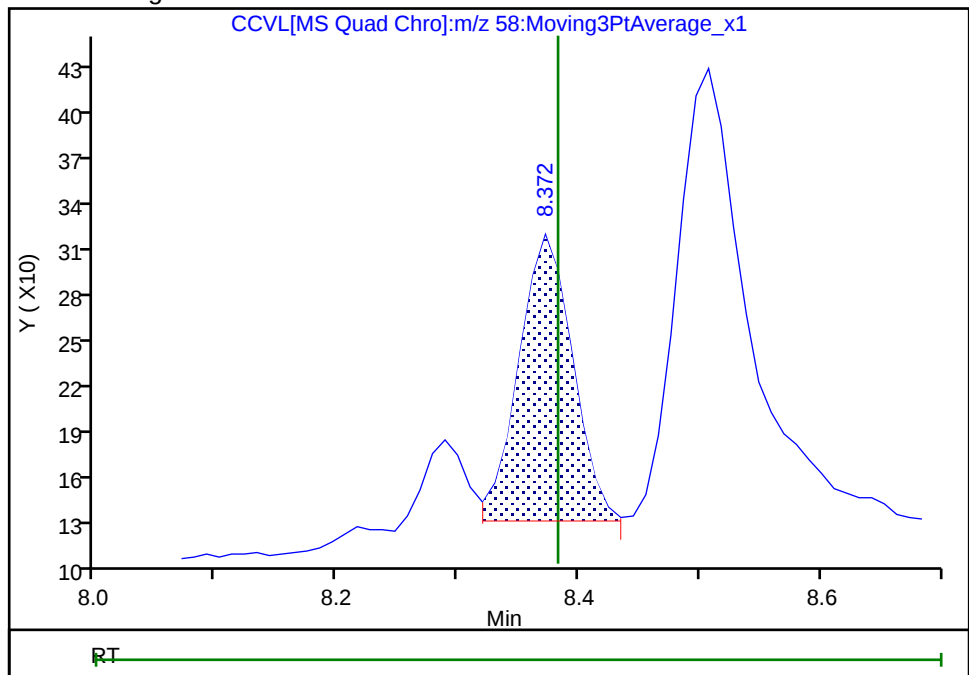
RT: 8.37
Area: 1335
Amount: 12.732716
Amount Units: ug/l

Processing Integration Results



RT: 8.37
Area: 586
Amount: 3.445634
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:11:58 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.: _____
Lab Sample ID: CCVL 810-127767/2-A Calibration Date: 12/26/2024 19:55
Instrument ID: GCMS-FE Calib Start Date: 11/20/2024 15:07
GC Column: CPSelect 624 MS ID: 0.25 (mm) Calib End Date: 11/20/2024 18:02
Lab File ID: CCVM.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
1,4-Dioxane	Lin1		0.9784		52.4	50.0	105	50-150
1,4-Dioxane-d8 (Surr)	Ave	0.9044	1.013		560	500	112	70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVM.D
Lims ID: CCVL 810-127767/2-A
Client ID:
Sample Type: CCVL
Inject. Date: 26-Dec-2024 19:55:50 ALS Bottle#: 16 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-015
Misc. Info.: CCVL 810-127767/2-A
Operator ID: BC Instrument ID: GCMS-FE
Sublist: chrom-522_GCMS-FE*sub1
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 08:25:40 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:20:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.220	6.220	0.000	24	153582	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.310	8.300	0.010	100	155565	500.0	560.0	
11 1,4-Dioxane	88	8.383	8.383	0.000	83	15027	50.0	52.4	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVM.D

Injection Date: 26-Dec-2024 19:55:50

Instrument ID: GCMS-FE

Lims ID: CCVL 810-127767/2-A

Client ID:

Operator ID: BC

ALS Bottle#: 16

Worklist Smp#: 15

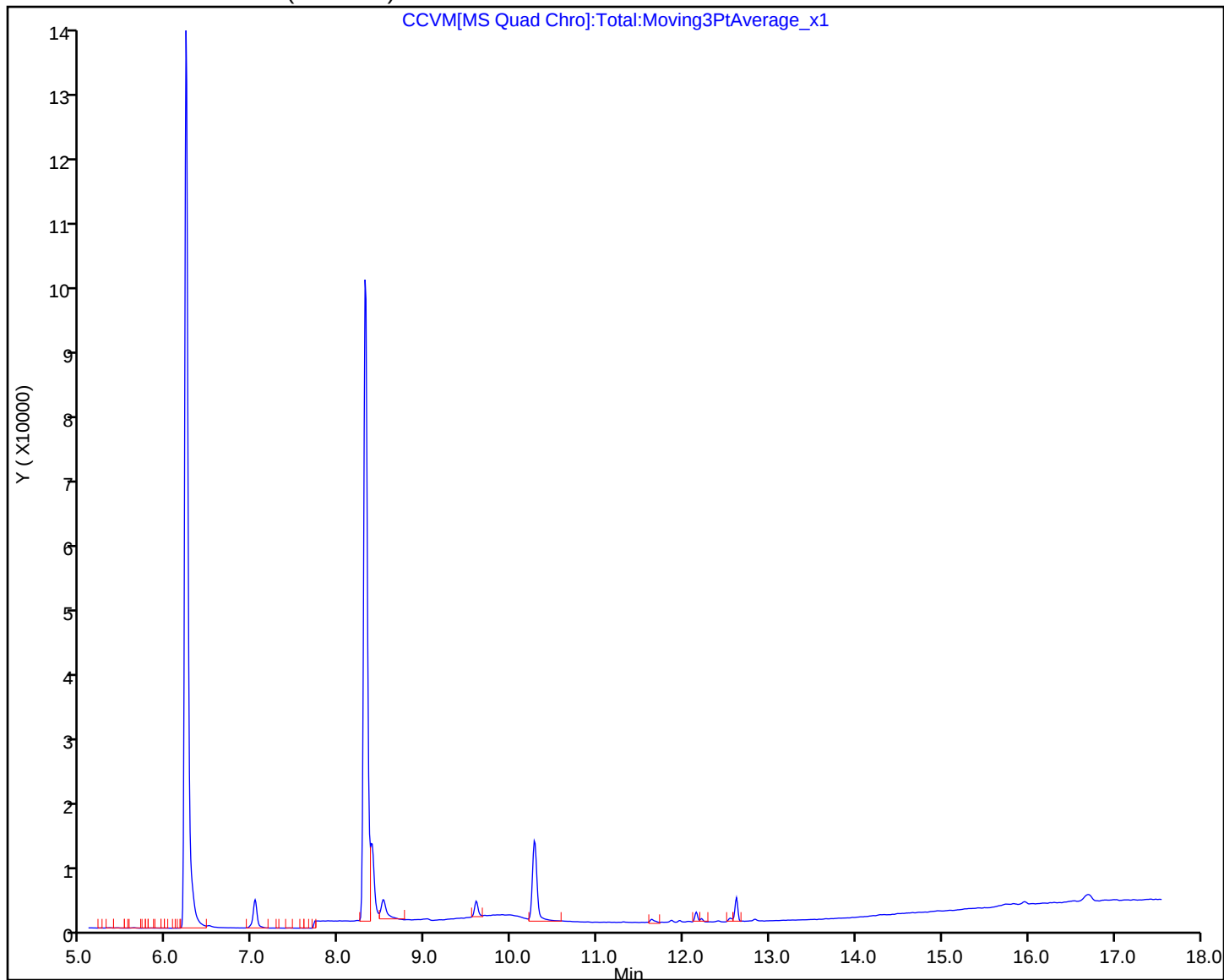
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend

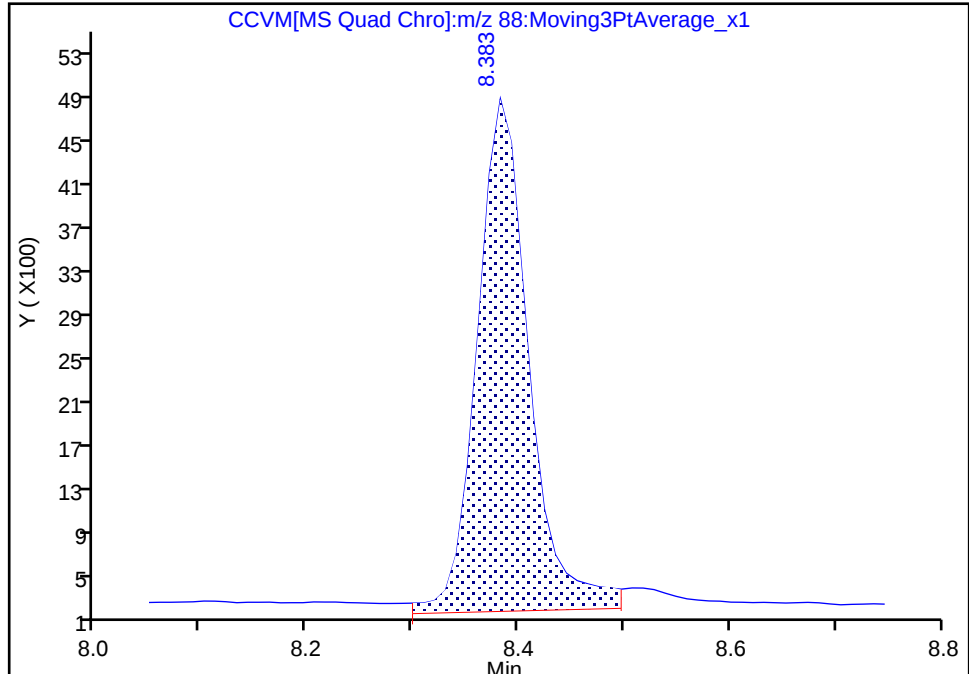
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCVM.D
Injection Date: 26-Dec-2024 19:55:50 Instrument ID: GCMS-FE
Lims ID: CCVL 810-127767/2-A
Client ID:
Operator ID: BC ALS Bottle#: 16 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

