

May 22, 2019

Mr. Harry Allen
Federal On-Scene Coordinator
U. S. Environmental Protection Agency
Region 9, Emergency Response Section
2445 North Palm Drive Signal Hill, CA 90755

**Subject: Guam Agent Orange Final Site Assessment Report
Yigo, Guam
TDD No.: 0002/1302-T2-R9-17-12-0001
Document Control No.: 0178-08-ACDE**

Dear Mr. Allen:

Under the Technical Direction Document (TDD) No. 0002/1302-T2-R9-17-12-0001, the United States (U.S.) Environmental Protection Agency (EPA) Region 9 Federal On-Scene Coordinator (FOSC), Harry Allen, tasked the Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) to support a soil screening assessment on Andersen Air Force Base (AAFB) in Guam (**Attachment A, Figure 1**). The screening assessment was conducted at the request of the Government of Guam and in conjunction with Navy Installations Command, Joint Region Marianas. The request was prompted by public concerns related to historical herbicide use on Guam, potentially including Herbicide Orange (HO) or its constituents. This report also includes subsequent soil sampling off of AAFB (referred to throughout this report as “off-base”) conducted at the request of Guam Environmental Protection Agency (GEPA).

The role of EPA in the soil screening assessment was to analyze split samples collected by AECOM on behalf of Joint Region Marianas to evaluate the alleged presence of contaminants of potential concern (COPCs). The suspected COPCs include the HO constituents 2, 4 - dichlorophenoxyacetic acid (2,4-D) and 2, 4, 5 - trichlorophenoxy acetic acid (2,4,5-T) used on Guam. Soil (Incremental Sampling Methodology [ISM]) samples were collected from surface soils in three predetermined areas on AAFB by AECOM in April 2018 for analysis by EMAX Laboratories, Inc. (EMAX). Split samples were provided to TestAmerica Laboratories, Inc. (TestAmerica) through the START contract.

Although the AECOM laboratory did not show any detections during their split sample analysis, split samples provided to START and analyzed by TestAmerica from Area 1 had positive detections of trace amounts of 2,4-D and 2,4,5-T. In response to these findings, additional ISM samples were collected by AECOM in December 2018 from only Area 1. AECOM collected three soil samples on December 2018 and split samples were again provided to TestAmerica. Neither lab reported detections in the second round of sampling. Split sample results from TestAmerica are provided in this Site Assessment Report.

As a result of the AAFB soil screening assessment initial Area 1 findings, GEPA requested that EPA collect surface soils at five additional locations along a historic fuel pipeline right-of-way located off AAFB.

Off-base soil sampling was conducted by START and took place over the course of 2 days, beginning November 14, 2018, and concluding November 15, 2018. The sampling event included five assessment sites located along a portion of fuel pipeline where reported herbicide spraying reportedly occurred. Additional COPCs were considered in this event including 2(2,4,5-trichlorophenoxy) propionic acid (2,4,5-TP, also known as Silvex or Fenoprop) and other herbicides reported in the test method. From the off-base soil sampling effort, soil sample TY-02 had detections for both 2,4,5-T at 37 micrograms per kilogram ($\mu\text{g}/\text{kg}$) and 2,4,5-TP at 23 $\mu\text{g}/\text{kg}$ using EPA Method 8321A.

This letter report discusses the background, site description, and split sample analysis and off-base soil sampling activities, and presents a summary of START mobilization activities. **Attachment A** provides the figures for this letter report. **Attachment B** provides a photographic log of Site conditions and emergency response activities. **Attachment C** contains the soil sampling results and data validation reports.

BACKGROUND

According to a Work Plan document drafted by AECOM titled *Limited Investigation into Alleged Herbicide Orange Use at Three Sites* (2018), the Department of Veterans Affairs requested that the U.S. Department of Defense (DoD) provide locations and dates, excluding Vietnam, where the DoD utilized herbicide agents, including HO, along with exposure data indicating where DoD personnel were most likely exposed to the COPCs. The Government of Guam requested that EPA participate in this limited investigation by assisting in the Work Plan development and analyzing split samples.

On April 23, 2018, as a component of the limited investigation, AECOM conducted a soil screening assessment into alleged chlorinated herbicide use. AECOM collected soil samples in three areas of concern (AOCs) on AAFB using ISM in accordance with the Interstate Technology and Regulatory Council guidance document ISM-1, "Incremental Sampling Methodology," February 2012. The soil samples collected by AECOM at AAFB were sent to EMAX, in Torrance, California (CA), to be split into two separate samples and then analyzed for the COPCs. EMAX performed analysis for chlorinated herbicides using EPA Method 8151A on one set of split samples. The START contracted laboratory, TestAmerica, received the second set of split soil samples from EMAX for duplicate analysis. The validated analytical report received from TestAmerica for one soil sample collected along the former fuel pipeline from Area 1 revealed trace amounts of 2,4-D, with a concentration of 380 $\mu\text{g}/\text{kg}$ and 2,4,5-T, with a concentration of 49 $\mu\text{g}/\text{kg}$. Trace amounts of 2,4-D, with a concentration of 10 $\mu\text{g}/\text{kg}$, were also detected in one soil sample collected from Area 3 and analyzed by TestAmerica. EMAX did not detect COPCs in any of the split samples analyzed for chlorinated herbicides from the AAFB sampling event.

Because only one of the two laboratories detected the presence of the COPCs in the split soil samples, an expanded resampling event of Area 1 was conducted to confirm the presence or absence of the COPCs in surface soils. AAFB sample locations are presented in **Attachment A, Figure 1**. In December 2018, Navy contractor AECOM collected soil screening samples in only Area 1 and split the samples for analysis for the COPCs. These split sample collection methods and results are described below.

In addition to Navy resampling efforts of Area 1, EPA expanded soil sampling efforts to include five separate off-base sampling locations along a former fuel pipeline located near AAFB where reported spraying of chlorinated herbicides may have occurred. START mobilization activities and soil sample collection methods and results are described below.

SPLIT SAMPLE COLLECTION

On April 23, 2018, AECOM collected surface soil samples from AOCs on AAFB using ISM. The soil screening samples collected by AECOM at AAFB were sent to EMAX in Torrance, CA, to be split into two separate samples and then analyzed for the COPCs. EMAX performed analysis for chlorinated herbicides using EPA Method 8151A on one set of split samples and TestAmerica received the second set of split soil samples from EMAX for duplicate analysis.

Positive detections were confirmed in only Area 1 from April 2018; therefore this area was resampled on December 4, 2018 by Navy subcontractor AECOM. EPA was not present during the Navy resampling event. Four samples were collected and sent to EMAX to be split between the Navy-contracted laboratory and TestAmerica. TestAmerica was contracted by START to perform analysis on the split samples received from EMAX. ISM split sample preparation was performed by EMAX, and split samples were received by TestAmerica on December 12, 2018. Split samples were analyzed by TestAmerica for herbicides in accordance with EPA Method 8151A, as before. A final analytical report was not received from the Navy regarding the results of split samples received by the Navy-contracted laboratory; therefore, those data are not reported in this document.

MOBILIZATION ACTIVITIES

On November 13, 2018, FOSC Harry Allen and START mobilized to the Site in Guam and met with GEPA to discuss sampling locations and conduct a site walk for five sampling locations along an off-base pipeline reportedly involved in the spraying of chlorinated herbicides. Some of the pre-determined locations were modified upon arrival in Guam. A site walk followed by the sampling of five locations began on November 14, 2018 and was completed over the course of two days.

OFF-BASE SOIL SAMPLE COLLECTION

To evaluate public concerns surrounding the historical use of HO and other chlorinated herbicides, composite surface soil samples were collected at a depth of 0 to 3 inches below ground surface from five public access locations where herbicide use was reported. Composite soil samples were collected from an approximately 200-square-foot area along different sections of the pipeline at

valves and other common access points where spraying of chlorinated herbicides reportedly occurred. Composite soil samples were collected using dedicated sampling equipment and submitted to a laboratory for chlorinated herbicide analysis by EPA Method 8321A and semivolatile organic compounds (SVOCs) by EPA Method 8270D. Additionally, 20 percent (%) of the soil samples were submitted to a laboratory for herbicide analysis by EPA Method 8151A. **Attachment B** provides photographic documentation of conditions at AAFB and selected sampling activities.

On November 14, 2018, FOSC Harry Allen, START, GEPA, and Guam Senator Therese Terlaje arrived at the first composite soil sampling site located at the Potts Junction (PJ) in Guam (**Attachment A, Figure 3**). The PJ site is located at the northwest end of the island approximately 9 kilometers (km) west of AAFB. A total of five 5-point composite surface soil samples (PJ-01, PJ-02, PJ-03, PJ-04, PJ-05) and a duplicate sample (PJ-02-20), were collected along the powerline right-of-way at five distinct areas identified as potential areas of chlorinated herbicide use (**Attachment A, Figure 3**).

On November 14, 2018, FOSC Harry Allen, START, and GEPA arrived at the second sampling location. The site was located at Tiyan Junction (TY), which is positioned centrally on the island of Guam near the southern edge of Antonio B. Won Pat International Airport (**Attachment A, Figure 4**). The original position of this sampling location had to be modified because of site access restrictions by the Navy. Two 5-point composite surface soil samples were collected at the TY location. The first 5-point composite sample (TY-01) was collected along the pipeline on East Cesario Street in a mixed residential and commercial area (**Attachment A, Figure 5**). The second 5-point composite sample (TY-02) and a duplicate sample (TY-02-20) were collected along a portion of pipeline where a valve junction was visible on West Cesario Street, just west of Route 33 (**Attachment A, Figure 6**). The aboveground pipeline parallels the road and is located in a publicly accessible right-of-way.

On November 14, 2018, FOSC Harry Allen and START arrived at the third sampling location. The sampling site was centrally located on the island, south of the TY sampling location in the Victoria's Ranch area of Mongmong Toto-Maite (MTM) (**Attachment A, Figure 7**). The MTM sampling location was added based on reports indicating the location was historically involved in HO spraying. One 5-point composite surface soil sample (MTM-01) was collected along the pipeline at the MTM site.

On November 15, 2018, FOSC Harry Allen and START arrived at the Navy tie-in Pipeline (NTIP) location (**Attachment A, Figure 8**) and met with representatives from the GEPA. The site is centrally located along the western coastline of the island in the village of Piti. The pipeline system runs northwest until arriving at a large valve system on Route 11A. The pipeline then runs northeast from the valve system on the south side of Route 11A. Sub-surface pipe was installed to cross Route 11A. The pipeline resurfaces on the northwest corner of Route 11A and an unnamed road and continues north towards a Guam Power Authority facility. There is a second set of valves where the pipeline resurfaces and there is an old concrete vault in a dilapidated condition. One 5-point composite surface soil sample (NTIP-01) was collected around the pipeline valve area. A

discrete surface soil grab sample (NTIP-02) and a discrete concrete grab sample (NTIP-CS-01) were also collected per the direction of FOSC Allen.

On November 15, 2018, FOSC Allen arrived onsite with START and GEPA at the Olivares (OLV) sampling location (**Attachment A, Figure 9**). The site is located on a private residence south of the NTIP location, along the western coastline in the village of Piti. The residents of the property complained of vegetative dead spots or “dead zones,” claiming vegetation will not grow in certain areas where the pipeline runs through the property. The property is reported to have previously been a storage area for 55-gallon drums that have since been removed. Remnant metal debris was still present during the site walk. The residential structure is located at the southwest corner of the property. Potential drum metal debris were observed approximately 30 feet (ft) east of the residential property in a densely vegetated area near where the sub-surface pipeline is known to be positioned through the property. A 5-point composite surface soil sample (OLV-01) was collected at this location with a grab sample of the possible drum metal debris (OLV-DM-01). Approximately 100 feet northeast of the area where possible drum metal debris was observed, there is an open field with a mound of soil and no vegetation at the sub-surface pipeline location. The resident indicated that the cleared area is where vegetation is reportedly unable to grow. A second 5-point composite sample (OLV-02) was collected from the cleared area. The pipeline runs northeast through the property and then offsets to the north across Peaceful Valley Road. A third 5-point composite surface soil sample (OLV-03) was collected along a culvert where the pipeline was visible on the north side of Peaceful Valley Road. Photographic documentation of field activities is presented in **Attachment B**.

RESULTS

SPLIT SAMPLES

In April 2018, EMAX provided the initial spilt samples to TestAmerica for Areas 1 through 3. These were analyzed for herbicides using EPA SW-846 Method 8151A by TestAmerica. The validated analytical report received from TestAmerica for one soil sample collected from Area 1 revealed trace amounts of 2,4-D with a concentration of 380 µg/kg and 2,4,5-T with a concentration of 49 µg/kg. Trace amounts of 2,4-D with a concentration of 10 µg/kg were also detected in one soil sample collected from Area 3. Soil split samples from both Area 1 and Area 3 also had detections of 2,4-D; however, both 2,4-D results were considered to have high uncertainty based on quality control measures. EMAX did not detect COPCs in any of the split samples analyzed for chlorinated herbicides from the AAFB sampling event in April 2018. Laboratory analytical results are presented in **Attachment C**.

Soil screening split samples received by TestAmerica from EMAX on December 12, 2018, were analyzed for herbicides using EPA SW-846 Method 8151A by TestAmerica. A deviation from the Standard Operating Procedure (SOP) occurred with the following details: the pre-weighed ISM aliquots for samples GQ010, GQ011, GQ011MS, GQ011MSD, GQ012, and L1011SMB provided the analyst with only 30 grams in contrast to the SOP requirement of 50 grams. The laboratory notified START of the issue on December 14, 2018, and START notified the FOSC of the issue on December 15, 2018. The FOSC and START approved proceeding with the extraction process with the 30-gram aliquots that were provided. Reporting limits were adjusted accordingly due to

the lower starting mass. The following samples were diluted 5x because of the gold color of the sample extract caused by the soil matrix to preserve the integrity of the analytical instrumentation and the reporting limits were adjusted accordingly: GQ010, GQ011, GQ011MS, and GQ011 matrix spike duplicate (MSD). Because of these dilutions, the surrogate and matrix spike (MS) concentrations in the samples were reduced to a level where the recovery calculation did not provide useful information.

To better evaluate the extraction performance and lower reporting limits for all samples analyzed at the 5x dilution, Navy requested that START have TestAmerica reanalyze the sample extracts (and MS/MSD) for the split samples at the 1x dilution to standardize laboratory quality assurance/quality control (QA/QC) protocol so that the sample results from both laboratories would be comparable. TestAmerica was able to re-analyze the sample extracts for GQ010 and GQ011 at 1x dilution. No detections of COPCs were observed in either analytical report received from TestAmerica. Data for split samples analyzed by TestAmerica are presented in **Attachment C**.

OFF-BASE SOIL SAMPLES

A total of 13 soil samples and two duplicate samples were collected by START personnel and submitted to TestAmerica for SVOC analysis in accordance with EPA Method 8270D and for herbicide analysis in accordance with EPA Method 8321A. Chlorinated herbicides, including HO, were reportedly applied in the 1960s and 1970s and have experienced over 50 years of environmental degradation. Limitations in resolution for the previously utilized EPA Method 8151A may have potentially restricted the ability to detect the COPCs at the lower concentrations necessary to quantitatively assess long-term risks. Therefore, a modified analytical method, EPA Method 8321A with increased resolution, was utilized to attempt to detect herbicides at lower concentrations than was possible with the previously utilized method. To evaluate potential measurement error, 20% of samples were split and analyzed using the original EPA Method 8151A.

Using EPA Method 8321A, it was determined that sample TY-02 had detections for both 2,4,5-T at 37 µg/kg and 2,4,5-TP at 23 µg/kg. Concentrations for 2,4,5-T and 2,4,5-TP did not exceed EPA Regional Screening Levels (RSLs) for residential soil or Tropical Pacific Environmental Screening Levels (TPESLs) for unrestricted land use where groundwater is not a current or potential drinking water resource and soil depth is less than 3 meters below ground surface. The EPA RSL residential values are 630,000 µg/kg for 2,4,5-T and 510,000 µg/kg for 2,4,5-TP. The TPESL values are 12,000 µg/kg for 2,4,5-T and 870 µg/kg for 2,4,5-TP. The detections of 2,4,5-T and 2,4,5-TP were greater than the method detection limit but less than the reporting limit; therefore, the concentrations are an approximate value. No detections were observed for the 20% split samples analyzed using EPA Method 8151A for herbicides.

SVOC data revealed concentrations for sample TY-01 exceeded EPA residential RSLs for benzo[a]pyrene of 110 µg/kg with a concentration of 120 µg/kg. SVOC data also revealed sample NTIP-01 exceeded EPA RSL for Bis(2-ethylhexyl) phthalate of 39,000 µg/kg with a concentration of 43,000 µg/kg. Bis(2-ethylhexyl) phthalate is a widely used plasticizer in the manufacturing of polyvinyl chloride (PVC). Benzo[a]pyrene is a polyaromatic hydrocarbon associated with burned

ash and/or asphalt. Both analytes that are in exceedance are SVOCs unrelated to the scope of work for this Site Assessment.

CONCRETE AND DRUM METAL SAMPLE

Concrete sample NTIP-CS-01 and metal sample OLV-DM-01 were analyzed for herbicides in accordance with EPA Method 8321A and for SVOCs in accordance with EPA Method 8270D. There were no detections for herbicides or SVOCs in either the concrete sample collected in the concrete vault area at the NTIP sampling location or in the metal sample collected at the alleged OLV drum storage sampling location.

SUMMARY

The goal of this study was to sample soils for evidence of chlorinated herbicides used on Guam. In addition to performing laboratory analysis of split samples collected from the limited investigation soil screening assessment on AAFB by Navy contractors, EPA conducted an off-base soil sampling effort from November 13, 2018 to November 15, 2018, which included five sampling locations along the former fuel pipeline located off-base, where reported spraying of chlorinated herbicides, including HO, may have occurred. Detections for both 2,4,5-T and 2,4,5-TP were observed at the TY site location. The herbicide 2,4,5-T was a known component of HO and both herbicides have been banned for use in the United States since the early 1980s. The detection of the analytes 2,4,5-T and 2,4,5-TP during the November 2018 sampling event, in combination with the previous detection of 2,4,5-T and (possibly) 2,4-D from split samples collected from Area 1 located on AAFB in April 2018, indicate the presence of these residual chlorinated herbicides in the soils tested. Please feel free to contact me at (925) 948-2608 if you have any questions or concerns regarding this report.

Respectfully,

WESTON SOLUTIONS, Inc.



Amanda Wagner
START Project Scientist



Attachments:

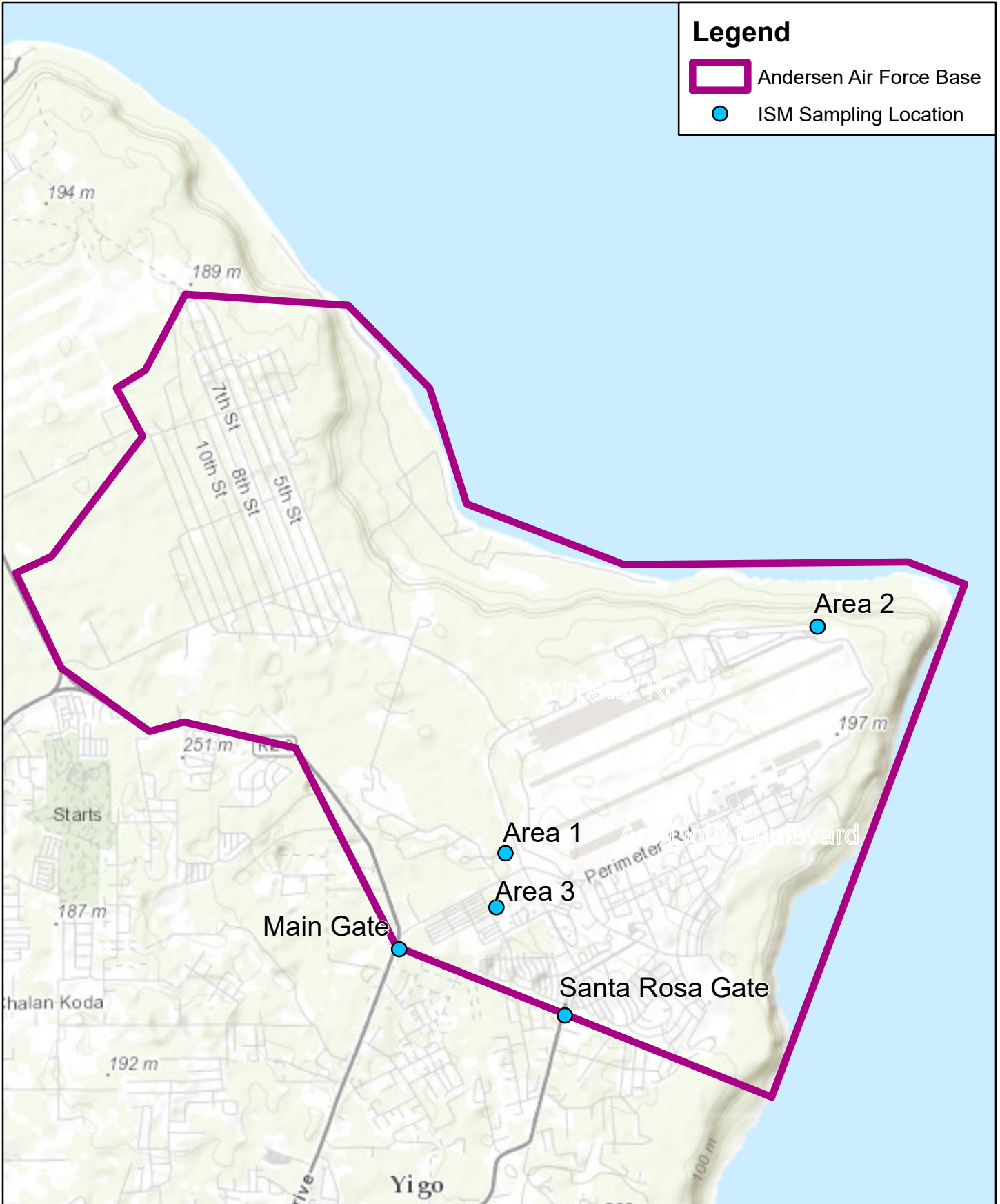
- A – Figures
- B – Photographic Documentation
- C – Sampling Results

cc: WESTON START DCN File

ATTACHMENT A: FIGURES

Legend

-  Andersen Air Force Base
-  ISM Sampling Location



PREPARED BY:
Weston Solutions, Inc.
2300 Clayton Rd, Ste 900
Concord, CA 94520

PREPARED FOR:
EPA Region 9
Pacific
Southwest



FIGURE 1
ANDERSEN AFB
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam



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0 Miles 4

PREPARED BY: **WESTON SOLUTIONS**
 Region 9, START
 Weston Solutions, Inc.
 2300 Clayton Rd. Suite 900
 Concord, CA 94520

PREPARED FOR:
 EPA Region 9
 Pacific
 Southwest



FIGURE 2
SITE LOCATION MAP
 Guam Agent Orange Site Assessment
 Yigo, Guam

Legend

- Composite Sample Aliquot
- 5-Point Composite Sample Location



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Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520

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FIGURE 3
POTTS JUNCTION
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam

Legend

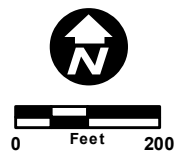
- Composite Sample Aliquot
- 5-Point Composite Sample Location



**FIGURE 7
TY-01**

**FIGURE 8
TY-02**

**FIGURE 4
TIYAN JUNCTION
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam**



PREPARED BY:
Region 9, START
Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520

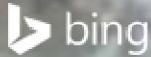


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Legend

- Composite Sample Aliquot
- ▭ 5-Point Composite Sample Location



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Concord, CA 94520

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FIGURE 5
TY-01 SAMPLING LOCATION
Guam Agent Orange Site Assessment
Yigo, Guam

Legend

- Composite Sample Aliquot
- 5-Point Composite Sample Location



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Region 9, START
Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520

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EPA Region 9
Pacific
Southwest

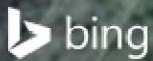


FIGURE 6
TY-02 SAMPLING LOCATION
Guam Agent Orange Site Assessment
Yigo, Guam

Legend

- Composite Sample Aliquot
- 5-Point Composite Sample Location

MTM-01



PREPARED BY: **WESTON SOLUTIONS**
Region 9, START
Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520

PREPARED FOR:
EPA Region 9
Pacific
Southwest



FIGURE 7
MONGMONG TOTO MAITE
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam

Legend

- Discrete Soil Sample
- Discrete Concrete Sample
- Concrete Vault Area
- Composite Sample Aliquot
- 5-Point Composite Sample Location



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Region 9, START
Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520

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FIGURE 8
NAVY TIE-IN PIPELINE
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam

Legend

- Discrete Metal Sample
- Composite Sample Aliquot
- 5-Point Composite Sample Location

OLV-03

Peaceful Valley Road

OLV-02

OLV-01

OLV-DM-01



PREPARED BY:
Region 9, START
Weston Solutions, Inc.
2300 Clayton Rd. Suite 900
Concord, CA 94520



PREPARED FOR:
EPA Region 9
Pacific
Southwest



FIGURE 9
OLIVARES
SAMPLING LOCATIONS
Guam Agent Orange Site Assessment
Yigo, Guam

ATTACHMENT B: PHOTOGRAPHIC DOCUMENTATION

Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 1	Date: 11/14/2019
Description: Direction: Northeast Potts Junction Site along powerline right-of-way adjacent to Route 3 in Guam.	



Photo No. 2	Date: 11/14/2019
Description: Direction: Southwest START conducting a 5-point composite soil sample at Potts Junction Site.	



Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 3	Date: 11/14/2019	
Description: Direction: Southwest EPA OSC and GEPA observing and photographing a sampling location at Potts Junction Site.		

Photo No. 4	Date: 11/14/2019	
Description: Direction: South 5-point composite sampling location at Potts Junction Site.		

Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 5	Date: 11/14/2019
Description: Direction: North Entrance to the Tiyan Junction TY-01 5-point composite sample location.	



Photo No. 6	Date: 11/14/2019
Description: Direction: South Tiyan Junction TY-01 5-point composite sample location with the pipeline visible along the eastern edge of the right-of-way.	



Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 7	Date: 11/14/2019
Description: Direction: East Tiyan Junction TY-02 5-point composite sample location with the pipeline visible along East Cesario Street.	



Photo No. 8	Date: 11/14/2019
Description: Direction: South Valve along East Cesario Street where Tiyan Junction TY-02 5-point composite sample location was collected.	



Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 9	Date: 11/15/2019	
Description: Direction: Northwest Large pipeline valve system at the Navy Tie-In Pipeline Site where pipeline crosses under Route 11A where NTIP-01 5-point composite sample was collected.		

Photo No. 10	Date: 11/15/2019	
Description: Direction: N/A Close-up view of a composite sampling location at the Navy Tie-In Pipeline Site where NTIP-01 5-point composite sample was collected.		

Project Name: Guam AO Site Assessment	Site Location: Yigo, Guam	Project No. TDD: 0002/1302-T2-R9-17-12-0001 DCN: 0178-08-ACDE
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Photo No. 9	Date: 11/15/2019	
Description: Direction: Southwest Pipeline at the north side of Route 11A at the Navy Tie-In Pipeline Site where NTIP-01 5-point composite sample was collected.		

Photo No. 10	Date: 11/15/2019	
Description: Direction: Northeast Pipeline at the north side of Route 11A at the Navy Tie-In Pipeline Site where NTIP-01 5-point composite was collected along with the discrete soil sample NTIP-02 and the concrete sample NTIP-CS-01.		

Project Name:
Guam AO Site Assessment

Site Location:
Yigo, Guam

Project No.
TDD: 0002/1302-T2-R9-17-12-0001
DCN: 0178-08-ACDE

Photo No.
9

Date:
11/15/2019

Description:

Direction: N/A

Close-up view of concrete vault in ruin where the discrete soil sample NTIP-02 and the concrete sample NTIP-CS-01 were collected.



Photo No.
10

Date:
11/15/2019

Description:

Direction: East

Dead zone area and soil mound at Olivares site where 5-point composite sample OLV-02 was collected.



ATTACHMENT C: SAMPLING RESULTS

Table 1
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Sample Date					
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8321A - Solid (µg/kg)		
2,4,5-T	630000	12000	ND (<5.5)	ND (<8.2)	ND (<5.7)
2,4-D	700000	340	ND (<5.5)	ND (<8.2)	ND (<5.7)
2,4-DB	1900000	--	ND (<6.6) J	ND (<9.8)	ND (<6.8)
Dicamba	1900000	--	ND (<5.5) J	ND (<8.2)	ND (<5.7)
Dichlorprop	--	--	ND (<5.5)	ND (<8.2)	ND (<5.7)
MCPA	32000	--	ND (<5.5) J	ND (<8.2)	ND (<5.7)
MCPP	63000	--	ND (<5.5) J	ND (<8.2)	ND (<5.7)
Silvex (2,4,5-TP)	510000	870	ND (<5.5)	ND (<8.2)	ND (<5.7)
Dalapon	--	--	ND (<5.5)	ND (<8.2)	ND (<5.7)
			ND (<230)		

Notes:

by EPA Method 8321A

Bold, Underlined and Highlighted = Analytical result exceeds screening level

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

TPESL= Tropical Pacific Environmental screening unrestricted land use; groundwater is not a current or potential drinking water resource (Fall 2017)

Table 1
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA Method 8321A - Solid (µg/kg)				
	EPA RSL (µg/kg)	TPESL (µg/kg)			
2,4,5-T	630000	12000	ND (<6.5)	ND (<6.5)	ND (<6.1) J
2,4-D	700000	340	ND (<6.5)	ND (<6.1)	ND (<6.1)
2,4-DB	1900000	--	ND (<7.7)	ND (<7.3)	ND (<7.3)
Dicamba	1900000	--	ND (<6.5)	ND (<6.1)	ND (<6.1)
Dichlorprop	--	--	ND (<6.5)	ND (<6.1)	ND (<6.1)
MCPA	32000	--	ND (<6.5)	ND (<6.1)	ND (<6.1)
MCPP	63000	--	ND (<6.5)	ND (<6.1)	ND (<6.1)
Silvex (2,4,5-TP)	510000	870	ND (<6.5)	ND (<6.1)	ND (<6.1) J
Dalapon	--	--	ND (<6.5)	ND (<6.1)	ND (<6.1) J

Notes:

by EPA Method 8321A

Bold, Underlined and Highlighted = Analytical result exceeds screening level

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 1
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	PJ-04	PJ-05	TY-01	TY-02	TY-02-20
Sample Date	11/14/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA Method 8321A - Solid (µg/kg)				
	EPA RSL (µg/kg)	TPESL (µg/kg)			
2,4,5-T	630000	12000	ND (<5.7)	37 J	ND (<6)
2,4-D	700000	340	ND (<5.7)	ND (<62)	ND (<6)
2,4-DB	1900000	--	ND (<6.8)	ND (<74)	ND (<7.2)
Dicamba	1900000	--	ND (<5.7)	ND (<62)	ND (<6)
Dichlorprop	--	--	ND (<5.7)	ND (<62)	ND (<6)
MCPA	32000	--	ND (<5.7)	ND (<62)	ND (<6)
MCPP	63000	--	ND (<5.7)	ND (<62)	ND (<6)
Silvex (2,4,5-TP)	510000	870	ND (<5.7)	ND (<62)	ND (<6)
Dalapon	--	--	ND (<5.7)	23 J	ND (<6)

Notes:

by EPA Method 8321A

Bold, Underlined and Highlighted = Analytical result exceeds screening level

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 2
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	NTIP-02	PJ-03	TY-01
Sample Date	11/15/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8151A - Solid (µg/kg)
2,4,5-T	630000	12000	ND (<24)
2,4-D	700000	340	ND (<95)
Dalapon	--	--	ND (<48)
Dicamba	1900000	--	ND (<48)
Dichlorprop	--	--	ND (<95)
MCPA	32000	--	ND (<9300)
MCPP	63000	--	ND (<9300)
Silvex (2,4,5-TP)	510000	870	ND (<24)
2,4-DB	--	--	ND (<95)

Notes:

by EPA Method 8151A

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

ND = not detected above the reporting limit (<RL)

TPESL= Tropical Pacific Environmental screening unrestricted land use; groundwater is not a current or potential drinking water resource (Fall 2017)

Table 3
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Concrete and Metal Sample

Sample ID	NTIP-CS-01 11/15/2018		OLV-DM-01 11/15/2018
Sample Date	EPA Method 8321A - Solid (µg/kg)		
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	
2,4,5-T	630000	12000	ND (<51) J
2,4-D	700000	340	ND (<51) J
2,4-DB	--	--	ND (<61) J
Dicamba	1900000	--	ND (<51) J
Dichlorprop	--	--	ND (<51) J
MCPA	32000	--	ND (<51) J
MCPA	63000	--	ND (<51) J
Silvex (2,4,5-TP)	510000	870	ND (<51) J

Notes:

by EPA Method 8321A

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

TPESL= Tropical Pacific Environmental screening unrestricted land use; groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
1,1'-Biphenyl	47000	10000	ND (<35000)	ND (<540)	ND (<1600)
1,2,4,5-Tetrachlorobenzene	23000	--	ND (<35000)	ND (<540)	ND (<1600)
1,2,4-Trichlorobenzene	24000	180	ND (<35000)	ND (<540)	ND (<1600)
1,2-Dichlorobenzene	1800000	1100	ND (<35000) J	ND (<540)	ND (<1600)
1,2-Diphenylhydrazine(as Azobenzene)	680	--	ND (<35000) J	ND (<540)	ND (<1600)
1,3,5-Trinitrobenzene	2200000	2800	ND (<170000)	ND (<2600)	ND (<7800)
1,3-Dichlorobenzene	1800000	1100	ND (<35000) J	ND (<540)	ND (<1600)
1,3-Dinitrobenzene	6300	580	ND (<35000)	ND (<540)	ND (<1600)
1,4-Dichlorobenzene	2600	1100	ND (<35000) J	ND (<540)	ND (<1600)
1,4-Dinitrobenzene	6300	--	ND (<35000)	ND (<540)	ND (<1600)
1,4-Dioxane	5300	5400	ND (<70000)	ND (<1100)	ND (<3200)
1,4-Naphthoquinone	--	--	ND (<170000)	ND (<2600)	ND (<7800)
1-Chloronaphthalene	--	--	ND (<260000)	ND (<4100)	ND (<12000)
1-Methylnaphthalene	18000	890	ND (<35000) J	ND (<540)	ND (<1600)
1-Naphthylamine	--	--	ND (<70000) J	ND (<1100) J	ND (<3200) J
2,2'-oxybis[1-chloropropane]	--	--	ND (<35000) J	ND (<540)	ND (<1600)
2,3,4,6-Tetrachlorophenol	1900000	56	ND (<170000)	ND (<2600)	ND (<7800)
2,4,5-Trichlorophenol	6300000	2900	ND (<35000) J	ND (<540)	ND (<1600)
2,4,6-Trichlorophenol	49000	310	ND (<35000) J	ND (<540)	ND (<1600)
2,4-Dichlorophenol	190000	73	ND (<35000) J	ND (<540)	ND (<1600)
2,4-Dimethylphenol	1300000	9000	ND (<35000)	ND (<540)	ND (<1600)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RLL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
1,1'-Biphenyl	47000	10000	ND (<440)	ND (<410)	ND (<420)
1,2,4,5-Tetrachlorobenzene	23000	--	ND (<440)	ND (<410)	ND (<380)
1,2,4-Trichlorobenzene	24000	180	ND (<440)	ND (<410)	ND (<380)
1,2-Dichlorobenzene	1800000	1100	ND (<440)	ND (<410)	ND (<380)
1,2-Diphenylhydrazine(as Azobenzene)	680	--	ND (<440)	ND (<410)	ND (<380)
1,3,5-Trinitrobenzene	2200000	2800	ND (<2100)	ND (<2000)	ND (<1800) J
1,3-Dichlorobenzene	1800000	1100	ND (<440)	ND (<410)	ND (<380)
1,3-Dinitrobenzene	6300	580	ND (<440)	ND (<410)	ND (<380)
1,4-Dichlorobenzene	2600	1100	ND (<440)	ND (<410)	ND (<380)
1,4-Dinitrobenzene	6300	--	ND (<440)	ND (<410)	ND (<380)
1,4-Dioxane	5300	5400	ND (<870)	ND (<820)	ND (<760)
1,4-Naphthoquinone	--	--	ND (<2100)	ND (<2000)	ND (<1800) J
1-Chloronaphthalene	--	--	ND (<3300)	ND (<3100)	ND (<2900)
1-Methylnaphthalene	18000	890	ND (<440)	ND (<410)	ND (<380)
1-Naphthylamine	--	--	ND (<870) J	ND (<820) J	ND (<760) J
2,2'-oxybis[1-chloropropane]	--	--	ND (<440)	ND (<410)	ND (<380)
2,3,4,6-Tetrachlorophenol	1900000	56	ND (<2100)	ND (<2000)	ND (<1800)
2,4,5-Trichlorophenol	6300000	2900	ND (<440)	ND (<410)	ND (<380)
2,4,6-Trichlorophenol	49000	310	ND (<440)	ND (<410)	ND (<380)
2,4-Dichlorophenol	190000	73	ND (<440)	ND (<410)	ND (<380)
2,4-Dimethylphenol	1300000	9000	ND (<440)	ND (<410)	ND (<380)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RLL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	PJ-04	PJ-05	TY-01	TY-02	TY-02-20
Sample Date	11/14/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
1,1'-Biphenyl	47000	10000	ND (<360)	ND (<39000)	ND (<40000)
1,2,4,5-Tetrachlorobenzene	23000	--	ND (<360)	ND (<39000)	ND (<40000)
1,2,4-Trichlorobenzene	24000	180	ND (<360)	ND (<39000)	ND (<40000)
1,2-Dichlorobenzene	1800000	1100	ND (<360)	ND (<39000)	ND (<40000)
1,2-Diphenylhydrazine(as Azobenzene)	680	--	ND (<360)	ND (<39000)	ND (<40000)
1,3,5-Trinitrobenzene	2200000	2800	ND (<1700)	ND (<190000)	ND (<190000)
1,3-Dichlorobenzene	1800000	1100	ND (<360)	ND (<39000)	ND (<40000)
1,3-Dinitrobenzene	6300	580	ND (<360)	ND (<39000)	ND (<40000)
1,4-Dichlorobenzene	2600	1100	ND (<360)	ND (<39000)	ND (<40000)
1,4-Dinitrobenzene	6300	--	ND (<360)	ND (<39000)	ND (<40000)
1,4-Dioxane	5300	5400	ND (<720)	ND (<77000)	ND (<80000)
1,4-Naphthoquinone	--	--	ND (<1700)	ND (<190000)	ND (<190000)
1-Chloronaphthalene	--	--	ND (<2700)	ND (<290000)	ND (<300000)
1-Methylnaphthalene	18000	890	ND (<360)	ND (<39000)	ND (<40000)
1-Naphthylamine	--	--	ND (<720) J	ND (<77000) J	ND (<80000) J
2,2'-oxybis[1-chloropropane]	--	--	ND (<360)	ND (<39000)	ND (<40000)
2,3,4,6-Tetrachlorophenol	1900000	56	ND (<1700)	ND (<190000)	ND (<190000)
2,4,5-Trichlorophenol	6300000	2900	ND (<360)	ND (<39000)	ND (<40000)
2,4,6-Trichlorophenol	49000	310	ND (<360)	ND (<39000)	ND (<40000)
2,4-Dichlorophenol	190000	73	ND (<360)	ND (<39000)	ND (<40000)
2,4-Dimethylphenol	1300000	9000	ND (<360)	ND (<39000)	ND (<40000)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RLL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
2,4-Dinitrophenol	130000	1100	ND (<170000)	ND (<2600)	ND (<7800)
2,4-Dinitrotoluene	1700	870	ND (<35000)	ND (<540)	ND (<1600)
2,6-Dichlorophenol	--	--	ND (<35000)	ND (<540)	ND (<1600)
2,6-Dinitrotoluene	360	360	ND (<35000)	ND (<540)	ND (<1600)
2-Acetylaminofluorene	140	--	ND (<350000)	ND (<5400)	ND (<16000)
2-Chloronaphthalene	--	--	ND (<35000) J	ND (<540)	ND (<1600)
2-Chlorophenol	390000	120	ND (<35000) J	ND (<540)	ND (<1600)
2-Methylnaphthalene	240000	1900	ND (<35000) J	ND (<540)	ND (<1600)
2-Methylphenol	--	--	ND (<35000) J	ND (<540)	ND (<1600)
2-Naphthylamine	300	--	ND (<70000) J	ND (<1100) J	ND (<3200) J
2-Nitroaniline	630000	--	ND (<170000)	ND (<2600)	ND (<7800)
2-Nitrophenol	--	--	ND (<35000) J	ND (<540)	ND (<1600)
2-Picoline	--	--	ND (<70000) J	ND (<1100) J	ND (<3200) J
2-Toluidine	--	--	ND (<70000) J	ND (<1100) J	ND (<3200) J
3 & 4 Methylphenol	--	--	ND (<35000)	ND (<540)	ND (<1600)
3,3'-Dichlorobenzidine	1200	--	ND (<70000)	ND (<1100)	ND (<3200)
3,3'-Dimethylbenzidine	49	--	ND (<70000) J	ND (<1100) J	ND (<3200) J
3-Methylcholanthrene	5.5	--	ND (<70000)	ND (<1100)	ND (<3200)
3-Nitroaniline	--	--	ND (<170000)	ND (<2600)	ND (<7800)
4,6-Dinitro-2-methylphenol	--	--	ND (<170000)	ND (<2600)	ND (<7800)
4-Aminobiphenyl	26	--	ND (<170000) J	ND (<2600) J	ND (<7800) J

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RLL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
2,4-Dinitrophenol	130000	1100	ND (<2100)	ND (<2000)	ND (<1800)
2,4-Dinitrotoluene	1700	870	ND (<440)	ND (<410)	ND (<380)
2,6-Dichlorophenol	--	--	ND (<440)	ND (<410)	ND (<380)
2,6-Dinitrotoluene	360	360	ND (<440)	ND (<410)	ND (<380)
2-Acetylaminofluorene	140	--	ND (<4400)	ND (<4100)	ND (<3800)
2-Chloronaphthalene	--	--	ND (<440)	ND (<410)	ND (<380)
2-Chlorophenol	390000	120	ND (<440)	ND (<410)	ND (<380)
2-Methylnaphthalene	240000	1900	ND (<440)	ND (<410)	ND (<380)
2-Methylphenol	--	--	ND (<440)	ND (<410)	ND (<380)
2-Naphthylamine	300	--	ND (<870) J	ND (<820) J	ND (<760) J
2-Nitroaniline	630000	--	ND (<2100)	ND (<2000)	ND (<1800)
2-Nitrophenol	--	--	ND (<440)	ND (<410)	ND (<380)
2-Picoline	--	--	ND (<870) J	ND (<820) J	ND (<760) J
2-Toluidine	--	--	ND (<870) J	ND (<820) J	ND (<760) J
3 & 4 Methylphenol	--	--	ND (<440)	ND (<410)	ND (<380)
3,3'-Dichlorobenzidine	1200	--	ND (<870)	ND (<820)	ND (<760)
3,3'-Dimethylbenzidine	49	--	ND (<870) J	ND (<820) J	ND (<760) J
3-Methylcholanthrene	5.5	--	ND (<870)	ND (<820)	ND (<760)
3-Nitroaniline	--	--	ND (<2100)	ND (<2000)	ND (<1800)
4,6-Dinitro-2-methylphenol	--	--	ND (<2100)	ND (<2000)	ND (<1800)
4-Aminobiphenyl	26	--	ND (<2100) J	ND (<2000) J	ND (<1800) J

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RSL)

µg/kg=micrograms per kilogram

TPESEL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	PJ-04	PJ-05	TY-01	TY-02	TY-02-20
Sample Date	11/14/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
2,4-Dinitrophenol	130000	1100	ND (<1900)	ND (<190000)	ND (<190000)
2,4-Dinitrotoluene	1700	870	ND (<400)	ND (<39000)	ND (<40000)
2,6-Dichlorophenol	--	--	ND (<400)	ND (<39000)	ND (<40000)
2,6-Dinitrotoluene	360	360	ND (<400)	ND (<39000)	ND (<40000)
2-Acetylaminofluorene	140	--	ND (<4000)	ND (<390000)	ND (<400000)
2-Chloronaphthalene	--	--	ND (<400)	ND (<39000)	ND (<40000)
2-Chlorophenol	390000	120	ND (<400)	ND (<39000)	ND (<40000)
2-Methylnaphthalene	240000	1900	ND (<400)	ND (<39000)	ND (<40000)
2-Methylphenol	--	--	ND (<400)	ND (<39000)	ND (<40000)
2-Naphthylamine	300	--	ND (<800) J	ND (<77000) J	ND (<80000) J
2-Nitroaniline	630000	--	ND (<1900)	ND (<190000)	ND (<190000)
2-Nitrophenol	--	--	ND (<400)	ND (<39000)	ND (<40000)
2-Picoline	--	--	ND (<800) J	ND (<77000) J	ND (<80000) J
2-Toluidine	--	--	ND (<800) J	ND (<77000) J	ND (<80000) J
3 & 4 Methylphenol	--	--	ND (<400)	ND (<39000)	ND (<40000)
3,3'-Dichlorobenzidine	1200	--	ND (<800)	ND (<77000)	ND (<80000)
3,3'-Dimethylbenzidine	49	--	ND (<800) J	ND (<77000) J	ND (<80000) J
3-Methylcholanthrene	5.5	--	ND (<800)	ND (<77000)	ND (<80000)
3-Nitroaniline	--	--	ND (<1900)	ND (<190000)	ND (<190000)
4,6-Dinitro-2-methylphenol	--	--	ND (<1900)	ND (<190000)	ND (<190000)
4-Aminobiphenyl	26	--	ND (<1900) J	ND (<190000) J	ND (<190000) J

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RLL)

µg/kg=micrograms per kilogram

TPESEL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
4-Bromophenyl phenyl ether	--	--	ND (<35000) J	ND (<540)	ND (<1600)
4-Chloro-3-methylphenol	--	--	ND (<35000)	ND (<540)	ND (<1600)
4-Chloroaniline	--	--	ND (<35000)	ND (<540)	ND (<1600)
4-Chlorophenyl phenyl ether	--	--	ND (<35000) J	ND (<540)	ND (<1600)
4-Methylphenol	--	--	ND (<35000)	ND (<540)	ND (<1600)
4-Nitroaniline	27000	--	ND (<170000)	ND (<2600)	ND (<7800)
Anthracene	18000000	1400	ND (<35000)	ND (<540)	ND (<1600)
Aramite Peak 1	--	--	ND (<32000)	ND (<490)	ND (<1500)
Aramite Peak 2	--	--	ND (<38000)	ND (<590)	ND (<1800)
Azobenzene	5600	--	ND (<35000) J	ND (<540)	ND (<1600)
Benzidine	0.53	--	ND (<350000) J	ND (<5400) J	ND (<16000) J
Benzol[a]anthracene	1100	3300	ND (<35000) J	ND (<540)	ND (<1600)
Benzol[a]pyrene	110	3600	ND (<35000) J	ND (<540)	ND (<1600)
Benzol[b]fluoranthene	1100	11000	ND (<35000) J	ND (<540)	ND (<1600)
Benzol[g,h,i]perylene	--	35000	ND (<35000) J	ND (<540)	ND (<1600)
Benzol[k]fluoranthene	11000	39000	ND (<35000)	ND (<540)	ND (<1600)
Benzoic acid	250000000	--	ND (<170000)	ND (<2600)	ND (<7800)
Benzyl alcohol	6300000	--	ND (<35000) J	ND (<540)	ND (<1600)
Bis(2-chloroethoxy)methane	190000	--	ND (<35000) J	ND (<540)	ND (<1600)
Bis(2-chloroethyl)ether	230	7.9	ND (<35000) J	ND (<540)	ND (<1600)
Bis(2-ethylhexyl) phthalate	39000	39000	43,000 J	5,700	ND (<1600)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

µg/kg=micrograms per kilogram

TPESEL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
4-Bromophenyl phenyl ether	--	--	ND (<440)	ND (<410)	ND (<420)
4-Chloro-3-methylphenol	--	--	ND (<440)	ND (<410)	ND (<420)
4-Chloroaniline	--	--	ND (<440)	ND (<410)	ND (<420)
4-Chlorophenyl phenyl ether	--	--	ND (<440)	ND (<410)	ND (<420)
4-Methylphenol	--	--	ND (<440)	ND (<410)	ND (<420)
4-Nitroaniline	27000	--	ND (<2100)	ND (<2000)	ND (<1800)
Anthracene	18000000	1400	ND (<440)	ND (<410)	ND (<420)
Aramite Peak 1	--	--	ND (<400)	ND (<370)	ND (<380)
Aramite Peak 2	--	--	ND (<480)	ND (<450)	ND (<460)
Azobenzene	5600	--	ND (<440)	ND (<410)	ND (<420)
Benzidine	0.53	--	ND (<4400)	ND (<4100)	ND (<4200)
Benzo[a]anthracene	1100	3300	ND (<440)	ND (<410)	ND (<420)
Benzo[a]pyrene	110	3600	ND (<440)	ND (<410)	ND (<420)
Benzo[b]fluoranthene	1100	11000	ND (<440)	ND (<410)	ND (<420)
Benzo[g,h,i]perylene	--	35000	ND (<440)	ND (<410)	ND (<420)
Benzo[k]fluoranthene	11000	39000	ND (<440)	ND (<410)	ND (<420)
Benzoic acid	250000000	--	1,000 J	ND (<2000)	ND (<1800) J
Benzyl alcohol	6300000	--	ND (<440)	ND (<410)	ND (<420)
Bis(2-chloroethoxy)methane	190000	--	ND (<440)	ND (<410)	ND (<420)
Bis(2-chloroethyl)ether	230	7.9	ND (<440)	ND (<410)	ND (<420)
Bis(2-ethylhexyl) phthalate	39000	39000	ND (<440)	ND (<410)	ND (<420)

Notes:

by EPA Method 8270D

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EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

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µg/kg=micrograms per kilogram

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	PJ-04	PJ-05	TY-01	TY-02	TY-02-20
Sample Date	11/14/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA Method 8270D - Solid (µg/kg)				
	EPA RSL (µg/kg)	TPESL (µg/kg)			
4-Bromophenyl phenyl ether	--	--	ND (<370)	ND (<39000)	ND (<40000)
4-Chloro-3-methylphenol	--	--	ND (<370)	ND (<39000)	ND (<40000)
4-Chloroaniline	--	--	ND (<370)	ND (<39000)	ND (<40000)
4-Chlorophenyl phenyl ether	--	--	ND (<370)	ND (<39000)	ND (<40000)
4-Methylphenol	--	--	ND (<370)	ND (<39000)	ND (<40000)
4-Nitroaniline	27000	--	ND (<1800)	ND (<190000)	ND (<190000)
Anthracene	18000000	1400	ND (<370)	ND (<39000)	ND (<40000)
Aramite Peak 1	--	--	ND (<330)	ND (<35000)	ND (<36000)
Aramite Peak 2	--	--	ND (<400)	ND (<42000)	ND (<44000)
Azobenzene	5600	--	ND (<370)	ND (<39000)	ND (<40000)
Benzidine	0.53	--	ND (<3700)	ND (<390000)	ND (<400000)
Benzol[a]anthracene	1100	3300	73 J	ND (<39000)	ND (<40000)
Benzol[a]pyrene	110	3600	120 J	ND (<39000)	ND (<40000)
Benzol[b]fluoranthene	1100	11000	210 J	ND (<39000)	ND (<40000)
Benzol[g,h,i]perylene	--	35000	110 J	ND (<39000)	ND (<40000)
Benzol[k]fluoranthene	11000	39000	68 J	ND (<39000)	ND (<40000)
Benzoic acid	250000000	--	ND (<1800)	ND (<190000)	ND (<190000)
Benzyl alcohol	6300000	--	ND (<370)	ND (<39000)	ND (<40000)
Bis(2-chloroethoxy)methane	190000	--	ND (<370)	ND (<39000)	ND (<40000)
Bis(2-chloroethyl)ether	230	7.9	ND (<370)	ND (<39000)	ND (<40000)
Bis(2-ethylhexyl) phthalate	39000	39000	120 J	ND (<39000)	ND (<40000)

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
Butyl benzyl phthalate	290000	--	ND (<35000)	ND (<540)	ND (<1600)
Carbazole	--	--	ND (<35000)	ND (<540)	ND (<1600)
Chrysene	110000	30000	ND (<35000)	ND (<540)	ND (<1600)
Dibenz(a,h)anthracene	110	1100	ND (<35000) J	ND (<540)	ND (<1600)
Dibenz[a,j]acridine	--	--	ND (<70000)	ND (<1100)	ND (<3200)
Dibenzofuran	73000	--	ND (<35000) J	ND (<540)	ND (<1600)
Diethyl phthalate	51000000	3700	ND (<70000) J	ND (<1100)	ND (<3200)
Dimethoate	140000	--	ND (<70000)	ND (<1100)	ND (<3200)
Dimethyl phthalate	--	26000	ND (<35000) J	ND (<540)	ND (<1600)
Di-n-butyl phthalate	--	--	ND (<35000)	ND (<540)	ND (<1600)
Di-n-octyl phthalate	630000	--	ND (<35000) J	ND (<540)	ND (<1600)
Diphenylamine	6300000	--	ND (<35000)	ND (<540)	ND (<1600)
Disulfoton	2500	--	ND (<170000)	ND (<2600)	ND (<7800)
Ethyl 4,4'-Dichlorobenzilate	--	--	ND (<35000)	ND (<540)	ND (<1600)
Ethyl methanesulfonate	--	--	ND (<35000)	ND (<540)	ND (<1600)
Ethyl Parathion	--	--	ND (<170000)	ND (<2600)	ND (<7800)
Fluoranthene	2400000	29000	ND (<35000)	ND (<540)	ND (<1600)
Fluorene	2400000	31000	ND (<35000) J	ND (<540)	ND (<1600)
Hexachlorobenzene	210	78	ND (<35000)	ND (<540)	ND (<1600)
Hexachlorobutadiene	1200	61	ND (<35000) J	ND (<540)	ND (<1600)
Hexachlorocyclopentadiene	1800	--	ND (<170000) J	ND (<2600)	ND (<7800)

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
Butyl benzyl phthalate	290000	--	ND (<440)	ND (<420)	ND (<380)
Carbazole	--	--	ND (<440)	ND (<420)	ND (<380)
Chrysene	110000	30000	ND (<440)	ND (<420)	ND (<380)
Dibenz(a,h)anthracene	110	1100	ND (<440)	ND (<420)	ND (<380)
Dibenz[a,j]acridine	--	--	ND (<870)	ND (<830)	ND (<760)
Dibenzofuran	73000	--	ND (<440)	ND (<420)	ND (<380)
Diethyl phthalate	51000000	3700	ND (<870)	ND (<830)	ND (<760)
Dimethoate	140000	--	ND (<870)	ND (<830)	ND (<760)
Dimethyl phthalate	--	26000	ND (<440)	ND (<420)	ND (<380)
Di-n-butyl phthalate	--	--	ND (<440)	ND (<420)	ND (<380)
Di-n-octyl phthalate	630000	--	ND (<440)	ND (<420)	ND (<380)
Diphenylamine	6300000	--	ND (<440)	ND (<420)	ND (<380)
Disulfoton	2500	--	ND (<2100)	ND (<2000)	ND (<1800)
Ethyl 4,4'-Dichlorobenzilate	--	--	ND (<440)	ND (<420)	ND (<380)
Ethyl methanesulfonate	--	--	ND (<440)	ND (<420)	ND (<380)
Ethyl Parathion	--	--	ND (<2100)	ND (<2000)	ND (<1800)
Fluoranthene	2400000	29000	ND (<440)	ND (<420)	ND (<380)
Fluorene	2400000	31000	ND (<440)	ND (<420)	ND (<380)
Hexachlorobenzene	210	78	ND (<440)	ND (<420)	ND (<380)
Hexachlorobutadiene	1200	61	ND (<440)	ND (<420)	ND (<380)
Hexachlorocyclopentadiene	1800	--	ND (<2100)	ND (<2000)	ND (<1800) J

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Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	Sample Date	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)				
				PJ-04 11/14/2018	PJ-05 11/14/2018	TY-01 11/14/2018	TY-02 11/14/2018	TY-02-20 11/14/2018
Butyl benzyl phthalate	--	290000	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Carbazole	--	--	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Chrysene	30000	110000	30000	ND (<360)	ND (<400)	130 J	ND (<39000)	ND (<40000)
Dibenz(a,h)anthracene	1100	110	1100	ND (<360)	ND (<400)	25 J	ND (<39000)	ND (<40000)
Dibenz[a,j]acridine	--	--	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Dibenzofuran	73000	73000	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Diethyl phthalate	51000000	51000000	3700	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Dimethoate	140000	140000	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Dimethyl phthalate	--	--	26000	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Di-n-butyl phthalate	--	--	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Di-n-octyl phthalate	630000	630000	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Diphenylamine	6300000	6300000	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Disulfoton	2500	2500	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Ethyl 4,4'-Dichlorobenzilate	--	--	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Ethyl methanesulfonate	--	--	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Ethyl Parathion	--	--	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Fluoranthene	2400000	2400000	29000	ND (<360)	ND (<400)	130 J	ND (<39000)	ND (<40000)
Fluorene	2400000	2400000	31000	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Hexachlorobenzene	210	210	78	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Hexachlorobutadiene	1200	1200	61	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Hexachlorocyclopentadiene	1800	1800	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)

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Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA Method 8270D - Solid (µg/kg)				
	EPA RSL (µg/kg)	TPESL (µg/kg)			
Hexachloroethane	1800	680	ND (<35000) J	ND (<540)	ND (<1600)
Hexachloropropene	--	--	ND (<350000) J	ND (<5400) J	ND (<16000) J
Indeno[1,2,3-cd]pyrene	1100	11000	ND (<35000) J	ND (<540)	ND (<1600)
Isodrin	--	--	ND (<35000) J	ND (<540)	ND (<1600)
Isophorone	570000	10000	ND (<35000) J	ND (<540)	ND (<1600)
Methapyrilene	--	--	ND (<170000) J	ND (<2600) J	ND (<7800) J
Methyl methanesulfonate	5500	--	ND (<35000) J	ND (<540)	ND (<1600)
Methyl parathion	16000	--	ND (<170000) J	ND (<2600)	ND (<7800)
Naphthalene	3800	3100	ND (<35000) J	ND (<540)	ND (<1600)
Nitrobenzene	5100	5600	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitro-o-toluidine	--	--	ND (<7000) J	ND (<1100) J	ND (<3200) J
N-Nitrosodiethylamine	190	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosodimethylamine	2	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosodi-n-butylamine	99	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosodi-n-propylamine	78	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosodiphenylamine	11000	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosomethylethylamine	20	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosomorpholine	81	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosopiperidine	58	--	ND (<35000) J	ND (<540)	ND (<1600)
N-Nitrosopyrrolidine	260	--	ND (<35000) J	ND (<540)	ND (<1600)
o,o'-Triethylphosphorothioate	--	--	ND (<170000) J	ND (<2600)	ND (<7800)

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03 11/15/2018	PJ-01 11/14/2018	PJ-02 11/14/2018	PJ-02-20 11/14/2018	PJ-03 11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
Hexachloroethane	1800	680	ND (<440)	ND (<410)	ND (<420)
Hexachloropropene	--	--	ND (<4400) J	ND (<4100) J	ND (<4200) J
Indeno[1,2,3-cd]pyrene	1100	11000	ND (<440)	ND (<410)	ND (<420)
Isodrin	--	--	ND (<440)	ND (<410)	ND (<420)
Isophorone	570000	10000	ND (<440)	ND (<410)	ND (<420)
Methapyrilene	--	--	ND (<2100) J	ND (<2000) J	ND (<2000) J
Methyl methanesulfonate	5500	--	ND (<440)	ND (<410)	ND (<420)
Methyl parathion	16000	--	ND (<2100)	ND (<2000)	ND (<2000)
Naphthalene	3800	3100	ND (<440)	ND (<410)	ND (<420)
Nitrobenzene	5100	5600	ND (<440)	ND (<410)	ND (<420)
N-Nitro-o-toluidine	--	--	ND (<870)	ND (<820)	ND (<830)
N-Nitrosodiethylamine	190	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosodimethylamine	2	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosodi-n-butylamine	99	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosodi-n-propylamine	78	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosodiphenylamine	11000	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosomethylethylamine	20	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosomorpholine	81	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosopiperidine	58	--	ND (<440)	ND (<410)	ND (<420)
N-Nitrosopyrrolidine	260	--	ND (<440)	ND (<410)	ND (<420)
o,o'-Triethylphosphorothioate	--	--	ND (<2100)	ND (<2000)	ND (<2000)

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	PJ-04	PJ-05	TY-01	TY-02	TY-02-20
Sample Date	11/14/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA Method 8270D - Solid (µg/kg)				
	EPA RSL (µg/kg)	TPESL (µg/kg)			
Hexachloroethane	1800	680	ND (<370)	ND (<39000)	ND (<40000)
Hexachloropropene	--	--	ND (<3700) J	ND (<39000) J	ND (<40000) J
Indeno[1,2,3-cd]pyrene	1100	11000	100 J	ND (<39000)	ND (<40000)
Isodrin	--	--	ND (<370)	ND (<39000)	ND (<40000)
Isophorone	570000	10000	ND (<370)	ND (<39000)	ND (<40000)
Methapyrilene	--	--	ND (<1800) J	ND (<190000) J	ND (<190000) J
Methyl methanesulfonate	5500	--	ND (<370)	ND (<39000)	ND (<40000)
Methyl parathion	16000	--	ND (<1800)	ND (<190000)	ND (<190000)
Naphthalene	3800	3100	ND (<370)	ND (<39000)	ND (<40000)
Nitrobenzene	5100	5600	ND (<370)	ND (<39000)	ND (<40000)
N-Nitro-o-toluidine	--	--	ND (<730)	ND (<77000)	ND (<80000)
N-Nitrosodiethylamine	190	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosodimethylamine	2	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosodi-n-butylamine	99	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosodi-n-propylamine	78	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosodiphenylamine	11000	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosomethylethylamine	20	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosomorpholine	81	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosopiperidine	58	--	ND (<370)	ND (<39000)	ND (<40000)
N-Nitrosopyrrolidine	260	--	ND (<370)	ND (<39000)	ND (<40000)
o,o'-Triethylphosphorothioate	--	--	ND (<1800)	ND (<190000)	ND (<190000)

Notes:

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Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	MTM-01 11/14/2018	NTIP-01 11/15/2018	NTIP-02 11/15/2018	OLV-01 11/15/2018	OLV-02 11/15/2018
Analyte	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
p-Dimethylamino azobenzene	120	--	ND (<7000)	ND (<1100)	ND (<3200)
Pentachlorobenzene	63000	--	ND (<35000)	ND (<540)	ND (<1600)
Pentachloroethane	7700	--	ND (<170000) J	ND (<2600)	ND (<7800)
Pentachloronitrobenzene	2700	--	ND (<170000)	ND (<2600)	ND (<7800)
Pentachlorophenol	1000	--	ND (<170000)	ND (<2600)	ND (<7800)
Phenacetin	250000	--	ND (<70000)	ND (<1100)	ND (<3200)
Phenanthrene	--	23000	ND (<35000)	ND (<540)	ND (<1600)
Phenol	19000000	1800	ND (<35000) J	ND (<540)	ND (<1600)
Phorate	13000	--	ND (<170000)	ND (<2600)	ND (<7800)
p-Phenylene diamine	63000	--	ND (<170000) J	ND (<2600) J	ND (<7800) J
Pronamide	--	--	ND (<35000)	ND (<540)	ND (<1600)
Pyrene	1800000	41000	ND (<35000)	ND (<540)	ND (<1600)
Pyridine	780000	--	ND (<70000)	ND (<1100)	ND (<3200)
Safrrole, Total	550	--	ND (<170000)	ND (<2600)	ND (<7800)
Sulfotepp	--	--	ND (<110000)	ND (<1600)	ND (<4900)
Thionazin	--	--	ND (<170000)	ND (<2600)	ND (<7800)
Aramite, Total	--	--	ND (<70000)	ND (<1100)	ND (<3200)
Diallate	8900	--	ND (<70000)	ND (<1100)	ND (<3200)
Isosafrole	--	--	ND (<70000) J	ND (<1100)	ND (<3200)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	OLV-03	PJ-01	PJ-02	PJ-02-20	PJ-03
Sample Date	11/15/2018	11/14/2018	11/14/2018	11/14/2018	11/14/2018
Analyte	EPA RSL (µg/kg)	TPESEL (µg/kg)	EPA Method 8270D - Solid (µg/kg)		
p-Dimethylamino azobenzene	120	--	ND (<870)	ND (<820)	ND (<830)
Pentachlorobenzene	63000	--	ND (<440)	ND (<410)	ND (<420)
Pentachloroethane	7700	--	ND (<2100) J	ND (<2000) J	ND (<2000) J
Pentachloronitrobenzene	2700	--	ND (<2100)	ND (<2000)	ND (<2000)
Pentachlorophenol	1000	--	ND (<2100)	ND (<2000)	ND (<2000)
Phenacetin	250000	--	ND (<870)	ND (<820)	ND (<830)
Phenanthrene	--	23000	ND (<440)	ND (<410)	ND (<420)
Phenol	19000000	1800	ND (<440)	ND (<410)	ND (<420)
Phorate	13000	--	ND (<2100)	ND (<2000)	ND (<2000)
p-Phenylene diamine	63000	--	ND (<2100) J	ND (<2000) J	ND (<2000) J
Pronamide	--	--	ND (<440)	ND (<410)	ND (<420)
Pyrene	1800000	41000	ND (<440)	ND (<410)	ND (<420)
Pyridine	780000	--	ND (<870)	ND (<820)	ND (<830)
Safrrole, Total	550	--	ND (<2100)	ND (<2000)	ND (<2000)
Sulfotepp	--	--	ND (<1300)	ND (<1200)	ND (<1300)
Thionazin	--	--	ND (<2100)	ND (<2000)	ND (<2000)
Aramite, Total	--	--	ND (<870)	ND (<820)	ND (<830)
Diallate	8900	--	ND (<870)	ND (<820)	ND (<830)
Isosafrole	--	--	ND (<870)	ND (<820)	ND (<830)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

µg/kg=micrograms per kilogram

TPESEL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

Table 4
Guam Agent Orange Screening Assessment Site
Summary of Analytical Data - Soil

Sample ID	EPA RSL (µg/kg)	TPESL (µg/kg)	EPA Method 8270D - Solid (µg/kg)				
			PJ-04 11/14/2018	PJ-05 11/14/2018	TY-01 11/14/2018	TY-02 11/14/2018	TY-02-20 11/14/2018
Analyte							
p-Dimethylamino azobenzene	120	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Pentachlorobenzene	63000	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Pentachloroethane	7700	--	ND (<1700) J	ND (<1900) J	ND (<1800) J	ND (<190000) J	ND (<190000) J
Pentachloronitrobenzene	2700	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Pentachlorophenol	1000	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Phenacetin	250000	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Phenanthrene	--	23000	ND (<360)	ND (<400)	23 J	ND (<39000)	ND (<40000)
Phenol	19000000	1800	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Phorate	13000	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
p-Phenylene diamine	63000	--	ND (<1700) J	ND (<1900) J	ND (<1800) J	ND (<190000) J	ND (<190000) J
Pronamide	--	--	ND (<360)	ND (<400)	ND (<370)	ND (<39000)	ND (<40000)
Pyrene	1800000	41000	ND (<360)	ND (<400)	130 J	ND (<39000)	ND (<40000)
Pyridine	780000	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Safrrole, Total	550	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Sulfotepp	--	--	ND (<1100)	ND (<1200)	ND (<1100)	ND (<120000)	ND (<120000)
Thionazin	--	--	ND (<1700)	ND (<1900)	ND (<1800)	ND (<190000)	ND (<190000)
Aramite, Total	--	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Diallate	8900	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)
Isosafrole	--	--	ND (<720)	ND (<800)	ND (<730)	ND (<77000)	ND (<80000)

Notes:

by EPA Method 8270D

Bold, Underlined and Highlighted = Analytical result exceeds screening levels

-- = Not Applicable

EPA RSL=EPA Regional Screening Levels for residential soil (November 2018)

J = Indicates the concentration is an approximate value because the analyte

concentration is below the reporting limit and above the method detection limit

ND = not detected above the reporting limit (<RL)

µg/kg=micrograms per kilogram

TPESL= Tropical Pacific Environmental screening unrestricted land use;

groundwater is not a current or potential drinking water resource (Fall 2017)

ANALYTICAL REPORT

Job Number: 680-151865-1

Job Description: Andersen AFB, Guam - Herbicides

For:

AECOM Technical Services Inc.

