

## ANALYTICAL REPORT

Job Number: 460-172261-1

Job Description: DEC-GABRESKI-AIRNATIONALGUARD

Contract Number: C100700

For:

New York State D.E.C.

625 Broadway

12th Floor

Albany, NY 12233-7017

Attention: Ms. Heather Bishop



Approved for release.  
Thomas A Chupela  
Project Management Assistant I  
12/27/2018 9:51 AM

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12/27/2018

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**TestAmerica Laboratories, Inc.**

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Job Number: 460-172261-1

Job Description: DEC-GABRESKI-AIRNATIONALGUARD

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.  
Thomas A. Chupela  
Project Management Assistant I  
12/27/2018 9:51 AM

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Designee for  
Melissa Haas

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## **CASE NARRATIVE**

**Client: New York State D.E.C.**

**Project: DEC-GABRESKI-AIRNATIONALGUARD**

**Report Number: 460-172261-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

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

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

### **RECEIPT**

The samples were received on 12/20/2018 9:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

### **1,4 DIOXANE BY 8270D SIM, ISOTOPE DILUTION**

Samples SCR-MW03 (460-172261-1), IRP5-MW01 (460-172261-2), SW-10 (460-172261-3) and IRP7-MW01 (460-172261-4) were analyzed for 1,4 Dioxane by 8270D SIM, Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared and analyzed on 12/26/2018.

No difficulties were encountered during the 1,4 Dioxane analysis.

All quality control parameters were within the acceptance limits.

## Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 460-172261-1

Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 460-172261-1  | SCR-MW03         | Water  | 12/19/18 10:25 | 12/20/18 21:00 |
| 460-172261-2  | IRP5-MW01        | Water  | 12/19/18 11:22 | 12/20/18 21:00 |
| 460-172261-3  | SW-10            | Water  | 12/19/18 12:25 | 12/20/18 21:00 |
| 460-172261-4  | IRP7-MW01        | Water  | 12/19/18 13:13 | 12/20/18 21:00 |

## Detection Summary

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

**Client Sample ID: SCR-MW03**

**Lab Sample ID: 460-172261-1**

☐ No Detections.

**Client Sample ID: IRP5-MW01**

**Lab Sample ID: 460-172261-2**

☐ No Detections.

**Client Sample ID: SW-10**

**Lab Sample ID: 460-172261-3**

☐ No Detections.

**Client Sample ID: IRP7-MW01**

**Lab Sample ID: 460-172261-4**

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Edison

## Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 460-172261-1

Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

| Method       | Method Description                                            | Protocol | Laboratory |
|--------------|---------------------------------------------------------------|----------|------------|
| 8270D SIM ID | Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) | SW846    | TAL EDI    |
| 3510C        | Liquid-Liquid Extraction (Separatory Funnel)                  | SW846    | TAL EDI    |

### Protocol References:

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

### Laboratory References:

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

# Client Sample Results

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

## Client Sample ID: SCR-MW03

Date Collected: 12/19/18 10:25

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-1

Matrix: Water

### Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.20      | U         | 0.20     | 0.016 | ug/L | — | 12/26/18 09:07 | 12/26/18 15:54 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 31        |           | 10 - 150 |       |      |   | 12/26/18 09:07 | 12/26/18 15:54 | 1       |

## Client Sample ID: IRP5-MW01

Date Collected: 12/19/18 11:22

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-2

Matrix: Water

### Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.20      | U         | 0.20     | 0.016 | ug/L | — | 12/26/18 09:07 | 12/26/18 16:10 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 45        |           | 10 - 150 |       |      |   | 12/26/18 09:07 | 12/26/18 16:10 | 1       |

## Client Sample ID: SW-10

Date Collected: 12/19/18 12:25

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-3

Matrix: Water

### Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.20      | U         | 0.20     | 0.016 | ug/L | — | 12/26/18 09:07 | 12/26/18 15:37 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 45        |           | 10 - 150 |       |      |   | 12/26/18 09:07 | 12/26/18 15:37 | 1       |

## Client Sample ID: IRP7-MW01

Date Collected: 12/19/18 13:13

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-4

Matrix: Water

### Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

| Analyte          | Result    | Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.20      | U         | 0.20     | 0.016 | ug/L | — | 12/26/18 09:07 | 12/26/18 16:27 | 1       |
| Isotope Dilution | %Recovery | Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 47        |           | 10 - 150 |       |      |   | 12/26/18 09:07 | 12/26/18 16:27 | 1       |

# Isotope Dilution Summary

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID     | Client Sample ID | DXE<br>(10-150) |
|-------------------|------------------|-----------------|
| 460-172261-1      | SCR-MW03         | 31              |
| 460-172261-2      | IRP5-MW01        | 45              |
| 460-172261-3      | SW-10            | 45              |
| 460-172261-3 MS   | SW-10            | 36              |
| 460-172261-3 MSD  | SW-10            | 37              |
| 460-172261-4      | IRP7-MW01        | 47              |
| MB 460-578647/1-A | Method Blank     | 35              |

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID   | DXE<br>(10-200) |
|--------------------|--------------------|-----------------|
| LCS 460-578647/2-A | Lab Control Sample | 36              |

#### Surrogate Legend

DXE = 1,4-Dioxane-d8

# QC Sample Results

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

## Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 460-578647/1-A  
Matrix: Water  
Analysis Batch: 578622

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 578647

| Analyte          | MB<br>Result    | MB<br>Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------|-----------------|-----------------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane      | 0.20            | U               | 0.20     | 0.016 | ug/L | - | 12/26/18 09:07 | 12/26/18 15:04 | 1       |
| Isotope Dilution | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 1,4-Dioxane-d8   | 35              |                 | 10 - 150 |       |      |   | 12/26/18 09:07 | 12/26/18 15:04 | 1       |

Lab Sample ID: LCS 460-578647/2-A  
Matrix: Water  
Analysis Batch: 578622

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 578647

| Analyte          |                  |                  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|------------------|------------------|------------------|----------------|---------------|------------------|------|---|------|-----------------|
| 1,4-Dioxane      |                  |                  | 1.60           | 1.46          |                  | ug/L | - | 91   | 10 - 200        |
| Isotope Dilution | LCS<br>%Recovery | LCS<br>Qualifier | Limits         |               |                  |      |   |      |                 |
| 1,4-Dioxane-d8   | 36               |                  | 10 - 200       |               |                  |      |   |      |                 |

Lab Sample ID: 460-172261-3 MS  
Matrix: Water  
Analysis Batch: 578622

Client Sample ID: SW-10  
Prep Type: Total/NA  
Prep Batch: 578647

| Analyte          | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|------------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| 1,4-Dioxane      | 0.20             | U                   | 1.60           | 1.60         |                 | ug/L | - | 100  | 70 - 130        |
| Isotope Dilution | MS<br>%Recovery  | MS<br>Qualifier     | Limits         |              |                 |      |   |      |                 |
| 1,4-Dioxane-d8   | 36               |                     | 10 - 150       |              |                 |      |   |      |                 |

Lab Sample ID: 460-172261-3 MSD  
Matrix: Water  
Analysis Batch: 578622

Client Sample ID: SW-10  
Prep Type: Total/NA  
Prep Batch: 578647

| Analyte          | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | Limit |
|------------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|-------|
| 1,4-Dioxane      | 0.20             | U                   | 1.60           | 1.72          |                  | ug/L | - | 108  | 70 - 130        | 8   | 20    |
| Isotope Dilution | MSD<br>%Recovery | MSD<br>Qualifier    | Limits         |               |                  |      |   |      |                 |     |       |
| 1,4-Dioxane-d8   | 37               |                     | 10 - 150       |               |                  |      |   |      |                 |     |       |

# Definitions/Glossary

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description          |
|-----------|--------------------------------|
| U         | Analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| 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)                                                                             |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| PQL            | Practical Quantitation Limit                                                                                |
| 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)                                                                       |

# QC Association Summary

Client: New York State D.E.C.

TestAmerica Job ID: 460-172261-1

Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

## GC/MS Semi VOA

### Analysis Batch: 578622

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method       | Prep Batch |
|--------------------|--------------------|-----------|--------|--------------|------------|
| 460-172261-1       | SCR-MW03           | Total/NA  | Water  | 8270D SIM ID | 578647     |
| 460-172261-2       | IRP5-MW01          | Total/NA  | Water  | 8270D SIM ID | 578647     |
| 460-172261-3       | SW-10              | Total/NA  | Water  | 8270D SIM ID | 578647     |
| 460-172261-4       | IRP7-MW01          | Total/NA  | Water  | 8270D SIM ID | 578647     |
| MB 460-578647/1-A  | Method Blank       | Total/NA  | Water  | 8270D SIM ID | 578647     |
| LCS 460-578647/2-A | Lab Control Sample | Total/NA  | Water  | 8270D SIM ID | 578647     |
| 460-172261-3 MS    | SW-10              | Total/NA  | Water  | 8270D SIM ID | 578647     |
| 460-172261-3 MSD   | SW-10              | Total/NA  | Water  | 8270D SIM ID | 578647     |

### Prep Batch: 578647

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 460-172261-1       | SCR-MW03           | Total/NA  | Water  | 3510C  |            |
| 460-172261-2       | IRP5-MW01          | Total/NA  | Water  | 3510C  |            |
| 460-172261-3       | SW-10              | Total/NA  | Water  | 3510C  |            |
| 460-172261-4       | IRP7-MW01          | Total/NA  | Water  | 3510C  |            |
| MB 460-578647/1-A  | Method Blank       | Total/NA  | Water  | 3510C  |            |
| LCS 460-578647/2-A | Lab Control Sample | Total/NA  | Water  | 3510C  |            |
| 460-172261-3 MS    | SW-10              | Total/NA  | Water  | 3510C  |            |
| 460-172261-3 MSD   | SW-10              | Total/NA  | Water  | 3510C  |            |

# Lab Chronicle

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

## Client Sample ID: SCR-MW03

Date Collected: 12/19/18 10:25

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C        |     |                 | 578647       | 12/26/18 09:07       | DXD     | TAL EDI |
| Total/NA  | Analysis   | 8270D SIM ID |     | 1               | 578622       | 12/26/18 15:54       | CAZ     | TAL EDI |

## Client Sample ID: IRP5-MW01

Date Collected: 12/19/18 11:22

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C        |     |                 | 578647       | 12/26/18 09:07       | DXD     | TAL EDI |
| Total/NA  | Analysis   | 8270D SIM ID |     | 1               | 578622       | 12/26/18 16:10       | CAZ     | TAL EDI |

## Client Sample ID: SW-10

Date Collected: 12/19/18 12:25

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C        |     |                 | 578647       | 12/26/18 09:07       | DXD     | TAL EDI |
| Total/NA  | Analysis   | 8270D SIM ID |     | 1               | 578622       | 12/26/18 15:37       | CAZ     | TAL EDI |

## Client Sample ID: IRP7-MW01

Date Collected: 12/19/18 13:13

Date Received: 12/20/18 21:00

## Lab Sample ID: 460-172261-4

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 3510C        |     |                 | 578647       | 12/26/18 09:07       | DXD     | TAL EDI |
| Total/NA  | Analysis   | 8270D SIM ID |     | 1               | 578622       | 12/26/18 16:27       | CAZ     | TAL EDI |

### Laboratory References:

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

## Accreditation/Certification Summary

Client: New York State D.E.C.  
Project/Site: DEC-GABRESKI-AIRNATIONALGUARD

TestAmerica Job ID: 460-172261-1

### Laboratory: TestAmerica Edison

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|-----------|---------|------------|-----------------------|-----------------|
| New York  | NELAP   | 2          | 11452                 | 04-01-19        |

# 8270D\_SIM\_MS\_ID

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Semivolatile Organic Compounds  
(GC/MS SIM / Isotope Dilution)

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison

Job No.: 460-172261-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25 (mm)

| Client Sample ID | Lab Sample ID        | DXE # |
|------------------|----------------------|-------|
| SCR-MW03         | 460-172261-1         | 31    |
| IRP5-MW01        | 460-172261-2         | 45    |
| SW-10            | 460-172261-3         | 45    |
| IRP7-MW01        | 460-172261-4         | 47    |
|                  | MB<br>460-578647/1-A | 35    |
| SW-10 MS         | 460-172261-3 MS      | 36    |
| SW-10 MSD        | 460-172261-3 MSD     | 37    |

DXE = 1,4-Dioxane-d8

QC LIMITS  
10-150

# Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison

Job No.: 460-172261-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25 (mm)

| Client Sample ID | Lab Sample ID         | DXE # |
|------------------|-----------------------|-------|
|                  | LCS<br>460-578647/2-A | 36    |

DXE = 1,4-Dioxane-d8

QC LIMITS  
10-200

# Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: C32244.D  
Lab ID: LCS 460-578647/2-A Client ID: \_\_\_\_\_

| COMPOUND       | SPIKE<br>ADDED<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|----------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| 1,4-Dioxane    | 1.60                     | 1.46                           | 91              | 10-200              |   |
| 1,4-Dioxane-d8 | 32.0                     | 11.6                           | 36              | 10-200              |   |

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: C32249.D  
Lab ID: 460-172261-3 MS Client ID: SW-10 MS

| COMPOUND       | SPIKE<br>ADDED<br>(ug/L) | SAMPLE<br>CONCENTRATION<br>(ug/L) | MS<br>CONCENTRATION<br>(ug/L) | MS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|----------------|--------------------------|-----------------------------------|-------------------------------|----------------|---------------------|---|
| 1,4-Dioxane    | 1.60                     | 0.20 U                            | 1.60                          | 100            | 70-130              |   |
| 1,4-Dioxane-d8 | 32.0                     | 14                                | 11.4                          | 36             | 10-150              |   |

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: C32250.D  
Lab ID: 460-172261-3 MSD Client ID: SW-10 MSD

| COMPOUND       | SPIKE<br>ADDED<br>(ug/L) | MSD<br>CONCENTRATION<br>(ug/L) | MSD<br>%<br>REC | %<br>RPD | QC LIMITS |        | # |
|----------------|--------------------------|--------------------------------|-----------------|----------|-----------|--------|---|
|                |                          |                                |                 |          | RPD       | REC    |   |
| 1,4-Dioxane    | 1.60                     | 1.72                           | 108             | 8        | 20        | 70-130 |   |
| 1,4-Dioxane-d8 | 32.0                     | 12.0                           | 37              |          |           | 10-150 |   |

# Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Lab File ID: C32243.D Lab Sample ID: MB 460-578647/1-A  
Matrix: Water Date Extracted: 12/26/2018 09:07  
Instrument ID: CBNAMS13 Date Analyzed: 12/26/2018 15:04  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID      | LAB<br>FILE ID | DATE ANALYZED    |
|------------------|--------------------|----------------|------------------|
|                  | LCS 460-578647/2-A | C32244.D       | 12/26/2018 15:20 |
| SW-10            | 460-172261-3       | C32245.D       | 12/26/2018 15:37 |
| SCR-MW03         | 460-172261-1       | C32246.D       | 12/26/2018 15:54 |
| IRP5-MW01        | 460-172261-2       | C32247.D       | 12/26/2018 16:10 |
| IRP7-MW01        | 460-172261-4       | C32248.D       | 12/26/2018 16:27 |
| SW-10 MS         | 460-172261-3 MS    | C32249.D       | 12/26/2018 16:43 |
| SW-10 MSD        | 460-172261-3 MSD   | C32250.D       | 12/26/2018 17:00 |

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Lab File ID: C28985.D DFTPP Injection Date: 05/11/2018  
Instrument ID: CBNAMS13 DFTPP Injection Time: 12:33  
Analysis Batch No.: 518314

| M/E | ION ABUNDANCE CRITERIA              | % RELATIVE ABUNDANCE |
|-----|-------------------------------------|----------------------|
| 51  | 30.0 - 60.0 % of mass 198           | 42.1                 |
| 68  | Less than 2.0 % of mass 69          | 0.7 (1.8) 1          |
| 69  | Mass 69 relative abundance          | 40.1                 |
| 70  | Less than 2.0 % of mass 69          | 0.2 (0.4) 1          |
| 127 | 40.0 - 60.0 % of mass 198           | 47.0                 |
| 197 | Less than 1.0 % of mass 198         | 0.0                  |
| 198 | Base Peak, 100 % relative abundance | 100.0                |
| 199 | 5.0- 9.0 % of mass 198              | 6.7                  |
| 275 | 10.0 - 30.0 % of mass 198           | 26.5                 |
| 365 | Greater than 1.0 % of mass 198      | 3.4                  |
| 441 | Present but less than mass 443      | 15.2 (79.7) 3        |
| 442 | Greater than 40.0 % of mass 198     | 94.8                 |
| 443 | 17.0 - 23.0 % of mass 442           | 19.1 (20.1) 2        |

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

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 |
|------------------|-------------------|-------------|---------------|---------------|
|                  | ICIS 460-518314/2 | C28986.D    | 05/11/2018    | 12:48         |
|                  | STD8 460-518314/3 | C28987.D    | 05/11/2018    | 13:08         |
|                  | STD7 460-518314/4 | C28988.D    | 05/11/2018    | 13:27         |
|                  | STD6 460-518314/5 | C28989.D    | 05/11/2018    | 14:16         |
|                  | STD4 460-518314/6 | C28990.D    | 05/11/2018    | 14:35         |
|                  | STD3 460-518314/7 | C28991.D    | 05/11/2018    | 15:44         |
|                  | STD2 460-518314/8 | C28992.D    | 05/11/2018    | 16:02         |
|                  | STD1 460-518314/9 | C28993.D    | 05/11/2018    | 17:20         |

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Lab File ID: C32220.D DFTPP Injection Date: 12/26/2018  
Instrument ID: CBNAMS13 DFTPP Injection Time: 08:27  
Analysis Batch No.: 578622

| M/E | ION ABUNDANCE CRITERIA              | % RELATIVE ABUNDANCE |
|-----|-------------------------------------|----------------------|
| 51  | 30.0 - 60.0 % of mass 198           | 38.7                 |
| 68  | Less than 2.0 % of mass 69          | 0.6 (1.6) 1          |
| 69  | Mass 69 relative abundance          | 40.8                 |
| 70  | Less than 2.0 % of mass 69          | 0.2 (0.5) 1          |
| 127 | 40.0 - 60.0 % of mass 198           | 48.6                 |
| 197 | Less than 1.0 % of mass 198         | 0.3                  |
| 198 | Base Peak, 100 % relative abundance | 100.0                |
| 199 | 5.0- 9.0 % of mass 198              | 6.8                  |
| 275 | 10.0 - 30.0 % of mass 198           | 26.3                 |
| 365 | Greater than 1.0 % of mass 198      | 3.3                  |
| 441 | Present but less than mass 443      | 13.6 (80.4) 3        |
| 442 | Greater than 40.0 % of mass 198     | 88.7                 |
| 443 | 17.0 - 23.0 % of mass 442           | 17.0 (19.1) 2        |

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

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

| CLIENT SAMPLE ID | LAB SAMPLE ID      | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|--------------------|-------------|---------------|---------------|
|                  | CCVIS 460-578622/2 | C32221.D    | 12/26/2018    | 08:54         |
|                  | MB 460-578647/1-A  | C32243.D    | 12/26/2018    | 15:04         |
|                  | LCS 460-578647/2-A | C32244.D    | 12/26/2018    | 15:20         |
| SW-10            | 460-172261-3       | C32245.D    | 12/26/2018    | 15:37         |
| SCR-MW03         | 460-172261-1       | C32246.D    | 12/26/2018    | 15:54         |
| IRP5-MW01        | 460-172261-2       | C32247.D    | 12/26/2018    | 16:10         |
| IRP7-MW01        | 460-172261-4       | C32248.D    | 12/26/2018    | 16:27         |
| SW-10 MS         | 460-172261-3 MS    | C32249.D    | 12/26/2018    | 16:43         |
| SW-10 MSD        | 460-172261-3 MSD   | C32250.D    | 12/26/2018    | 17:00         |

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

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 460-578622/2 Date Analyzed: 12/26/2018 08:54  
 Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil MS ID: 0.25 (mm)  
 Lab File ID (Standard): C32221.D Heated Purge: (Y/N) N  
 Calibration ID: 68479

|                    |                  | DCBd4  |      |        |      |        |      |
|--------------------|------------------|--------|------|--------|------|--------|------|
|                    |                  | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD     |                  | 175729 | 5.58 |        |      |        |      |
| UPPER LIMIT        |                  |        |      |        |      |        |      |
| LOWER LIMIT        |                  |        |      |        |      |        |      |
| LAB SAMPLE ID      | CLIENT SAMPLE ID |        |      |        |      |        |      |
| MB 460-578647/1-A  |                  | 156760 | 5.58 |        |      |        |      |
| LCS 460-578647/2-A |                  | 154828 | 5.58 |        |      |        |      |
| 460-172261-3       | SW-10            | 147592 | 5.58 |        |      |        |      |
| 460-172261-1       | SCR-MW03         | 151722 | 5.58 |        |      |        |      |
| 460-172261-2       | IRP5-MW01        | 150699 | 5.58 |        |      |        |      |
| 460-172261-4       | IRP7-MW01        | 148115 | 5.58 |        |      |        |      |
| 460-172261-3 MS    | SW-10 MS         | 156556 | 5.58 |        |      |        |      |
| 460-172261-3 MSD   | SW-10 MSD        | 158403 | 5.58 |        |      |        |      |

# Column used to flag values outside QC limits

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: SCR-MW03 Lab Sample ID: 460-172261-1  
Matrix: Water Lab File ID: C32246.D  
Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 10:25  
Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 15:54  
Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
Injection Volume: 5 (uL) Level: (low/med) Low  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 0.20   | U | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 31   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32246.D  
 Lims ID: 460-172261-A-1-A  
 Client ID: SCR-MW03  
 Sample Type: Client  
 Inject. Date: 26-Dec-2018 15:54:30 ALS Bottle#: 27 Worklist Smp#: 27  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-027  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:13:14

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ug/ml | %Rec | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|--------------------|------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.790        | 2.781            | 0.007            | 0  | 373134   | 1.24               | 31.1 |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.584        | 5.584            | 0.000            | 99 | 151722   | 0.2000             |      |       |

**Reagents:**

SM\_iso\_d4istd\_00003                      Amount Added: 20.00                      Units: uL                      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32246.D

Injection Date: 26-Dec-2018 15:54:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-A-1-A

Lab Sample ID: 460-172261-1

Worklist Smp#: 27

Client ID: SCR-MW03

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

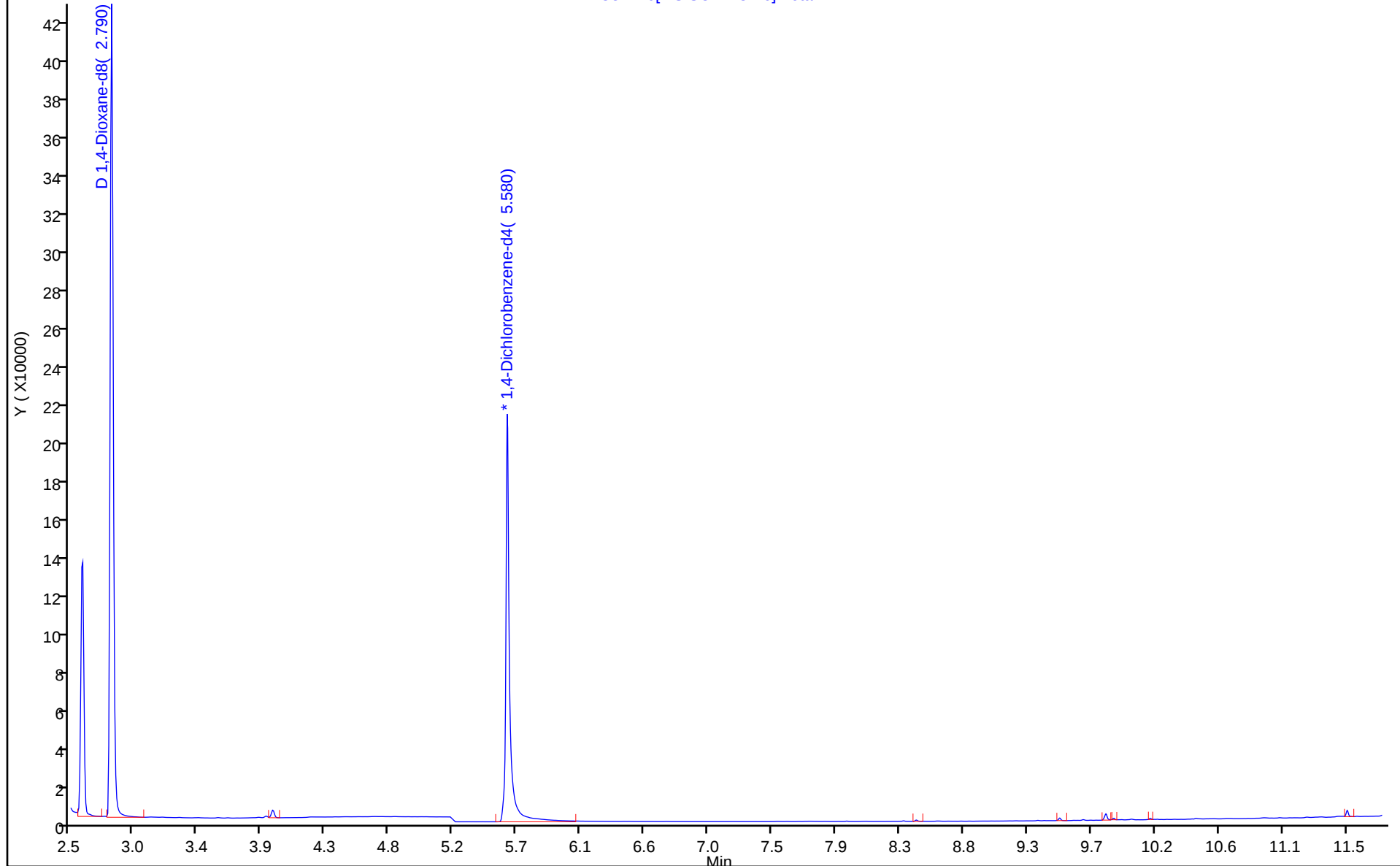
ALS Bottle#: 27

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C32246[MS SCAN Chro]:Total



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32246.D

Injection Date: 26-Dec-2018 15:54:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-A-1-A