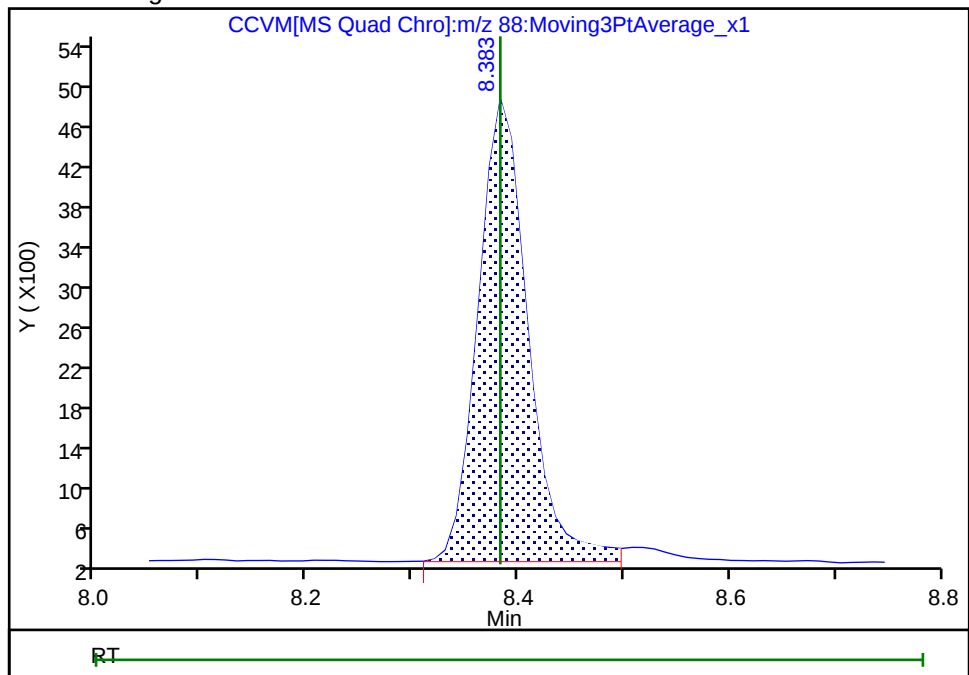
RT: 8.38
Area: 15908
Amount: 55.489979
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 15027
Amount: 52.422997
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:19:58 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315

Audit Reason: Incomplete Integration

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.: _____
Lab Sample ID: CCV 810-127767/3-A Calibration Date: 12/26/2024 23:33
Instrument ID: GCMS-FE Calib Start Date: 11/20/2024 15:07
GC Column: CPSelect 624 MS ID: 0.25 (mm) Calib End Date: 11/20/2024 18:02
Lab File ID: CCV.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%REC	%REC LIMITS
1,4-Dioxane	Lin1		0.9767		522	500	104	70-130
1,4-Dioxane-d8 (Surr)	Ave	0.9044	1.025		567	500	113	70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCV.D
 Lims ID: CCV 810-127767/3-A
 Client ID:
 Sample Type: CCV
 Inject. Date: 26-Dec-2024 23:33:03 ALS Bottle#: 26 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 810-0032669-025
 Misc. Info.: CCV 810-127767/3-A
 Operator ID: BC Instrument ID: GCMS-FE
 Sublist: chrom-522_GCMS-FE*sub1
 Raw Data: Smoothed
 Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
 Limit Group: MSS - 522
 Last Update: 27-Dec-2024 06:24:12 Calib Date: 20-Nov-2024 18:02:23
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
 Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
 Process Host: CTX1633

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.220	6.220	0.000	24	147999	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.299	8.300	-0.001	98	151733	500.0	566.8	
11 1,4-Dioxane	88	8.382	8.383	-0.001	82	144550	500.0	522.3	

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\CCV.D

Injection Date: 26-Dec-2024 23:33:03

Instrument ID: GCMS-FE

Lims ID: CCV 810-127767/3-A

Client ID:

Operator ID: BC

ALS Bottle#: 26

Worklist Smp#: 25

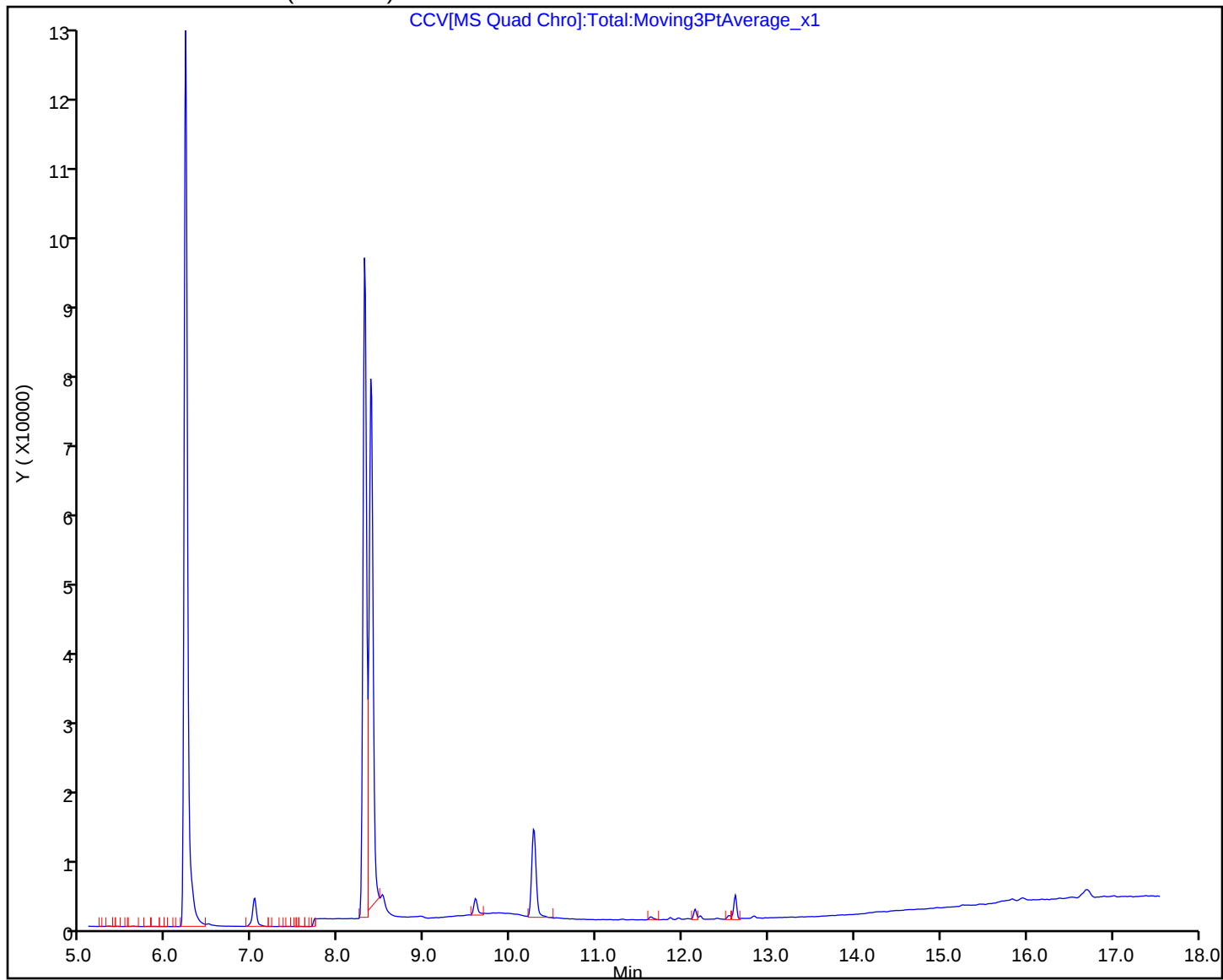
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\BFB 1.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Nov-2024 14:40:28 ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 2.0 mL Dil. Factor: 1.0000
Sample Info: 810-0031576-001
Misc. Info.: BFB 1
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed

Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 21-Nov-2024 10:58:43 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D

Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: JH8B

Date: 21-Nov-2024 10:58:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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10 BFB

QC Flag Legend

Processing Flags

Reagents:

O-522BFBSUB_00015

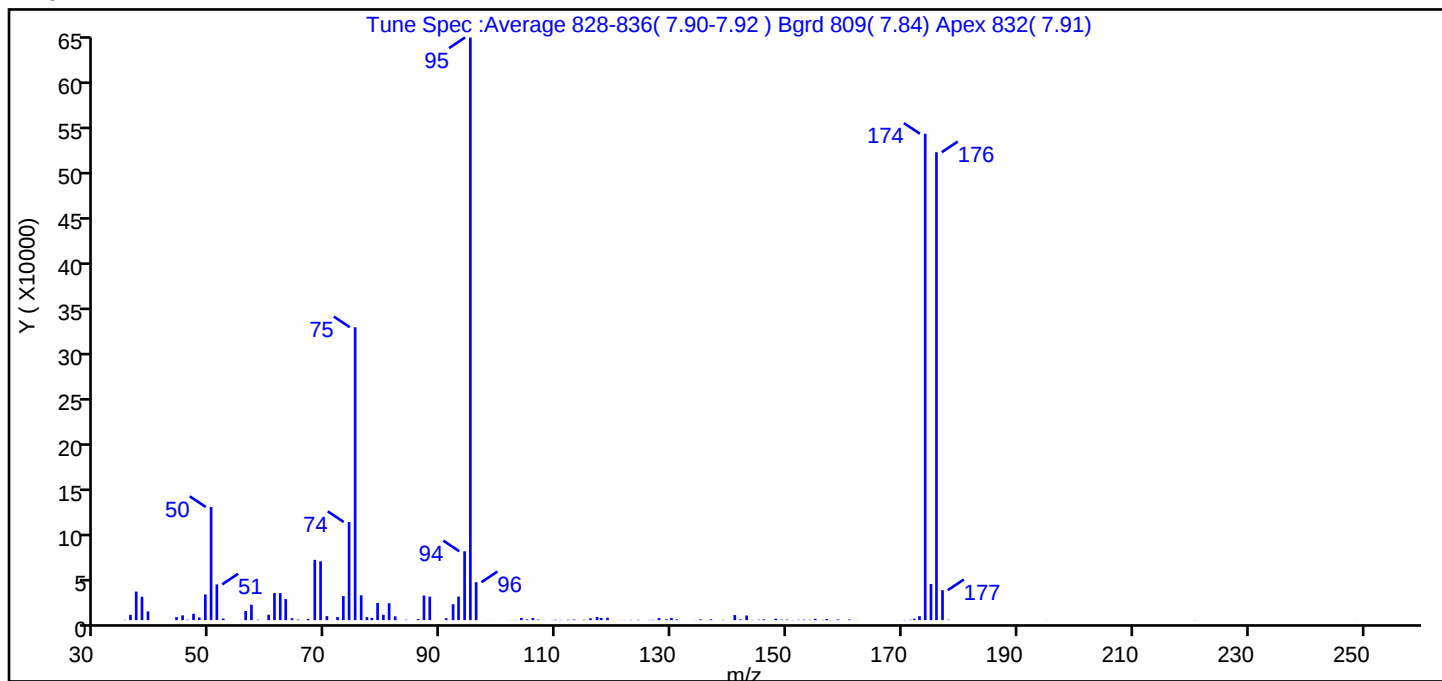
Amount Added: 2.00

Units: mL

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\BFB 1.D
Injection Date: 20-Nov-2024 14:40:28 Instrument ID: GCMS-FE
Lims ID: BFB
Client ID:
Operator ID: BC ALS Bottle#: 2 Worklist Smp#: 1
Injection Vol: 2.0 mL Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Tune Method: BFB Method 524

10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	19.4
75	30-80% of mass 95	50.3
96	5-9% of mass 95	6.5
173	<2% of mass 174	0.7 (0.8)
174	>50% of mass 95	83.5
175	5-9% of mass 174	6.2 (7.4)
176	>95% but <101% of mass 174	80.3 (96.2)
177	5-9% of mass 176	5.1 (6.4)

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\BFB 1.D\522_GCMS-FE.rslt\spectra.d
Injection Date: 20-Nov-2024 14:40:28
Spectrum: Tune Spec :Average 828-836(7.90-7.92) Bgrd 809(7.84) Apex 832(7.91)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 150

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	312	80.00	5886	124.00	425	169.00	77
36.00	5894	81.00	18824	126.00	234	170.00	192
37.00	31712	82.00	4229	127.00	357	171.00	382
38.00	25968	84.00	496	128.00	2289	172.00	1501
39.00	9645	86.00	1199	129.00	994	173.00	4432
42.00	21	87.00	27296	130.00	2462	174.00	539968
44.00	3363	88.00	26096	131.00	900	175.00	40096
45.00	5321	90.00	41	132.00	70	176.00	519488
46.00	494	91.00	2086	134.00	105	177.00	33304
47.00	7090	92.00	17696	135.00	862	178.00	485
48.00	2991	93.00	26184	136.00	103	179.00	25
49.00	28512	94.00	76448	137.00	940	184.00	10
50.00	125608	95.00	646848	138.00	60	184.00	6
51.00	39688	96.00	42136	139.00	313	195.00	103
52.00	1751	98.00	74	141.00	5677	203.00	19
56.00	10114	99.00	68	142.00	859	209.00	69
57.00	17112	100.00	45	143.00	5160	216.00	11
58.00	442	102.00	65	144.00	282	218.00	14
60.00	5999	102.00	113	145.00	542	219.00	63
61.00	30032	103.00	150	146.00	888	220.00	6
62.00	30064	104.00	2457	148.00	1547	221.00	149
63.00	23384	105.00	862	149.00	595	225.00	6
64.00	2099	106.00	2319	150.00	642	230.00	9
65.00	642	107.00	633	151.00	152	231.00	13
66.00	83	108.00	38	152.00	373	233.00	18
67.00	1386	109.00	110	153.00	568	234.00	41
68.00	66936	110.00	489	154.00	422	236.00	6
69.00	65368	111.00	284	155.00	1500	237.00	32
70.00	4491	112.00	478	156.00	319	238.00	24
71.00	82	113.00	651	157.00	1234	249.00	65
72.00	3419	115.00	433	158.00	139	252.00	40
73.00	26696	116.00	2047	159.00	785	253.00	23
74.00	108904	117.00	3532	161.00	79	254.00	15

Report Date: 21-Nov-2024 10:58:43

Chrom Revision: 2.3 12-Nov-2024 16:55:22

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\BFB 1.D\522_GCMS-FE.rslt\spectra.d

Injection Date: 20-Nov-2024 14:40:28

Spectrum: Tune Spec :Average 828-836(7.90-7.92) Bgrd 809(7.84) Apex 832(7.91)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 150

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	325184	118.00	2409	161.00	690	257.00	14
76.00	27584	119.00	2684	162.00	108	260.00	6
77.00	3354	121.00	47	163.00	3	260.00	7
78.00	2502	122.00	181	166.00	67		
79.00	19088	123.00	290	167.00	16		

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\BFB 1.D

Injection Date: 20-Nov-2024 14:40:28

Instrument ID: GCMS-FE

Lims ID: BFB

Client ID:

Operator ID: BC

ALS Bottle#: 2

Worklist Smp#: 1

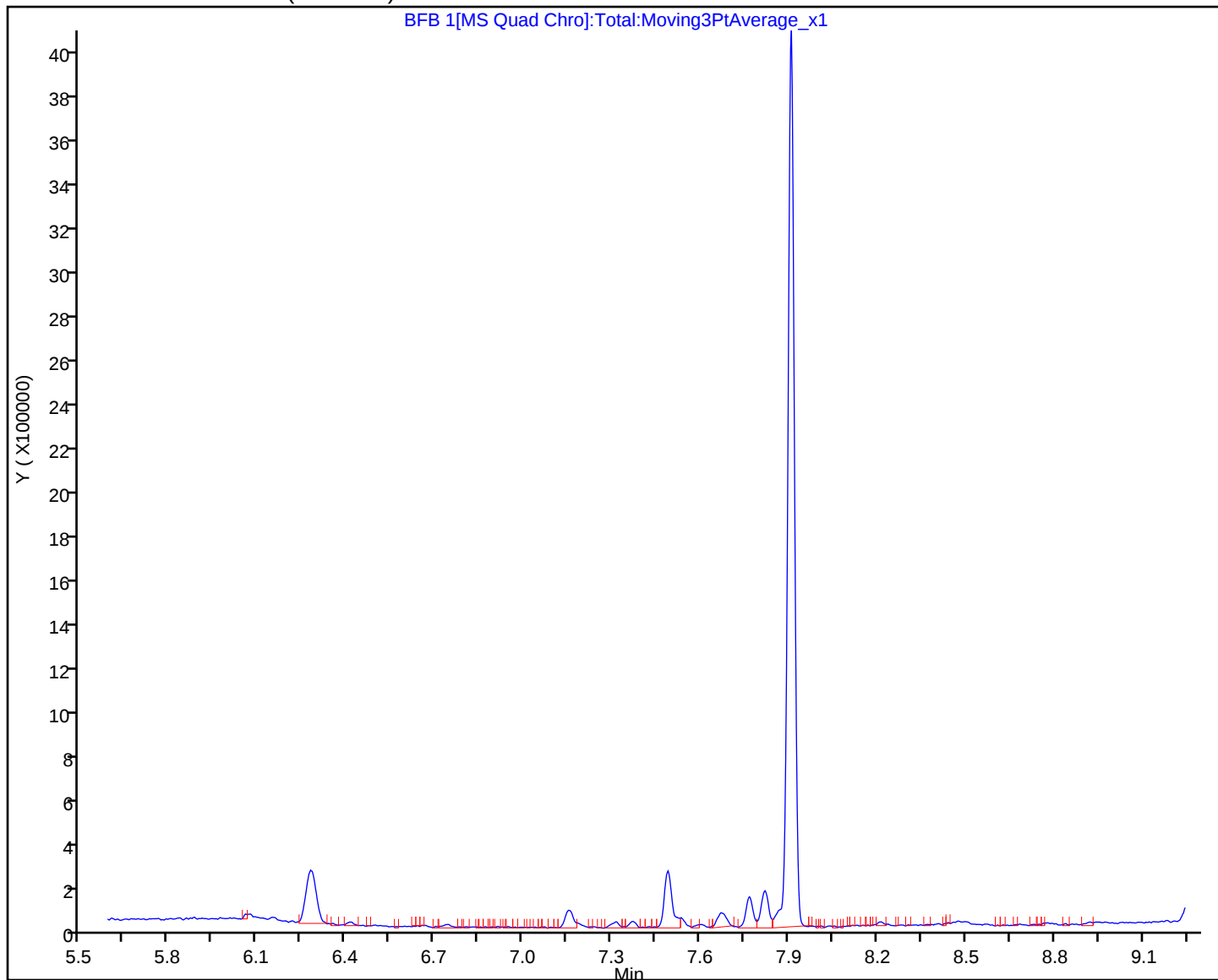
Injection Vol: 2.0 mL

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Eaton Analytical South Bend
Job No.: 810-132339-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MBL 810-127766/1-A

Matrix: Water Lab File ID: MBL.D

Analysis Method: 522 Date Collected: _____

Extract. Method: 522 Date Extracted: 12/26/2024 08:09

Sample wt/vol: 100 (mL) Date Analyzed: 12/26/2024 15:13

Con. Extract Vol.: 2 (mL) Dilution Factor: 1

Injection Volume: 1 (uL) GC Column: CPSelect 624 MS ID: 0.25 (mm)

% Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N

Cleanup Factor: _____ Level: (low/med) Low

Analysis Batch No.: 127813 Units: ug/L

Preparation Batch No.: 127766 Instrument ID: GCMS-FE

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	<0.062		0.070	0.062

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	102		70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\MBL.D
Lims ID: MBL 810-127766/1-A
Client ID:
Sample Type: MBL
Inject. Date: 26-Dec-2024 15:13:38 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-002
Misc. Info.: MBL 810-127766/1-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:23:55 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:13:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.212	6.220	-0.008	23	153082	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.300	8.300	0.000	98	141537	500.0	511.2	
11 1,4-Dioxane	88		8.383					ND	MU
10 BFB									