1001 Bishop Street

Ste 1600

Honolulu, HI 96813

Attention: Dr. Brant Landers



Approved for release.
Stephanie K Rothmeyer
Project Manager I
5/15/2018 4:08 PM

Designee for
Patrick J McEntee, Manager of Project Management
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0107
patrick.mcentee@testamericainc.com
05/15/2018

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



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Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
D	The reported value is from a dilution.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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)

CASE NARRATIVE

Client: AECOM Technical Services Inc.

Project: Andersen AFB, Guam - Herbicides

Report Number: 680-151865-1

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

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

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

RECEIPT

The samples were received on 5/2/2018 at 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

Receipt Exceptions

ISM preparation was performed by EMAX laboratories for the requested 8151 Herbicides analyses performed by TestAmerica.

Percent moisture analysis was performed by EMAX laboratories and data was provided to TestAmerica for dry weight correction on analytical results.

CHLORINATED HERBICIDES

Samples GQ001 (680-151865-1), GQ002 (680-151865-2) and GQ003 (680-151865-3) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/04/2018 and analyzed on 05/10/2018 and 05/11/2018.

2,4-Dichlorophenylacetic acid (Surr) failed the surrogate recovery criteria low for GQ001 (680-151865-1) and GQ002 (680-151865-2). There was insufficient sample to perform a re-extraction; therefore, the data have been reported. Associated results are flagged "Q".

2,4,5-T and 2,4-D failed the recovery criteria low for the MS and MSD of sample GQ003 (680-151865-3) in batch 680-523572. 2,4,5-T and 2,4-D exceeded the RPD limit. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details.

Sample GQ003 (680-151865-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

PERCENT SOLIDS

Samples GQ001 (680-151865-1), GQ002 (680-151865-2) and GQ003 (680-151865-3) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 05/07/2018.

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

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Client Sample ID: GQ001

Lab Sample ID: 680-151865-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-D	10	M	8.4	5.1	ug/Kg	1	☼	8151A DOD	Total/NA

Client Sample ID: GQ002

Lab Sample ID: 680-151865-2

No Detections.

Client Sample ID: GQ003

Lab Sample ID: 680-151865-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,5-T	49	J1	8.4	2.3	ug/Kg	1	☼	8151A DOD	Total/NA
2,4-D	380	D J1	42	25	ug/Kg	5	☼	8151A DOD	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Client Sample ID: GQ001
Date Collected: 04/23/18 13:20
Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-1
Matrix: Solid
Percent Solids: 98.6

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.4	U	8.4	2.3	ug/Kg	☼	05/04/18 14:00	05/10/18 04:28	1
2,4-D	10	M	8.4	5.1	ug/Kg	☼	05/04/18 14:00	05/10/18 04:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	23	M Q	27 - 122				05/04/18 14:00	05/10/18 04:28	1

Client Sample ID: GQ002
Date Collected: 04/23/18 13:25
Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-2
Matrix: Solid
Percent Solids: 99.0

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.3	U M	8.4	2.3	ug/Kg	☼	05/04/18 14:00	05/10/18 04:47	1
2,4-D	8.4	U M	8.4	5.0	ug/Kg	☼	05/04/18 14:00	05/10/18 04:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	15	M Q	27 - 122				05/04/18 14:00	05/10/18 04:47	1

Client Sample ID: GQ003
Date Collected: 04/23/18 13:30
Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-3
Matrix: Solid
Percent Solids: 98.9

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	49	J1	8.4	2.3	ug/Kg	☼	05/04/18 14:00	05/10/18 05:07	1
2,4-D	380	D J1	42	25	ug/Kg	☼	05/04/18 14:00	05/11/18 21:55	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	31		27 - 122				05/04/18 14:00	05/10/18 05:07	1

Default Detection Limits

Client: AECOM Technical Services Inc.

Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Method: 8151A DOD - Herbicides (GC)

Prep: 8151A

Analyte	LOD	DL	Units	Method
2,4,5-T	8.3	2.3	ug/Kg	8151A DOD
2,4-D	8.3	5.0	ug/Kg	8151A DOD

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Method: 8151A DOD - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (27-122)
680-151865-1	GQ001	23 M Q
680-151865-2	GQ002	15 M Q
680-151865-3	GQ003	31
680-151865-3 MS	GQ003	45 M
680-151865-3 MSD	GQ003	35
LCS 680-522658/5-A	Lab Control Sample	77
MB 680-522658/4-A	Method Blank	69

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Method: 8151A DOD - Herbicides (GC)

Lab Sample ID: MB 680-522658/4-A
Matrix: Solid
Analysis Batch: 523317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522658

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,5-T	4.2	U M	8.1	2.3	ug/Kg		05/04/18 14:00	05/10/18 03:48	1
2,4-D	8.1	U	8.1	4.9	ug/Kg		05/04/18 14:00	05/10/18 03:48	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
2,4-Dichlorophenylacetic acid (Surr)	69		27 - 122				05/04/18 14:00	05/10/18 03:48	1

Lab Sample ID: LCS 680-522658/5-A
Matrix: Solid
Analysis Batch: 523317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522658

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-D	64.8	46.3		ug/Kg		72	28 - 144
Surrogate	LCS LCS		Limits				
	%Recovery	Qualifier					
2,4-Dichlorophenylacetic acid (Surr)	77		27 - 122				

Lab Sample ID: 680-151865-3 MS
Matrix: Solid
Analysis Batch: 523317

Client Sample ID: GQ003
Prep Type: Total/NA
Prep Batch: 522658

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Surrogate	MS MS		Limits						
	%Recovery	Qualifier							
2,4-Dichlorophenylacetic acid (Surr)	45	M	27 - 122						

Lab Sample ID: 680-151865-3 MS
Matrix: Solid
Analysis Batch: 523572

Client Sample ID: GQ003
Prep Type: Total/NA
Prep Batch: 522658

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits

Lab Sample ID: 680-151865-3 MSD
Matrix: Solid
Analysis Batch: 523317

Client Sample ID: GQ003
Prep Type: Total/NA
Prep Batch: 522658

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	
										RPD	Limit
2,4,5-T	49	J1	16.8	25.6	J1	ug/Kg	☼	-139	31 - 138	94	30
Surrogate	MSD MSD		Limits								
	%Recovery	Qualifier									
2,4-Dichlorophenylacetic acid (Surr)	35		27 - 122								

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Method: 8151A DOD - Herbicides (GC) (Continued)

Lab Sample ID: 680-151865-3 MSD
Matrix: Solid
Analysis Batch: 523572

Client Sample ID: GQ003
Prep Type: Total/NA
Prep Batch: 522658

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2,4-D	380	D J1	67.3	139	D 4 J1	ug/Kg	☼	-354	28 - 144	126	30

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

GC Semi VOA

Prep Batch: 522658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151865-1	GQ001	Total/NA	Solid	8151A	
680-151865-2	GQ002	Total/NA	Solid	8151A	
680-151865-3	GQ003	Total/NA	Solid	8151A	
MB 680-522658/4-A	Method Blank	Total/NA	Solid	8151A	
LCS 680-522658/5-A	Lab Control Sample	Total/NA	Solid	8151A	
680-151865-3 MS	GQ003	Total/NA	Solid	8151A	
680-151865-3 MSD	GQ003	Total/NA	Solid	8151A	

Analysis Batch: 523317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151865-1	GQ001	Total/NA	Solid	8151A DOD	522658
680-151865-2	GQ002	Total/NA	Solid	8151A DOD	522658
680-151865-3	GQ003	Total/NA	Solid	8151A DOD	522658
MB 680-522658/4-A	Method Blank	Total/NA	Solid	8151A DOD	522658
LCS 680-522658/5-A	Lab Control Sample	Total/NA	Solid	8151A DOD	522658
680-151865-3 MS	GQ003	Total/NA	Solid	8151A DOD	522658
680-151865-3 MSD	GQ003	Total/NA	Solid	8151A DOD	522658

Analysis Batch: 523572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151865-3	GQ003	Total/NA	Solid	8151A DOD	522658
680-151865-3 MS	GQ003	Total/NA	Solid	8151A DOD	522658
680-151865-3 MSD	GQ003	Total/NA	Solid	8151A DOD	522658

General Chemistry

Analysis Batch: 523856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151865-1	GQ001	Total/NA	Solid	Moisture	
680-151865-2	GQ002	Total/NA	Solid	Moisture	
680-151865-3	GQ003	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Client Sample ID: GQ001

Date Collected: 04/23/18 13:20

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ001

Date Collected: 04/23/18 13:20

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-1

Matrix: Solid

Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522658	05/04/18 14:00	CEW	TAL SAV
Total/NA	Analysis	8151A DOD		1	523317	05/10/18 04:28	JCK	TAL SAV

Client Sample ID: GQ002

Date Collected: 04/23/18 13:25

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ002

Date Collected: 04/23/18 13:25

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-2

Matrix: Solid

Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522658	05/04/18 14:00	CEW	TAL SAV
Total/NA	Analysis	8151A DOD		1	523317	05/10/18 04:47	JCK	TAL SAV

Client Sample ID: GQ003

Date Collected: 04/23/18 13:30

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ003

Date Collected: 04/23/18 13:30

Date Received: 05/02/18 08:45

Lab Sample ID: 680-151865-3

Matrix: Solid

Percent Solids: 98.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522658	05/04/18 14:00	CEW	TAL SAV
Total/NA	Analysis	8151A DOD		1	523317	05/10/18 05:07	JCK	TAL SAV
Total/NA	Prep	8151A			522658	05/04/18 14:00	CEW	TAL SAV
Total/NA	Analysis	8151A DOD		5	523572	05/11/18 21:55	JCK	TAL SAV

TestAmerica Savannah

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19
New Jersey	NELAP	2	CO004	06-30-18

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Method	Method Description	Protocol	Laboratory
8151A DOD	Herbicides (GC)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV
8151A	Extraction (Herbicides)	SW846	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151865-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-151865-1	GQ001	Solid	04/23/18 13:20	05/02/18 08:45
680-151865-2	GQ002	Solid	04/23/18 13:25	05/02/18 08:45
680-151865-3	GQ003	Solid	04/23/18 13:30	05/02/18 08:45

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: IC 680-523317/4 Client Sample ID: _____
 Date Analyzed: 05/09/18 17:59 Lab File ID: SE090004.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dalapon	2.49	Peak assignment corrected	kellarj	05/09/18 18:47
3,5-Dichlorobenzoic acid	6.05	Peak assignment corrected	kellarj	05/09/18 18:48
4-Nitrophenol	6.17	Peak assignment corrected	kellarj	05/09/18 18:48
2,4-Dichlorophenylacetic acid (Surr)	6.61	Peak assignment corrected	kellarj	05/09/18 18:48
Dicamba	6.64	Peak assignment corrected	kellarj	05/09/18 18:48
MCPP	6.79	Peak assignment corrected	kellarj	05/10/18 10:25
MCPA	6.92	Peak assignment corrected	kellarj	05/09/18 18:48
Dichlorprop	7.10	Peak assignment corrected	kellarj	05/09/18 18:48
2,4-D	7.25	Peak assignment corrected	kellarj	05/09/18 18:48
Pentachlorophenol	7.60	Peak assignment corrected	kellarj	05/09/18 18:49
Silvex (2,4,5-TP)	7.69	Peak assignment corrected	kellarj	05/09/18 18:49
Chloramben	7.77	Peak assignment corrected	kellarj	05/09/18 18:49
2,4,5-T	7.85	Peak assignment corrected	kellarj	05/09/18 18:49
2,4-DB	8.09	Peak assignment corrected	kellarj	05/09/18 18:49
Dinoseb	8.15	Peak assignment corrected	kellarj	05/09/18 18:49
Bentazon	8.22	Peak assignment corrected	kellarj	05/09/18 18:49
Picloram	8.44	Baseline Smoothing	kellarj	05/09/18 18:49
Tetrathalic acid, tetrachloro-, dimethyl ester	8.54	Peak assignment corrected	kellarj	05/09/18 18:49
Acifluorfen	9.58	Peak assignment corrected	kellarj	05/09/18 18:49

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: IC 680-523317/4 Client Sample ID: _____
 Date Analyzed: 05/09/18 17:59 Lab File ID: SE090004.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dalapon	2.54	Peak assignment corrected	kellarj	05/09/18 18:49
3,5-Dichlorobenzoic acid	6.04	Peak assignment corrected	kellarj	05/09/18 18:50
4-Nitrophenol	6.43	Peak assignment corrected	kellarj	05/09/18 18:50
2,4-Dichlorophenylacetic acid (Surr)	6.75	Peak assignment corrected	kellarj	05/09/18 18:50
Dicamba	6.84	Peak assignment corrected	kellarj	05/09/18 18:50
MCPP	6.89	Peak assignment corrected	kellarj	05/09/18 18:50
MCPA	7.08	Peak assignment corrected	kellarj	05/09/18 18:50
Dichlorprop	7.23	Peak assignment corrected	kellarj	05/09/18 18:50
2,4-D	7.44	Peak assignment corrected	kellarj	05/09/18 18:50
Pentachlorophenol	7.64	Peak assignment corrected	kellarj	05/09/18 18:50
Silvex (2,4,5-TP)	7.78	Peak assignment corrected	kellarj	05/09/18 18:50
2,4,5-T	8.01	Peak assignment corrected	kellarj	05/09/18 18:50
Chloramben	8.08	Peak assignment corrected	kellarj	05/09/18 18:50
Dinoseb	8.18	Peak assignment corrected	kellarj	05/09/18 18:51
2,4-DB	8.22	Peak assignment corrected	kellarj	05/09/18 18:50
Bentazon	8.58	Peak assignment corrected	kellarj	05/09/18 18:51
Tetrathalic acid, tetrachloro-, dimethyl ester	8.70	Peak assignment corrected	kellarj	05/09/18 18:51
Picloram	8.92	Baseline Smoothing	kellarj	05/09/18 18:51
Acifluorfen	9.72	Peak assignment corrected	kellarj	05/09/18 18:51

Lab Sample ID: IC 680-523317/5 Client Sample ID: _____
 Date Analyzed: 05/09/18 18:19 Lab File ID: SE090005.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MCPP	6.79	Peak assignment corrected	kellarj	05/10/18 10:26

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: IC 680-523317/5 Client Sample ID: _____
 Date Analyzed: 05/09/18 18:19 Lab File ID: SE090005.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
MCP	6.88	Unspecified	

Lab Sample ID: PIBLK 680-523317/33 Client Sample ID: _____
 Date Analyzed: 05/10/18 03:29 Lab File ID: SE090033.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/10/18 11:01

Lab Sample ID: PIBLK 680-523317/33 Client Sample ID: _____
 Date Analyzed: 05/10/18 03:29 Lab File ID: SE090033.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

Lab Sample ID: MB 680-522658/4-A Client Sample ID: _____
 Date Analyzed: 05/10/18 03:48 Lab File ID: SE090034.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/10/18 11:19

Lab Sample ID: MB 680-522658/4-A Client Sample ID: _____
 Date Analyzed: 05/10/18 03:48 Lab File ID: SE090034.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: 680-151865-1 Client Sample ID: GQ001
 Date Analyzed: 05/10/18 04:28 Lab File ID: SE090036.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.60	Baseline Smoothing	kellarj 05/10/18 11:19
2,4-D	7.24	Baseline Smoothing	kellarj 05/10/18 11:19

Lab Sample ID: 680-151865-1 Client Sample ID: GQ001
 Date Analyzed: 05/10/18 04:28 Lab File ID: SE090036.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.75	Baseline Smoothing	kellarj 05/10/18 11:19
2,4-D	7.44	Baseline Smoothing	kellarj 05/10/18 11:19

Lab Sample ID: 680-151865-2 Client Sample ID: GQ002
 Date Analyzed: 05/10/18 04:47 Lab File ID: SE090037.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.61	Baseline Smoothing	kellarj 05/10/18 11:20
2,4-D	7.24	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T		Invalid Compound ID	kellarj 05/10/18 11:20

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: 680-151865-2 Client Sample ID: GQ002
 Date Analyzed: 05/10/18 04:47 Lab File ID: SE090037.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.75	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	7.44	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	8.01	Baseline Smoothing	kellarj 05/10/18 11:20

Lab Sample ID: 680-151865-3 MS Client Sample ID: GQ003 MS
 Date Analyzed: 05/10/18 05:26 Lab File ID: SE090039.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.61	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	7.24	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	7.85	Baseline Smoothing	kellarj 05/10/18 11:20

Lab Sample ID: 680-151865-3 MS Client Sample ID: GQ003 MS
 Date Analyzed: 05/10/18 05:26 Lab File ID: SE090039.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.75	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	7.44	Baseline Smoothing	kellarj 05/10/18 11:20
2,4,5-T	8.01	Baseline Smoothing	kellarj 05/10/18 11:20

Lab Sample ID: PIBLK 680-523317/48 Client Sample ID:
 Date Analyzed: 05/10/18 08:23 Lab File ID: SE090048.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/10/18 11:18

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523317
 Lab Sample ID: PIBLK 680-523317/48 Client Sample ID:
 Date Analyzed: 05/10/18 08:23 Lab File ID: SE090048.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523572
 Lab Sample ID: ICV 680-523572/12 CCV Client Sample ID:
 Date Analyzed: 05/11/18 14:23 Lab File ID: SE110012.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dichlorobenzoic acid	6.01	Baseline Smoothing	kellarj	05/11/18 15:41
4-Nitrophenol	6.39	Baseline Smoothing	kellarj	05/11/18 15:41
2,4-Dichlorophenylacetic acid (Surr)	6.72	Baseline Smoothing	kellarj	05/11/18 15:41
Dicamba	6.80	Baseline Smoothing	kellarj	05/11/18 15:41
MCPFP	6.85	Baseline Smoothing	kellarj	05/11/18 15:41
MCPA	7.05	Baseline Smoothing	kellarj	05/11/18 15:41
Dichlorprop	7.19	Baseline Smoothing	kellarj	05/11/18 15:41
2,4-D	7.41	Baseline Smoothing	kellarj	05/11/18 15:41
Pentachlorophenol	7.61	Baseline Smoothing	kellarj	05/11/18 15:41
Silvex (2,4,5-TP)	7.74	Baseline Smoothing	kellarj	05/11/18 15:41
2,4,5-T	7.98	Baseline Smoothing	kellarj	05/11/18 15:41
Chloramben	8.05	Baseline Smoothing	kellarj	05/11/18 15:41
Dinoseb	8.14	Baseline Smoothing	kellarj	05/11/18 15:41
2,4-DB	8.19	Baseline Smoothing	kellarj	05/11/18 15:41
Bentazon	8.54	Baseline Smoothing	kellarj	05/11/18 15:41
Tetrathalic acid, tetrachloro-, dimethyl ester	8.66	Baseline Smoothing	kellarj	05/11/18 15:41
Picloram	8.88	Baseline Smoothing	kellarj	05/11/18 15:41
Acifluorfen	9.68	Baseline Smoothing	kellarj	05/11/18 15:41

Lab Sample ID: CCV 680-523572/30 Client Sample ID:
 Date Analyzed: 05/11/18 20:17 Lab File ID: SE110030.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dichlorobenzoic acid	6.01	Split Peak	kellarj	05/12/18 10:43

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523572
 Lab Sample ID: CCV 680-523572/30 Client Sample ID: _____
 Date Analyzed: 05/11/18 20:17 Lab File ID: SE110030.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
Dalapon	2.49	Baseline Smoothing	kellarj 05/12/18 10:43

Lab Sample ID: CCV 680-523572/49 Client Sample ID: _____
 Date Analyzed: 05/12/18 02:29 Lab File ID: SE110049.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.72	Baseline Smoothing	kellarj 05/12/18 10:44
Dicamba	6.80	Baseline Smoothing	kellarj 05/12/18 10:44
MCPP	6.85	Baseline Smoothing	kellarj 05/12/18 10:44
MCPA	7.05	Baseline Smoothing	kellarj 05/12/18 10:44
Dichlorprop	7.19	Baseline Smoothing	kellarj 05/12/18 10:44
2,4-D	7.41	Baseline Smoothing	kellarj 05/12/18 10:44
Pentachlorophenol	7.61	Baseline Smoothing	kellarj 05/12/18 10:44
Silvex (2,4,5-TP)	7.74	Baseline Smoothing	kellarj 05/12/18 10:44
2,4,5-T	7.98	Baseline Smoothing	kellarj 05/12/18 10:44
Chloramben	8.05	Baseline Smoothing	kellarj 05/12/18 10:44
Dinoseb	8.14	Baseline Smoothing	kellarj 05/12/18 10:44
2,4-DB	8.19	Baseline Smoothing	kellarj 05/12/18 10:44
Bentazon	8.54	Baseline Smoothing	kellarj 05/12/18 10:44
Tetrathalic acid, tetrachloro-, dimethyl ester	8.66	Baseline Smoothing	kellarj 05/12/18 10:44
Picloram	8.88	Baseline Smoothing	kellarj 05/12/18 10:44

Lab Sample ID: PIBLK 680-523572/50 Client Sample ID: _____
 Date Analyzed: 05/12/18 02:49 Lab File ID: SE110050.D GC Column: DB-XLKB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/12/18 10:44

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523572
 Lab Sample ID: PIBLK 680-523572/50 Client Sample ID: _____
 Date Analyzed: 05/12/18 02:49 Lab File ID: SE110050.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HERBwKLS_00049	05/05/18	04/25/18	meoh, Lot SG_meOH_00004	200 mL	HERBICVMMASTER_00013	20 mL	2,4,6-Trichlorophenol	1 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							3,5-Dichlorobenzoic acid	2 ug/mL
							4-Nitrophenol	2 ug/mL
							Acifluorfen	2 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,5-T	0.5 ug/mL
							2,4-D	2 ug/mL
							2,4-DB	2 ug/mL
							Dalapon	2 ug/mL
							Dicamba	1 ug/mL
							Dichlorprop	2 ug/mL
							Dinoseb	2 ug/mL
							MCPA	200 ug/mL
							MCPP	200 ug/mL
							Pentachlorophenol	0.5 ug/mL
							Picloram	2 ug/mL
							Silvex (2,4,5-TP)	0.5 ug/mL
.HERBICVMMASTER_00013	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00005	1.3 mL	DCPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HERBMASTER_00032	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHerbList1_00006	1.3 mL	Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,6-Trichlorophenol	5 ug/mL							
2,6-Dichlorophenol	10 ug/mL							
3,5-Dichlorobenzoic acid	10 ug/mL							
4-Nitrophenol	10 ug/mL							
Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							
DCPA	10 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
..SGHerbList1_00006	07/31/18		Restek, Lot A0120183			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHerbList1_00008	07/31/18		Restek, Lot A0120183			MCPA	20000 ug/mL	20000 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
						Pentachlorophenol	50 ug/mL	50 ug/mL
						Picloram	200 ug/mL	200 ug/mL
						Silvex (2,4,5-TP)	50 ug/mL	50 ug/mL
						2,4,5-T	50 ug/mL	50 ug/mL
						2,4-D	200 ug/mL	200 ug/mL
						2,4-DB	200 ug/mL	200 ug/mL
						Dalapon	200 ug/mL	200 ug/mL
						Dicamba	100 ug/mL	100 ug/mL
						Dichlorprop	200 ug/mL	200 ug/mL
						Dinoseb	200 ug/mL	200 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
Pentachlorophenol	50 ug/mL	50 ug/mL						
Picloram	200 ug/mL	200 ug/mL						
Silvex (2,4,5-TP)	50 ug/mL	50 ug/mL						
2,4,6-Trichlorophenol	100 ug/mL	100 ug/mL						
2,6-Dichlorophenol	200 ug/mL	200 ug/mL						
3,5-Dichlorobenzoic acid	200 ug/mL	200 ug/mL						
4-Nitrophenol	200 ug/mL	200 ug/mL						
Acifluorfen	200 ug/mL	200 ug/mL						
Bentazon	200 ug/mL	200 ug/mL						
Chloramben	200 ug/mL	200 ug/mL						
DCPA	200 ug/mL	200 ug/mL						
2,4-Dichlorophenylacetic acid (Surr)	1 mL	SGDCAAF_A_00054		500 mL		1 mL	2,4-Dichlorophenylacetic acid (Surr)	2 ug/mL
2,4-Dichlorophenylacetic acid (Surr)	10/16/18		Restek, Lot A0128506				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SG HerbSurr_00044	07/16/18	04/16/18	Methanol, Lot 5248086	500 mL			2,4-Dichlorophenylacetic acid (Surr)	1.004 ug/mL
.SGDCAAF_A_00054								
SG HIBLK_00063	11/08/18	05/08/18	MTBE, Lot A0380840	50 mL	DCAAME_00011	500 uL	2,4-Dichlorophenylacetic acid (Surr)	100.4 ug/mL
.DCAAME_00011	11/08/18		Ultra Scientific, Lot CP-4762				2,4-Dichlorophenylacetic acid (Surr)	
SGHERB-1_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.04 mL	3,5-Dichlorobenzoic acid	0.01 ug/mL
							4-Nitrophenol	0.01 ug/mL
							Acifluorfen	0.01 ug/mL
							Bentazon	0.01 ug/mL
							Chloramben	0.01 ug/mL
							DCPA	0.01 ug/mL
							2,4,5-T	0.0025 ug/mL
							2,4-D	0.01 ug/mL
							2,4-DB	0.01 ug/mL
							Dalapon	0.01 ug/mL
							Dicamba	0.005 ug/mL
							Dichlorprop	0.01 ug/mL
							Dinoseb	0.01 ug/mL
							MCPA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCP	1 ug/mL
							Pentachlorophenol	0.0025 ug/mL
							Picloram	0.01 ug/mL
							Silvex (2,4,5-TP)	0.0025 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.01 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006							3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
						SGHerbICV1_00009	07/31/18
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00009	2,4-DB	10 ug/mL	
						Dalapon	10 ug/mL	
						Dicamba	5 ug/mL	
						Dichlorprop	10 ug/mL	
						Dinoseb	10 ug/mL	
						MCPA	1000 ug/mL	
						MCPP	1000 ug/mL	
						Pentachlorophenol	2.5 ug/mL	
						Picloram	10 ug/mL	
						Silvex (2,4,5-TP)	2.5 ug/mL	
						2,4,5-T	2.5 ug/mL	
						2,4-D	10 ug/mL	
						2,4-DB	10 ug/mL	
						Dalapon	10 ug/mL	
						Dicamba	5 ug/mL	
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)		
.....SGHerbICV1_00007					Restek, Lot A0120175	2,4-DB	10 ug/mL	
						Dalapon	10 ug/mL	
						Dicamba	5 ug/mL	
						Dichlorprop	10 ug/mL	
						Dinoseb	10 ug/mL	
						MCPA	1000 ug/mL	
						MCPP	1000 ug/mL	
						Pentachlorophenol	2.5 ug/mL	
						Picloram	10 ug/mL	
						Silvex (2,4,5-TP)	2.5 ug/mL	
						2,4,5-T	2.5 ug/mL	
						2,4-D	10 ug/mL	
						2,4-DB	10 ug/mL	
						Dalapon	10 ug/mL	
						Dicamba	5 ug/mL	
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
SGHERB-2_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration								
					Reagent ID	Volume Added									
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							3,5-Dichlorobenzoic acid	10 ug/mL							
							4-Nitrophenol	10 ug/mL							
							Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
SGHerbICV1_00006	0.2 mL						2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL						2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							SGHerbICV1_00009	0.9 mL						2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			Dinoseb	Dinoseb	10 ug/mL
						MCPA	MCPA	1000 ug/mL
						MCPP	MCPA	1000 ug/mL
						Pentachlorophenol	Pentachlorophenol	2.5 ug/mL
						Picloram	Picloram	10 ug/mL
						Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	2.5 ug/mL
						3,5-Dichlorobenzoic acid	3,5-Dichlorobenzoic acid	200 ug/mL
						4-Nitrophenol	4-Nitrophenol	200 ug/mL
						Acifluorfen	Acifluorfen	200 ug/mL
						Bentazon	Bentazon	200 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			Chloramben	Chloramben	200 ug/mL
						DCPA	DCPA	200 ug/mL
						2,4,5-T	2,4,5-T	50 ug/mL
						2,4-D	2,4-D	200 ug/mL
						2,4-DB	2,4-DB	200 ug/mL
						Dalapon	Dalapon	200 ug/mL
						Dicamba	Dicamba	100 ug/mL
						Dichlorprop	Dichlorprop	200 ug/mL
						Dinoseb	Dinoseb	200 ug/mL
						MCPA	MCPA	20000 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			MCPA	MCPA	20000 ug/mL
						MCPP	MCPA	20000 ug/mL
						Pentachlorophenol	Pentachlorophenol	50 ug/mL
						Picloram	Picloram	200 ug/mL
						Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	50 ug/mL
						2,4,5-T	2,4,5-T	50 ug/mL
						2,4-D	2,4-D	200 ug/mL
						2,4-DB	2,4-DB	200 ug/mL
						Dalapon	Dalapon	200 ug/mL
						Dicamba	Dicamba	100 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175			Dichlorprop	Dichlorprop	200 ug/mL
						Dinoseb	Dinoseb	200 ug/mL
						MCPA	MCPA	20000 ug/mL
						MCPP	MCPA	20000 ug/mL
						Pentachlorophenol	Pentachlorophenol	50 ug/mL
						Picloram	Picloram	200 ug/mL
						Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	50 ug/mL
						2,4,5-T	2,4,5-T	50 ug/mL
						2,4-D	2,4-D	200 ug/mL
						2,4-DB	2,4-DB	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	0.2 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-3_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.2 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.025 ug/mL 0.05 ug/mL 0.05 ug/mL 5 ug/mL 5 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHERBCALINT_00029	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration	
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2,4,5-T	0.625 ug/mL	
						2,4-D	2.5 ug/mL	
						2,4-DB	2.5 ug/mL	
						Dalapon	2.5 ug/mL	
						Dicamba	1.25 ug/mL	
						Dichlorprop	2.5 ug/mL	
						Dinoseb	2.5 ug/mL	
						MCPA	250 ug/mL	
						MCPP	250 ug/mL	
						Pentachlorophenol	0.625 ug/mL	
						Picloram	2.5 ug/mL	
						Silvex (2,4,5-TP)	0.625 ug/mL	
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL	
						3,5-Dichlorobenzoic acid	2.5 ug/mL	
						4-Nitrophenol	2.5 ug/mL	
						Acifluorfen	2.5 ug/mL	
						Bentazon	2.5 ug/mL	
						Chloramben	2.5 ug/mL	
						DCEA	2.5 ug/mL	
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2,4,5-T	0.625 ug/mL	
						2,4-D	2.5 ug/mL	
						2,4-DB	2.5 ug/mL	
						Dalapon	2.5 ug/mL	
						Dicamba	1.25 ug/mL	
						Dichlorprop	2.5 ug/mL	
						Dinoseb	2.5 ug/mL	
						MCPA	250 ug/mL	
						MCPP	250 ug/mL	
						Pentachlorophenol	0.625 ug/mL	
						Picloram	2.5 ug/mL	
						Silvex (2,4,5-TP)	0.625 ug/mL	
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL	
						3,5-Dichlorobenzoic acid	10 ug/mL	
						4-Nitrophenol	10 ug/mL	
						Acifluorfen	10 ug/mL	
						Bentazon	10 ug/mL	
						Chloramben	10 ug/mL	
						DCEA	10 ug/mL	
SGHERBICV1_00006	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2,4,5-T	2.5 ug/mL	
						2,4-D	10 ug/mL	
						2,4-DB	10 ug/mL	
						Dalapon	10 ug/mL	
						Dicamba	5 ug/mL	
						Dichlorprop	10 ug/mL	
						Dinoseb	10 ug/mL	
						MCPA	1000 ug/mL	
						SGHERBICV1_00006	0.2 mL	2.5 ug/mL
						SGHERBICV1_00006	0.2 mL	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					1.4 mL	SGHerbICV1_00007	MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006					0.9 mL	SGHerbICV1_00009	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00007						(Purchased Reagent)	Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007						(Purchased Reagent)	Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		(Purchased Reagent)									3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL							
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641			(Purchased Reagent)	3,5-Dichlorobenzoic acid	0.1 ug/mL
							4-Nitrophenol	0.1 ug/mL
							Acifluorfen	0.1 ug/mL
							Bentazon	0.1 ug/mL
							Chloramben	0.1 ug/mL
							DCPA	0.1 ug/mL
							2,4,5-T	0.025 ug/mL
							2,4-D	0.1 ug/mL
							2,4-DB	0.1 ug/mL
							Dalapon	0.1 ug/mL
							Dicamba	0.05 ug/mL
							Dichlorprop	0.1 ug/mL
							Dinoseb	0.1 ug/mL
							MCPA	10 ug/mL
SGHERB-4_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	25 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid	0.1 ug/mL
							4-Nitrophenol	0.1 ug/mL
							Acifluorfen	0.1 ug/mL
							Bentazon	0.1 ug/mL
							Chloramben	0.1 ug/mL
							DCPA	0.1 ug/mL
							2,4,5-T	0.025 ug/mL
							2,4-D	0.1 ug/mL
							2,4-DB	0.1 ug/mL
							Dalapon	0.1 ug/mL
							Dicamba	0.05 ug/mL
							Dichlorprop	0.1 ug/mL
							Dinoseb	0.1 ug/mL
							MCPA	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCPP	10 ug/mL
							Pentachlorophenol	0.025 ug/mL
							Picloram	0.1 ug/mL
							Silvex (2,4,5-TP)	0.025 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.1 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006					SGHerbICV1_00006	0.2 mL	3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007					SGHerbICV1_00007	1.4 mL	Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
2,4-D	200 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
Dichlorprop	100 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00006	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration
					Reagent ID	Volume Added	
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175	50 mL	(Purchased Reagent)	MCP	20000 ug/mL
						Pentachlorophenol	50 ug/mL
						Picloram	200 ug/mL
						Silvex (2,4,5-TP)	50 ug/mL
						2,4,5-T	50 ug/mL
						2,4-D	200 ug/mL
						2,4-DB	200 ug/mL
						Dalapon	200 ug/mL
						Dicamba	100 ug/mL
						Dichlorprop	200 ug/mL
						Dinoseb	200 ug/mL
						MCPA	20000 ug/mL
						MCP	20000 ug/mL
						Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL						
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	50 mL	(Purchased Reagent)	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
						3,5-Dichlorobenzoic acid	0.175 ug/mL
						4-Nitrophenol	0.175 ug/mL
						Acifluorfen	0.175 ug/mL
						Bentazon	0.175 ug/mL
						Chloramben	0.175 ug/mL
						DCPA	0.175 ug/mL
						2,4,5-T	0.04375 ug/mL
						2,4-D	0.175 ug/mL
						2,4-DB	0.175 ug/mL
						Dalapon	0.175 ug/mL
						Dicamba	0.0875 ug/mL
						Dichlorprop	0.175 ug/mL
						Dinoseb	0.175 ug/mL
SGHERB-5_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBCALINT_00030	MCP	17.5 ug/mL
						MCP	17.5 ug/mL
						Pentachlorophenol	0.04375 ug/mL
						Picloram	0.175 ug/mL
						Silvex (2,4,5-TP)	0.04375 ug/mL
						2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL
						3,5-Dichlorobenzoic acid	2.5 ug/mL
						4-Nitrophenol	2.5 ug/mL
						Acifluorfen	2.5 ug/mL
						Bentazon	2.5 ug/mL
						Chloramben	2.5 ug/mL
						DCPA	2.5 ug/mL
						2,4,5-T	0.625 ug/mL
						2,4-D	2.5 ug/mL
2,4-DB	2.5 ug/mL						
Dalapon	2.5 ug/mL						
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	3,5-Dichlorobenzoic acid	2.5 ug/mL
						4-Nitrophenol	2.5 ug/mL
						Acifluorfen	2.5 ug/mL
						Bentazon	2.5 ug/mL
						Chloramben	2.5 ug/mL
						DCPA	2.5 ug/mL
						2,4,5-T	0.625 ug/mL
						2,4-D	2.5 ug/mL
						2,4-DB	2.5 ug/mL
						Dalapon	2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
...SGHERBADDICV_00013	07/31/18				(Purchased Reagent)	SGHERBICV1_00007	2,4,5-T	1.4 mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	0.9 mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							3,5-Dichlorobenzoic acid	10 ug/mL							
							4-Nitrophenol	10 ug/mL							
							Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							SGHerbICV1_00009	0.9 mL				SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
						SGHerbICV1_00009	07/31/18
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	1 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-6_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.125 ug/mL 0.25 ug/mL 0.25 ug/mL 25 ug/mL 25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL
SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
...	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid	10 ug/mL
...	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
...	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00006	0.2 mL	SGHerbICV1_00006	0.2 mL	2,4,5-T	2.5 ug/mL
...	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00006	0.2 mL	SGHerbICV1_00006	0.2 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00007	1.4 mL	MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006					SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
.....SGHerbICV1_00007					(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00016			RESTEK, Lot A0123922		(Purchased Reagent)									3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006			Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-7_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	2 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCFA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.125 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.25 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCP	50 ug/mL
							Pentachlorophenol	0.125 ug/mL
							Picloram	0.5 ug/mL
							Silvex (2,4,5-TP)	0.125 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006							3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013			RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL 10 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18				SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175				(Purchased Reagent)	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration				
					Reagent ID	Volume Added					
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)	MCP	20000 ug/mL				
						Pentachlorophenol	50 ug/mL				
						Picloram	200 ug/mL				
						Silvex (2,4,5-TP)	50 ug/mL				
						2,4,5-T	50 ug/mL				
						2,4-D	200 ug/mL				
						2,4-DB	200 ug/mL				
						Dalapon	200 ug/mL				
						Dicamba	100 ug/mL				
						Dichlorprop	200 ug/mL				
						Dinoseb	200 ug/mL				
						MCPA	20000 ug/mL				
						MCP	20000 ug/mL				
						Pentachlorophenol	50 ug/mL				
Picloram	200 ug/mL										
Silvex (2,4,5-TP)	50 ug/mL										
2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL										
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)	3,5-Dichlorobenzoic acid	1 ug/mL				
						4-Nitrophenol	1 ug/mL				
						Acifluorfen	1 ug/mL				
						Bentazon	1 ug/mL				
						Chloramben	1 ug/mL				
						DCPA	1 ug/mL				
						2,4,5-T	0.25 ug/mL				
						2,4-D	1 ug/mL				
						2,4-DB	1 ug/mL				
						Dalapon	1 ug/mL				
						Dicamba	0.5 ug/mL				
						Dichlorprop	1 ug/mL				
						Dinoseb	1 ug/mL				
						MCPA	100 ug/mL				
MCP	100 ug/mL										
Pentachlorophenol	0.25 ug/mL										
Picloram	1 ug/mL										
Silvex (2,4,5-TP)	0.25 ug/mL										
2,4-Dichlorophenylacetic acid (Surr)	1 ug/mL										
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	3,5-Dichlorobenzoic acid	2.5 ug/mL				
						4-Nitrophenol	2.5 ug/mL				
						Acifluorfen	2.5 ug/mL				
						Bentazon	2.5 ug/mL				
						Chloramben	2.5 ug/mL				
						DCPA	2.5 ug/mL				
						2,4,5-T	0.625 ug/mL				
						2,4-D	2.5 ug/mL				
						2,4-DB	2.5 ug/mL				
						Dalapon	2.5 ug/mL				
						MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
						MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	4-Nitrophenol	2.5 ug/mL
						MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	Acifluorfen	2.5 ug/mL
						MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	Bentazon	2.5 ug/mL
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	Chloramben	2.5 ug/mL						
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	DCPA	2.5 ug/mL						
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	2,4,5-T	0.625 ug/mL						
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	2,4-D	2.5 ug/mL						
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	2,4-DB	2.5 ug/mL						
MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	Dalapon	2.5 ug/mL						

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-Dichlorophenylacetic acid	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922				(Purchased Reagent)	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration
					Reagent ID	Volume Added	
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	2,4-DB	2.5 ug/mL
						Dalapon	2.5 ug/mL
						Dicamba	1.25 ug/mL
						Dichlorprop	2.5 ug/mL
						Dinoseb	2.5 ug/mL
						MCPA	250 ug/mL
						MCPP	250 ug/mL
						Pentachlorophenol	0.625 ug/mL
						Picloram	2.5 ug/mL
						Silvex (2,4,5-TP)	0.625 ug/mL
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
						3,5-Dichlorobenzoic acid	10 ug/mL
						4-Nitrophenol	10 ug/mL
						Acifluorfen	10 ug/mL
						Bentazon	10 ug/mL
						Chloramben	10 ug/mL
DCPA	10 ug/mL						
SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006	2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
						Dicamba	5 ug/mL
						Dichlorprop	10 ug/mL
						Dinoseb	10 ug/mL
						MCPA	1000 ug/mL
						MCPP	1000 ug/mL
						Pentachlorophenol	2.5 ug/mL
						Picloram	10 ug/mL
						Silvex (2,4,5-TP)	2.5 ug/mL
						2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
Dicamba	5 ug/mL						
Dichlorprop	10 ug/mL						
Dinoseb	10 ug/mL						
MCPA	1000 ug/mL						
MCPP	1000 ug/mL						
Pentachlorophenol	2.5 ug/mL						
Picloram	10 ug/mL						
Silvex (2,4,5-TP)	2.5 ug/mL						
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007	2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
						Dicamba	5 ug/mL
						Dichlorprop	10 ug/mL
						Dinoseb	10 ug/mL
						MCPA	1000 ug/mL
						MCPP	1000 ug/mL
						Pentachlorophenol	2.5 ug/mL
						Picloram	10 ug/mL
						Silvex (2,4,5-TP)	2.5 ug/mL
						2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
Dicamba	5 ug/mL						
Dichlorprop	10 ug/mL						
Dinoseb	10 ug/mL						
MCPA	1000 ug/mL						
MCPP	1000 ug/mL						
Pentachlorophenol	2.5 ug/mL						
Picloram	10 ug/mL						
Silvex (2,4,5-TP)	2.5 ug/mL						
SGHerbICV1_00009	0.9 mL				SGHerbICV1_00009	2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
						Dicamba	5 ug/mL
						Dichlorprop	10 ug/mL
						Dinoseb	10 ug/mL
						MCPA	1000 ug/mL
						MCPP	1000 ug/mL
						Pentachlorophenol	2.5 ug/mL
						Picloram	10 ug/mL
						Silvex (2,4,5-TP)	2.5 ug/mL
						2,4,5-T	2.5 ug/mL
						2,4-D	10 ug/mL
						2,4-DB	10 ug/mL
						Dalapon	10 ug/mL
Dicamba	5 ug/mL						
Dichlorprop	10 ug/mL						

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAAF_00064	11/07/18		Restek, Lot A0132641				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERBICV_00014								
	06/30/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBICVINT_00037	700 uL	2,4,5-T	0.04375 ug/mL
							2,4-D	0.175 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL
.SGHERBICVINT_00037	06/30/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBICVINT_00035	10 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
..SGHERBICVINT_00035	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		SGHerbList1_00008	0.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		SGHerbList1_00011	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGDCAAF_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
..SGHERBICVINT_00036	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		SGHerbList1_00008	0.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		SGHerbList1_00011	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL

Reagent

DCAAME_00011

DCAA Methyl Ester Solution

Product Number: PPS-161

Page: 1 of 1

Lot Number: CP-4762

Lot Issue Date: 20-Sep-2016

Expiration Date: 31-Oct-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
DCAA methyl ester	055954-23-9	RM03071	100.0 ± 0.5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Reagent

SGDCAAF_A_00054



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0128506

Description : DCAA Standard
DCAA Standard 1,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : June 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 53.5730	µg/mL	Unstressed
			+/- 53.6627	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

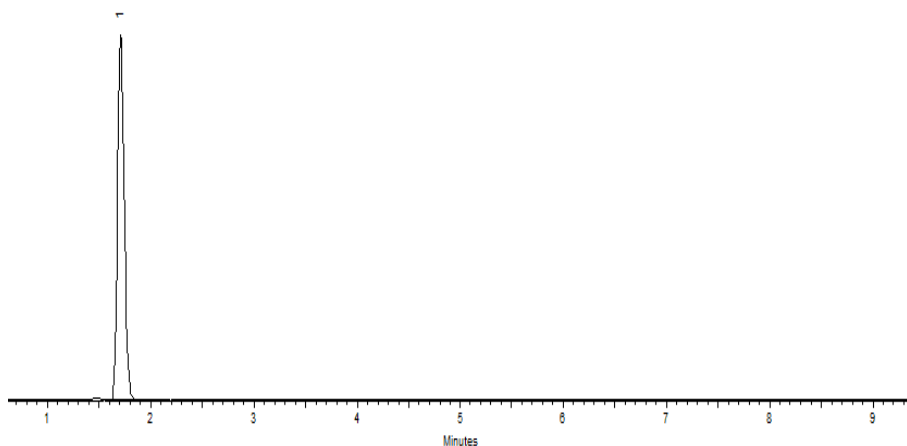
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

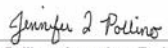


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Joseph Jaglowski - Mix Technician

Date Mixed: 15-Jun-2017

Balance: B251644995


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jun-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGDCAAF_A_00064



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0132641

Description : DCAA Standard
DCAA Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : November 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,000.8 µg/mL	+/- 5.8733	µg/mL	Gravimetric
			+/- 53.2353	µg/mL	Unstressed
			+/- 53.3244	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

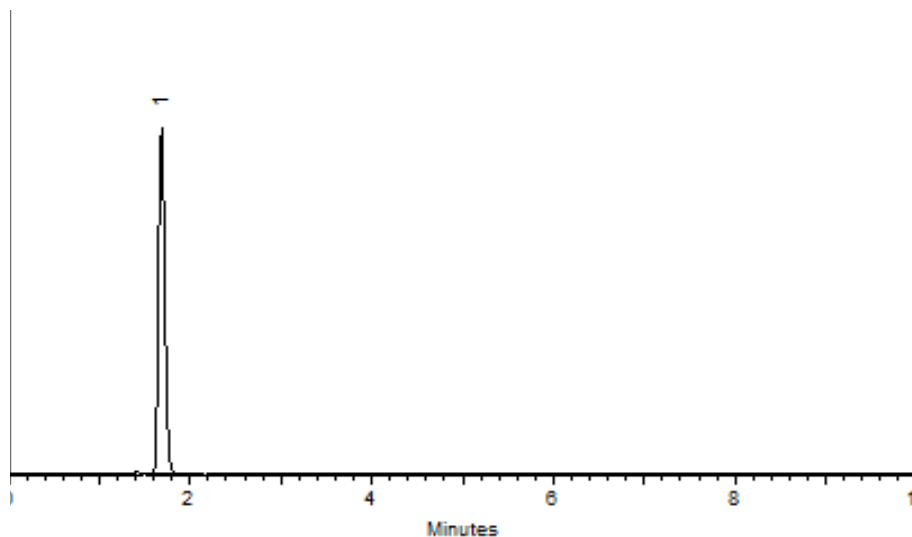
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 21-Nov-2017 **Balance:** B442140311

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Nov-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHERBADDICV_00013



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473.SEC **Lot No.:** A0123922

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,6-Trichlorophenol	100.0 µg/mL	+/- 0.7088	µg/mL Gravimetric
	CAS # 88-06-2.SEC (Lot UUMYM)			+/- 5.3320 µg/mL Unstressed
	Purity 98%			+/- 5.3409 µg/mL Stressed
2	2,6-Dichlorophenol	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 87-65-0.SEC (Lot SIDBB)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
3	3,5-Dichlorobenzoic acid	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 51-36-5.SEC (Lot 00823)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
4	4-Nitrophenol	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 100-02-7.SEC (Lot 2J5LB)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
5	Acifluorfen (blazer)	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 50594-66-6.SEC (Lot 30619)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	Bentazon	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 25057-89-0.SEC (Lot 90723)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Chloramben	199.9 µg/mL	+/- 1.4176	µg/mL Gravimetric
	CAS # 133-90-4.SEC (Lot PSJUA)			+/- 10.6640 µg/mL Unstressed
	Purity 98%			+/- 10.6818 µg/mL Stressed

8	DCPA diacid (tetrachloroterephthalic acid)	201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 2136-79-0.SEC (Lot 3931400)			+/-	10.7216	µg/mL	Unstressed
	Purity ----%			+/-	10.7395	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%



Brandon Reish - Mix Technician

Date Mixed: 04-Jan-2017

Balance: B345965662

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00005



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)		+/-	2.6671	µg/mL	Unstressed
	Purity	99%			+/-	2.6715	µg/mL	Stressed
9	2,4,5-T		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)		+/-	2.6671	µg/mL	Unstressed
	Purity	99%			+/-	2.6715	µg/mL	Stressed
10	2,4-DB		201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)		+/-	10.7216	µg/mL	Unstressed
	Purity	99%			+/-	10.7395	µg/mL	Stressed
11	Dinoseb		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)		+/-	10.6683	µg/mL	Unstressed
	Purity	99%			+/-	10.6860	µg/mL	Stressed
12	Picloram		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)		+/-	10.6683	µg/mL	Unstressed
	Purity	99%			+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol							
	CAS #	67-56-1						
	Purity	99%						

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

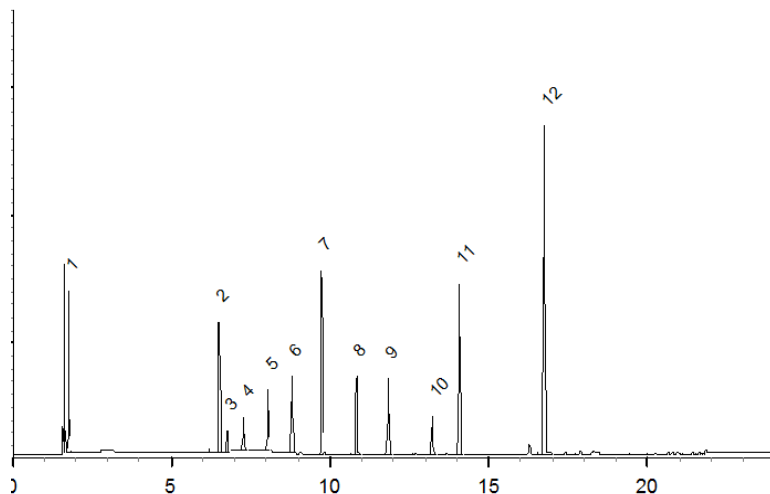
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB		201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric	
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

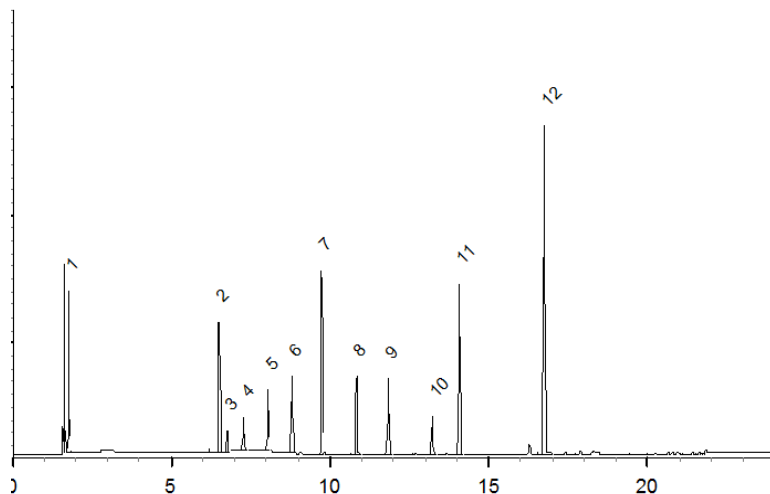
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL	Unstressed
	Purity 95%			+/- 10.6847 µg/mL	Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL	Unstressed
	Purity 99%			+/- 5.3430 µg/mL	Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL	Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL	Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL	Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL	Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL	Unstressed
	Purity 99%			+/- 10.6860 µg/mL	Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL	Unstressed
	Purity 99%			+/- 10.7929 µg/mL	Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL	Unstressed
	Purity 99%			+/- 2.6715 µg/mL	Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

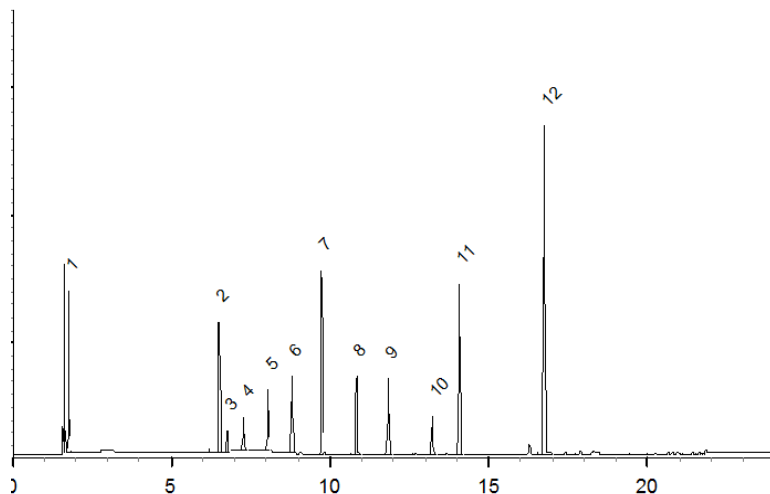
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00009



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

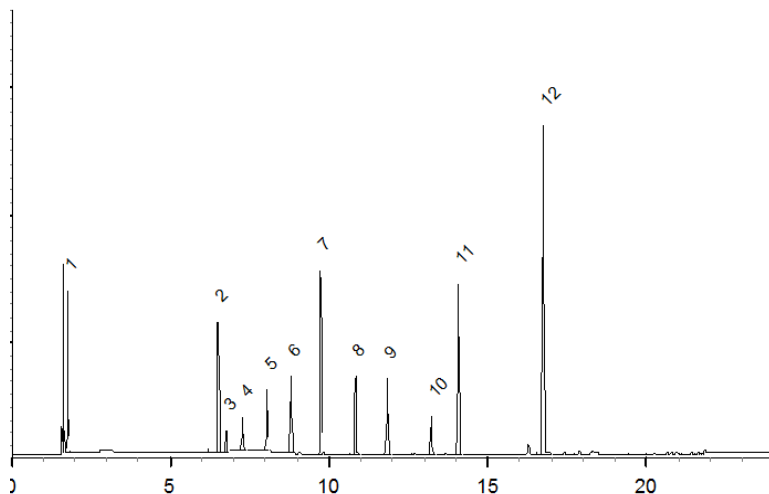
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

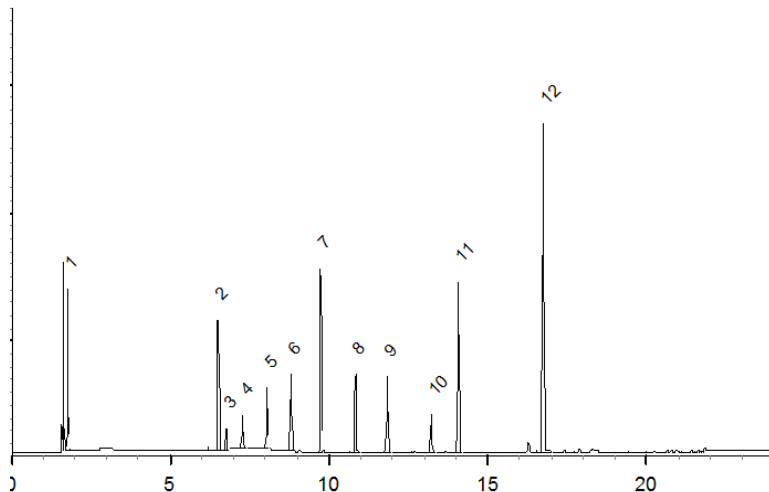
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

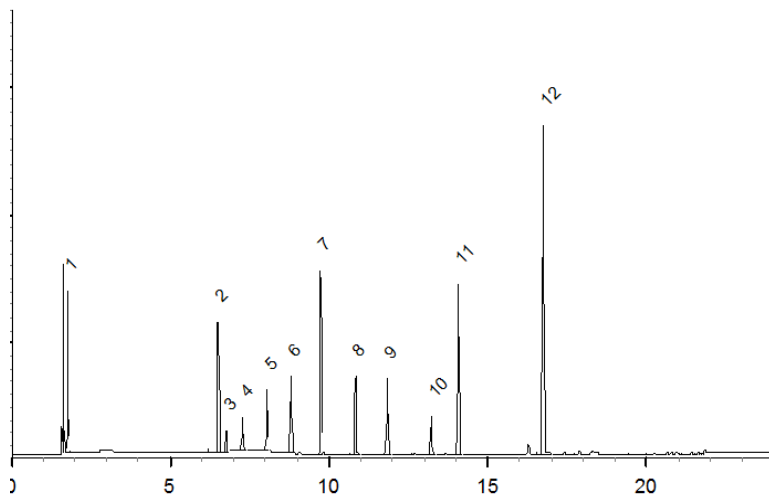
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00008



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

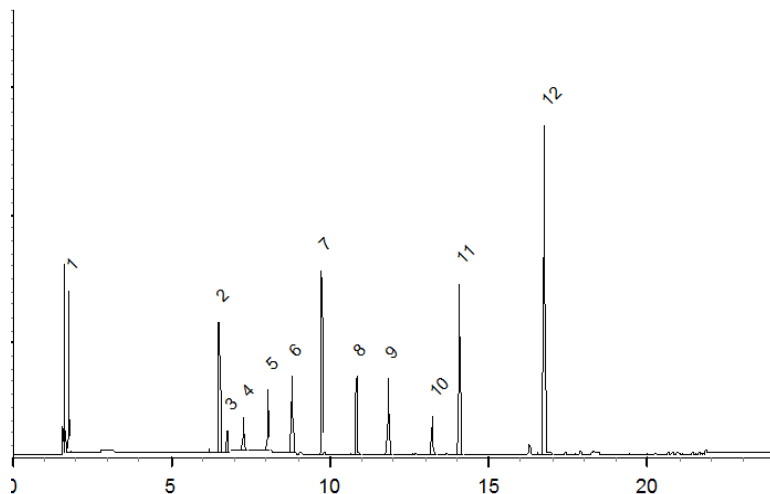
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
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Reagent

SGHerbList1_00011



CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
Tel: (800)356-1688
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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
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	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

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Rtx-CLP II (cat.# 11323)

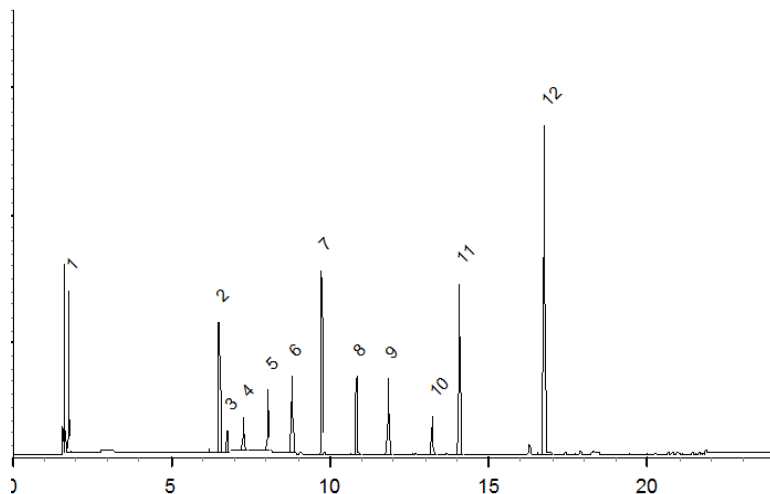
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

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Manufactured under Restek's ISO 9001:2008
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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHMCCALFA_00040



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473 **Lot No.:** A0123630

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2,4,6-Trichlorophenol	100.0 µg/mL	+/-	0.7091	µg/mL	Gravimetric
	CAS # 88-06-2 (Lot MKBL4698V)		+/-	5.3341	µg/mL	Unstressed
	Purity 99%		+/-	5.3430	µg/mL	Stressed
2	2,6-Dichlorophenol	200.0 µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS # 87-65-0 (Lot MKBP8620V)		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
3	3,5-Dichlorobenzoic acid	201.0 µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 51-36-5 (Lot 08004EH)		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
4	4-Nitrophenol	201.0 µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 100-02-7 (Lot MKBV0501V)		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
5	Acifluorfen (blazer)	200.0 µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS # 50594-66-6 (Lot 83-46A)		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
6	Bentazon	199.9 µg/mL	+/-	1.4176	µg/mL	Gravimetric
	CAS # 25057-89-0 (Lot 2735000)		+/-	10.6640	µg/mL	Unstressed
	Purity 98%		+/-	10.6818	µg/mL	Stressed
7	Chloramben	202.0 µg/mL	+/-	1.4323	µg/mL	Gravimetric
	CAS # 133-90-4 (Lot 83-49A)		+/-	10.7750	µg/mL	Unstressed
	Purity 99%		+/-	10.7929	µg/mL	Stressed

8 DCPA diacid (tetrachloroterephthalic acid)
CAS # 2136-79-0 (Lot DWL0462)
Purity 99%

201.0 µg/mL

+/- 1.4253
+/- 10.7216
+/- 10.7395

µg/mL
µg/mL
µg/mL

Gravimetric
Unstressed
Stressed

Solvent:

Acetonitrile

CAS # 75-05-8

Purity 99%



Date Mixed: 20-Dec-2016 Balance: 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8151 DOD

Herbicides (GC) by Method 8151A DOD

FORM II
HERBICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-151865-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (1): DB-35MS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	DCPAA1 #
GQ001	680-151865-1	23 M Q
GQ002	680-151865-2	15 M Q
GQ003	680-151865-3	31
	MB 680-522658/4-A	69
	LCS 680-522658/5-A	77
GQ003 MS	680-151865-3 MS	45 M
GQ003 MSD	680-151865-3 MSD	35

DCPAA = 2,4-Dichlorophenylacetic acid (Surr) QC LIMITS
27-122

Column to be used to flag recovery values

FORM II 8151A DOD

FORM III
HERBICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: SE090035.D

Lab ID: LCS 680-522658/5-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4,5-T	16.2	9.28	57	31-138	
2,4-D	64.8	46.3	72	28-144	

Column to be used to flag recovery and RPD values

FORM III
HERBICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: SE090039.D
 Lab ID: 680-151865-3 MS Client ID: GQ003 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4,5-T	16.8	49	9.26	-236	31-138	M J1

Column to be used to flag recovery and RPD values
 FORM III 8151A DOD

FORM III
HERBICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: SE110036.D
 Lab ID: 680-151865-3 MS Client ID: GQ003 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4-D	67.3	380	31.5 J	-514	28-144	D 4

Column to be used to flag recovery and RPD values
 FORM III 8151A DOD

FORM III
HERBICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: SE090040.D

Lab ID: 680-151865-3 MSD Client ID: GQ003 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2,4,5-T	16.8	25.6	-139	94	30	31-138	J1

Column to be used to flag recovery and RPD values

FORM III
HERBICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: SE110037.D

Lab ID: 680-151865-3 MSD Client ID: GQ003 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
2,4-D	67.3	139	-354	126	30	28-144	D 4 J1

Column to be used to flag recovery and RPD values

FORM IV
HERBICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: MB 680-522658/4-A
 Matrix: Solid Date Extracted: 05/04/2018 14:00
 Lab File ID: (1) SE090034.D Lab File ID: (2) SE090034.D
 Date Analyzed: (1) 05/10/2018 03:48 Date Analyzed: (2) 05/10/2018 03:48
 Instrument ID: (1) CSGS Instrument ID: (2) CSGS
 GC Column: (1) DB-35MS ID: 0.32 (mm) GC Column: (2) DB-XLB ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1		DATE ANALYZED 2	
	LCS 680-522658/5-A	05/10/2018	04:08	05/10/2018	04:08
GQ001	680-151865-1	05/10/2018	04:28	05/10/2018	04:28
GQ002	680-151865-2	05/10/2018	04:47	05/10/2018	04:47
GQ003	680-151865-3	05/10/2018	05:07	05/10/2018	05:07
GQ003 MS	680-151865-3 MS	05/10/2018	05:26	05/10/2018	05:26
GQ003 MSD	680-151865-3 MSD	05/10/2018	05:46	05/10/2018	05:46
GQ003	680-151865-3	05/11/2018	21:55	05/11/2018	21:55
GQ003 MS	680-151865-3 MS	05/11/2018	22:14	05/11/2018	22:14
GQ003 MSD	680-151865-3 MSD	05/11/2018	22:34	05/11/2018	22:34

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ001 Lab Sample ID: 680-151865-1
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/10/2018 04:28 Date Analyzed (2): 05/10/2018 04:28
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.44	7.43	7.45	10		30.3
	2		7.24	7.24	7.26	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 Lab Sample ID: 680-151865-3
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/10/2018 05:07 Date Analyzed (2): 05/10/2018 05:07
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.44	7.43	7.45	500		2.4
	2		7.24	7.24	7.26	490		
2,4,5-T	1		8.01	8.00	8.02	49		2.0
	2		7.85	7.84	7.86	48		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 Lab Sample ID: 680-151865-3
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/11/2018 21:55 Date Analyzed (2): 05/11/2018 21:55
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.41	7.40	7.42	380		2.0
	2		7.21	7.20	7.22	380		
2,4,5-T	1		7.98	7.97	7.99	38		7.4
	2		7.82	7.81	7.83	41		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MS Lab Sample ID: 680-151865-3 MS
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/10/2018 05:26 Date Analyzed (2): 05/10/2018 05:26
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.44	7.43	7.45	38.0		28.6
	2		7.24	7.24	7.26	50.7		
2,4,5-T	1		8.01	8.00	8.02	9.26		7.6
	2		7.85	7.84	7.86	8.58		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MS Lab Sample ID: 680-151865-3 MS
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/11/2018 22:14 Date Analyzed (2): 05/11/2018 22:14
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.41	7.40	7.42	31.5		7.8
	2		7.21	7.20	7.22	34.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MSD Lab Sample ID: 680-151865-3 MSD
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/10/2018 05:46 Date Analyzed (2): 05/10/2018 05:46
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.44	7.43	7.45	162		0.8
	2		7.24	7.24	7.26	161		
2,4,5-T	1		8.01	8.00	8.02	25.6		7.0
	2		7.85	7.84	7.86	27.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MSD Lab Sample ID: 680-151865-3 MSD
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/11/2018 22:34 Date Analyzed (2): 05/11/2018 22:34
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.41	7.40	7.42	139		8.0
	2		7.21	7.20	7.22	151		
2,4,5-T	1		7.97	7.97	7.99	21.9		26.3
	2		7.82	7.81	7.83	28.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522658/5-A
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/10/2018 04:08 Date Analyzed (2): 05/10/2018 04:08
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.44	7.43	7.45	46.3		2.6
	2		7.24	7.24	7.26	47.6		
2,4,5-T	1		8.01	8.00	8.02	9.28		20.5
	2		7.85	7.84	7.86	11.4		