Lab Sample ID: 460-172261-1

Client ID: SCR-MW03

Operator ID:

ALS Bottle#:

27

Worklist Smp#:

27

Injection Vol: 5.0 ul

Dil. Factor:

1.0000

Method: 8270\_Isotope

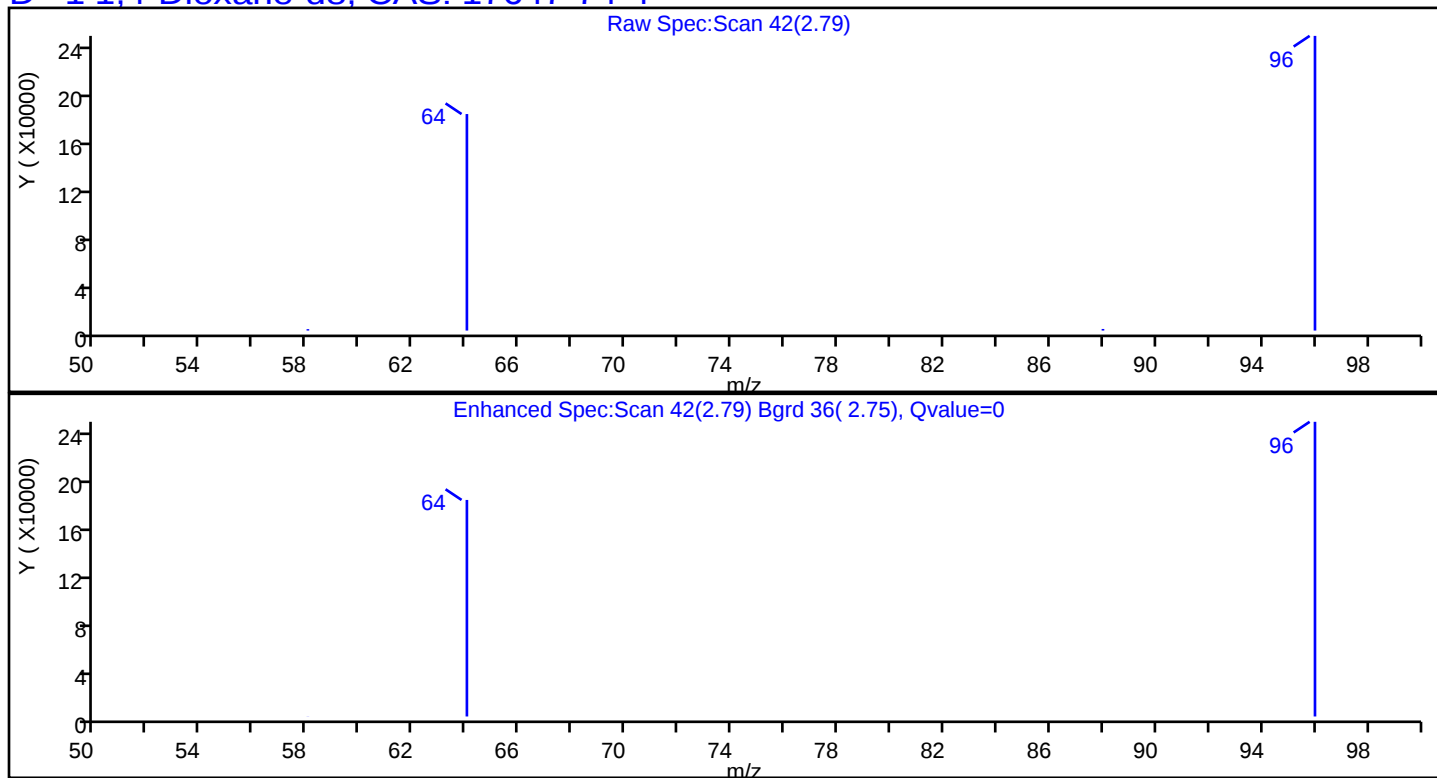
Limit Group:

MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector

MS SCAN

**D 1 1,4-Dioxane-d8, CAS: 17647-74-4**

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32246.D

Injection Date: 26-Dec-2018 15:54:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-A-1-A

Lab Sample ID: 460-172261-1

Client ID: SCR-MW03

Operator ID:

ALS Bottle#:

27

Worklist Smp#: 27

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

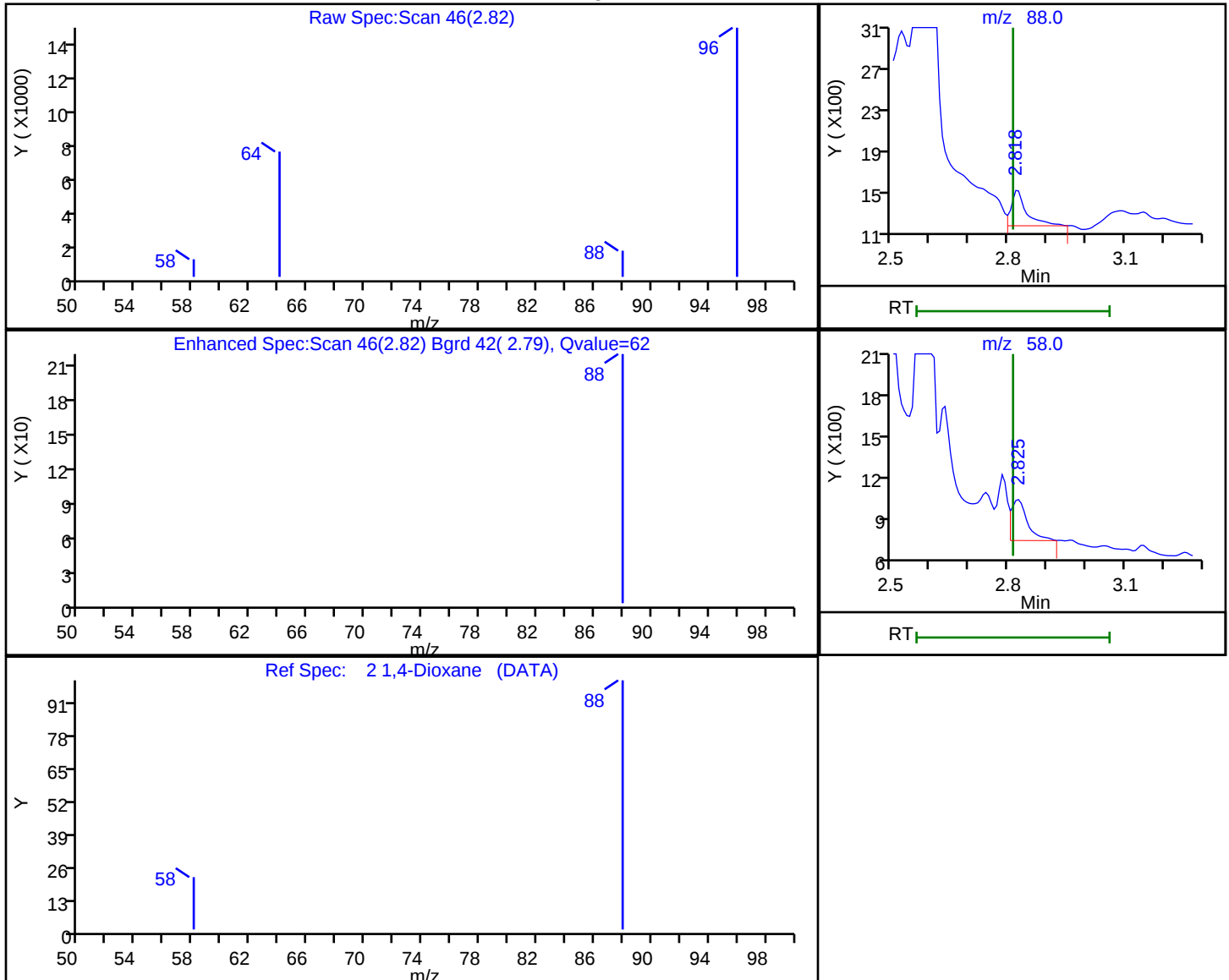
Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

## Processing Results



| RT   | Mass  | Response | Amount   |
|------|-------|----------|----------|
| 2.82 | 88.00 | 918      | 0.007601 |
| 2.83 | 58.00 | 845      |          |

Reviewer: khlungprakhons, 27-Dec-2018 14:13:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: IRP5-MW01 Lab Sample ID: 460-172261-2  
 Matrix: Water Lab File ID: C32247.D  
 Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 11:22  
 Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 16:10  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 0.20   | U | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 45   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32247.D  
 Lims ID: 460-172261-B-2-A  
 Client ID: IRP5-MW01  
 Sample Type: Client  
 Inject. Date: 26-Dec-2018 16:10:30 ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-028  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:13:40

| Compound | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | OnCol Amt<br>ug/ml | %Rec | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|--------------------|------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|--------------------|------|-------|

|     |                        |     |       |       |       |    |        |        |      |
|-----|------------------------|-----|-------|-------|-------|----|--------|--------|------|
| D 1 | 1,4-Dioxane-d8         | 96  | 2.797 | 2.781 | 0.014 | 0  | 537435 | 1.80   | 45.1 |
| * 4 | 1,4-Dichlorobenzene-d4 | 152 | 5.584 | 5.584 | 0.000 | 99 | 150699 | 0.2000 |      |

**Reagents:**

SM\_iso\_d4istd\_00003                      Amount Added: 20.00                      Units: uL                      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32247.D

Injection Date: 26-Dec-2018 16:10:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-B-2-A

Lab Sample ID: 460-172261-2

Worklist Smp#: 28

Client ID: IRP5-MW01

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

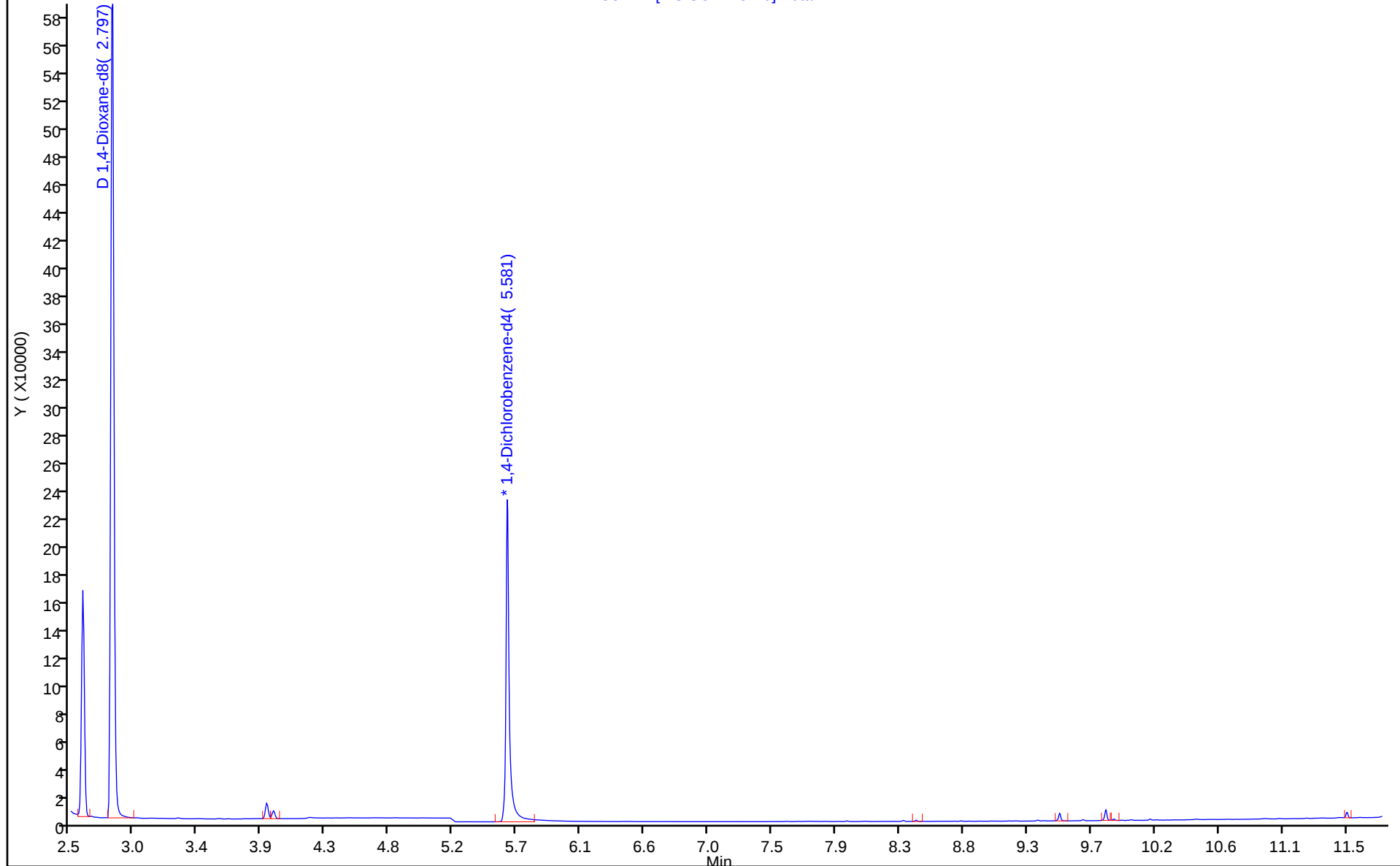
ALS Bottle#: 28

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C32247[MS SCAN Chro]:Total



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32247.D

Injection Date: 26-Dec-2018 16:10:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-B-2-A

Lab Sample ID: 460-172261-2

Client ID: IRP5-MW01

Operator ID:

ALS Bottle#:

28

Worklist Smp#:

28

Injection Vol: 5.0 ul

Dil. Factor:

1.0000

Method: 8270\_Isotope

Limit Group:

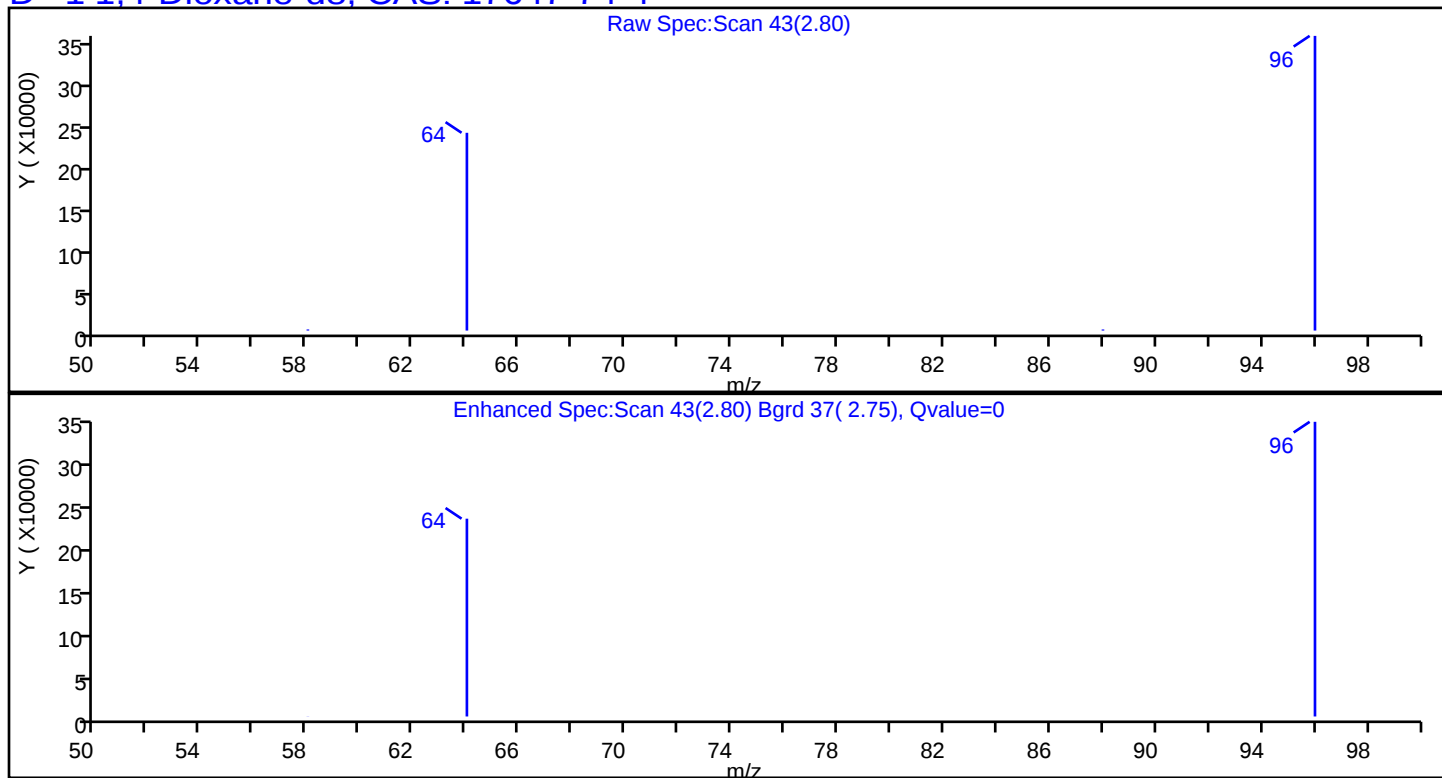
MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS (0.25 mm)

Detector

MS SCAN

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32247.D

Injection Date: 26-Dec-2018 16:10:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-B-2-A

Lab Sample ID: 460-172261-2

Client ID: IRP5-MW01

Operator ID:

ALS Bottle#:

28

Worklist Smp#: 28

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

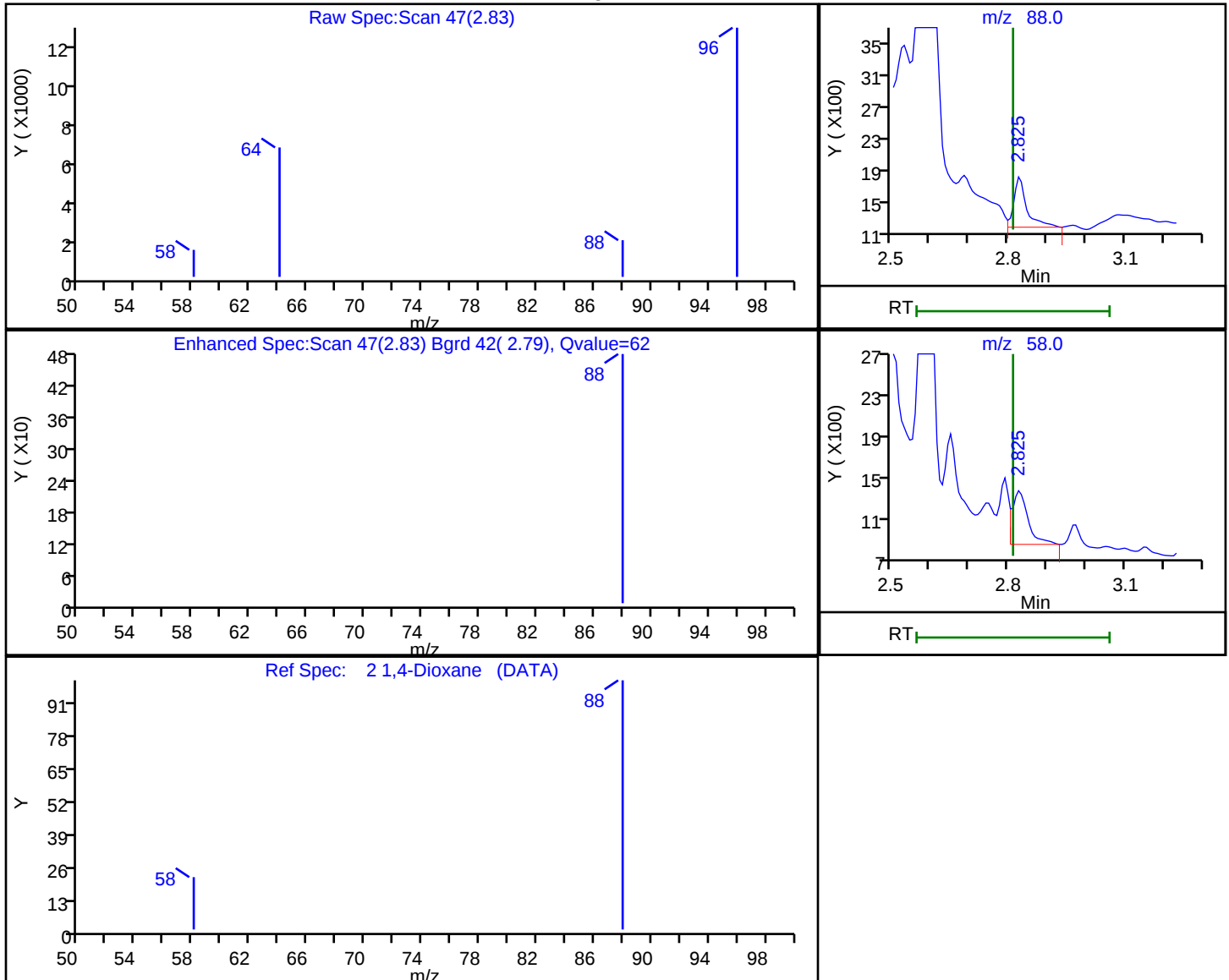
Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

## Processing Results



| RT   | Mass  | Response | Amount   |
|------|-------|----------|----------|
| 2.83 | 88.00 | 1422     | 0.008174 |
| 2.83 | 58.00 | 1503     |          |

Reviewer: khlungprakhons, 27-Dec-2018 14:13:38

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: SW-10 Lab Sample ID: 460-172261-3  
 Matrix: Water Lab File ID: C32245.D  
 Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 12:25  
 Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 15:37  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 0.20   | U | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 45   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32245.D  
 Lims ID: 460-172261-A-3-B  
 Client ID: SW-10  
 Sample Type: Client  
 Inject. Date: 26-Dec-2018 15:37:30 ALS Bottle#: 26 Worklist Smp#: 26  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-026  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:12:56

| Compound | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | OnCol Amt<br>ug/ml | %Rec | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|--------------------|------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|--------------------|------|-------|

|     |                        |     |       |       |       |    |        |        |      |
|-----|------------------------|-----|-------|-------|-------|----|--------|--------|------|
| D 1 | 1,4-Dioxane-d8         | 96  | 2.790 | 2.781 | 0.007 | 0  | 521027 | 1.79   | 44.7 |
| * 4 | 1,4-Dichlorobenzene-d4 | 152 | 5.584 | 5.584 | 0.000 | 99 | 147592 | 0.2000 |      |

**Reagents:**

SM\_iso\_d4istd\_00003                      Amount Added: 20.00                      Units: uL                      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32245.D

Injection Date: 26-Dec-2018 15:37:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-A-3-B