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\MBL.D

Injection Date: 26-Dec-2024 15:13:38

Instrument ID: GCMS-FE

Lims ID: MBL 810-127766/1-A

Client ID:

Operator ID: BC

ALS Bottle#:

3

Worklist Smp#:

2

Injection Vol: 1.0 ul

Dil. Factor:

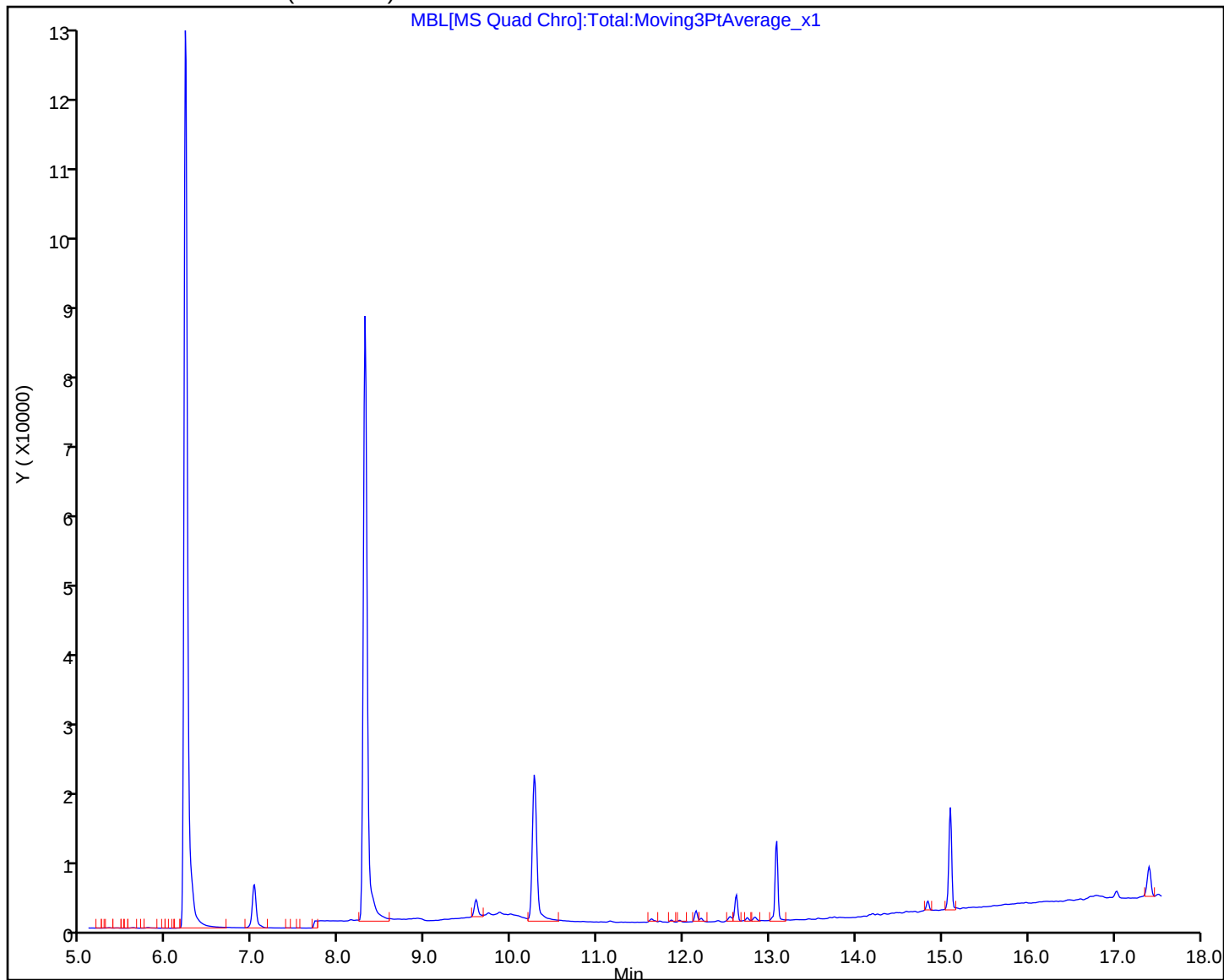
1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend
Recovery Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\MBL.D
Lims ID: MBL 810-127766/1-A
Client ID:
Sample Type: MBL
Inject. Date: 26-Dec-2024 15:13:38 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-002
Misc. Info.: MBL 810-127766/1-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:23:55 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:13:39

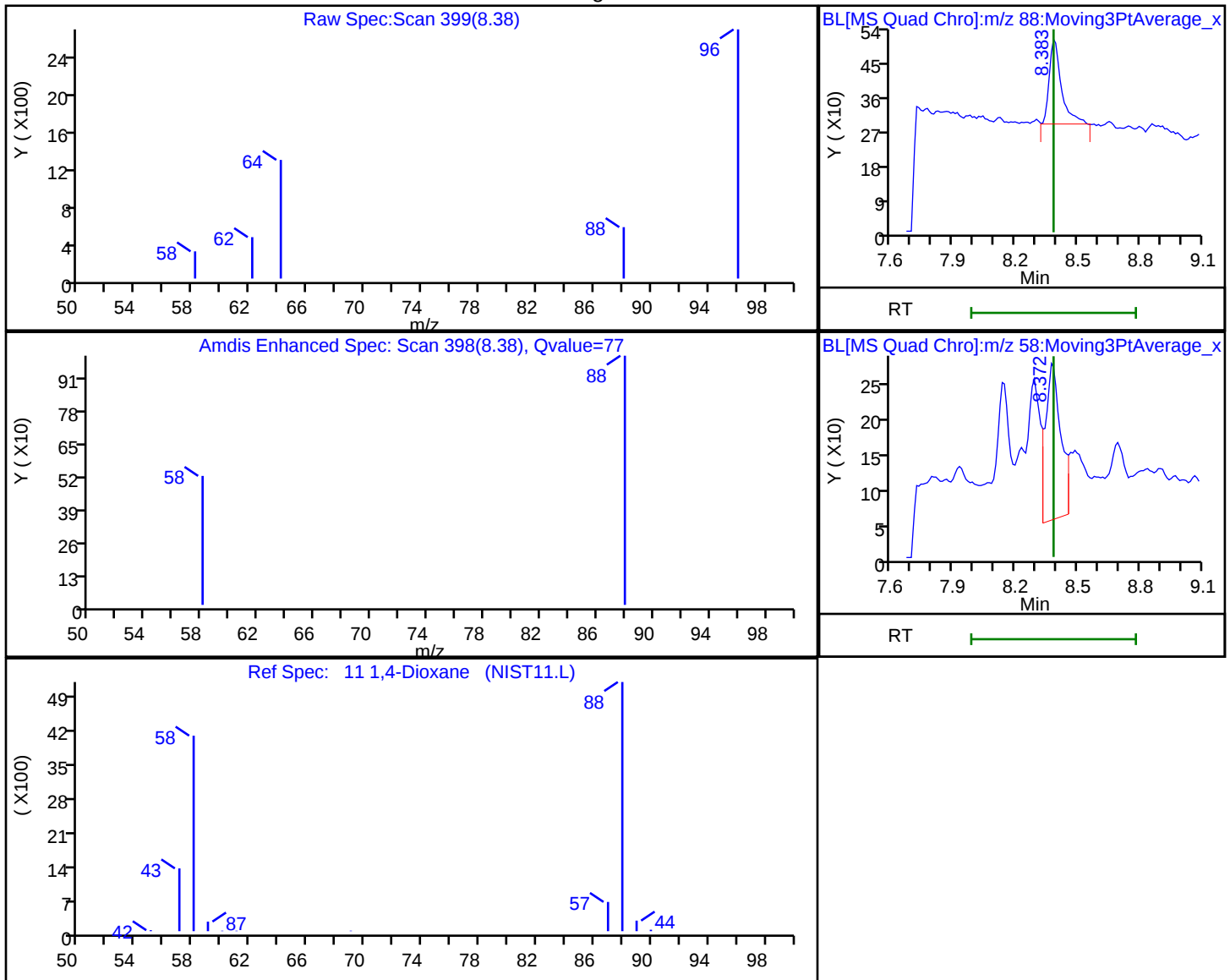
Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,4-Dioxane-d8 (Surr)	500.0	511.2	102.24

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\MBL.D
Injection Date: 26-Dec-2024 15:13:38 Instrument ID: GCMS-FE
Lims ID: MBL 810-127766/1-A
Client ID:
Operator ID: BC ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
8.38	88.00	956	3.449186
8.37	58.00	1173	

Reviewer: JH8B, 27-Dec-2024 06:13:37 -05:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.:
Client Sample ID: Lab Sample ID: LCS 810-127766/3-A
Matrix: Water Lab File ID: LCS.D
Analysis Method: 522 Date Collected:
Extract. Method: 522 Date Extracted: 12/26/2024 08:09
Sample wt/vol: 100 (mL) Date Analyzed: 12/26/2024 15:57
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) GC Column: CPSelect 624 MS ID: 0.25 (mm)
% Moisture: % Solids: GPC Cleanup: (Y/N) N
Cleanup Factor: Level: (low/med) Low
Analysis Batch No.: 127813 Units: ug/L
Preparation Batch No.: 127766 Instrument ID: GCMS-FE

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.941		0.070	0.062

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	99		70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LCS.D
Lims ID: LCS 810-127766/3-A
Client ID:
Sample Type: LCS
Inject. Date: 26-Dec-2024 15:57:04 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-004
Misc. Info.: LCS 810-127766/3-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:23:55 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:14:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.212	6.220	-0.008	24	156453	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.299	8.300	-0.001	98	140202	500.0	495.5	
11 1,4-Dioxane	88	8.383	8.383	0.000	82	13739	50.0	47.1	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LCS.D