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ001 Lab Sample ID: 680-151865-1
 Matrix: Solid Lab File ID: SE090036.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:20
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.03(g) Date Analyzed: 05/10/2018 04:28
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 1.4 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.4	U	8.4	4.4	2.3
94-75-7	2,4-D	10	M	8.4	8.4	5.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	23	M Q	27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090036.D
 Lims ID: 680-151865-A-1-A
 Client ID: GQ001
 Sample Type: Client
 Inject. Date: 10-May-2018 04:28:02 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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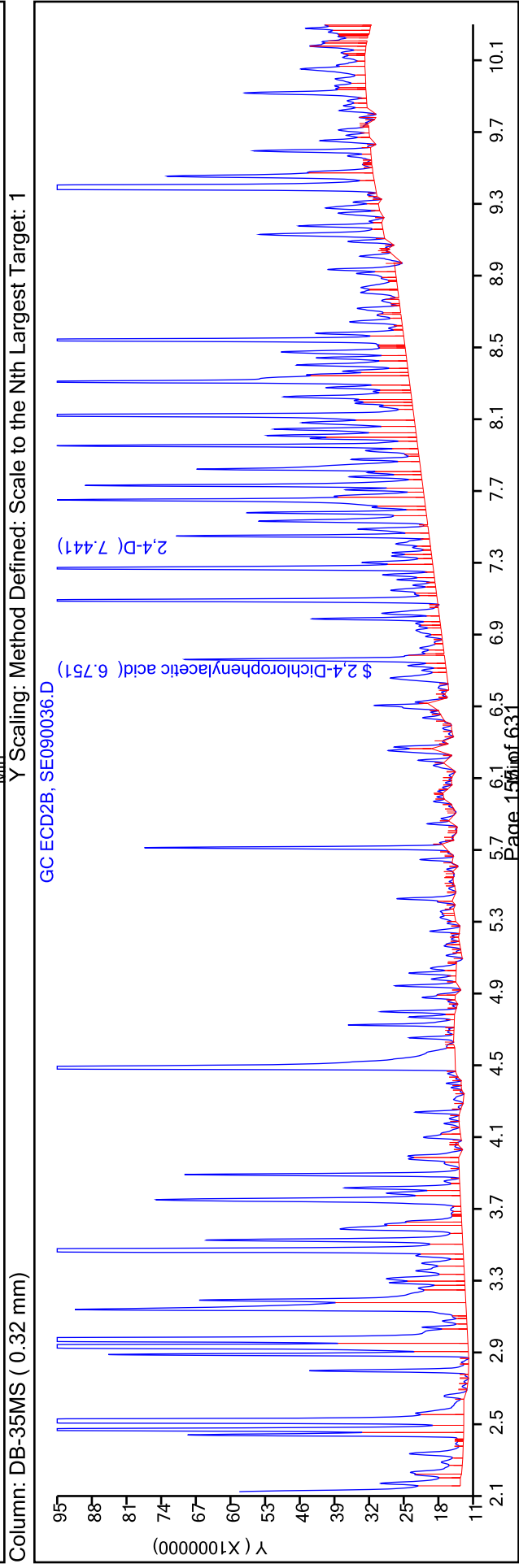
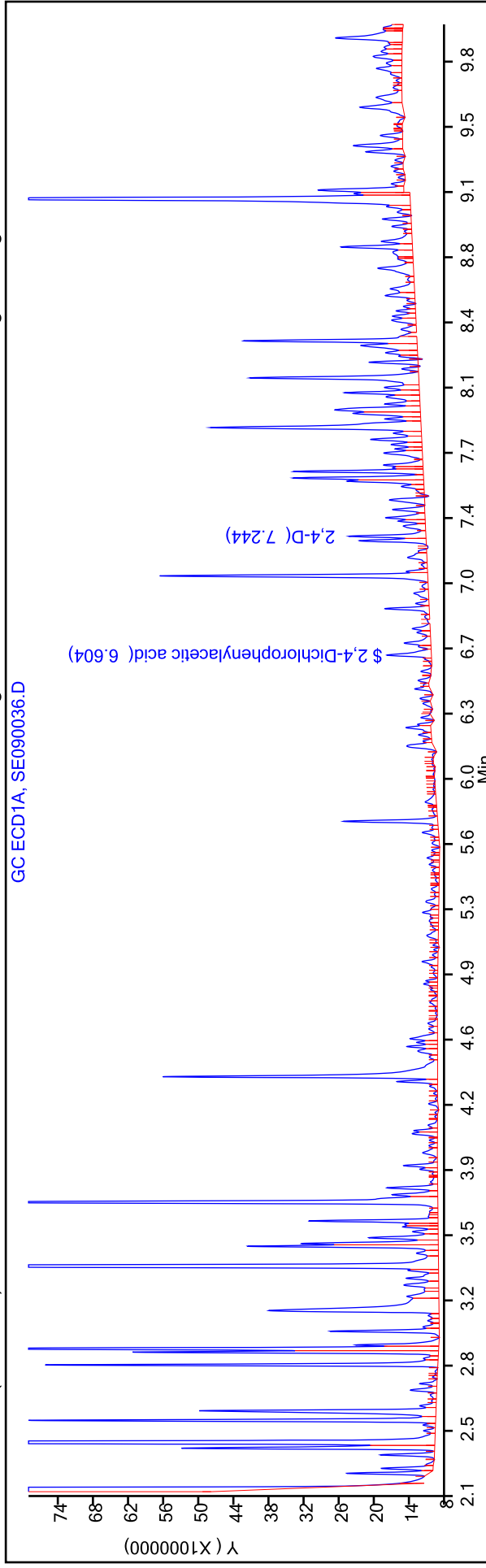
\$ 6	2,4-Dichlorophenylacetic acid					M
1	6.604	6.604	0.000	10000940	0.0507	M
2	6.751	6.752	-0.001	58266550	0.0468	M
					RPD = 7.85	
11	2,4-D					M
1	7.244	7.246	-0.002	12951290	0.0410	M
2	7.441	7.443	-0.002	44126076	0.0302	M
					RPD = 30.33	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090036.D
Injection Date: 10-May-2018 04:28:02
Lims ID: 680-151865-A-1-A
Client ID: GQ001
Injection Vol: 1.0 ul
Method: Herbicides_CSGS
Column: DB-XLB (0.32 mm)
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1
Operator ID: GEM
Worklist Smp#: 36
ALS Bottle#: 36



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090036.D
 Lims ID: 680-151865-A-1-A
 Client ID: GQ001
 Sample Type: Client
 Inject. Date: 10-May-2018 04:28:02 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:02

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0507	25.33

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0468	23.41

TestAmerica Savannah

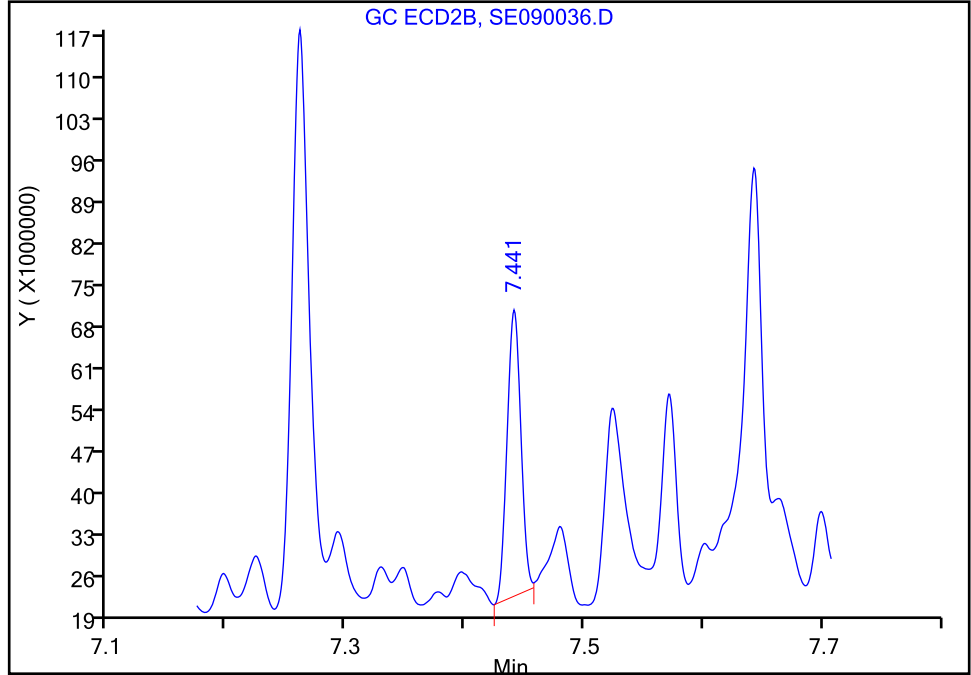
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090036.D
Injection Date: 10-May-2018 04:28:02 Instrument ID: CSGS
Lims ID: 680-151865-A-1-A Lab Sample ID: 680-151865-1
Client ID: GQ001
Operator ID: GEM ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

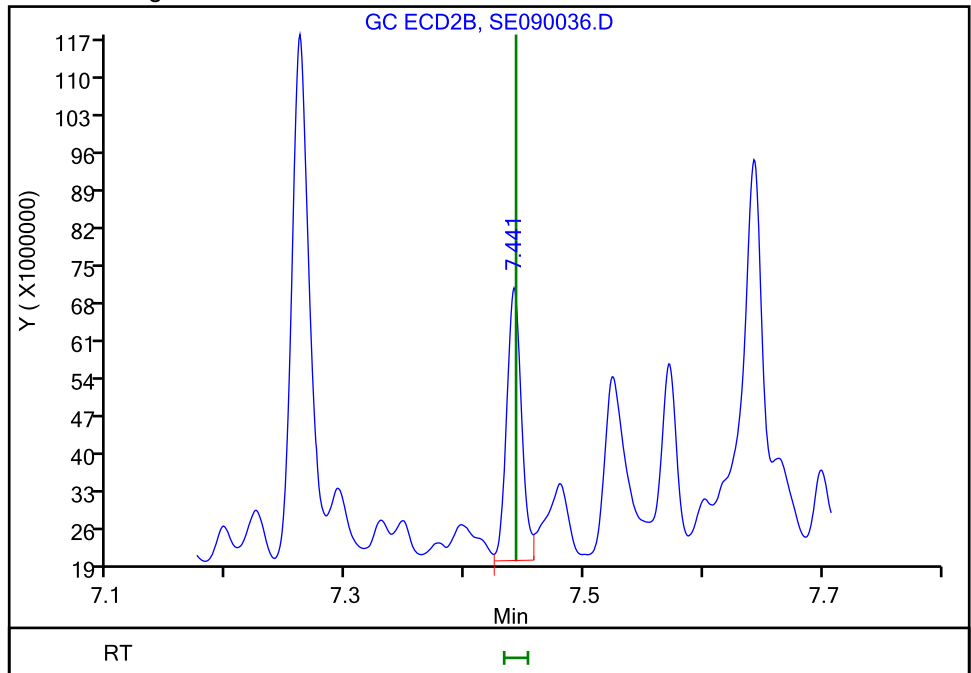
RT: 7.44
Area: 38939352
Amount: 0.026674
Amount Units: ug/ml

Processing Integration Results



RT: 7.44
Area: 44126076
Amount: 0.030227
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:19:58
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

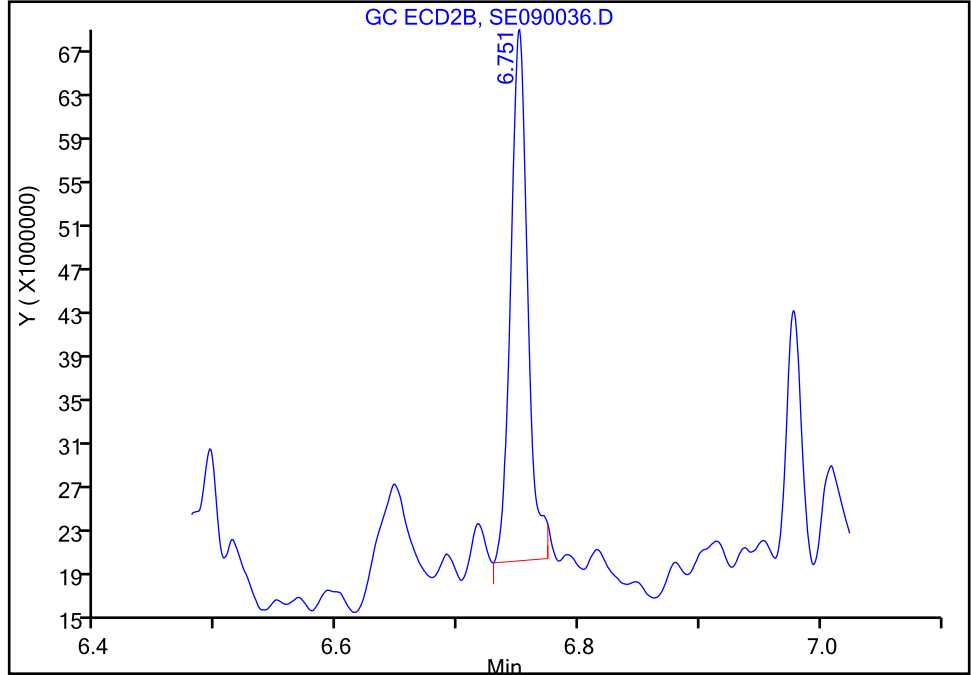
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090036.D
Injection Date: 10-May-2018 04:28:02 Instrument ID: CSGS
Lims ID: 680-151865-A-1-A Lab Sample ID: 680-151865-1
Client ID: GQ001
Operator ID: GEM ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

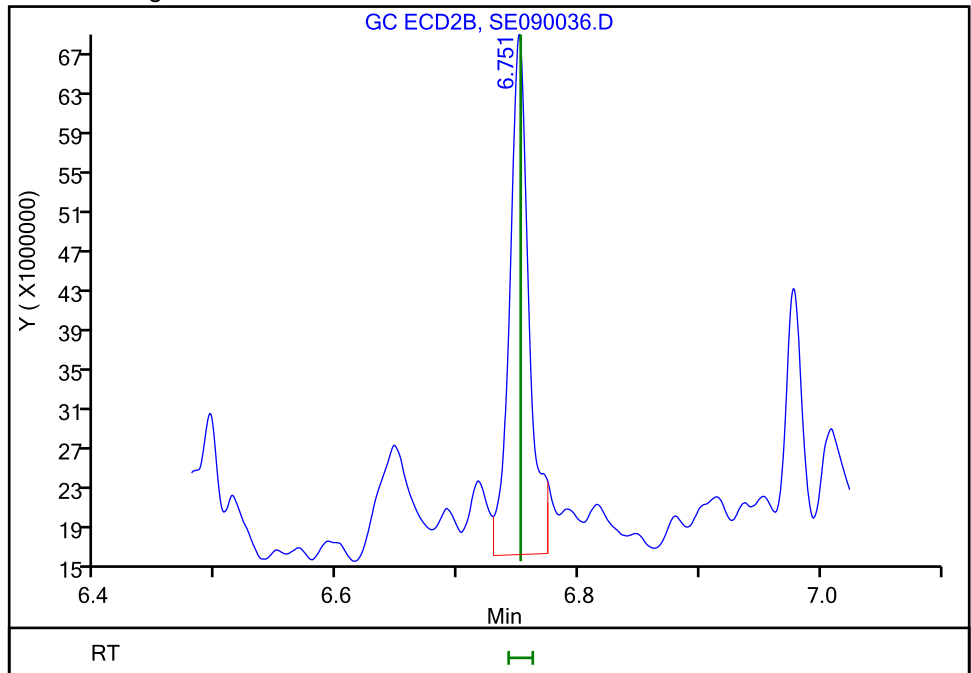
RT: 6.75
Area: 47391352
Amount: 0.038088
Amount Units: ug/ml

Processing Integration Results



RT: 6.75
Area: 58266550
Amount: 0.046829
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:19:58
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ002 Lab Sample ID: 680-151865-2
 Matrix: Solid Lab File ID: SE090037.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:25
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.05(g) Date Analyzed: 05/10/2018 04:47
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 1.0 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.3	U M	8.4	4.3	2.3
94-75-7	2,4-D	8.4	U M	8.4	8.4	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	15	M Q	27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
 Lims ID: 680-151865-A-2-A
 Client ID: GQ002
 Sample Type: Client
 Inject. Date: 10-May-2018 04:47:38 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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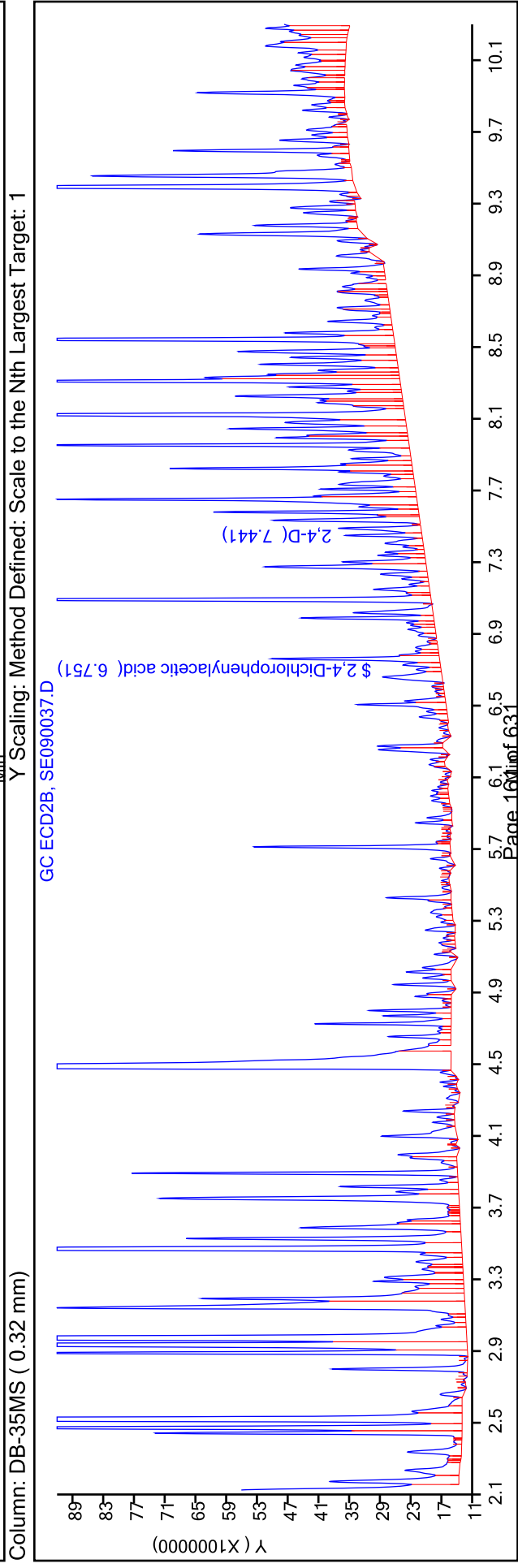
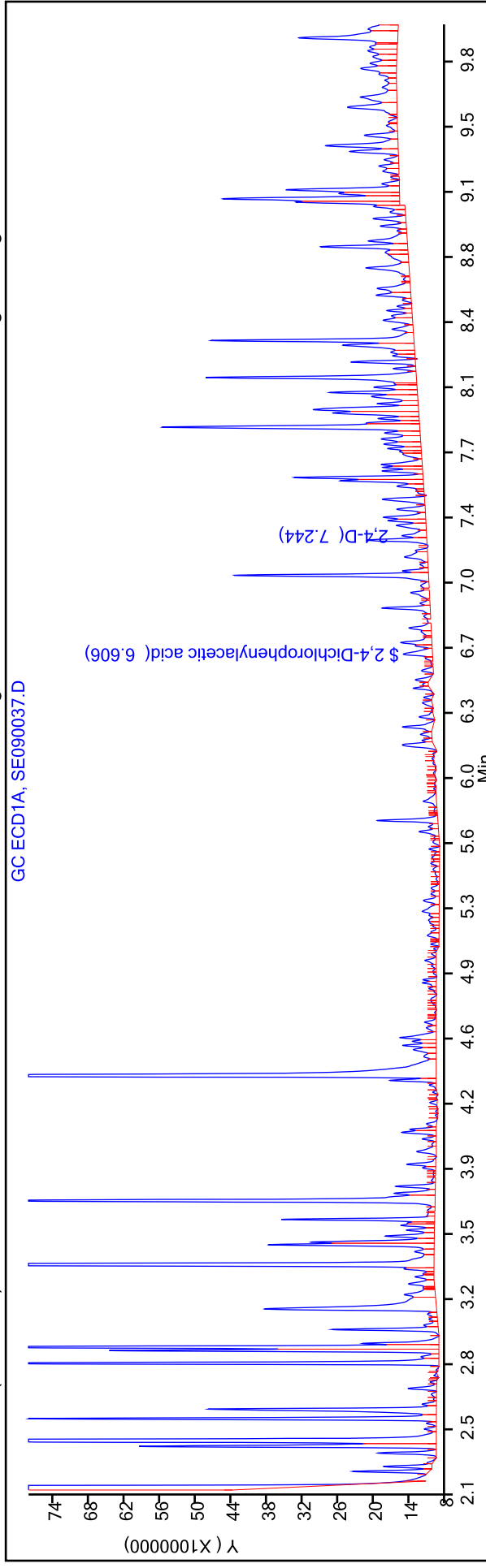
\$ 6	2,4-Dichlorophenylacetic acid					M
1	6.606	6.604	0.002	7587994	0.0384	M
2	6.751	6.752	-0.001	37442900	0.0301	M
					RPD = 24.34	
11	2,4-D					M
1	7.244	7.246	-0.002	5532460	0.0175	M
2	7.441	7.443	-0.002	13411997	0.009187	M
					RPD = 62.45	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
 Injection Date: 10-May-2018 04:47:38
 Lims ID: 680-151865-A-2-A
 Client ID: GQ002
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1
 Operator ID: GEM
 Worklist Smp#: 37
 ALS Bottle#: 37



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
 Lims ID: 680-151865-A-2-A
 Client ID: GQ002
 Sample Type: Client
 Inject. Date: 10-May-2018 04:47:38 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:21

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0384	19.22

Surrogate Recovery, Detector: GC ECD2B

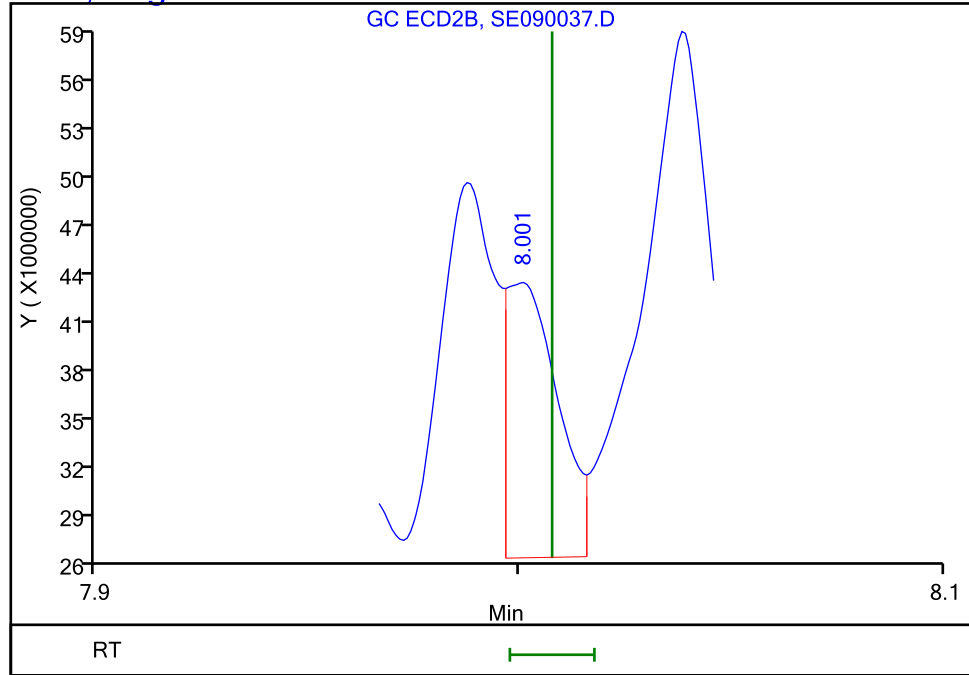
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0301	15.05

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
Injection Date: 10-May-2018 04:47:38 Instrument ID: CSGS
Lims ID: 680-151865-A-2-A Lab Sample ID: 680-151865-2
Client ID: GQ002
Operator ID: GEM ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

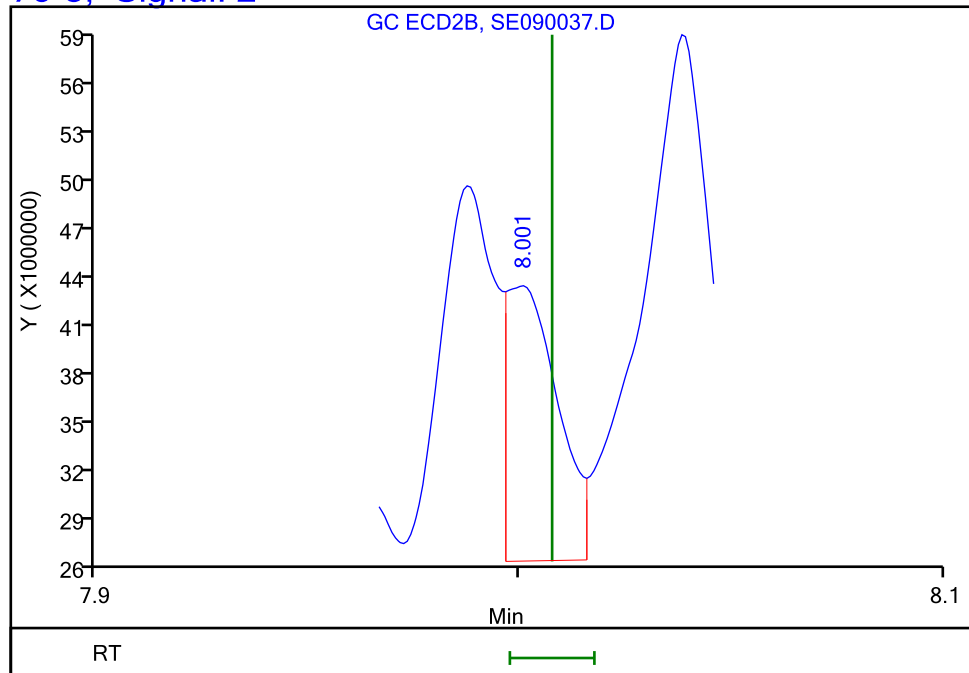
RT: 8.00
Response: 13584827
Amount: 0.002180



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.00
Response: 13584827
Amount: 0.002180



Reviewer: kellarj, 10-May-2018 11:20:21
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

TestAmerica Savannah

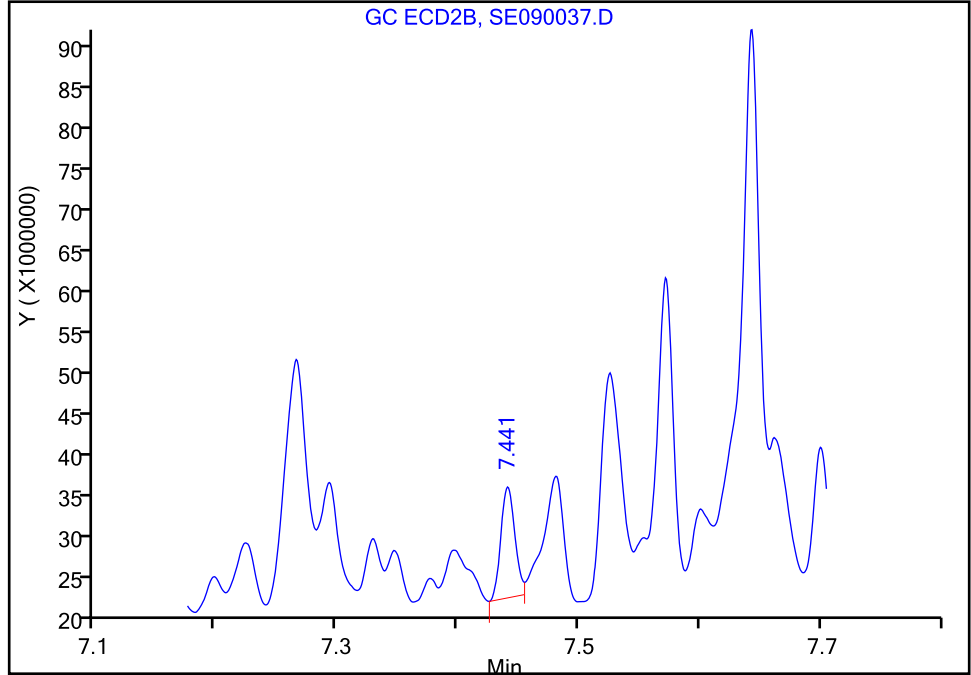
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
Injection Date: 10-May-2018 04:47:38 Instrument ID: CSGS
Lims ID: 680-151865-A-2-A Lab Sample ID: 680-151865-2
Client ID: GQ002
Operator ID: GEM ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

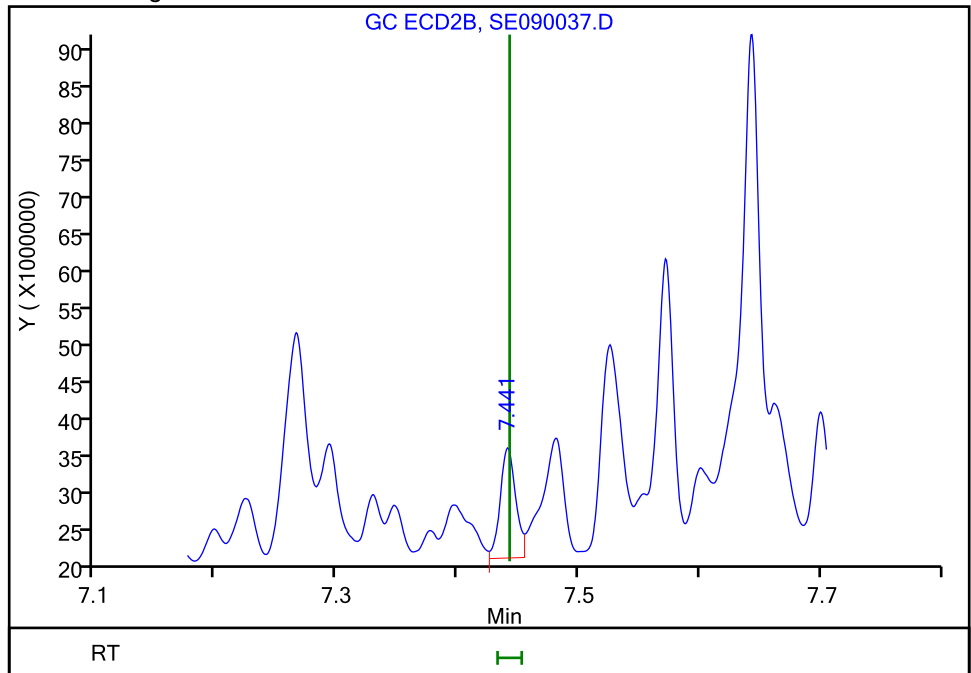
RT: 7.44
Area: 11088154
Amount: 0.007596
Amount Units: ug/ml

Processing Integration Results



RT: 7.44
Area: 13411997
Amount: 0.009187
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:20:17
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

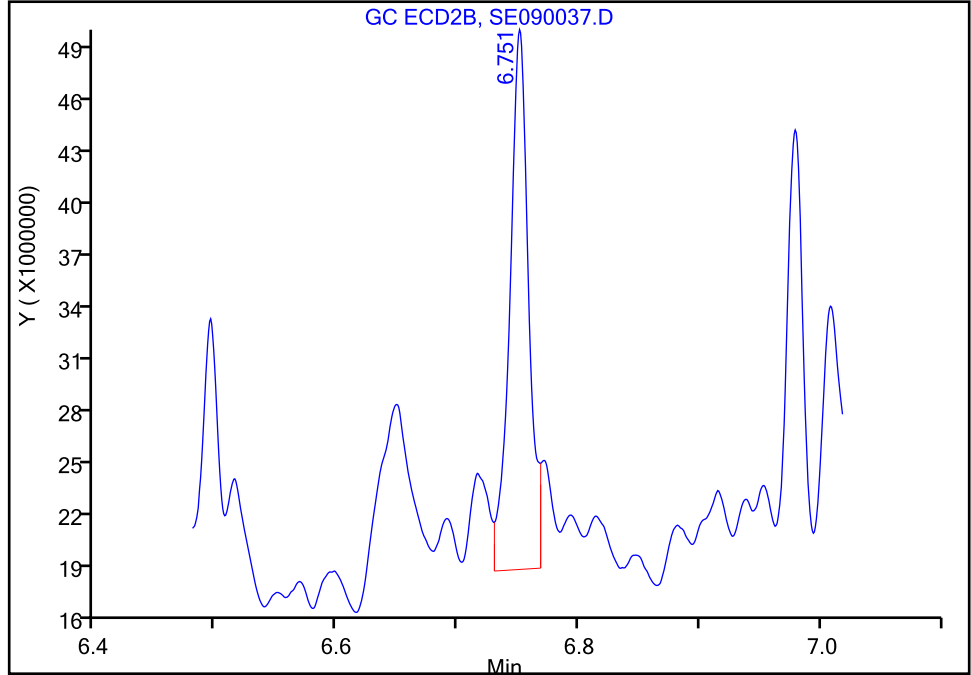
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090037.D
Injection Date: 10-May-2018 04:47:38 Instrument ID: CSGS
Lims ID: 680-151865-A-2-A Lab Sample ID: 680-151865-2
Client ID: GQ002
Operator ID: GEM ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

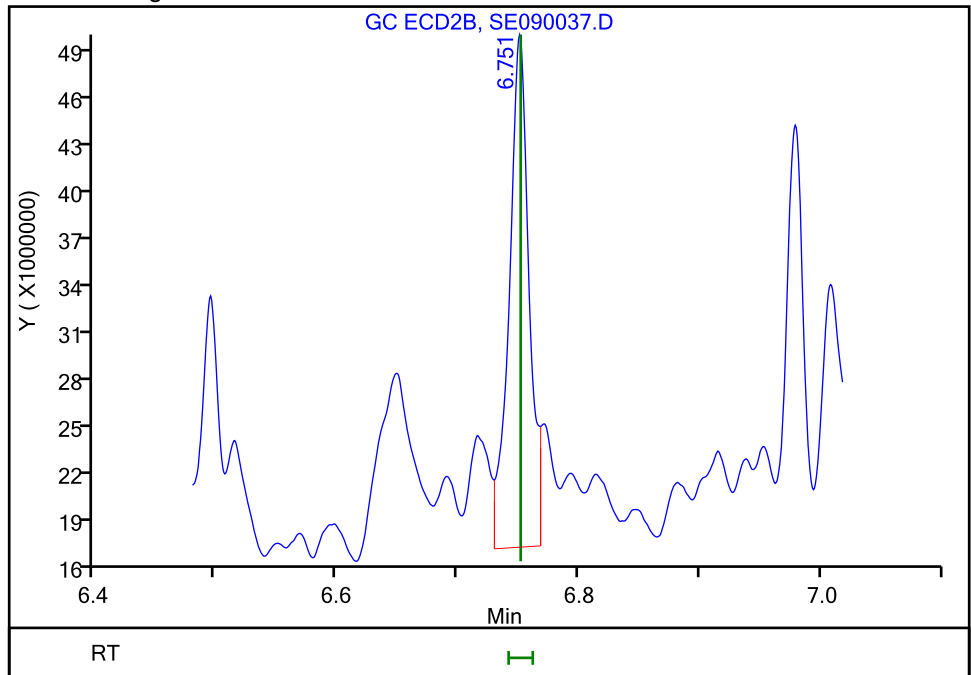
RT: 6.75
Area: 33804243
Amount: 0.027168
Amount Units: ug/ml

Processing Integration Results



RT: 6.75
Area: 37442900
Amount: 0.030093
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:20:17
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 Lab Sample ID: 680-151865-3
 Matrix: Solid Lab File ID: SE090038.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.05(g) Date Analyzed: 05/10/2018 05:07
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	49	J1	8.4	4.3	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	31		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090038.D
 Lims ID: 680-151865-A-3-A
 Client ID: GQ003
 Sample Type: Client
 Inject. Date: 10-May-2018 05:07:11 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-038
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	9340254	0.0473	
2	6.751	6.752	-0.001	77615678	0.0624	
RPD = 27.48						
11 2,4-D						
1	7.244	7.246	-0.002	461213783	1.46	E
2	7.444	7.443	0.001	2185650126	1.50	E
RPD = 2.43						
15 2,4,5-T						
1	7.846	7.848	-0.002	265666148	0.1425	
2	8.007	8.008	-0.001	906122650	0.1454	
RPD = 2.03						

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090038.D

Injection Date: 10-May-2018 05:07:11

Operator ID: GEM

Lims ID: 680-151865-A-3-A

Worklist Smp#: 38

Client ID: GQ003

Injection Vol: 1.0 ul

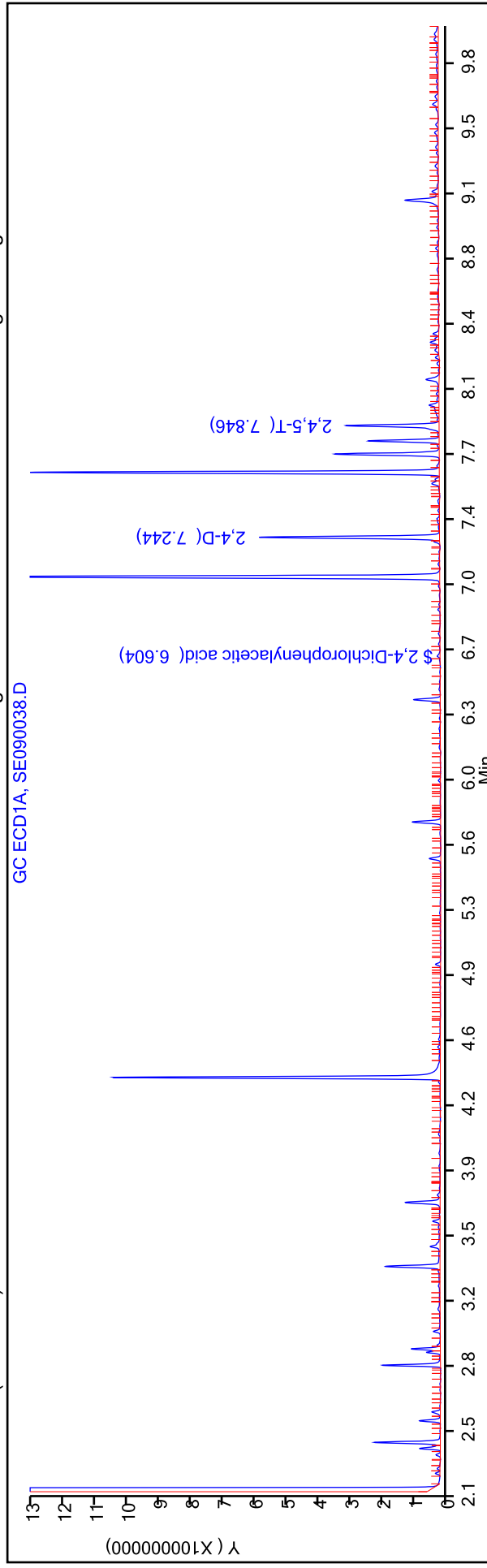
ALS Bottle#: 38

Method: Herbicides_CSGS

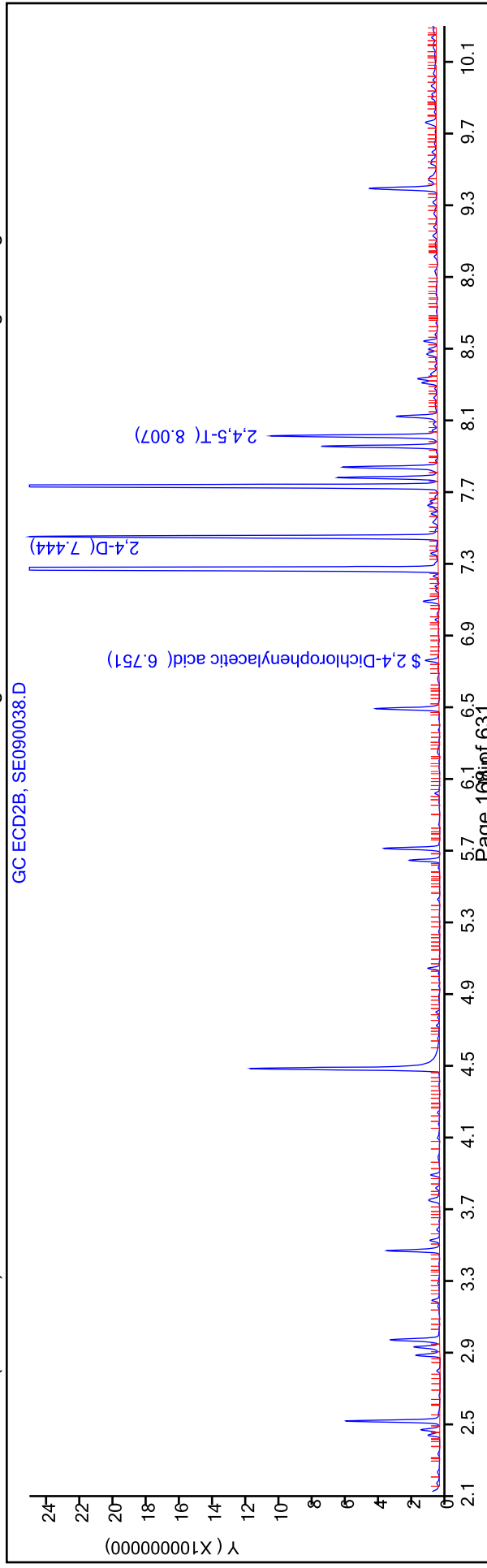
Dil. Factor: 1.0000

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090038.D
 Lims ID: 680-151865-A-3-A
 Client ID: GQ003
 Sample Type: Client
 Inject. Date: 10-May-2018 05:07:11 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-038
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:20:35

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0473	23.65

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0624	31.19

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 Lab Sample ID: 680-151865-3
 Matrix: Solid Lab File ID: SE110035.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.05(g) Date Analyzed: 05/11/2018 21:55
 Con. Extract Vol.: 10(mL) Dilution Factor: 5
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
94-75-7	2,4-D	380	D J1	42	42	25

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110035.D
 Lims ID: 680-151865-A-3-A
 Client ID: GQ003
 Sample Type: Client
 Inject. Date: 11-May-2018 21:55:10 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 14-May-2018 09:49:29 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK029

First Level Reviewer: halll Date: 14-May-2018 14:50:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.571	6.572	-0.001	1678847	0.009765
2	6.719	6.720	-0.001	13998467	0.0123
RPD = 22.61					

10 Dichlorprop

1	7.069	7.069	0.000	1512878	0.006574
2	7.191	7.191	0.000	5012800	0.004373
RPD = 40.22					

11 2,4-D

1	7.212	7.214	-0.002	62460690	0.2287
2	7.411	7.412	-0.001	282169999	0.2241
RPD = 2.00					

12 Pentachlorophenol

1	7.563	7.562	0.001	130644508	0.0299
2	7.608	7.605	0.003	9088473	0.000580
RPD = 192.39					

13 Silvex (2,4,5-TP)

1	7.661	7.661	0.000	38699235	0.0242
2	7.743	7.744	-0.001	74225429	0.0123
RPD = 65.44					

15 2,4,5-T

1	7.815	7.816	-0.001	37602081	0.0242
2	7.975	7.976	-0.001	115548319	0.0225
RPD = 7.37					

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110035.D

Injection Date: 11-May-2018 21:55:10

Operator ID: GEM

Lims ID: 680-151865-A-3-A

Instrument ID: CSGS

Worklist Smp#: 35

Client ID: GQ003

Lab Sample ID: 680-151865-3

Injection Vol: 1.0 ul

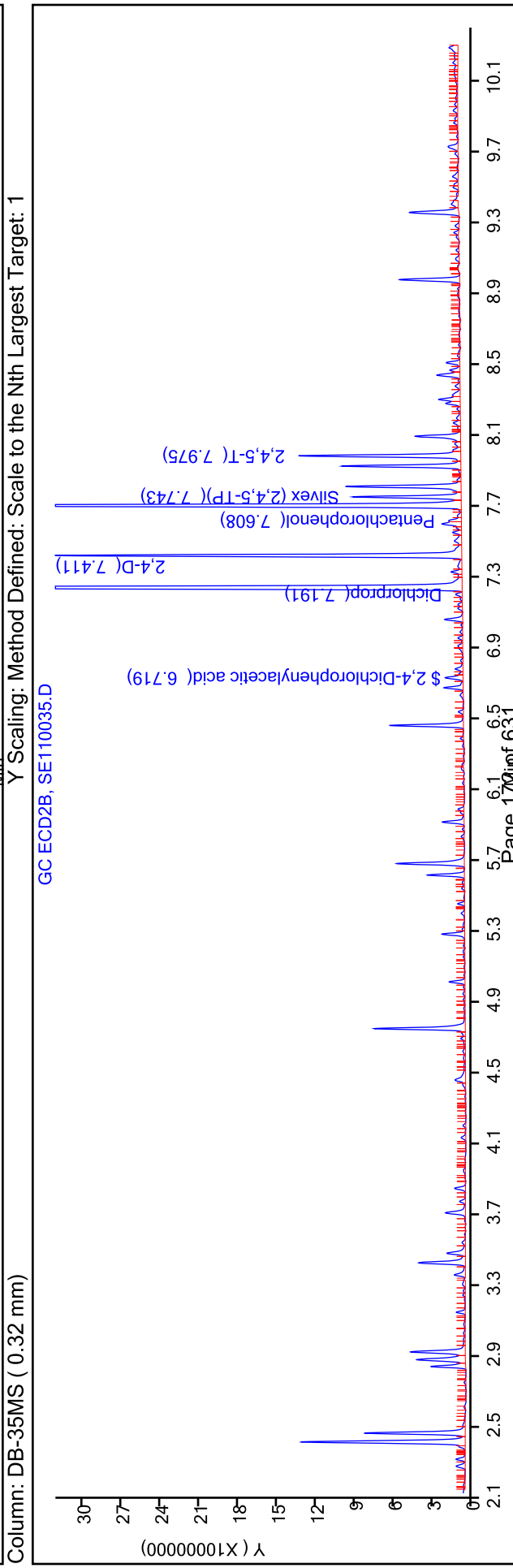
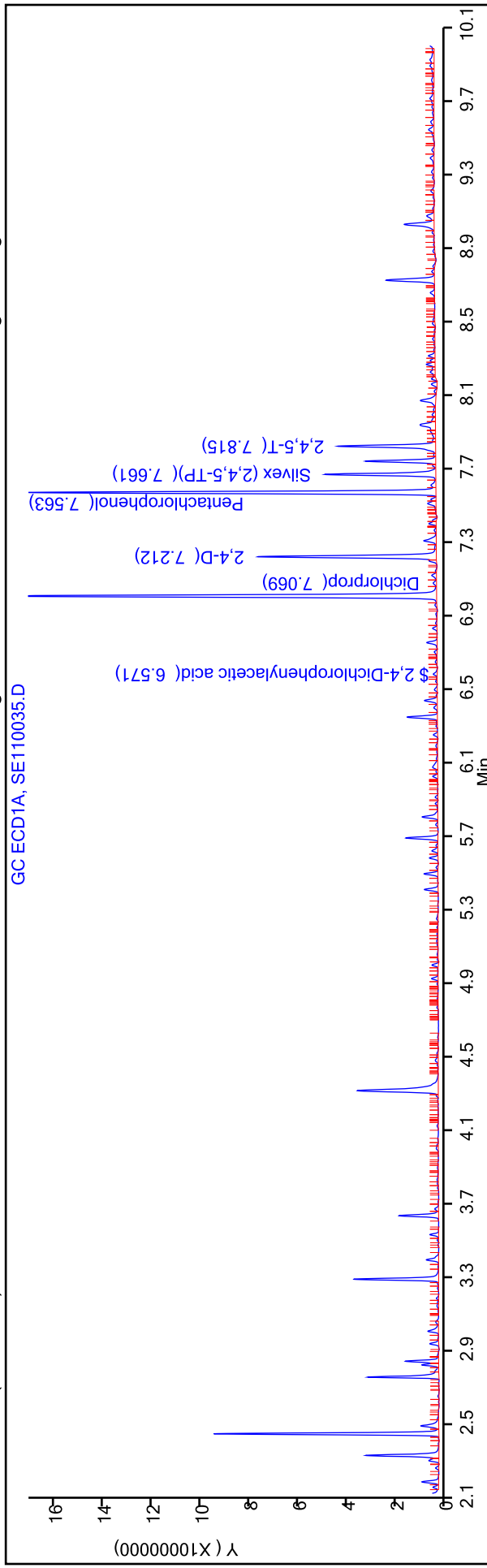
Dil. Factor: 5.0000

ALS Bottle#: 35

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110035.D
 Lims ID: 680-151865-A-3-A
 Client ID: GQ003
 Sample Type: Client
 Inject. Date: 11-May-2018 21:55:10 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 14-May-2018 09:49:29 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK029

First Level Reviewer: halll Date: 14-May-2018 14:50:47

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.009765	24.41

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0123	30.64

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.489	2.490	2.491	2.491	2.491	2.491	2.492	2.492	2.471 - 2.511	2.491
3,5-Dichlorobenzoic acid	6.048	6.047	6.047	6.047	6.047	6.047	6.047	6.048	6.037 - 6.057	6.047
4-Nitrophenol	6.177	6.175	6.174	6.173	6.173	6.172	6.172	6.173	6.163 - 6.183	6.174
Dicamba	6.641	6.642	6.641	6.642	6.642	6.642	6.641	6.643	6.632 - 6.652	6.642
MCPP	6.790	6.789	6.788	6.789	6.790	6.790	6.791	6.794	6.779 - 6.799	6.790
MCPA	6.917	6.917	6.916	6.916	6.917	6.917	6.919	6.922	6.906 - 6.926	6.918
Dichlorprop	7.104	7.103	7.102	7.102	7.103	7.101	7.101	7.103	7.092 - 7.112	7.102
2,4-D	7.248	7.247	7.247	7.246	7.246	7.245	7.246	7.246	7.236 - 7.256	7.246
Pentachlorophenol	7.595	7.595	7.595	7.594	7.595	7.595	7.596	7.597	7.584 - 7.604	7.595
Silvex (2,4,5-TP)	7.694	7.692	7.693	7.692	7.693	7.693	7.692	7.693	7.682 - 7.702	7.693
Chloramben	7.772	7.772	7.771	7.770	7.770	7.770	7.771	7.772	7.760 - 7.780	7.771
2,4,5-T	7.849	7.849	7.848	7.848	7.848	7.848	7.847	7.848	7.838 - 7.858	7.848
2,4-DB	8.093	8.092	8.092	8.091	8.091	8.091	8.090	8.090	8.081 - 8.101	8.091
Dinoseb	8.145	8.145	8.145	8.145	8.145	8.144	8.145	8.146	8.134 - 8.154	8.145
Bentazon	8.219	8.219	8.218	8.218	8.218	8.218	8.218	8.218	8.208 - 8.228	8.218
Picloram	8.436	8.436	8.435	8.433	8.434	8.434	8.435	+++++	8.423 - 8.443	8.435
Tetrathalic acid, tetrachloro-, dimethyl ester	8.539	8.538	8.538	8.537	8.538	8.539	8.539	+++++	8.527 - 8.547	8.538
Acifluorfen	9.579	9.578	9.578	9.577	9.578	9.579	9.578	+++++	9.567 - 9.587	9.578
2,4-Dichlorophenylacetic acid (Surr)	6.605	6.605	6.605	6.604	6.604	6.605	6.605	6.605	6.594 - 6.614	6.605

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.:

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	679004100	586306400	529724880	486927140	Lin2	2140794.62	475679294						0.9990				0.9900	
3,5-Dichlorobenzoic acid	488923720	471437860	481577290	472686723	Ave		309205739			3.1		20.0						
4-Nitrophenol	294471600	304813200	302496800	306718880	Ave		99563067.3			4.9		20.0						
Dicamba	316092469	306233072	100269680	100636080	Ave		985452559			6.9		20.0						
MCPP	104073800	104215600	99148808	93032826	Ave		648655.585			9.1		20.0						
MCPA	874466200	929331920	949702840	973337620	Ave		846838.620					0.9950					0.9900	
Dichlorprop	1016720891	1000989912	1058983740	1080087350	Lin2	110437.943	256140387			1.7		20.0						
2,4-D	517455	698193	701701	679975	Ave		315615394			2.6		20.0						
Pentachlorophenol	913431	970146	929117	878491	Lin2	110437.943	5067705785			14.1		20.0						
Silvex (2,4,5-TP)	867697	812133	823274	782204	Ave		1871206069			10.7		20.0						
Chloramben	253948000	256946720	253424340	251838340	Ave		16388631616			15.2		20.0						
2,4,5-T	258455006	250985020	262537590	260988077	Ave		1864427231			5.2		20.0						
2,4-DB	304754500	309510160	313557920	313514680	Ave		176196398			7.0		20.0						
Dinoseb	319190594	310716568	325116650	328562078	Ave		1106610481			13.1		20.0						

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57184

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2							
Bentazon	237265100 264116669	252620960 257975996	251836540 270292904	253866100 270773698	Ave				4.3			20.0			
Picloram	2068364300 2880648589	2387441120 2898059392	2497091420 3293180308	2658849710 ++++	Ave				15.0			20.0			
Tetraphthalic acid, tetrachloro-, dimethyl	2272104700 3041027223	2578541480 3049196252	2717417820 3336707492	2862796940 ++++	Ave				12.4			20.0			
Acifluorfen	1590473000 2226585200	1811189040 2243089812	1848579360 2482446786	2041340920 ++++	Ave				15.1			20.0			
2,4-Dichlorophenylacetic acid (Surr)	200071800 197774526	199269440 192075308	196487840 199932728	193969790 199916295	Ave				1.5			20.0			

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57184

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)							
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Dalapon	Lin2	6790041 117859465	14657660 240788645	26486244 472686723	48692714	85561651	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
3,5-Dichlorobenzoic acid	Ave	2944716 76558268	7620330 161466175	15124840 319887544	30671888	55316182	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
4-Nitrophenol	Ave	1040738 24787202	2605390 46516413	5013484 91420310	10063608	18148801	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
Dicamba	Ave	4372331 125123739	11616649 264745935	23742571 540043675	48666881	88963078	0.00500 0.125	0.0125 0.250	0.0250 0.500	0.0500	0.0875	0.00500 0.125	0.0125 0.250	0.0250 0.500	0.0500	0.0875	
MCPP	Ave	517455 15798581	1745483 31559204	3508507 65821733	6799750	11735070	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5	
MCPA	Lin2	913431 20303334	2425365 41163701	4645587 78220442	8784914	15184702	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5	
Dichlorprop	Ave	2539480 62746255	6423668 131268795	12671217 260988077	25183834	45229626	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
2,4-D	Ave	3047545 77679142	7737754 162558325	15677896 328562078	31351468	55858354	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
Pentachlorophenol	Ave	9895451 331633513	27542680 720360768	58438516 1535573734	124451497	232407815	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	
Silvex (2,4,5-TP)	Ave	3859632 122984337	10459084 259138392	21972097 528834758	46478268	86592112	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	
Chloramben	Ave	12786212 428728783	35018105 942129901	74407541 2025978443	159803441	300714561	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
2,4,5-T	Ave	4426368 118284366	10974501 247745545	22227236 498225713	45407307	84308974	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438	
2,4-DB	Ave	1551068 44656333	4239618 94816741	8499475 193274970	17140092	31842206	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
Dinoseb	Ave	8830536 291379006	24507489 621322249	50192922 1314025484	108913733	205511059	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	
Bentazon	Ave	2372651 64493999	6315524 135146452	12591827 270773698	25386610	46220417	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57184

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Picloram	Ave	20683643 724514848	59686028 1646590154	124854571 +++++	265884971	504113503	0.0100 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	22721047 762299063	64463537 1668353746	135870891 +++++	286279694	532179764	0.0100 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175			
Acifluorfen	Ave	15904730 560772453	45279726 1241223393	92428968 +++++	204134092	389652410	0.0100 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	2000718 48018827	4981736 99966364	9824392 199916295	19396979	34610542	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			

Curve Type Legend:
 Ave = Average
 Lin2 = Linear 1/conc^2

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 09-May-2018 17:59:52 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:06 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 18:51:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.492	2.491	0.001	472686723	1.00	0.9892	a
2	2.543	2.540	0.003	1486390376	1.00	1.05	a
						RPD = 6.41	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	93110884	NC	NC	a
2	5.030	5.028	0.002	499305693	NC	NC	a
						RPD = 4.02	
3 2,4,6-Trichlorophenol							
1	5.712	5.710	0.002	1340729096	NC	NC	a
2	5.704	5.700	0.004	4940529110	NC	NC	a
						RPD = 10.44	
4 3,5-Dichlorobenzoic acid							
1	6.048	6.047	0.001	319887544	1.00	1.03	a
2	6.043	6.040	0.003	1744604922	1.00	1.08	a
						RPD = 4.17	
5 4-Nitrophenol							
1	6.173	6.173	0.000	91420310	1.00	0.9182	a
2	6.426	6.426	0.000	285656847	1.00	0.9182	a
						RPD = 0.00	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	199916295	1.00	1.01	a
2	6.754	6.752	0.002	1320744257	1.00	1.06	a
						RPD = 4.72	
7 Dicamba							
1	6.643	6.642	0.001	540043675	0.5000	0.5480	a
2	6.836	6.833	0.003	2436964400	0.5000	0.5495	a
						RPD = 0.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							a
1	6.794	6.789	0.005	65821733	100.0	101.5	a
2	6.885	6.880	0.005	369583811	100.0	99.0	a
							RPD = 2.50
9 MCPA							a
1	6.922	6.916	0.006	78220442	100.0	92.2	a
2	7.084	7.078	0.006	724807549	100.0	96.7	a
							RPD = 4.75
10 Dichlorprop							a
1	7.103	7.102	0.001	260988077	1.00	1.02	a
2	7.225	7.223	0.002	1282238794	1.00	1.05	a
							RPD = 2.77
11 2,4-D							a
1	7.246	7.246	0.000	328562078	1.00	1.04	a
2	7.444	7.443	0.001	1629748617	1.00	1.12	a
							RPD = 6.99
12 Pentachlorophenol							a
1	7.597	7.594	0.003	1535573734	0.2500	0.3030	a
2	7.642	7.637	0.005	4549801262	0.2500	0.2698	a
							RPD = 11.60
13 Silvex (2,4,5-TP)							a
1	7.693	7.692	0.001	528834758	0.2500	0.2826	a
2	7.777	7.774	0.003	1933247676	0.2500	0.2882	a
							RPD = 1.94
14 Chloramben							a
1	7.772	7.770	0.002	2025978443	1.00	1.24	a
2	8.084	8.081	0.003	5823384953	1.00	1.08	a
							RPD = 13.91
15 2,4,5-T							a
1	7.848	7.848	0.000	498225713	0.2500	0.2672	a
2	8.009	8.008	0.001	1819790712	0.2500	0.2920	a
							RPD = 8.87
16 2,4-DB							a
1	8.090	8.091	-0.001	193274970	1.00	1.10	a
2	8.223	8.222	0.001	849802206	1.00	0.9682	a
							RPD = 12.47
17 Dinoseb							a
1	8.146	8.144	0.002	1314025484	1.00	1.19	a
2	8.178	8.173	0.005	4034212367	1.00	1.23	a
							RPD = 3.50
18 Bentazon							a
1	8.218	8.218	0.000	270773698	1.00	1.05	a
2	8.582	8.578	0.004	824414003	1.00	1.11	a
							RPD = 5.11
19 Picloram							Ma
1	8.436	8.433	0.003	3621817547	1.00	1.36	a
2	8.920	8.913	0.007	11034840048	1.00	1.33	M
							RPD = 1.87

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	--------------	------------------	------------------	----------	------------------	--------------------	-------

20 DCPA							a
1	8.541	8.537	0.004	3595185453	1.00	1.27	a
2	8.699	8.692	0.007	9277203223	1.00	1.04	a
						RPD = 19.55	

21 Acifluorfen							a
1	9.580	9.577	0.003	2794380058	1.00	1.37	a
2	9.718	9.710	0.008	8638829439	1.00	1.05	a
						RPD = 26.75	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SGHERB-8_00011

Amount Added: 1.00

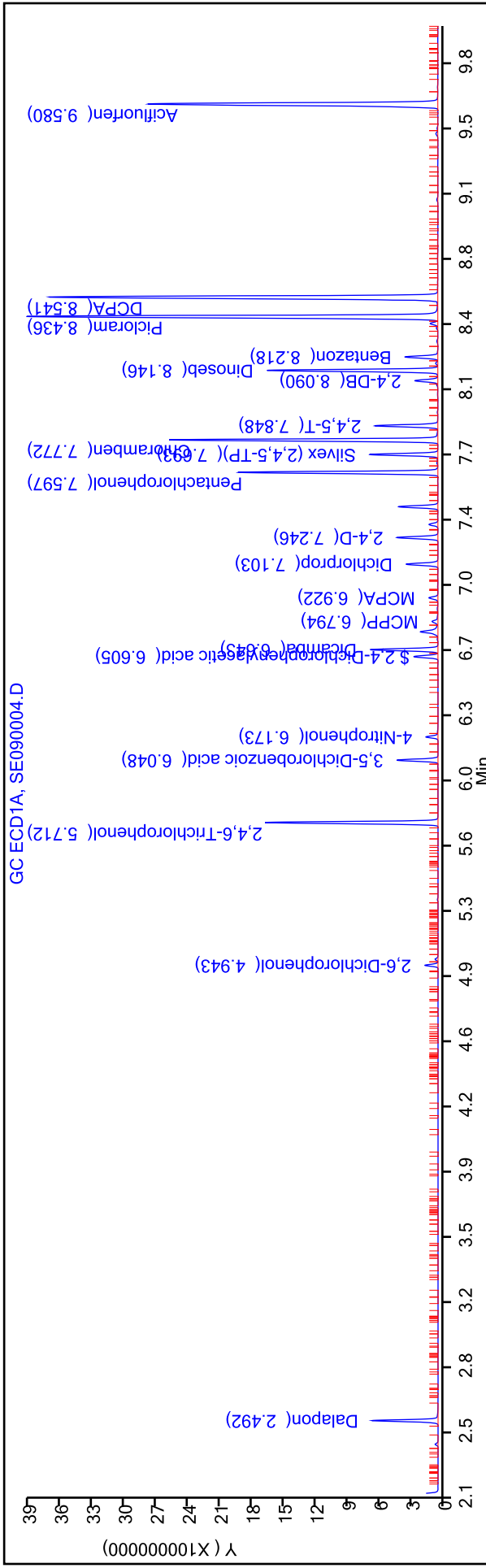
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE0900004.D
 Injection Date: 09-May-2018 17:59:52
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

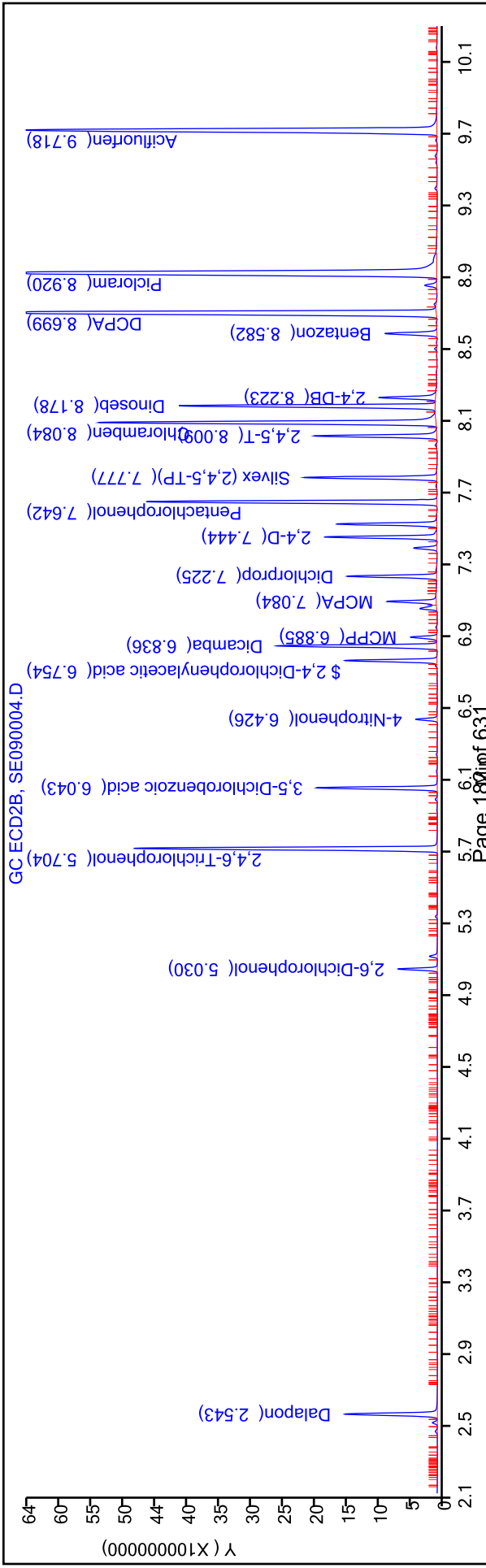
Operator ID: GEM
 Worklist Smp#: 4
 ALS Bottle#: 4

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

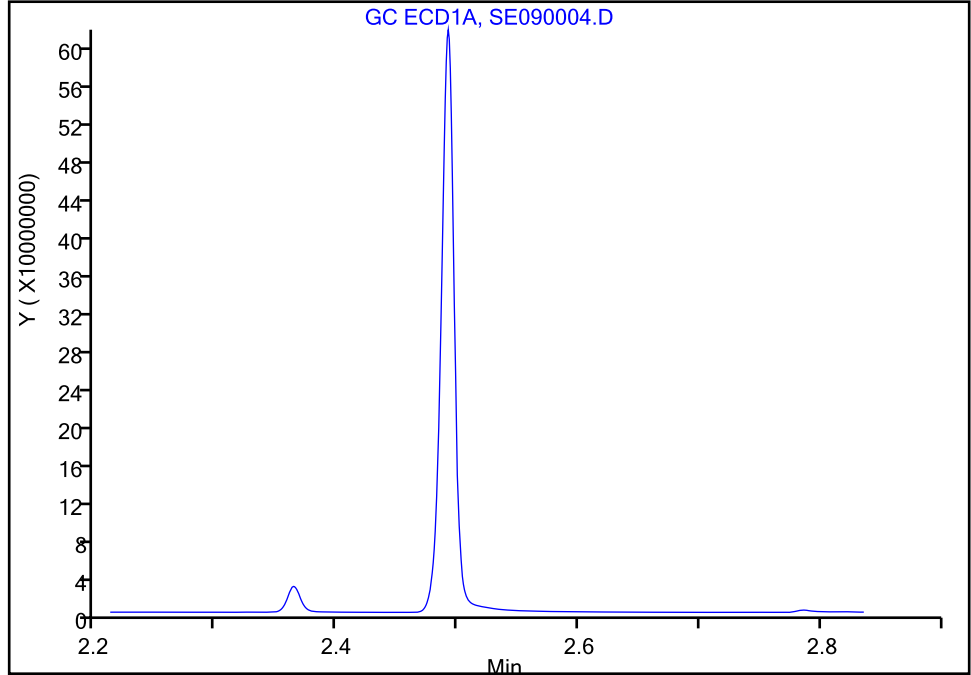
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