Lab Sample ID: 460-172261-3

Worklist Smp#: 26

Client ID: SW-10

Injection Vol: 5.0 ul

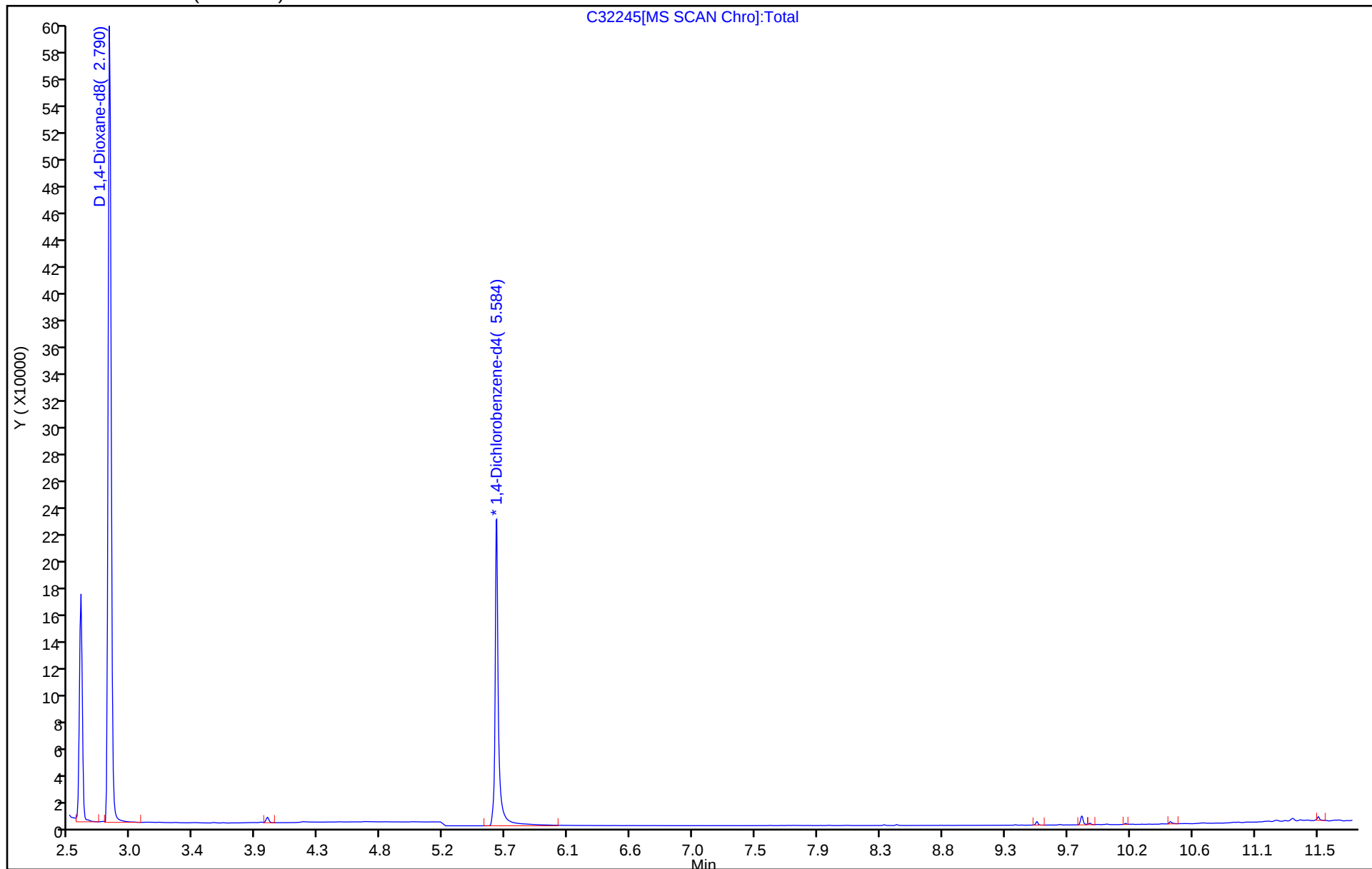
Dil. Factor: 1.0000

ALS Bottle#: 26

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32245.D

Injection Date: 26-Dec-2018 15:37:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-A-3-B

Lab Sample ID: 460-172261-3

Client ID: SW-10

Operator ID:

ALS Bottle#: 26

Worklist Smp#: 26

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

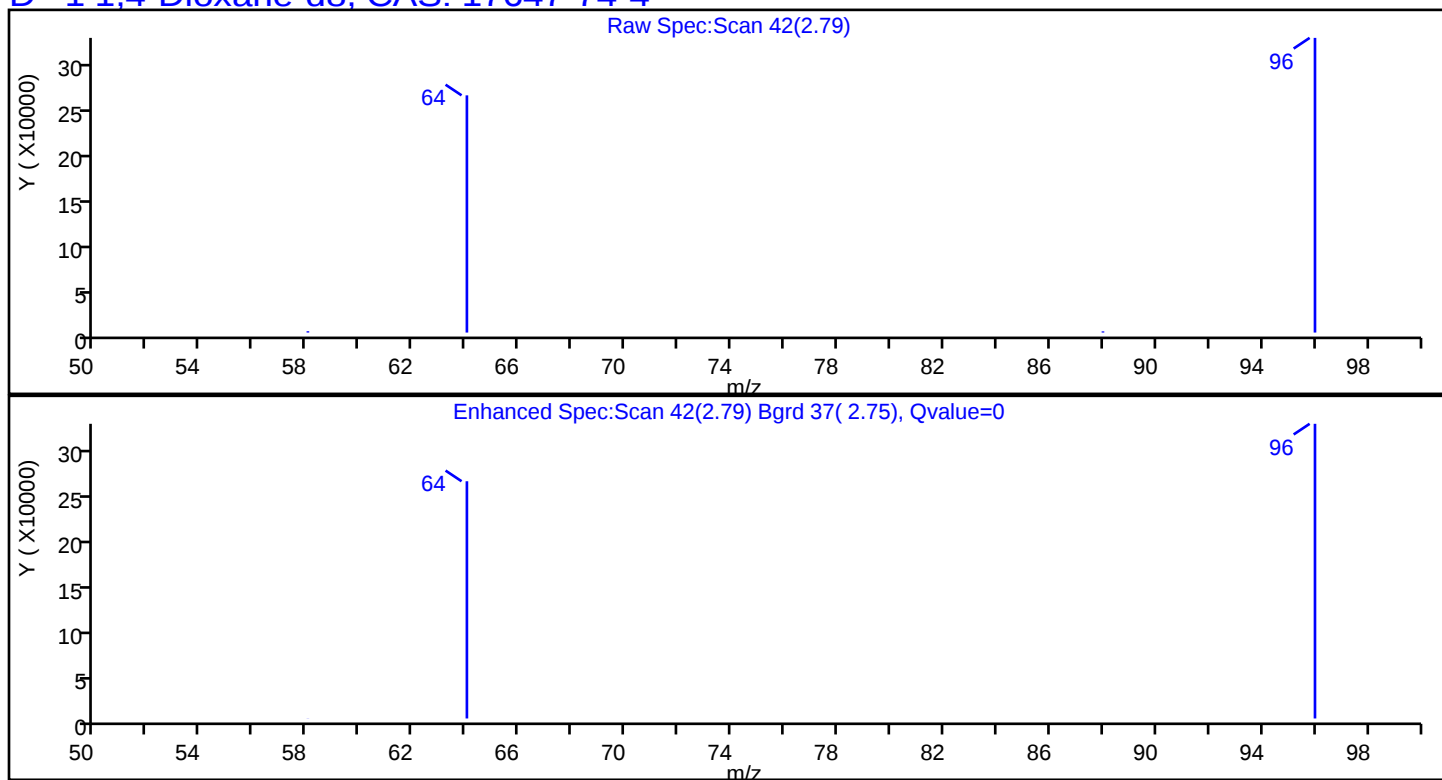
Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32245.D

Injection Date: 26-Dec-2018 15:37:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-A-3-B

Lab Sample ID: 460-172261-3

Client ID: SW-10

Operator ID:

ALS Bottle#:

26

Worklist Smp#: 26

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

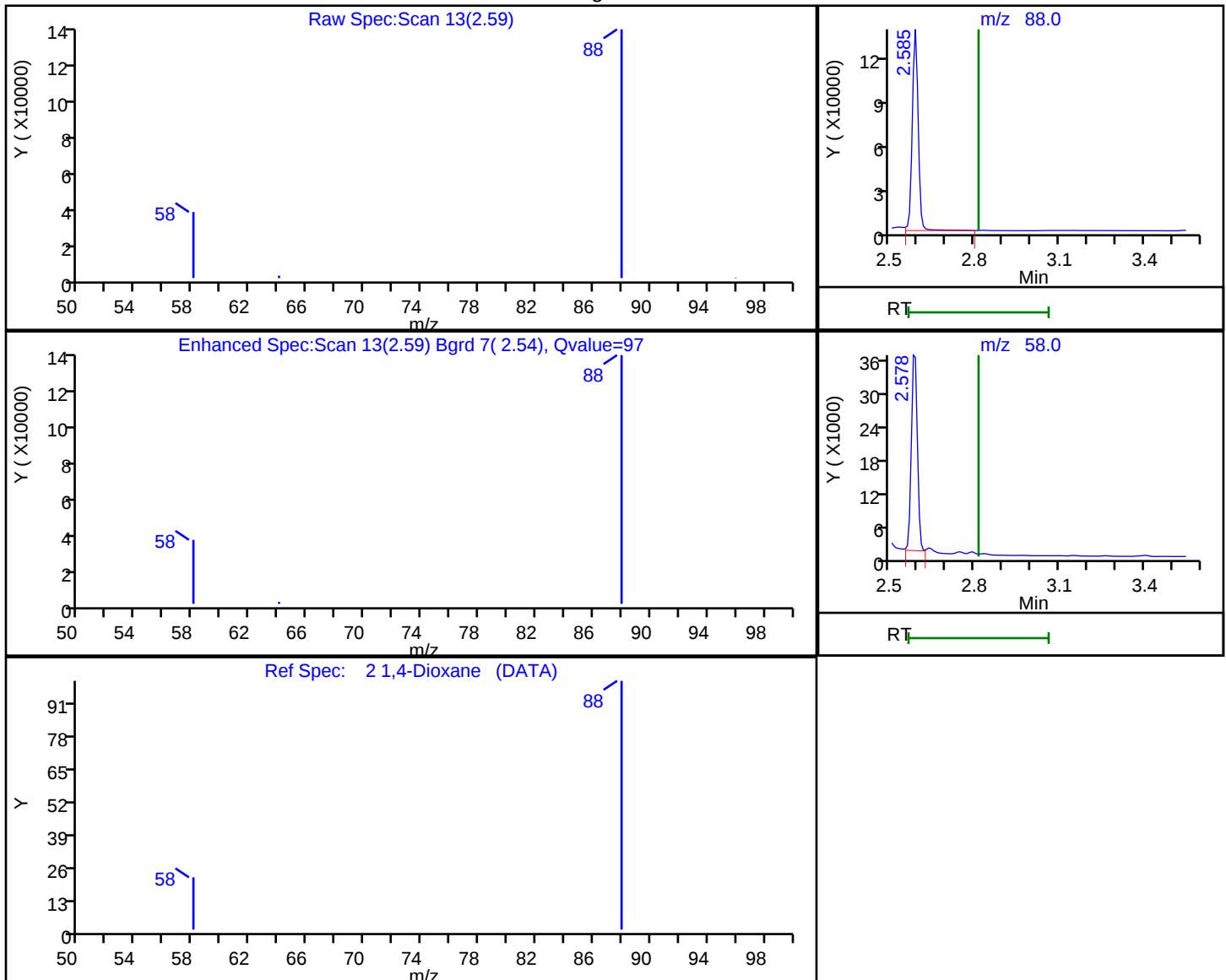
Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

## Processing Results



| RT   | Mass  | Response | Amount   |
|------|-------|----------|----------|
| 2.59 | 88.00 | 197288   | 1.169810 |
| 2.58 | 58.00 | 51780    |          |

Reviewer: khlungprakhons, 27-Dec-2018 14:13:05

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: IRP7-MW01 Lab Sample ID: 460-172261-4  
Matrix: Water Lab File ID: C32248.D  
Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 13:13  
Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 16:27  
Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
Injection Volume: 5 (uL) Level: (low/med) Low  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 0.20   | U | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 47   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32248.D  
 Lims ID: 460-172261-B-4-A  
 Client ID: IRP7-MW01  
 Sample Type: Client  
 Inject. Date: 26-Dec-2018 16:27:30 ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-029  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:13:50

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ug/ml | %Rec | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|--------------------|------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.790        | 2.781            | 0.007            | 0  | 552419   | 1.89               | 47.2 |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.581        | 5.584            | -0.004           | 96 | 148115   | 0.2000             |      |       |

**Reagents:**

SM\_iso\_d4istd\_00003      Amount Added: 20.00      Units: uL      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32248.D

Injection Date: 26-Dec-2018 16:27:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-B-4-A

Lab Sample ID: 460-172261-4

Worklist Smp#: 29

Client ID: IRP7-MW01

Injection Vol: 5.0 ul

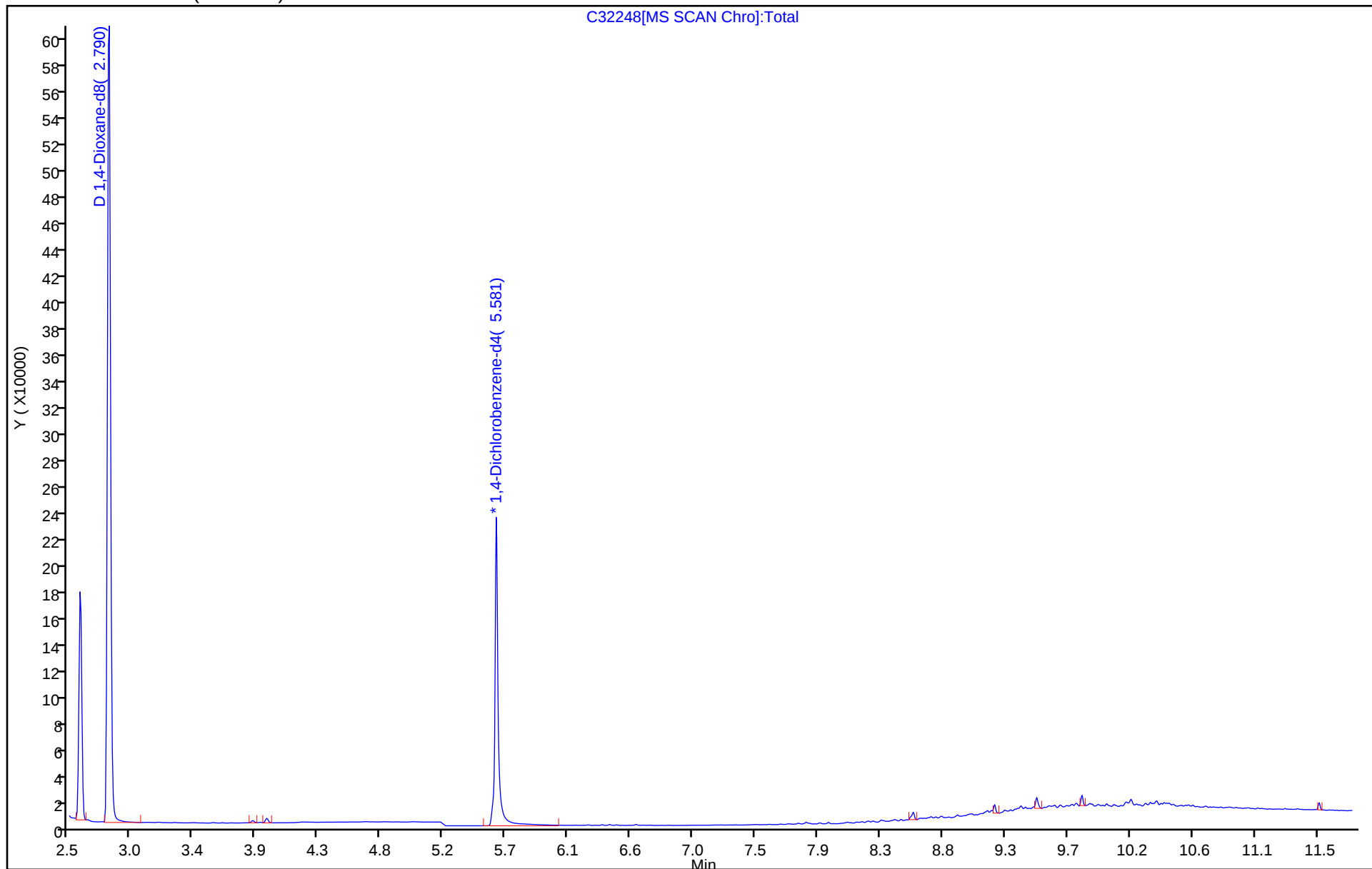
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32248.D

Injection Date: 26-Dec-2018 16:27:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-B-4-A

Lab Sample ID: 460-172261-4

Client ID: IRP7-MW01

Operator ID:

ALS Bottle#:

29

Worklist Smp#:

29

Injection Vol: 5.0 ul

Dil. Factor:

1.0000

Method: 8270\_Isotope

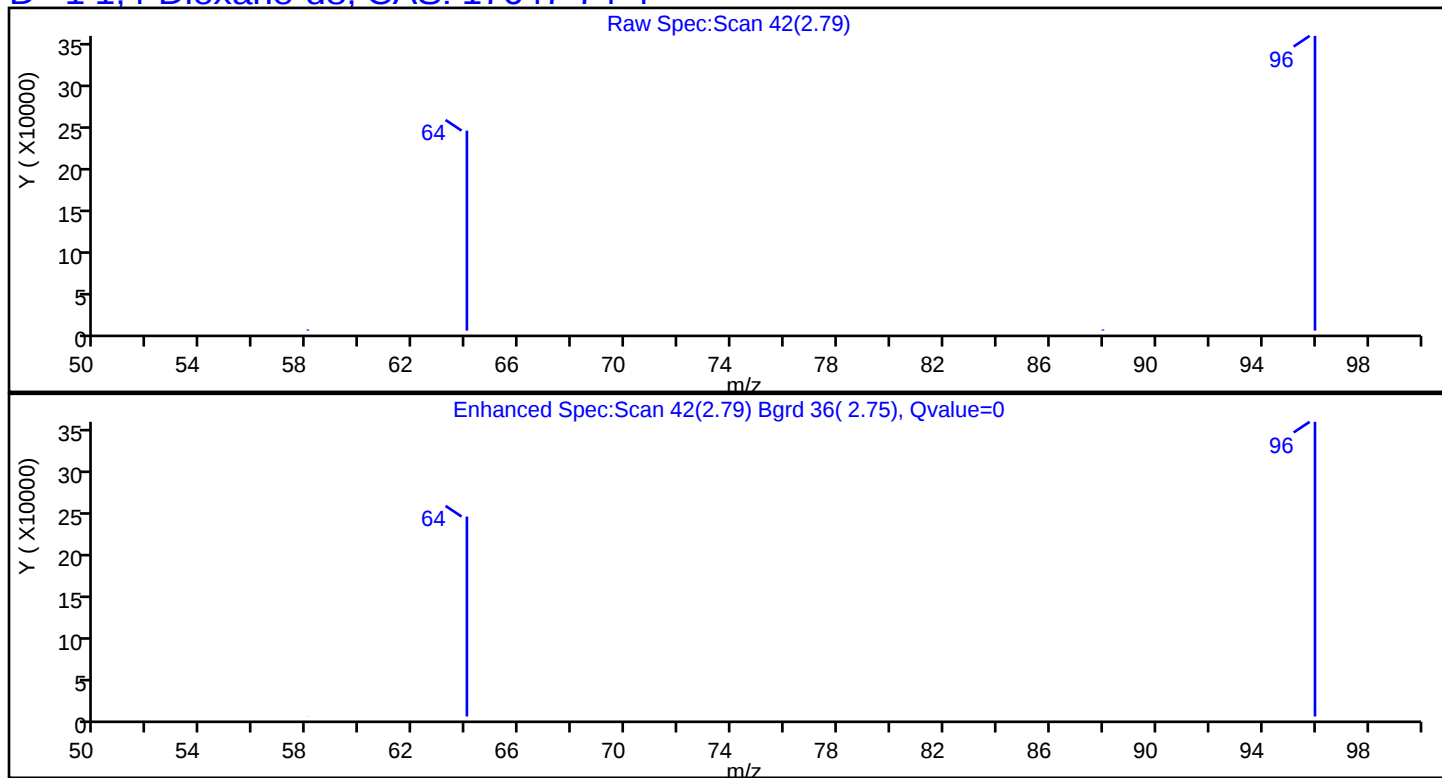
Limit Group:

MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS (0.25 mm)

Detector

MS SCAN

**D 1 1,4-Dioxane-d8, CAS: 17647-74-4**

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32248.D

Injection Date: 26-Dec-2018 16:27:30

Instrument ID: CBNAMS13

Lims ID: 460-172261-B-4-A

Lab Sample ID: 460-172261-4

Client ID: IRP7-MW01

Operator ID:

ALS Bottle#:

29

Worklist Smp#: 29

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

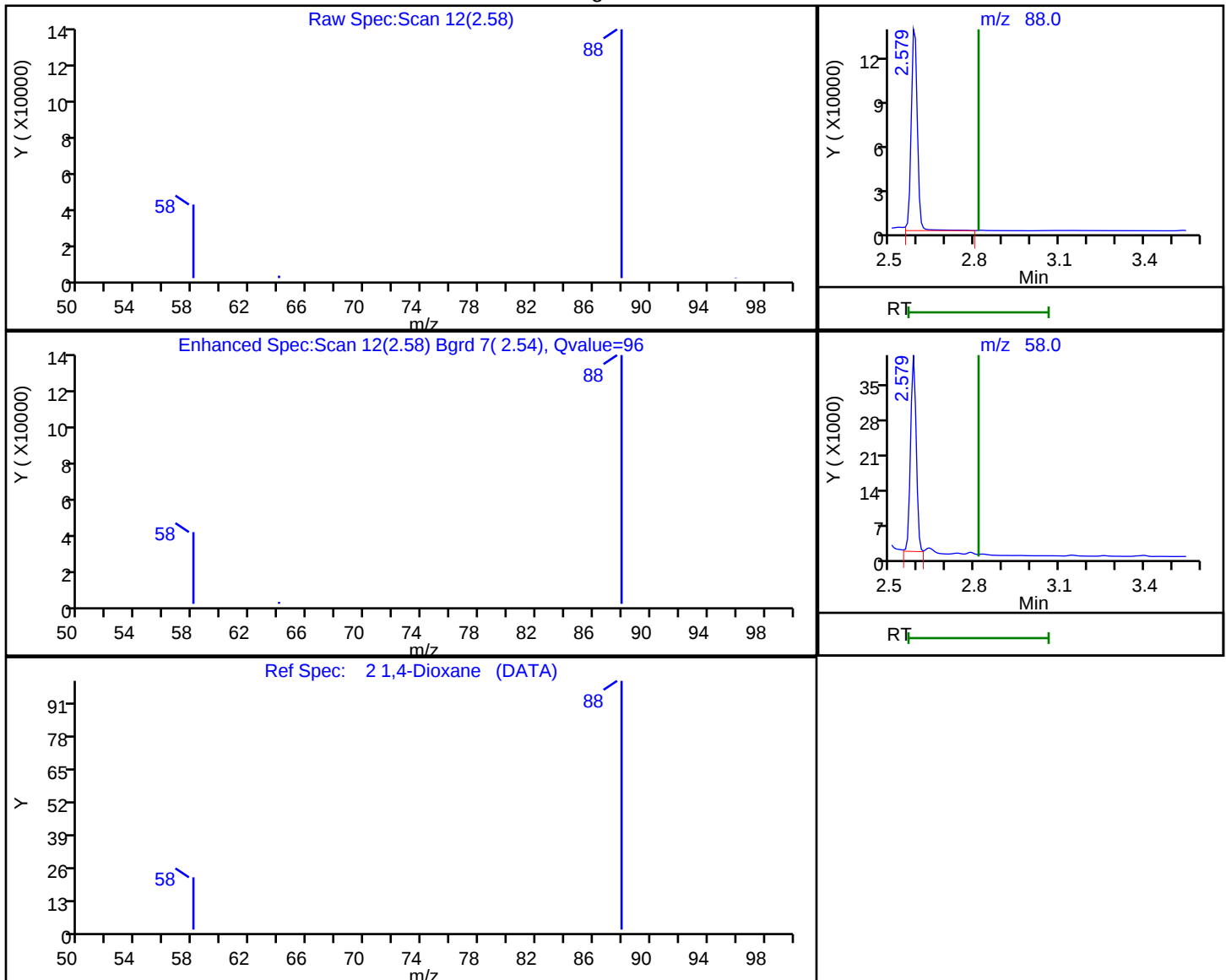
Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