Injection Date: 26-Dec-2024 15:57:04

Instrument ID: GCMS-FE

Lims ID: LCS 810-127766/3-A

Client ID:

Operator ID: BC

ALS Bottle#: 5

Worklist Smp#: 4

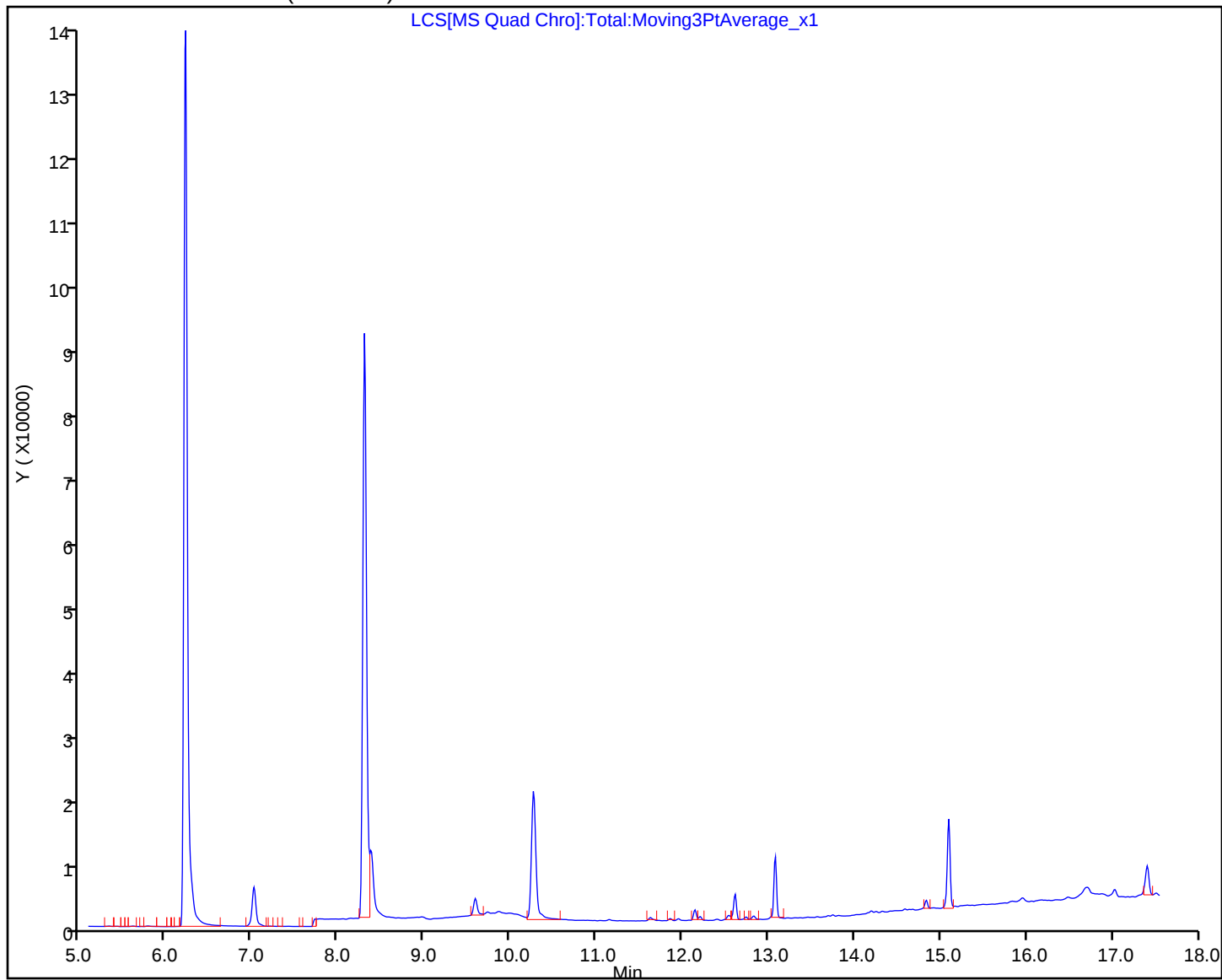
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend
Recovery Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LCS.D
Lims ID: LCS 810-127766/3-A
Client ID:
Sample Type: LCS
Inject. Date: 26-Dec-2024 15:57:04 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-004
Misc. Info.: LCS 810-127766/3-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:23:55 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:14:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,4-Dioxane-d8 (Surr)	500.0	495.5	99.09

Eurofins Eaton Analytical South Bend

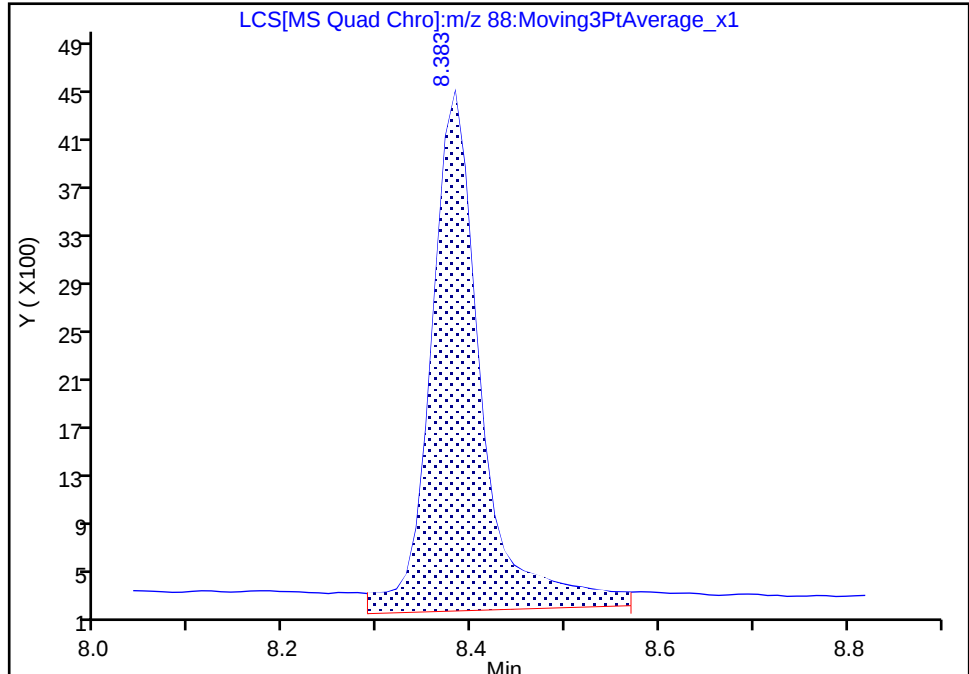
Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LCS.D
Injection Date: 26-Dec-2024 15:57:04 Instrument ID: GCMS-FE
Lims ID: LCS 810-127766/3-A
Client ID:
Operator ID: BC ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 522_GCMS-FE Limit Group: MSS - 522
Column: CP Select 624 MS (0.25 mm) Detector MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

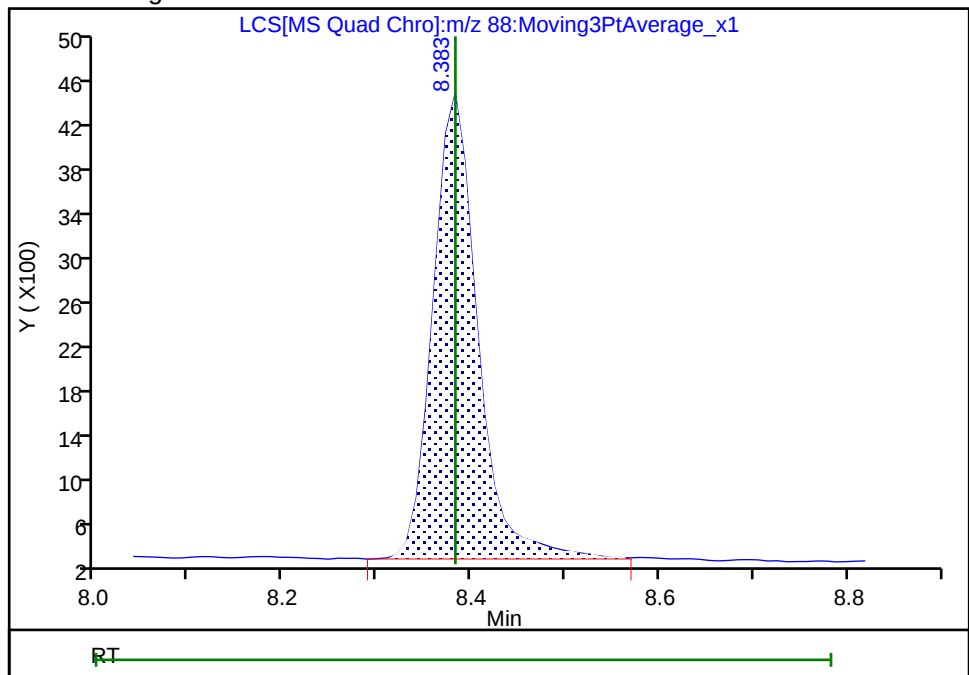
RT: 8.38
Area: 16062
Amount: 55.000005
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 13739
Amount: 47.061459
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:14:09 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1
SDG No.:
Client Sample ID: Lab Sample ID: LLCS 810-127766/2-A
Matrix: Water Lab File ID: LLCS.D
Analysis Method: 522 Date Collected:
Extract. Method: 522 Date Extracted: 12/26/2024 08:09
Sample wt/vol: 100 (mL) Date Analyzed: 12/26/2024 15:35
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) GC Column: CPSelect 624 MS ID: 0.25 (mm)
% Moisture: % Solids: GPC Cleanup: (Y/N) N
Cleanup Factor: Level: (low/med) Low
Analysis Batch No.: 127813 Units: ug/L
Preparation Batch No.: 127766 Instrument ID: GCMS-FE

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.0826		0.070	0.062

CAS NO.	SURROGATE	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8 (Surr)	100		70-130