1 Dalapon, CAS: 75-99-0

Signal: 1

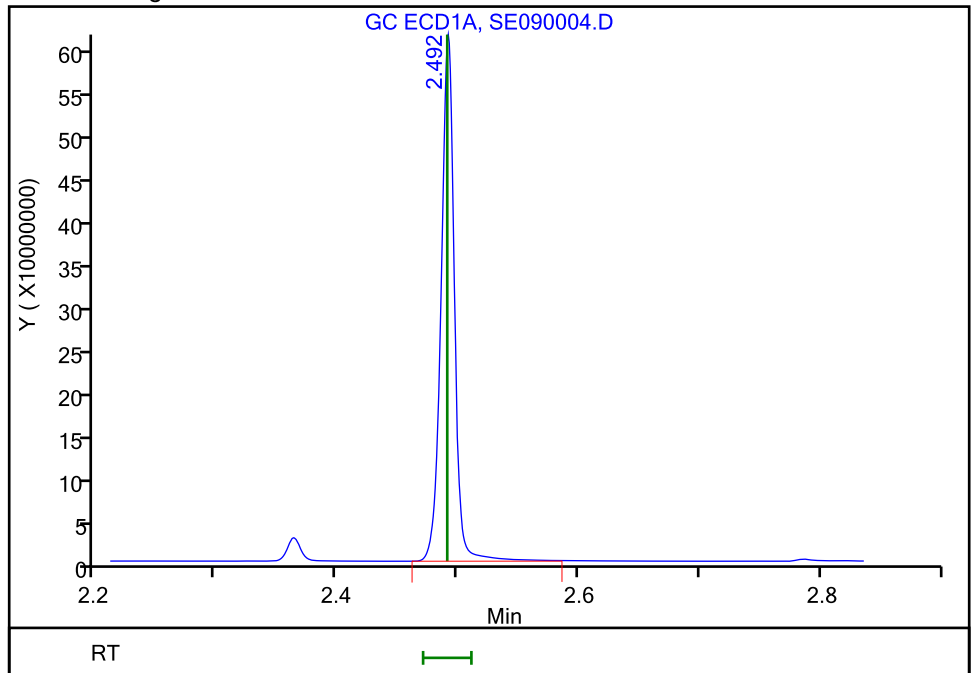
Not Detected
Expected RT: 2.49

Processing Integration Results



RT: 2.49
Area: 472686723
Amount: 0.989208
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:47:59
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

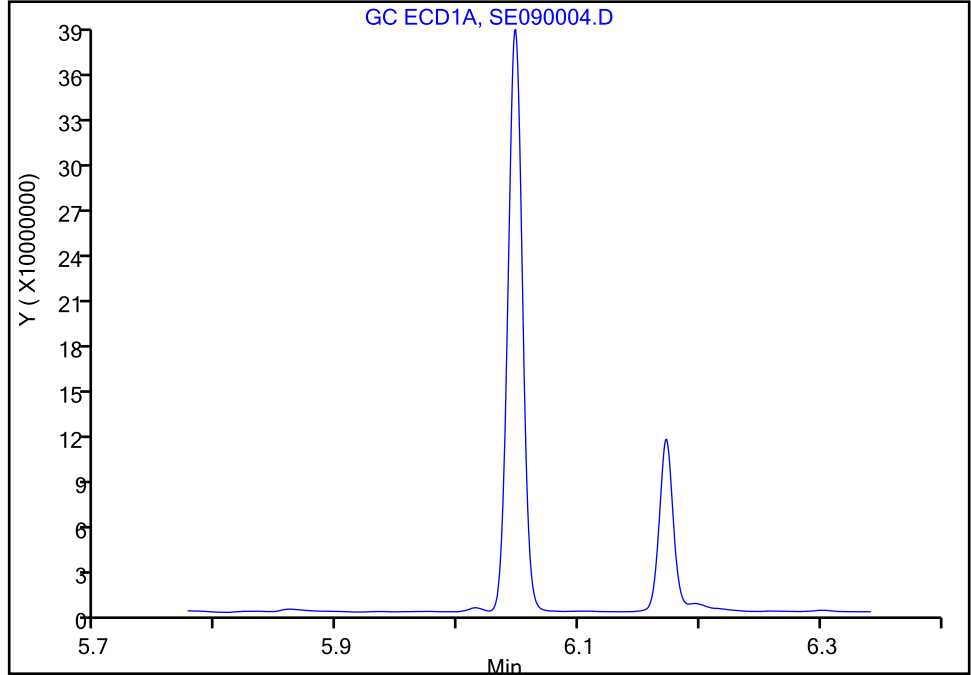
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

4 3,5-Dichlorobenzoic acid, CAS: 51-36-5

Signal: 1

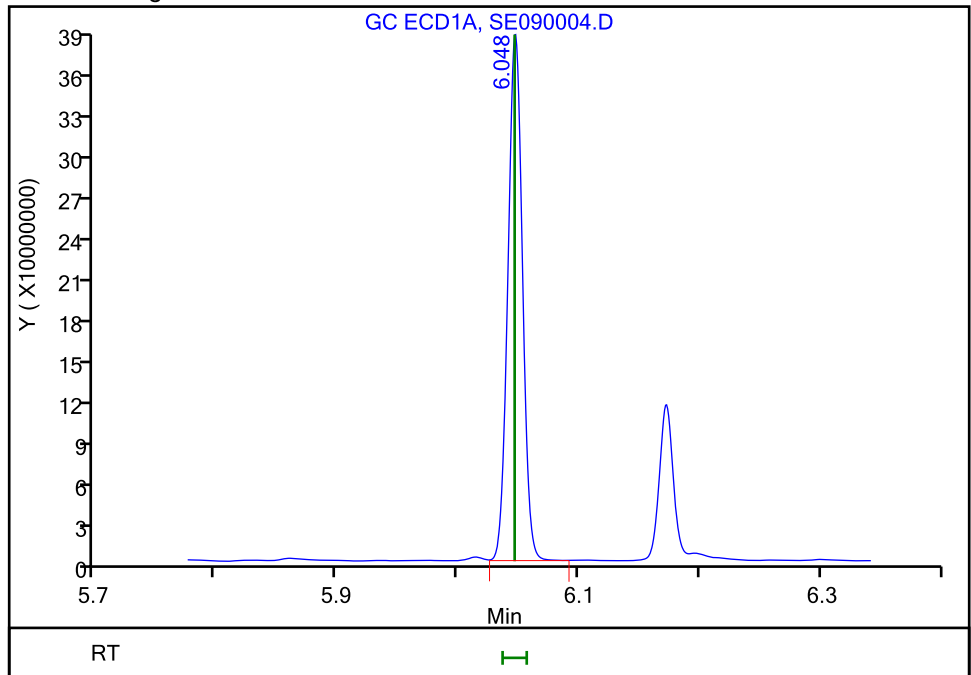
Not Detected
Expected RT: 6.05

Processing Integration Results



RT: 6.05
Area: 319887544
Amount: 1.034546
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:48:20
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

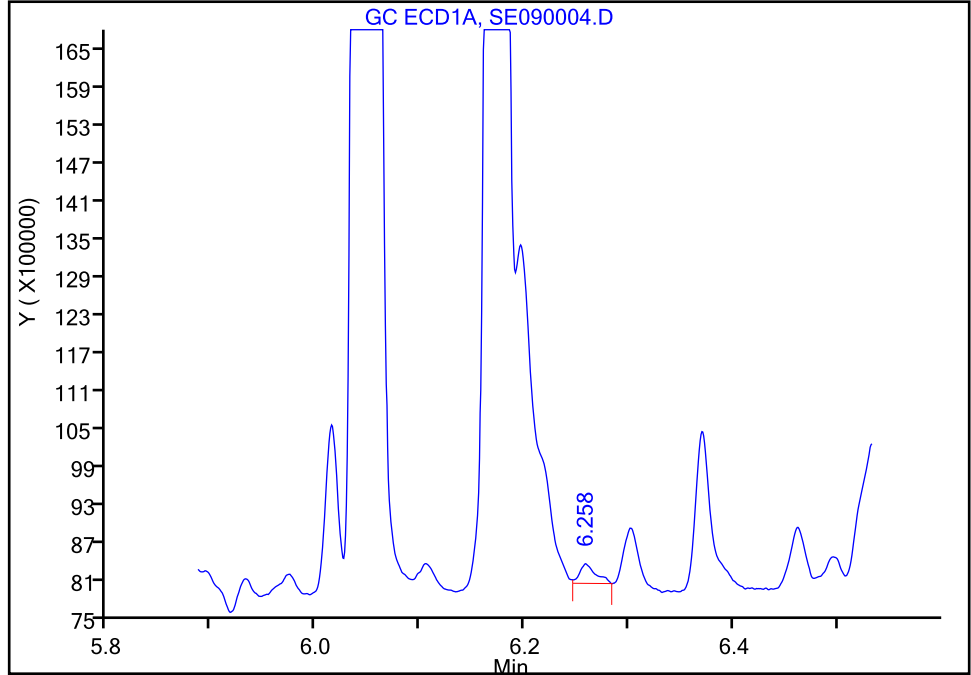
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

5 4-Nitrophenol, CAS: 100-02-7

Signal: 1

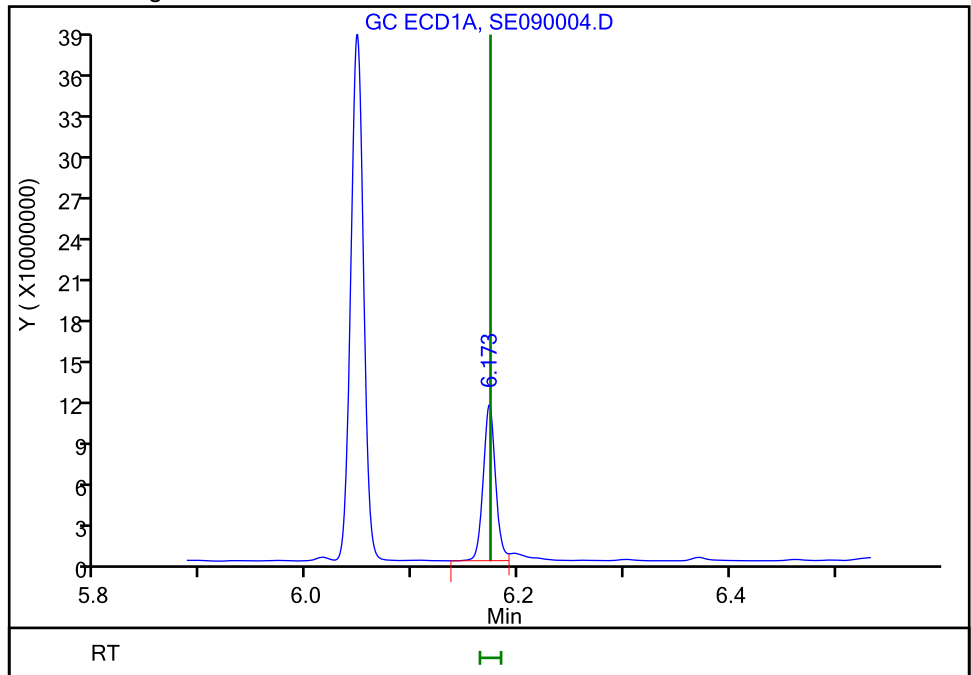
RT: 6.26
Area: 329130
Amount: 1.000000
Amount Units: ug/ml

Processing Integration Results



RT: 6.17
Area: 91420310
Amount: 0.918215
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:48:25
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

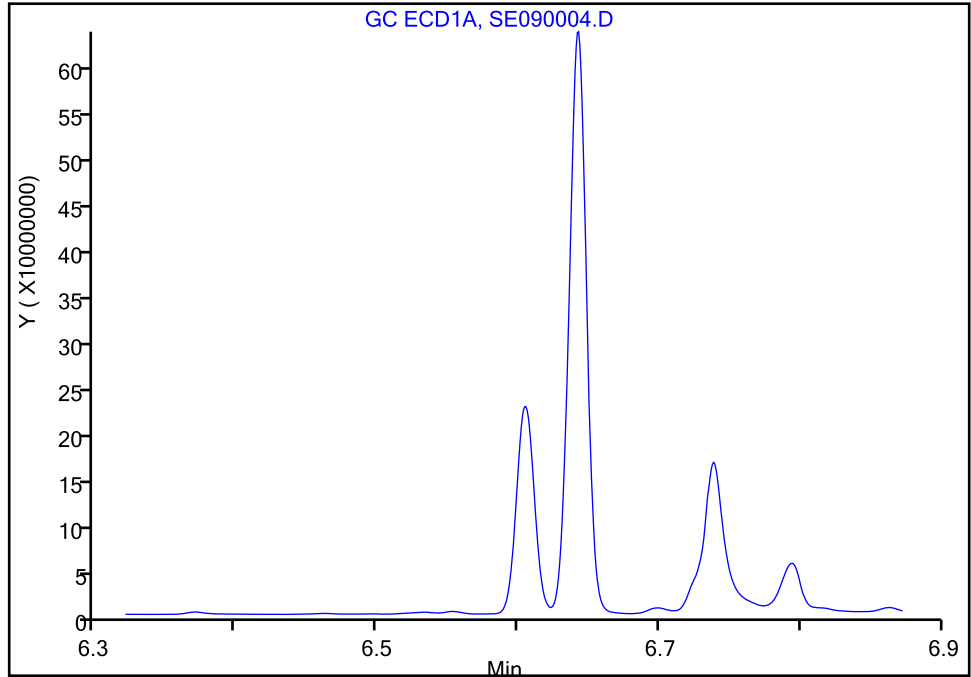
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 1

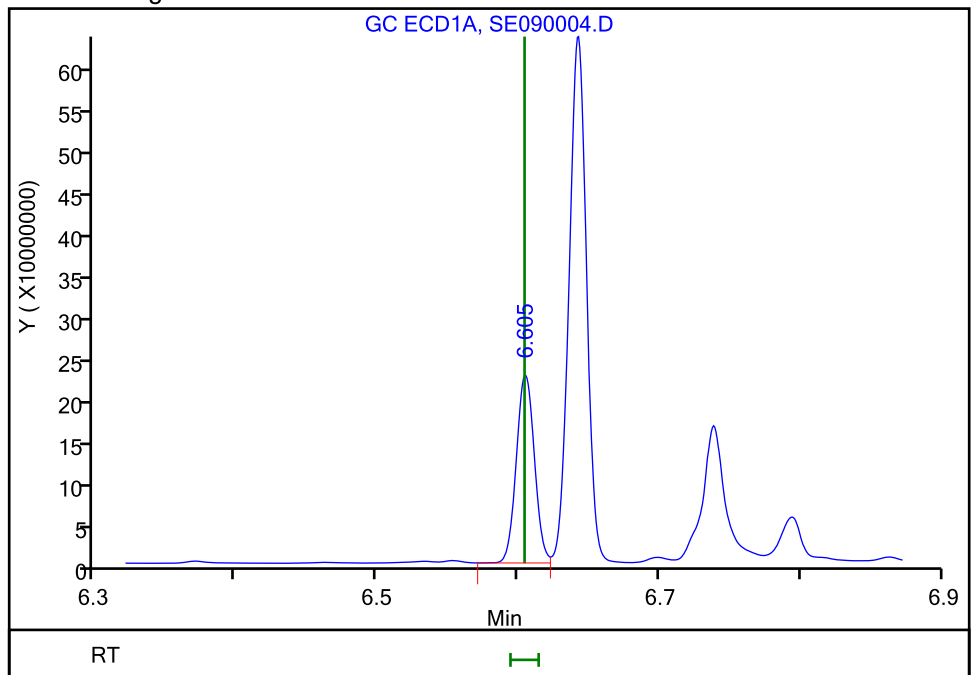
Not Detected
Expected RT: 6.60

Processing Integration Results



Manual Integration Results

RT: 6.61
Area: 199916295
Amount: 1.012556
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:48:31
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

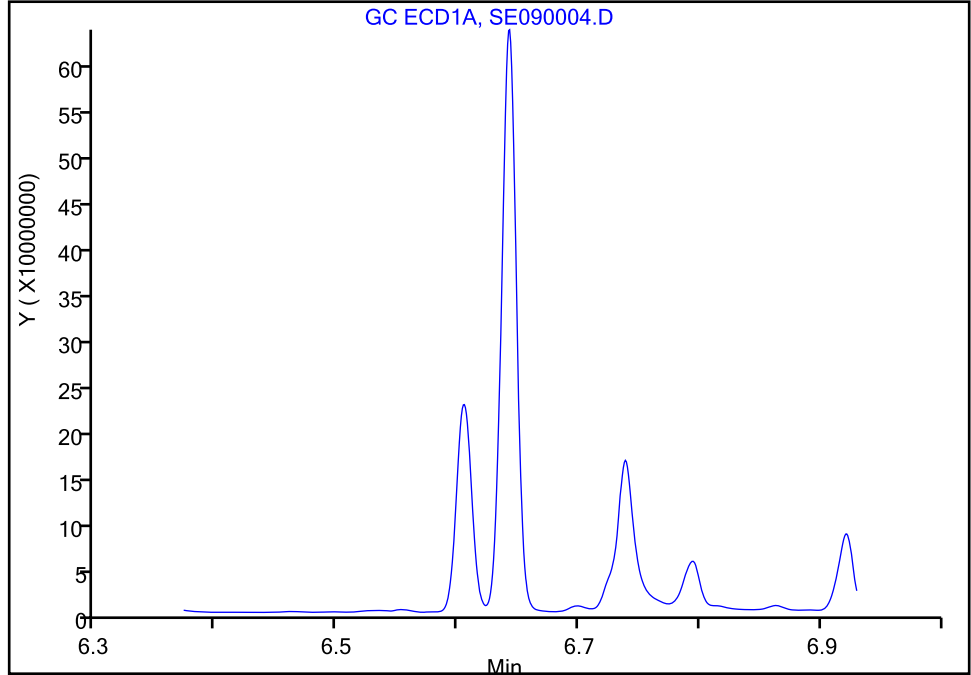
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

7 Dicamba, CAS: 1918-00-9

Signal: 1

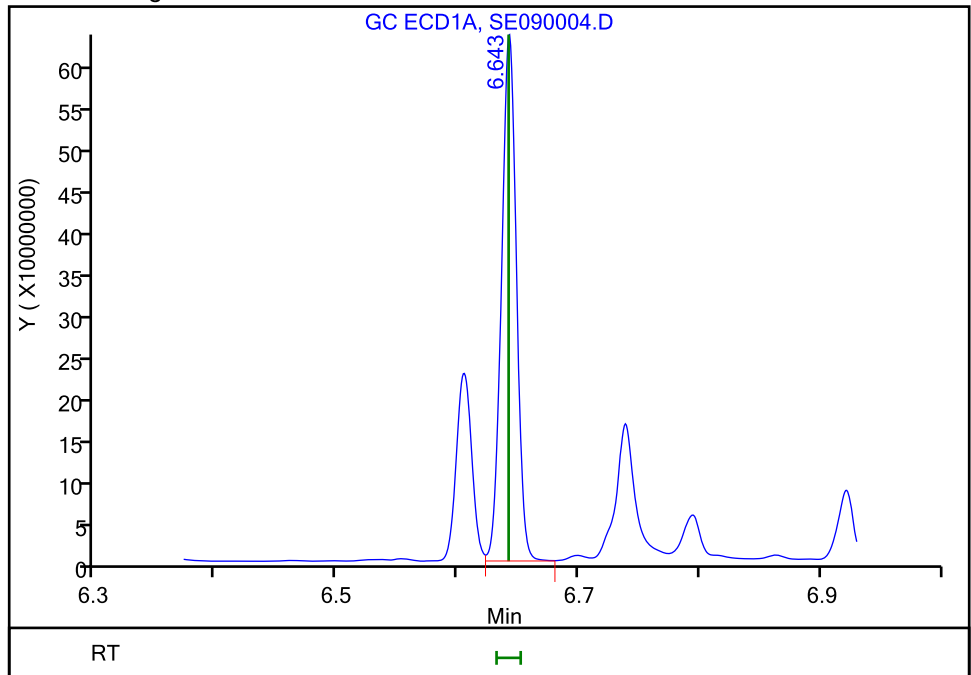
Not Detected
Expected RT: 6.64

Processing Integration Results



Manual Integration Results

RT: 6.64
Area: 540043675
Amount: 0.548016
Amount Units: ug/ml



TestAmerica Savannah

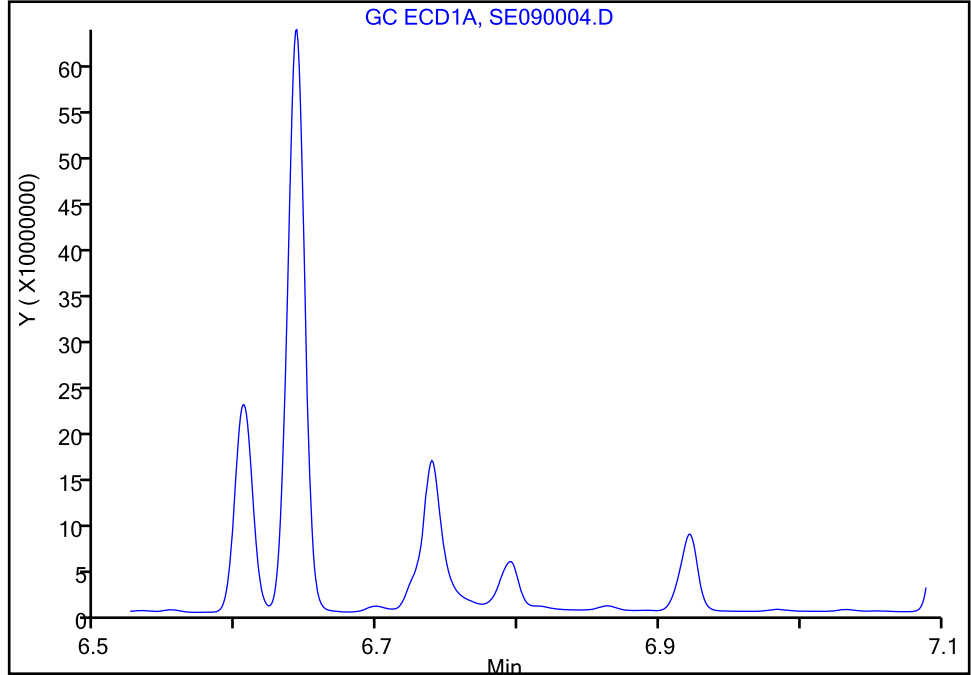
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

8 MCPP, CAS: 93-65-2

Signal: 1

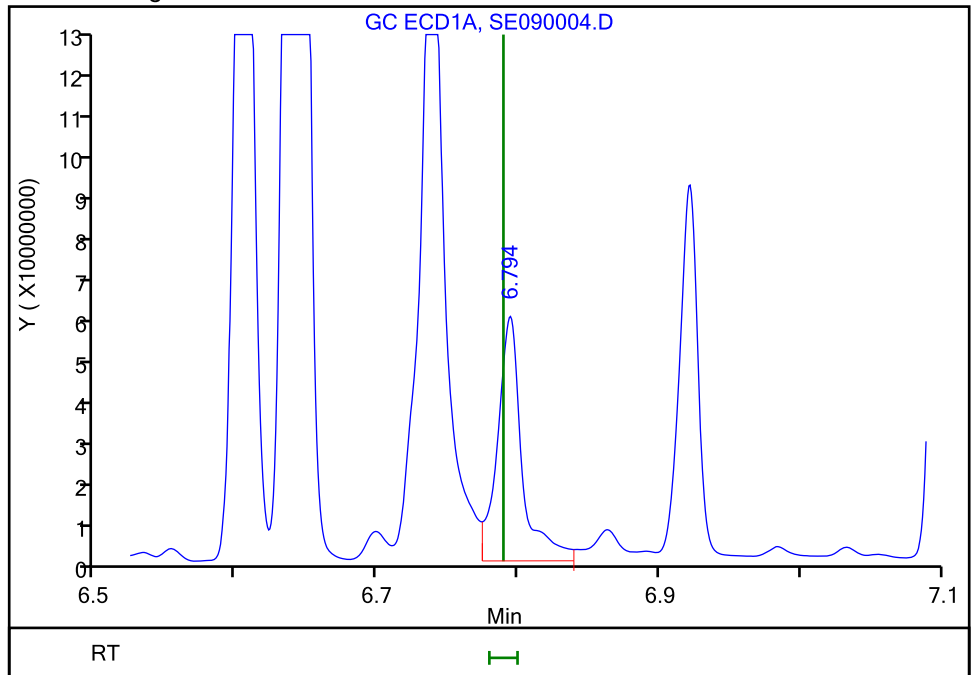
Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results

RT: 6.79
Area: 65821733
Amount: 101.4741
Amount Units: ug/ml



Reviewer: kellarj, 10-May-2018 10:25:56
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

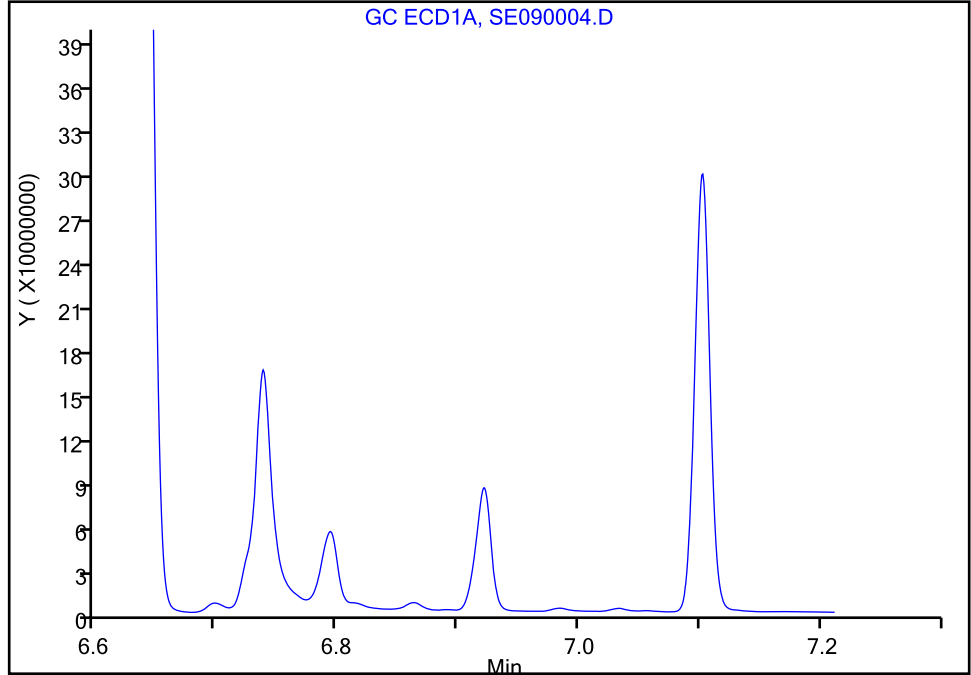
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

9 MCPA, CAS: 94-74-6

Signal: 1

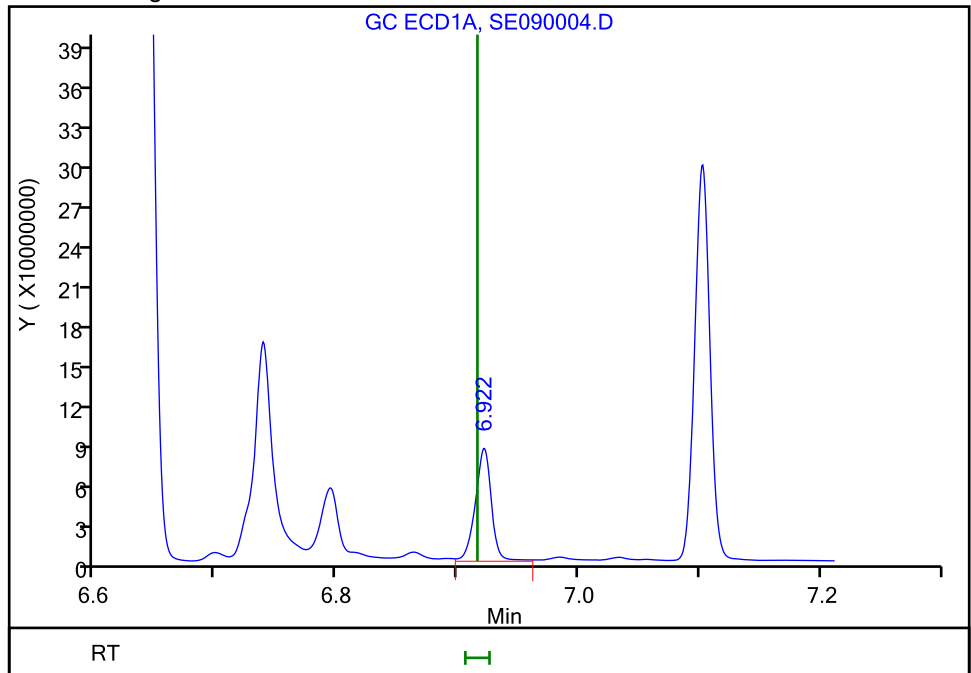
Not Detected
Expected RT: 6.92

Processing Integration Results



Manual Integration Results

RT: 6.92
Area: 78220442
Amount: 92.237177
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:48:40
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

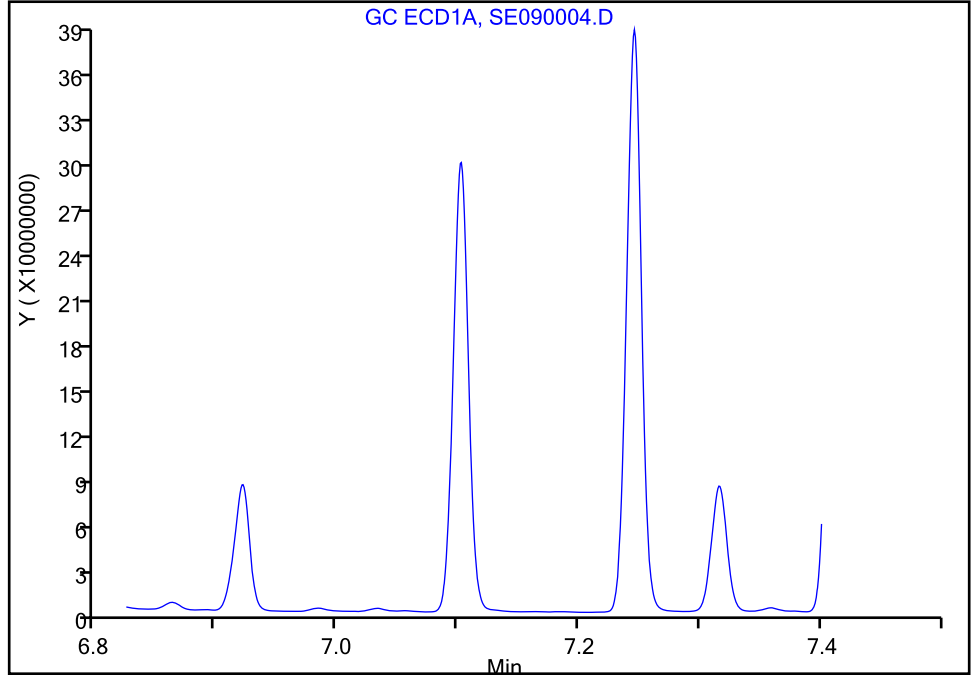
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

10 Dichlorprop, CAS: 120-36-5

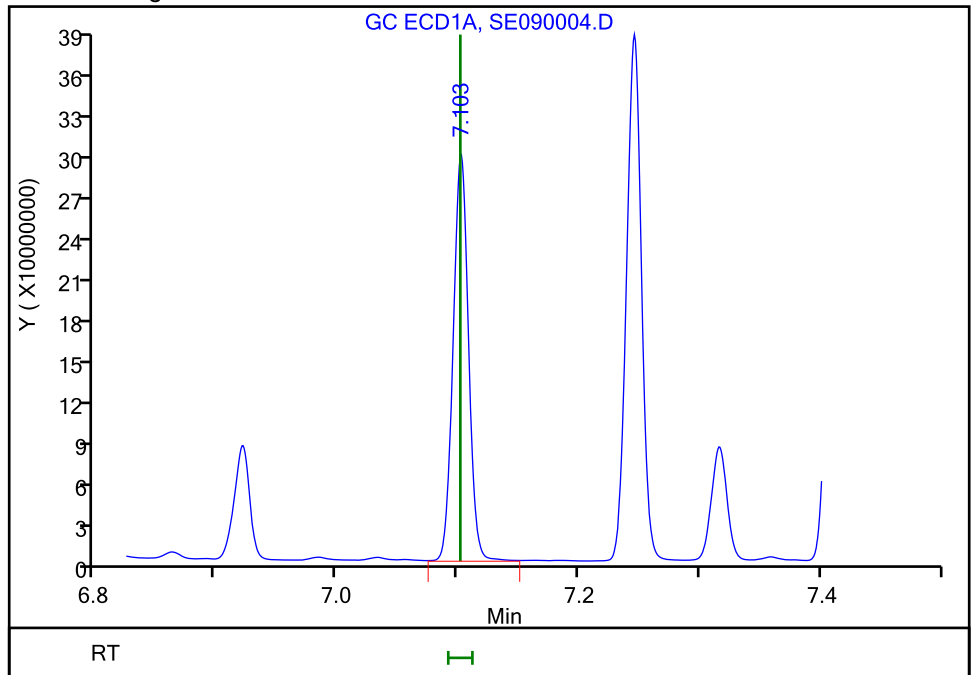
Signal: 1

Not Detected
Expected RT: 7.10

Processing Integration Results



Manual Integration Results



RT: 7.10
Area: 260988077
Amount: 1.018926
Amount Units: ug/ml

TestAmerica Savannah

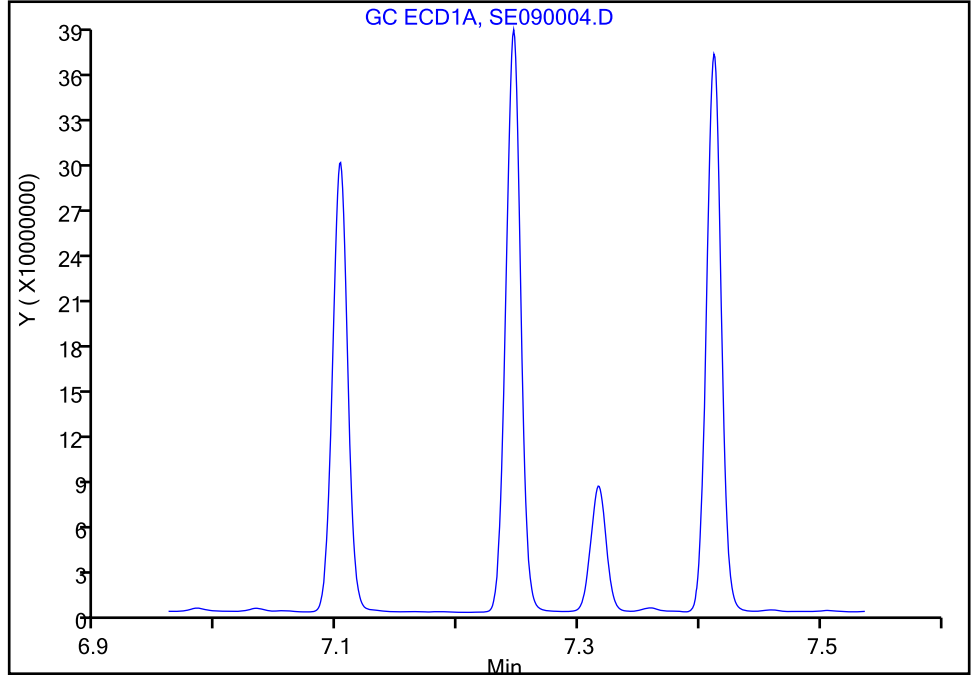
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

11 2,4-D, CAS: 94-75-7

Signal: 1

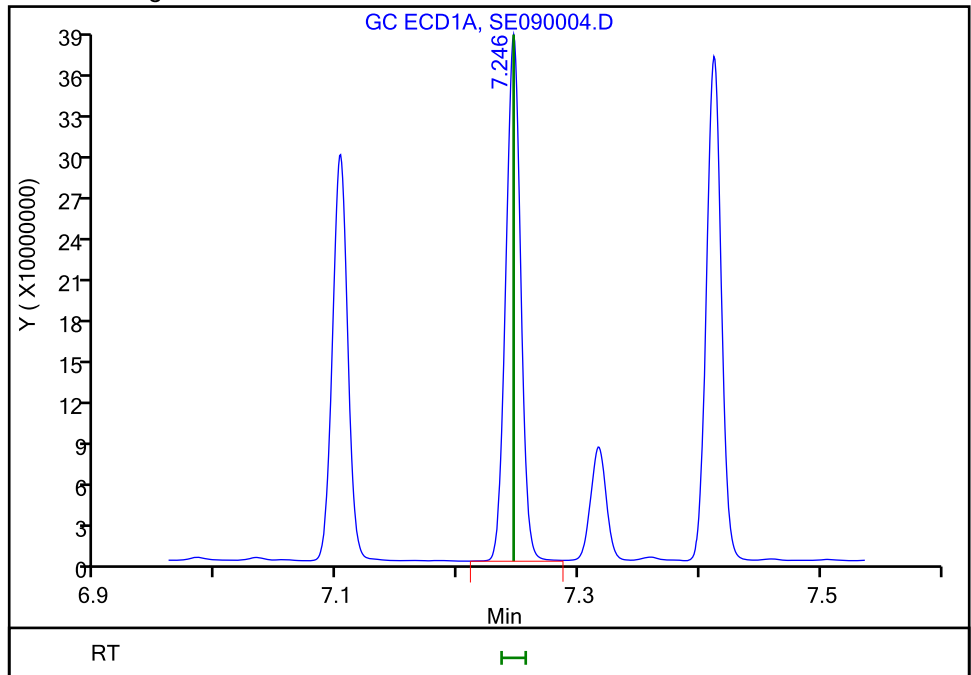
Not Detected
Expected RT: 7.25

Processing Integration Results



Manual Integration Results

RT: 7.25
Area: 328562078
Amount: 1.041020
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:48:54
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

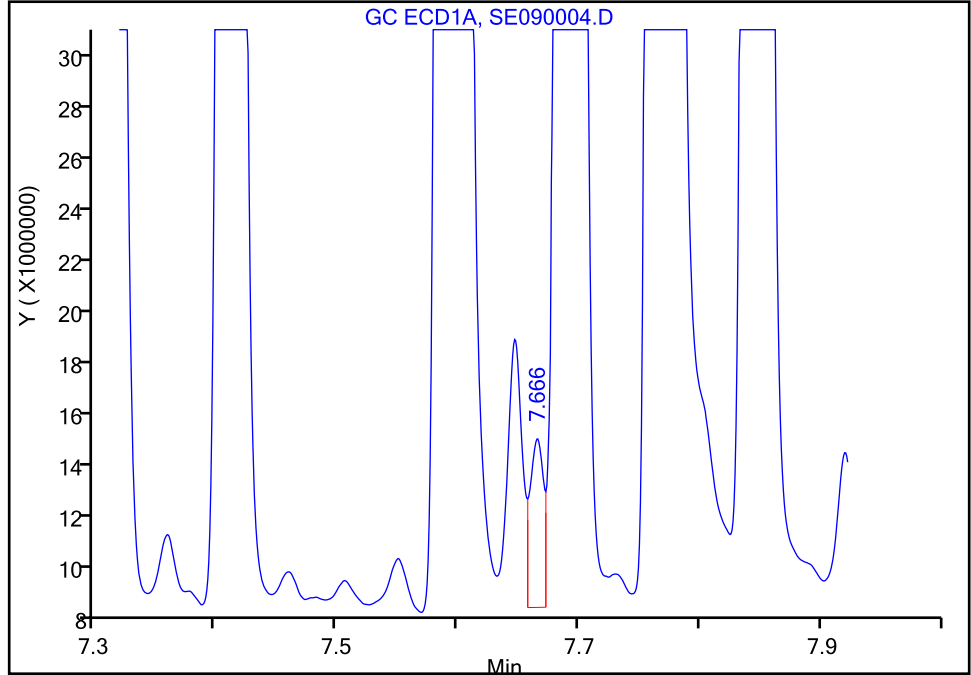
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

12 Pentachlorophenol, CAS: 87-86-5

Signal: 1

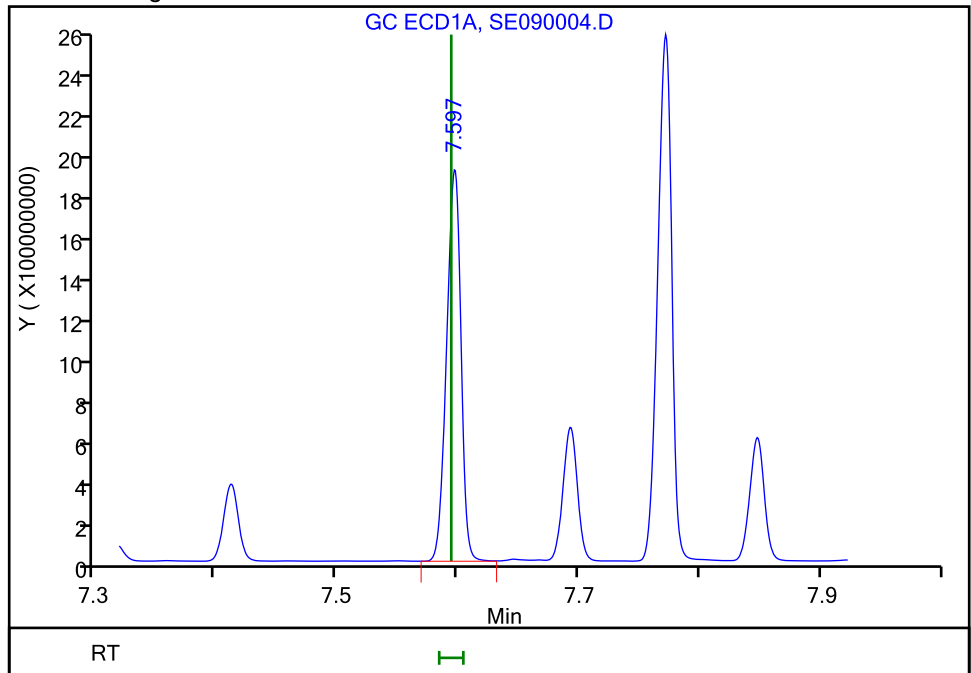
RT: 7.67
Area: 4767366
Amount: 0.238545
Amount Units: ug/ml

Processing Integration Results



RT: 7.60
Area: 1535573734
Amount: 0.303012
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:49:00
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

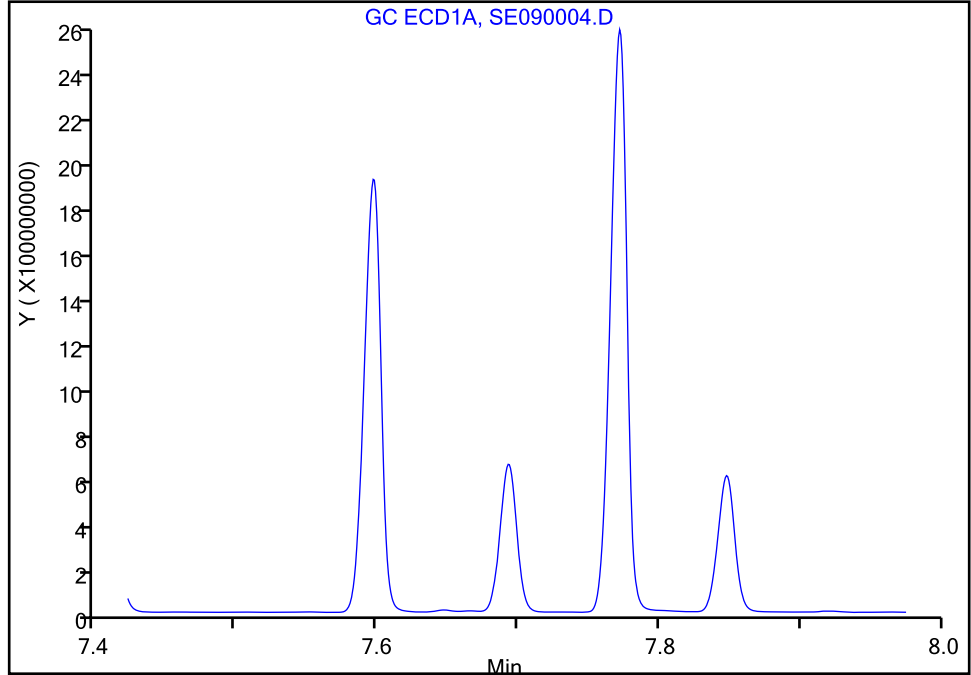
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 1

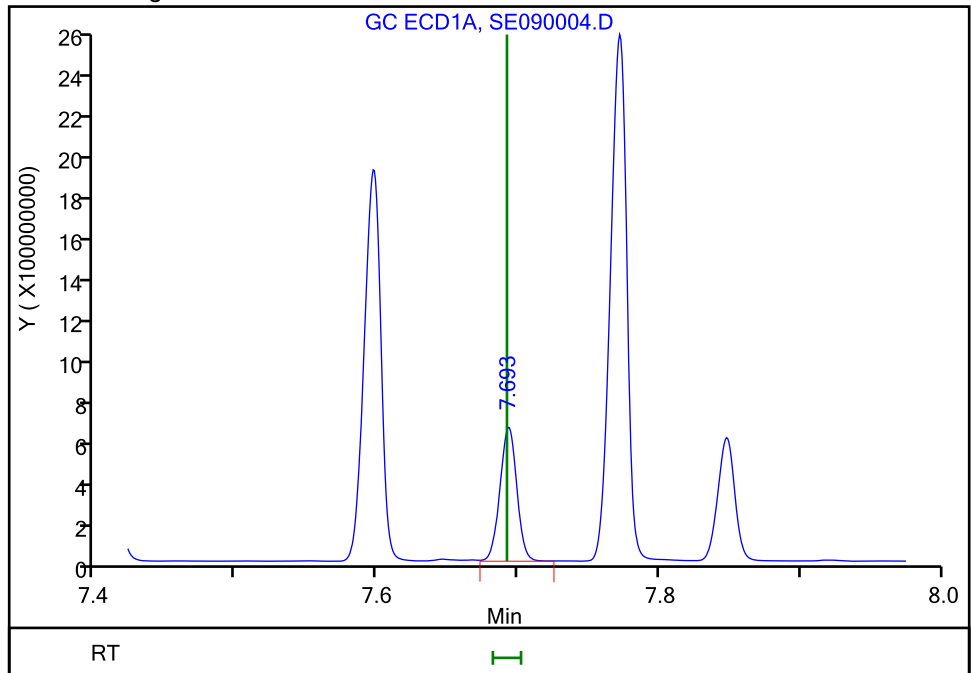
Not Detected
Expected RT: 7.69

Processing Integration Results



Manual Integration Results

RT: 7.69
Area: 528834758
Amount: 0.282617
Amount Units: ug/ml



TestAmerica Savannah

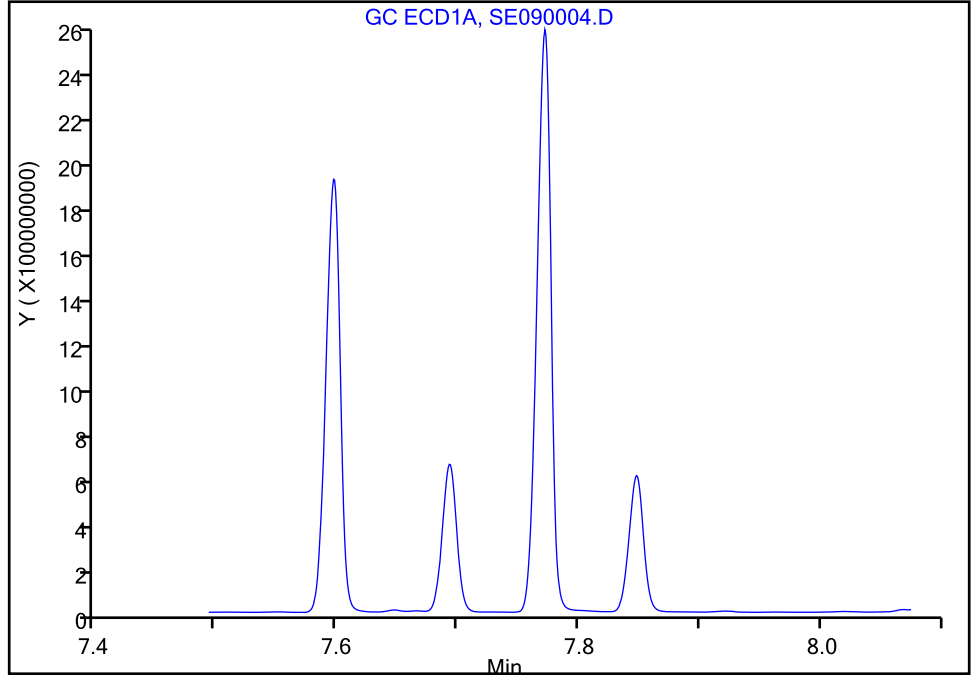
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

14 Chloramben, CAS: 133-90-4

Signal: 1

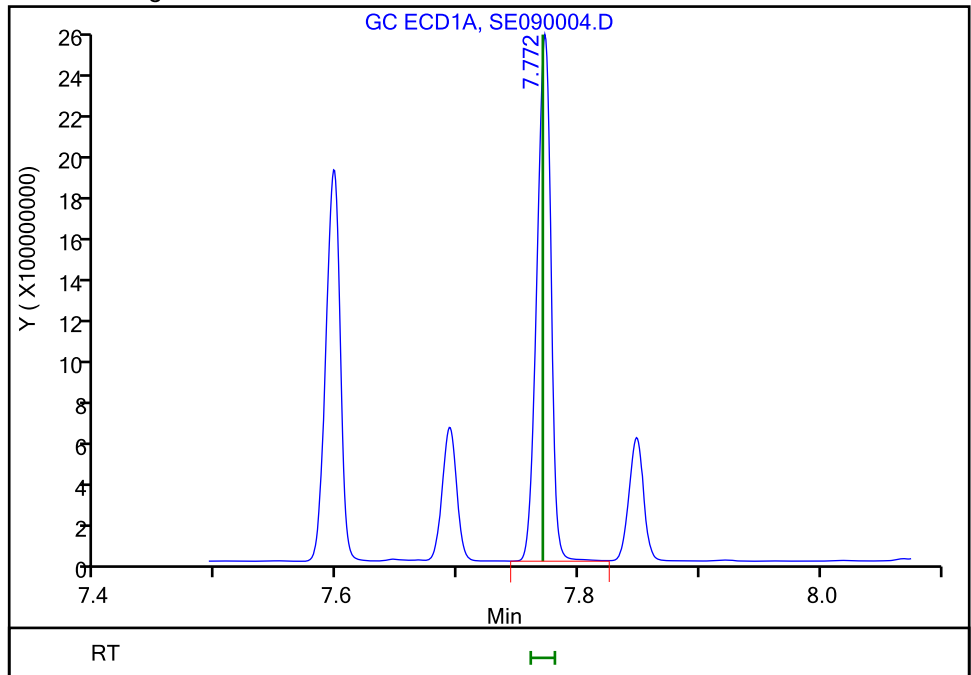
Not Detected
Expected RT: 7.77

Processing Integration Results



RT: 7.77
Area: 2025978443
Amount: 1.236384
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

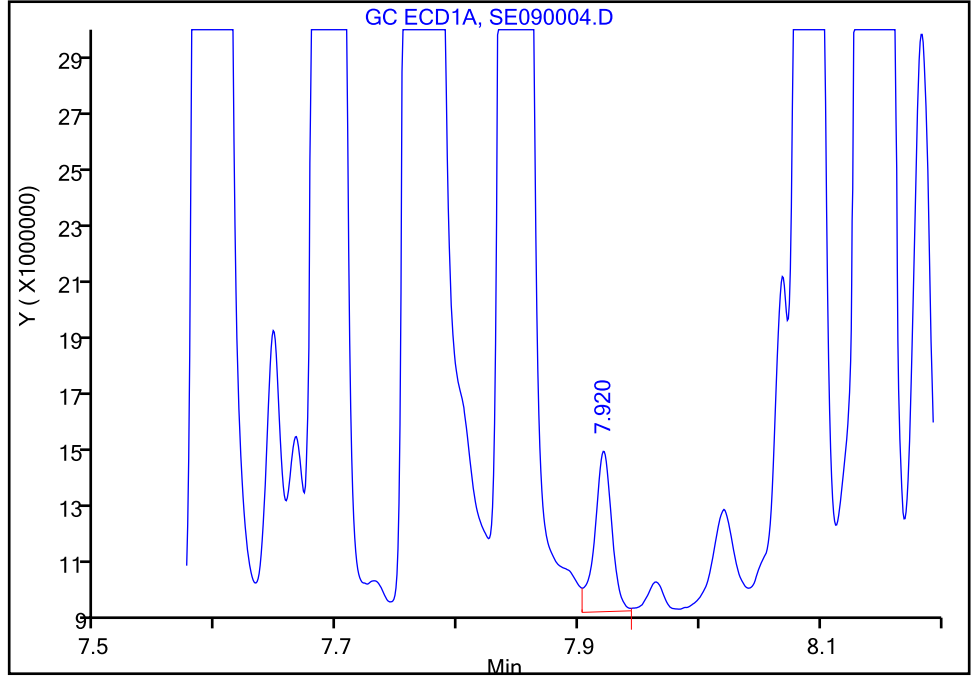
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

15 2,4,5-T, CAS: 93-76-5

Signal: 1

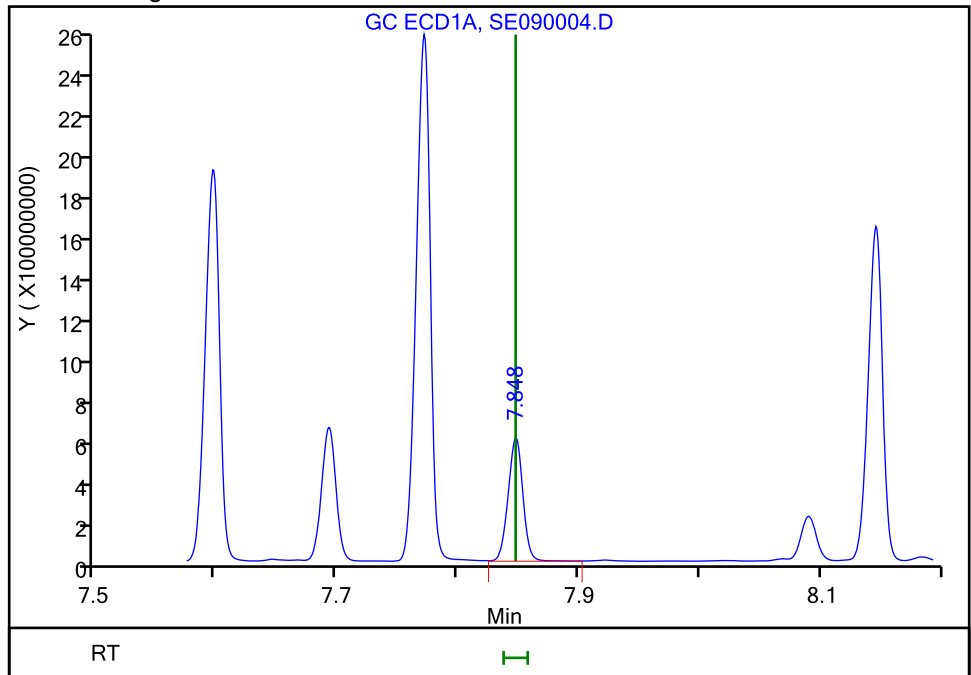
RT: 7.92
Area: 5490488
Amount: 0.215657
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 498225713
Amount: 0.267227
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

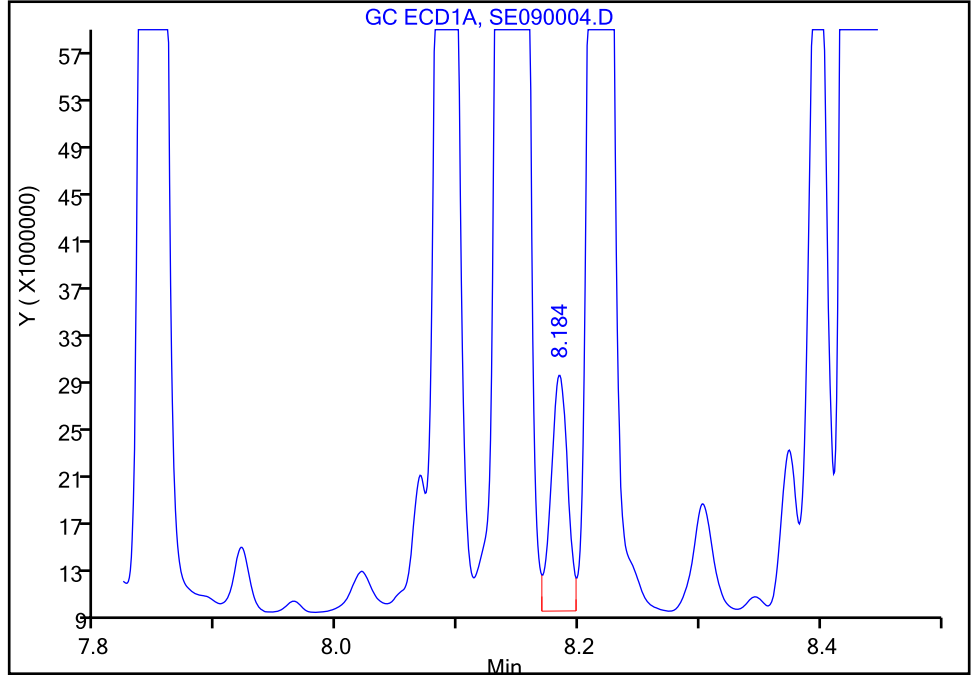
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

16 2,4-DB, CAS: 94-82-6

Signal: 1

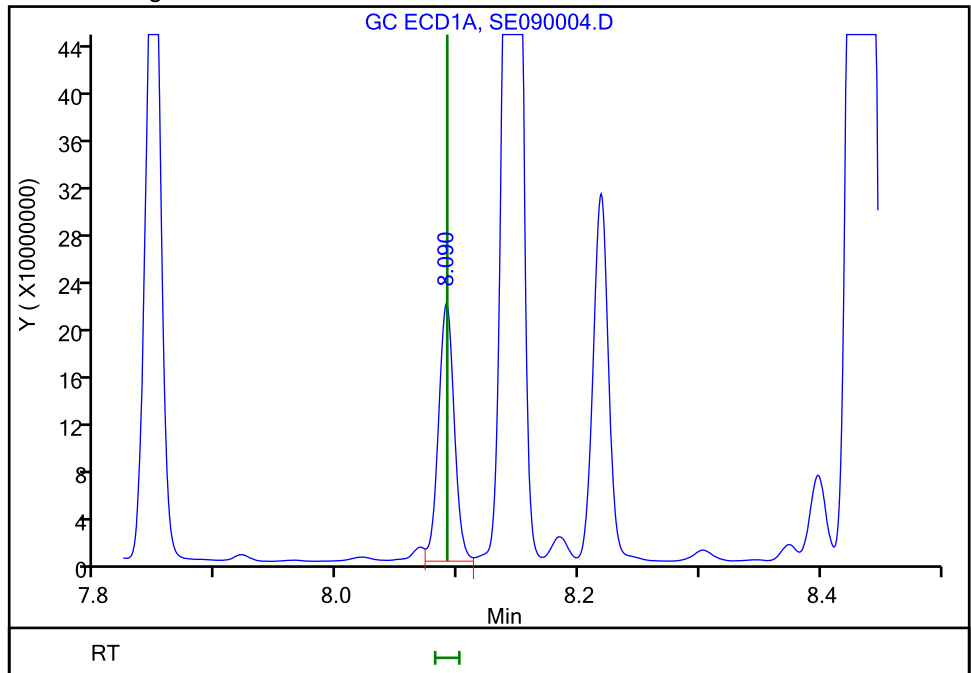
RT: 8.18
Area: 18999977
Amount: 0.955259
Amount Units: ug/ml

Processing Integration Results



RT: 8.09
Area: 193274970
Amount: 1.096929
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

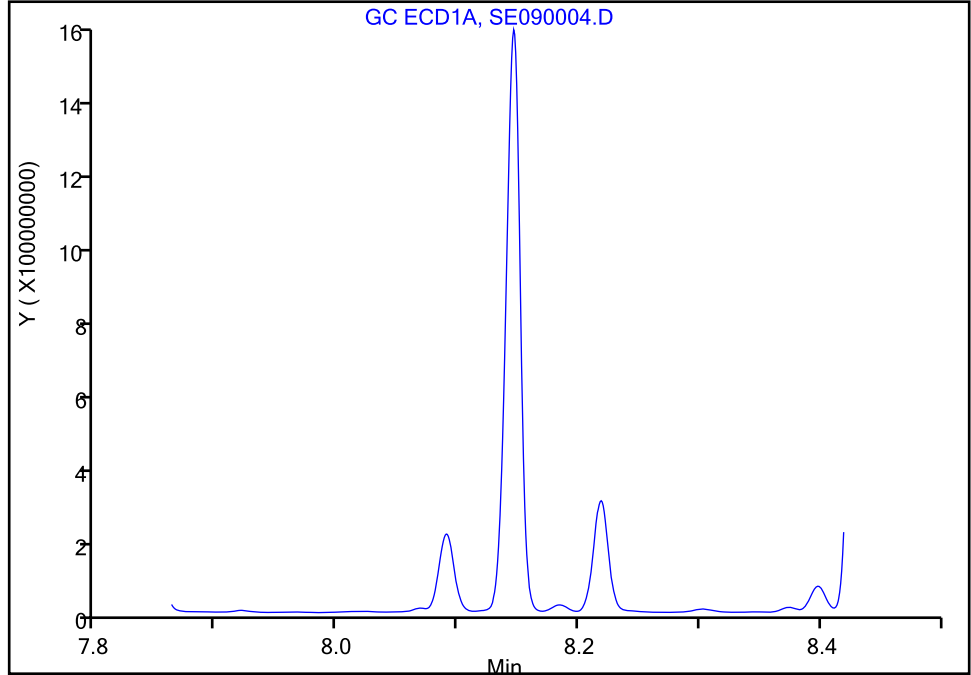
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

17 Dinoseb, CAS: 88-85-7

Signal: 1

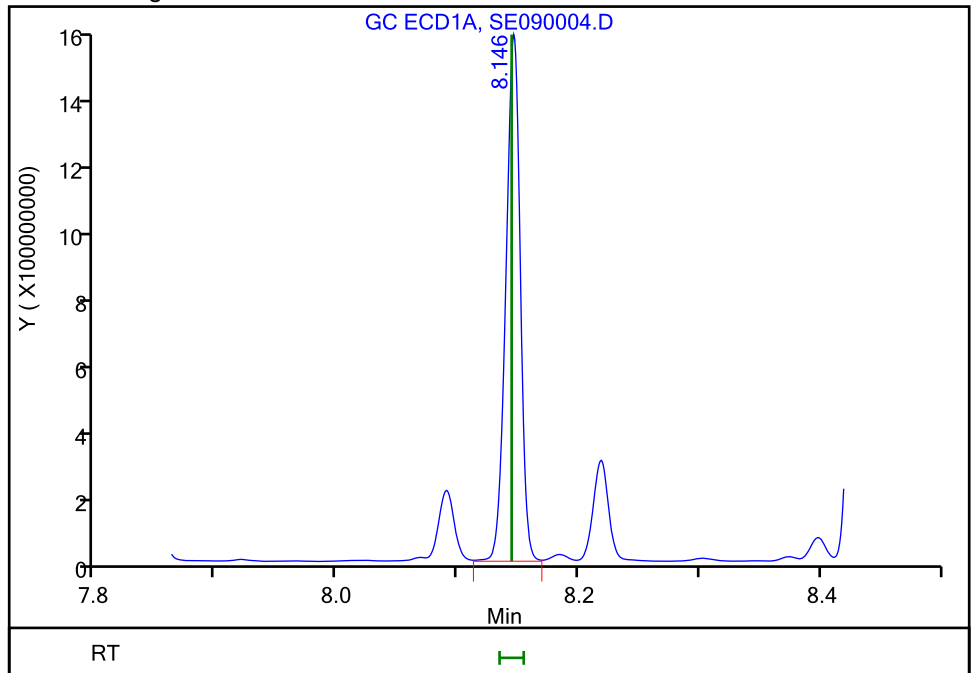
Not Detected
Expected RT: 8.14

Processing Integration Results



Manual Integration Results

RT: 8.15
Area: 1314025484
Amount: 1.187433
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:49:22
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

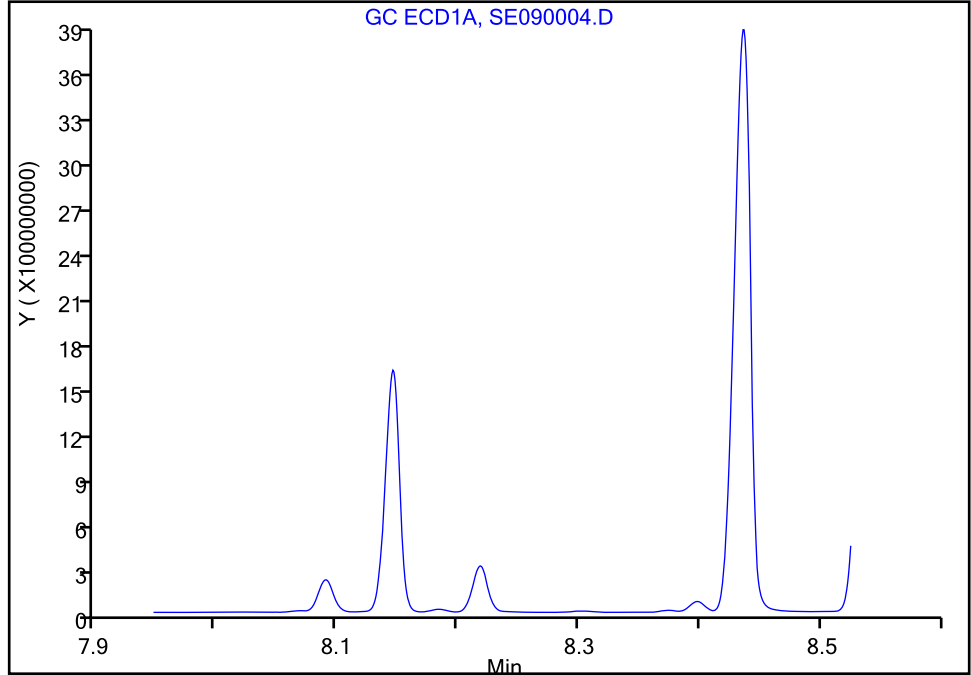
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