## Processing Results



| RT   | Mass  | Response | Amount   |
|------|-------|----------|----------|
| 2.58 | 88.00 | 205765   | 1.150742 |
| 2.58 | 58.00 | 53832    |          |

Reviewer: khlungprakhons, 27-Dec-2018 14:13:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: TestAmerica Edison Job No.: 460-172261-1 Analy Batch No.: 518314

SDG No.: \_\_\_\_\_

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 12:48 Calibration End Date: 05/11/2018 17:20 Calibration ID: 68479

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | STD1 460-518314/9 | C28993.D     |
| Level 2 | STD2 460-518314/8 | C28992.D     |
| Level 3 | STD3 460-518314/7 | C28991.D     |
| Level 4 | ICIS 460-518314/2 | C28986.D     |
| Level 5 | STD8 460-518314/3 | C28987.D     |
| Level 6 | STD7 460-518314/4 | C28988.D     |
| Level 7 | STD6 460-518314/5 | C28989.D     |
| Level 8 | STD4 460-518314/6 | C28990.D     |

| ANALYTE        | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|----------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 1,4-Dioxane    | 1.4707<br>1.1835 | 1.4974<br>1.2114 | 1.3755<br>1.3268 | 1.2864 | 1.0062 | AveID         |             | 1.2947 |    |   |         | 12.5 |   | 50.0        |               |   |                   |
| 1,4-Dioxane-d8 | 0.4001<br>0.3970 | 0.3939<br>0.3945 | 0.3865<br>0.3964 | 0.3977 | 0.3963 | Ave           |             | 0.3953 |    |   |         | 1.0  |   | 50.0        |               |   |                   |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-172261-1 Analy Batch No.: 518314

SDG No.: \_\_\_\_\_

Instrument ID: CBNAMS13 GC Column: Rtxi-5Sil M ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 12:48 Calibration End Date: 05/11/2018 17:20 Calibration ID: 68479

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
|---------|-------------------|--------------|
| Level 1 | STD1 460-518314/9 | C28993.D     |
| Level 2 | STD2 460-518314/8 | C28992.D     |
| Level 3 | STD3 460-518314/7 | C28991.D     |
| Level 4 | ICIS 460-518314/2 | C28986.D     |
| Level 5 | STD8 460-518314/3 | C28987.D     |
| Level 6 | STD7 460-518314/4 | C28988.D     |
| Level 7 | STD6 460-518314/5 | C28989.D     |
| Level 8 | STD4 460-518314/6 | C28990.D     |

| ANALYTE        | IS<br>REF | CURVE<br>TYPE | RESPONSE           |                    |                    |         |         | CONCENTRATION (UG/ML) |                |                |       |       |
|----------------|-----------|---------------|--------------------|--------------------|--------------------|---------|---------|-----------------------|----------------|----------------|-------|-------|
|                |           |               | LVL 1<br>LVL 6     | LVL 2<br>LVL 7     | LVL 3<br>LVL 8     | LVL 4   | LVL 5   | LVL 1<br>LVL 6        | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 1,4-Dioxane    |           | AveID         | 19118<br>1516533   | 40300<br>779650    | 88487<br>176553    | 413818  | 6531196 | 0.0200<br>2.00        | 0.0400<br>1.00 | 0.100<br>0.200 | 0.500 | 10.0  |
| 1,4-Dioxane-d8 | DCBd<br>4 | Ave           | 2599863<br>2562721 | 2691312<br>2574395 | 2573218<br>2661308 | 2573458 | 2596349 | 4.00<br>4.00          | 4.00<br>4.00   | 4.00<br>4.00   | 4.00  | 4.00  |

Curve Type Legend:

Ave = Average ISTD  
AveID = Average isotope dilution

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28986.D  
 Lims ID: icis  
 Client ID:  
 Sample Type: ICIS Calib Level: 5  
 Inject. Date: 11-May-2018 12:48:30 ALS Bottle#: 9 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-002  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:25 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 11-May-2018 13:27:37

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2573458  | 4.00             | 4.02               | a     |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 79 | 413818   | 0.5000           | 0.4968             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.952        | 5.952            | 0.000            | 98 | 323558   | 0.2000           | 0.2000             |       |

**QC Flag Legend**

Review Flags

a - User Assigned ID

**Reagents:**

SM\_ISOTOPL5\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28986.D

Injection Date: 11-May-2018 12:48:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: icis

Worklist Smp#: 2

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

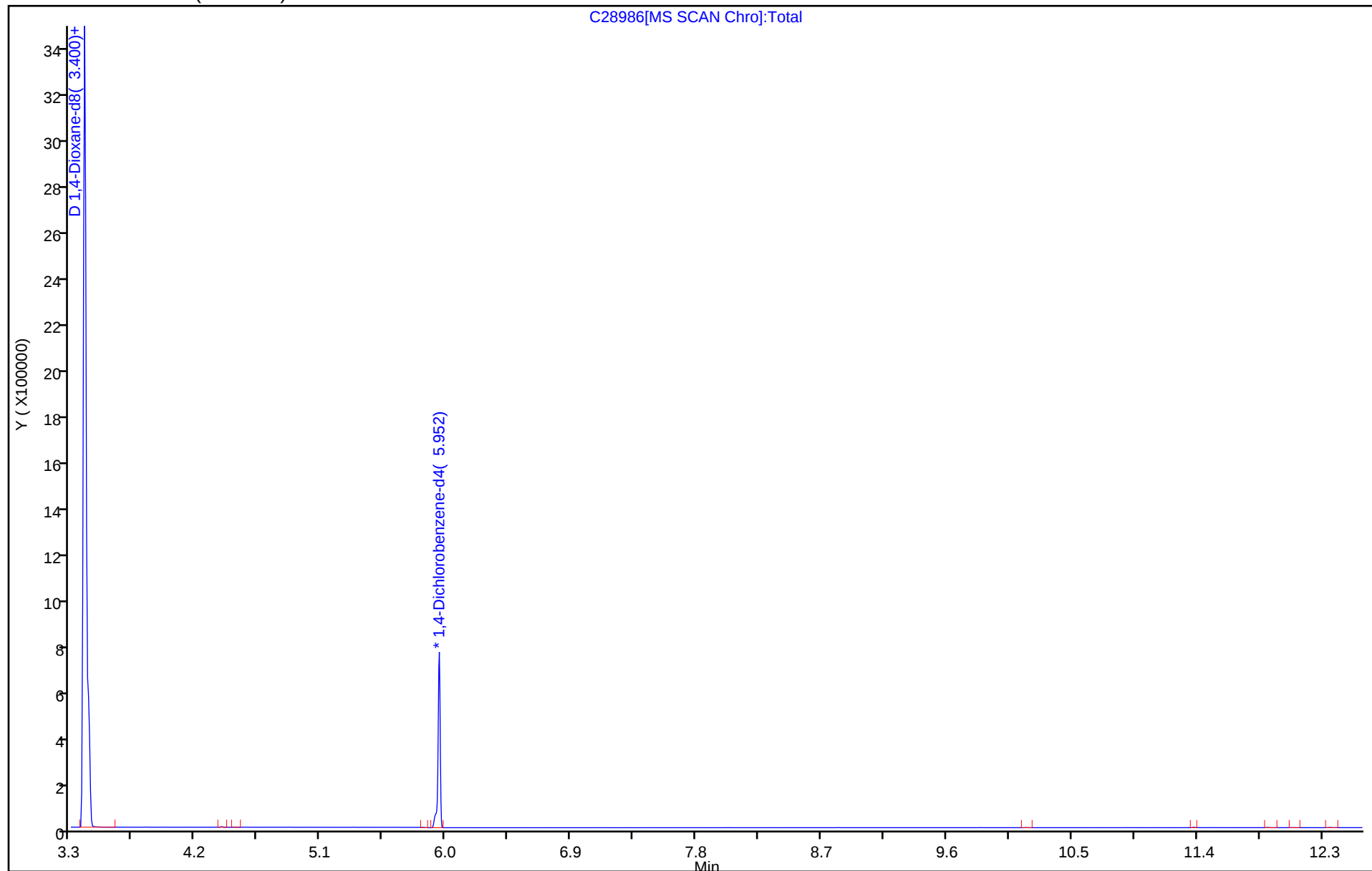
ALS Bottle#: 9

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C28986[MS SCAN Chro]:Total



## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28986.D

Injection Date: 11-May-2018 12:48:30

Instrument ID: CBNAMS13

Lims ID: icis

Client ID:

Operator ID:

ALS Bottle#:

9

Worklist Smp#: 2

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

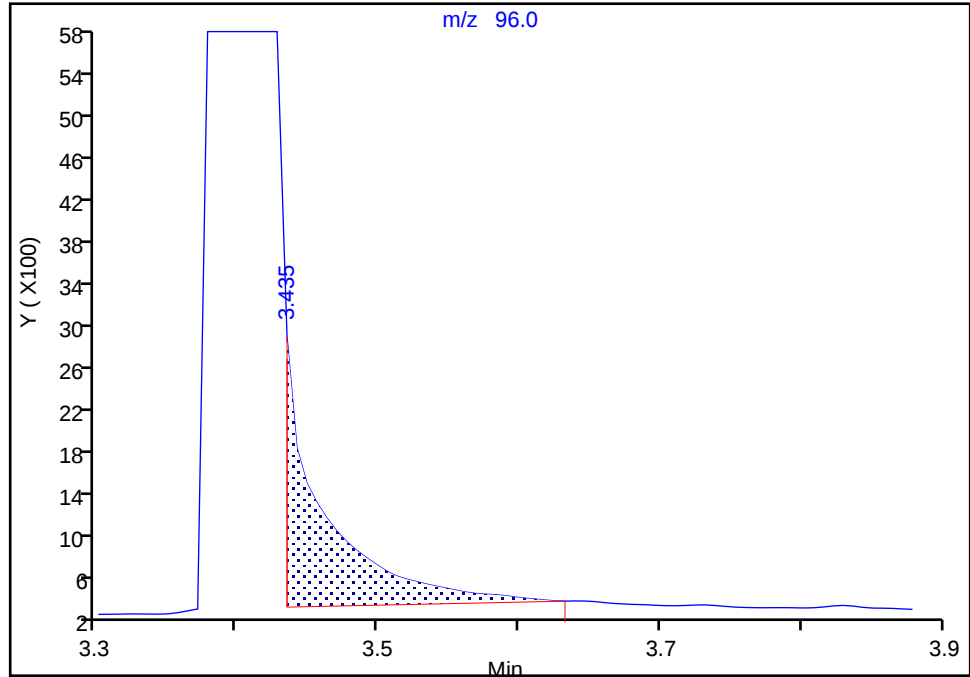
Detector: MS SCAN

**D 1 1,4-Dioxane-d8, CAS: 17647-74-4**

Signal: 1

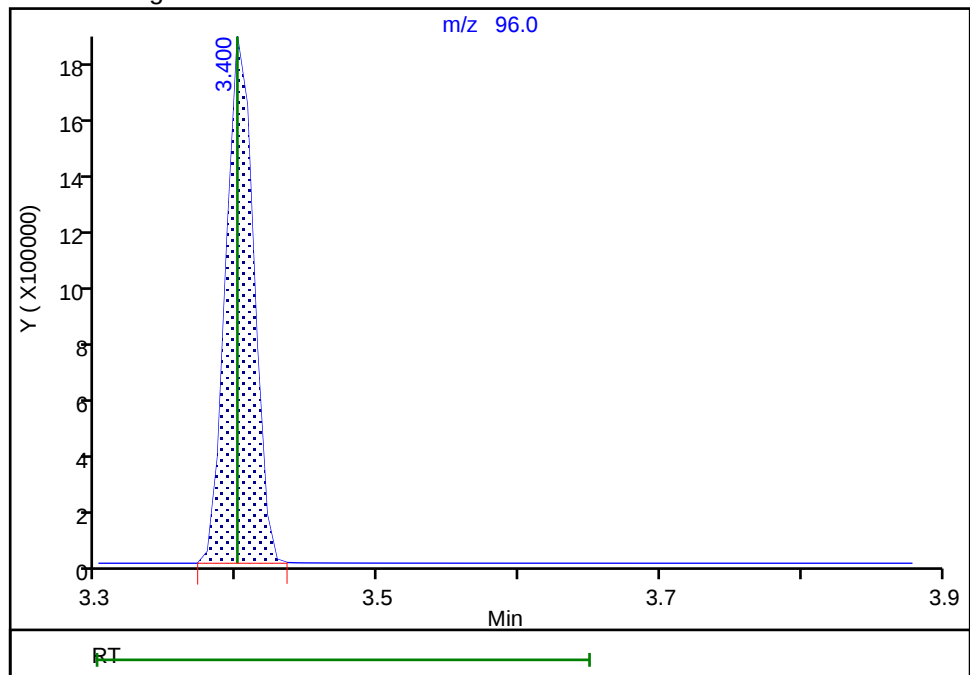
RT: 3.43  
Area: 5015  
Amount: 4.029831  
Amount Units: ug/ml

## Processing Integration Results



RT: 3.40  
Area: 2573458  
Amount: 4.024073  
Amount Units: ug/ml

## Manual Integration Results



Reviewer: johnstonm1, 11-May-2018 13:27:27

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28987.D  
 Lims ID: STD8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 11-May-2018 13:08:30 ALS Bottle#: 10 Worklist Smp#: 3  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-003  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:25 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 11-May-2018 13:28:03

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.392        | 3.400            | -0.008           | 0  | 2596349  | 4.00             | 4.01               | a     |
| 2 1,4-Dioxane              | 88  | 3.421        | 3.428            | -0.007           | 78 | 6531196  | 10.0             | 7.77               |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.944        | 5.952            | -0.008           | 97 | 327569   | 0.2000           | 0.2000             |       |

**QC Flag Legend**

Review Flags

a - User Assigned ID

**Reagents:**

SM\_ISOTOPL8\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28987.D

Injection Date: 11-May-2018 13:08:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD8

Worklist Smp#: 3

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

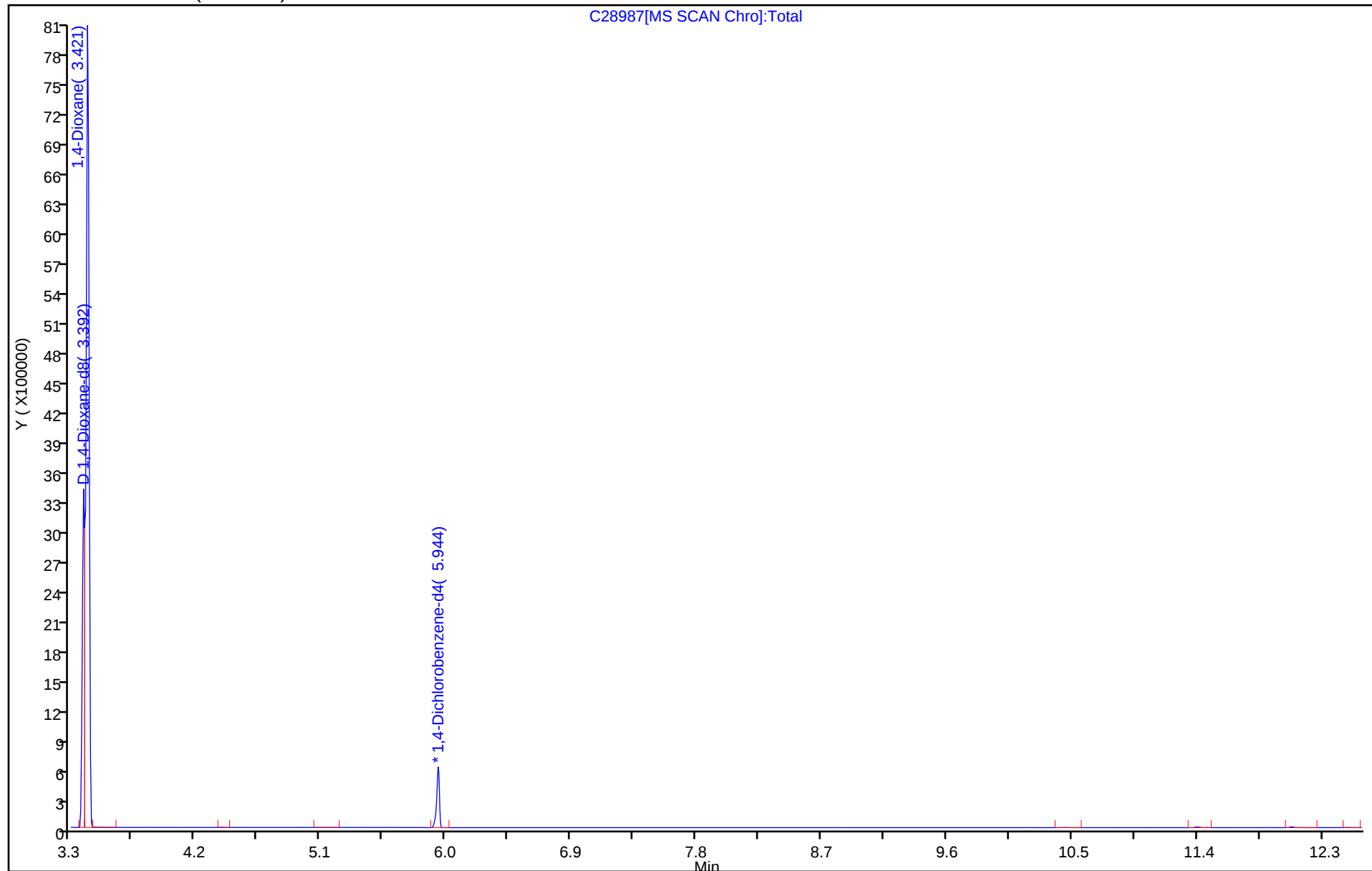
ALS Bottle#: 10

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C28987[MS SCAN Chro]:Total



## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28987.D

Injection Date: 11-May-2018 13:08:30

Instrument ID: CBNAMS13

Lims ID: STD8

Client ID:

Operator ID:

ALS Bottle#:

10

Worklist Smp#:

3

Injection Vol: 5.0 ul

Dil. Factor:

1.0000

Method: 8270\_Isotope

Limit Group:

MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector

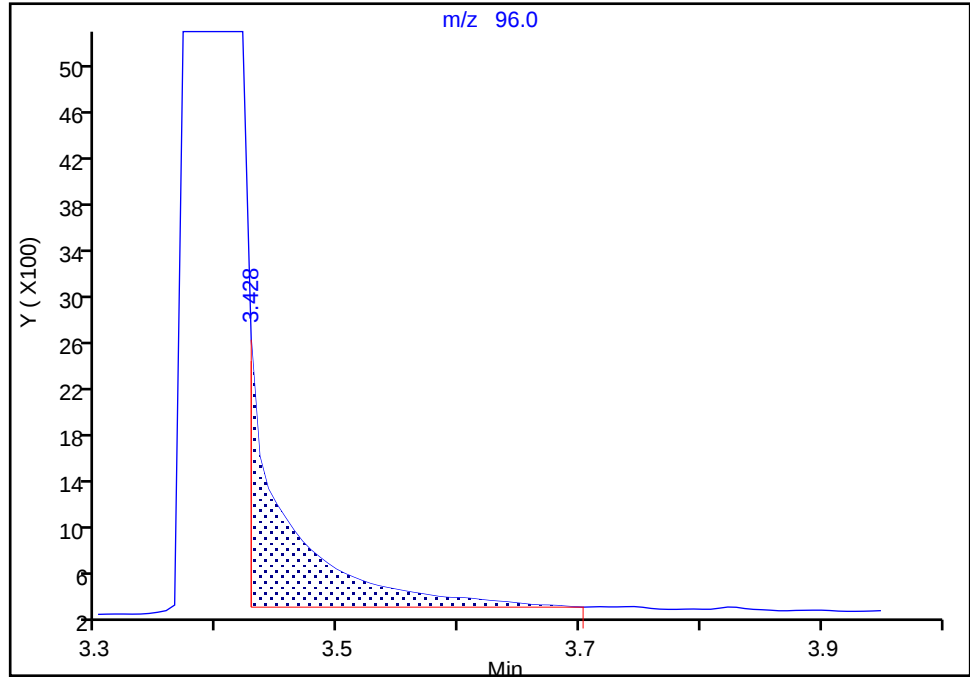
MS SCAN

**D 1 1,4-Dioxane-d8, CAS: 17647-74-4**

Signal: 1

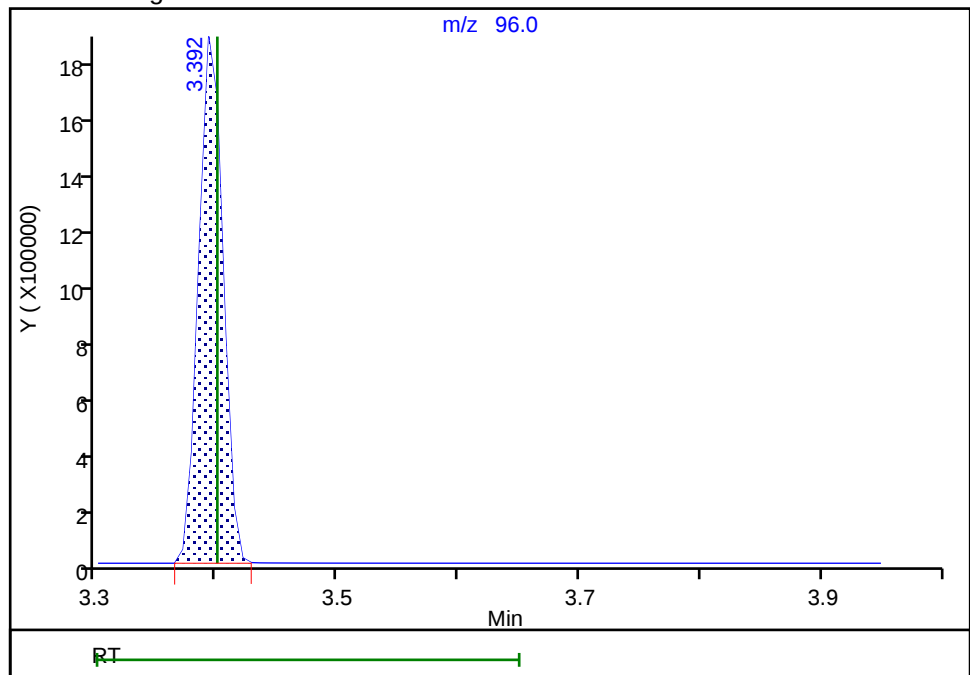
RT: 3.43  
Area: 5002  
Amount: 0.015330  
Amount Units: ug/ml

## Processing Integration Results



RT: 3.39  
Area: 2596349  
Amount: 4.010155  
Amount Units: ug/ml

## Manual Integration Results



Reviewer: johnstonm1, 11-May-2018 13:27:45

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28988.D  
 Lims ID: STD7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 11-May-2018 13:27:30 ALS Bottle#: 11 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-004  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:26 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:21

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2562721  | 4.00             | 4.02               |       |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 79 | 1516533  | 2.00             | 1.83               |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.948        | 5.952            | -0.004           | 99 | 322762   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL7\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28988.D

Injection Date: 11-May-2018 13:27:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD7