Eurofins Eaton Analytical South Bend
Target Compound Quantitation Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LLCS.D
Lims ID: LLCS 810-127766/2-A
Client ID:
Sample Type: LLCS
Inject. Date: 26-Dec-2024 15:35:24 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-003
Misc. Info.: LLCS 810-127766/2-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:24:12 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:14:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 5 Tetrahydrofuran-d8	46	6.212	6.220	-0.008	24	156403	500.0	500.0	
\$ 9 1,4-Dioxane-d8 (Surr)	96	8.300	8.300	0.000	98	141891	500.0	501.6	
11 1,4-Dioxane	88	8.383	8.383	0.000	79	1176	3.50	4.13	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LLCS.D

Injection Date: 26-Dec-2024 15:35:24

Instrument ID: GCMS-FE

Lims ID: LLCS 810-127766/2-A

Client ID:

Operator ID: BC

ALS Bottle#: 4

Worklist Smp#: 3

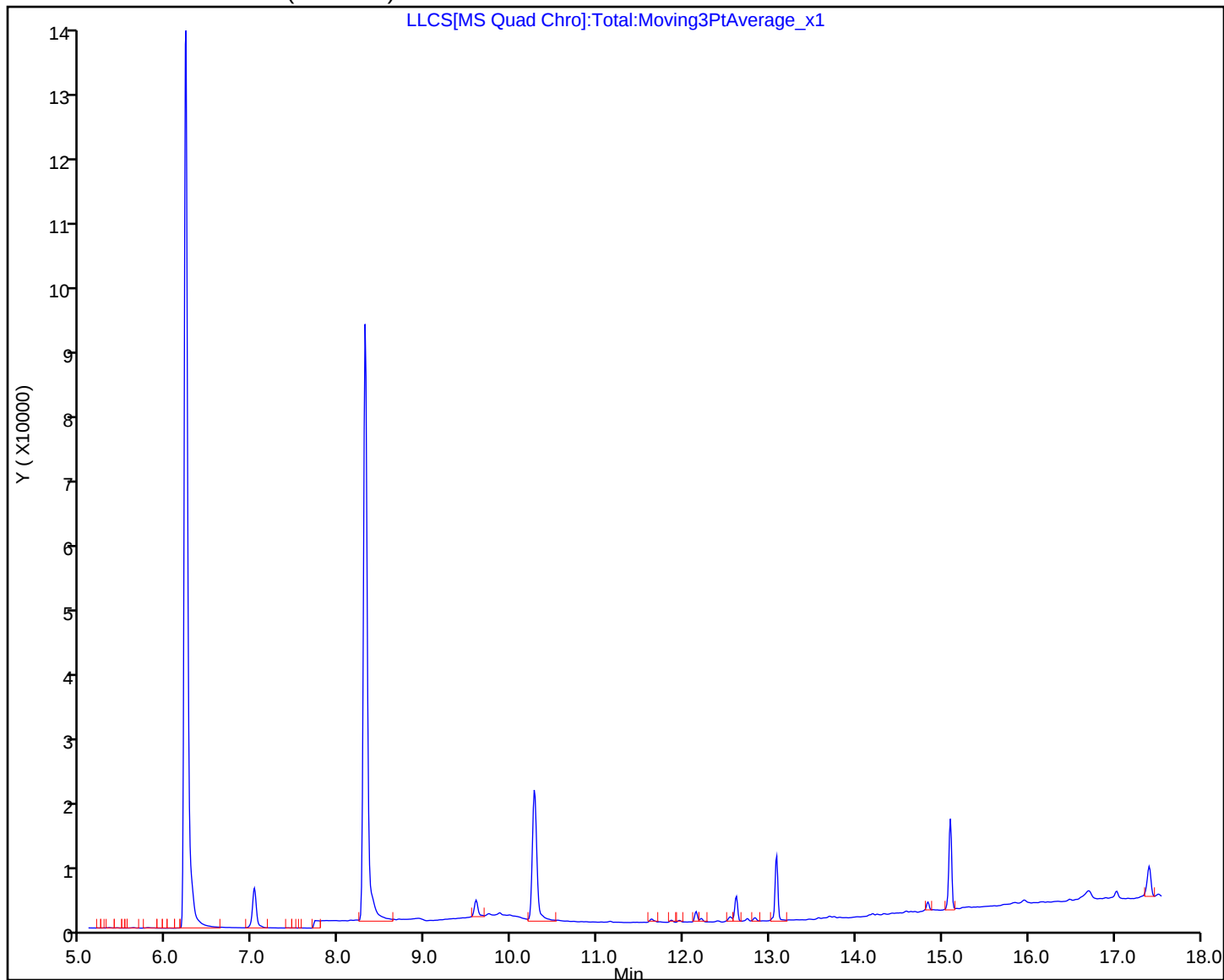
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)



Eurofins Eaton Analytical South Bend
Recovery Report

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LLCS.D
Lims ID: LLCS 810-127766/2-A
Client ID:
Sample Type: LLCS
Inject. Date: 26-Dec-2024 15:35:24 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 810-0032669-003
Misc. Info.: LLCS 810-127766/2-A
Operator ID: BC Instrument ID: GCMS-FE
Raw Data: Smoothed
Method: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\522_GCMS-FE.m
Limit Group: MSS - 522
Last Update: 27-Dec-2024 06:24:12 Calib Date: 20-Nov-2024 18:02:23
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241120-31576.b\IC 20.D
Column 1 : CP Select 624 MS (0.25 mm) Det: MS Quad
Process Host: CTX1633

First Level Reviewer: JH8B

Date: 27-Dec-2024 06:14:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,4-Dioxane-d8 (Surr)	500.0	501.6	100.32

Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LLCS.D

Injection Date: 26-Dec-2024 15:35:24

Instrument ID: GCMS-FE

Lims ID: LLCS 810-127766/2-A

Client ID:

Operator ID: BC

ALS Bottle#:

4

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 522_GCMS-FE

Limit Group: MSS - 522

Column: CP Select 624 MS (0.25 mm)

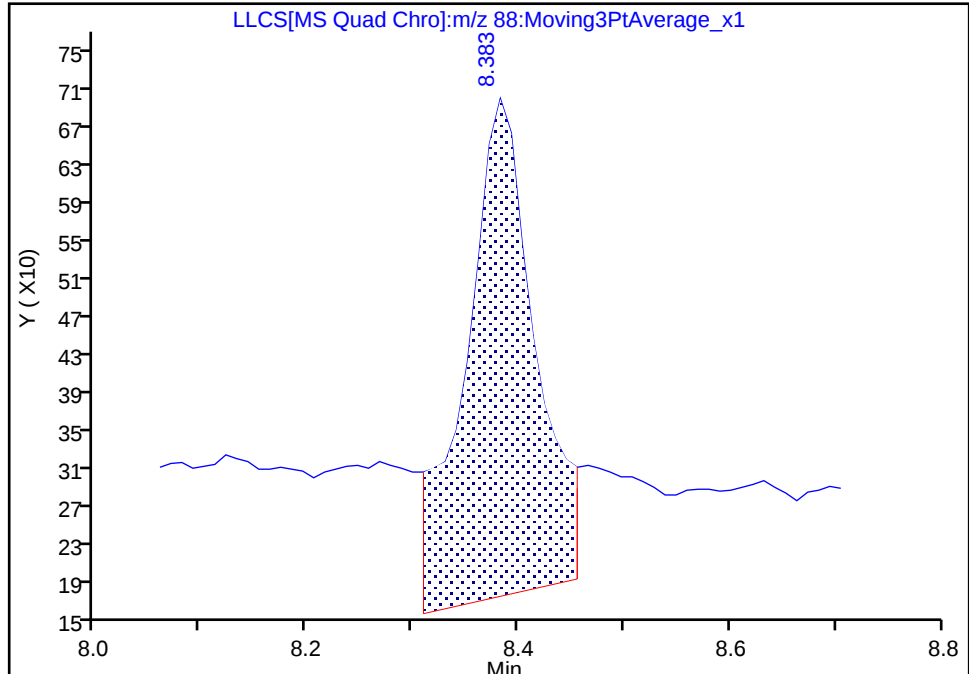
Detector: MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 1

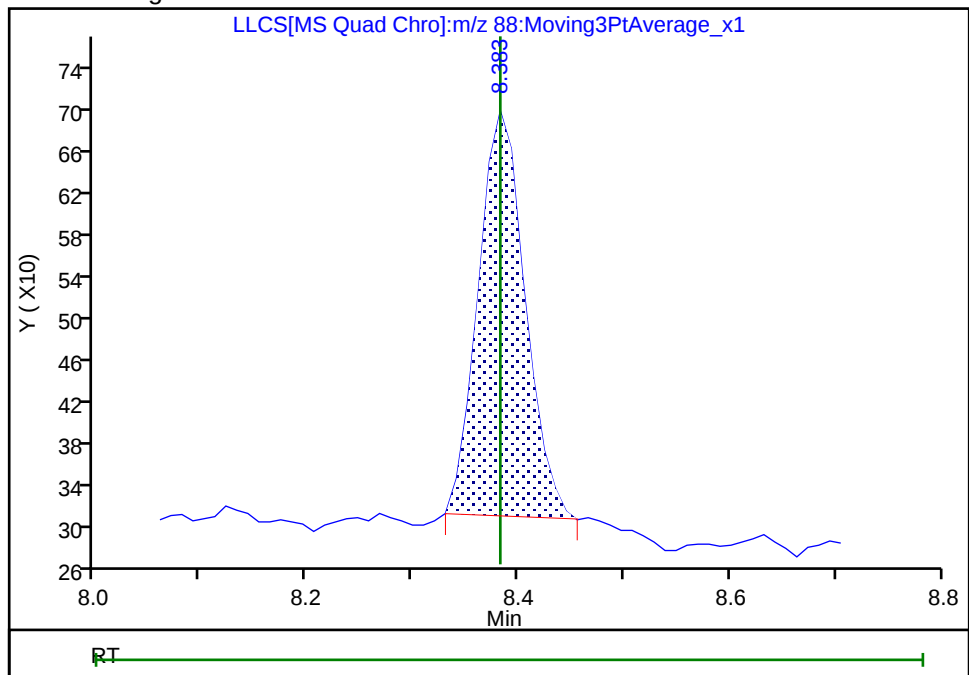
RT: 8.38
Area: 2465
Amount: 8.536745
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 1176
Amount: 4.130350
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:13:52 -05:00:00 (UTC)