18 Bentazon, CAS: 25057-89-0

Signal: 1

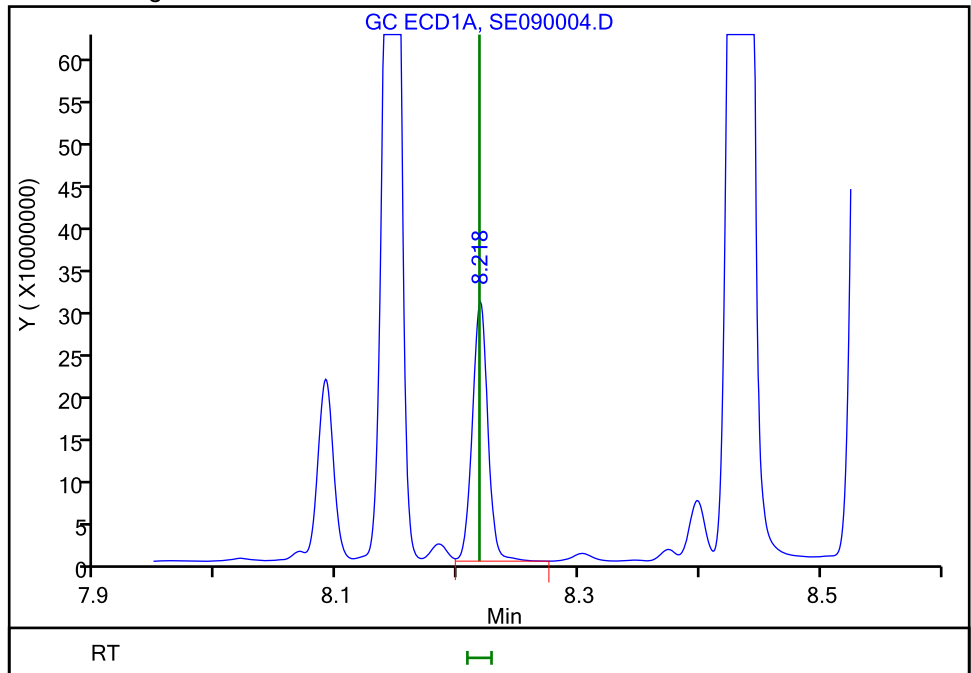
Not Detected
Expected RT: 8.22

Processing Integration Results



Manual Integration Results

RT: 8.22
Area: 270773698
Amount: 1.052188
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:49:26
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

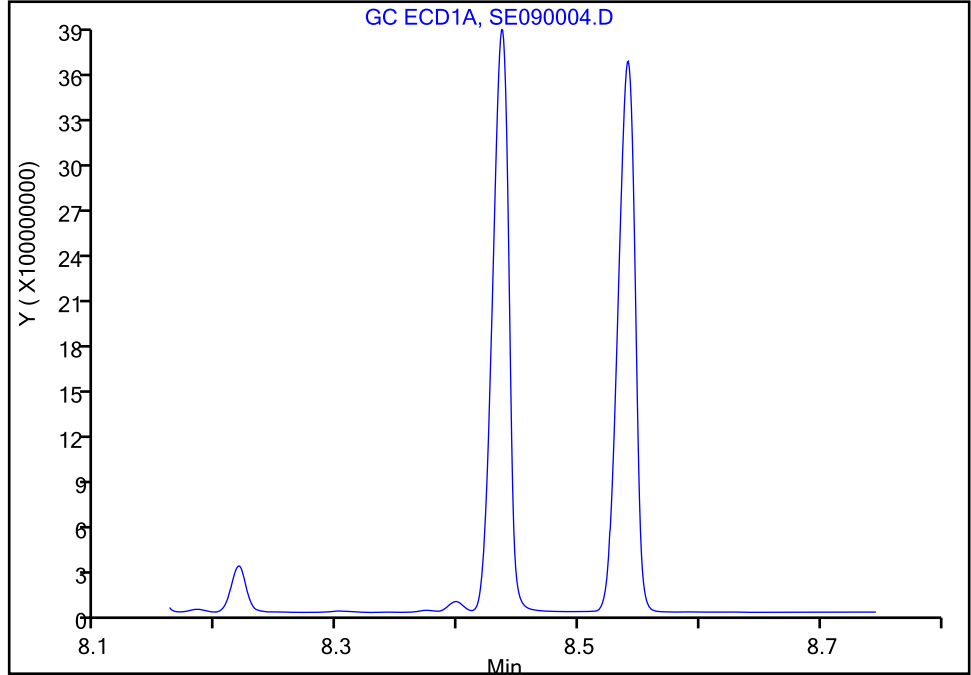
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

19 Picloram, CAS: 1918-02-1

Signal: 1

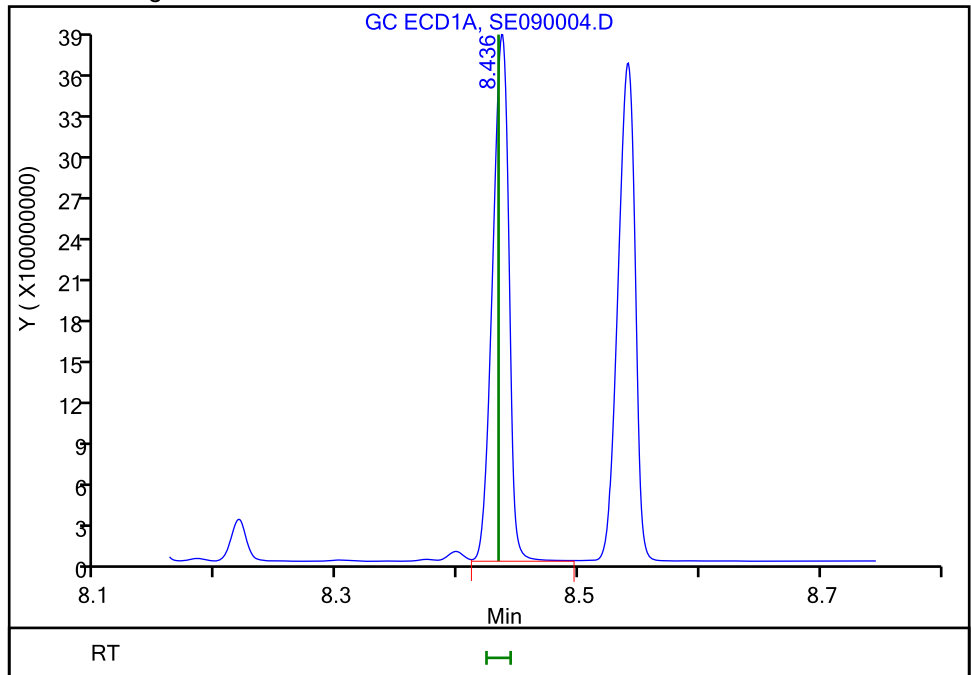
Not Detected
Expected RT: 8.43

Processing Integration Results



Manual Integration Results

RT: 8.44
Area: 3621817547
Amount: 1.356948
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:49:30
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

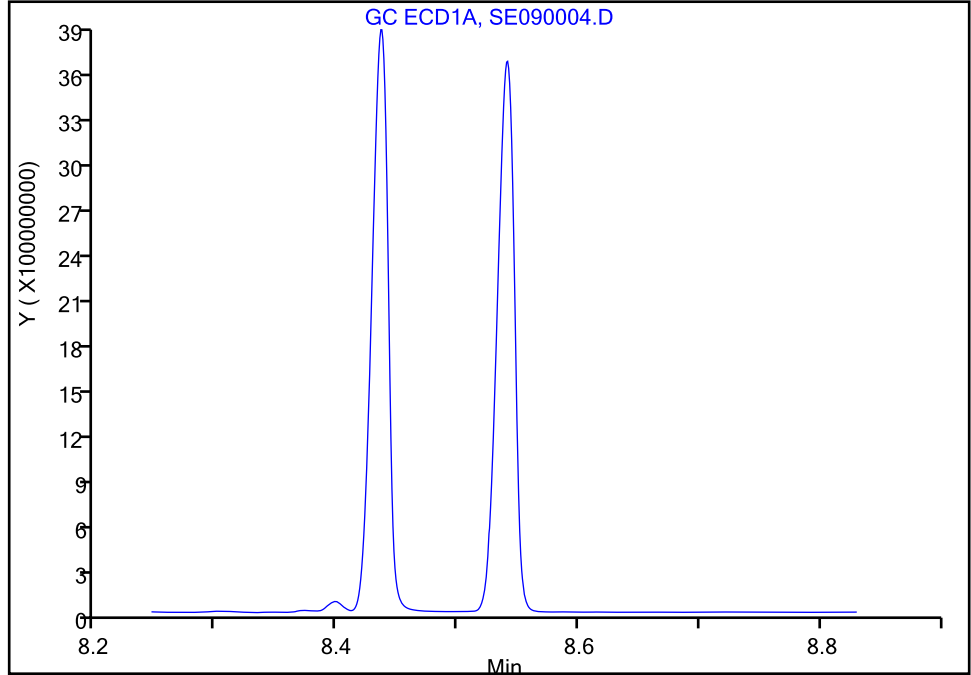
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

20 DCPA, CAS: 1861-32-1

Signal: 1

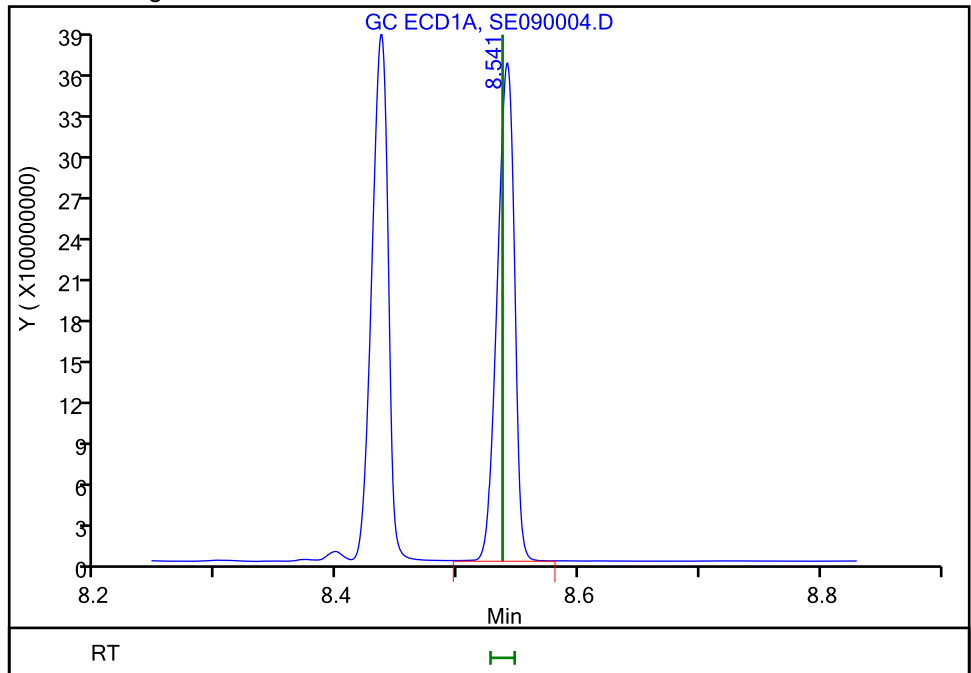
Not Detected
Expected RT: 8.54

Processing Integration Results



RT: 8.54
Area: 3595185453
Amount: 1.267326
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:49:33
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

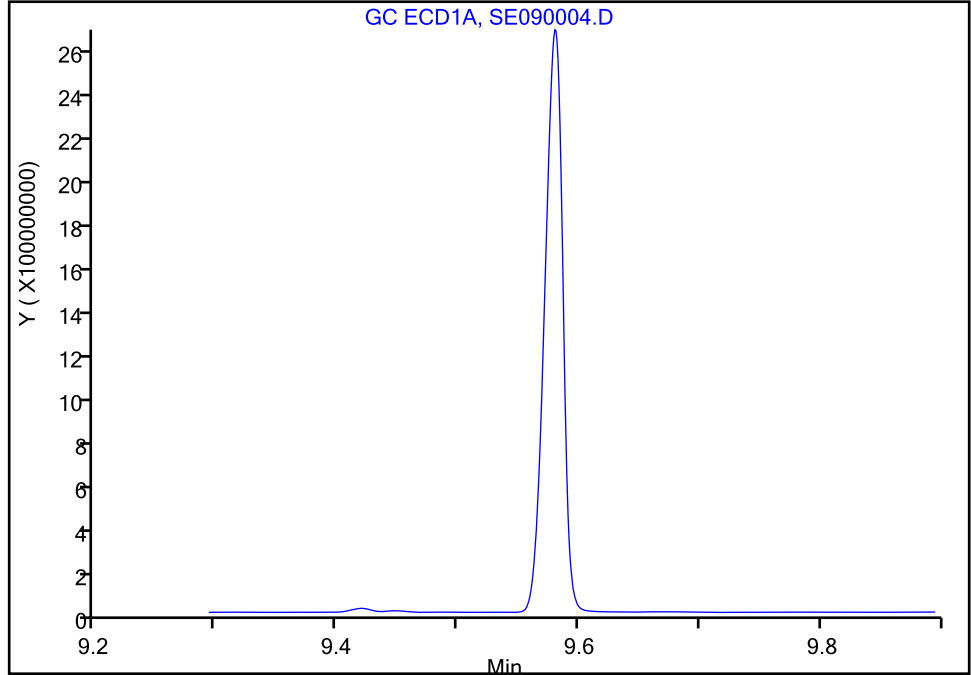
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

21 Acifluorfen, CAS: 50594-66-6

Signal: 1

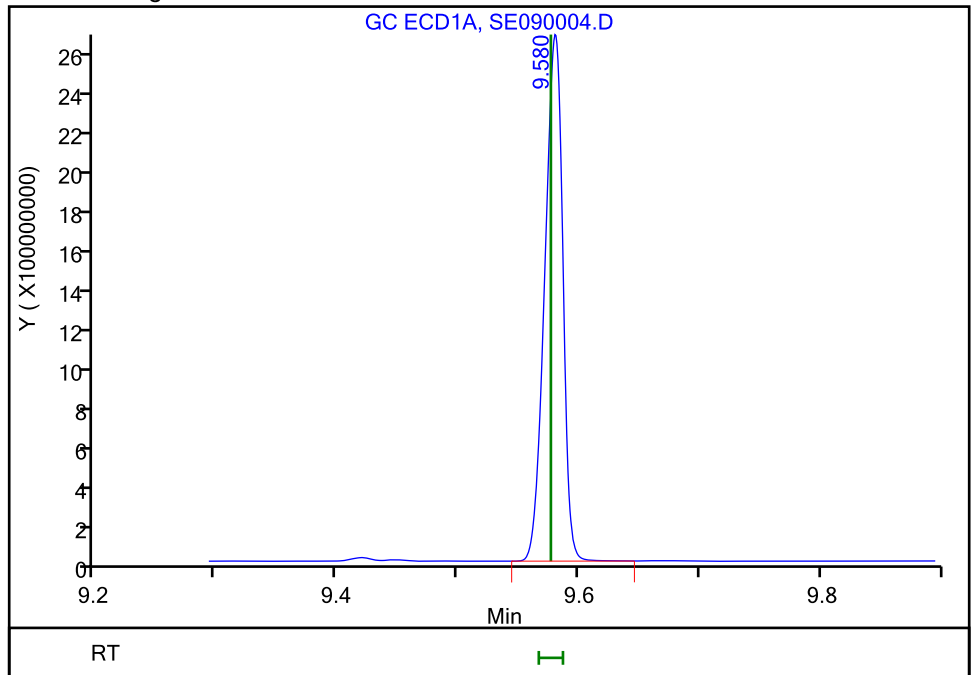
Not Detected
Expected RT: 9.58

Processing Integration Results



RT: 9.58
Area: 2794380058
Amount: 1.373285
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 09-May-2018 18:19:23 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:20 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 18:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.492	2.491	0.001	240788645	0.5000	0.5017	
2	2.542	2.540	0.002	732221950	0.5000	0.5196	
						RPD = 3.50	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	47814176	NC	NC	
2	5.029	5.028	0.001	251719023	NC	NC	
						RPD = 2.18	
3 2,4,6-Trichlorophenol							
1	5.711	5.710	0.001	646877112	NC	NC	
2	5.703	5.700	0.003	2604837423	NC	NC	
						RPD = 1.58	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	161466175	0.5000	0.5222	
2	6.041	6.040	0.001	851491539	0.5000	0.5264	
						RPD = 0.81	
5 4-Nitrophenol							
1	6.172	6.173	-0.001	46516413	0.5000	0.4672	
2	6.425	6.426	-0.001	143473602	0.5000	0.4612	
						RPD = 1.30	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	99966364	0.5000	0.5063	
2	6.753	6.752	0.001	641182661	0.5000	0.5153	
						RPD = 1.76	
7 Dicamba							
1	6.641	6.642	-0.001	264745935	0.2500	0.2687	
2	6.835	6.833	0.002	1198198735	0.2500	0.2702	
						RPD = 0.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							a
1	6.791	6.789	0.002	31559204	50.0	48.7	a
2	6.882	6.880	0.002	187460762	50.0	49.7	
						RPD = 2.13	
9 MCPA							
1	6.919	6.916	0.003	41163701	50.0	48.5	
2	7.081	7.078	0.003	391405967	50.0	51.8	
						RPD = 6.53	
10 Dichlorprop							
1	7.101	7.102	-0.001	131268795	0.5000	0.5125	
2	7.224	7.223	0.001	619789858	0.5000	0.5063	
						RPD = 1.21	
11 2,4-D							
1	7.246	7.246	0.000	162558325	0.5000	0.5151	
2	7.443	7.443	0.000	776315154	0.5000	0.5318	
						RPD = 3.20	
12 Pentachlorophenol							
1	7.596	7.594	0.002	720360768	0.1250	0.1421	
2	7.640	7.637	0.003	2361098559	0.1250	0.1400	
						RPD = 1.52	
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	259138392	0.1250	0.1385	
2	7.776	7.774	0.002	943300131	0.1250	0.1406	
						RPD = 1.51	
14 Chloramben							
1	7.771	7.770	0.001	942129901	0.5000	0.5749	
2	8.083	8.081	0.002	3138504970	0.5000	0.5797	
						RPD = 0.82	
15 2,4,5-T							
1	7.847	7.848	-0.001	247745545	0.1250	0.1329	
2	8.008	8.008	0.000	877205524	0.1250	0.1408	
						RPD = 5.77	
16 2,4-DB							
1	8.090	8.091	-0.001	94816741	0.5000	0.5381	
2	8.222	8.222	0.000	447502886	0.5000	0.5098	
						RPD = 5.40	
17 Dinoseb							
1	8.145	8.144	0.001	621322249	0.5000	0.5615	
2	8.175	8.173	0.002	2012769159	0.5000	0.6135	
						RPD = 8.87	
18 Bentazon							
1	8.218	8.218	0.000	135146452	0.5000	0.5252	
2	8.579	8.578	0.001	402556641	0.5000	0.5407	
						RPD = 2.92	
19 Picloram							
1	8.435	8.433	0.002	1646590154	0.5000	0.6169	
2	8.916	8.913	0.003	5400334032	0.5000	0.6518	
						RPD = 5.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.539	8.537	0.002	1668353746	0.5000	0.5881	
2	8.696	8.692	0.004	5077033272	0.5000	0.5701	
						RPD = 3.12	

21 Acifluorfen

1	9.578	9.577	0.001	1241223393	0.5000	0.6100	
2	9.716	9.710	0.006	4100306829	0.5000	0.5129	
						RPD = 17.30	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE0900005.D

Injection Date: 09-May-2018 18:19:23

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ic h7

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

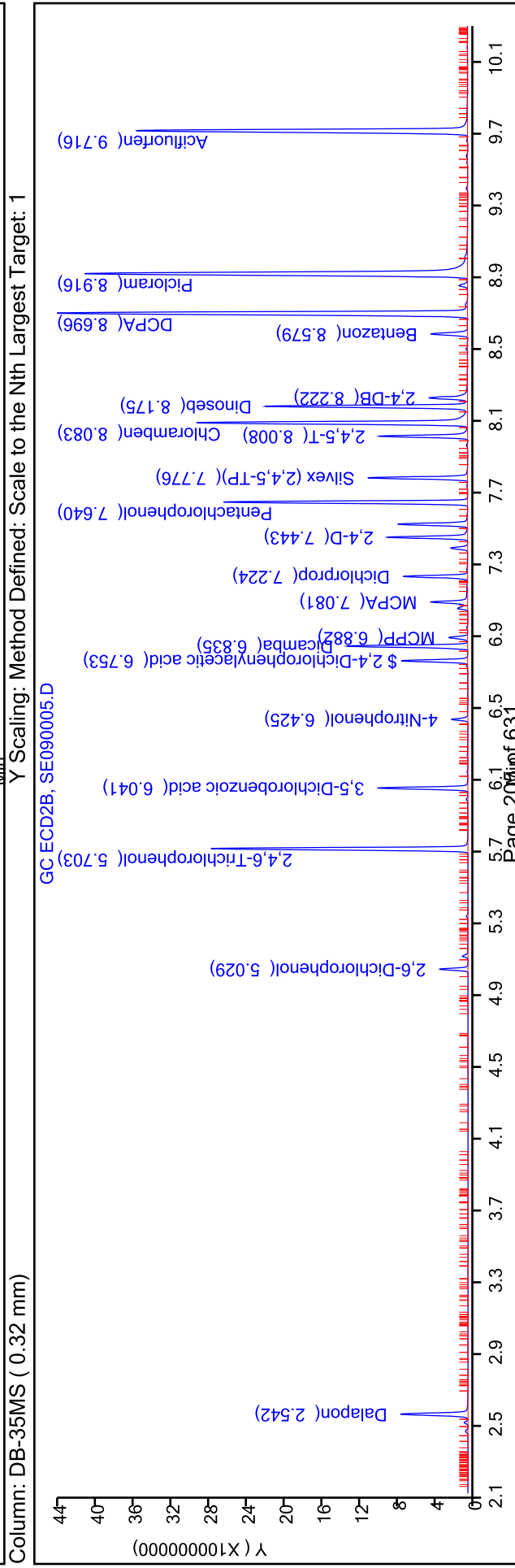
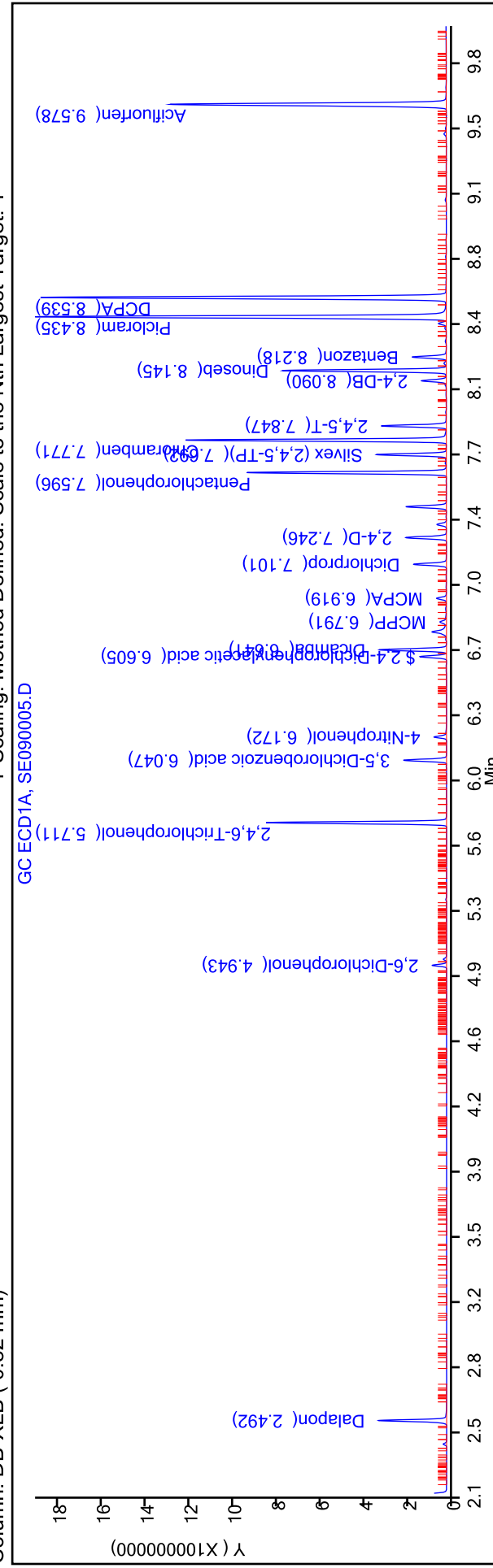
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

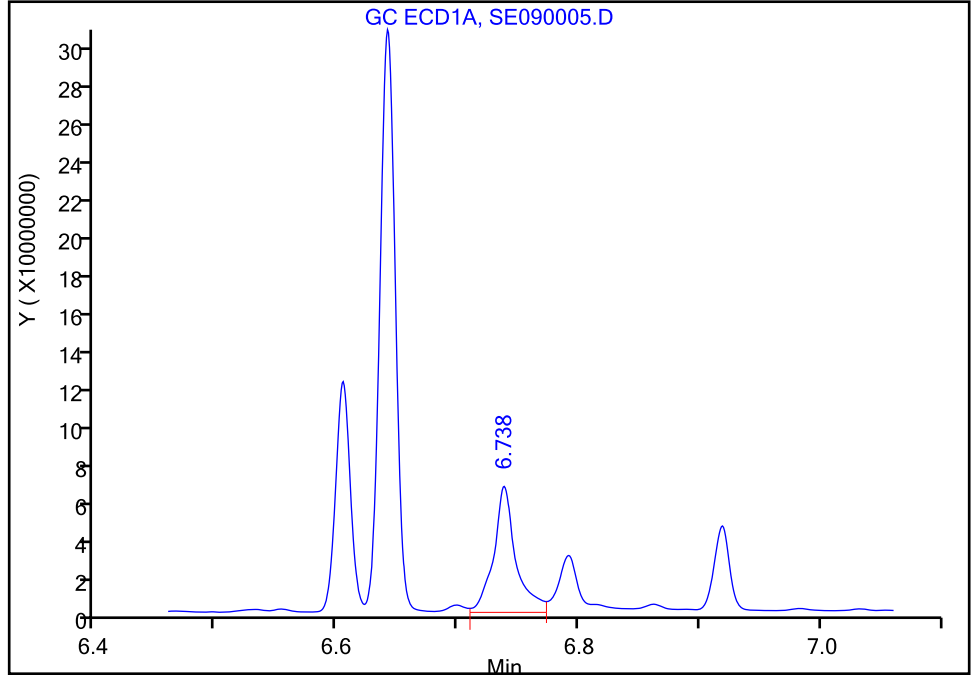
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090005.D
Injection Date: 09-May-2018 18:19:23 Instrument ID: CSGS
Lims ID: ic h7
Client ID:
Operator ID: GEM ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

8 MCPP, CAS: 93-65-2

Signal: 1

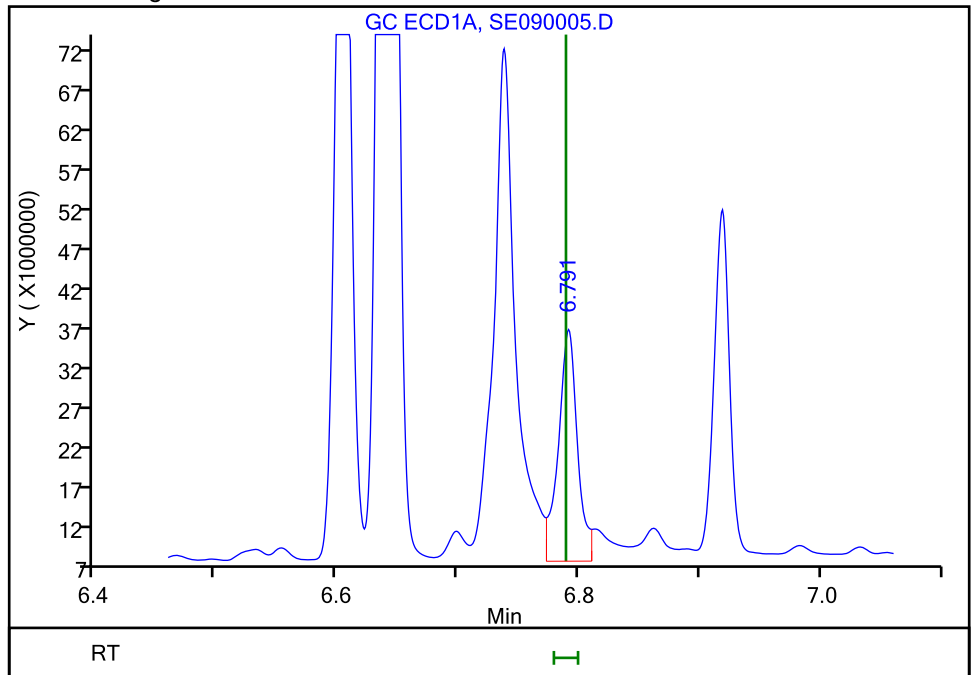
RT: 6.74
Area: 81989520
Amount: 78.974488
Amount Units: ug/ml

Processing Integration Results



RT: 6.79
Area: 31559204
Amount: 48.653253
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 09-May-2018 18:39:00 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:31 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.491	2.491	0.000	117859465	0.2500	0.2433	
2	2.542	2.540	0.002	343706065	0.2500	0.2439	
							RPD = 0.25

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	23392908	NC	NC	
2	5.029	5.028	0.001	121382918	NC	NC	
							RPD = 0.73

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	300214321	NC	NC	
2	5.702	5.700	0.002	1233407049	NC	NC	
							RPD = 0.43

4 3,5-Dichlorobenzoic acid

1	6.047	6.047	0.000	76558268	0.2500	0.2476	
2	6.041	6.040	0.001	402937011	0.2500	0.2491	
							RPD = 0.61

5 4-Nitrophenol

1	6.172	6.173	-0.001	24787202	0.2500	0.2490	
2	6.425	6.426	-0.001	70418420	0.2500	0.2264	
							RPD = 9.51

\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	48018827	0.2500	0.2432	
2	6.752	6.752	0.000	306481984	0.2500	0.2463	
							RPD = 1.27

7 Dicamba

1	6.642	6.642	0.000	125123739	0.1250	0.1270	
2	6.834	6.833	0.001	564195778	0.1250	0.1272	
							RPD = 0.20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	15798581	25.0	24.4	
2	6.881	6.880	0.001	95134406	25.0	24.7	
						RPD = 1.51	
9 MCPA							
1	6.917	6.916	0.001	20303334	25.0	23.8	
2	7.080	7.078	0.002	189250340	25.0	24.5	
						RPD = 2.63	
10 Dichlorprop							
1	7.101	7.102	-0.001	62746255	0.2500	0.2450	
2	7.224	7.223	0.001	290450649	0.2500	0.2373	
						RPD = 3.19	
11 2,4-D							
1	7.245	7.246	-0.001	77679142	0.2500	0.2461	
2	7.444	7.443	0.001	361394001	0.2500	0.2476	
						RPD = 0.58	
12 Pentachlorophenol							
1	7.595	7.594	0.001	331633513	0.0625	0.0654	
2	7.639	7.637	0.002	1120470146	0.0625	0.0664	
						RPD = 1.51	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	122984337	0.0625	0.0657	
2	7.775	7.774	0.001	436902458	0.0625	0.0651	
						RPD = 0.92	
14 Chloramben							
1	7.770	7.770	0.000	428728783	0.2500	0.2616	
2	8.083	8.081	0.002	1447513965	0.2500	0.2674	
						RPD = 2.16	
15 2,4,5-T							
1	7.848	7.848	0.000	118284366	0.0625	0.0634	
2	8.008	8.008	0.000	402466907	0.0625	0.0646	
						RPD = 1.79	
16 2,4-DB							
1	8.091	8.091	0.000	44656333	0.2500	0.2534	
2	8.223	8.222	0.001	212450773	0.2500	0.2420	
						RPD = 4.60	
17 Dinoseb							
1	8.144	8.144	0.000	291379006	0.2500	0.2633	
2	8.175	8.173	0.002	901988457	0.2500	0.2750	
						RPD = 4.33	
18 Bentazon							
1	8.218	8.218	0.000	64493999	0.2500	0.2506	
2	8.580	8.578	0.002	186627828	0.2500	0.2507	
						RPD = 0.02	
19 Picloram							
1	8.434	8.433	0.001	724514848	0.2500	0.2714	
2	8.916	8.913	0.003	2365516502	0.2500	0.2855	
						RPD = 5.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.539	8.537	0.002	762299063	0.2500	0.2687	
2	8.695	8.692	0.003	2416371573	0.2500	0.2713	
						RPD = 0.96	

21 Acifluorfen

1	9.579	9.577	0.002	560772453	0.2500	0.2756	
2	9.714	9.710	0.004	1719149943	0.2500	0.2314	
						RPD = 17.41	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

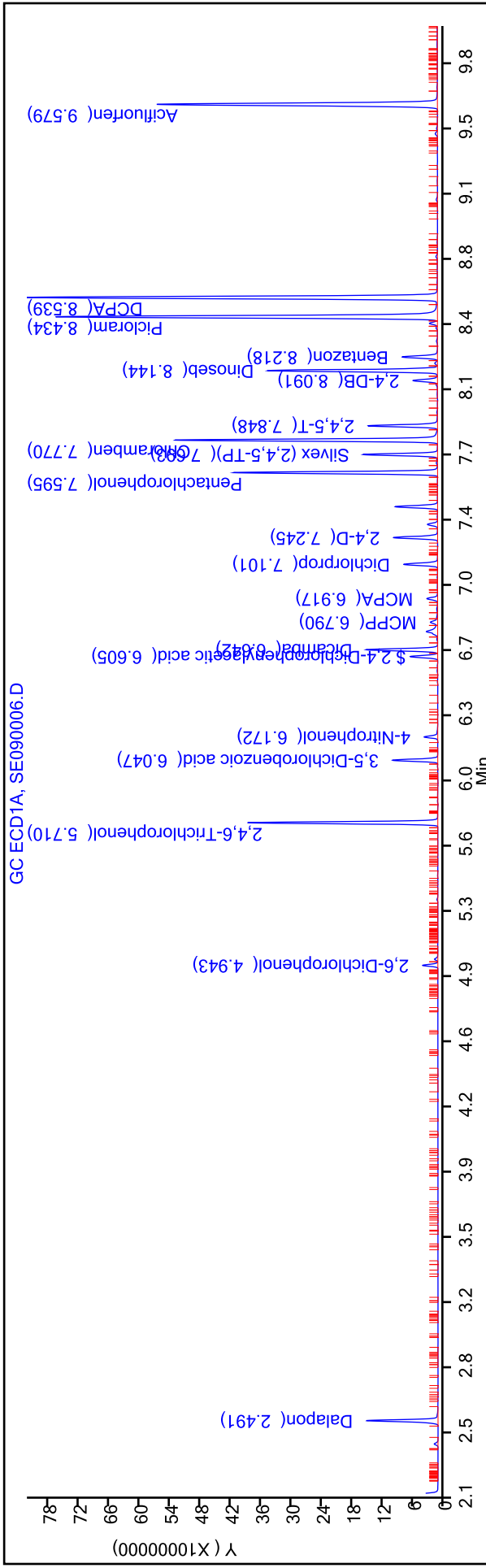
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE0900006.D
 Injection Date: 09-May-2018 18:39:00
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

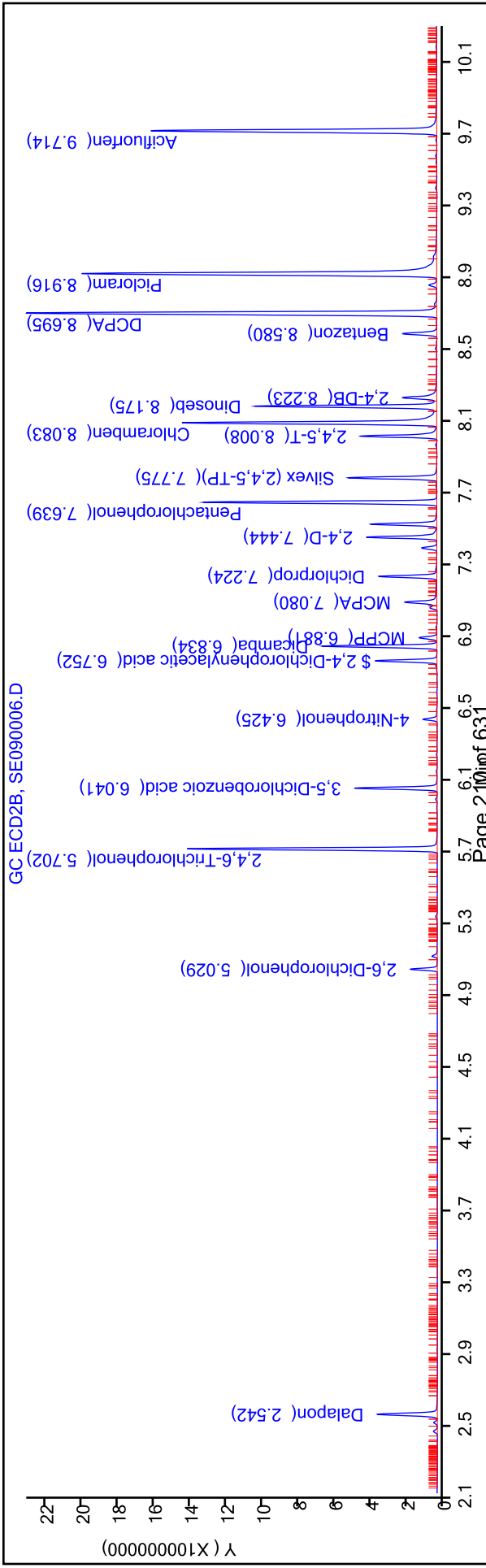
Operator ID: GEM
 Worklist Smp#: 6
 ALS Bottle#: 6

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 09-May-2018 18:58:34 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:41 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	85561651	0.1750	0.1754	
2	2.541	2.540	0.001	245675180	0.1750	0.1743	
						RPD = 0.60	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	16820806	NC	NC	
2	5.028	5.028	0.000	87350522	NC	NC	
						RPD = 0.81	
3 2,4,6-Trichlorophenol							
1	5.711	5.710	0.001	210985965	NC	NC	
2	5.702	5.700	0.002	868535448	NC	NC	
						RPD = 0.63	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	55316182	0.1750	0.1789	
2	6.040	6.040	0.000	285956578	0.1750	0.1768	
						RPD = 1.18	
5 4-Nitrophenol							
1	6.173	6.173	0.000	18148801	0.1750	0.1823	
2	6.426	6.426	0.000	50791322	0.1750	0.1633	
						RPD = 11.01	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	34610542	0.1750	0.1753	
2	6.753	6.752	0.001	217901405	0.1750	0.1751	
						RPD = 0.10	
7 Dicamba							
1	6.642	6.642	0.000	88963078	0.0875	0.0903	
2	6.833	6.833	0.000	399308905	0.0875	0.0900	
						RPD = 0.26	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	11735070	17.5	18.1	
2	6.881	6.880	0.001	70347241	17.5	18.0	
						RPD = 0.39	
9 MCPA							
1	6.917	6.916	0.001	15184702	17.5	17.8	
2	7.080	7.078	0.002	143685808	17.5	18.3	
						RPD = 2.96	
10 Dichlorprop							
1	7.103	7.102	0.001	45229626	0.1750	0.1766	
2	7.223	7.223	0.000	206211940	0.1750	0.1685	
						RPD = 4.70	
11 2,4-D							
1	7.246	7.246	0.000	55858354	0.1750	0.1770	
2	7.443	7.443	0.000	256797724	0.1750	0.1759	
						RPD = 0.61	
12 Pentachlorophenol							
1	7.595	7.594	0.001	232407815	0.0438	0.0459	
2	7.638	7.637	0.001	787462544	0.0438	0.0467	
						RPD = 1.80	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	86592112	0.0438	0.0463	
2	7.775	7.774	0.001	309540353	0.0438	0.0461	
						RPD = 0.30	
14 Chloramben							
1	7.770	7.770	0.000	300714561	0.1750	0.1835	
2	8.082	8.081	0.001	1017374760	0.1750	0.1879	
						RPD = 2.36	
15 2,4,5-T							
1	7.848	7.848	0.000	84308974	0.0438	0.0452	
2	8.008	8.008	0.000	281806659	0.0438	0.0452	
						RPD = 0.01	
16 2,4-DB							
1	8.091	8.091	0.000	31842206	0.1750	0.1807	
2	8.223	8.222	0.001	160878564	0.1750	0.1833	
						RPD = 1.41	
17 Dinoseb							
1	8.145	8.144	0.001	205511059	0.1750	0.1857	
2	8.175	8.173	0.002	624797611	0.1750	0.1905	
						RPD = 2.52	
18 Bentazon							
1	8.218	8.218	0.000	46220417	0.1750	0.1796	
2	8.580	8.578	0.002	132529059	0.1750	0.1780	
						RPD = 0.89	
19 Picloram							
1	8.434	8.433	0.001	504113503	0.1750	0.1889	
2	8.915	8.913	0.002	1614105282	0.1750	0.1948	
						RPD = 3.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	532179764	0.1750	0.1876	
2	8.694	8.692	0.002	1692976152	0.1750	0.1901	
						RPD = 1.32	

21 Acifluorfen

1	9.578	9.577	0.001	389652410	0.1750	0.1915	
2	9.713	9.710	0.003	1145964479	0.1750	0.1637	
						RPD = 15.65	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\CSGS\20180509-47236.b\SE090007.D
Injection Date: 09-May-2018 18:58:34
Lims ID: ic h5
Instrument ID: CSGS

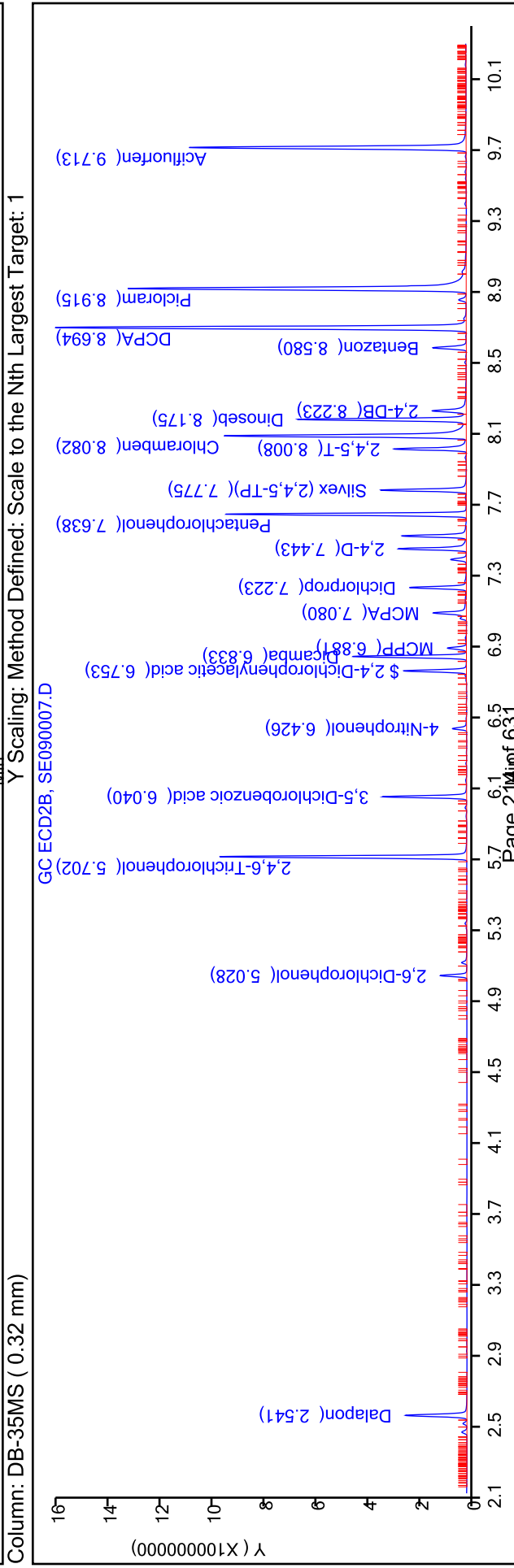
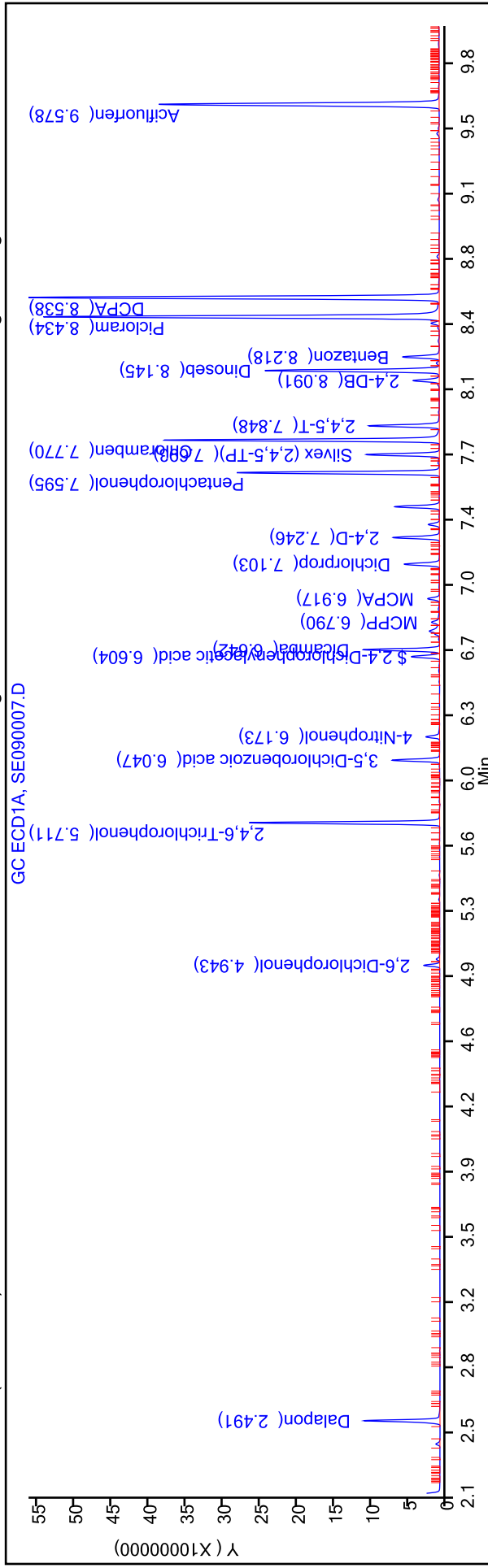
Operator ID: GEM
Worklist Smp#: 7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 09-May-2018 19:18:17 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:52 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.491	2.491	0.000	48692714	0.1000	0.0979	
2	2.540	2.540	0.000	134282444	0.1000	0.0953	
							RPD = 2.67

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	9632391	NC	NC	
2	5.028	5.028	0.000	49153025	NC	NC	
							RPD = 0.94

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	113343196	NC	NC	
2	5.700	5.700	0.000	470539202	NC	NC	
							RPD = 1.47

4 3,5-Dichlorobenzoic acid

1	6.047	6.047	0.000	30671888	0.1000	0.0992	
2	6.040	6.040	0.000	157142720	0.1000	0.0972	
							RPD = 2.08

5 4-Nitrophenol

1	6.173	6.173	0.000	10063608	0.1000	0.1011	
2	6.426	6.426	0.000	28701977	0.1000	0.0923	
							RPD = 9.12

\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	19396979	0.1000	0.0982	
2	6.752	6.752	0.000	121598006	0.1000	0.0977	
							RPD = 0.53

7 Dicamba

1	6.642	6.642	0.000	48666881	0.0500	0.0494	
2	6.833	6.833	0.000	218858895	0.0500	0.0494	
							RPD = 0.07

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090008.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	6799750	10.0	10.5	
2	6.880	6.880	0.000	42804626	10.0	10.6	
						RPD = 0.84	
9 MCPA							
1	6.916	6.916	0.000	8784914	10.0	10.2	
2	7.078	7.078	0.000	87635867	10.0	10.8	
						RPD = 5.05	
10 Dichlorprop							
1	7.102	7.102	0.000	25183834	0.1000	0.0983	
2	7.223	7.223	0.000	116304622	0.1000	0.0950	
						RPD = 3.42	
11 2,4-D							
1	7.246	7.246	0.000	31351468	0.1000	0.0993	
2	7.443	7.443	0.000	141286640	0.1000	0.0968	
						RPD = 2.60	
12 Pentachlorophenol							
1	7.594	7.594	0.000	124451497	0.0250	0.0246	
2	7.637	7.637	0.000	426702551	0.0250	0.0253	
						RPD = 2.98	
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	46478268	0.0250	0.0248	
2	7.774	7.774	0.000	165575880	0.0250	0.0247	
						RPD = 0.64	
14 Chloramben							
1	7.770	7.770	0.000	159803441	0.1000	0.0975	
2	8.081	8.081	0.000	534232051	0.1000	0.0987	
						RPD = 1.17	
15 2,4,5-T							
1	7.848	7.848	0.000	45407307	0.0250	0.0244	
2	8.008	8.008	0.000	150219829	0.0250	0.0241	
						RPD = 1.02	
16 2,4-DB							
1	8.091	8.091	0.000	17140092	0.1000	0.0973	
2	8.222	8.222	0.000	89229518	0.1000	0.1017	
						RPD = 4.40	
17 Dinoseb							
1	8.144	8.144	0.000	108913733	0.1000	0.0984	
2	8.173	8.173	0.000	319720996	0.1000	0.0975	
						RPD = 0.98	
18 Bentazon							
1	8.218	8.218	0.000	25386610	0.1000	0.0986	
2	8.578	8.578	0.000	72241071	0.1000	0.0970	
						RPD = 1.65	
19 Picloram							
1	8.433	8.433	0.000	265884971	0.1000	0.0996	
2	8.913	8.913	0.000	817209657	0.1000	0.0986	
						RPD = 1.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.537	8.537	0.000	286279694	0.1000	0.1009	
2	8.692	8.692	0.000	903362678	0.1000	0.1014	
						RPD = 0.51	

21 Acifluorfen

1	9.577	9.577	0.000	204134092	0.1000	0.1003	
2	9.710	9.710	0.000	561519505	0.1000	0.0946	
						RPD = 5.86	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090008.D
Injection Date: 09-May-2018 19:18:17 Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 8

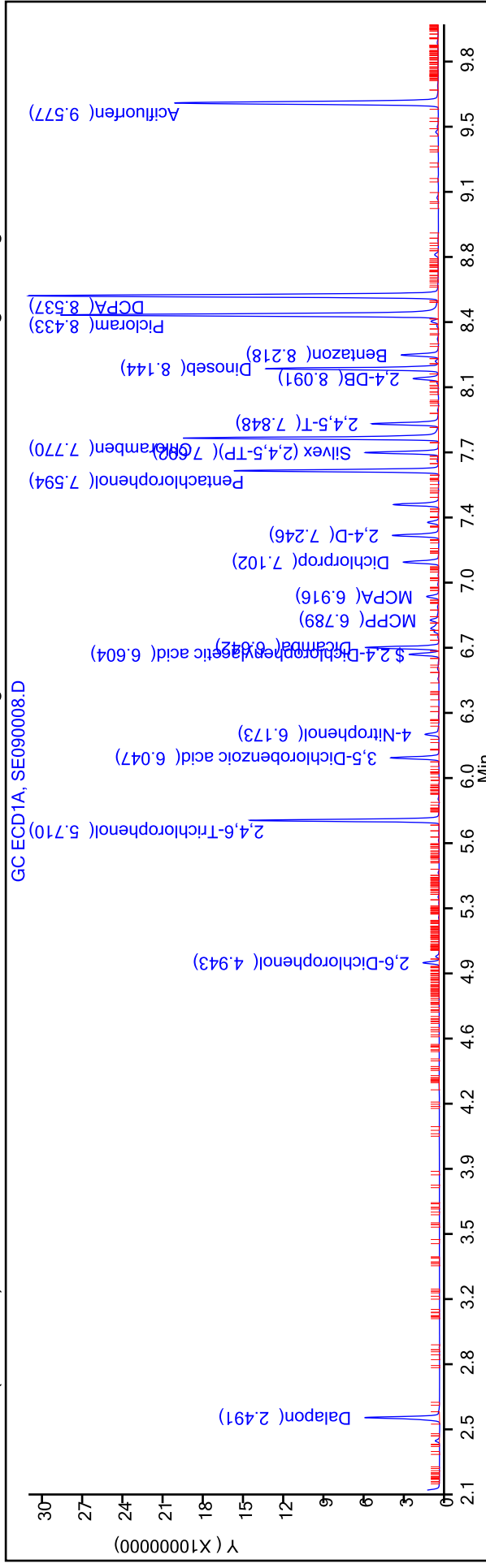
Lims ID: ic h4
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

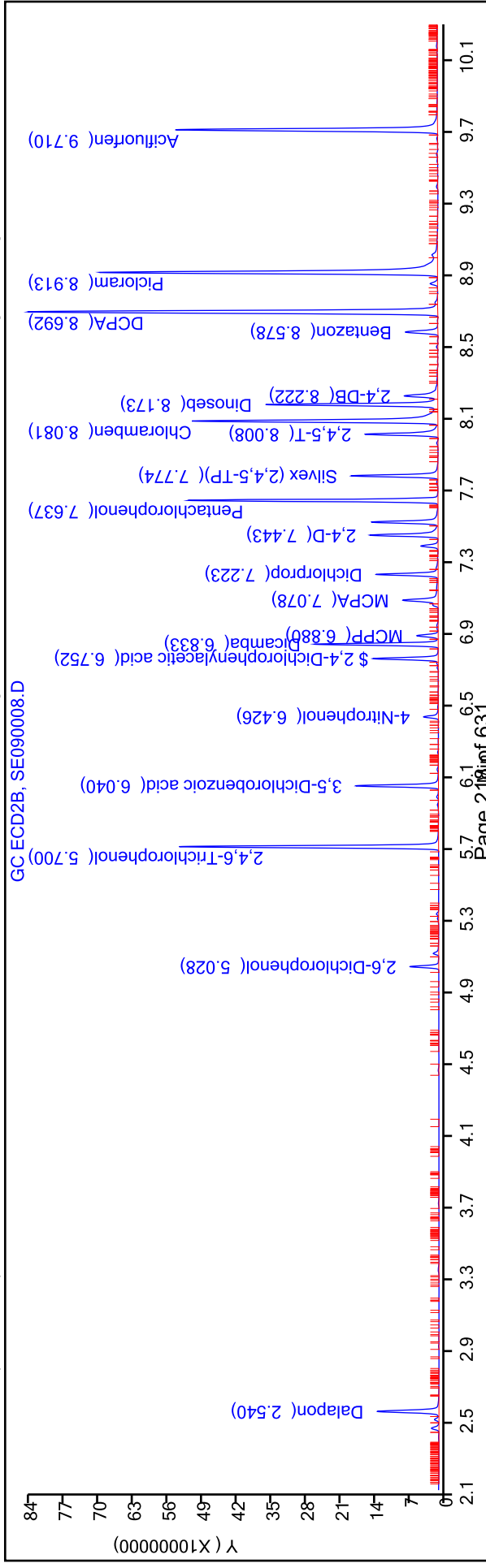
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 09-May-2018 19:37:54 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:11 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	26486244	0.0500	0.0512	
2	2.541	2.540	0.001	68276472	0.0500	0.0484	
						RPD = 5.48	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	5042831	NC	NC	
2	5.028	5.028	0.000	25694947	NC	NC	
						RPD = 1.09	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	53550343	NC	NC	
2	5.700	5.700	0.000	226578608	NC	NC	
						RPD = 3.37	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	15124840	0.0500	0.0489	
2	6.041	6.040	0.001	78811020	0.0500	0.0487	
						RPD = 0.39	
5 4-Nitrophenol							
1	6.174	6.173	0.001	5013484	0.0500	0.0504	
2	6.428	6.426	0.002	15379120	0.0500	0.0494	
						RPD = 1.84	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	9824392	0.0500	0.0498	
2	6.753	6.752	0.001	61074468	0.0500	0.0491	
						RPD = 1.36	
7 Dicamba							
1	6.641	6.642	-0.001	23742571	0.0250	0.0241	
2	6.833	6.833	0.000	106662608	0.0250	0.0241	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.788	6.789	-0.001	3508507	5.00	5.41	
2	6.881	6.880	0.001	24151794	5.00	5.53	
						RPD = 2.14	
9 MCPA							
1	6.916	6.916	0.000	4645587	5.00	5.36	
2	7.078	7.078	0.000	48125167	5.00	5.44	
						RPD = 1.65	
10 Dichlorprop							
1	7.102	7.102	0.000	12671217	0.0500	0.0495	
2	7.223	7.223	0.000	58567059	0.0500	0.0478	
						RPD = 3.33	
11 2,4-D							
1	7.247	7.246	0.001	15677896	0.0500	0.0497	
2	7.443	7.443	0.000	69419021	0.0500	0.0476	
						RPD = 4.36	
12 Pentachlorophenol							
1	7.595	7.594	0.001	58438516	0.0125	0.0115	
2	7.637	7.637	0.000	203051099	0.0125	0.0120	
						RPD = 4.31	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	21972097	0.0125	0.0117	
2	7.774	7.774	0.000	78461272	0.0125	0.0117	
						RPD = 0.40	
14 Chloramben							
1	7.771	7.770	0.001	74407541	0.0500	0.0454	
2	8.082	8.081	0.001	253737337	0.0500	0.0469	
						RPD = 3.16	
15 2,4,5-T							
1	7.848	7.848	0.000	22227236	0.0125	0.0119	
2	8.008	8.008	0.000	71548434	0.0125	0.0115	
						RPD = 3.76	
16 2,4-DB							
1	8.092	8.091	0.001	8499475	0.0500	0.0482	
2	8.223	8.222	0.001	45093077	0.0500	0.0514	
						RPD = 6.30	
17 Dinoseb							
1	8.145	8.144	0.001	50192922	0.0500	0.0454	
2	8.173	8.173	0.000	141523650	0.0500	0.0431	
						RPD = 5.01	
18 Bentazon							
1	8.218	8.218	0.000	12591827	0.0500	0.0489	
2	8.580	8.578	0.002	35628390	0.0500	0.0479	
						RPD = 2.22	
19 Picloram							
1	8.435	8.433	0.002	124854571	0.0500	0.0468	
2	8.913	8.913	0.000	374069812	0.0500	0.0451	
						RPD = 3.55	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	135870891	0.0500	0.0479	
2	8.693	8.692	0.001	429416896	0.0500	0.0482	
						RPD = 0.67	

21 Acifluorfen

1	9.578	9.577	0.001	92428968	0.0500	0.0454	
2	9.712	9.710	0.002	237117322	0.0500	0.0563	
						RPD = 21.33	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

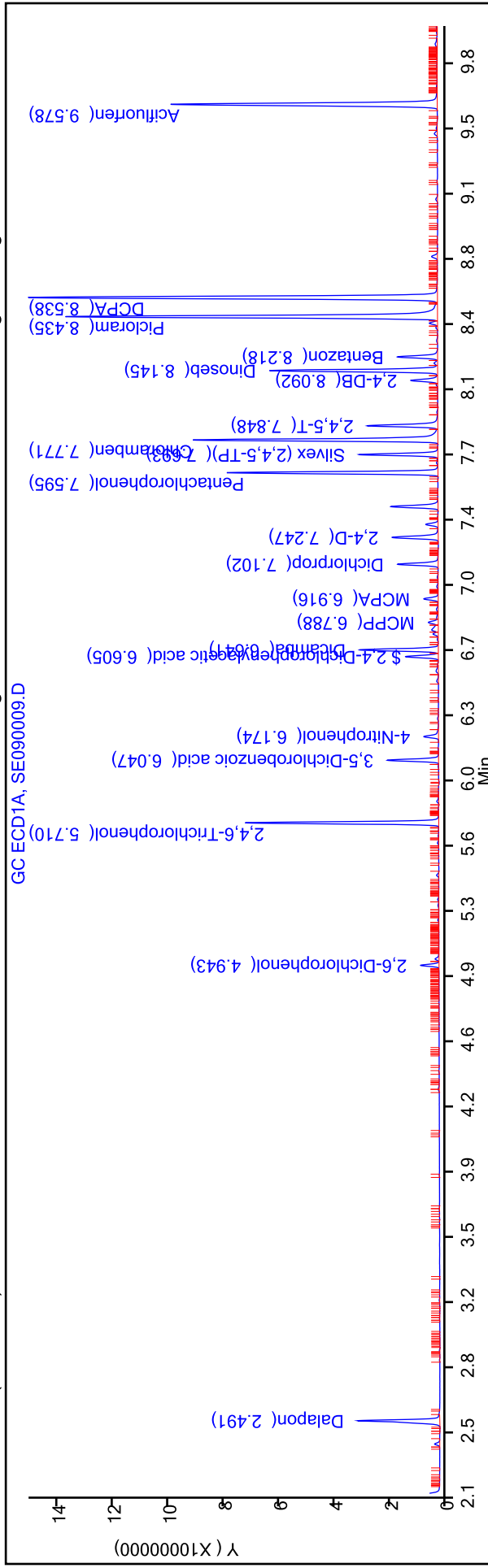
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090009.D
 Injection Date: 09-May-2018 19:37:54
 Lims ID: ic h3
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

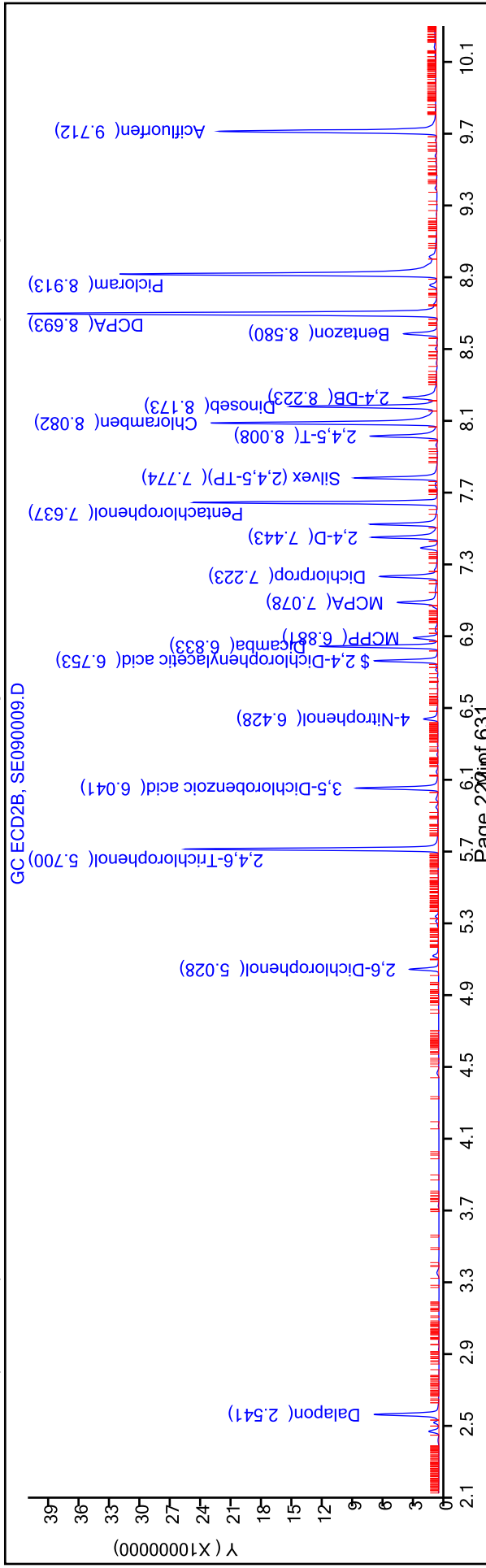
Operator ID: GEM
 Worklist Smp#: 9
 ALS Bottle#: 9

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 09-May-2018 19:57:37 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:30 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:25:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.490	2.491	-0.001	14657660	0.0250	0.0263	
2	2.540	2.540	0.000	34680649	0.0250	0.0246	
						RPD = 6.70	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	2643396	NC	NC	
2	5.029	5.028	0.001	13247063	NC	NC	
						RPD = 2.75	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	25414505	NC	NC	
2	5.700	5.700	0.000	107319552	NC	NC	
						RPD = 3.17	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	7620330	0.0250	0.0246	
2	6.041	6.040	0.001	38364540	0.0250	0.0237	
						RPD = 3.83	
5 4-Nitrophenol							
1	6.175	6.173	0.002	2605390	0.0250	0.0262	
2	6.427	6.426	0.001	8778298	0.0250	0.0282	
						RPD = 7.54	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	4981736	0.0250	0.0252	
2	6.752	6.752	0.000	30704507	0.0250	0.0247	
						RPD = 2.22	
7 Dicamba							
1	6.642	6.642	0.000	11616649	0.0125	0.0118	
2	6.832	6.833	-0.001	51691784	0.0125	0.0117	
						RPD = 1.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	1745483	2.50	2.69	
2	6.880	6.880	0.000	13914604	2.50	2.76	
						RPD = 2.42	
9 MCPA							
1	6.917	6.916	0.001	2425365	2.50	2.73	
2	7.078	7.078	0.000	28551579	2.50	2.80	
						RPD = 2.54	
10 Dichlorprop							
1	7.103	7.102	0.001	6423668	0.0250	0.0251	
2	7.223	7.223	0.000	31462180	0.0250	0.0257	
						RPD = 2.46	
11 2,4-D							
1	7.247	7.246	0.001	7737754	0.0250	0.0245	
2	7.442	7.443	-0.001	34715108	0.0250	0.0238	
						RPD = 3.05	
12 Pentachlorophenol							
1	7.595	7.594	0.001	27542680	0.006250	0.005435	
2	7.637	7.637	0.000	94352178	0.006250	0.005595	
						RPD = 2.89	
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	10459084	0.006250	0.005589	
2	7.774	7.774	0.000	37061107	0.006250	0.005524	
						RPD = 1.18	
14 Chloramben							
1	7.772	7.770	0.002	35018105	0.0250	0.0214	
2	8.082	8.081	0.001	120073751	0.0250	0.0222	
						RPD = 3.71	
15 2,4,5-T							
1	7.849	7.848	0.001	10974501	0.006250	0.005886	
2	8.007	8.008	-0.001	33976230	0.006250	0.005452	
						RPD = 7.65	
16 2,4-DB							
1	8.092	8.091	0.001	4239618	0.0250	0.0241	
2	8.223	8.222	0.001	22663618	0.0250	0.0258	
						RPD = 7.05	
17 Dinoseb							
1	8.145	8.144	0.001	24507489	0.0250	0.0221	
2	8.173	8.173	0.000	66394703	0.0250	0.0202	
						RPD = 9.00	
18 Bentazon							
1	8.219	8.218	0.001	6315524	0.0250	0.0245	
2	8.580	8.578	0.002	17606131	0.0250	0.0236	
						RPD = 3.71	
19 Picloram							
1	8.436	8.433	0.003	59686028	0.0250	0.0224	
2	8.913	8.913	0.000	171088600	0.0250	0.0206	
						RPD = 7.97	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	64463537	0.0250	0.0227	
2	8.692	8.692	0.000	202718580	0.0250	0.0228	
							RPD = 0.17