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 ul

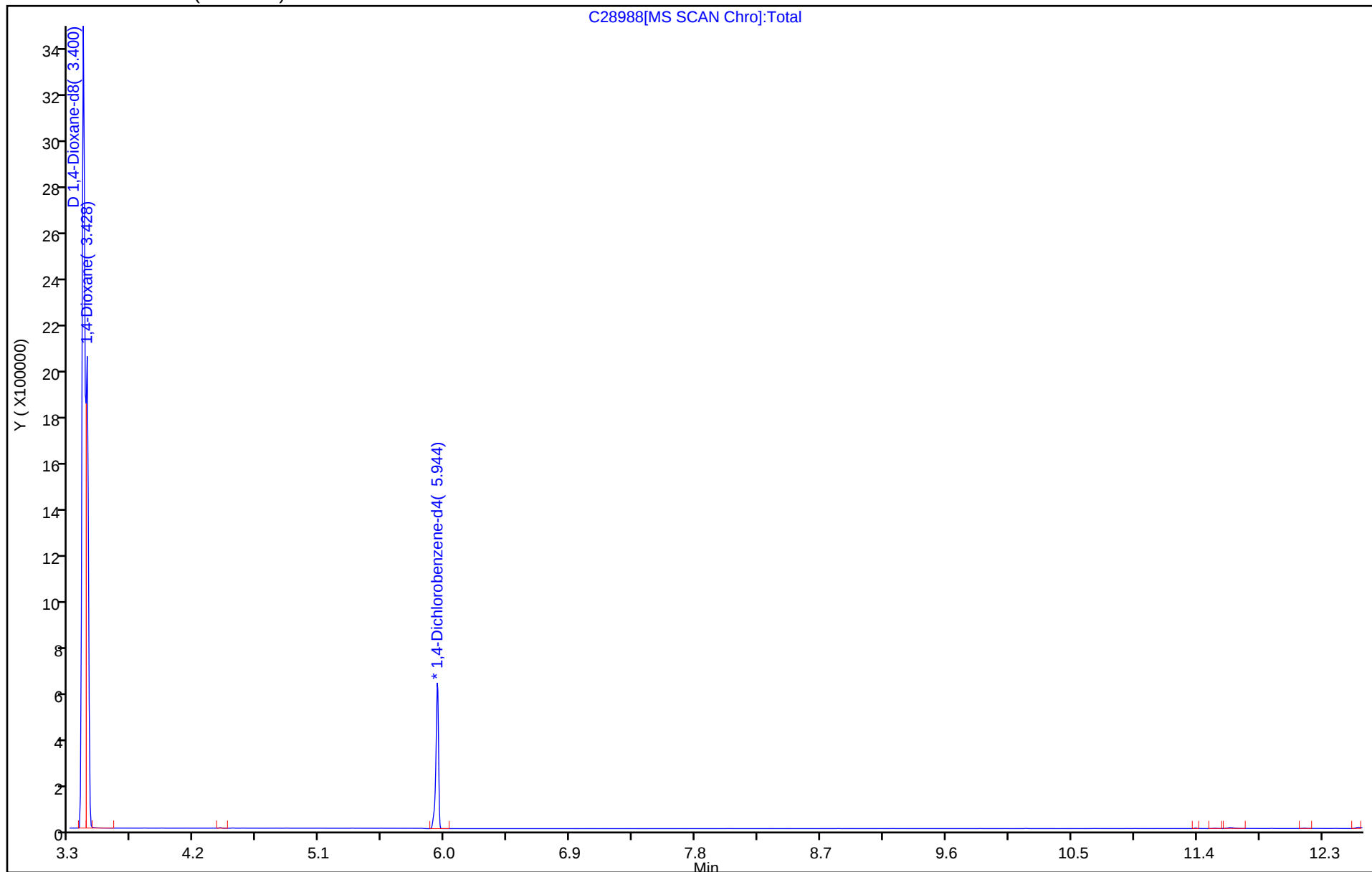
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28989.D  
 Lims ID: STD6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 11-May-2018 14:16:30 ALS Bottle#: 12 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-005  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:27 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:26

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2574395  | 4.00             | 3.99               |       |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 82 | 779650   | 1.00             | 0.9356             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.948        | 5.952            | -0.004           | 97 | 326300   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL6\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28989.D

Injection Date: 11-May-2018 14:16:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD6

Worklist Smp#: 5

Client ID:

Injection Vol: 5.0 ul

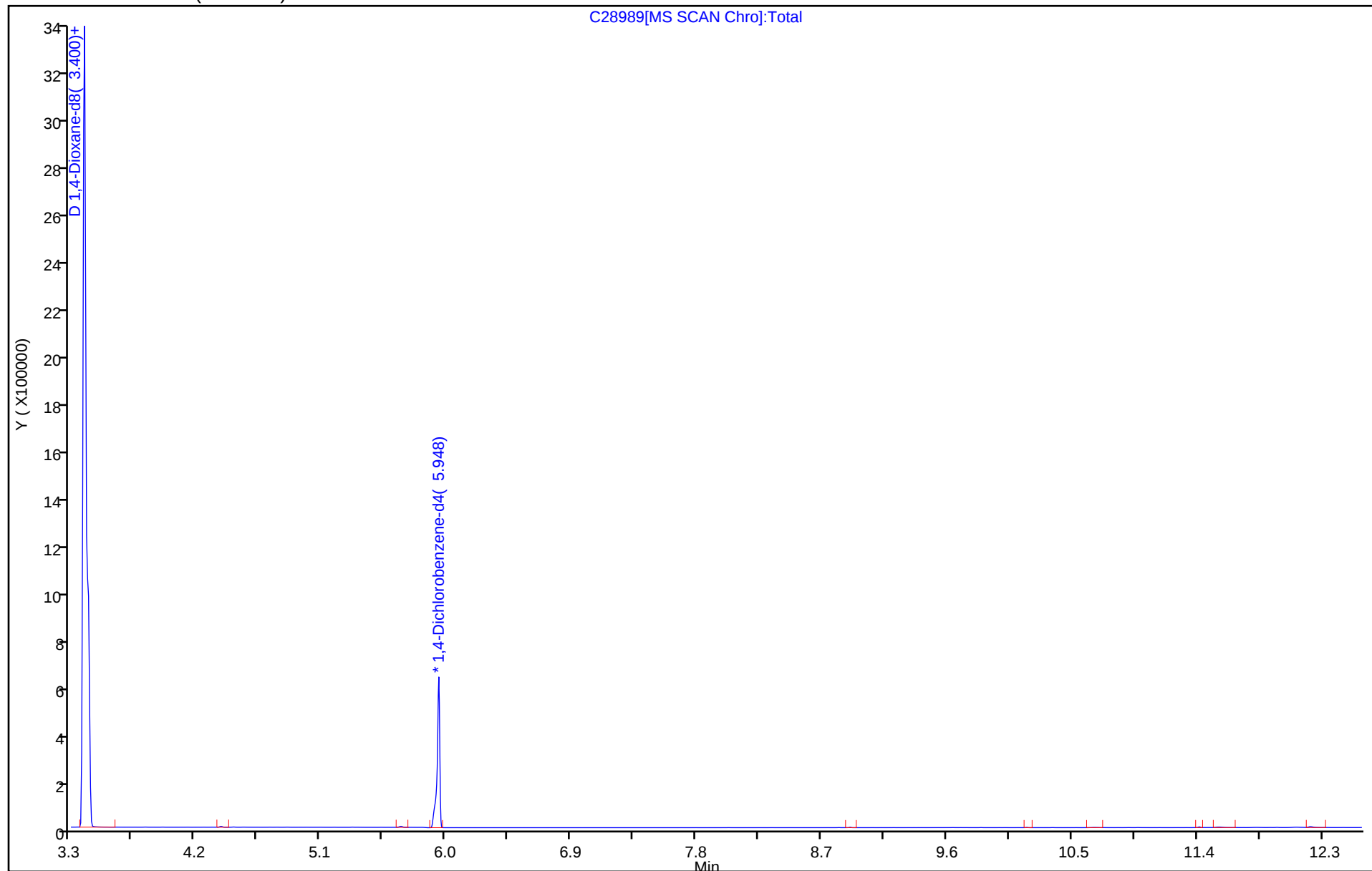
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28990.D  
 Lims ID: STD4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 11-May-2018 14:35:30 ALS Bottle#: 13 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-006  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:28 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:33

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.399        | 3.400            | -0.001           | 0  | 2661308  | 4.00             | 4.01               |       |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 79 | 176553   | 0.2000           | 0.2050             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.944        | 5.952            | -0.008           | 96 | 335668   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL4\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\\Edison\\ChromData\\CBNAMS13\\20180511-71845.b\\C28990.D

Injection Date: 11-May-2018 14:35:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD4

Worklist Smp#: 6

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

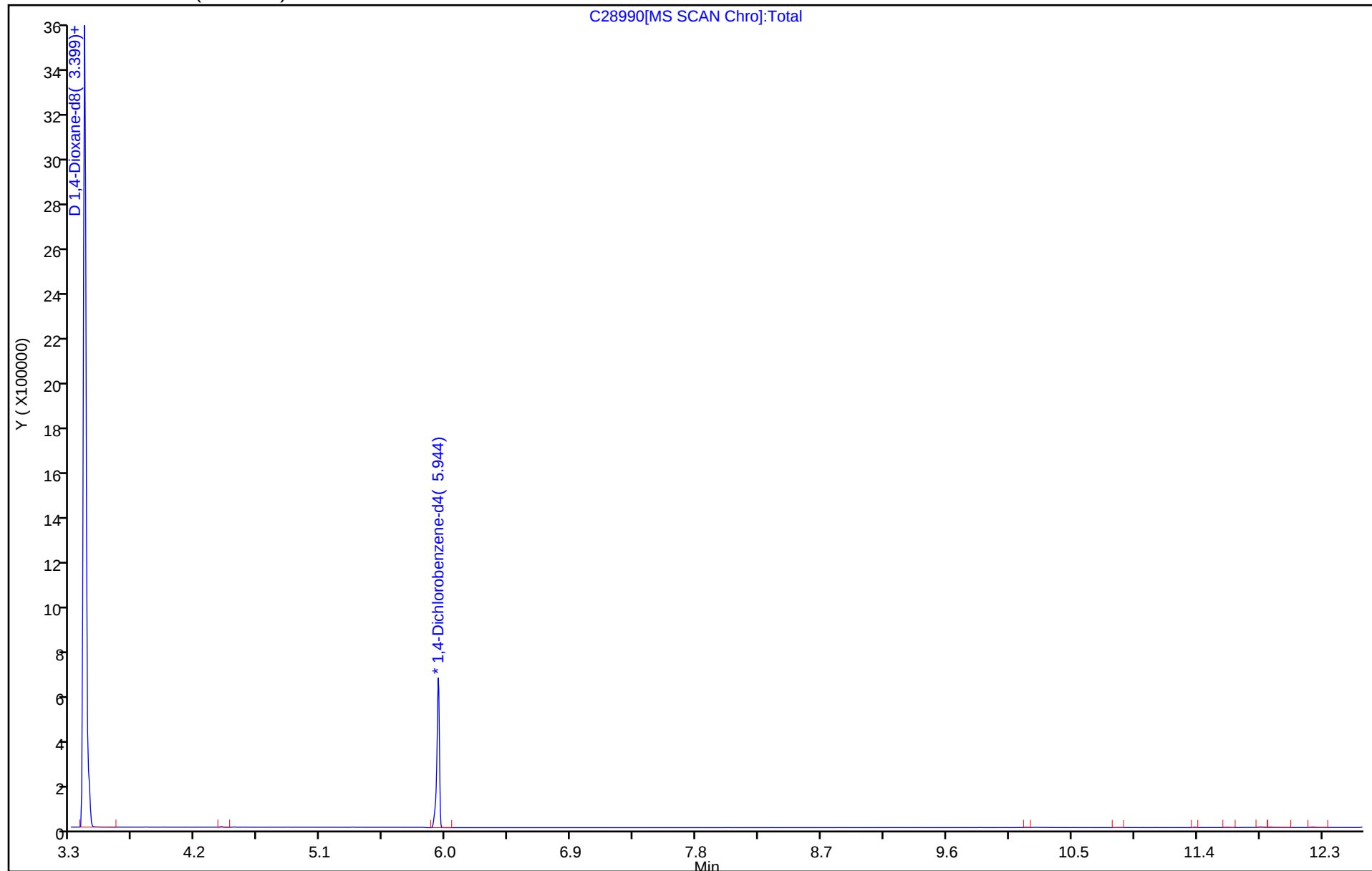
ALS Bottle#: 13

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C28990[MS SCAN Chro]:Total



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28991.D  
 Lims ID: STD3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 11-May-2018 15:44:30 ALS Bottle#: 14 Worklist Smp#: 7  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-007  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:28 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:37

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2573218  | 4.00             | 3.91               |       |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 81 | 88487    | 0.1000           | 0.1062             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.948        | 5.948            | 0.000            | 97 | 332866   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL3\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28991.D

Injection Date: 11-May-2018 15:44:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD3

Worklist Smp#: 7

Client ID:

Injection Vol: 5.0 ul

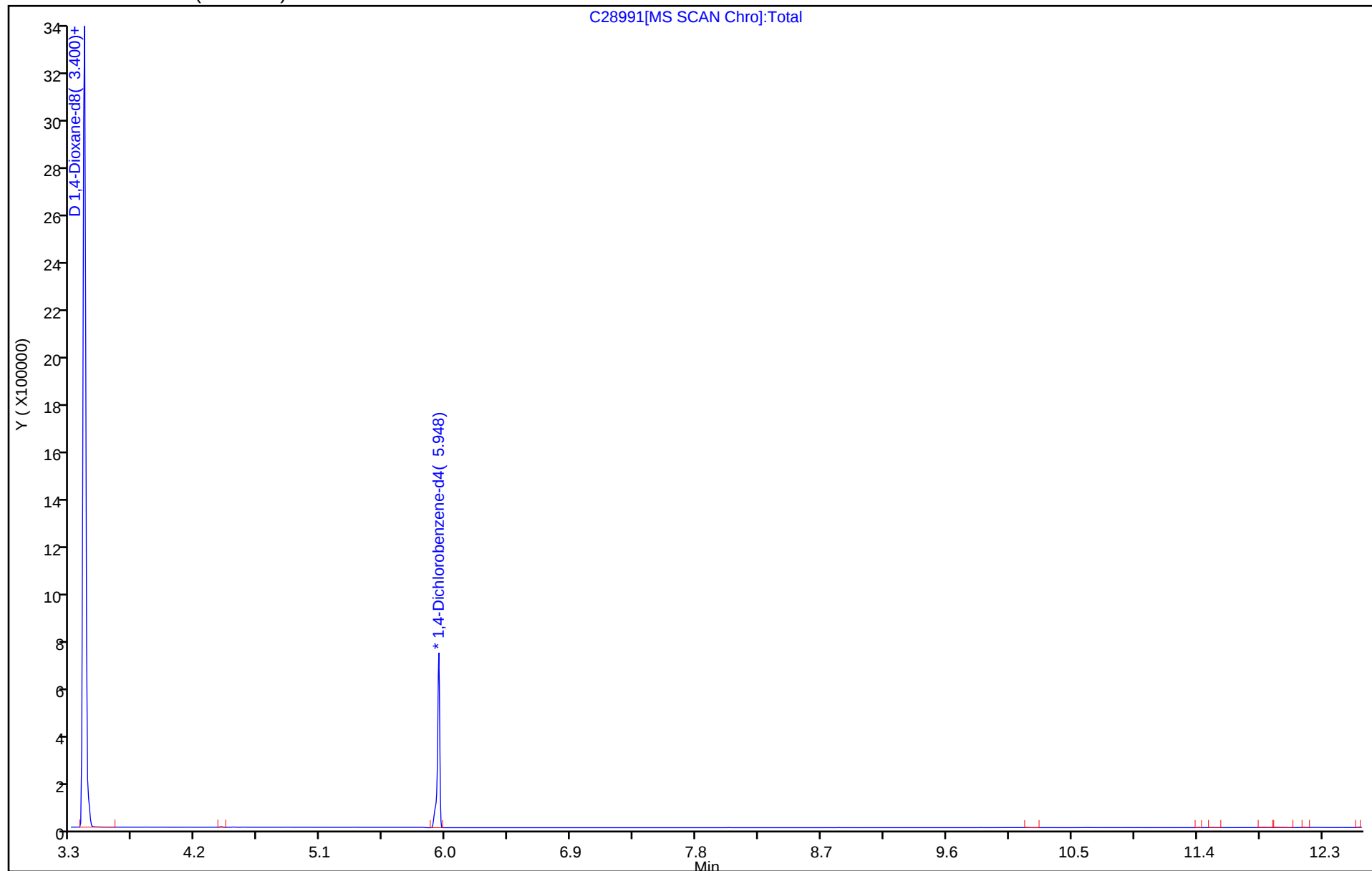
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28992.D  
 Lims ID: STD2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 11-May-2018 16:02:30 ALS Bottle#: 15 Worklist Smp#: 8  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-008  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:29 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:44

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2691312  | 4.00             | 3.99               |       |
| 2 1,4-Dioxane              | 88  | 3.435        | 3.428            | 0.007            | 85 | 40300    | 0.0400           | 0.0463             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.948        | 5.948            | 0.000            | 97 | 341640   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL2\_00001

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28992.D

Injection Date: 11-May-2018 16:02:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD2

Worklist Smp#: 8

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

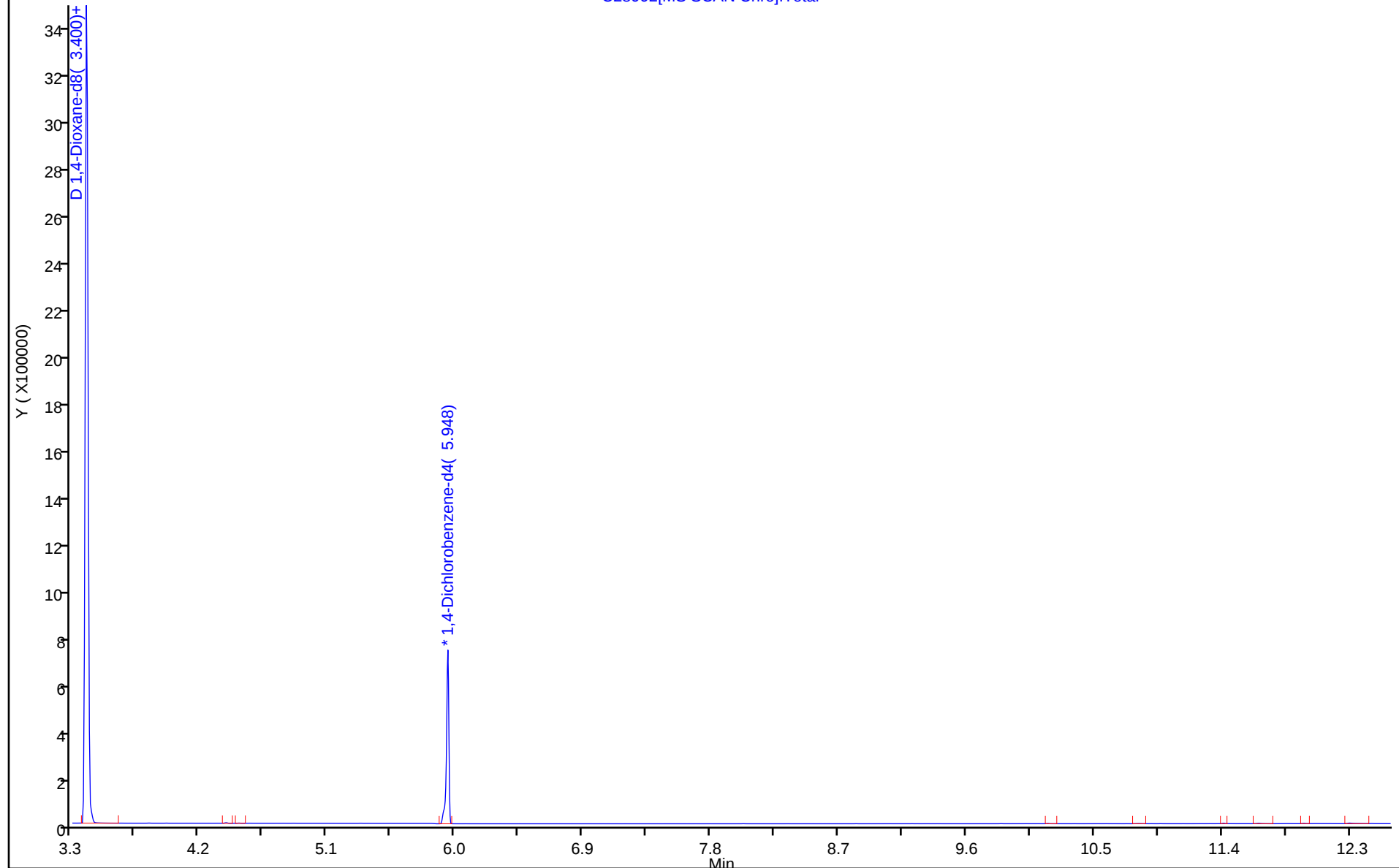
ALS Bottle#: 15

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C28992[MS SCAN Chro]:Total



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Lims ID: STD1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 11-May-2018 17:20:30 ALS Bottle#: 16 Worklist Smp#: 9  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0071845-009  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 14-May-2018 12:12:30 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: XAWRK013

First Level Reviewer: johnstonm1

Date: 14-May-2018 08:54:50

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 3.400        | 3.400            | 0.000            | 0  | 2599863  | 4.00             | 4.05               |       |
| 2 1,4-Dioxane              | 88  | 3.428        | 3.428            | 0.000            | 87 | 19118    | 0.0200           | 0.0227             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.948        | 5.948            | 0.000            | 98 | 324883   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL1\_00001

Amount Added: 1.00

Units: mL

Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\\Edison\\ChromData\\CBNAMS13\\20180511-71845.b\\C28993.D

Injection Date: 11-May-2018 17:20:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: STD1

Worklist Smp#: 9

Client ID:

Injection Vol: 5.0 ul

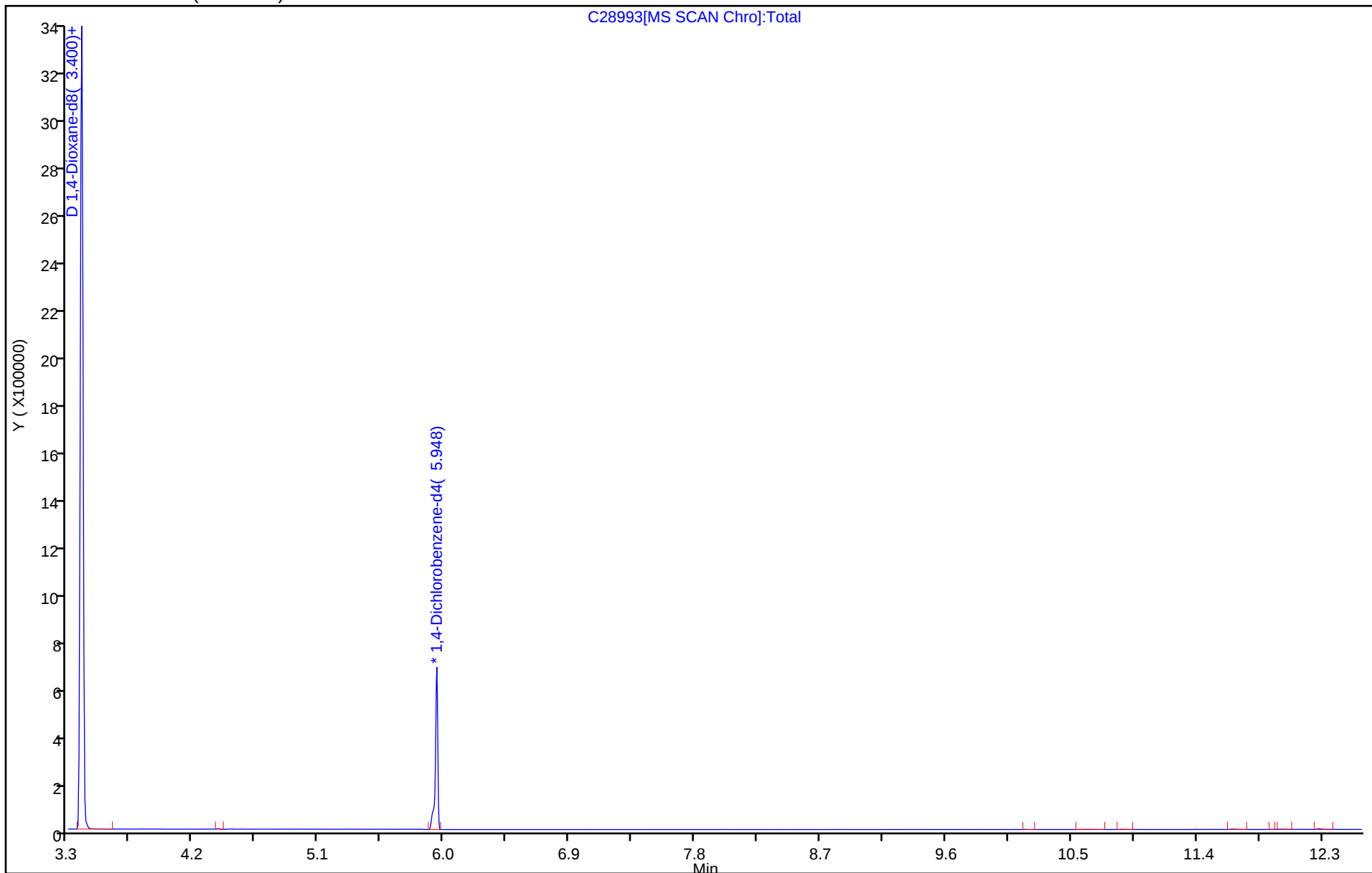
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 460-578622/2 Calibration Date: 12/26/2018 08:54  
Instrument ID: CBNAMS13 Calib Start Date: 05/11/2018 12:48  
GC Column: Rtxi-5Sil MS ID: 0.25 (mm) Calib End Date: 05/11/2018 17:20  
Lab File ID: C32221.D Conc. Units: ug/L

| ANALYTE        | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D   | MAX<br>%D |
|----------------|---------------|---------|--------|---------|----------------|-----------------|------|-----------|
| 1,4-Dioxane    | AveID         | 1.295   | 1.187  |         | 458            | 500             | -8.4 |           |
| 1,4-Dioxane-d8 | Ave           | 0.3953  | 0.3805 |         | 3850           | 4000            | -3.8 | 50.0      |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32221.D  
 Lims ID: ccvis  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 26-Dec-2018 08:54:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-002  
 Operator ID: Instrument ID: CBNAMS13  
 Sublist: chrom-8270\_Isotope\*sub1  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 26-Dec-2018 10:59:46 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0308