Audit Action: Manually Integrated
P5315Audit Reason: Incomplete Integration
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Eurofins Eaton Analytical South Bend

Data File: \\ChromFS\Southbend\ChromData\GCMS-FE\20241226-32669.b\LLCS.D

Injection Date: 26-Dec-2024 15:35:24

Instrument ID: GCMS-FE

Lims ID: LLCS 810-127766/2-A

Client ID:

Operator ID: BC

ALS Bottle#:

4

Worklist Smp#: 3

Injection Vol: 1.0 ul

Dil. Factor:

1.0000

Method: 522_GCMS-FE

Limit Group:

MSS - 522

Column: CP Select 624 MS (0.25 mm)

Detector

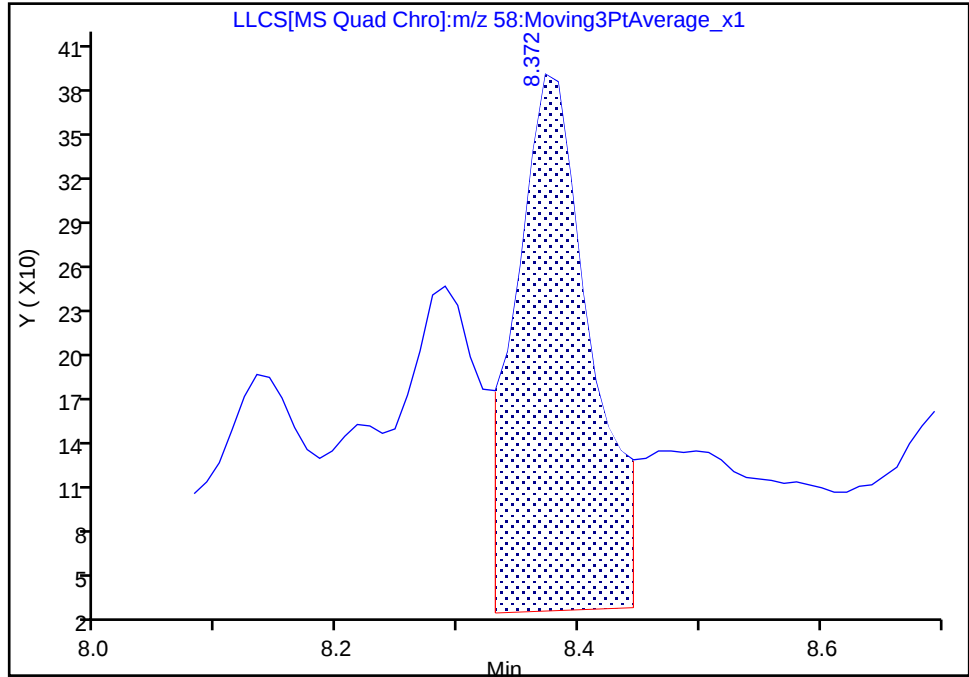
MS Quad

11 1,4-Dioxane, CAS: 123-91-1

Signal: 2

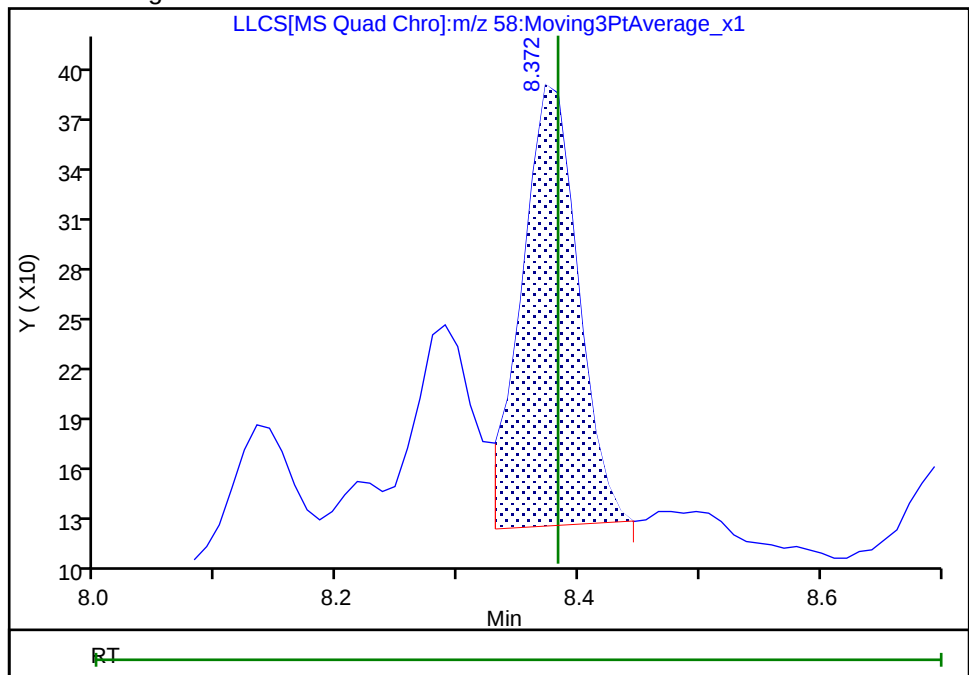
RT: 8.37
Area: 1625
Amount: 8.536745
Amount Units: ug/l

Processing Integration Results



RT: 8.37
Area: 865
Amount: 4.130350
Amount Units: ug/l

Manual Integration Results



Reviewer: JH8B, 27-Dec-2024 06:13:59 -05:00:00 (UTC)

Audit Action: Manually Integrated

P5315

Audit Reason: Incomplete Integration

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GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Eaton Analytical South Bend

Job No.: 810-132339-1

SDG No.:

Instrument ID: GCMS-FE

Start Date: 11/20/2024 14:40

Analysis Batch Number: 123541

End Date: 11/21/2024 05:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 810-123541/1		11/20/2024 14:40	1	BFB 1.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/4-A		11/20/2024 15:07	1	IC 007.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/5-A		11/20/2024 15:29	1	IC 01.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/6-A		11/20/2024 15:51	1	IC 02.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/7-A		11/20/2024 16:12	1	IC 05.D	CPSelect 624 MS 0.25 (mm)
ICISAV 810-123437/8-A		11/20/2024 16:34	1	IC 1.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/9-A		11/20/2024 16:56	1	IC 2.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/10-A		11/20/2024 17:18	1	IC 5.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/11-A		11/20/2024 17:40	1	IC 10.D	CPSelect 624 MS 0.25 (mm)
IC 810-123437/12-A		11/20/2024 18:02	1	IC 20.D	CPSelect 624 MS 0.25 (mm)
CCVLIS 810-123437/1-A		11/20/2024 18:46	1		CPSelect 624 MS 0.25 (mm)
ICV 810-123437/13-A		11/20/2024 19:07	1	ICV.D	CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		11/20/2024 19:51	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		11/20/2024 20:13	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		11/20/2024 20:35	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 20:57	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 21:19	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 21:41	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 22:02	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 22:24	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 22:46	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 23:08	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 23:30	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/20/2024 23:52	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 00:14	1		CPSelect 624 MS 0.25 (mm)
CCVIS 810-123437/2-A		11/21/2024 00:35	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 00:57	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 01:19	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 01:41	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 02:03	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		11/21/2024 02:25	1		CPSelect 624 MS 0.25 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Eaton Analytical South Bend Job No.: 810-132339-1

SDG No.: _____

Instrument ID: GCMS-FE Start Date: 11/20/2024 14:40Analysis Batch Number: 123541 End Date: 11/21/2024 05:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ (QC)		11/21/2024 02:47	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 03:09	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 03:30	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 03:52	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 04:14	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 04:36	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		11/21/2024 04:58	1		CPSelect 624 MS 0.25 (mm)
CCV 810-123437/3-A		11/21/2024 05:20	1		CPSelect 624 MS 0.25 (mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Eaton Analytical South Bend

Job No.: 810-132339-1

SDG No.:

Instrument ID: GCMS-FE

Start Date: 12/26/2024 14:30

Analysis Batch Number: 127813

End Date: 12/26/2024 23:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVLIS 810-127767/1-A		12/26/2024 14:30	1	CCVL.D	CPSelect 624 MS 0.25 (mm)
MBL 810-127766/1-A		12/26/2024 15:13	1	MBL.D	CPSelect 624 MS 0.25 (mm)
LLCS 810-127766/2-A		12/26/2024 15:35	1	LLCS.D	CPSelect 624 MS 0.25 (mm)
LCS 810-127766/3-A		12/26/2024 15:57	1	LCS.D	CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 16:18	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 16:40	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 17:02	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 17:23	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 17:45	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 18:07	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 18:28	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 18:50	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 19:12	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 19:34	1		CPSelect 624 MS 0.25 (mm)
CCVL 810-127767/2-A		12/26/2024 19:55	1	CCVM.D	CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 20:17	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 20:39	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 21:01	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 21:22	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		12/26/2024 21:44	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (QC)		12/26/2024 22:06	1		CPSelect 624 MS 0.25 (mm)
810-132339-1	VPB190A-HYD-20241217	12/26/2024 22:27	1	810-132339-A-1-A.D	CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 22:49	1		CPSelect 624 MS 0.25 (mm)
ZZZZZ (Client)		12/26/2024 23:11	1		CPSelect 624 MS 0.25 (mm)
CCV 810-127767/3-A		12/26/2024 23:33	1	CCV.D	CPSelect 624 MS 0.25 (mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Eaton Analytical Sout Job No.: 810-132339-1