21 Acifluorfen

1	9.578	9.577	0.001	45279726	0.0250	0.0223	
2	9.711	9.710	0.001	108783467	0.0250	0.0411	
							RPD = 59.50

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090010.D
Injection Date: 09-May-2018 19:57:37
Lims ID: ic h2
Instrument ID: CSGS

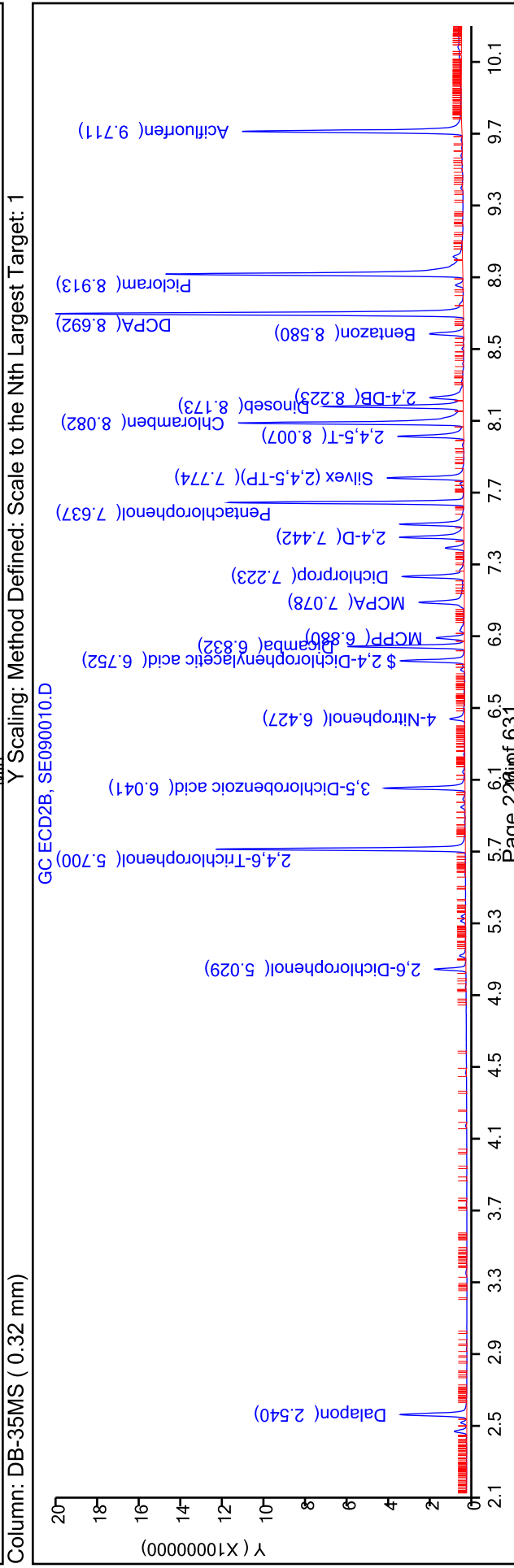
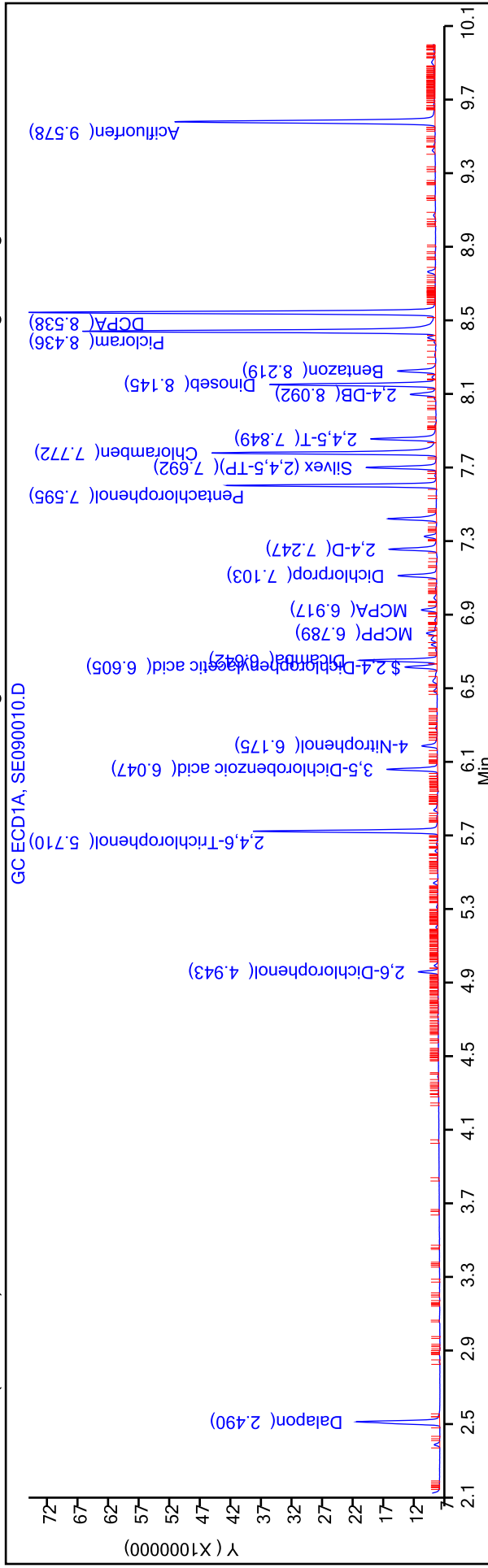
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 09-May-2018 20:17:14 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.489	2.491	-0.002	6790041	0.0100	0.009774	
2	2.539	2.540	-0.001	14490384	0.0100	0.0103	
							RPD = 5.07

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	1126471	NC	NC	
2	5.029	5.028	0.001	5671182	NC	NC	
							RPD = 2.29

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	9125808	NC	NC	
2	5.699	5.700	-0.001	39546213	NC	NC	
							RPD = 5.76

4 3,5-Dichlorobenzoic acid

1	6.048	6.047	0.001	2944716	0.0100	0.009523	
2	6.042	6.040	0.002	15640455	0.0100	0.009670	
							RPD = 1.52

5 4-Nitrophenol

1	6.177	6.173	0.004	1040738	0.0100	0.0105	
2	6.429	6.426	0.003	3984898	0.0100	0.0128	
							RPD = 20.26

\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	2000718	0.0100	0.0101	
2	6.754	6.752	0.002	12141554	0.0100	0.009758	
							RPD = 3.77

7 Dicamba

1	6.641	6.642	-0.001	4372331	0.005000	0.004437	
2	6.834	6.833	0.001	19774183	0.005000	0.004459	
							RPD = 0.50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	517455	1.00	0.7977	
2	6.882	6.880	0.002	6429640	1.00	0.7323	
						RPD = 8.55	
9 MCPA							
1	6.917	6.916	0.001	913431	1.00	0.9482	
2	7.081	7.078	0.003	12826943	1.00	0.6828	
						RPD = 32.55	
10 Dichlorprop							
1	7.104	7.102	0.002	2539480	0.0100	0.0099	
2	7.224	7.223	0.001	13374924	0.0100	0.0109	
						RPD = 9.72	
11 2,4-D							
1	7.248	7.246	0.002	3047545	0.0100	0.009656	
2	7.445	7.443	0.002	13933080	0.0100	0.009544	
						RPD = 1.16	
12 Pentachlorophenol							
1	7.595	7.594	0.001	9895451	0.002500	0.001953	
2	7.638	7.637	0.001	33742162	0.002500	0.002001	
						RPD = 2.43	
13 Silvex (2,4,5-TP)							
1	7.694	7.692	0.002	3859632	0.002500	0.002063	
2	7.776	7.774	0.002	13743986	0.002500	0.002049	
						RPD = 0.68	
14 Chloramben							
1	7.772	7.770	0.002	12786212	0.0100	0.007803	
2	8.083	8.081	0.002	43902837	0.0100	0.008109	
						RPD = 3.84	
15 2,4,5-T							
1	7.849	7.848	0.001	4426368	0.002500	0.002374	
2	8.009	8.008	0.001	13763803	0.002500	0.002209	
						RPD = 7.22	
16 2,4-DB							
1	8.093	8.091	0.002	1551068	0.0100	0.008803	
2	8.225	8.222	0.003	8072867	0.0100	0.009197	
						RPD = 4.38	
17 Dinoseb							
1	8.145	8.144	0.001	8830536	0.0100	0.007980	
2	8.174	8.173	0.001	23228618	0.0100	0.007081	
						RPD = 11.94	
18 Bentazon							
1	8.219	8.218	0.001	2372651	0.0100	0.009220	
2	8.582	8.578	0.004	6834492	0.0100	0.009180	
						RPD = 0.43	
19 Picloram							
1	8.436	8.433	0.003	20683643	0.0100	0.007749	
2	8.914	8.913	0.001	60165899	0.0100	0.007261	
						RPD = 6.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.539	8.537	0.002	22721047	0.0100	0.008009	
2	8.694	8.692	0.002	71194571	0.0100	0.007994	
						RPD = 0.19	

21 Acifluorfen

1	9.579	9.577	0.002	15904730	0.0100	0.007816	
2	9.714	9.710	0.004	36049429	0.0100	0.0325	
						RPD = 122.46	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-1_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D

Injection Date: 09-May-2018 20:17:14

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ic h1

Worklist Smp#: 11

Client ID:

Injection Vol: 1.0 ul

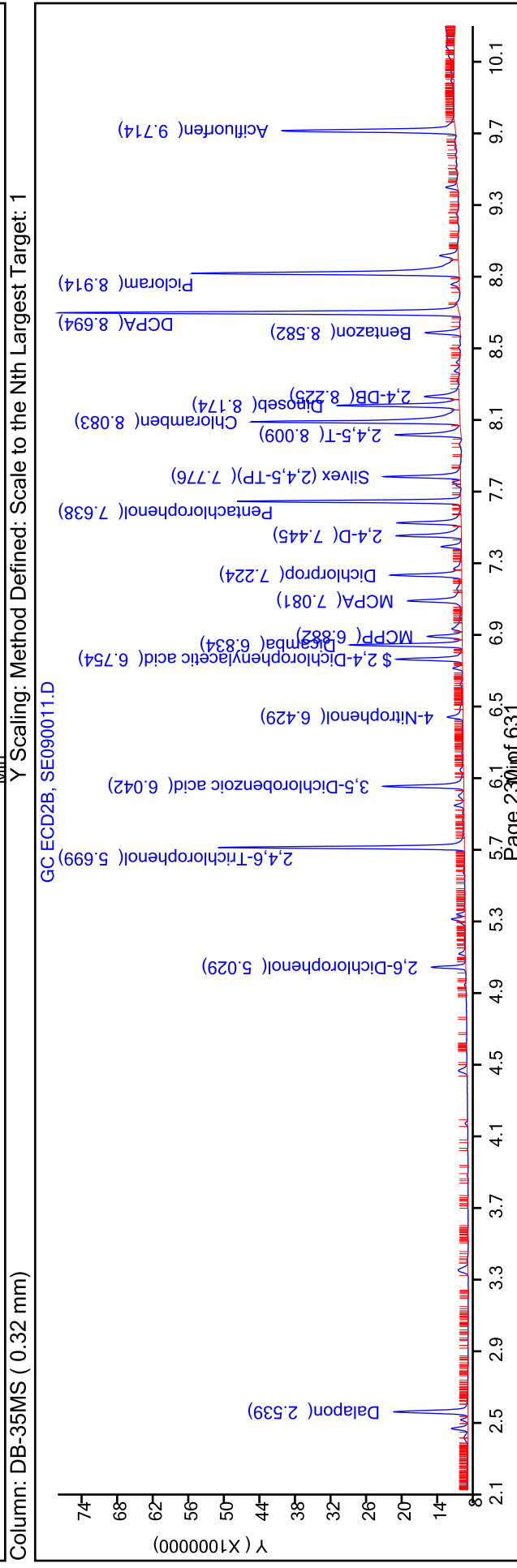
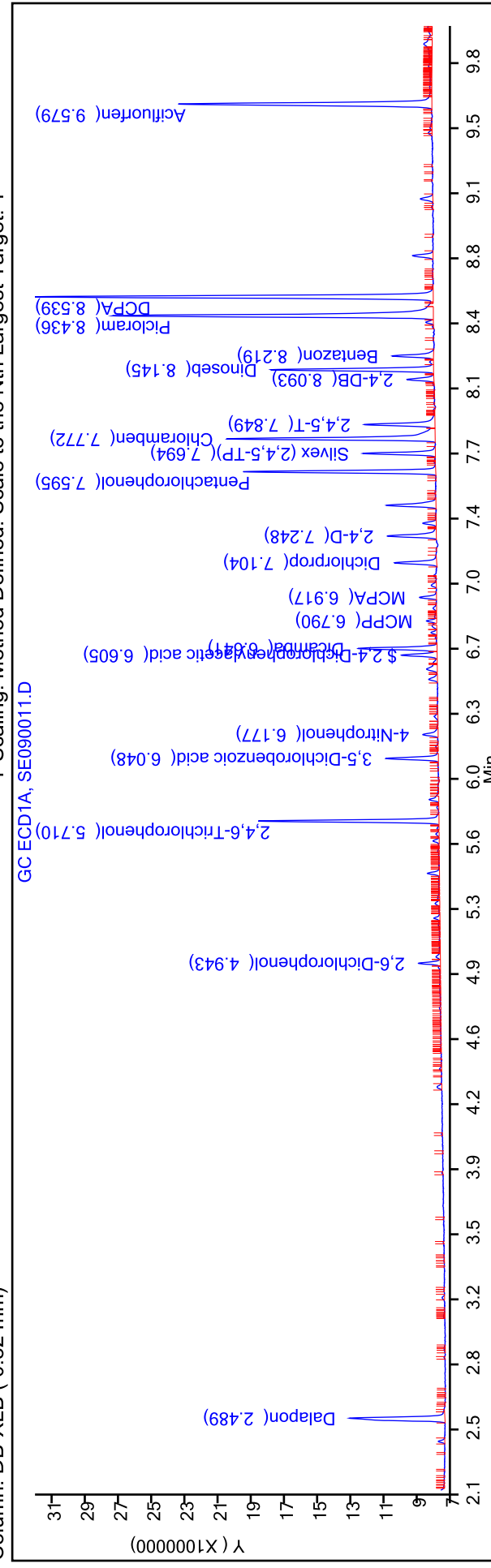
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

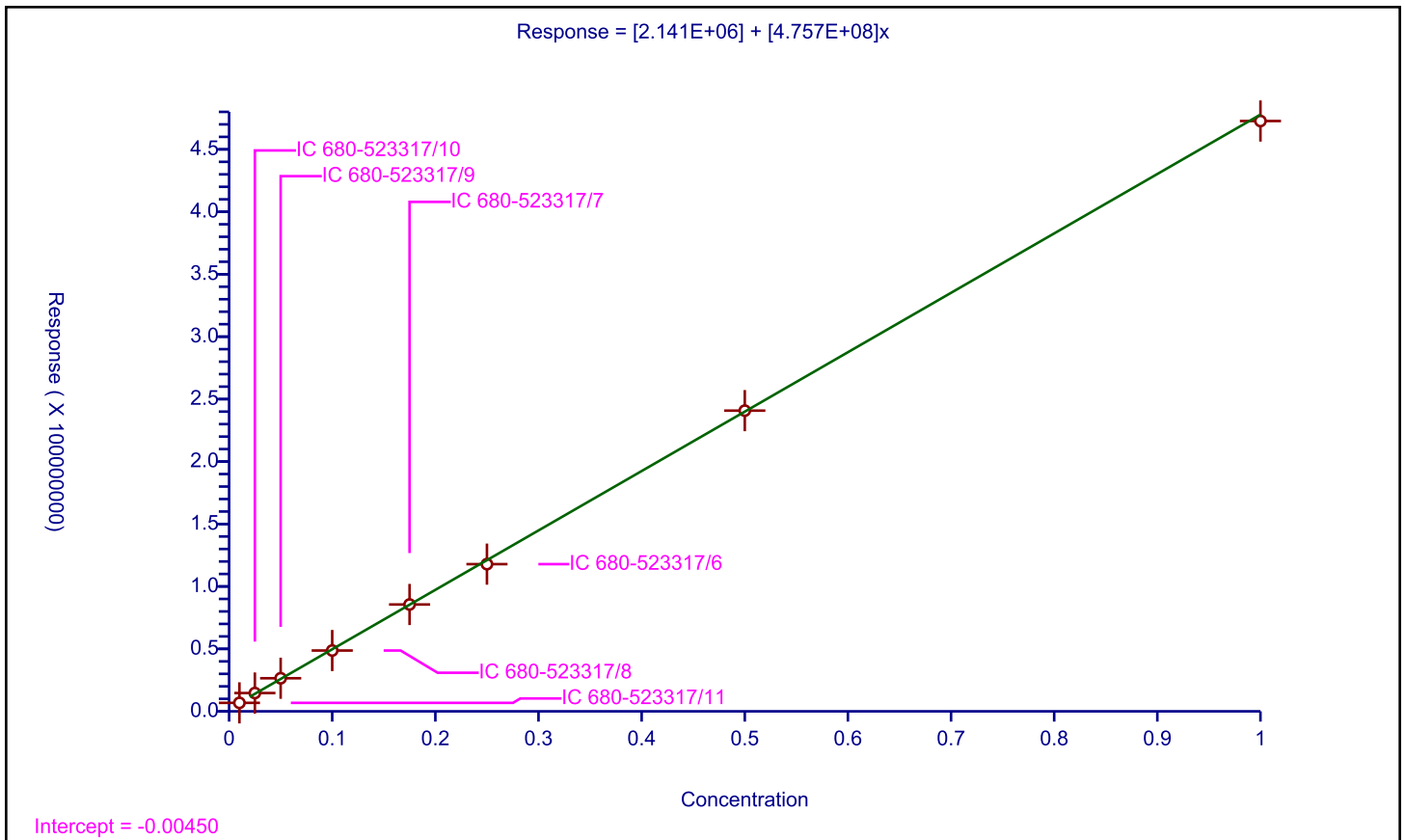
/ Dalapon

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	2.141E+06
Slope:	4.757E+08

Error Coefficients	
Standard Error:	2550000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	6790041.0			679004100.0	Y
2	IC 680-523317/10	0.025	14657660.0			586306400.0	Y
3	IC 680-523317/9	0.05	26486244.0			529724880.0	Y
4	IC 680-523317/8	0.1	48692714.0			486927140.0	Y
5	IC 680-523317/7	0.175	85561651.0			488923720.0	Y
6	IC 680-523317/6	0.25	117859465.0			471437860.0	Y
7	IC 680-523317/5	0.5	240788645.0			481577290.0	Y
8	IC 680-523317/4	1.0	472686723.0			472686723.0	Y



Calibration

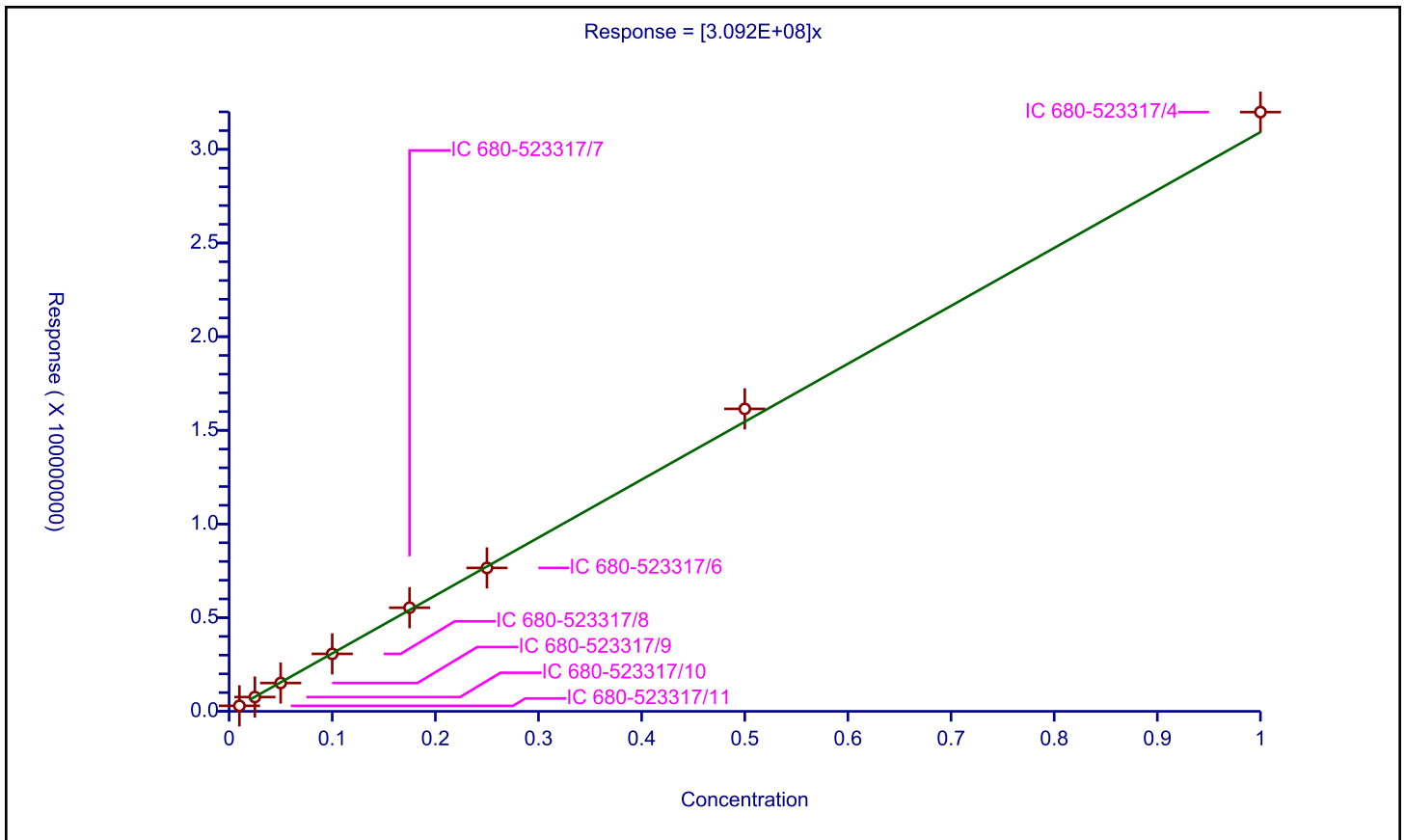
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	3.092E+08

Error Coefficients	
Standard Error:	4830000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	2944716.0			294471600.0	Y
2	IC 680-523317/10	0.025	7620330.0			304813200.0	Y
3	IC 680-523317/9	0.05	15124840.0			302496800.0	Y
4	IC 680-523317/8	0.1	30671888.0			306718880.0	Y
5	IC 680-523317/7	0.175	55316182.0			316092468.571429	Y
6	IC 680-523317/6	0.25	76558268.0			306233072.0	Y
7	IC 680-523317/5	0.5	161466175.0			322932350.0	Y
8	IC 680-523317/4	1.0	319887544.0			319887544.0	Y



Calibration

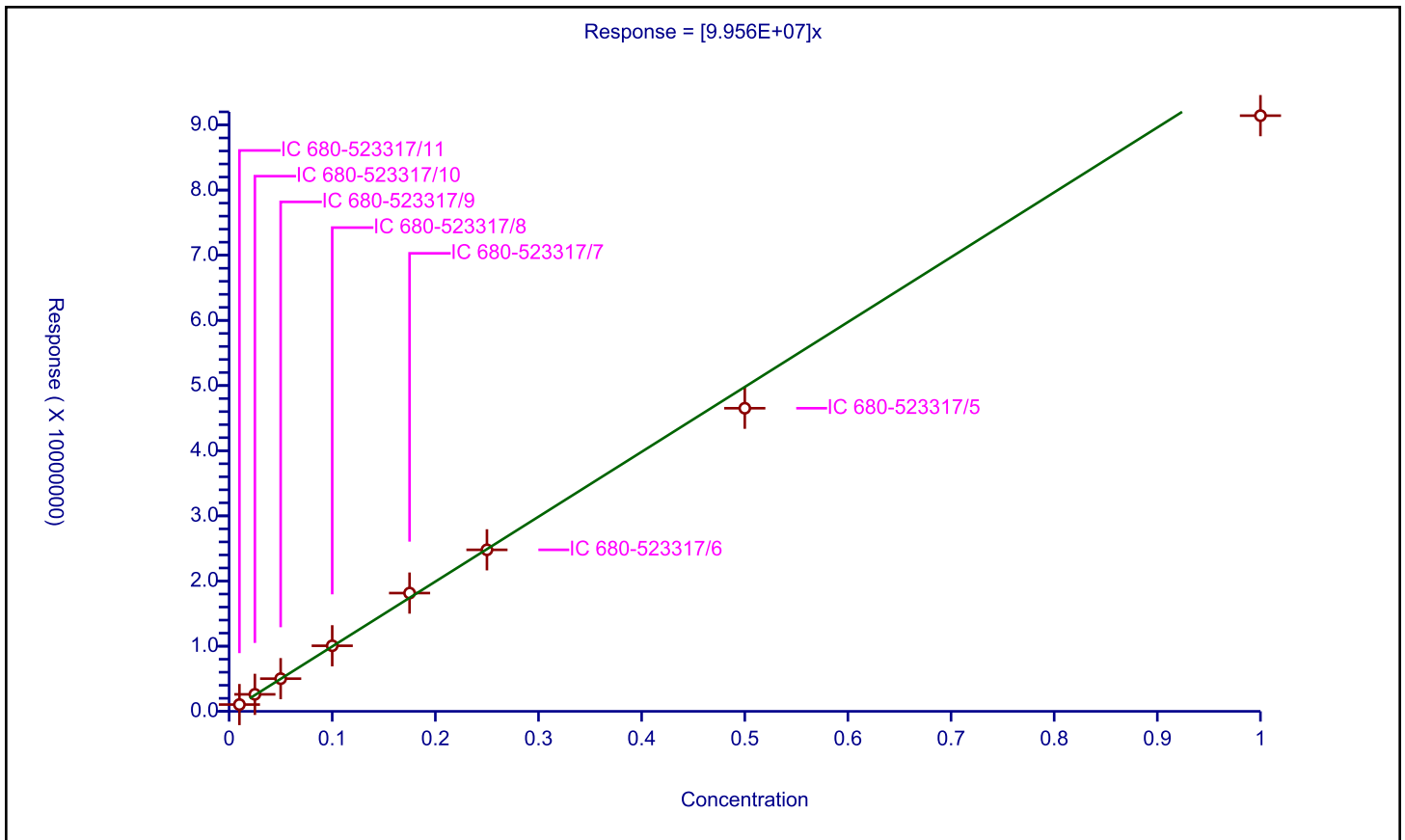
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	9.956E+07

Error Coefficients	
Standard Error:	3330000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	1040738.0			104073800.0	Y
2	IC 680-523317/10	0.025	2605390.0			104215600.0	Y
3	IC 680-523317/9	0.05	5013484.0			100269680.0	Y
4	IC 680-523317/8	0.1	10063608.0			100636080.0	Y
5	IC 680-523317/7	0.175	18148801.0			103707434.285714	Y
6	IC 680-523317/6	0.25	24787202.0			99148808.0	Y
7	IC 680-523317/5	0.5	46516413.0			93032826.0	Y
8	IC 680-523317/4	1.0	91420310.0			91420310.0	Y



Calibration

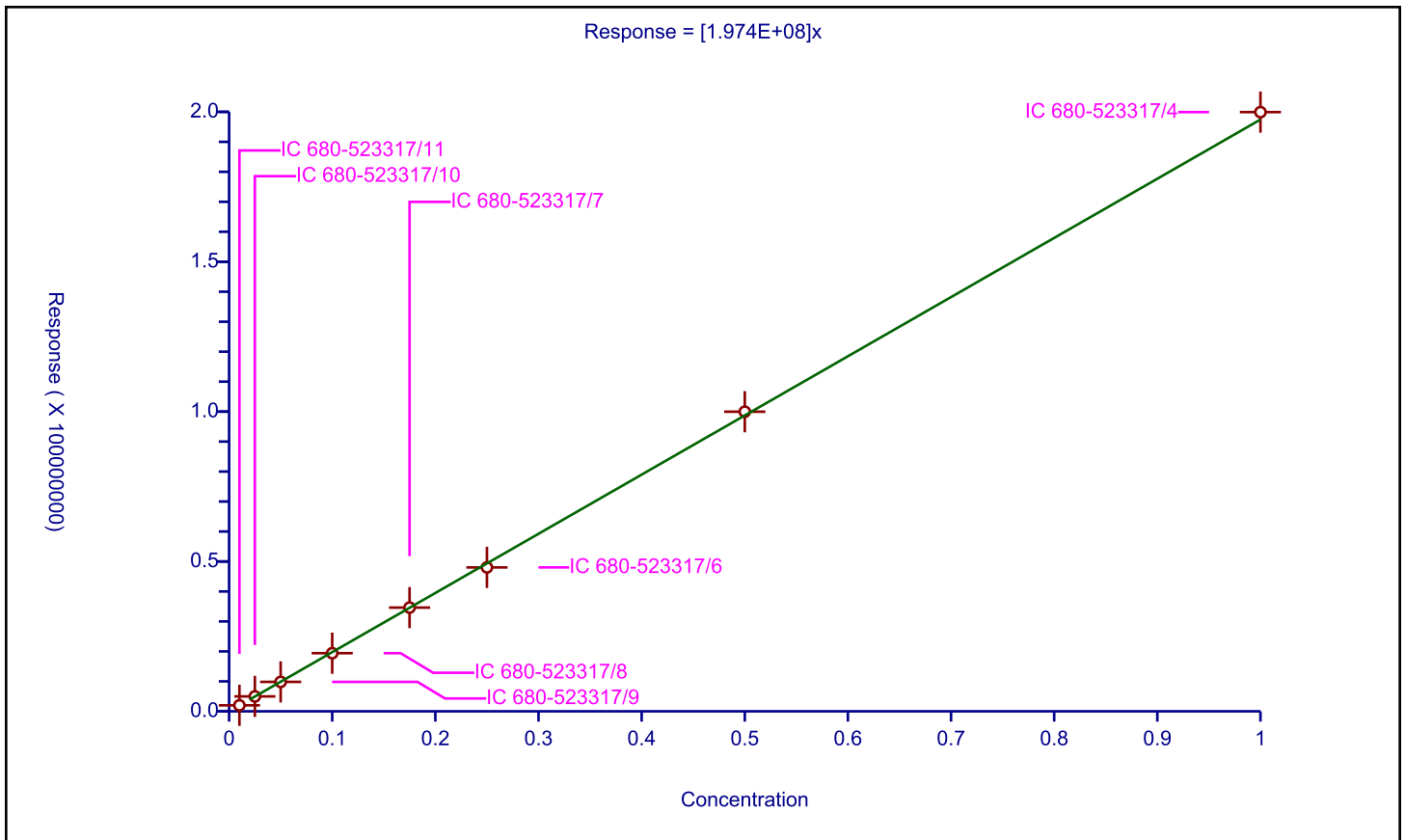
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.974E+08

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	2000718.0			200071800.0	Y
2	IC 680-523317/10	0.025	4981736.0			199269440.0	Y
3	IC 680-523317/9	0.05	9824392.0			196487840.0	Y
4	IC 680-523317/8	0.1	19396979.0			193969790.0	Y
5	IC 680-523317/7	0.175	34610542.0			197774525.714286	Y
6	IC 680-523317/6	0.25	48018827.0			192075308.0	Y
7	IC 680-523317/5	0.5	99966364.0			199932728.0	Y
8	IC 680-523317/4	1.0	199916295.0			199916295.0	Y



Calibration

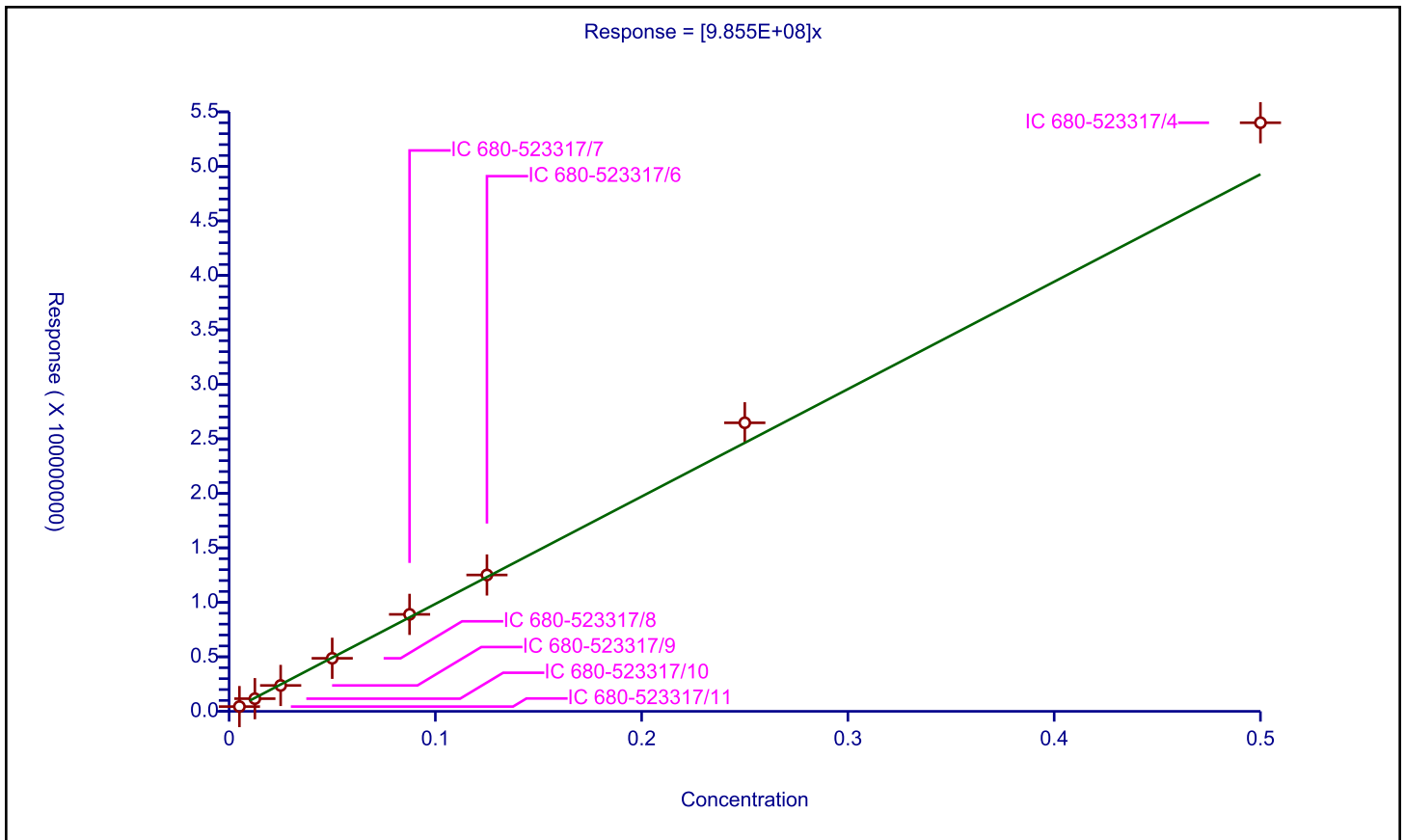
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	9.855E+08

Error Coefficients	
Standard Error:	19200000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.005	4372331.0			874466200.0	Y
2	IC 680-523317/10	0.0125	11616649.0			929331920.0	Y
3	IC 680-523317/9	0.025	23742571.0			949702840.0	Y
4	IC 680-523317/8	0.05	48666881.0			973337620.0	Y
5	IC 680-523317/7	0.0875	88963078.0			1016720891.42857	Y
6	IC 680-523317/6	0.125	125123739.0			1000989912.0	Y
7	IC 680-523317/5	0.25	264745935.0			1058983740.0	Y
8	IC 680-523317/4	0.5	540043675.0			1080087350.0	Y



Calibration

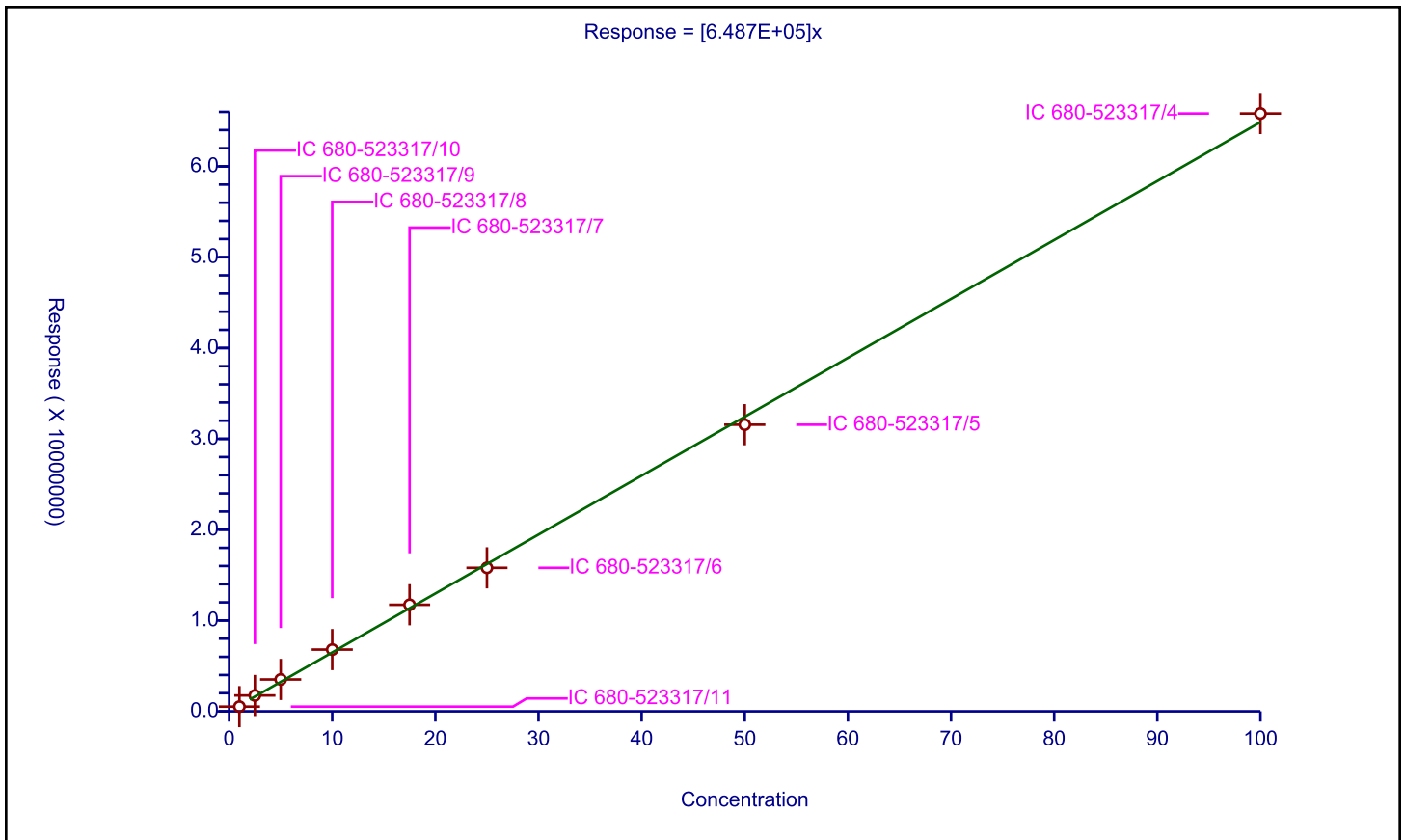
/ MCPP

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

Curve Coefficients	
Intercept:	0
Slope:	6.487E+05

Error Coefficients	
Standard Error:	561000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	1.0	517455.0			517455.0	Y
2	IC 680-523317/10	2.5	1745483.0			698193.2	Y
3	IC 680-523317/9	5.0	3508507.0			701701.4	Y
4	IC 680-523317/8	10.0	6799750.0			679975.0	Y
5	IC 680-523317/7	17.5	11735070.0			670575.428571	Y
6	IC 680-523317/6	25.0	15798581.0			631943.24	Y
7	IC 680-523317/5	50.0	31559204.0			631184.08	Y
8	IC 680-523317/4	100.0	65821733.0			658217.33	Y



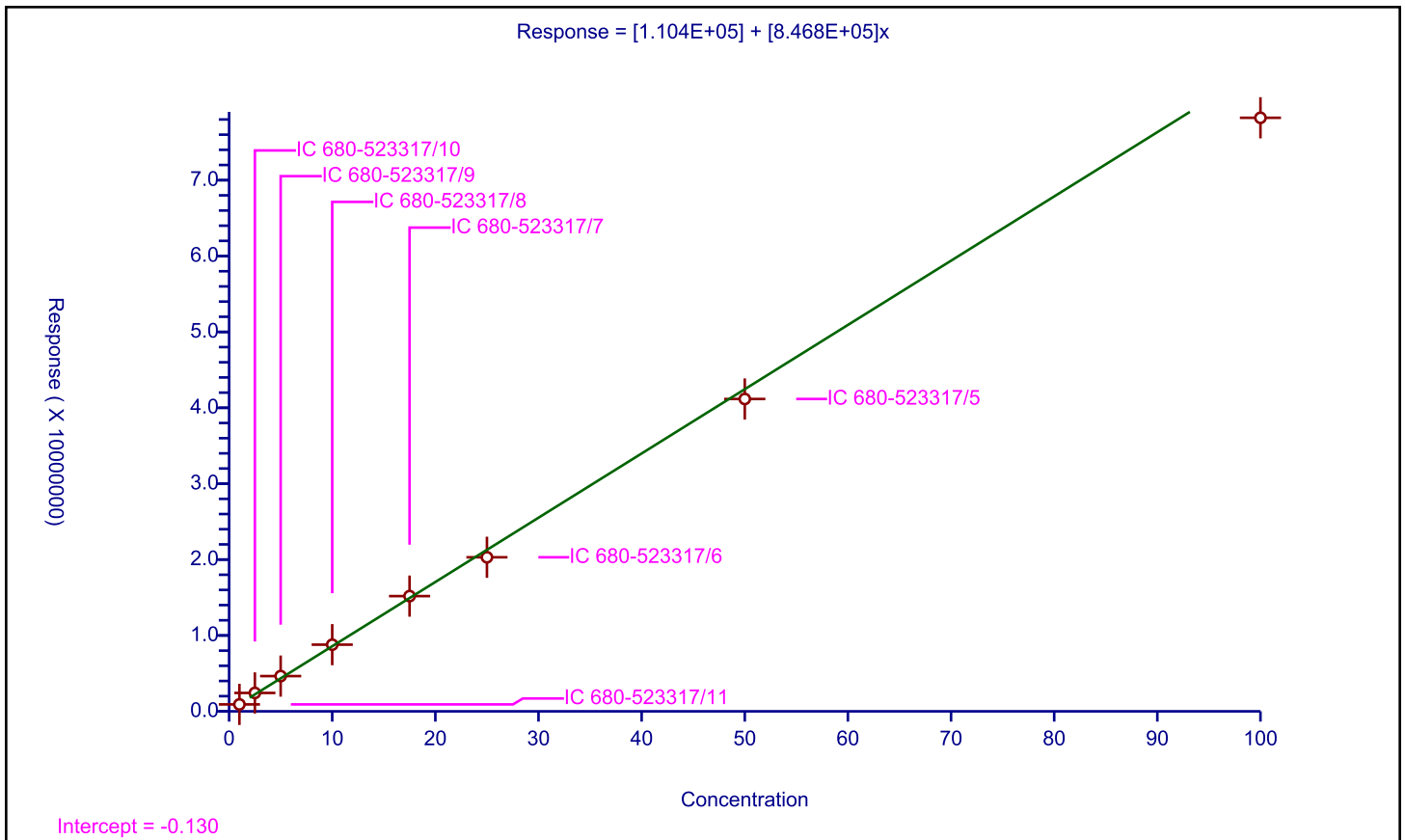
Calibration

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.104E+05
Slope:	8.468E+05

Error Coefficients	
Standard Error:	2770000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	1.0	913431.0			913431.0	Y
2	IC 680-523317/10	2.5	2425365.0			970146.0	Y
3	IC 680-523317/9	5.0	4645587.0			929117.4	Y
4	IC 680-523317/8	10.0	8784914.0			878491.4	Y
5	IC 680-523317/7	17.5	15184702.0			867697.257143	Y
6	IC 680-523317/6	25.0	20303334.0			812133.36	Y
7	IC 680-523317/5	50.0	41163701.0			823274.02	Y
8	IC 680-523317/4	100.0	78220442.0			782204.42	Y



Calibration

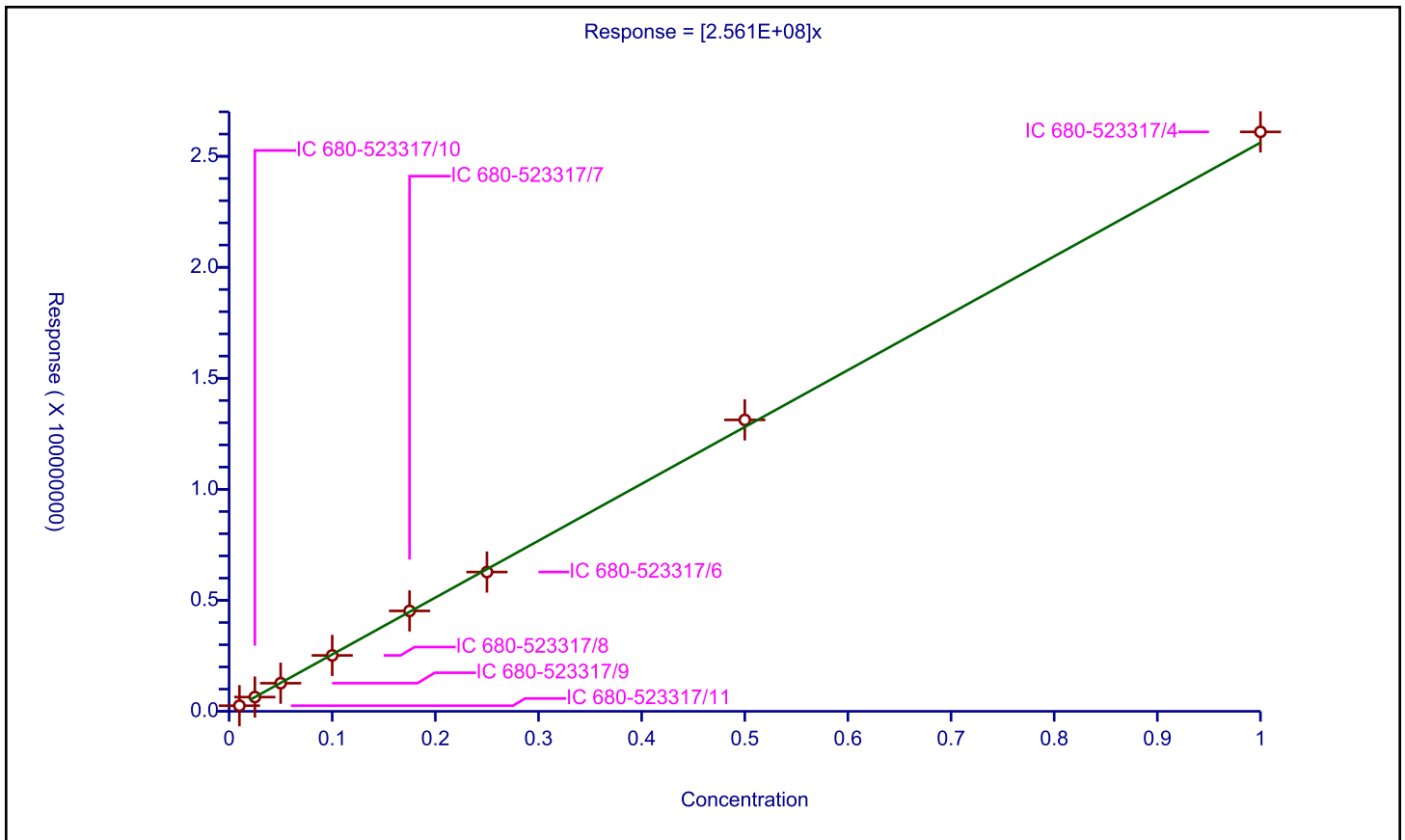
/ Dichlorprop

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

Curve Coefficients	
Intercept:	0
Slope:	2.561E+08

Error Coefficients	
Standard Error:	2260000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	2539480.0			253948000.0	Y
2	IC 680-523317/10	0.025	6423668.0			256946720.0	Y
3	IC 680-523317/9	0.05	12671217.0			253424340.0	Y
4	IC 680-523317/8	0.1	25183834.0			251838340.0	Y
5	IC 680-523317/7	0.175	45229626.0			258455005.714286	Y
6	IC 680-523317/6	0.25	62746255.0			250985020.0	Y
7	IC 680-523317/5	0.5	131268795.0			262537590.0	Y
8	IC 680-523317/4	1.0	260988077.0			260988077.0	Y



Calibration

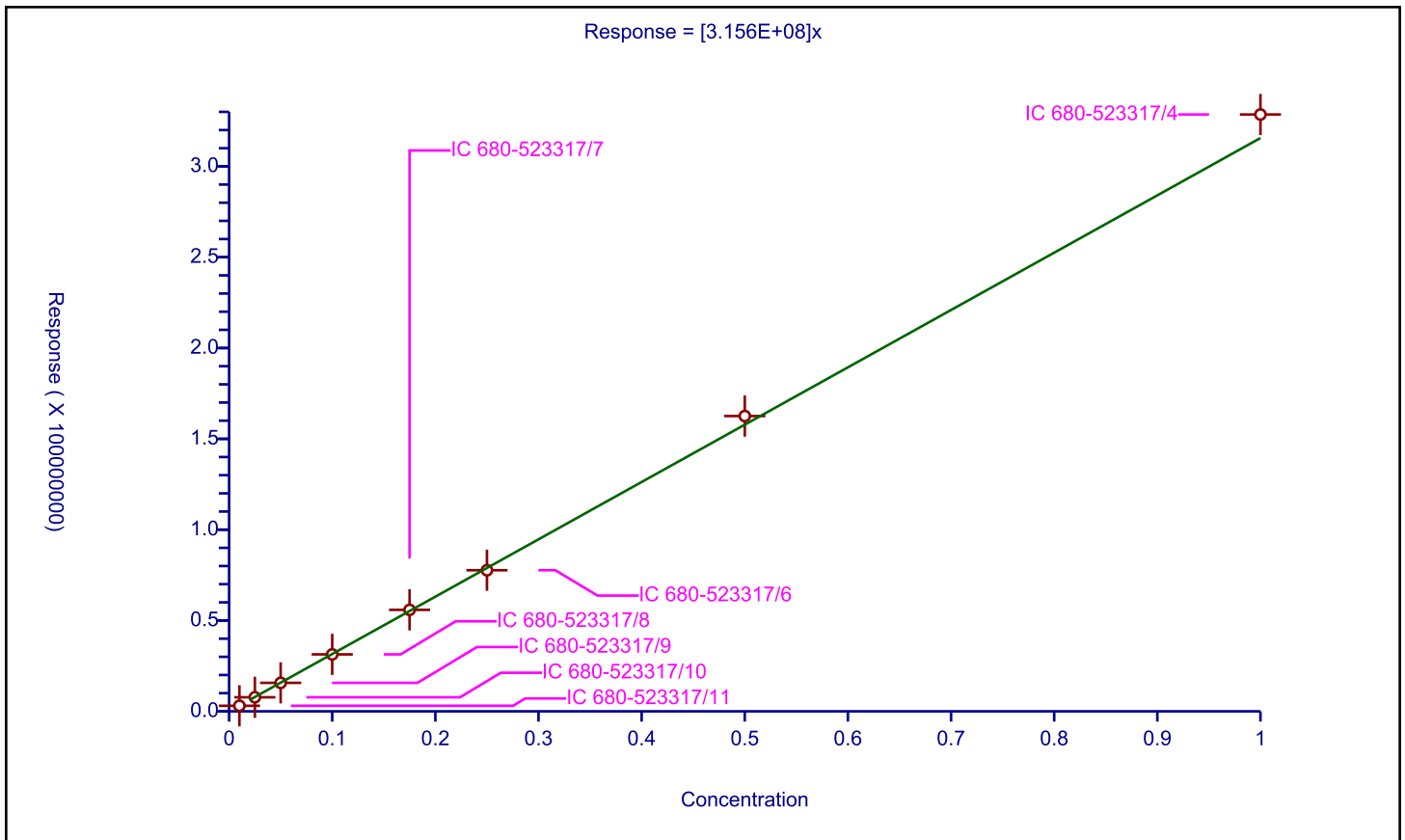
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	3.156E+08

Error Coefficients	
Standard Error:	5240000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	3047545.0			304754500.0	Y
2	IC 680-523317/10	0.025	7737754.0			309510160.0	Y
3	IC 680-523317/9	0.05	15677896.0			313557920.0	Y
4	IC 680-523317/8	0.1	31351468.0			313514680.0	Y
5	IC 680-523317/7	0.175	55858354.0			319190594.285714	Y
6	IC 680-523317/6	0.25	77679142.0			310716568.0	Y
7	IC 680-523317/5	0.5	162558325.0			325116650.0	Y
8	IC 680-523317/4	1.0	328562078.0			328562078.0	Y



Calibration

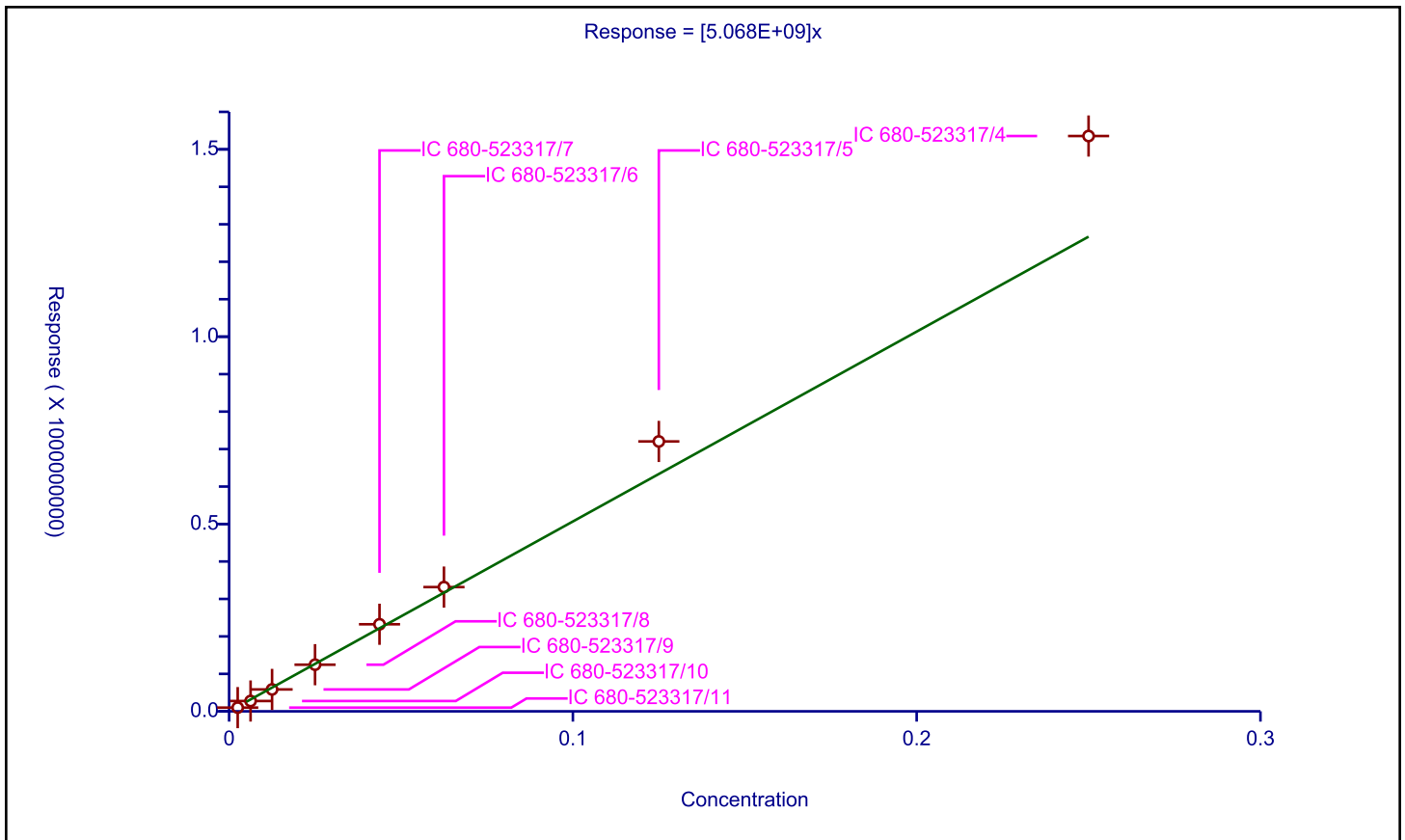
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	5.068E+09

Error Coefficients	
Standard Error:	107000000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	9895451.0			3958180400.0	Y
2	IC 680-523317/10	0.00625	27542680.0			4406828800.0	Y
3	IC 680-523317/9	0.0125	58438516.0			4675081280.0	Y
4	IC 680-523317/8	0.025	124451497.0			4978059880.0	Y
5	IC 680-523317/7	0.04375	232407815.0			5312178628.57143	Y
6	IC 680-523317/6	0.0625	331633513.0			5306136208.0	Y
7	IC 680-523317/5	0.125	720360768.0			5762886144.0	Y
8	IC 680-523317/4	0.25	1535573734.0			6142294936.0	Y



Calibration

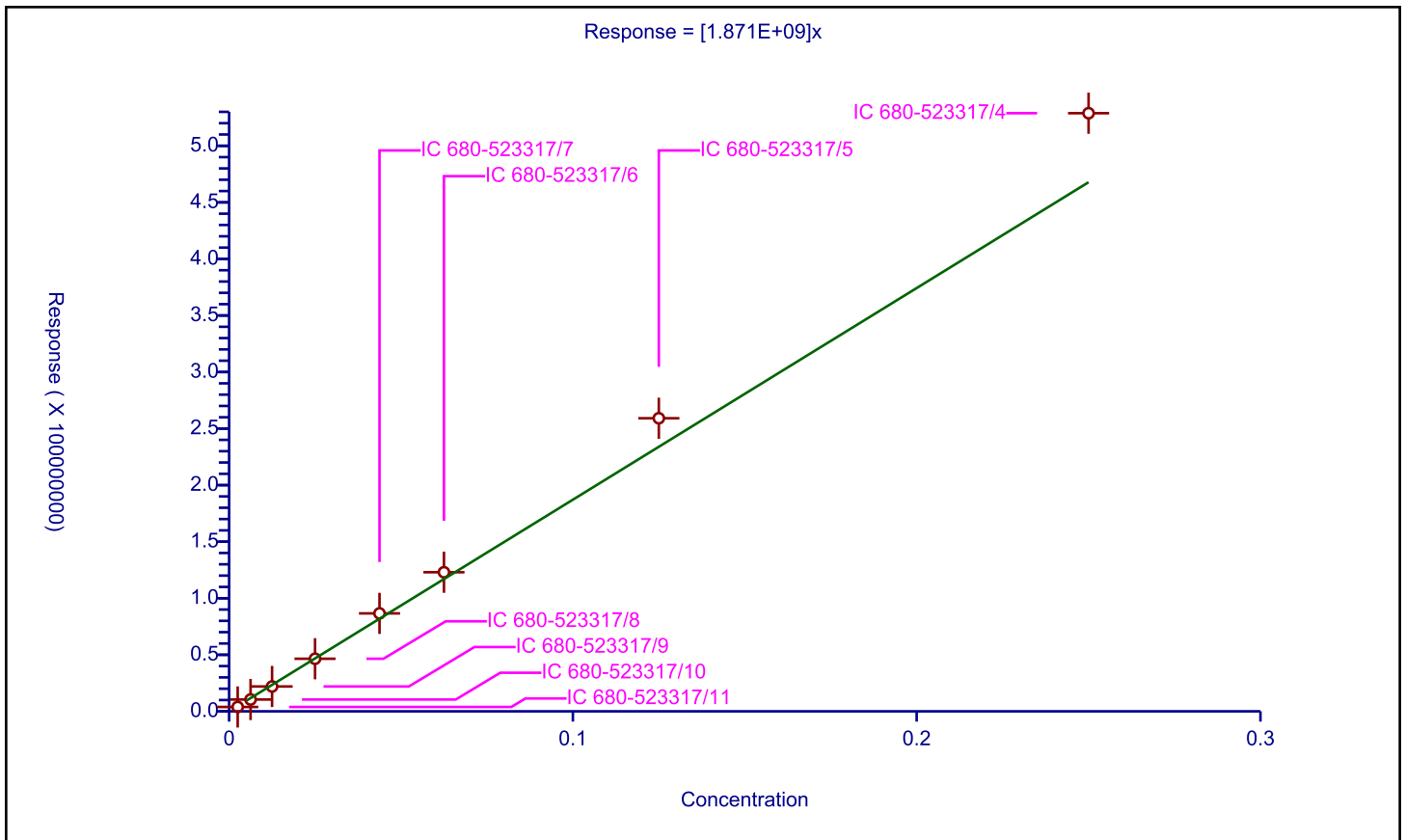
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	1.871E+09

Error Coefficients	
Standard Error:	25100000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	3859632.0			1543852800.0	Y
2	IC 680-523317/10	0.00625	10459084.0			1673453440.0	Y
3	IC 680-523317/9	0.0125	21972097.0			1757767760.0	Y
4	IC 680-523317/8	0.025	46478268.0			1859130720.0	Y
5	IC 680-523317/7	0.04375	86592112.0			1979248274.28571	Y
6	IC 680-523317/6	0.0625	122984337.0			1967749392.0	Y
7	IC 680-523317/5	0.125	259138392.0			2073107136.0	Y
8	IC 680-523317/4	0.25	528834758.0			2115339032.0	Y



Calibration

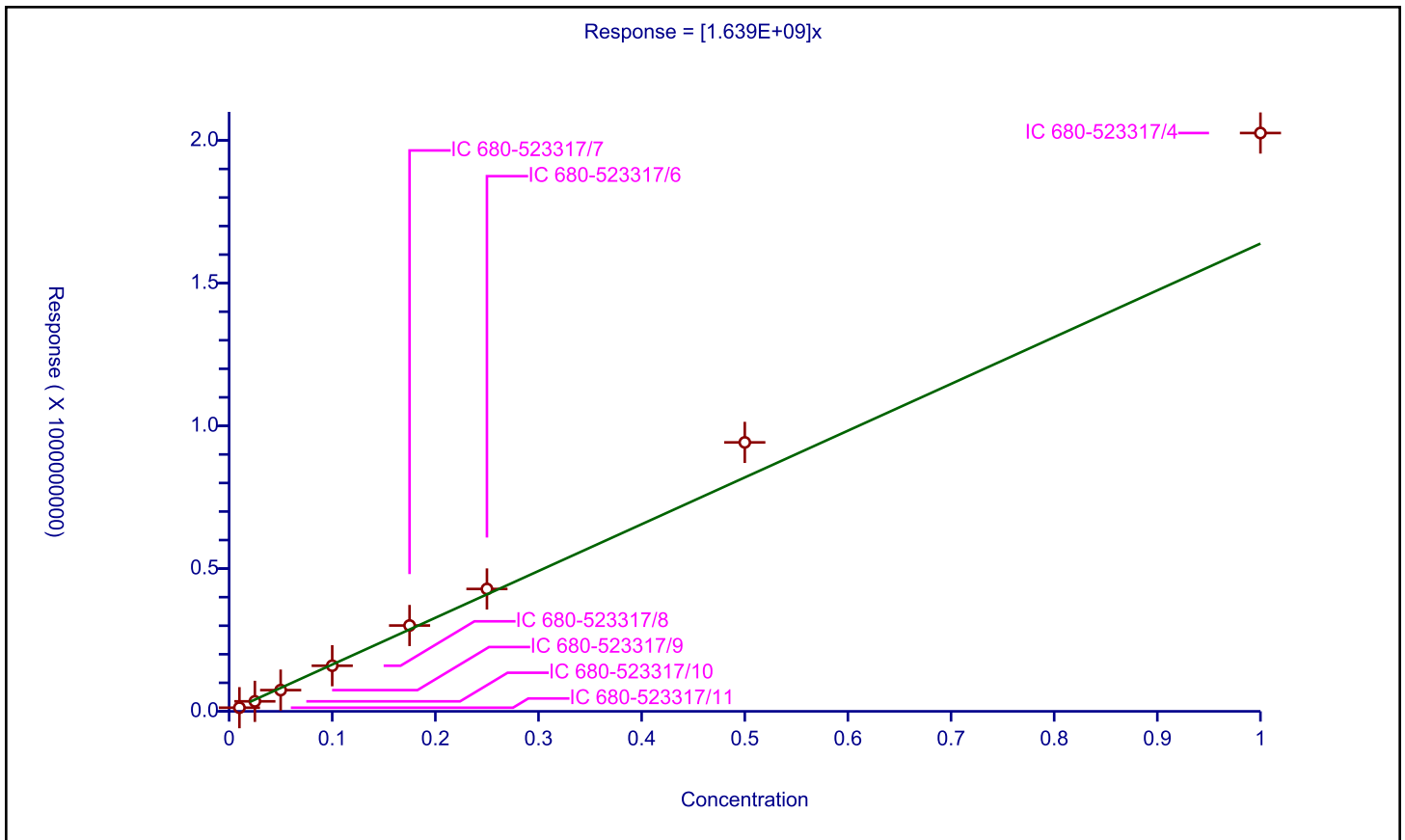
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	1.639E+09

Error Coefficients	
Standard Error:	154000000
Relative Standard Error:	15.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	12786212.0			1278621200.0	Y
2	IC 680-523317/10	0.025	35018105.0			1400724200.0	Y
3	IC 680-523317/9	0.05	74407541.0			1488150820.0	Y
4	IC 680-523317/8	0.1	159803441.0			1598034410.0	Y
5	IC 680-523317/7	0.175	300714561.0			1718368920.0	Y
6	IC 680-523317/6	0.25	428728783.0			1714915132.0	Y
7	IC 680-523317/5	0.5	942129901.0			1884259802.0	Y
8	IC 680-523317/4	1.0	2025978443.0			2025978443.0	Y