First Level Reviewer: zhaoc

Date: 26-Dec-2018 09:10:49

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.783        | 2.781            | 0.000            | 0  | 1337183  | 4.00             | 3.85               |       |
| 2 1,4-Dioxane              | 88  | 2.811        | 2.811            | 0.000            | 80 | 198334   | 0.5000           | 0.4582             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.584        | 5.584            | 0.000            | 98 | 175729   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_ISOTOPL5\_00002

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32221.D

Injection Date: 26-Dec-2018 08:54:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: ccvis

Worklist Smp#: 2

Client ID:

Injection Vol: 5.0 ul

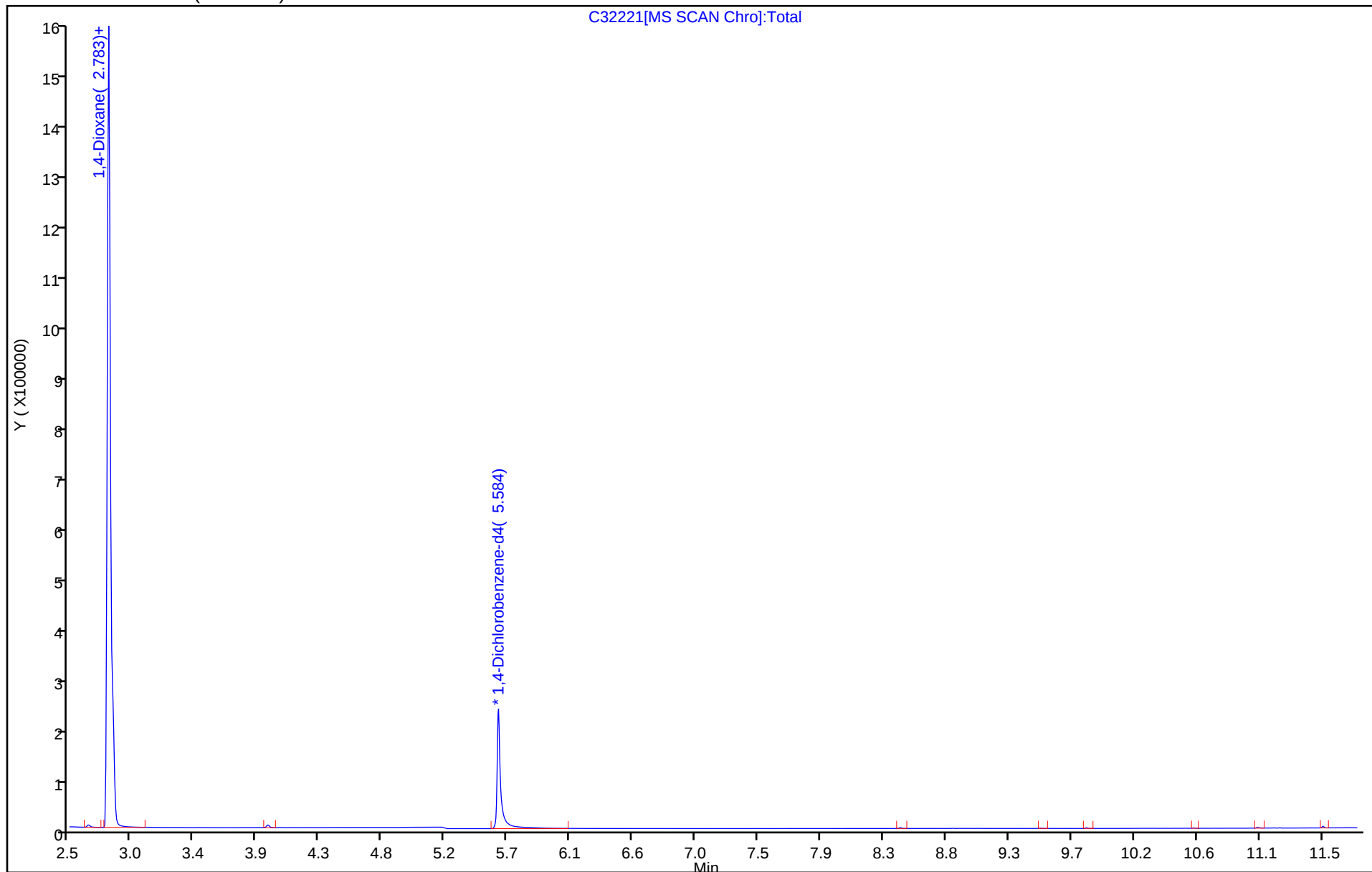
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28985.D  
Lims ID: DFTPP  
Client ID:  
Sample Type: DFTPP  
Inject. Date: 11-May-2018 12:33:30 ALS Bottle#: 1 Worklist Smp#: 1  
Injection Vol: 5.0 ul Dil. Factor: 1.0000  
Sample Info: 460-0071845-001  
Operator ID: Instrument ID: CBNAMS13  
Method: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\8270\_Isotope.m  
Limit Group: MSS 8270 Isotope Dilution IS  
Last Update: 14-May-2018 12:12:23 Calib Date: 11-May-2018 17:20:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Isotopic Dilution Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
Process Host: XAWRK013

| Compound | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|------------------|--------------------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|------------------|--------------------|-------|

3 DFTPP

**Reagents:**

SMDFTP\_CH\_00024

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28985.D

Injection Date: 11-May-2018 12:33:30

Instrument ID: CBNAMS13

Lims ID: DFTPP

Client ID:

Operator ID:

ALS Bottle#:

1

Worklist Smp#:

1

Injection Vol: 5.0 ul

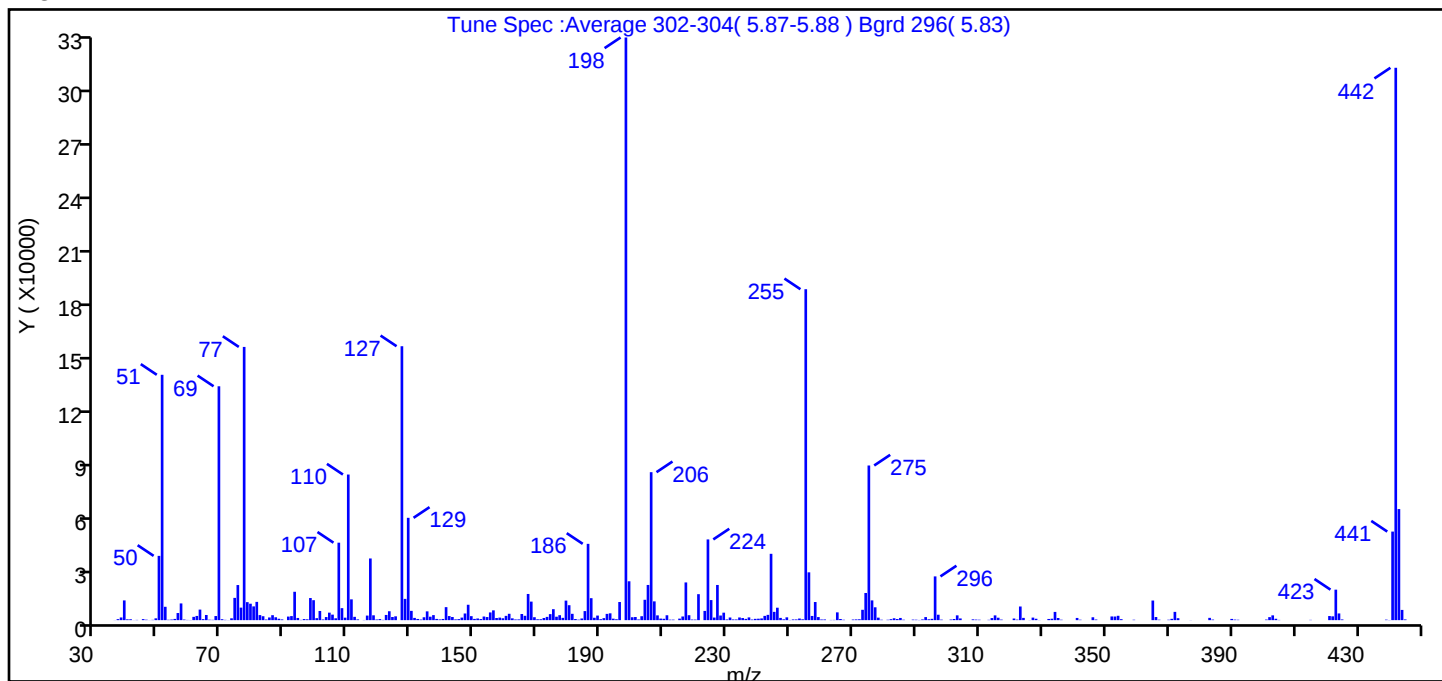
Dil. Factor: 1.0000

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Tune Method: DFTPP Method 8270

## 3 DFTPP



| m/z | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base peak, 100% relative abundance | 100.0                |
| 51  | 30-60% of mass 198                 | 42.1                 |
| 68  | <2% of mass 69                     | 0.7 (1.8)            |
| 69  | Present                            | 40.1                 |
| 70  | <2% of mass 69                     | 0.2 (0.4)            |
| 127 | 40-60% of mass 198                 | 47.0                 |
| 197 | <1% of mass 198                    | 0.0                  |
| 199 | 5-9% of mass 198                   | 6.7                  |
| 275 | 10-30% of mass 198                 | 26.5                 |
| 365 | >1% of mass 198                    | 3.4                  |
| 441 | Present but less than mass 443     | 15.2 (79.7)          |
| 442 | >40% of mass 198                   | 94.8                 |
| 443 | 17-23% of mass 442                 | 19.1 (20.1)          |

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28985.D\8270\_Isotope.rsl\spectra.d  
Injection Date: 11-May-2018 12:33:30  
Spectrum: Tune Spec :Average 302-304( 5.87-5.88 ) Bgrd 296( 5.83)  
Base Peak: 198.00  
Minimum % Base Peak: 0  
Number of Points: 315

| m/z   | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y     |
|-------|--------|--------|--------|--------|-------|--------|-------|
| 36.00 | 49     | 118.00 | 2662   | 199.00 | 21424 | 284.00 | 629   |
| 37.00 | 560    | 119.00 | 356    | 200.00 | 1603  | 285.00 | 1209  |
| 38.00 | 1472   | 120.00 | 579    | 201.00 | 1724  | 286.00 | 232   |
| 39.00 | 10876  | 121.00 | 155    | 202.00 | 387   | 289.00 | 295   |
| 40.00 | 455    | 122.00 | 2863   | 203.00 | 2164  | 290.00 | 241   |
| 41.00 | 481    | 123.00 | 4900   | 204.00 | 11226 | 291.00 | 106   |
| 42.00 | 39     | 124.00 | 1725   | 205.00 | 19392 | 292.00 | 398   |
| 43.00 | 136    | 125.00 | 2104   | 206.00 | 81552 | 293.00 | 1687  |
| 45.00 | 569    | 127.00 | 150976 | 207.00 | 10345 | 294.00 | 477   |
| 46.00 | 256    | 128.00 | 11721  | 208.00 | 2633  | 295.00 | 726   |
| 47.00 | 48     | 129.00 | 56400  | 209.00 | 858   | 296.00 | 24112 |
| 48.00 | 154    | 130.00 | 5115   | 210.00 | 754   | 297.00 | 2986  |
| 49.00 | 996    | 131.00 | 1239   | 211.00 | 2693  | 298.00 | 280   |
| 50.00 | 35424  | 132.00 | 659    | 212.00 | 261   | 301.00 | 344   |
| 51.00 | 135232 | 133.00 | 329    | 213.00 | 275   | 302.00 | 633   |
| 52.00 | 7359   | 134.00 | 1590   | 215.00 | 837   | 303.00 | 2643  |
| 53.00 | 210    | 135.00 | 4840   | 216.00 | 2019  | 304.00 | 933   |
| 54.00 | 335    | 136.00 | 1900   | 217.00 | 20784 | 308.00 | 434   |
| 55.00 | 677    | 137.00 | 2771   | 218.00 | 2720  | 309.00 | 311   |
| 56.00 | 3922   | 138.00 | 678    | 219.00 | 327   | 310.00 | 233   |
| 57.00 | 9214   | 139.00 | 389    | 220.00 | 311   | 313.00 | 174   |
| 58.00 | 331    | 140.00 | 654    | 221.00 | 14315 | 314.00 | 1138  |
| 59.00 | 120    | 141.00 | 7166   | 223.00 | 5085  | 315.00 | 2625  |
| 60.00 | 90     | 142.00 | 2254   | 224.00 | 44488 | 316.00 | 1335  |
| 61.00 | 1811   | 143.00 | 1719   | 225.00 | 11061 | 317.00 | 300   |
| 62.00 | 2317   | 144.00 | 426    | 226.00 | 1424  | 321.00 | 894   |
| 63.00 | 5816   | 145.00 | 563    | 227.00 | 19384 | 322.00 | 294   |
| 64.00 | 555    | 146.00 | 1400   | 228.00 | 2545  | 323.00 | 7522  |
| 65.00 | 2842   | 147.00 | 3667   | 229.00 | 4119  | 324.00 | 1244  |
| 66.00 | 251    | 148.00 | 8479   | 230.00 | 384   | 326.00 | 59    |
| 67.00 | 178    | 149.00 | 2193   | 231.00 | 1459  | 327.00 | 1399  |
| 68.00 | 2257   | 150.00 | 689    | 232.00 | 385   | 328.00 | 759   |
| 69.00 | 128904 | 151.00 | 917    | 233.00 | 373   | 329.00 | 56    |

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28985.D\8270\_Isotope.rslt\spectra.d

Injection Date: 11-May-2018 12:33:30

Spectrum: Tune Spec :Average 302-304( 5.87-5.88 ) Bgrd 296( 5.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 315

| m/z    | Y      | m/z    | Y     | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|-------|--------|--------|--------|-------|
| 70.00  | 507    | 152.00 | 605   | 234.00 | 1468   | 332.00 | 652   |
| 71.00  | 162    | 153.00 | 1996  | 235.00 | 1159   | 333.00 | 788   |
| 72.00  | 53     | 154.00 | 1704  | 236.00 | 695    | 334.00 | 4537  |
| 73.00  | 1010   | 155.00 | 4248  | 237.00 | 1514   | 335.00 | 1179  |
| 74.00  | 12272  | 156.00 | 5394  | 238.00 | 342    | 336.00 | 228   |
| 75.00  | 19344  | 157.00 | 1184  | 239.00 | 721    | 341.00 | 1210  |
| 76.00  | 6896   | 158.00 | 1388  | 240.00 | 795    | 342.00 | 233   |
| 77.00  | 150592 | 159.00 | 1030  | 241.00 | 946    | 346.00 | 1584  |
| 78.00  | 9919   | 160.00 | 2360  | 242.00 | 2348   | 347.00 | 356   |
| 79.00  | 9058   | 161.00 | 3502  | 243.00 | 2909   | 352.00 | 2034  |
| 80.00  | 7582   | 162.00 | 993   | 244.00 | 36560  | 353.00 | 1993  |
| 81.00  | 10071  | 163.00 | 375   | 245.00 | 4562   | 354.00 | 2402  |
| 82.00  | 2783   | 164.00 | 408   | 246.00 | 6853   | 355.00 | 538   |
| 83.00  | 2157   | 165.00 | 3389  | 247.00 | 1236   | 359.00 | 225   |
| 84.00  | 351    | 166.00 | 2398  | 248.00 | 451    | 365.00 | 10809 |
| 85.00  | 1479   | 167.00 | 14423 | 249.00 | 1549   | 366.00 | 1720  |
| 86.00  | 2732   | 168.00 | 10214 | 250.00 | 103    | 367.00 | 253   |
| 87.00  | 1579   | 169.00 | 1613  | 251.00 | 388    | 370.00 | 225   |
| 88.00  | 770    | 170.00 | 482   | 252.00 | 391    | 371.00 | 728   |
| 89.00  | 398    | 171.00 | 499   | 253.00 | 887    | 372.00 | 4559  |
| 91.00  | 1966   | 172.00 | 1186  | 254.00 | 465    | 373.00 | 1064  |
| 92.00  | 2232   | 173.00 | 1788  | 255.00 | 182400 | 377.00 | 50    |
| 93.00  | 15636  | 174.00 | 3316  | 256.00 | 26352  | 383.00 | 1257  |
| 94.00  | 1209   | 175.00 | 6051  | 257.00 | 2312   | 384.00 | 308   |
| 95.00  | 145    | 176.00 | 1886  | 258.00 | 9992   | 390.00 | 678   |
| 96.00  | 595    | 177.00 | 2731  | 259.00 | 1687   | 391.00 | 307   |
| 97.00  | 457    | 178.00 | 1265  | 260.00 | 360    | 392.00 | 218   |
| 98.00  | 12185  | 179.00 | 10767 | 261.00 | 375    | 401.00 | 324   |
| 99.00  | 10997  | 180.00 | 8233  | 263.00 | 112    | 402.00 | 1656  |
| 100.00 | 1090   | 181.00 | 3487  | 264.00 | 144    | 403.00 | 2639  |
| 101.00 | 5050   | 182.00 | 613   | 265.00 | 4290   | 404.00 | 756   |
| 102.00 | 377    | 183.00 | 260   | 266.00 | 632    | 405.00 | 123   |
| 103.00 | 1699   | 184.00 | 916   | 267.00 | 207    | 415.00 | 151   |
| 104.00 | 4132   | 185.00 | 4991  | 270.00 | 335    | 421.00 | 2267  |

Report Date: 14-May-2018 12:12:24

Chrom Revision: 2.2 11-May-2018 08:54:46

Data File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28985.D\8270\_Isotope.rslt\spectra.d

Injection Date: 11-May-2018 12:33:30

Spectrum: Tune Spec :Average 302-304( 5.87-5.88 ) Bgrd 296( 5.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 315

| m/z    | Y     | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|-------|--------|--------|--------|-------|--------|--------|
| 105.00 | 3036  | 186.00 | 42056  | 271.00 | 409   | 422.00 | 2101   |
| 106.00 | 1022  | 187.00 | 12106  | 272.00 | 486   | 423.00 | 16800  |
| 107.00 | 42696 | 188.00 | 1318   | 273.00 | 5701  | 424.00 | 3696   |
| 108.00 | 6612  | 189.00 | 2517   | 274.00 | 14971 | 425.00 | 385    |
| 109.00 | 1360  | 190.00 | 518    | 275.00 | 85240 | 439.00 | 278    |
| 110.00 | 80256 | 191.00 | 1108   | 276.00 | 10891 | 440.00 | 84     |
| 111.00 | 11459 | 192.00 | 3454   | 277.00 | 7084  | 441.00 | 48816  |
| 112.00 | 1823  | 193.00 | 3761   | 278.00 | 1373  | 442.00 | 304448 |
| 113.00 | 420   | 194.00 | 809    | 279.00 | 229   | 443.00 | 61224  |
| 115.00 | 100   | 195.00 | 507    | 281.00 | 211   | 444.00 | 5633   |
| 116.00 | 2517  | 196.00 | 9992   | 282.00 | 541   | 445.00 | 392    |
| 117.00 | 33992 | 198.00 | 321152 | 283.00 | 1038  |        |        |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32220.D  
Lims ID: DFTPP  
Client ID:  
Sample Type: DFTPP  
Inject. Date: 26-Dec-2018 08:27:30 ALS Bottle#: 1 Worklist Smp#: 1  
Injection Vol: 5.0 ul Dil. Factor: 1.0000  
Sample Info: 460-0084194-001  
Misc. Info.: DFTPP  
Operator ID: Instrument ID: CBNAMS13  
Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
Limit Group: MSS 8270 Isotope Dilution IS  
Last Update: 26-Dec-2018 10:59:45 Calib Date: 11-May-2018 17:20:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Isotopic Dilution Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
Process Host: CTX0308

| Compound | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|------------------|--------------------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|------------------|--------------------|-------|

3 DFTPP

## Reagents:

SMDFTP\_CH\_00026

Amount Added: 1.00

Units: mL

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32220.D

Injection Date: 26-Dec-2018 08:27:30

Instrument ID: CBNAMS13

Lims ID: DFTPP

Client ID:

Operator ID:

ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 5.0 ul

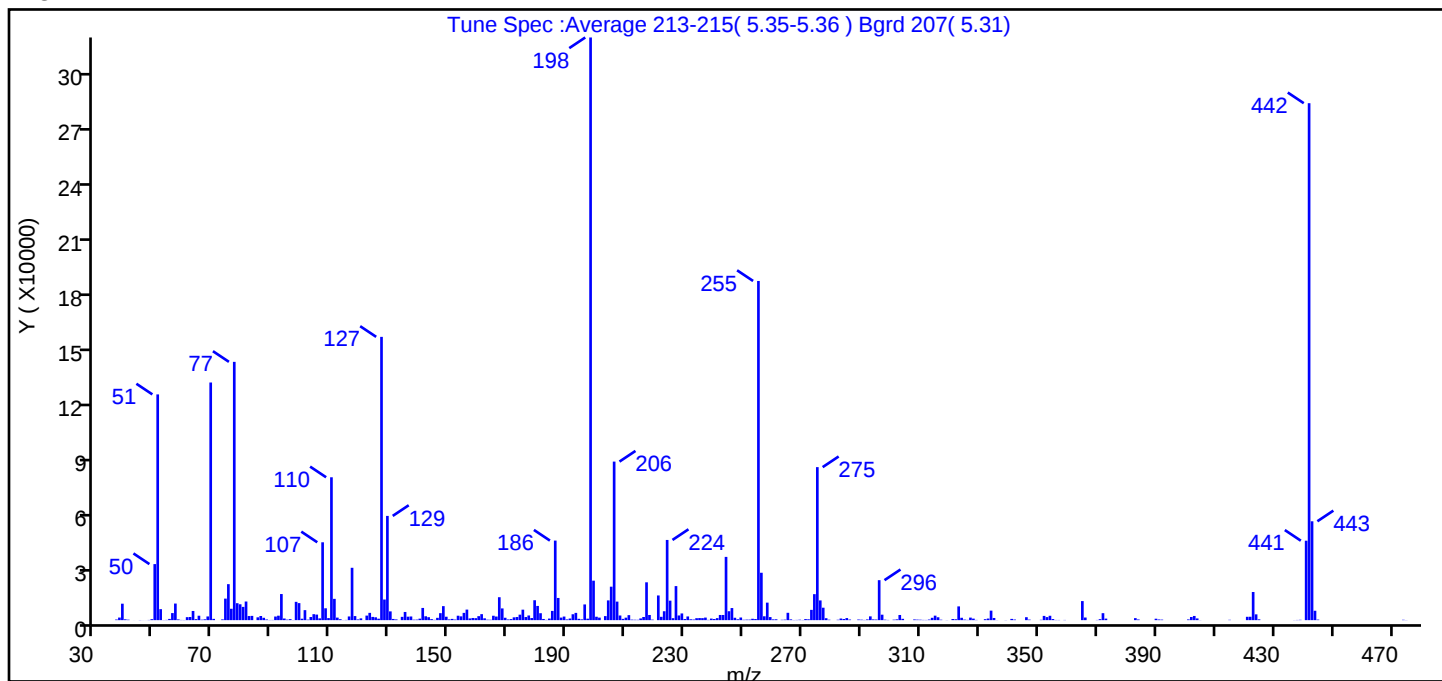
Dil. Factor: 1.0000

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Tune Method: DFTPP Method 8270