SDG No.: _____

Batch Number: 123437 Batch Start Date: 11/20/24 06:25 Batch Analyst: Miller, AnnaBatch Method: 522 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	522 IS SS 00219	522-Sur-SS 00116	O-522 CalM 00015	O-522-CalH 00012
IC 810-123437/4		522, 522			2 mL	2 mL	10 uL	10 uL		
IC 810-123437/5		522, 522			2 mL	2 mL	10 uL	10 uL		
IC 810-123437/6		522, 522			2 mL	2 mL	10 uL	10 uL		
IC 810-123437/7		522, 522			2 mL	2 mL	10 uL	10 uL	5 uL	
ICISAV 810-123437/8		522, 522			2 mL	2 mL	10 uL	10 uL	10 uL	
IC 810-123437/9		522, 522			2 mL	2 mL	10 uL	10 uL	20 uL	
IC 810-123437/10		522, 522			2 mL	2 mL	10 uL	10 uL		5 uL
IC 810-123437/11		522, 522			2 mL	2 mL	10 uL	10 uL		10 uL
IC 810-123437/12		522, 522			2 mL	2 mL	10 uL	10 uL		20 uL
ICV 810-123437/13		522, 522			2 mL	2 mL	10 uL	10 uL		

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	O-522-QCS-Sub 00007	O522-CalL 00016				
IC 810-123437/4		522, 522				7 uL				
IC 810-123437/5		522, 522				10 uL				
IC 810-123437/6		522, 522				20 uL				
IC 810-123437/7		522, 522								
ICISAV 810-123437/8		522, 522								
IC 810-123437/9		522, 522								
IC 810-123437/10		522, 522								
IC 810-123437/11		522, 522								
IC 810-123437/12		522, 522								
ICV 810-123437/13		522, 522			10 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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Eaton Analytical Sout Job No.: 810-132339-1

SDG No.: _____

Batch Number: 123437 Batch Start Date: 11/20/24 06:25 Batch Analyst: Miller, AnnaBatch Method: 522 Batch End Date: _____

Batch Notes	
MeCL2 ID	1666096
Balance ID	B27
Balance is Level? (Y/N)	yes

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 SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Eaton Analytical Sout Job No.: 810-132339-1

SDG No.: _____

Batch Number: 123541 Batch Start Date: 11/20/24 14:40 Batch Analyst: Orpurt, KylaBatch Method: 522 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	O-522BFBSUB 00015				
BFB 810-123541/1		522			2 mL	2 mL				
IC 810-123437/4-A		522			2 mL					
IC 810-123437/5-A		522			2 mL					
IC 810-123437/6-A		522			2 mL					
IC 810-123437/7-A		522			2 mL					
ICISAV 810-123437/8-A		522			2 mL					
IC 810-123437/9-A		522			2 mL					
IC 810-123437/10-A		522			2 mL					
IC 810-123437/11-A		522			2 mL					
IC 810-123437/12-A		522			2 mL					
ICV 810-123437/13-A		522			2 mL					

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 SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Eaton Analytical Sout Job No.: 810-132339-1

SDG No.: _____

Batch Number: 127766 Batch Start Date: 12/26/24 08:09 Batch Analyst: Miller, AnnaBatch Method: 522 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	522 IS SS 00222	522-Sur-SS 00120
MBL 810-127766/1		522, 522			100 g	0 g	100 mL	2 mL	10 uL	10 uL
LLCS 810-127766/2		522, 522			100 g	0 g	100 mL	2 mL	10 uL	10 uL
LCS 810-127766/3		522, 522			100 g	0 g	100 mL	2 mL	10 uL	10 uL
810-132339-A-1	VPB190A-HYD-202 41217	522, 522	Water	T	100 g	0 g	100 mL	2 mL	10 uL	10 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	O-522 CalM 00015	O522-CalL 00016	AnalysisCommen t			
MBL 810-127766/1		522, 522					Y1			
LLCS 810-127766/2		522, 522				7 uL	Y2			
LCS 810-127766/3		522, 522			10 uL		Y3			
810-132339-A-1	VPB190A-HYD-202 41217	522, 522	Water	T			Y2			

Batch Notes	
MeCL2 ID	1698024
Methanol ID	1725551
SPE Cartridge Lot ID	1634745
Sodium Sulfite ID	1456825
Na2SO4 ID	1684038
Sodium Bisulfate ID	660717
Reagent Water ID	Micro Tap
Balance ID	B27
Balance is Level? (Y/N)	yes

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.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Eaton Analytical Sout Job No.: 810-132339-1

SDG No.: _____

Batch Number: 127767 Batch Start Date: 12/26/24 08:09 Batch Analyst: Miller, AnnaBatch Method: 522 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	InitialAmount	FinalAmount	522 IS SS 00222	522-Sur-SS 00120	O-522 CalM 00015	O-522-CalH 00012
CCVLIS 810-127767/1		522, 522			2 mL	2 mL	10 uL	10 uL		
CCVL 810-127767/2		522, 522			2 mL	2 mL	10 uL	10 uL	10 uL	
CCV 810-127767/3		522, 522			2 mL	2 mL	10 uL	10 uL		10 uL

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	O522-CalL 00016					
CCVLIS 810-127767/1		522, 522			7 uL					
CCVL 810-127767/2		522, 522								
CCV 810-127767/3		522, 522								

Batch Notes	
MeCL2 ID	1698024
Balance ID	B27
Balance is Level? (Y/N)	yes

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.

Shipping and Receiving Documents



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 78-8922

www.chemtech.net

Chemtech Project Number:

P531415

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Lane Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901

FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: VPB-189

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetratech.com

PHONE: 757-466-4901

FAX: 757-461-4148

BILLING INFORMATION

BILL TO: SEE CONTRACT

PO#

ADDRESS:

CITY:

STATE: ZIP:

ATTENTION:

PHONE:

DATA TURNAROUND INFORMATION

FAX: 2 & 10 DAYS*

HARD COPY: 2 & 10 DAYS*

EDD 2 & 10 DAYS*

* TO BE APPROVED BY CHEMTECH

STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESEULTS ONLY☐ USEPA CLP☐ RESULTS + QC☐ New York State ASP "B"☐ New Jersey REDUCED☐ New York State ASP "A"☐ New Jersey CLP☐ Other☐ EDD Format

ANALYSIS

VOC(SW846-8260B)

1,4 Dioxane (8270 SIM)

1,4 Dioxane (522 PREC)

1

2

3

4

5

6

7

8

9

PRESERVATIVES

COMMENTS

CHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPESAMPLE
COLLECTION

of Bottles

COMP

GRAB

DATE

TIME

A

F

1

2

3

4

5

6

7

8

9

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

1. BP-VPB-190A-TB-20241213

QA

X

12/13/24

8:00

2

2

2. BP-VPB-190A-GW-678-680

AQ

X

12/13/24

11:00

3

2

1

3. BP-VPB-190A-GW-698-700

AQ

X

12/13/24

13:20

3

3

4. VPB190A-HYD-20241217

QA

X

12/17/24

10:00

5

2

1

2

Trip Blank

Collected extra vials due to high
particulate matter

Hydrant Sample

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER

DATE/TIME

RECEIVED BY

RELINQUISHED BY

DATE/TIME

RECEIVED BY

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

Conditions of bottles or coolers at receipt:

☐ Compliant☐ Non Compliant☐ Cooler Temp☐ Ice in Cooler?:

MeOH extraction requires an additional 4oz. Jar for percent solid

Comments: 48hr TAT - For VOC's see worksheet #15 of SAP 2018 for VPB program VOC list

10-DAY TAT - For 1,4 Dioxane (8270 SIM)

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ OvernightCHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete

☐ YES ☐ NO

Page 1 of 1

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY

7947

CHAIN OF CUSTODY RECORD

Sub Lab INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY : Eurofins Eaton Analytical South Bend		ORDER ID :	P5315	BILL TO: CHEMTECH	PO# : P5315
ADDRESS : 110 South Bend		PROJECT ID: CTO WE13		ADDRESS : 284, Sheffield Street	
CITY: South Bend	State : IN ZIP : 46617	PROJECT MANAGER Yazmeen		CITY: Mountinside	State : NJ ZIP : 07092
E-mail : Nathan.Trowbridge@et.eurofinsus.		E-mail :	YAZMEEN@CHEMTECH.NET	ATTENTION : Yazmeen	
PHONE : 574-233-4777		PHONE : (908) 789 8900	FAX: (908) 789 8922	PHONE : (908) 789 8900	FAX : (908) 789 8922

EDD : ADAPT Report : Level 4 Level 2+ Comment : *DOB Report to the LOD and include prenatation for the Raw Data LOD & DL

ID	CLIENT SAMPLE IDENTIFICATION	SAMPLE MATRIX	ANALYSIS	Preservative	Method	SAMPLE COLLECTION		# OF BOTTLES	TAT DAYS
01	VPB190A-HYD-20241217	Water	Met Chem Group	1:1 HNO3 to pH < 2	GC	DATE	TIME	2	10
						12/17/2024	10:00:00		

1,4 Dioxane

S22



810-132339 Chain of Custody

Initial Temp: 2.0
Corrected Temp: 1.4
IR Gun # 15

WE

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGES POSSESSION INCLUDING COURIER DELIVERY					
RELINQUISHED BY: SAMPLER:	DATE/TIME: 12-18-24	RECEIVED BY:	Conditions of bottles or Coolers at receipt:		
1. [Signature]		1. [Signature]	☐ Compliant	☐ Non Compliant	Cooler Temp _____
RELINQUISHED BY:	DATE/TIME: 12-19-2024	RECEIVED BY:	Ice or Cooler? _____		
2. [Signature]		2. [Signature]			
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	Shipment Complete: ☐ YES ☐ NO		
3. [Signature]		3. [Signature]			

P5315

Login Sample Receipt Checklist

Client: Chemtech Consulting Group Inc.

Job Number: 810-132339-1

Login Number: 132339

List Number: 1

Creator: DePriest, Kellie

List Source: Eurofins Eaton Analytical South Bend

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	