Calibration

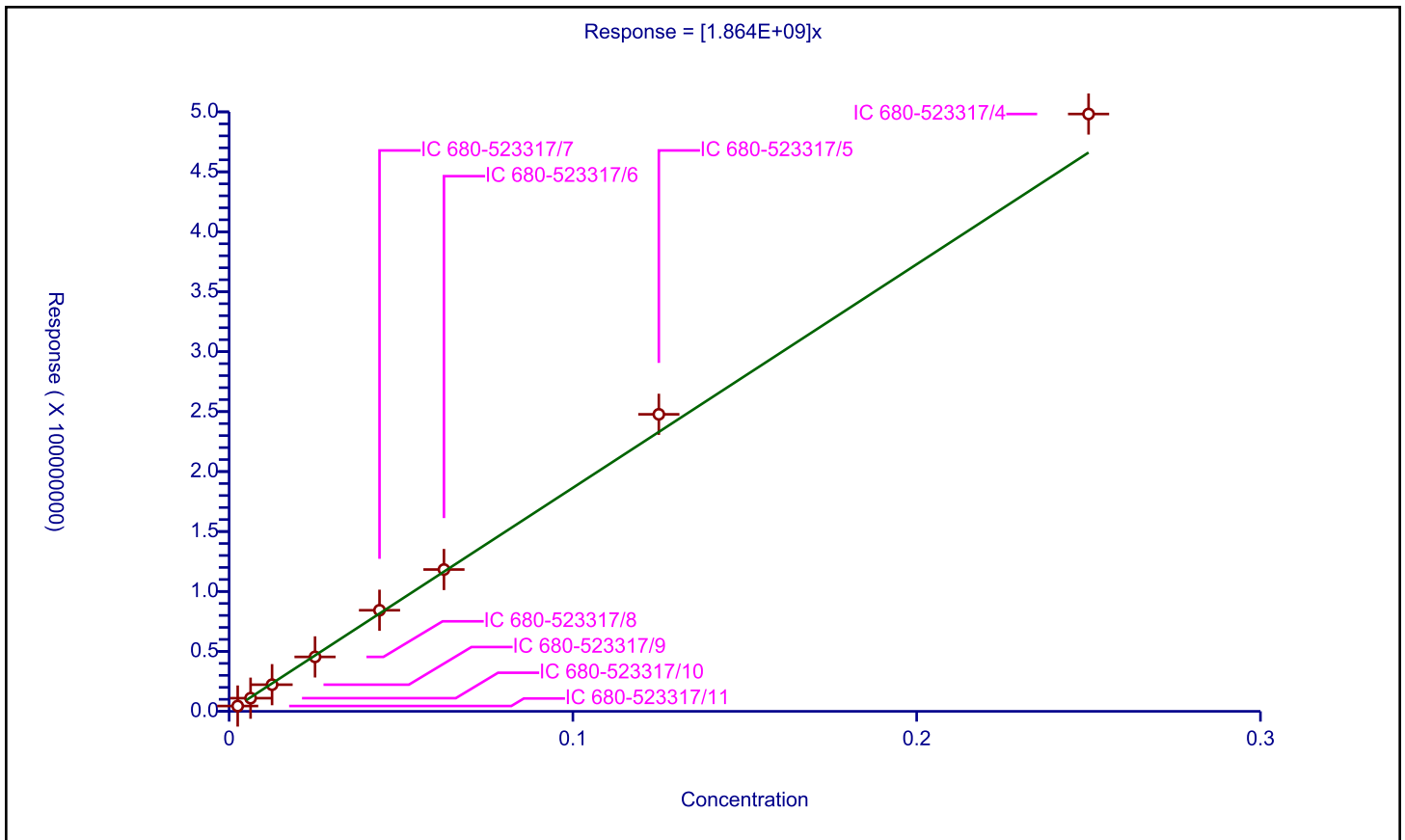
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	1.864E+09

Error Coefficients	
Standard Error:	13400000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	4426368.0			1770547200.0	Y
2	IC 680-523317/10	0.00625	10974501.0			1755920160.0	Y
3	IC 680-523317/9	0.0125	22227236.0			1778178880.0	Y
4	IC 680-523317/8	0.025	45407307.0			1816292280.0	Y
5	IC 680-523317/7	0.04375	84308974.0			1927062262.85714	Y
6	IC 680-523317/6	0.0625	118284366.0			1892549856.0	Y
7	IC 680-523317/5	0.125	247745545.0			1981964360.0	Y
8	IC 680-523317/4	0.25	498225713.0			1992902852.0	Y



Calibration

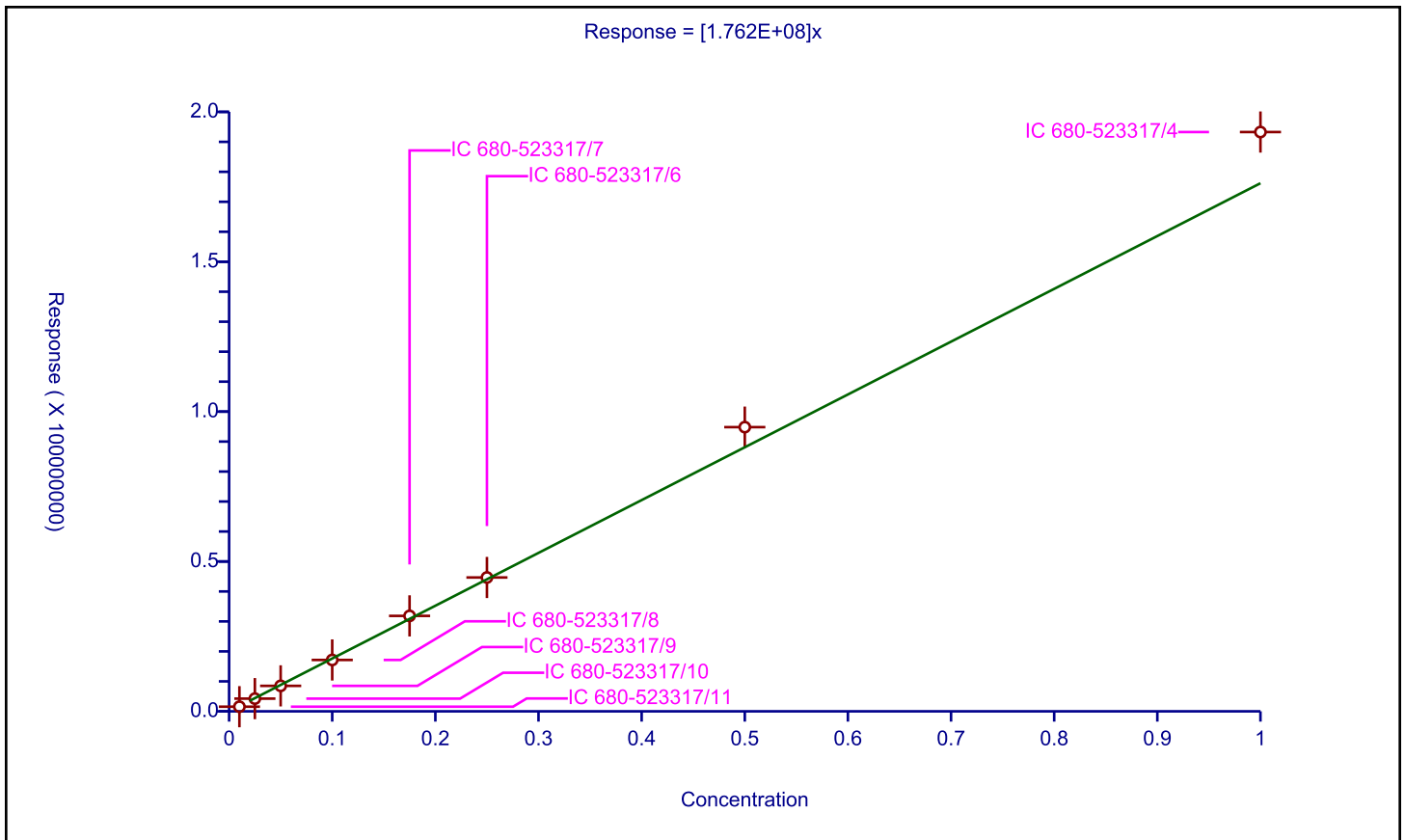
/ 2,4-DB

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

Curve Coefficients	
Intercept:	0
Slope:	1.762E+08

Error Coefficients	
Standard Error:	6950000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	1551068.0			155106800.0	Y
2	IC 680-523317/10	0.025	4239618.0			169584720.0	Y
3	IC 680-523317/9	0.05	8499475.0			169989500.0	Y
4	IC 680-523317/8	0.1	17140092.0			171400920.0	Y
5	IC 680-523317/7	0.175	31842206.0			181955462.857143	Y
6	IC 680-523317/6	0.25	44656333.0			178625332.0	Y
7	IC 680-523317/5	0.5	94816741.0			189633482.0	Y
8	IC 680-523317/4	1.0	193274970.0			193274970.0	Y



Calibration

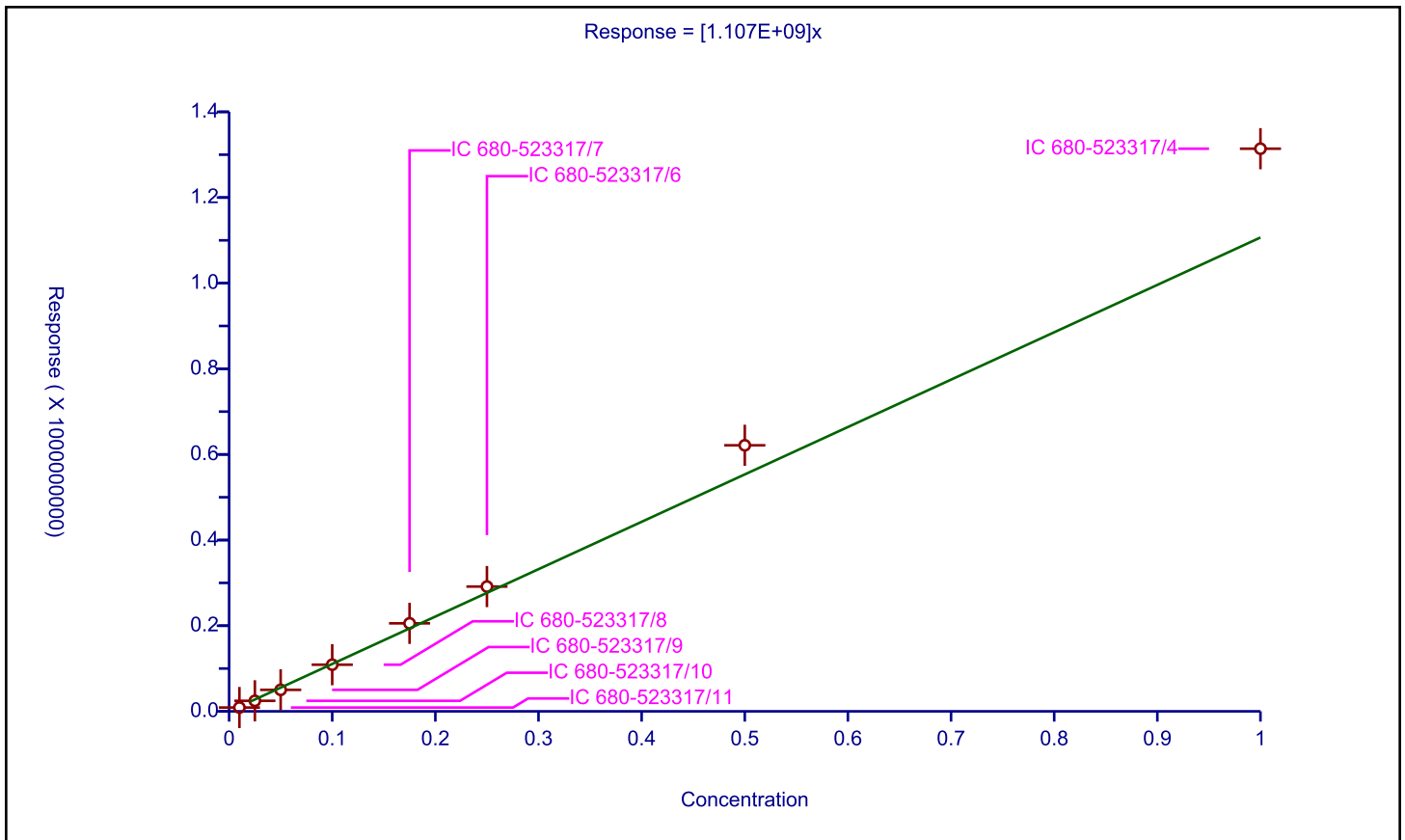
/ Dinoseb

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

Curve Coefficients	
Intercept:	0
Slope:	1.107E+09

Error Coefficients	
Standard Error:	82900000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	8830536.0			883053600.0	Y
2	IC 680-523317/10	0.025	24507489.0			980299560.0	Y
3	IC 680-523317/9	0.05	50192922.0			1003858440.0	Y
4	IC 680-523317/8	0.1	108913733.0			1089137330.0	Y
5	IC 680-523317/7	0.175	205511059.0			1174348908.57143	Y
6	IC 680-523317/6	0.25	291379006.0			1165516024.0	Y
7	IC 680-523317/5	0.5	621322249.0			1242644498.0	Y
8	IC 680-523317/4	1.0	1314025484.0			1314025484.0	Y



Calibration

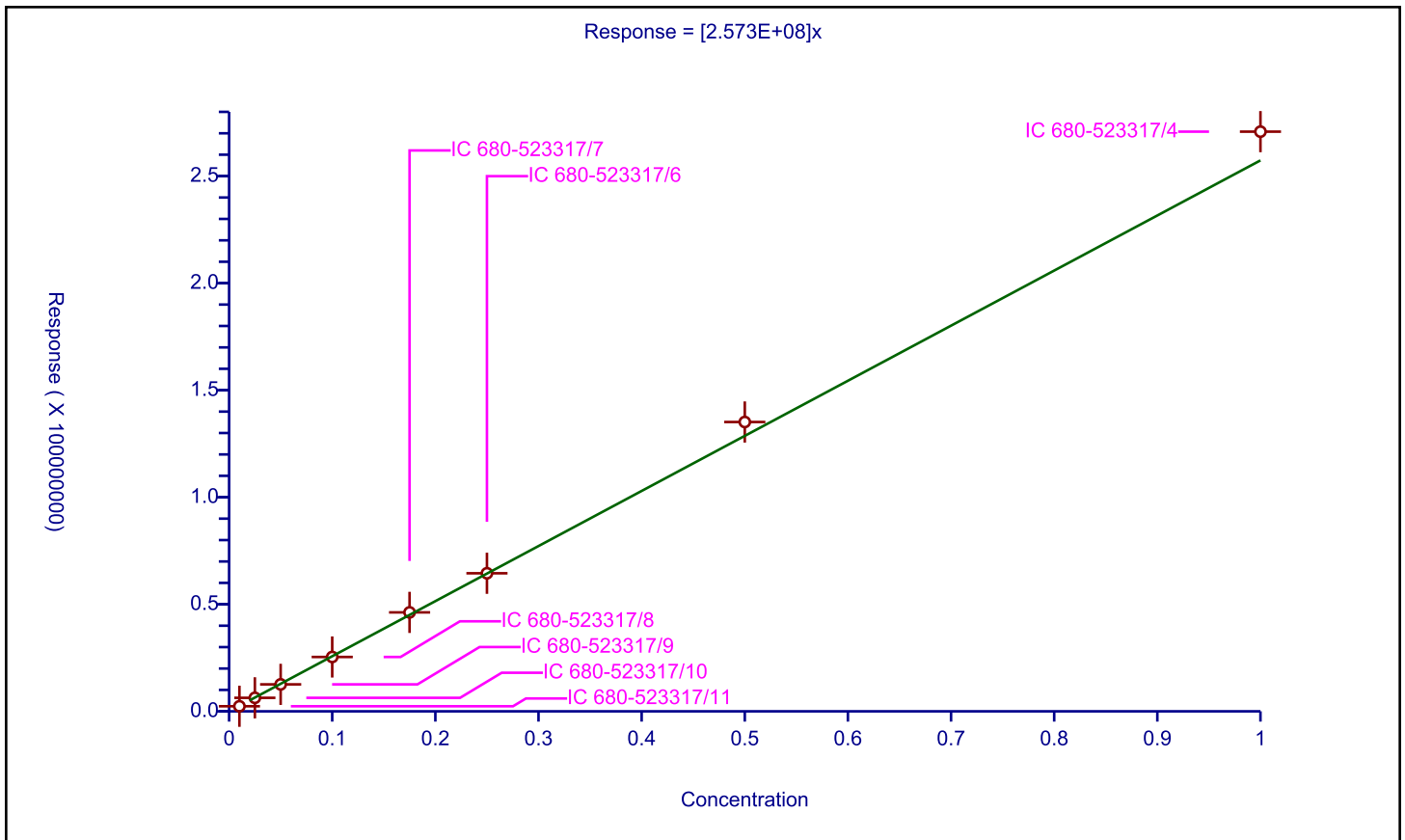
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	2.573E+08

Error Coefficients	
Standard Error:	5660000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	2372651.0			237265100.0	Y
2	IC 680-523317/10	0.025	6315524.0			252620960.0	Y
3	IC 680-523317/9	0.05	12591827.0			251836540.0	Y
4	IC 680-523317/8	0.1	25386610.0			253866100.0	Y
5	IC 680-523317/7	0.175	46220417.0			264116668.571429	Y
6	IC 680-523317/6	0.25	64493999.0			257975996.0	Y
7	IC 680-523317/5	0.5	135146452.0			270292904.0	Y
8	IC 680-523317/4	1.0	270773698.0			270773698.0	Y



Calibration

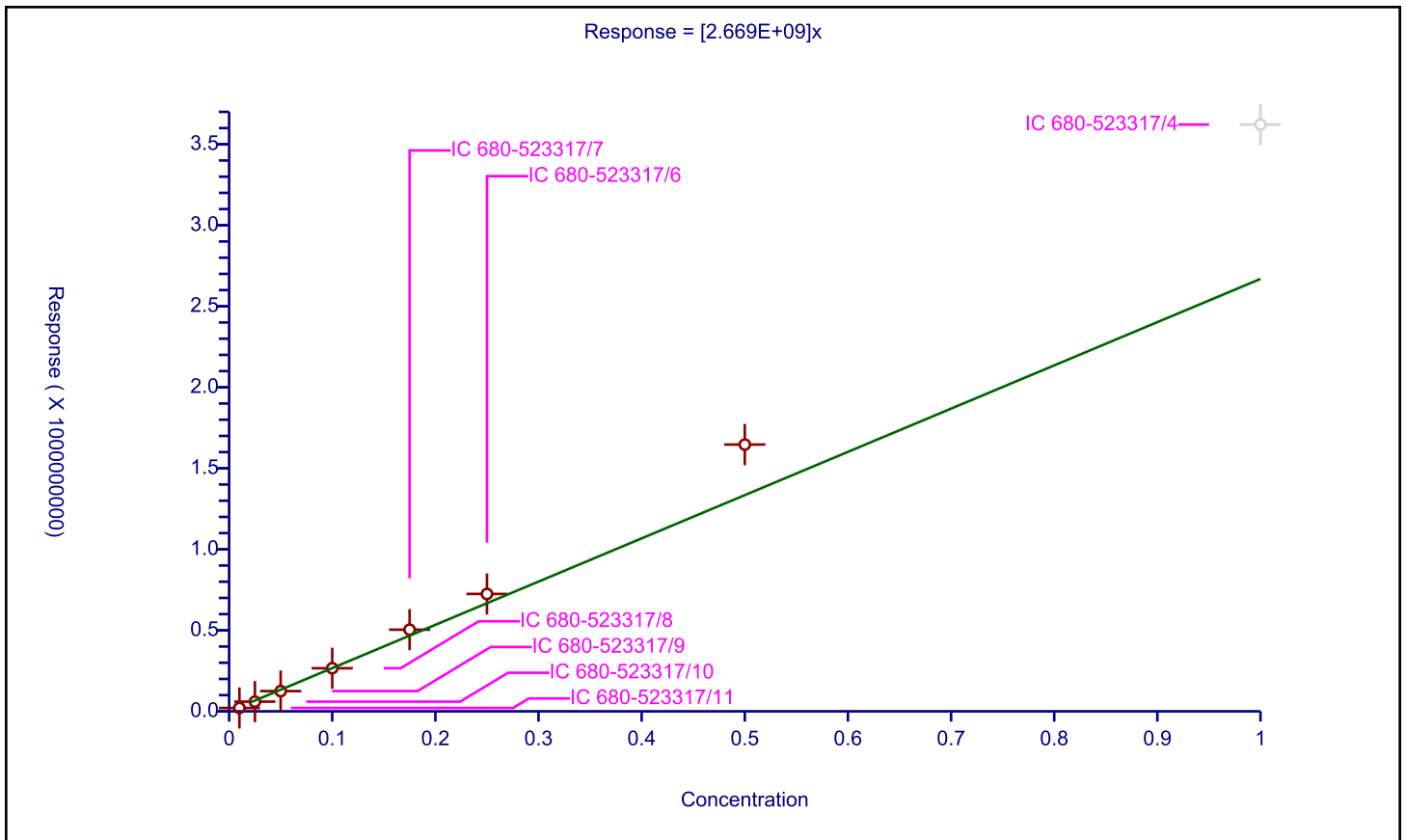
/ Picloram

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

Curve Coefficients	
Intercept:	0
Slope:	2.669E+09

Error Coefficients	
Standard Error:	130000000
Relative Standard Error:	15.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	20683643.0			2068364300.0	Y
2	IC 680-523317/10	0.025	59686028.0			2387441120.0	Y
3	IC 680-523317/9	0.05	124854571.0			2497091420.0	Y
4	IC 680-523317/8	0.1	265884971.0			2658849710.0	Y
5	IC 680-523317/7	0.175	504113503.0			2880648588.57143	Y
6	IC 680-523317/6	0.25	724514848.0			2898059392.0	Y
7	IC 680-523317/5	0.5	1646590154.0			3293180308.0	Y
8	IC 680-523317/4	1.0	3621817547.0			3621817547.0	N



Calibration

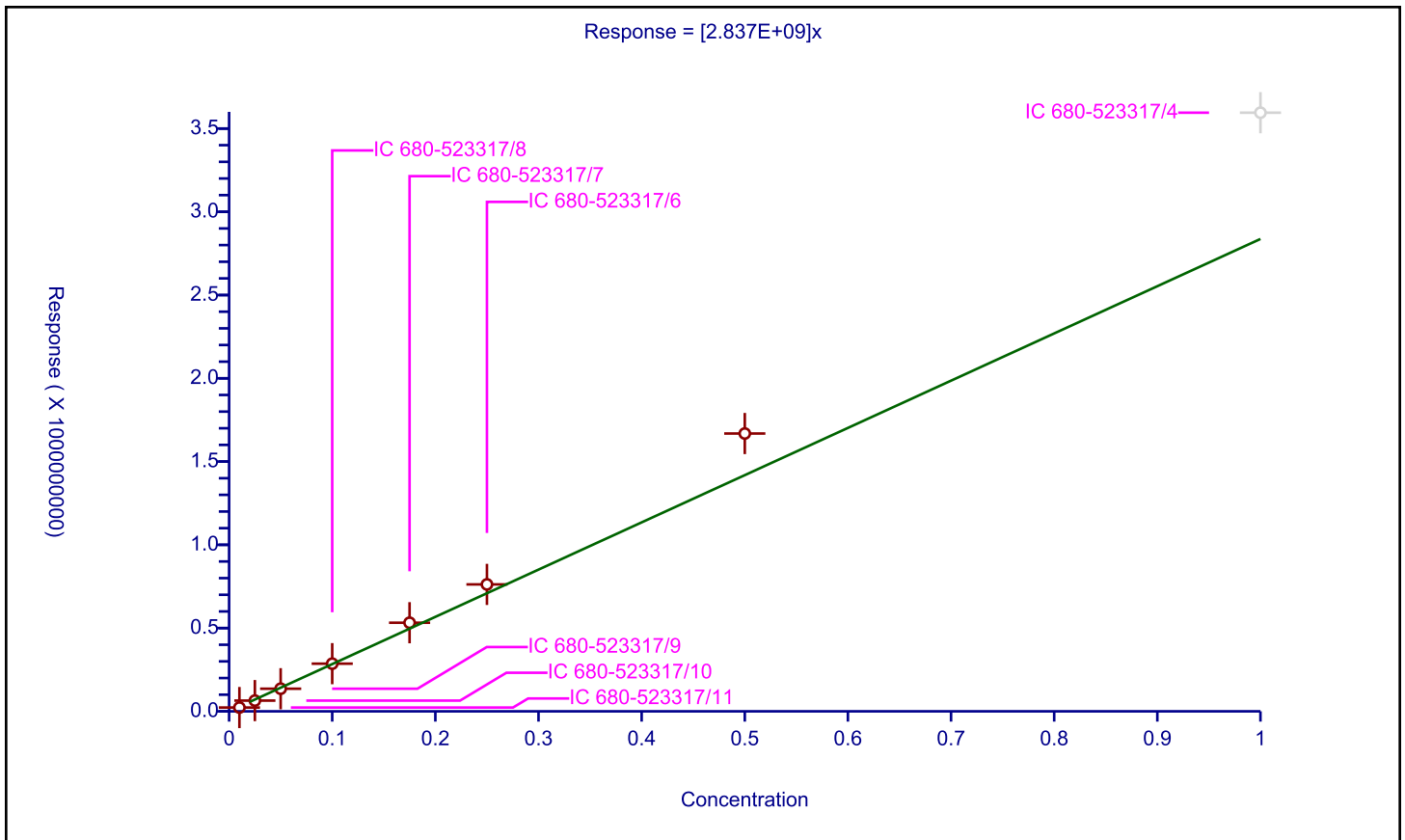
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	2.837E+09

Error Coefficients	
Standard Error:	105000000
Relative Standard Error:	12.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	22721047.0			2272104700.0	Y
2	IC 680-523317/10	0.025	64463537.0			2578541480.0	Y
3	IC 680-523317/9	0.05	135870891.0			2717417820.0	Y
4	IC 680-523317/8	0.1	286279694.0			2862796940.0	Y
5	IC 680-523317/7	0.175	532179764.0			3041027222.85714	Y
6	IC 680-523317/6	0.25	762299063.0			3049196252.0	Y
7	IC 680-523317/5	0.5	1668353746.0			3336707492.0	Y
8	IC 680-523317/4	1.0	3595185453.0			3595185453.0	N



Calibration

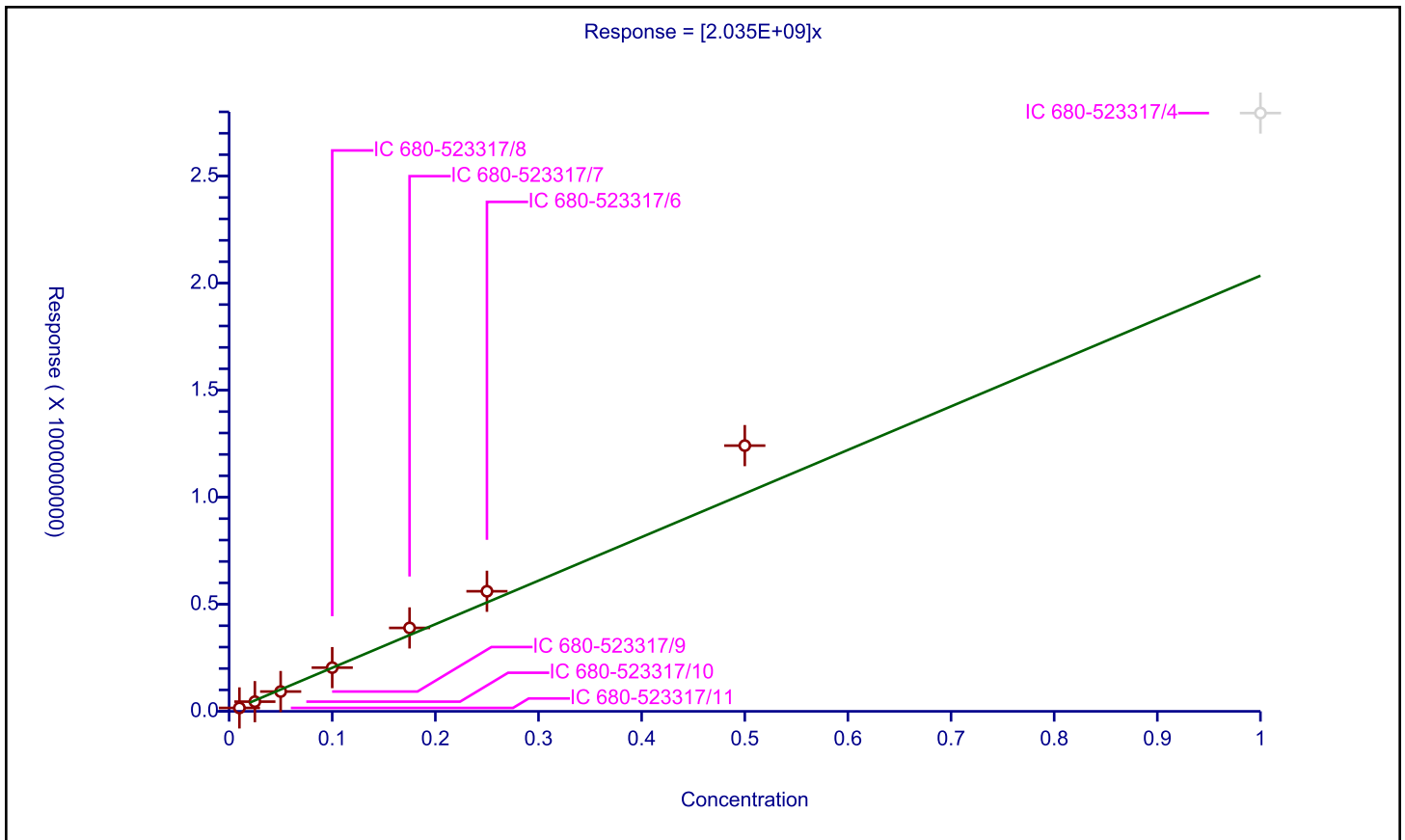
/ Acifluorfen

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

Curve Coefficients	
Intercept:	0
Slope:	2.035E+09

Error Coefficients	
Standard Error:	94900000
Relative Standard Error:	15.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	15904730.0			1590473000.0	Y
2	IC 680-523317/10	0.025	45279726.0			1811189040.0	Y
3	IC 680-523317/9	0.05	92428968.0			1848579360.0	Y
4	IC 680-523317/8	0.1	204134092.0			2041340920.0	Y
5	IC 680-523317/7	0.175	389652410.0			2226585200.0	Y
6	IC 680-523317/6	0.25	560772453.0			2243089812.0	Y
7	IC 680-523317/5	0.5	1241223393.0			2482446786.0	Y
8	IC 680-523317/4	1.0	2794380058.0			2794380058.0	N



FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.539	2.540	2.541	2.540	2.541	2.542	2.542	2.543	2.520 - 2.560	2.541
3,5-Dichlorobenzoic acid	6.042	6.041	6.041	6.040	6.040	6.041	6.041	6.043	6.030 - 6.050	6.041
4-Nitrophenol	6.429	6.427	6.428	6.426	6.426	6.425	6.425	6.426	6.416 - 6.436	6.427
Dicamba	6.834	6.832	6.833	6.833	6.833	6.834	6.835	6.836	6.823 - 6.843	6.834
MCPP	6.882	6.880	6.881	6.880	6.881	6.881	6.882	6.885	6.870 - 6.890	6.882
MCPA	7.081	7.078	7.078	7.078	7.080	7.080	7.081	7.084	7.068 - 7.088	7.080
Dichlorprop	7.224	7.223	7.223	7.223	7.223	7.224	7.224	7.225	7.213 - 7.233	7.224
2,4-D	7.445	7.442	7.443	7.443	7.443	7.444	7.443	7.444	7.433 - 7.453	7.443
Pentachlorophenol	7.638	7.637	7.637	7.637	7.638	7.639	7.640	7.642	7.627 - 7.647	7.639
Silvex (2,4,5-TP)	7.776	7.774	7.774	7.774	7.775	7.775	7.776	7.777	7.764 - 7.784	7.775
2,4,5-T	8.009	8.007	8.008	8.008	8.008	8.008	8.008	8.009	7.998 - 8.018	8.008
Chloramben	8.083	8.082	8.082	8.081	8.082	8.083	8.083	8.084	8.071 - 8.091	8.083
Dinoseb	8.174	8.173	8.173	8.173	8.175	8.175	8.175	8.178	8.163 - 8.183	8.175
2,4-DB	8.225	8.223	8.223	8.223	8.223	8.223	8.222	8.223	8.212 - 8.232	8.223
Bentazon	8.582	8.580	8.580	8.578	8.580	8.580	8.579	8.582	8.568 - 8.588	8.580
Tetrathalic acid, tetrachloro-, dimethyl ester	8.694	8.692	8.693	8.692	8.694	8.695	8.696	++++	8.682 - 8.702	8.694
Picloram	8.914	8.913	8.913	8.913	8.915	8.916	8.916	++++	8.903 - 8.923	8.914
Acifluorfen	++++	9.711	9.712	9.710	9.713	9.714	9.716	++++	9.700 - 9.720	9.713
2,4-Dichlorophenylacetic acid (Surr)	6.754	6.752	6.753	6.752	6.753	6.752	6.753	6.754	6.742 - 6.762	6.753

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	1449038400 1403858171	1387225960 1374824260	1365529440 1464443900	1342824440 1486390376	Ave				1409266868			3.7	20.0					
3,5-Dichlorobenzoic acid	1564045500 1634037589	1534581600 1611748044	1576220400 1702983078	1571427200 1744604922	Ave				1617456042			4.5	20.0					
4-Nitrophenol	398489800 290236126	351131920 281673680	307582400 286947204	2870191770 285656847	Ave				311092218			13.5	20.0					
Dicamba	3954836600 4563530343	4135342720 4513566224	4266504320 4792794940	4377177900 4873928800	Ave				4434710231			7.1	20.0					
MCPP	6429640 4019842	5565842 3805376	4830359 3749215	4280463 3695838	Lin1				3722367.66					0.9990			0.9900	
MCPA	12826943 8210618	11420632 7570014	9625033 7828119	8763587 7248075	Lin1				7765172.15					0.9970			0.9900	
Dichlorprop	1337492400 1178353943	1258487200 1161802596	1171341180 1239579716	1163046220 1282238794	Ave				1224042756			5.4	20.0					
2,4-D	1393308000 1467415566	1388604320 1445576004	1388380420 1552630308	1412866400 1629748617	Ave				1459816204			6.0	20.0					
Pentachlorophenol	1349686480 1799914380	1509634848 1792752230	1624408792 1888878840	1706810204 1819920500	Ave				1.6865 E+010			10.8	20.0					
Silvex (2,4,5-TP)	5497594400 7075208069	5929777120 6990439328	6276901760 7546401048	6623035200 7732990704	Ave				6709043454			11.6	20.0					
2,4,5-T	5505521200 6441295063	5436196800 6439470512	5723874720 7017644192	6008793160 7279162848	Ave				6231494812			11.0	20.0					
Chloramben	4390283700 5813570057	4802950040 5790055860	5074746740 6277009940	5342320510 5823384953	Ave				5414290225			11.6	20.0					
Dinoseb	2322861800 3570272063	2655788120 3607953828	2830473000 4025538318	3197209960 4034212367	Ave				3280538682			19.4	20.0					

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57185

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2							
2,4-DB	807286700 919306080	906544720 849803092	901861540 895005772	892295180 849802206	Ave				4.3			20.0			
Bentazon	683449200 757308909	704245240 746511312	712567800 805113282	722410710 824414003	Ave				6.6			20.0			
Tetraphthalic acid, tetrachloro-, dimethyl	7119457100 9674149440	8108743200 9665486292	8588337920 1015406654	9033626780 ++++ 4	Ave				11.8			20.0			
Picloram	6016589900 9223458754	6843544000 9462066008	7481396240 1080066806	8172096570 ++++ 4	Ave				20.0			20.0			
Acifluorfen	++++ 6548368451	4351338680 6876599772	4742346440 8200613658	5615195050 ++++ 4	Lin								0.9940		0.9900
2,4-Dichlorophenylacetic acid (Surr)	1214155400 1245150886	1228180280 1225927936	1221489360 1282365322	1215980060 1320744257	Ave				3.1			20.0			

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57185

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523317/11	SE090011.D
Level 2	IC 680-523317/10	SE090010.D
Level 3	IC 680-523317/9	SE090009.D
Level 4	IC 680-523317/8	SE090008.D
Level 5	IC 680-523317/7	SE090007.D
Level 6	IC 680-523317/6	SE090006.D
Level 7	IC 680-523317/5	SE090005.D
Level 8	IC 680-523317/4	SE090004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)							
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Dalapon	Ave	14490384 343706065	34680649 732221950	68276472 1486390376	134282444	245675180	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0175		
3,5-Dichlorobenzoic acid	Ave	15640455 402937011	38364540 851491539	78811020 1744604922	157142720	285956578	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
4-Nitrophenol	Ave	3984898 70418420	8778298 143473602	15379120 285656847	28701977	50791322	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
Dicamba	Ave	19774183 564195778	51691784 1198198735	106662608 2436964400	218858895	399308905	0.00500 0.125	0.0125 0.250	0.0250 0.500	0.0500	0.00500 0.125	0.0125 0.250	0.0250 0.500	0.0500	0.0875		
MCP	Lin1	6429640 95134406	13914604 187460762	24151794 369583811	42804626	70347241	1.00 25.0	2.50 50.0	5.00 100	10.0	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5		
MCPA	Lin1	12826943 189250340	28551579 391405967	48125167 724807549	87635867	143685808	1.00 25.0	2.50 50.0	5.00 100	10.0	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5		
Dichlorprop	Ave	13374924 290450649	31462180 619789858	58567059 1282238794	116304622	206211940	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
2,4-D	Ave	13933080 361394001	34715108 776315154	69419021 1629748617	141286640	256797724	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
Pentachlorophenol	Ave	33742162 1120470146	94352178 2361098559	203051099 4549801262	426702551	787462544	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438		
Silvex (2,4,5-TP)	Ave	13743986 436902458	37061107 943300131	78461272 1933247676	165575880	309540353	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438		
2,4,5-T	Ave	402466907 43902837	33976230 120073751	71548434 253737337	150219829	281806659	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438		
Chloramben	Ave	1447513965 232288618	3138504970 66394703	5823384953 141523650	534232051	1017374760	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
Dinoseb	Ave	901988457 8072867	2012769159 22663618	4034212367 45093077	319720996	624797611	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
2,4-DB	Ave	212450773 6834492	447502886 17606131	849802206 35628390	89229518	160878564	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		
Bentazon	Ave	186627828 402556641	402556641 824414003	824414003	72241071	132529059	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175		

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523317

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2018 17:59 Calibration End Date: 05/09/2018 20:17 Calibration ID: 57185

ANALYTE	CURVE TYPE	RESPONSE						CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	71194571 2416371573	202718580 5077033272	429416896 +++++	903362678	1692976152	0.0100 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175	
Picloram	Ave	60165899 2365516502	171088600 5400334032	374069812 +++++	817209657	1614105282	0.0100 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175	
Acifluorfen	Lin	+++++ 1719149943	108783467 4100306829	237117322 +++++	561519505	1145964479	+++++ 0.250	0.0250 0.500	0.0500 +++++	0.100	0.175	
2,4-Dichlorophenylacetic acid (Surr)	Ave	12141554 306481984	30704507 641182661	61074468 1320744257	121598006	217901405	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175	

Curve Type Legend:
 Ave = Average
 Lin = Linear
 Lin1 = Linear 1/conc

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 09-May-2018 17:59:52 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:06 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 18:51:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.492	2.491	0.001	472686723	1.00	0.9892	a
2	2.543	2.540	0.003	1486390376	1.00	1.05	a
						RPD = 6.41	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	93110884	NC	NC	a
2	5.030	5.028	0.002	499305693	NC	NC	a
						RPD = 4.02	
3 2,4,6-Trichlorophenol							
1	5.712	5.710	0.002	1340729096	NC	NC	a
2	5.704	5.700	0.004	4940529110	NC	NC	a
						RPD = 10.44	
4 3,5-Dichlorobenzoic acid							
1	6.048	6.047	0.001	319887544	1.00	1.03	a
2	6.043	6.040	0.003	1744604922	1.00	1.08	a
						RPD = 4.17	
5 4-Nitrophenol							
1	6.173	6.173	0.000	91420310	1.00	0.9182	a
2	6.426	6.426	0.000	285656847	1.00	0.9182	a
						RPD = 0.00	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	199916295	1.00	1.01	a
2	6.754	6.752	0.002	1320744257	1.00	1.06	a
						RPD = 4.72	
7 Dicamba							
1	6.643	6.642	0.001	540043675	0.5000	0.5480	a
2	6.836	6.833	0.003	2436964400	0.5000	0.5495	a
						RPD = 0.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							a
1	6.794	6.789	0.005	65821733	100.0	101.5	a
2	6.885	6.880	0.005	369583811	100.0	99.0	a
							RPD = 2.50
9 MCPA							a
1	6.922	6.916	0.006	78220442	100.0	92.2	a
2	7.084	7.078	0.006	724807549	100.0	96.7	a
							RPD = 4.75
10 Dichlorprop							a
1	7.103	7.102	0.001	260988077	1.00	1.02	a
2	7.225	7.223	0.002	1282238794	1.00	1.05	a
							RPD = 2.77
11 2,4-D							a
1	7.246	7.246	0.000	328562078	1.00	1.04	a
2	7.444	7.443	0.001	1629748617	1.00	1.12	a
							RPD = 6.99
12 Pentachlorophenol							a
1	7.597	7.594	0.003	1535573734	0.2500	0.3030	a
2	7.642	7.637	0.005	4549801262	0.2500	0.2698	a
							RPD = 11.60
13 Silvex (2,4,5-TP)							a
1	7.693	7.692	0.001	528834758	0.2500	0.2826	a
2	7.777	7.774	0.003	1933247676	0.2500	0.2882	a
							RPD = 1.94
14 Chloramben							a
1	7.772	7.770	0.002	2025978443	1.00	1.24	a
2	8.084	8.081	0.003	5823384953	1.00	1.08	a
							RPD = 13.91
15 2,4,5-T							a
1	7.848	7.848	0.000	498225713	0.2500	0.2672	a
2	8.009	8.008	0.001	1819790712	0.2500	0.2920	a
							RPD = 8.87
16 2,4-DB							a
1	8.090	8.091	-0.001	193274970	1.00	1.10	a
2	8.223	8.222	0.001	849802206	1.00	0.9682	a
							RPD = 12.47
17 Dinoseb							a
1	8.146	8.144	0.002	1314025484	1.00	1.19	a
2	8.178	8.173	0.005	4034212367	1.00	1.23	a
							RPD = 3.50
18 Bentazon							a
1	8.218	8.218	0.000	270773698	1.00	1.05	a
2	8.582	8.578	0.004	824414003	1.00	1.11	a
							RPD = 5.11
19 Picloram							Ma
1	8.436	8.433	0.003	3621817547	1.00	1.36	a
2	8.920	8.913	0.007	11034840048	1.00	1.33	M
							RPD = 1.87

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							a
1	8.541	8.537	0.004	3595185453	1.00	1.27	a
2	8.699	8.692	0.007	9277203223	1.00	1.04	a
RPD = 19.55							

21 Acifluorfen							a
1	9.580	9.577	0.003	2794380058	1.00	1.37	a
2	9.718	9.710	0.008	8638829439	1.00	1.05	a
RPD = 26.75							

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SGHERB-8_00011

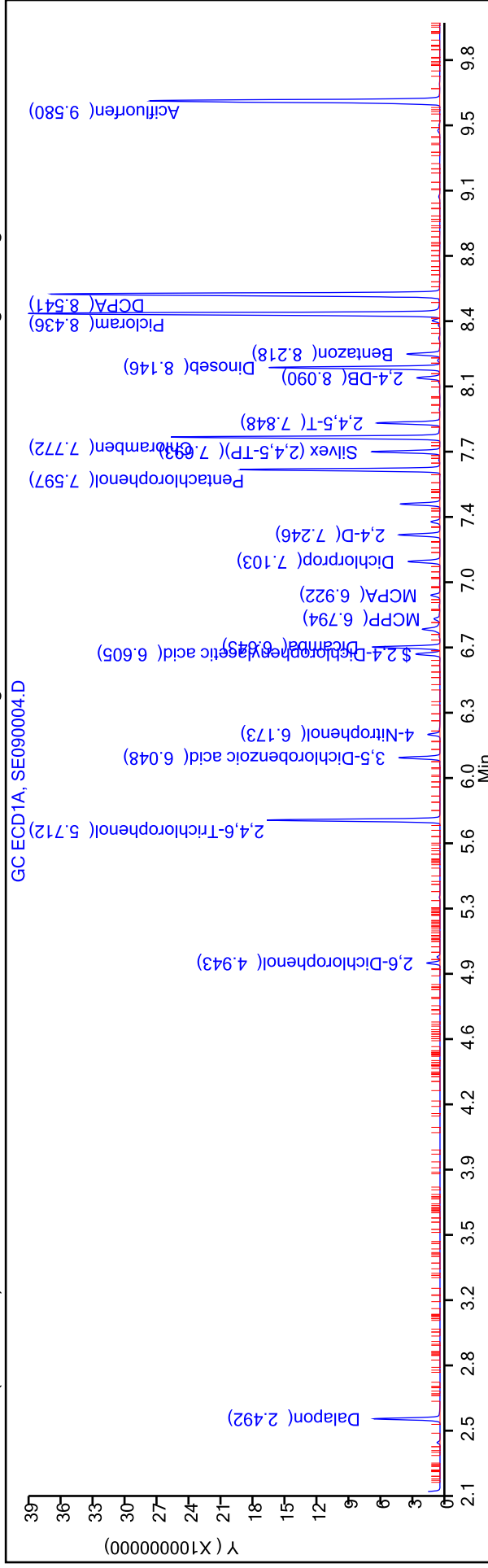
Amount Added: 1.00

Units: mL

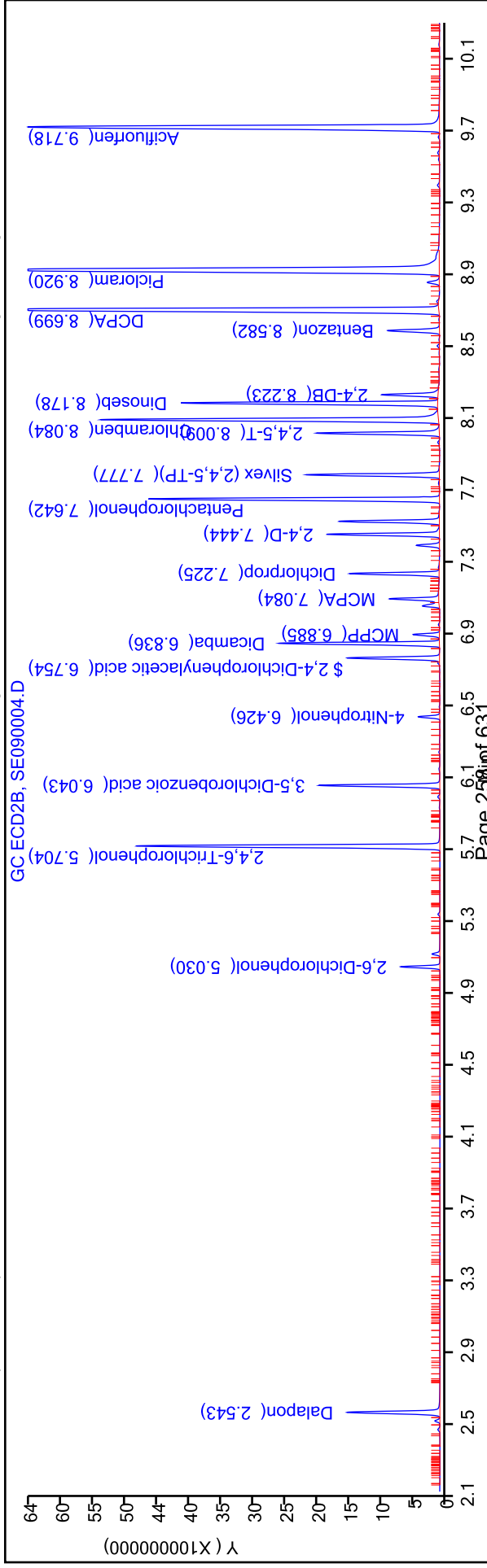
TestAmerica Savannah
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 Injection Date: 09-May-2018 17:59:52
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 4
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 4

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

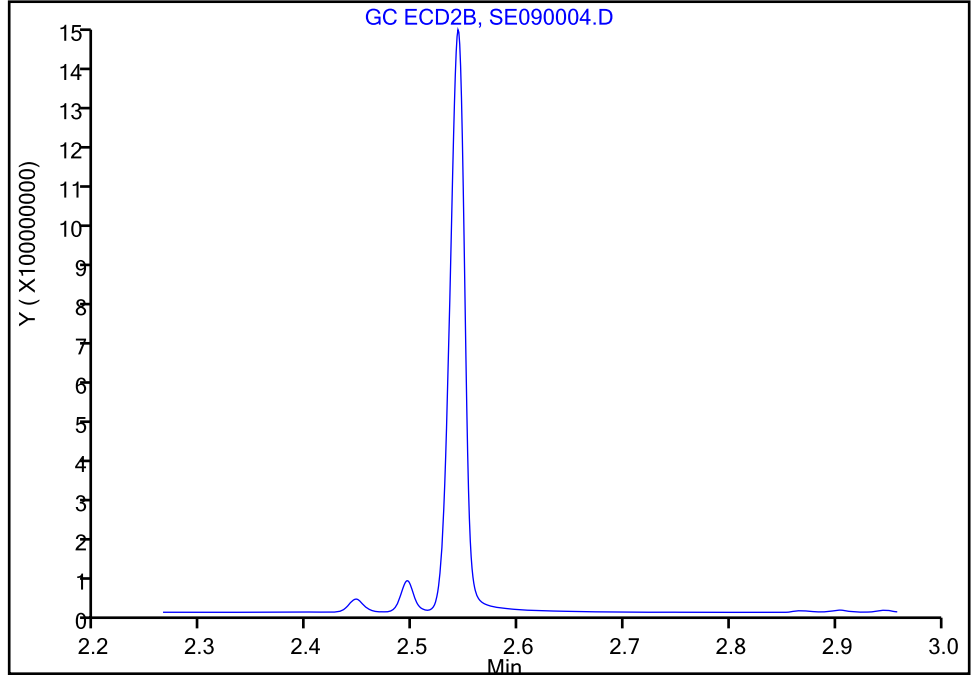
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

1 Dalapon, CAS: 75-99-0

Signal: 2

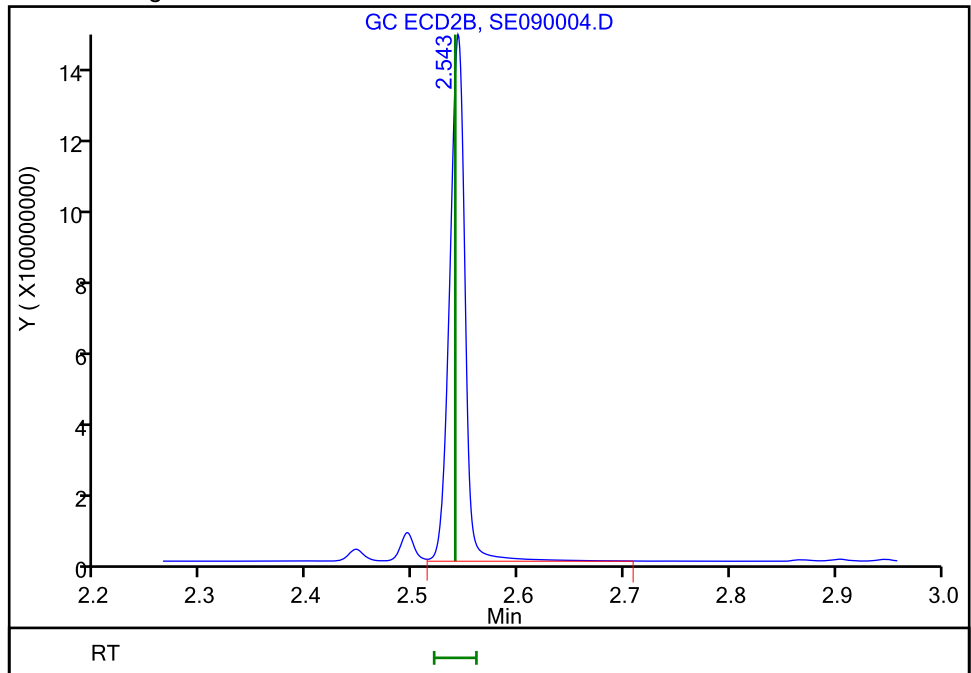
Not Detected
Expected RT: 2.54

Processing Integration Results



Manual Integration Results

RT: 2.54
Area: 1486390376
Amount: 1.054726
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:49:54
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

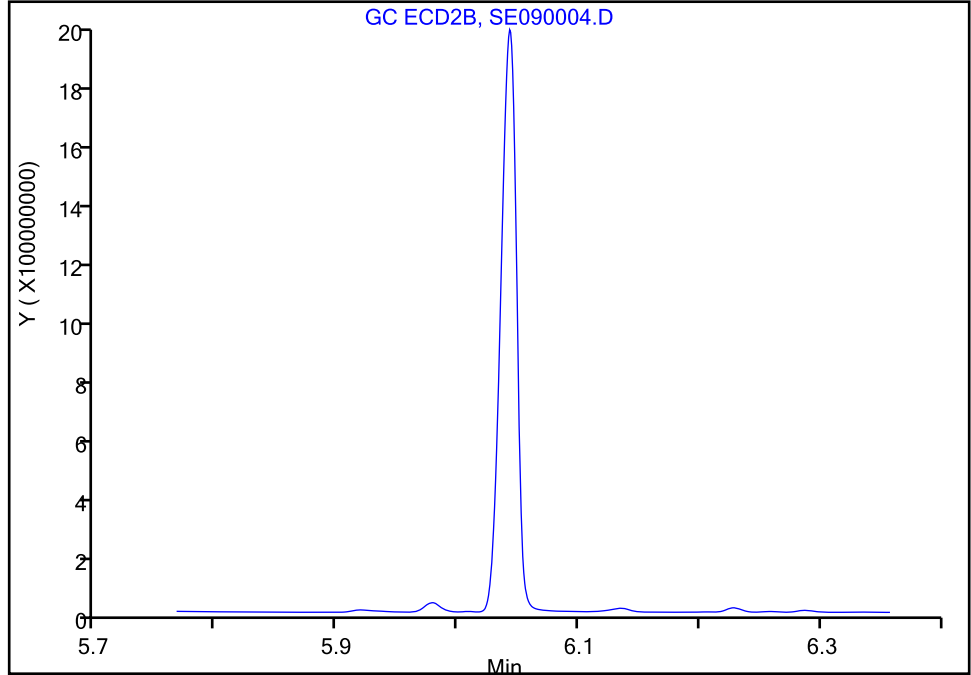
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

4 3,5-Dichlorobenzoic acid, CAS: 51-36-5

Signal: 2

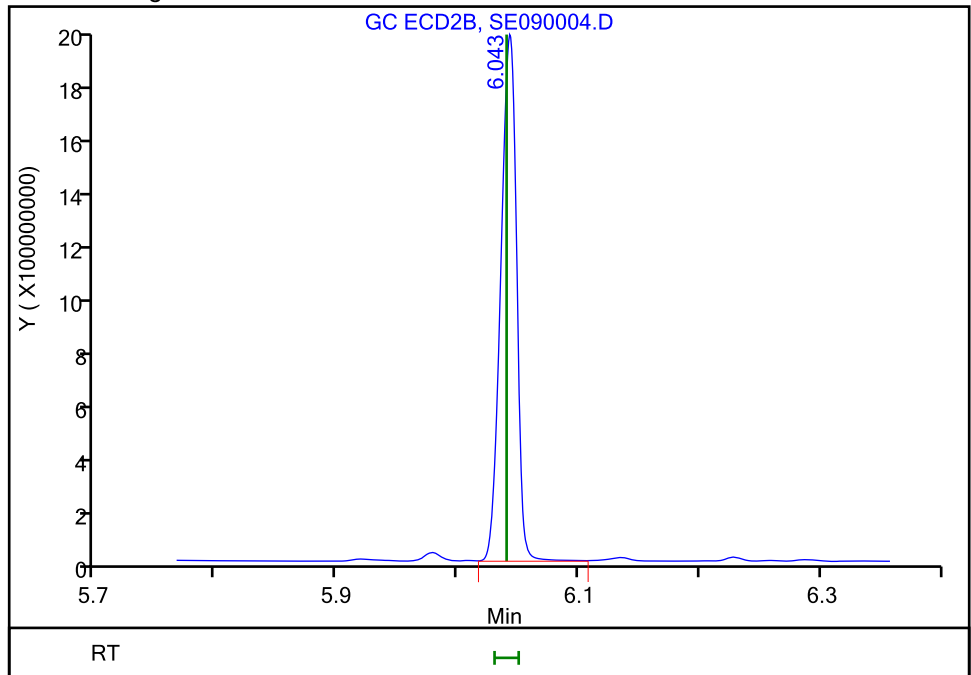
Not Detected
Expected RT: 6.04

Processing Integration Results



Manual Integration Results

RT: 6.04
Area: 1744604922
Amount: 1.078610
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:50:06
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

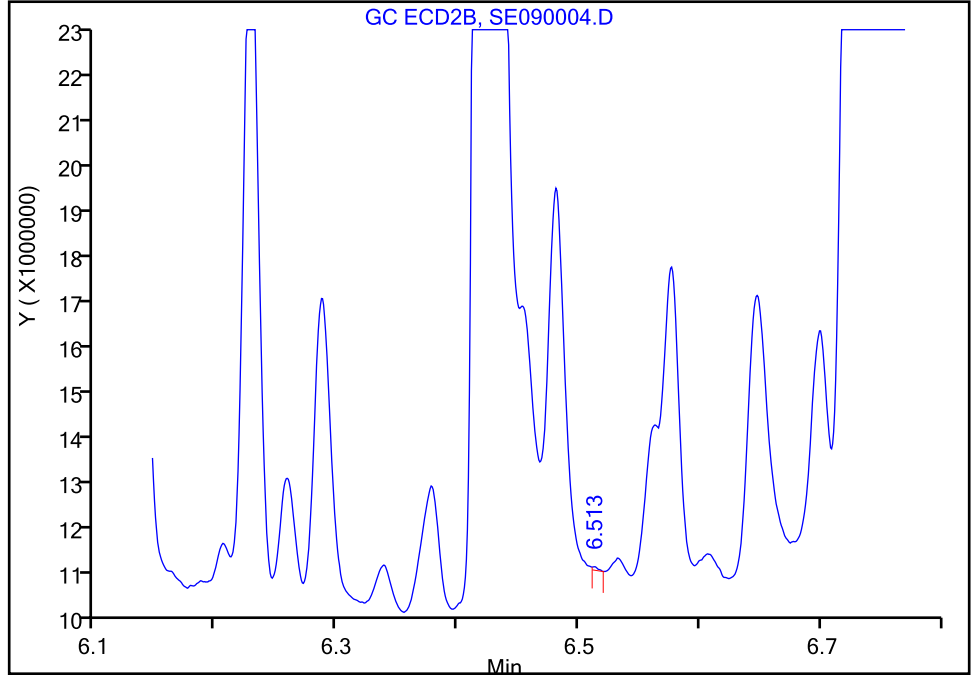
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Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

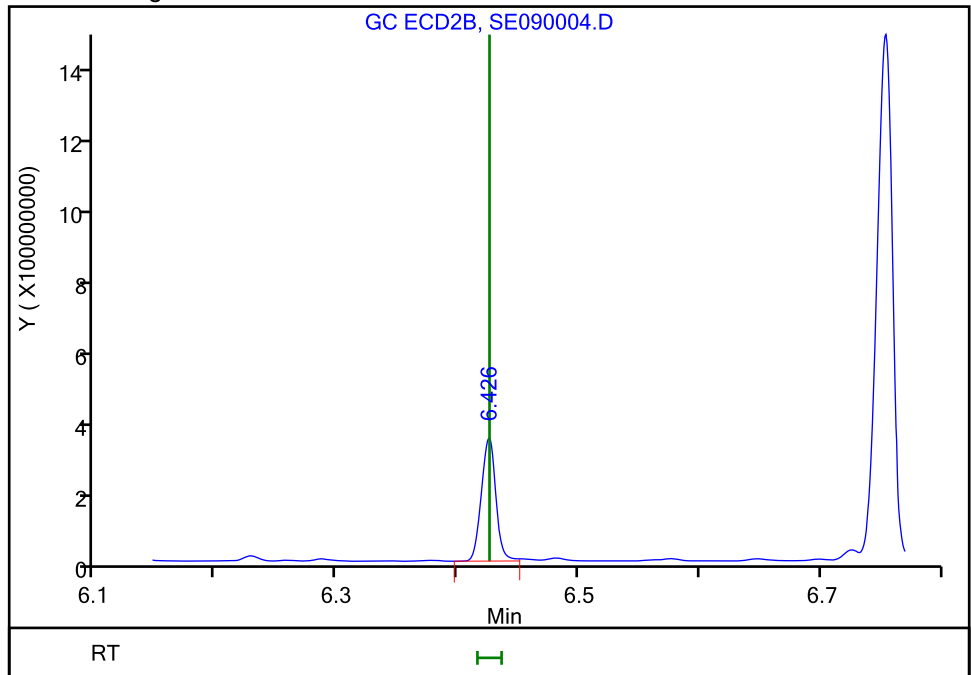
RT: 6.51
Area: 23223
Amount: 1.000000
Amount Units: ug/ml

Processing Integration Results



RT: 6.43
Area: 285656847
Amount: 0.918238
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:50:10
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

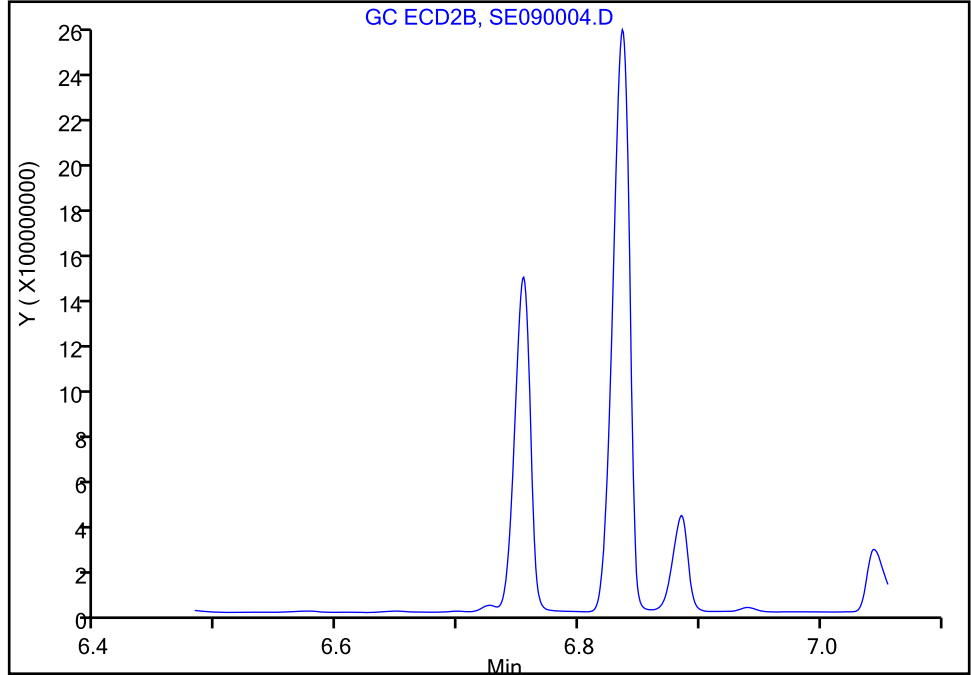
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Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

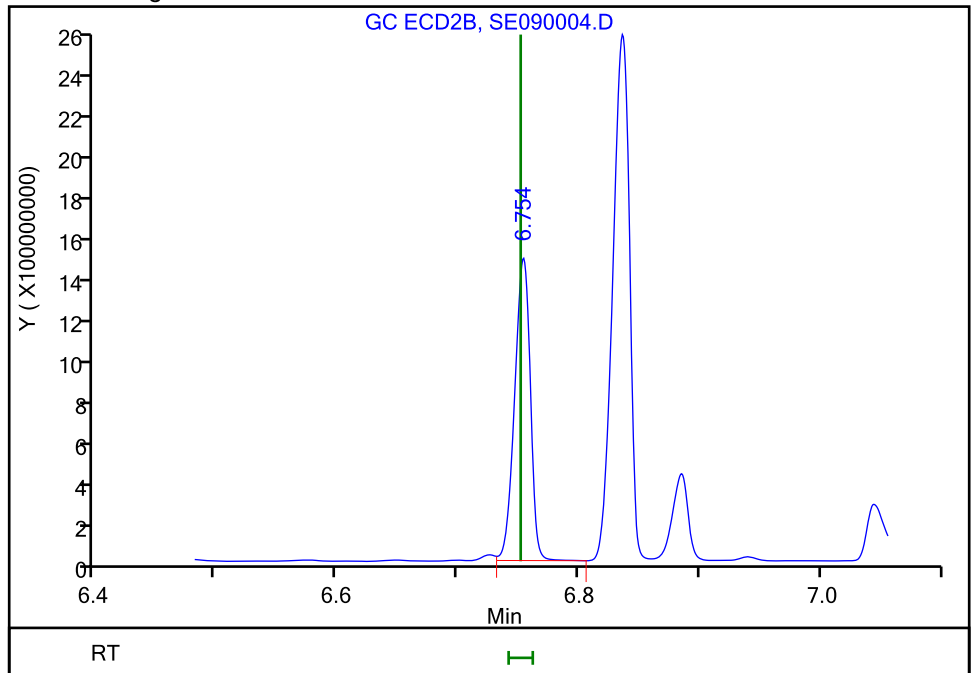
Not Detected
Expected RT: 6.75

Processing Integration Results



Manual Integration Results

RT: 6.75
Area: 1320744257
Amount: 1.061479
Amount Units: ug/ml



TestAmerica Savannah

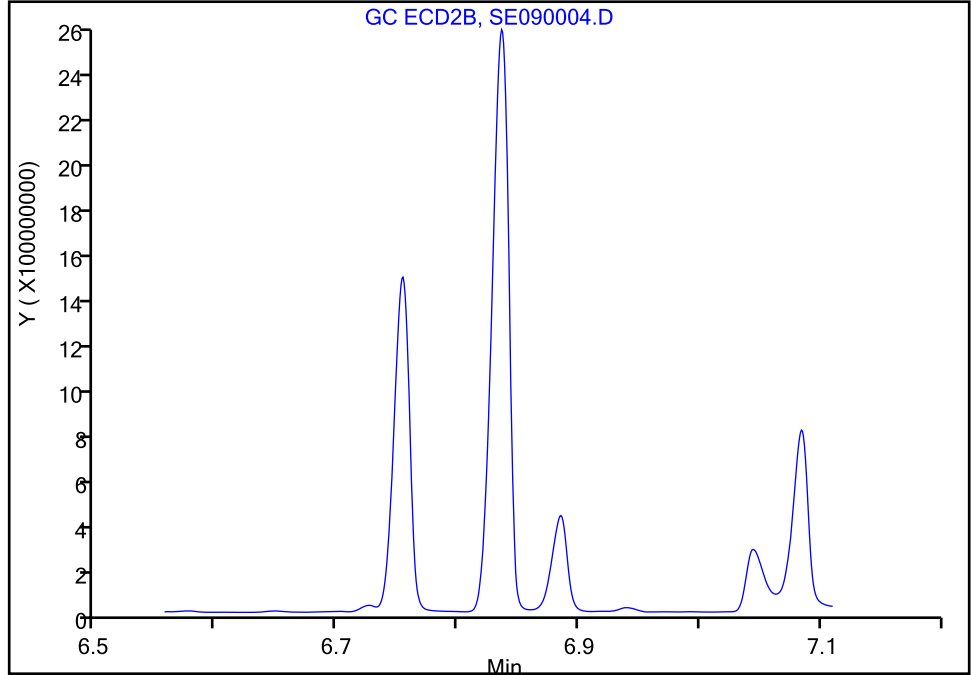
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