## 3 DFTPP



| m/z | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base peak, 100% relative abundance | 100.0                |
| 51  | 30-60% of mass 198                 | 38.7                 |
| 68  | <2% of mass 69                     | 0.6 (1.6)            |
| 69  | Present                            | 40.8                 |
| 70  | <2% of mass 69                     | 0.2 (0.5)            |
| 127 | 40-60% of mass 198                 | 48.6                 |
| 197 | <1% of mass 198                    | 0.3                  |
| 199 | 5-9% of mass 198                   | 6.8                  |
| 275 | 10-30% of mass 198                 | 26.3                 |
| 365 | >1% of mass 198                    | 3.3                  |
| 441 | Present but less than mass 443     | 13.6 (80.4)          |
| 442 | >40% of mass 198                   | 88.7                 |
| 443 | 17-23% of mass 442                 | 17.0 (19.1)          |

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32220.D\8270\_Isotope.rslt\spectra.d  
Injection Date: 26-Dec-2018 08:27:30  
Spectrum: Tune Spec :Average 213-215( 5.35-5.36 ) Bgrd 207( 5.31)  
Base Peak: 198.00  
Minimum % Base Peak: 0  
Number of Points: 327

| m/z   | Y      | m/z    | Y      | m/z    | Y     | m/z    | Y     |
|-------|--------|--------|--------|--------|-------|--------|-------|
| 37.00 | 345    | 122.00 | 2454   | 205.00 | 18080 | 293.00 | 2042  |
| 38.00 | 1393   | 123.00 | 3935   | 206.00 | 85680 | 294.00 | 402   |
| 39.00 | 8890   | 124.00 | 1747   | 207.00 | 10013 | 295.00 | 330   |
| 40.00 | 450    | 125.00 | 1535   | 208.00 | 2510  | 296.00 | 21600 |
| 41.00 | 251    | 126.00 | 786    | 209.00 | 690   | 297.00 | 2948  |
| 43.00 | 17     | 127.00 | 153088 | 210.00 | 1340  | 298.00 | 266   |
| 45.00 | 80     | 128.00 | 11151  | 211.00 | 2699  | 299.00 | 118   |
| 46.00 | 23     | 129.00 | 56328  | 212.00 | 279   | 301.00 | 255   |
| 47.00 | 20     | 130.00 | 4736   | 213.00 | 217   | 302.00 | 423   |
| 48.00 | 112    | 131.00 | 644    | 214.00 | 184   | 303.00 | 2789  |
| 49.00 | 539    | 132.00 | 385    | 215.00 | 919   | 304.00 | 711   |
| 50.00 | 30288  | 133.00 | 9      | 216.00 | 1699  | 308.00 | 386   |
| 51.00 | 121992 | 134.00 | 1774   | 217.00 | 20448 | 309.00 | 290   |
| 52.00 | 5936   | 135.00 | 4422   | 218.00 | 2790  | 310.00 | 233   |
| 53.00 | 68     | 136.00 | 1864   | 219.00 | 284   | 311.00 | 133   |
| 54.00 | 133    | 137.00 | 1974   | 221.00 | 13340 | 312.00 | 114   |
| 55.00 | 665    | 138.00 | 257    | 222.00 | 1801  | 313.00 | 329   |
| 56.00 | 3813   | 139.00 | 294    | 223.00 | 4815  | 314.00 | 1266  |
| 57.00 | 8967   | 140.00 | 799    | 224.00 | 43336 | 315.00 | 2422  |
| 58.00 | 391    | 141.00 | 6596   | 225.00 | 10528 | 316.00 | 1560  |
| 59.00 | 117    | 142.00 | 2093   | 226.00 | 1060  | 317.00 | 242   |
| 60.00 | 92     | 143.00 | 1595   | 227.00 | 18400 | 319.00 | 53    |
| 61.00 | 1610   | 144.00 | 543    | 228.00 | 2530  | 321.00 | 610   |
| 62.00 | 1698   | 145.00 | 157    | 229.00 | 3622  | 322.00 | 479   |
| 63.00 | 4954   | 146.00 | 1248   | 230.00 | 604   | 323.00 | 7432  |
| 64.00 | 546    | 147.00 | 3770   | 231.00 | 1997  | 324.00 | 1279  |
| 65.00 | 2386   | 148.00 | 7572   | 232.00 | 454   | 325.00 | 304   |
| 66.00 | 255    | 149.00 | 1847   | 233.00 | 334   | 326.00 | 141   |
| 67.00 | 454    | 150.00 | 401    | 234.00 | 1052  | 327.00 | 1366  |
| 68.00 | 1997   | 151.00 | 675    | 235.00 | 1124  | 328.00 | 828   |
| 69.00 | 128424 | 152.00 | 322    | 236.00 | 1085  | 329.00 | 118   |
| 70.00 | 690    | 153.00 | 2391   | 237.00 | 1382  | 332.00 | 523   |
| 71.00 | 2      | 154.00 | 2046   | 238.00 | 147   | 333.00 | 860   |

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32220.D\8270\_Isotope.rsl\spectra.d

Injection Date: 26-Dec-2018 08:27:30

Spectrum: Tune Spec :Average 213-215( 5.35-5.36 ) Bgrd 207( 5.31)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 327

| m/z    | Y      | m/z    | Y     | m/z    | Y      | m/z    | Y     |
|--------|--------|--------|-------|--------|--------|--------|-------|
| 73.00  | 408    | 155.00 | 3926  | 239.00 | 840    | 334.00 | 5138  |
| 74.00  | 11636  | 156.00 | 5700  | 240.00 | 613    | 335.00 | 1170  |
| 75.00  | 19448  | 157.00 | 929   | 241.00 | 1086   | 336.00 | 51    |
| 76.00  | 6154   | 158.00 | 1173  | 242.00 | 2795   | 339.00 | 59    |
| 77.00  | 139584 | 159.00 | 1068  | 243.00 | 2793   | 341.00 | 673   |
| 78.00  | 9162   | 160.00 | 2157  | 244.00 | 34184  | 342.00 | 332   |
| 79.00  | 8577   | 161.00 | 3241  | 245.00 | 4817   | 346.00 | 1589  |
| 80.00  | 7166   | 162.00 | 984   | 246.00 | 6536   | 347.00 | 290   |
| 81.00  | 10069  | 163.00 | 256   | 247.00 | 1289   | 351.00 | 196   |
| 82.00  | 2218   | 164.00 | 224   | 248.00 | 483    | 352.00 | 2290  |
| 83.00  | 2300   | 165.00 | 2376  | 249.00 | 1426   | 353.00 | 1647  |
| 84.00  | 15     | 166.00 | 1948  | 250.00 | 202    | 354.00 | 2362  |
| 85.00  | 1521   | 167.00 | 12391 | 251.00 | 286    | 355.00 | 595   |
| 86.00  | 2242   | 168.00 | 6337  | 252.00 | 289    | 356.00 | 109   |
| 87.00  | 1274   | 169.00 | 1291  | 253.00 | 743    | 357.00 | 106   |
| 88.00  | 364    | 170.00 | 380   | 254.00 | 594    | 359.00 | 111   |
| 89.00  | 95     | 171.00 | 571   | 255.00 | 183296 | 365.00 | 10298 |
| 90.00  | 111    | 172.00 | 1513  | 256.00 | 25608  | 366.00 | 1414  |
| 91.00  | 1956   | 173.00 | 1687  | 257.00 | 2084   | 370.00 | 108   |
| 92.00  | 2408   | 174.00 | 2959  | 258.00 | 9461   | 371.00 | 528   |
| 93.00  | 14106  | 175.00 | 5663  | 259.00 | 1660   | 372.00 | 3767  |
| 94.00  | 875    | 176.00 | 1682  | 260.00 | 412    | 373.00 | 823   |
| 95.00  | 275    | 177.00 | 2519  | 261.00 | 464    | 383.00 | 1086  |
| 96.00  | 547    | 178.00 | 1135  | 263.00 | 193    | 384.00 | 363   |
| 97.00  | 62     | 179.00 | 10757 | 264.00 | 285    | 390.00 | 769   |
| 98.00  | 9888   | 180.00 | 7677  | 265.00 | 3968   | 391.00 | 361   |
| 99.00  | 9200   | 181.00 | 3746  | 266.00 | 415    | 392.00 | 281   |
| 100.00 | 768    | 182.00 | 636   | 267.00 | 89     | 401.00 | 391   |
| 101.00 | 5404   | 183.00 | 143   | 268.00 | 128    | 402.00 | 1694  |
| 102.00 | 270    | 184.00 | 853   | 269.00 | 235    | 403.00 | 2263  |
| 103.00 | 1692   | 185.00 | 4981  | 270.00 | 97     | 404.00 | 929   |
| 104.00 | 3225   | 186.00 | 42992 | 271.00 | 573    | 405.00 | 54    |
| 105.00 | 2995   | 187.00 | 11988 | 272.00 | 463    | 415.00 | 181   |
| 106.00 | 960    | 188.00 | 1377  | 273.00 | 5555   | 421.00 | 1803  |

Report Date: 26-Dec-2018 10:59:45

Chrom Revision: 2.3 13-Dec-2018 17:23:12

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32220.D\8270\_Isotope.rslt\spectra.d

Injection Date: 26-Dec-2018 08:27:30

Spectrum: Tune Spec :Average 213-215( 5.35-5.36 ) Bgrd 207( 5.31)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 327

| m/z    | Y     | m/z    | Y      | m/z    | Y     | m/z    | Y      |
|--------|-------|--------|--------|--------|-------|--------|--------|
| 107.00 | 42072 | 189.00 | 1942   | 274.00 | 14041 | 422.00 | 1830   |
| 108.00 | 6409  | 190.00 | 398    | 275.00 | 82688 | 423.00 | 15204  |
| 109.00 | 1110  | 191.00 | 868    | 276.00 | 10660 | 424.00 | 3134   |
| 110.00 | 77208 | 192.00 | 3186   | 277.00 | 6721  | 425.00 | 436    |
| 111.00 | 11507 | 193.00 | 3925   | 278.00 | 1033  | 437.00 | 53     |
| 112.00 | 1367  | 194.00 | 717    | 279.00 | 237   | 438.00 | 109    |
| 113.00 | 509   | 195.00 | 423    | 282.00 | 210   | 439.00 | 179    |
| 114.00 | 51    | 196.00 | 8491   | 283.00 | 876   | 441.00 | 42928  |
| 115.00 | 122   | 197.00 | 796    | 284.00 | 620   | 442.00 | 279360 |
| 116.00 | 1995  | 198.00 | 314880 | 285.00 | 1120  | 443.00 | 53424  |
| 117.00 | 28296 | 199.00 | 21328  | 286.00 | 331   | 444.00 | 5075   |
| 118.00 | 2195  | 200.00 | 1840   | 289.00 | 341   | 445.00 | 302    |
| 119.00 | 398   | 201.00 | 1365   | 290.00 | 256   | 474.00 | 193    |
| 120.00 | 955   | 203.00 | 2179   | 291.00 | 120   | 475.00 | 59     |
| 121.00 | 28    | 204.00 | 10674  | 292.00 | 394   |        |        |

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 460-578647/1-A  
 Matrix: Water Lab File ID: C32243.D  
 Analysis Method: 8270D SIM ID Date Collected: \_\_\_\_\_  
 Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 15:04  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 0.20   | U | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 35   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32243.D  
 Lims ID: MB 460-578647/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 26-Dec-2018 15:04:30 ALS Bottle#: 24 Worklist Smp#: 24  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-024  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:12:37

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.797        | 2.781            | 0.014            | 0  | 436874   | 4.00             | 1.41               |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.581        | 5.584            | -0.003           | 97 | 156760   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_iso\_d4istd\_00003      Amount Added: 20.00      Units: uL      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32243.D

Injection Date: 26-Dec-2018 15:04:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: MB 460-578647/1-A

Worklist Smp#: 24

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

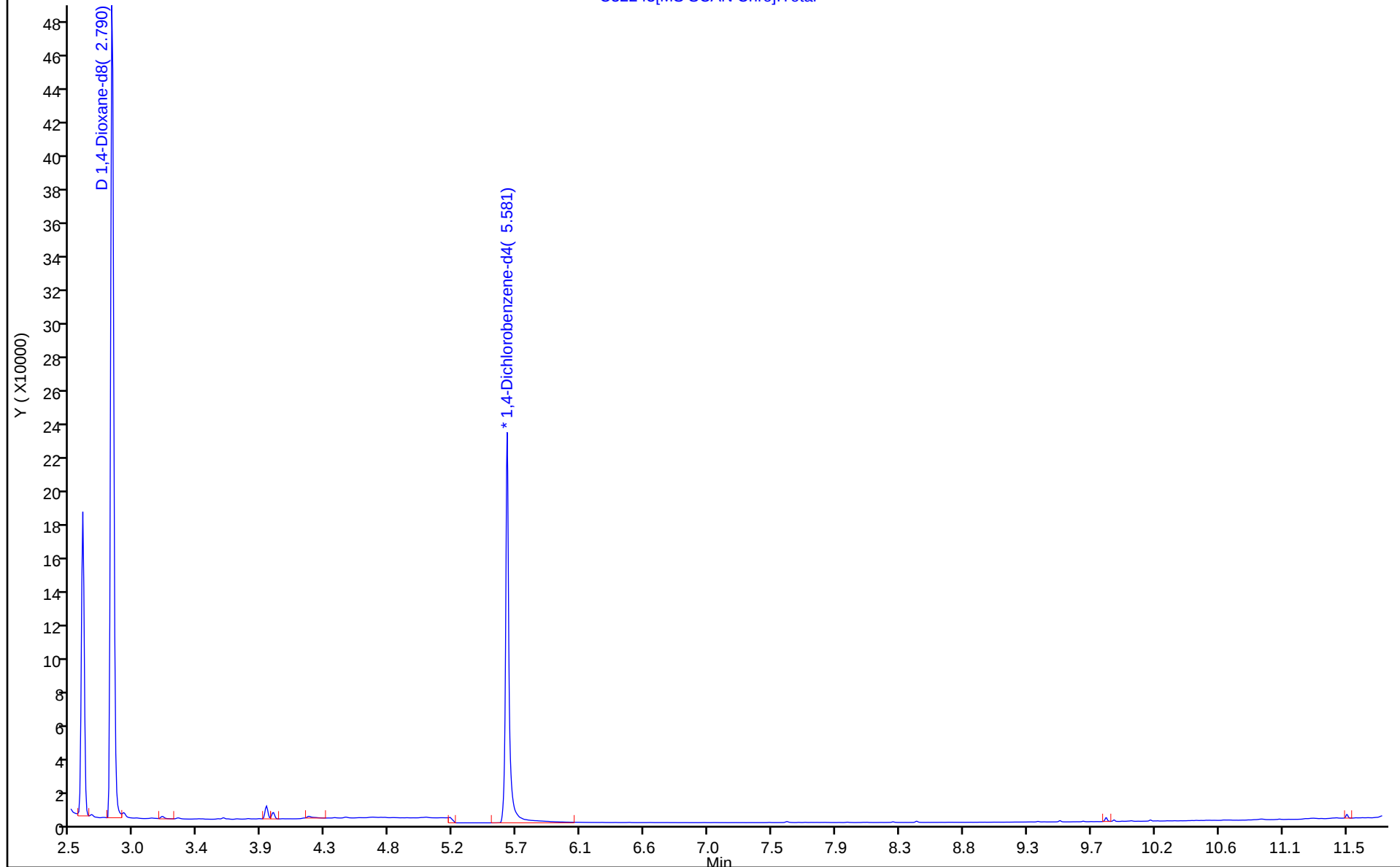
ALS Bottle#: 24

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C32243[MS SCAN Chro]:Total



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32243.D

Injection Date: 26-Dec-2018 15:04:30

Instrument ID: CBNAMS13

Lims ID: MB 460-578647/1-A

Client ID:

Operator ID:

ALS Bottle#:

24

Worklist Smp#:

24

Injection Vol: 5.0 ul

Dil. Factor:

1.0000

Method: 8270\_Isotope

Limit Group:

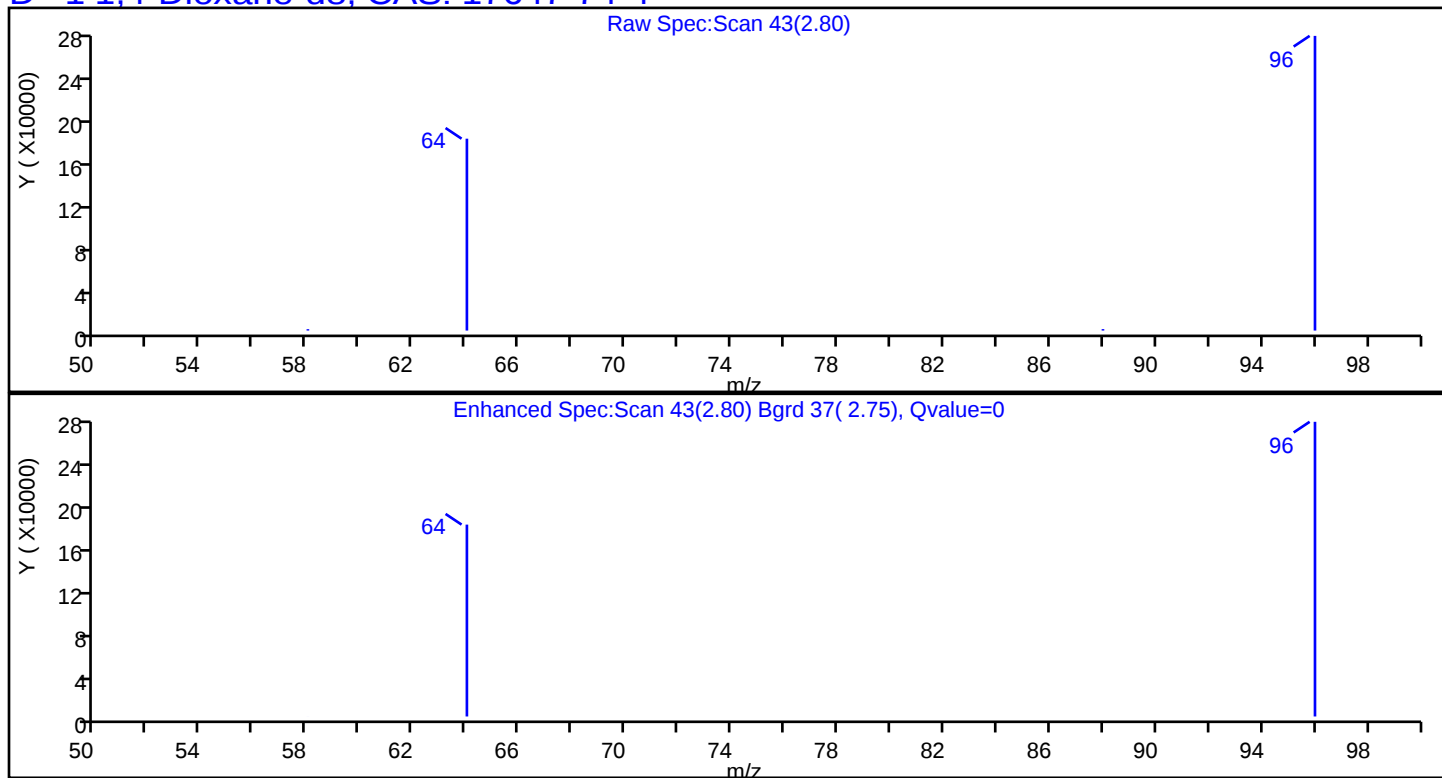
MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS (0.25 mm)

Detector

MS SCAN

## D 1 1,4-Dioxane-d8, CAS: 17647-74-4



## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32243.D

Injection Date: 26-Dec-2018 15:04:30

Instrument ID: CBNAMS13

Lims ID: MB 460-578647/1-A

Client ID:

Operator ID:

ALS Bottle#:

24

Worklist Smp#: 24

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

Method: 8270\_Isotope

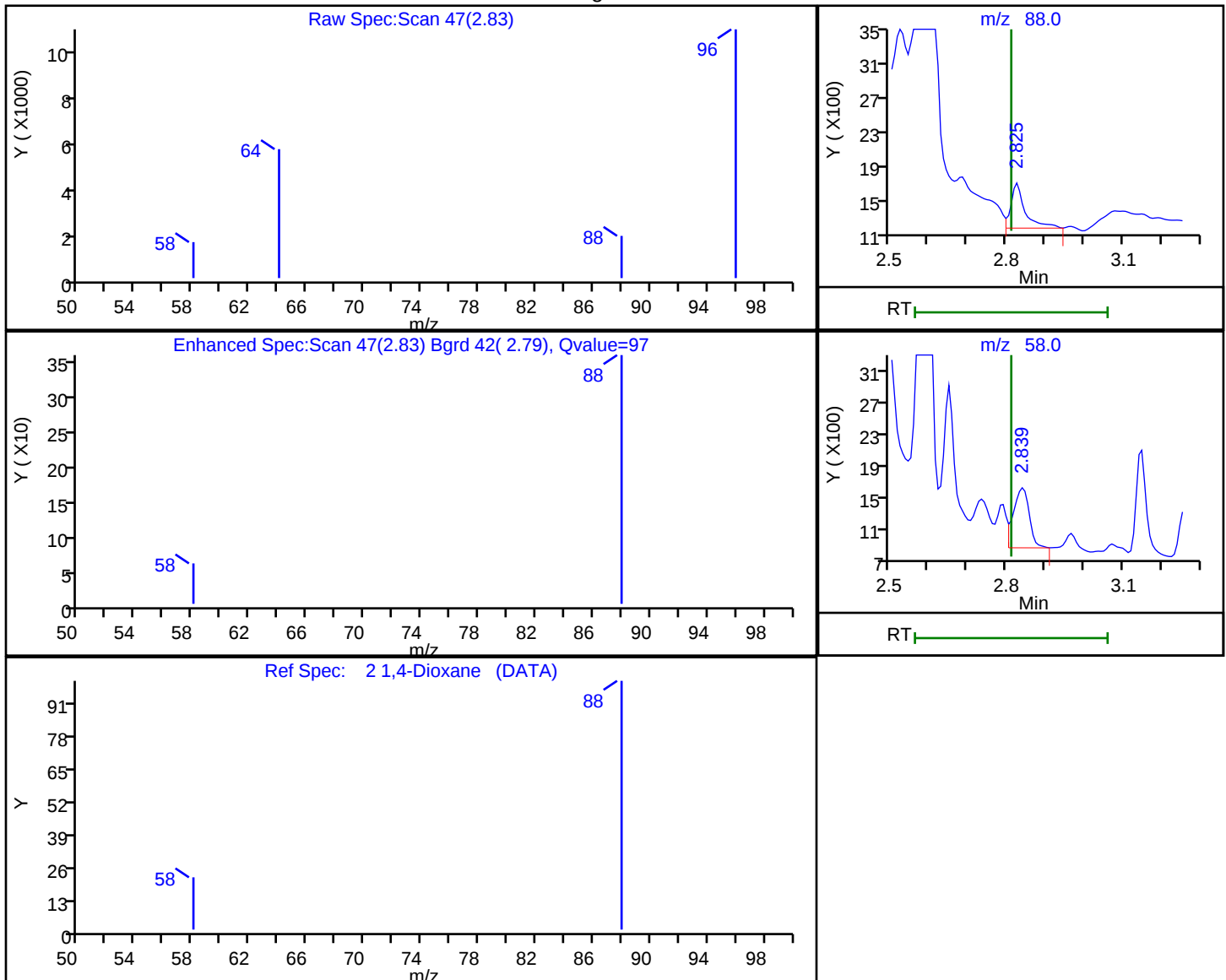
Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

Detector MS SCAN

## 2 1,4-Dioxane, CAS: 123-91-1

## Processing Results



| RT   | Mass  | Response | Amount   |
|------|-------|----------|----------|
| 2.83 | 88.00 | 1281     | 0.009059 |
| 2.84 | 58.00 | 2073     |          |

Reviewer: khlungprakhons, 27-Dec-2018 14:12:35

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 460-578647/2-A  
Matrix: Water Lab File ID: C32244.D  
Analysis Method: 8270D SIM ID Date Collected: \_\_\_\_\_  
Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 15:20  
Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
Injection Volume: 5 (uL) Level: (low/med) Low  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 1.46   |   | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 36   |   | 10-200 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32244.D  
 Lims ID: LCS 460-578647/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 26-Dec-2018 15:20:30 ALS Bottle#: 25 Worklist Smp#: 25  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-025  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 26-Dec-2018 15:37:27 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0308

First Level Reviewer: zhaoc

Date: 26-Dec-2018 15:37:35

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.790        | 2.781            | 0.007            | 0  | 445356   | 4.00             | 1.46               |       |
| 2 1,4-Dioxane              | 88  | 2.818        | 2.825            | 0.007            | 80 | 26247    | 0.2000           | 0.1821             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.580        | 5.584            | -0.004           | 97 | 154828   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_iso\_d4istd\_00003      Amount Added: 20.00      Units: uL      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32244.D

Injection Date: 26-Dec-2018 15:20:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: LCS 460-578647/2-A

Worklist Smp#: 25

Client ID:

Injection Vol: 5.0 ul

Dil. Factor: 1.0000

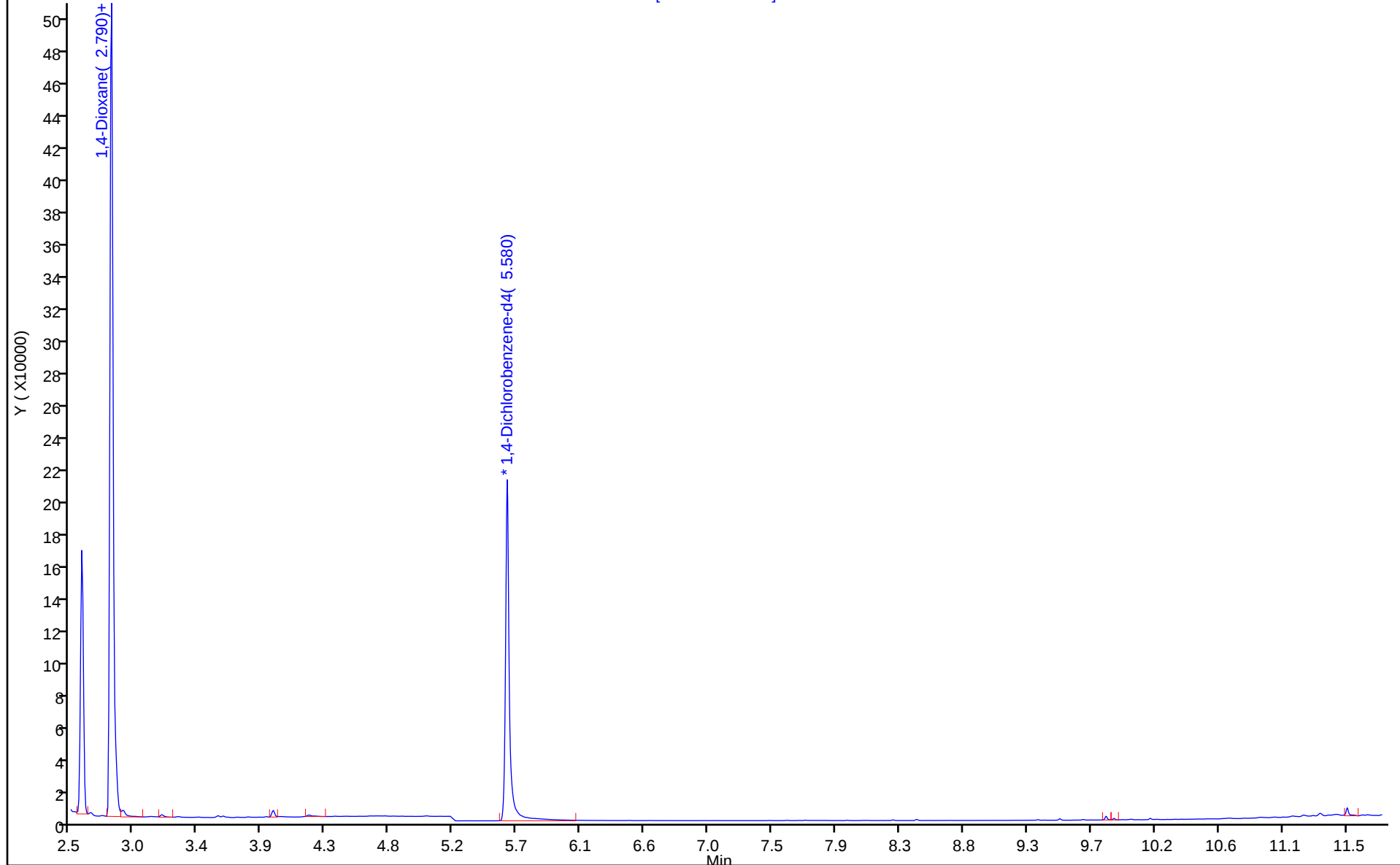
ALS Bottle#: 25

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)

C32244[MS SCAN Chro]:Total



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: SW-10 MS Lab Sample ID: 460-172261-3 MS  
Matrix: Water Lab File ID: C32249.D  
Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 12:25  
Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 16:43  
Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
Injection Volume: 5 (uL) Level: (low/med) Low  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 1.60   |   | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 36   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32249.D  
 Lims ID: 460-172261-A-3-A MS  
 Client ID: SW-10  
 Sample Type: MS  
 Inject. Date: 26-Dec-2018 16:43:30 ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-030  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: khlungprakhons

Date: 27-Dec-2018 14:13:57

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.783        | 2.781            | 0.000            | 0  | 439839   | 4.00             | 1.42               |       |
| 2 1,4-Dioxane              | 88  | 2.818        | 2.818            | 0.007            | 84 | 28430    | 0.2000           | 0.1997             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.584        | 5.584            | 0.000            | 99 | 156556   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_iso\_d4istd\_00003

Amount Added: 20.00

Units: uL

Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32249.D

Injection Date: 26-Dec-2018 16:43:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-A-3-A MS

Worklist Smp#: 30

Client ID: SW-10

Injection Vol: 5.0 ul

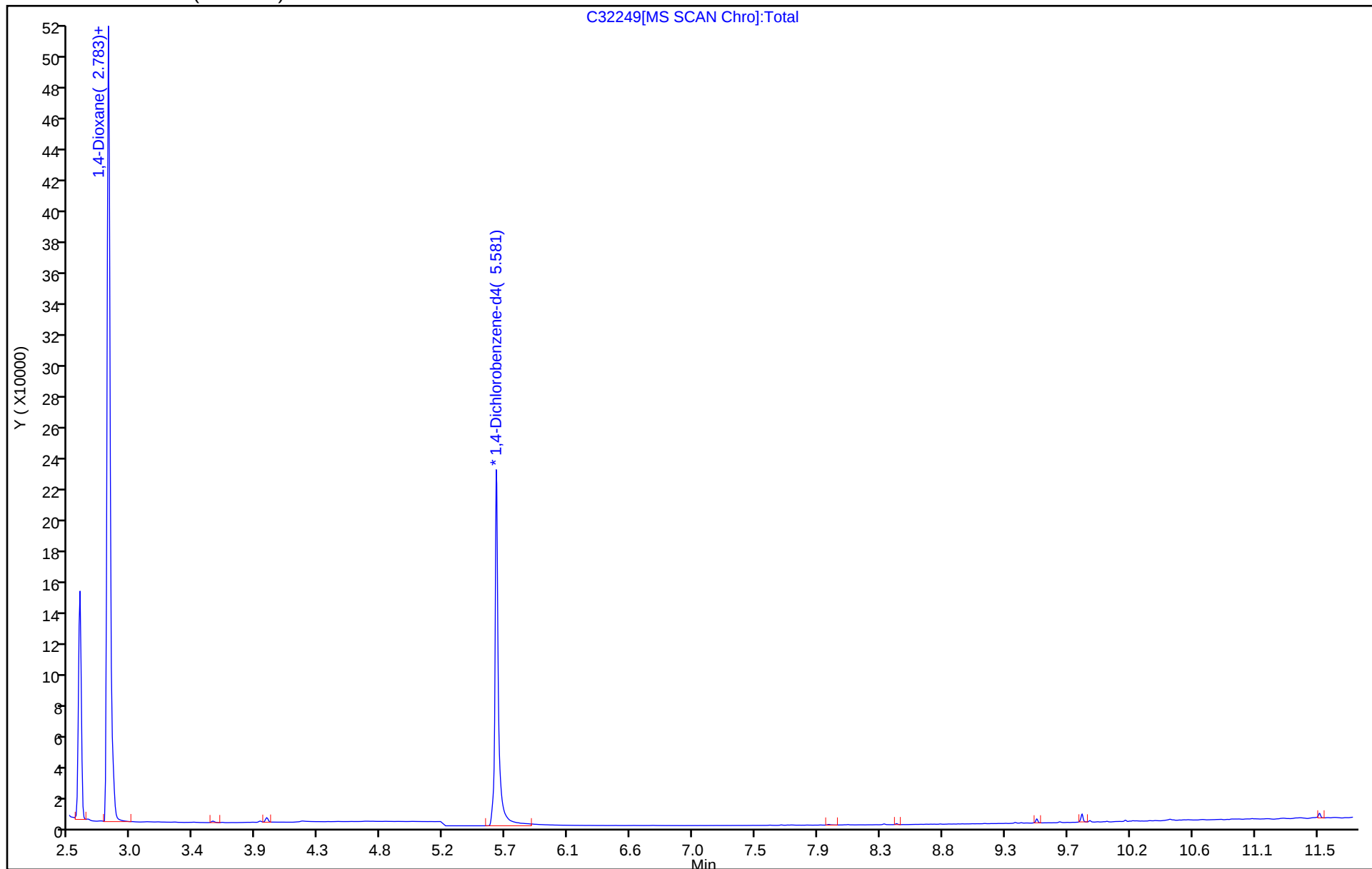
Dil. Factor: 1.0000

ALS Bottle#: 30

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: SW-10 MSD Lab Sample ID: 460-172261-3 MSD  
 Matrix: Water Lab File ID: C32250.D  
 Analysis Method: 8270D SIM ID Date Collected: 12/19/2018 12:25  
 Extract. Method: 3510C Date Extracted: 12/26/2018 09:07  
 Sample wt/vol: 250 (mL) Date Analyzed: 12/26/2018 17:00  
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1  
 Injection Volume: 5 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 578622 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL   | MDL   |
|----------|---------------|--------|---|------|-------|
| 123-91-1 | 1,4-Dioxane   | 1.72   |   | 0.20 | 0.016 |

| CAS NO.    | ISOTOPE DILUTION | %REC | Q | LIMITS |
|------------|------------------|------|---|--------|
| 17647-74-4 | 1,4-Dioxane-d8   | 37   |   | 10-150 |

TestAmerica Edison  
Target Compound Quantitation Report

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32250.D  
 Lims ID: 460-172261-B-3-A MSD  
 Client ID: SW-10  
 Sample Type: MSD  
 Inject. Date: 26-Dec-2018 17:00:30 ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 460-0084194-031  
 Operator ID: Instrument ID: CBNAMS13  
 Method: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\8270\_Isotope.m  
 Limit Group: MSS 8270 Isotope Dilution IS  
 Last Update: 27-Dec-2018 14:13:50 Calib Date: 11-May-2018 17:20:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Isotopic Dilution Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Edison\ChromData\CBNAMS13\20180511-71845.b\C28993.D  
 Column 1 : Rtxi-5Sil MS ( 0.25 mm) Det: MS SCAN  
 Process Host: CTX0331

First Level Reviewer: hamziy

Date: 27-Dec-2018 02:15:24

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ug/ml | OnCol Amt<br>ug/ml | Flags |
|----------------------------|-----|--------------|------------------|------------------|----|----------|------------------|--------------------|-------|
| D 1 1,4-Dioxane-d8         | 96  | 2.790        | 2.781            | 0.007            | 0  | 468697   | 4.00             | 1.50               |       |
| 2 1,4-Dioxane              | 88  | 2.825        | 2.818            | 0.014            | 83 | 32678    | 0.2000           | 0.2154             |       |
| * 4 1,4-Dichlorobenzene-d4 | 152 | 5.580        | 5.584            | -0.004           | 96 | 158403   | 0.2000           | 0.2000             |       |

**Reagents:**

SM\_iso\_d4istd\_00003      Amount Added: 20.00      Units: uL      Run Reagent

## TestAmerica Edison

Data File: \\chromna\Edison\ChromData\CBNAMS13\20181226-84194.b\C32250.D

Injection Date: 26-Dec-2018 17:00:30

Instrument ID: CBNAMS13

Operator ID:

Lims ID: 460-172261-B-3-A MSD

Worklist Smp#: 31

Client ID: SW-10

Injection Vol: 5.0 ul

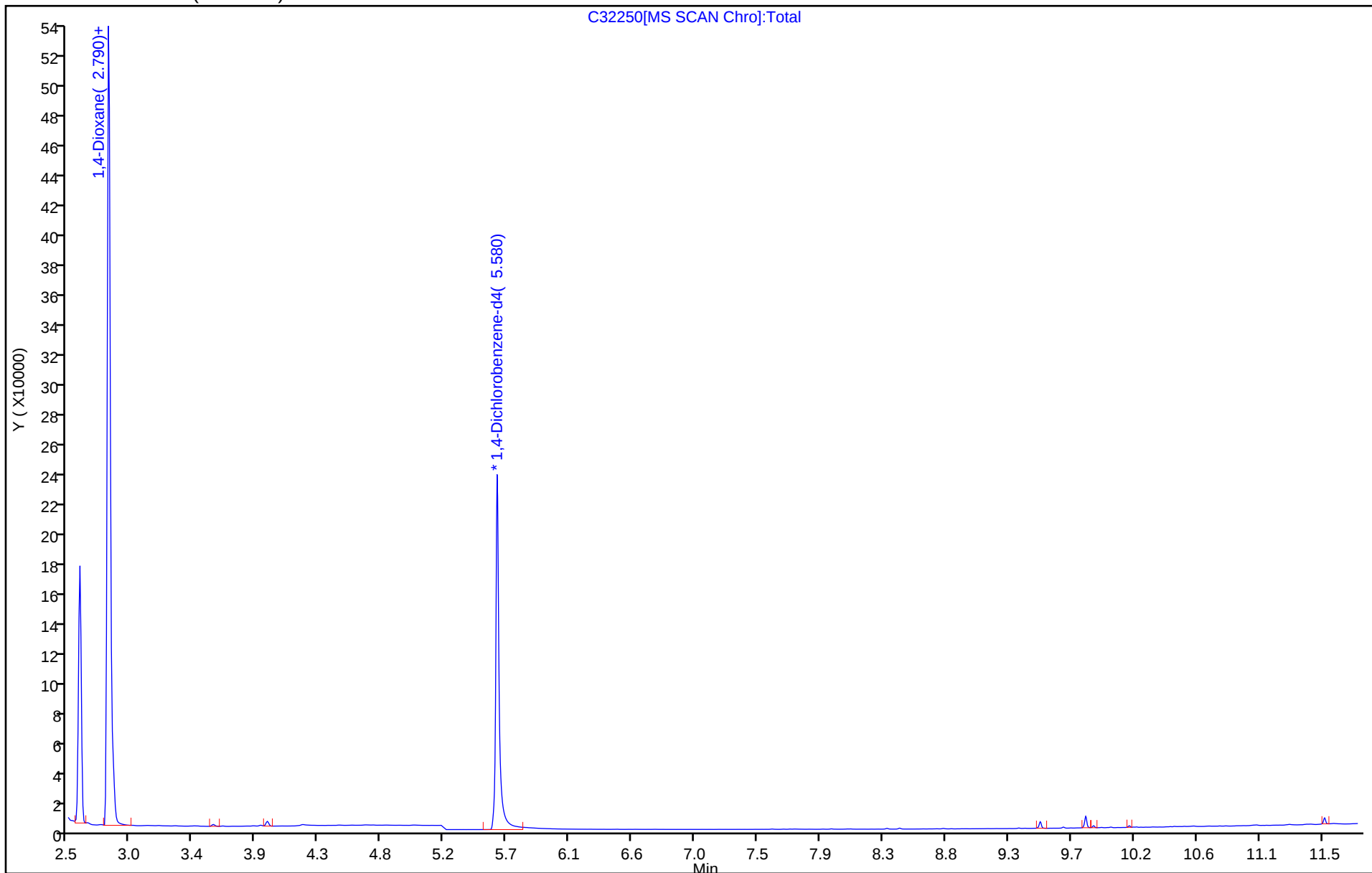
Dil. Factor: 1.0000

ALS Bottle#: 31

Method: 8270\_Isotope

Limit Group: MSS 8270 Isotope Dilution IS

Column: Rtxi-5Sil MS ( 0.25 mm)



## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-172261-1

SDG No.: \_\_\_\_\_

Instrument ID: CBNAMS13 Start Date: 05/11/2018 12:33Analysis Batch Number: 518314 End Date: 05/11/2018 17:43

| LAB SAMPLE ID        | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID              |
|----------------------|------------------|------------------|--------------------|-------------|------------------------|
| DFTPP 460-518314/1   |                  | 05/11/2018 12:33 | 1                  | C28985.D    | Rtxi-5Sil MS 0.25 (mm) |
| ICIS 460-518314/2    |                  | 05/11/2018 12:48 | 1                  | C28986.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD8 460-518314/3 IC |                  | 05/11/2018 13:08 | 1                  | C28987.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD7 460-518314/4 IC |                  | 05/11/2018 13:27 | 1                  | C28988.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD6 460-518314/5 IC |                  | 05/11/2018 14:16 | 1                  | C28989.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD4 460-518314/6 IC |                  | 05/11/2018 14:35 | 1                  | C28990.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD3 460-518314/7 IC |                  | 05/11/2018 15:44 | 1                  | C28991.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD2 460-518314/8 IC |                  | 05/11/2018 16:02 | 1                  | C28992.D    | Rtxi-5Sil MS 0.25 (mm) |
| STD1 460-518314/9 IC |                  | 05/11/2018 17:20 | 1                  | C28993.D    | Rtxi-5Sil MS 0.25 (mm) |
| ICV 460-518314/10    |                  | 05/11/2018 17:43 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |

## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica EdisonJob No.: 460-172261-1

SDG No.: \_\_\_\_\_

Instrument ID: CBNAMS13Start Date: 12/26/2018 08:27Analysis Batch Number: 578622End Date: 12/26/2018 17:00

| LAB SAMPLE ID      | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID              |
|--------------------|------------------|------------------|--------------------|-------------|------------------------|
| DFTPP 460-578622/1 |                  | 12/26/2018 08:27 | 1                  | C32220.D    | Rtxi-5Sil MS 0.25 (mm) |
| CCVIS 460-578622/2 |                  | 12/26/2018 08:54 | 1                  | C32221.D    | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 09:15 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 09:32 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 09:48 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 10:05 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 10:22 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 10:38 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 10:55 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 11:11 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 11:28 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 11:44 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 12:01 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 12:18 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 12:34 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 12:51 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 13:08 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 13:24 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 13:41 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 13:57 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 14:14 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 14:31 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| ZZZZZ              |                  | 12/26/2018 14:47 | 1                  |             | Rtxi-5Sil MS 0.25 (mm) |
| MB 460-578647/1-A  |                  | 12/26/2018 15:04 | 1                  | C32243.D    | Rtxi-5Sil MS 0.25 (mm) |
| LCS 460-578647/2-A |                  | 12/26/2018 15:20 | 1                  | C32244.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-3       |                  | 12/26/2018 15:37 | 1                  | C32245.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-1       |                  | 12/26/2018 15:54 | 1                  | C32246.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-2       |                  | 12/26/2018 16:10 | 1                  | C32247.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-4       |                  | 12/26/2018 16:27 | 1                  | C32248.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-3 MS    |                  | 12/26/2018 16:43 | 1                  | C32249.D    | Rtxi-5Sil MS 0.25 (mm) |
| 460-172261-3 MSD   |                  | 12/26/2018 17:00 | 1                  | C32250.D    | Rtxi-5Sil MS 0.25 (mm) |

## GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-172261-1

SDG No.: \_\_\_\_\_

Batch Number: 578647 Batch Start Date: 12/26/18 09:04 Batch Analyst: Dekkar, Djedjiga XBatch Method: 3510C Batch End Date: \_\_\_\_\_

| Lab Sample ID         | Client Sample ID | Method Chain           | Basis | InitialAmount | FinalAmount | ReceivedpH | FirstAdjustpH | OP_1,4-DX_SP<br>00003 | OP_14-DX_surr<br>00004 |
|-----------------------|------------------|------------------------|-------|---------------|-------------|------------|---------------|-----------------------|------------------------|
| MB 460-578647/1       |                  | 3510C, 8270D<br>SIM ID |       | 250 mL        | 2 mL        | 7 SU       | <2 SU         |                       | 20 uL                  |
| LCS<br>460-578647/2   |                  | 3510C, 8270D<br>SIM ID |       | 250 mL        | 2 mL        | 7 SU       | <2 SU         | 200 uL                | 20 uL                  |
| 460-172261-A-3<br>MS  | SW-10            | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         | 200 uL                | 20 uL                  |
| 460-172261-B-3<br>MSD | SW-10            | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         | 200 uL                | 20 uL                  |
| 460-172261-A-3        | SW-10            | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         |                       | 20 uL                  |
| 460-172261-A-1        | SCR-MW03         | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         |                       | 20 uL                  |
| 460-172261-B-2        | IRP5-MW01        | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         |                       | 20 uL                  |
| 460-172261-B-4        | IRP7-MW01        | 3510C, 8270D<br>SIM ID | T     | 250 mL        | 2 mL        | 5 SU       | <2 SU         |                       | 20 uL                  |

| Batch Notes                        |                             |
|------------------------------------|-----------------------------|
| Acid Used for pH Adjustment ID     | 186983                      |
| Batch Comment                      | 8270D_SIM_MS_ID 1,4-Dioxane |
| Analyst ID - Extraction            | dD                          |
| Method/Fraction                    | BNA WATER                   |
| Prep Solvent ID                    | MeCL2 202867                |
| Prep Solvent Volume Used           | 120 mL                      |
| Analyst ID - Spike Analyst         | dD                          |
| Analyst ID - Spike Witness Analyst | ID                          |
| Sufficient Volume for Batch QC     | 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.

8270D SIM ID

Page 1 of 1

# Shipping and Receiving Documents

460507

## THE LEADER IN ENVIRONMENTAL TESTING

Page 1 of 1

460-172261 Chain of Custody

## Water Metals Filtered (Yes/No)?

| Relinquished by    | Company | Date / Time    | Received by                    | Company |
|--------------------|---------|----------------|--------------------------------|---------|
| Wt A. White        | EAR     | 12/19/18 15:00 | 1) EAR Fader                   | EAR     |
| EAR Sample         | EAR     | 12-20-18 13    | Received by WILLIAM A. Vignata | Company |
| EAR HEDGE          | EAR     | 12-20-18 13    | Received by [Signature]        | Company |
| WILLIAM A. Vignata | EAR     | 12-20-18 13    | Received by [Signature]        | Company |
| WILLIAM A. Vignata | EAR     | 12-20-18 13    | Received by [Signature]        | Company |
| WILLIAM A. Vignata | EAR     | 12-20-18 13    | Received by [Signature]        | Company |

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

ITAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578)

3-13.5 mph

**Job Number:**

### Number of Coolers:

# IR Gun #1

## Cooler Temperatures

| RAW        |       | CORRECTED |       | RAW        |    | CORRECTED |    |
|------------|-------|-----------|-------|------------|----|-----------|----|
| Cooler #1: | 35 °C | 30 °C     | 30 °C | Cooler #4: | °C | °C        | °C |
| Cooler #2: | °C    | °C        | °C    | Cooler #5: | °C | °C        | °C |
| Cooler #3: | °C    | °C        | °C    | Cooler #6: | °C | °C        | °C |
|            |       |           |       | Cooler #7: | °C | °C        | °C |
|            |       |           |       | Cooler #8: | °C | °C        | °C |
|            |       |           |       | Cooler #9: | °C | °C        | °C |

[illegible]

**If pH adjustments are required record the information below:**

**Sample No(s). adjusted:**

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

**Expiration Date:**

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

EDS-WI-038, Rev 4, 06/09/2014

**Initials:**

Date:

2/20/22

## Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 460-172261-1

**Login Number: 172261**

**List Source: TestAmerica Edison**

**List Number: 1**

**Creator: Rivera, Kenneth**

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