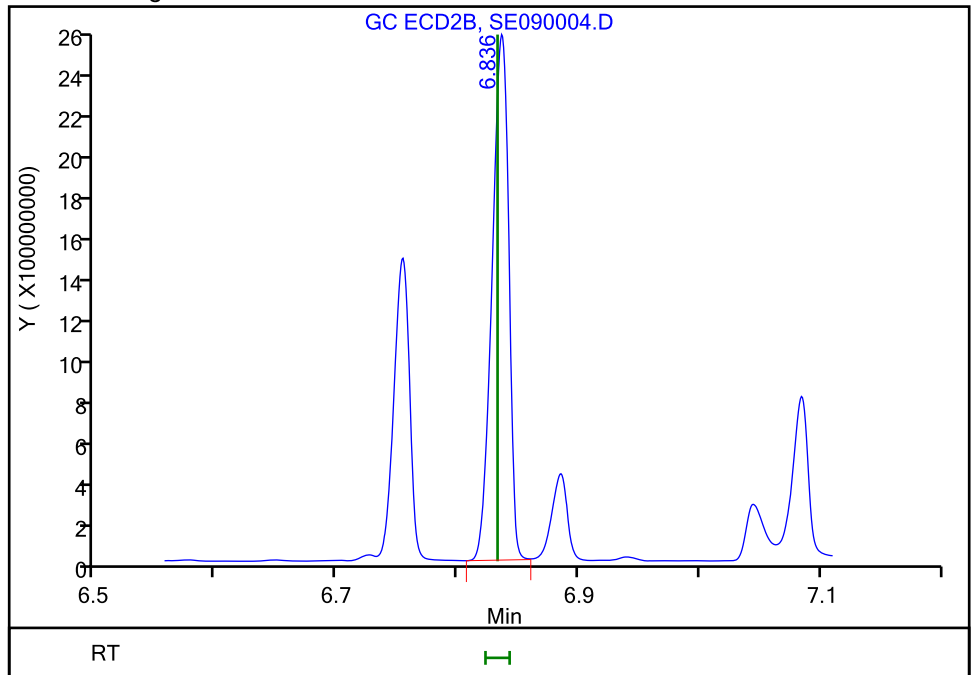
Not Detected
Expected RT: 6.83

Processing Integration Results



RT: 6.84
Area: 2436964400
Amount: 0.549521
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:50:18
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

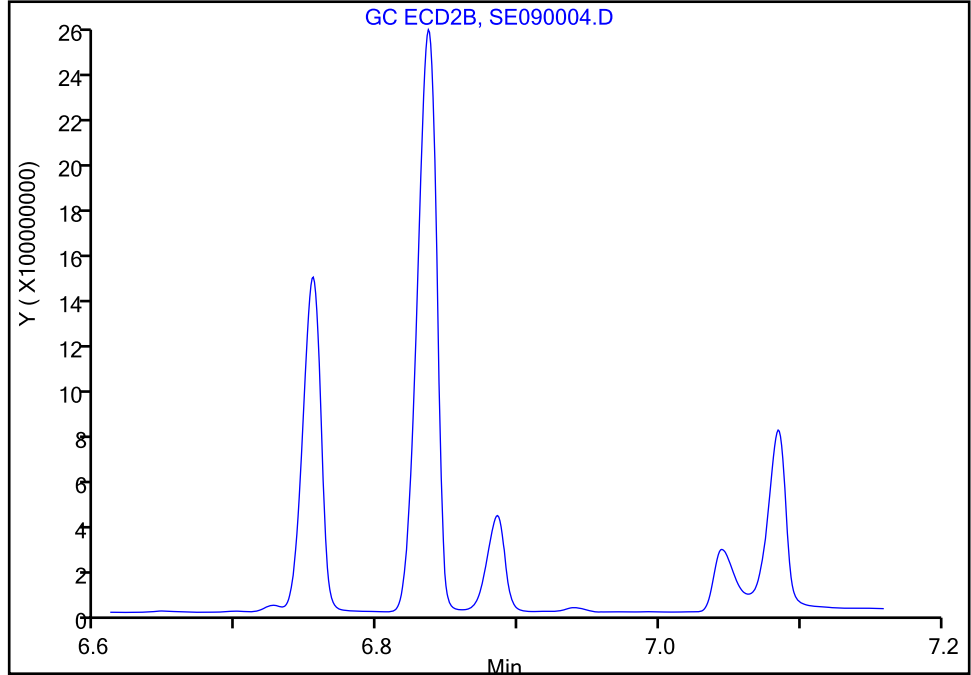
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

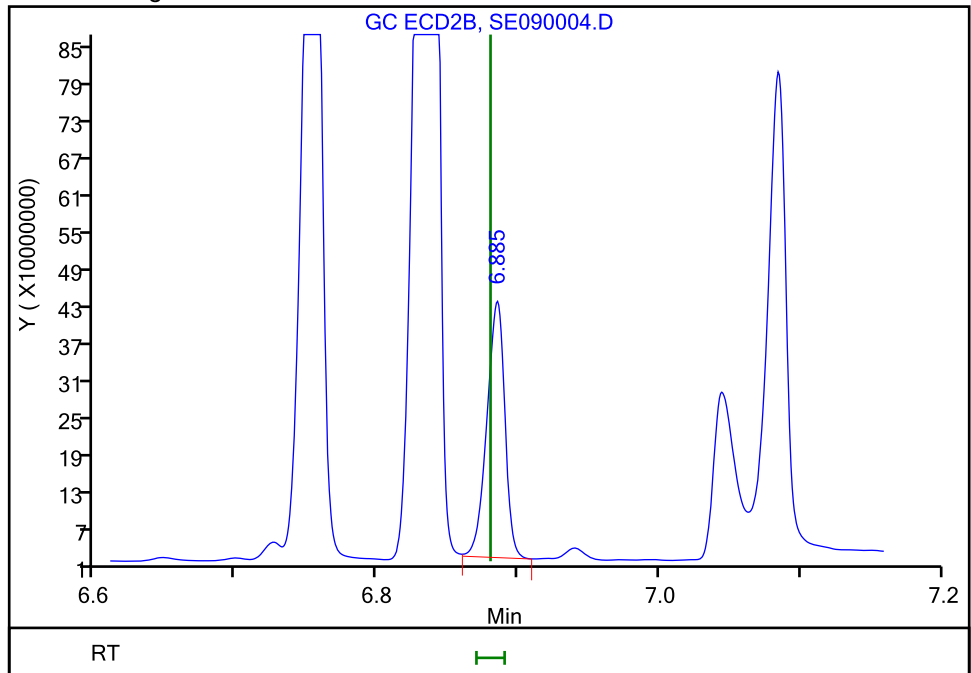
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.89
Area: 369583811
Amount: 98.964128
Amount Units: ug/ml



TestAmerica Savannah

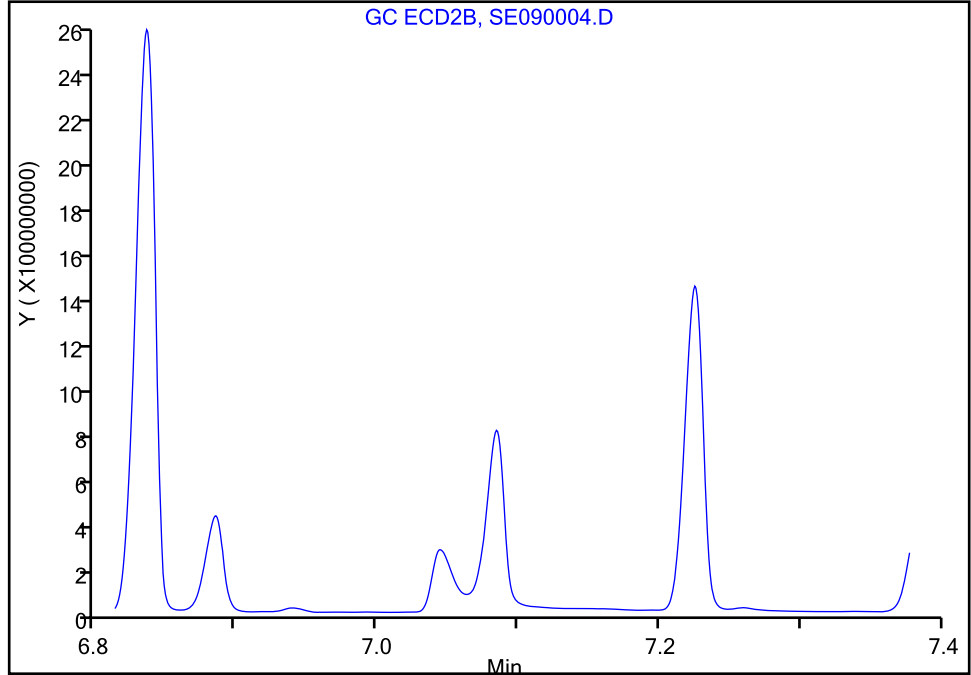
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

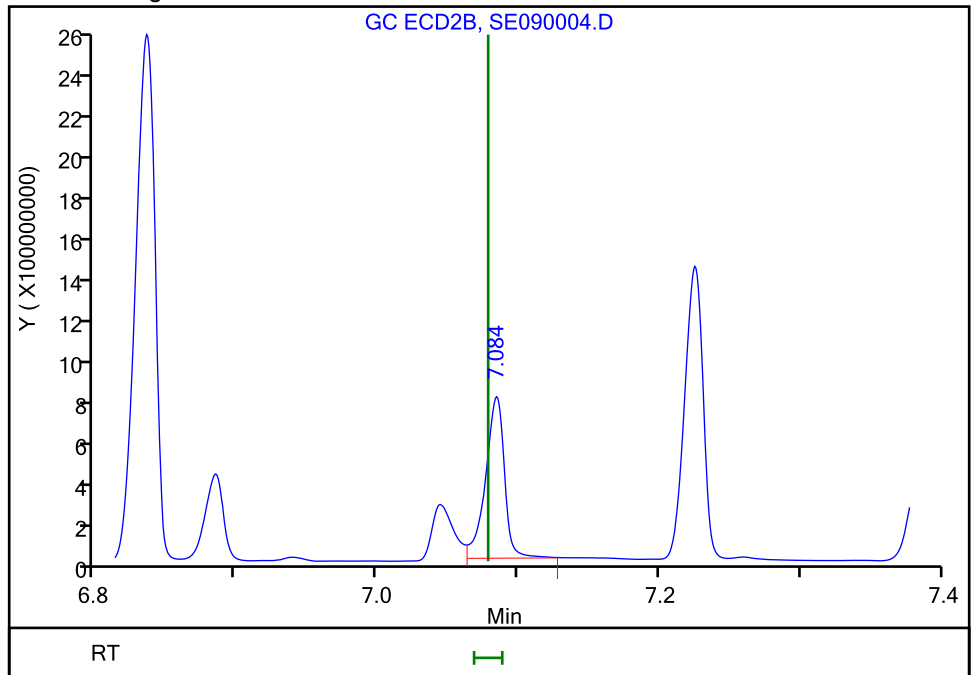
Not Detected
Expected RT: 7.08

Processing Integration Results



Manual Integration Results

RT: 7.08
Area: 724807549
Amount: 96.726155
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:50:23
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

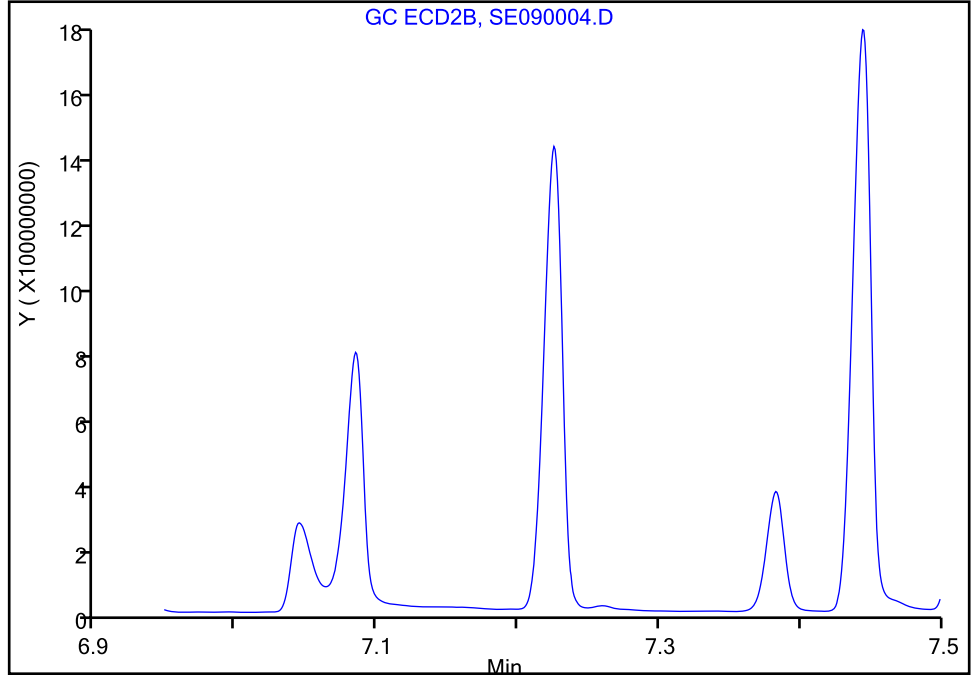
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

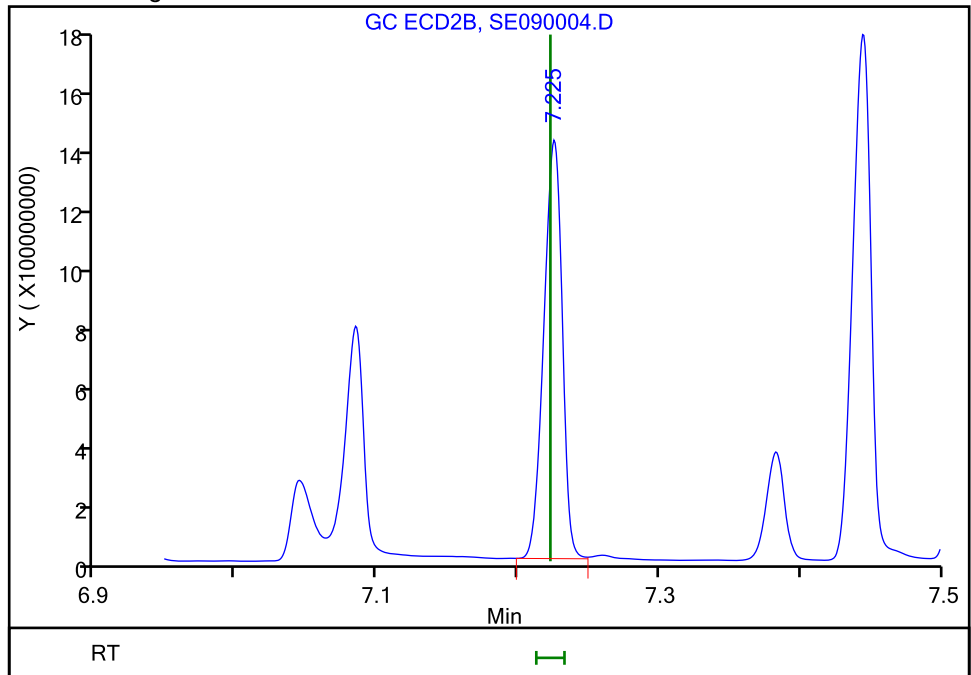
Signal: 2

Not Detected
Expected RT: 7.22

Processing Integration Results



Manual Integration Results



RT: 7.23
Area: 1282238794
Amount: 1.047544
Amount Units: ug/ml

TestAmerica Savannah

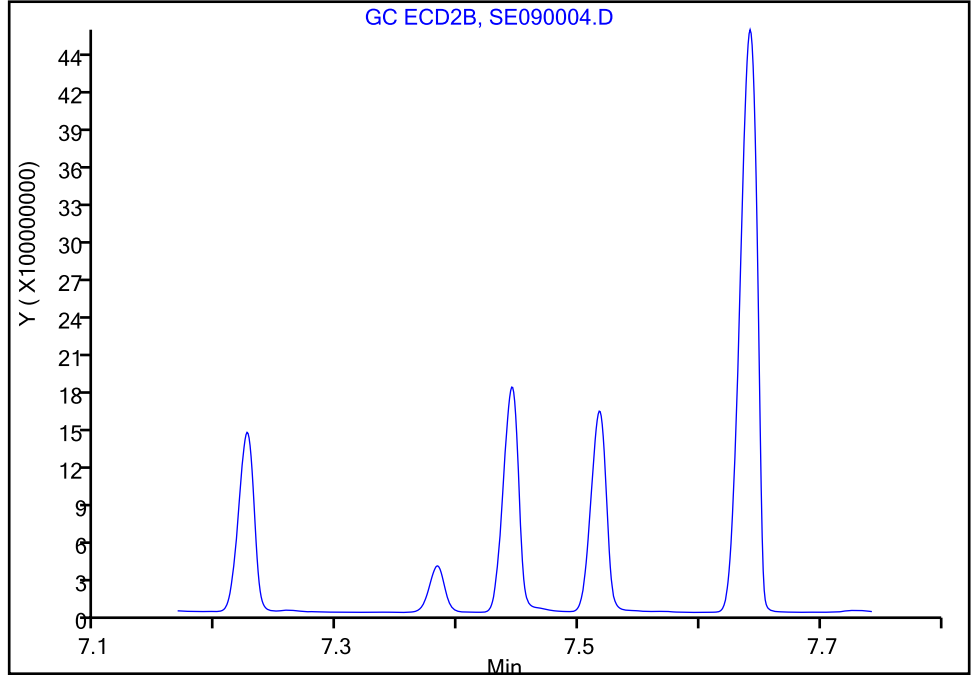
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

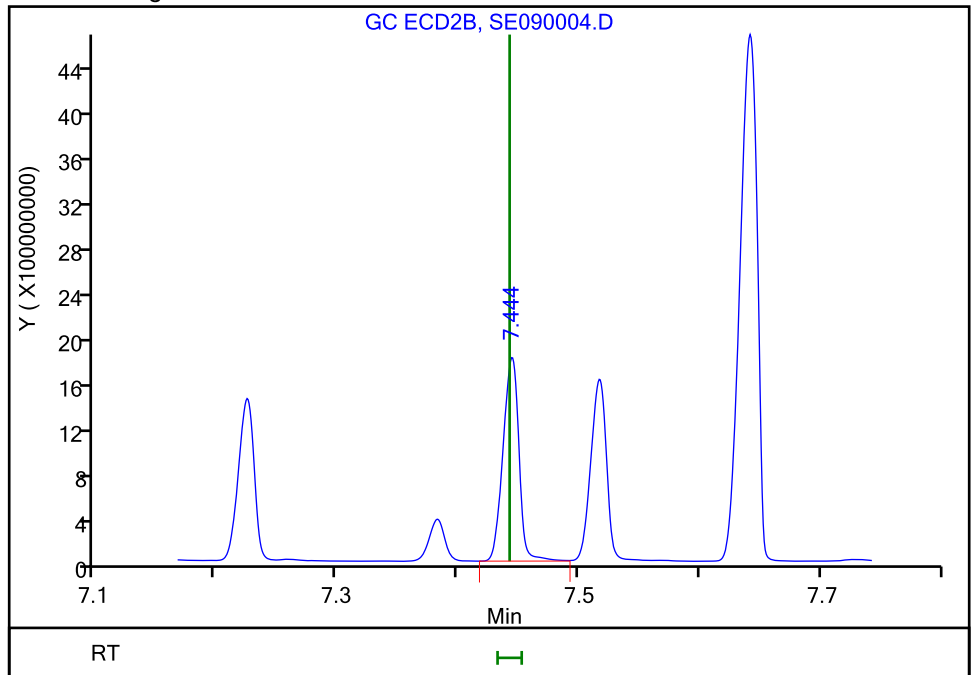
Signal: 2

Not Detected
Expected RT: 7.44

Processing Integration Results



Manual Integration Results



RT: 7.44
Area: 1629748617
Amount: 1.116407
Amount Units: ug/ml

TestAmerica Savannah

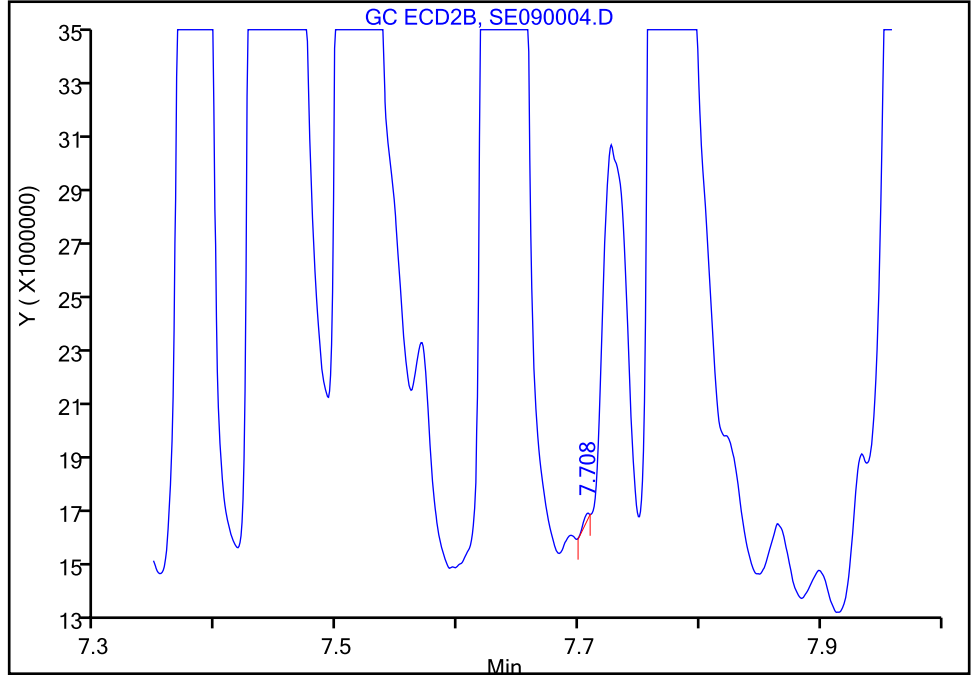
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Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

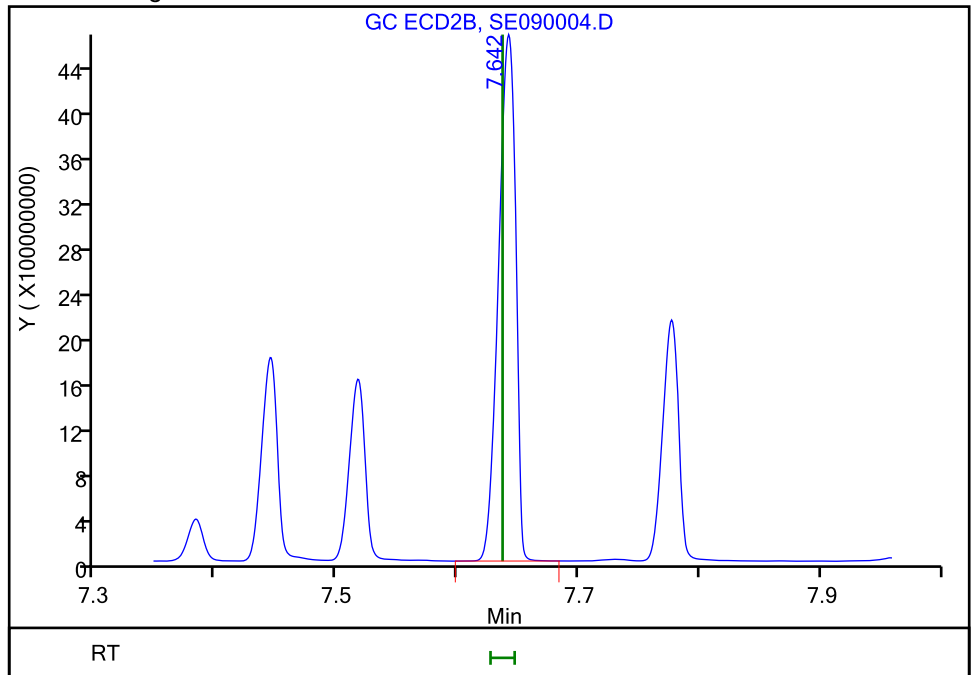
RT: 7.71
Area: 91366
Amount: 0.027231
Amount Units: ug/ml

Processing Integration Results



RT: 7.64
Area: 4549801262
Amount: 0.269778
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:50:37
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

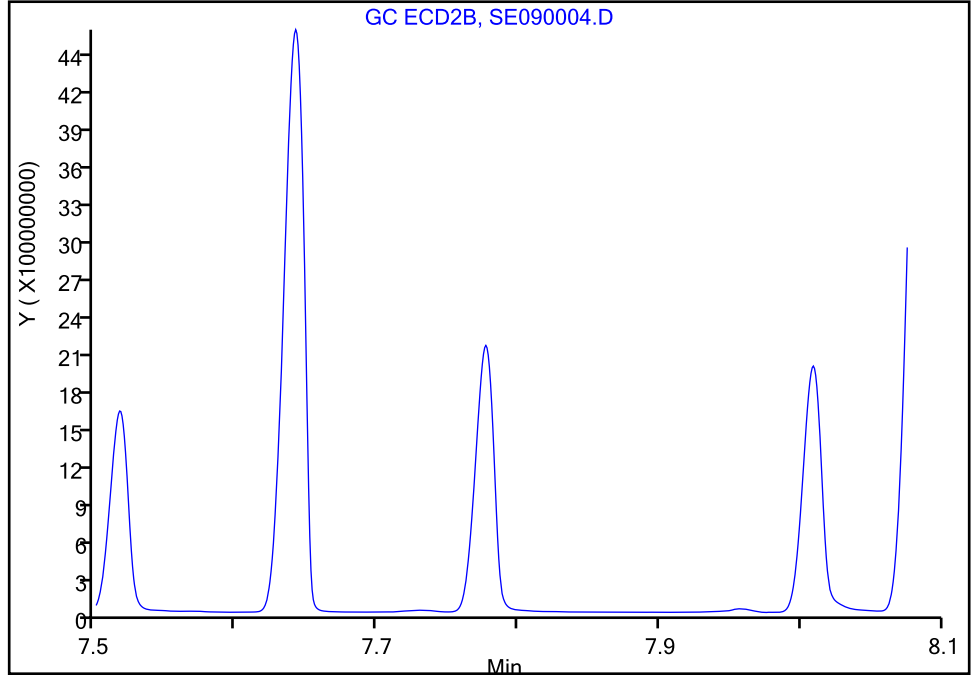
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

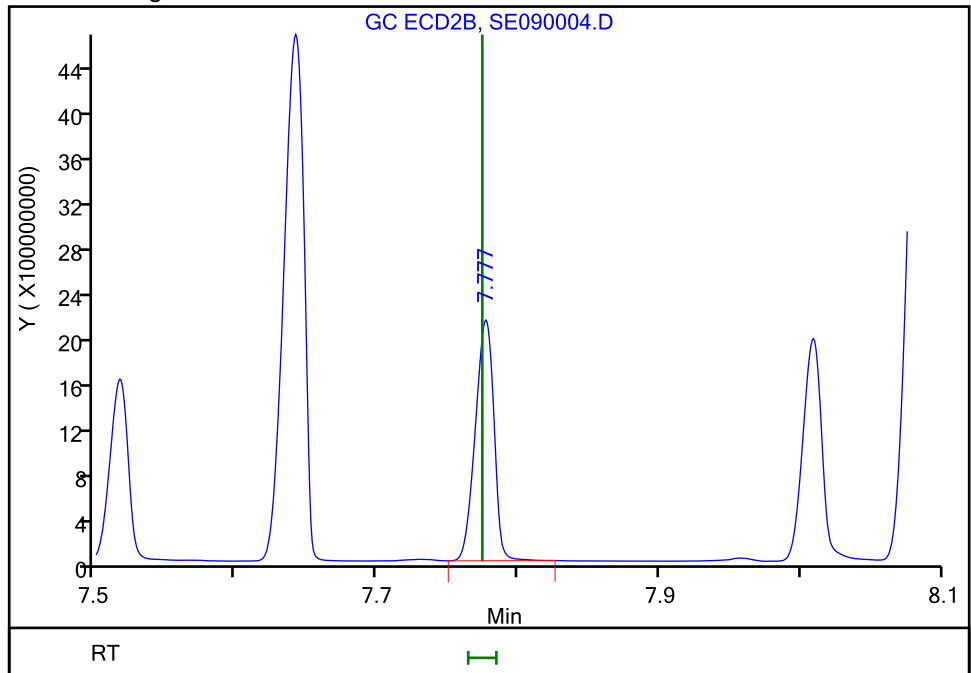
Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results

RT: 7.78
Area: 1933247676
Amount: 0.288155
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:50:42
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

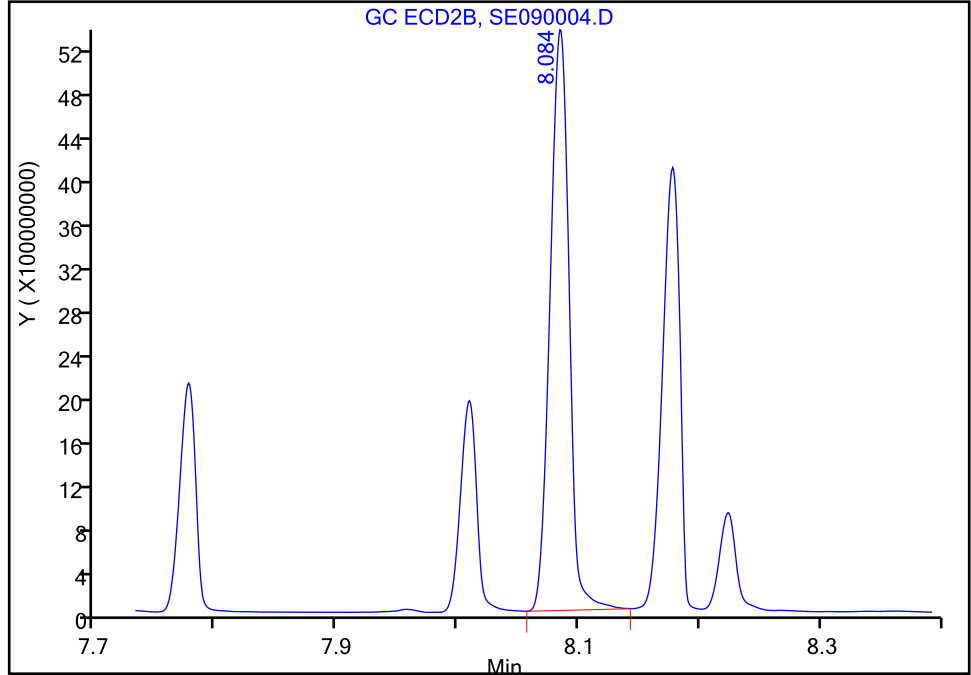
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

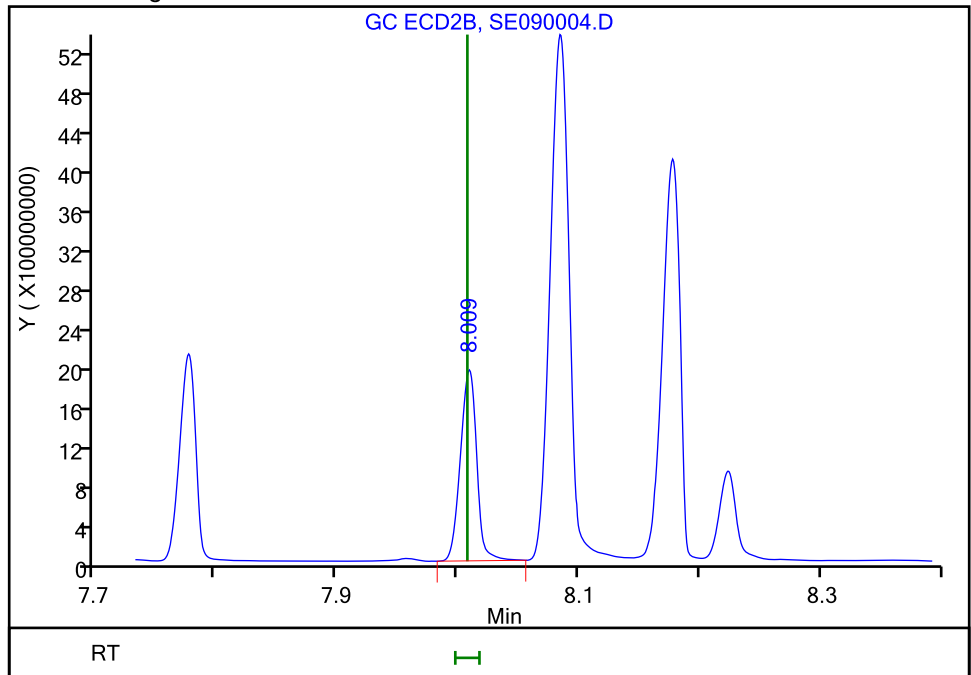
RT: 8.08
Area: 5823384953
Amount: 0.240628
Amount Units: ug/ml

Processing Integration Results



RT: 8.01
Area: 1819790712
Amount: 0.292031
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:50:52
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

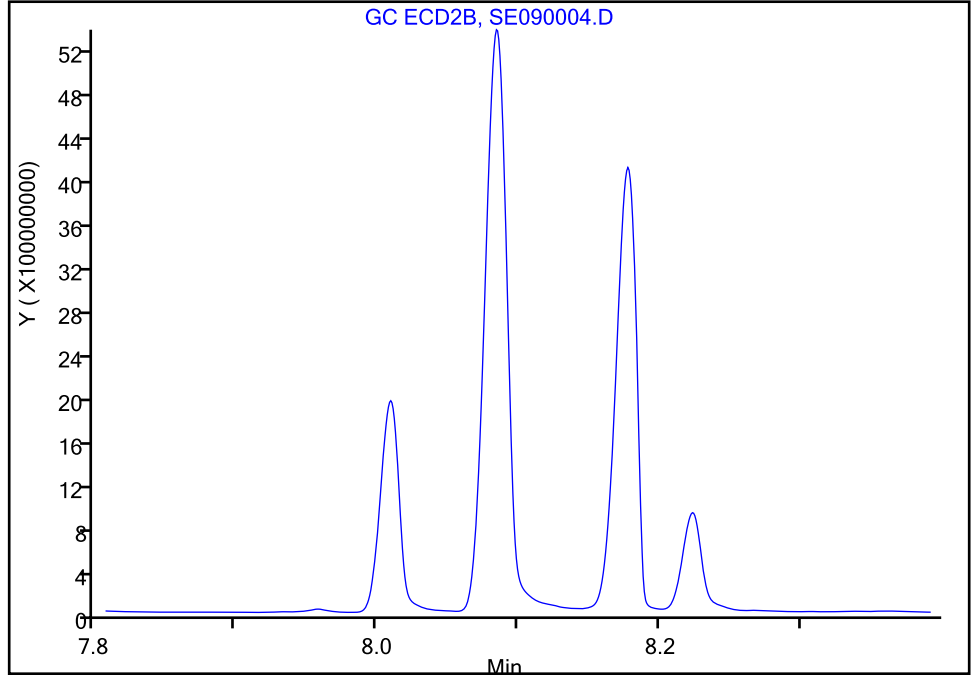
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

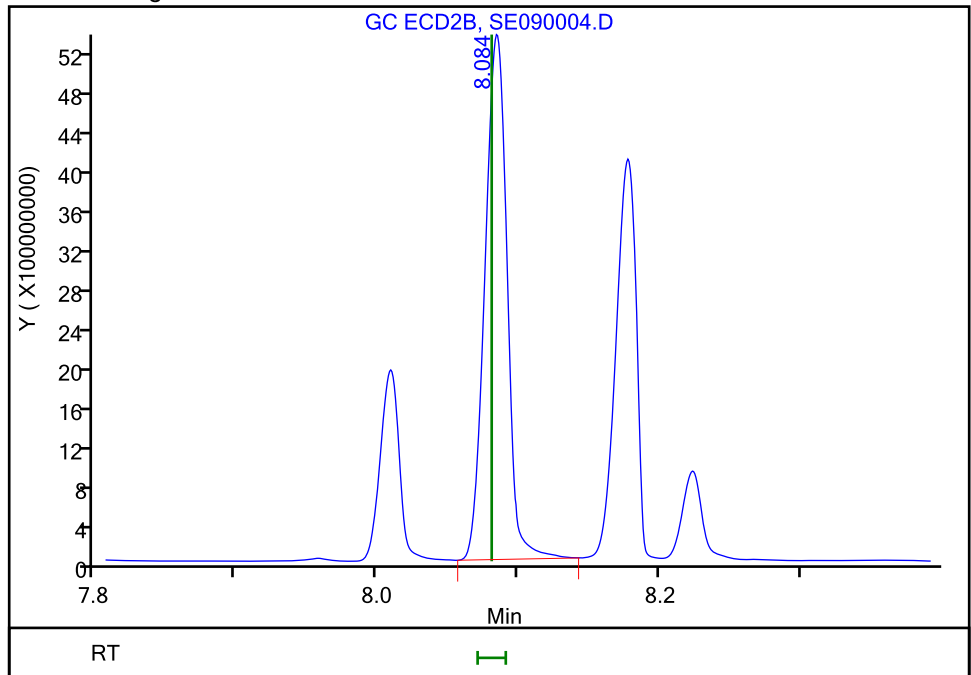
Not Detected
Expected RT: 8.08

Processing Integration Results



Manual Integration Results

RT: 8.08
Area: 5823384953
Amount: 1.075558
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:50:46
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

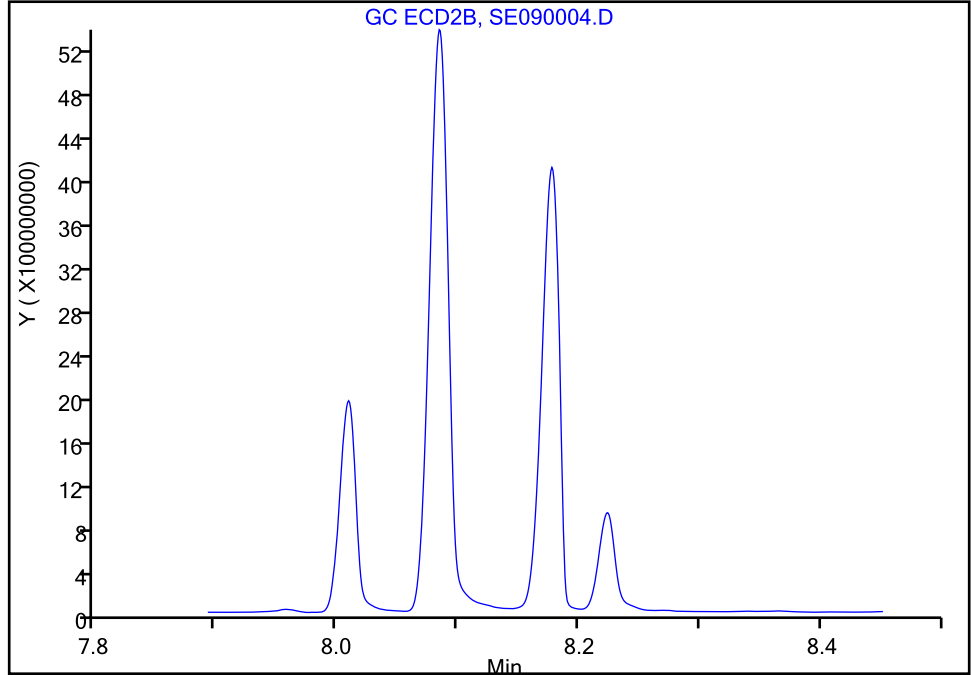
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

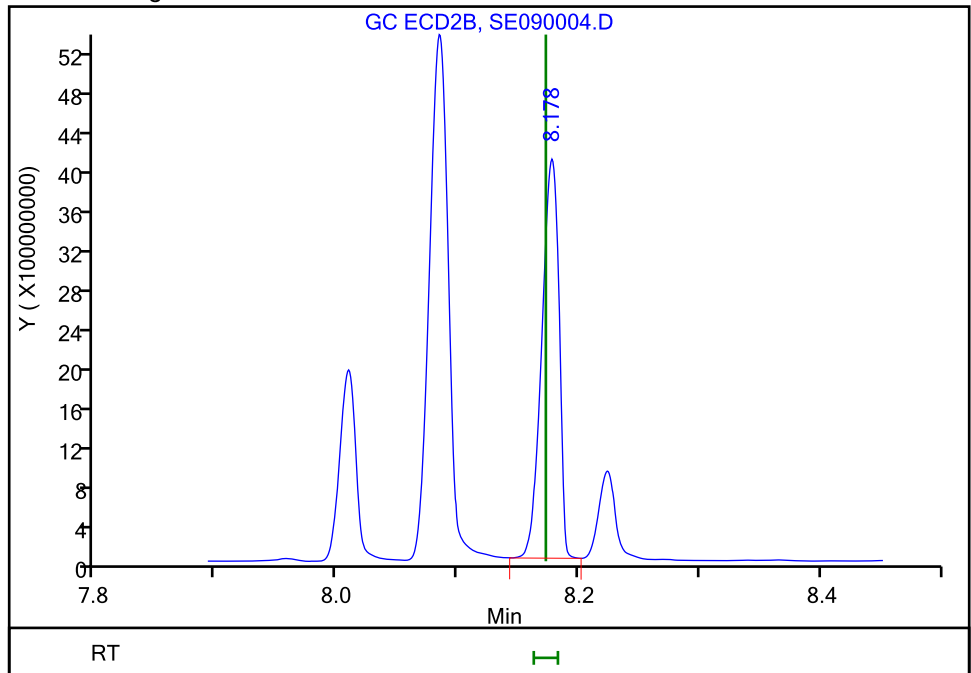
Not Detected
Expected RT: 8.17

Processing Integration Results



Manual Integration Results

RT: 8.18
Area: 4034212367
Amount: 1.229741
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:51:00
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

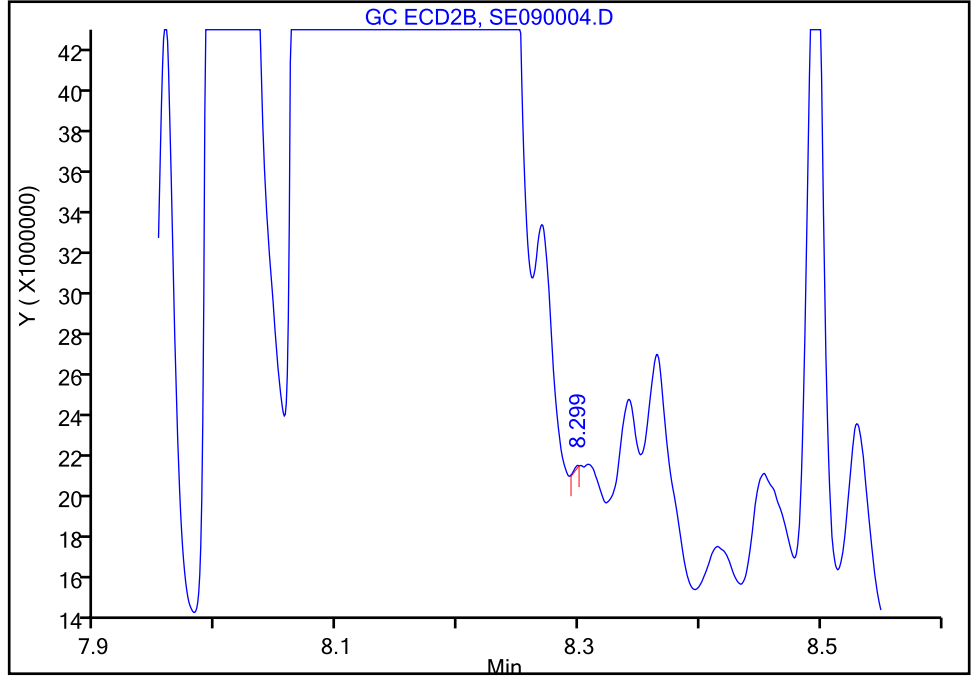
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

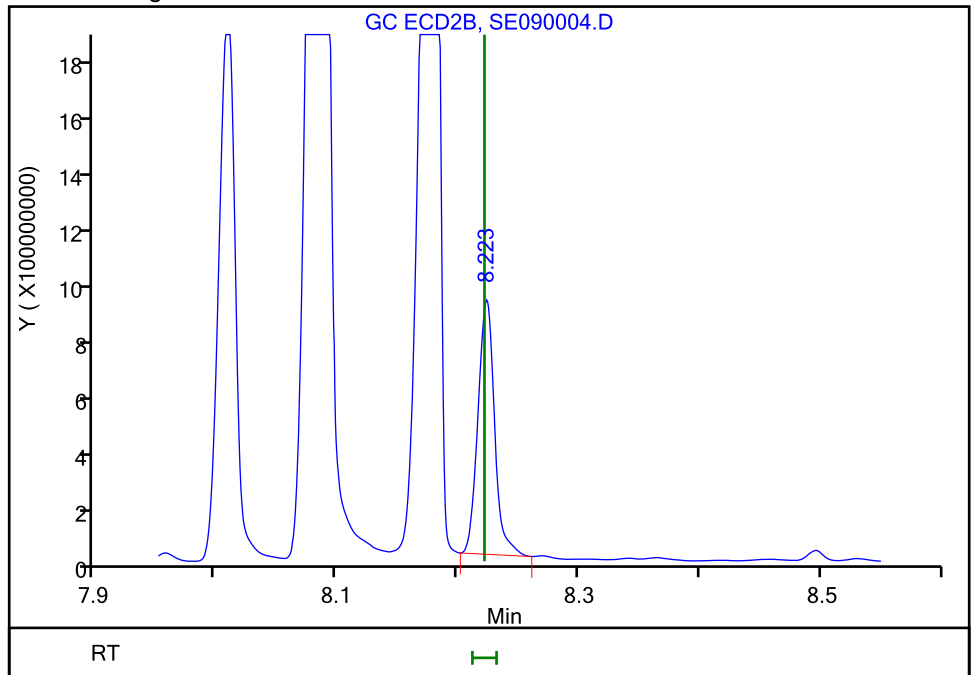
RT: 8.30
Area: 39346
Amount: 0.006885
Amount Units: ug/ml

Processing Integration Results



RT: 8.22
Area: 849802206
Amount: 0.968173
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 18:50:56
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah

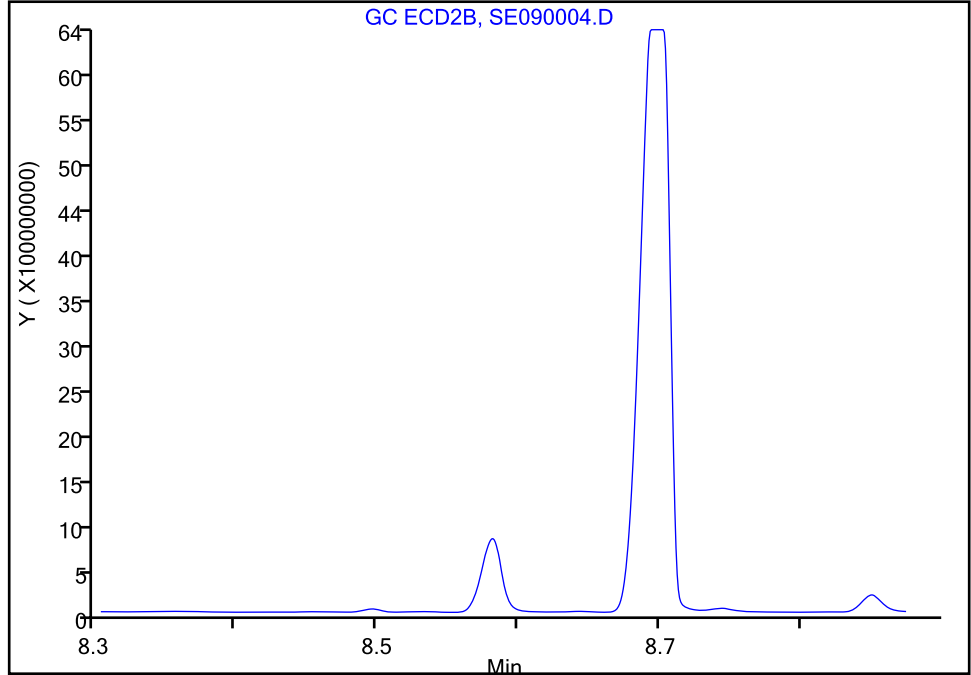
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

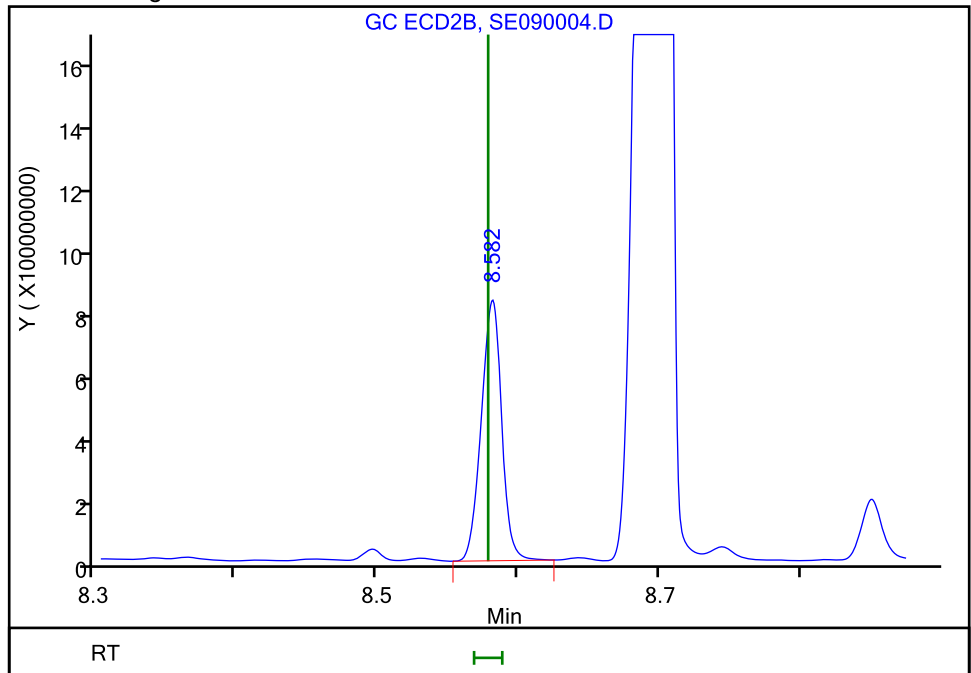
Signal: 2

Not Detected
Expected RT: 8.58

Processing Integration Results



Manual Integration Results



RT: 8.58
Area: 824414003
Amount: 1.107335
Amount Units: ug/ml

TestAmerica Savannah

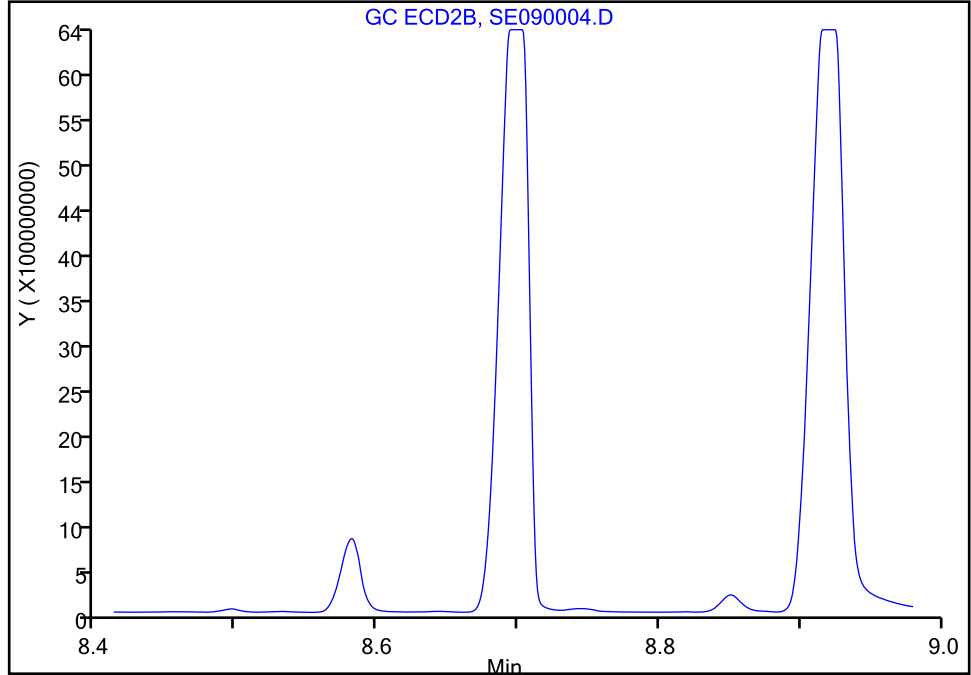
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

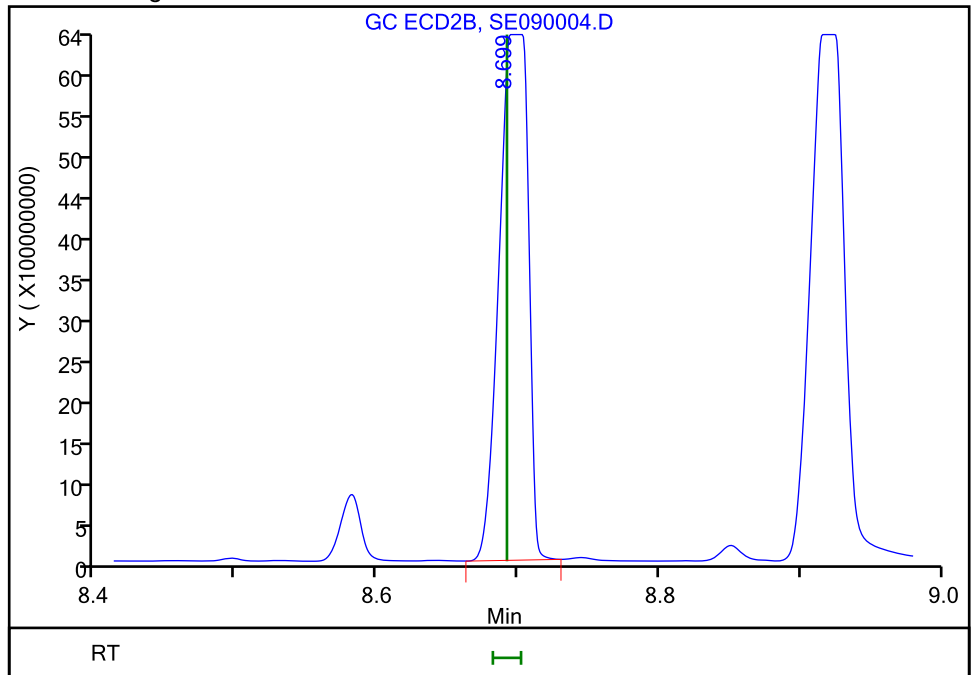
Not Detected
Expected RT: 8.69

Processing Integration Results



RT: 8.70
Area: 9277203223
Amount: 1.041649
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

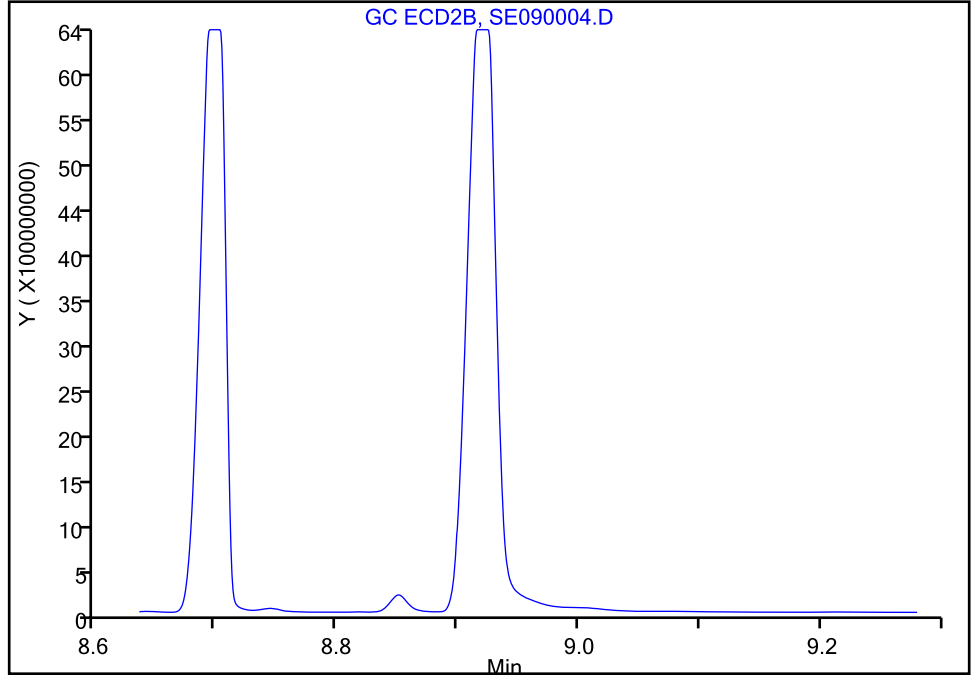
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

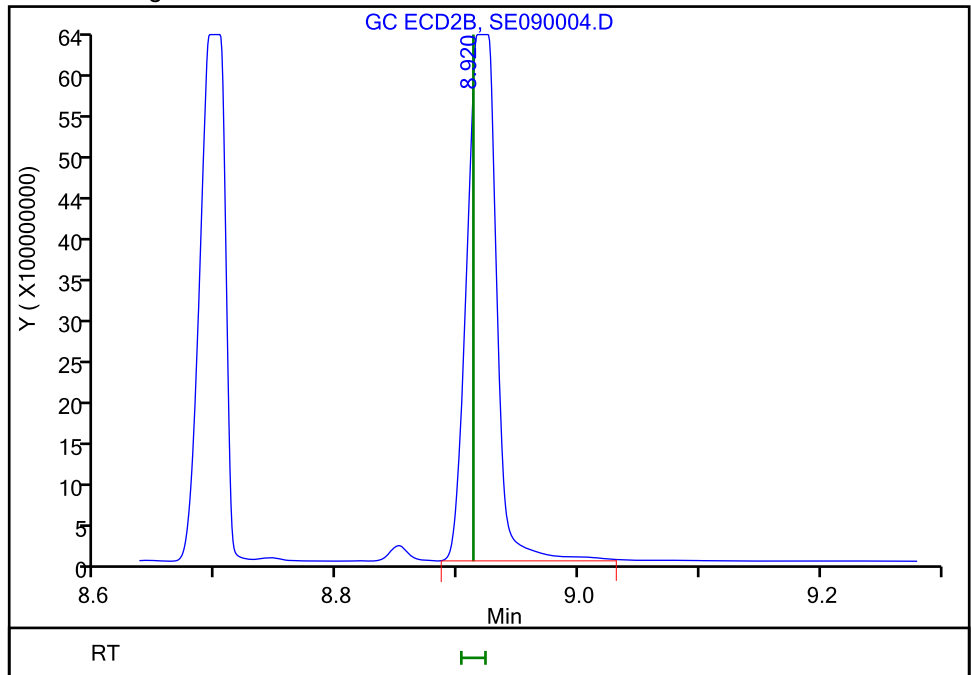
Not Detected
Expected RT: 8.91

Processing Integration Results



Manual Integration Results

RT: 8.92
Area: 11034840048
Amount: 1.331795
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:51:20
Audit Action: Manually Integrated

TestAmerica Savannah

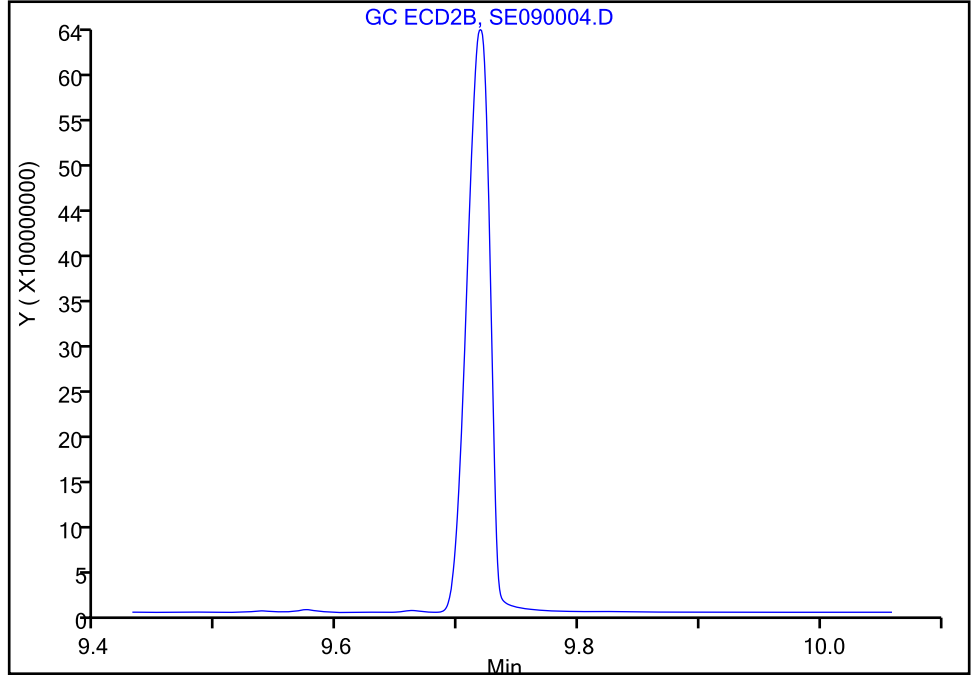
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090004.D
Injection Date: 09-May-2018 17:59:52 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

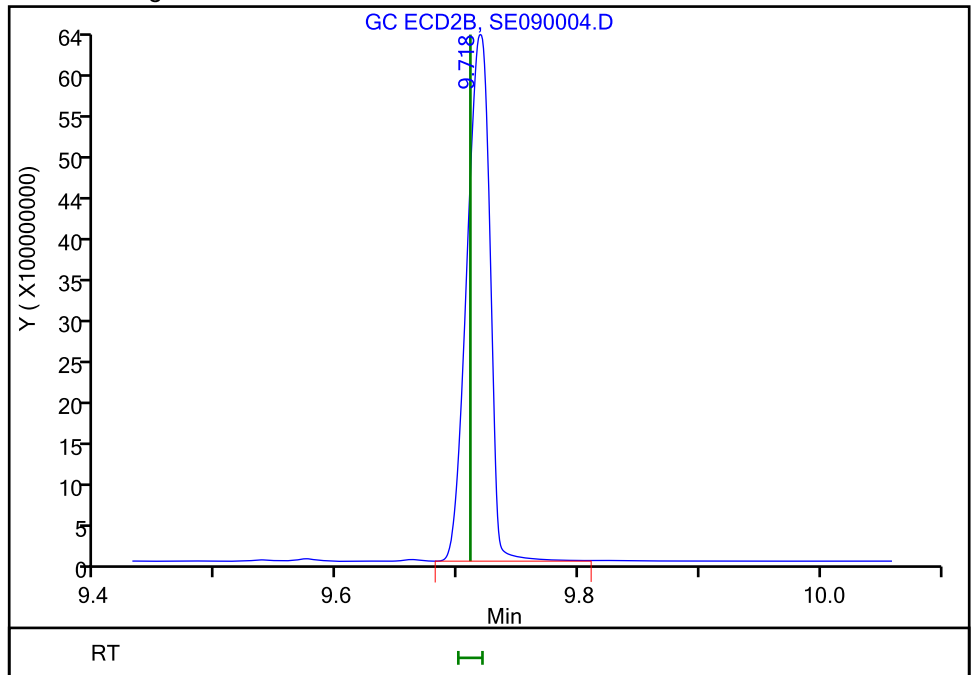
Not Detected
Expected RT: 9.71

Processing Integration Results



Manual Integration Results

RT: 9.72
Area: 8638829439
Amount: 1.049317
Amount Units: ug/ml



Reviewer: kellarj, 09-May-2018 18:51:15
Audit Action: Assigned Compound ID

Audit Reason:
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TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 09-May-2018 18:19:23 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:20 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 18:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.492	2.491	0.001	240788645	0.5000	0.5017	
2	2.542	2.540	0.002	732221950	0.5000	0.5196	
						RPD = 3.50	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	47814176	NC	NC	
2	5.029	5.028	0.001	251719023	NC	NC	
						RPD = 2.18	
3 2,4,6-Trichlorophenol							
1	5.711	5.710	0.001	646877112	NC	NC	
2	5.703	5.700	0.003	2604837423	NC	NC	
						RPD = 1.58	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	161466175	0.5000	0.5222	
2	6.041	6.040	0.001	851491539	0.5000	0.5264	
						RPD = 0.81	
5 4-Nitrophenol							
1	6.172	6.173	-0.001	46516413	0.5000	0.4672	
2	6.425	6.426	-0.001	143473602	0.5000	0.4612	
						RPD = 1.30	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	99966364	0.5000	0.5063	
2	6.753	6.752	0.001	641182661	0.5000	0.5153	
						RPD = 1.76	
7 Dicamba							
1	6.641	6.642	-0.001	264745935	0.2500	0.2687	
2	6.835	6.833	0.002	1198198735	0.2500	0.2702	
						RPD = 0.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							a
1	6.791	6.789	0.002	31559204	50.0	48.7	a
2	6.882	6.880	0.002	187460762	50.0	49.7	
							RPD = 2.13
9 MCPA							
1	6.919	6.916	0.003	41163701	50.0	48.5	
2	7.081	7.078	0.003	391405967	50.0	51.8	
							RPD = 6.53
10 Dichlorprop							
1	7.101	7.102	-0.001	131268795	0.5000	0.5125	
2	7.224	7.223	0.001	619789858	0.5000	0.5063	
							RPD = 1.21
11 2,4-D							
1	7.246	7.246	0.000	162558325	0.5000	0.5151	
2	7.443	7.443	0.000	776315154	0.5000	0.5318	
							RPD = 3.20
12 Pentachlorophenol							
1	7.596	7.594	0.002	720360768	0.1250	0.1421	
2	7.640	7.637	0.003	2361098559	0.1250	0.1400	
							RPD = 1.52
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	259138392	0.1250	0.1385	
2	7.776	7.774	0.002	943300131	0.1250	0.1406	
							RPD = 1.51
14 Chloramben							
1	7.771	7.770	0.001	942129901	0.5000	0.5749	
2	8.083	8.081	0.002	3138504970	0.5000	0.5797	
							RPD = 0.82
15 2,4,5-T							
1	7.847	7.848	-0.001	247745545	0.1250	0.1329	
2	8.008	8.008	0.000	877205524	0.1250	0.1408	
							RPD = 5.77
16 2,4-DB							
1	8.090	8.091	-0.001	94816741	0.5000	0.5381	
2	8.222	8.222	0.000	447502886	0.5000	0.5098	
							RPD = 5.40
17 Dinoseb							
1	8.145	8.144	0.001	621322249	0.5000	0.5615	
2	8.175	8.173	0.002	2012769159	0.5000	0.6135	
							RPD = 8.87
18 Bentazon							
1	8.218	8.218	0.000	135146452	0.5000	0.5252	
2	8.579	8.578	0.001	402556641	0.5000	0.5407	
							RPD = 2.92
19 Picloram							
1	8.435	8.433	0.002	1646590154	0.5000	0.6169	
2	8.916	8.913	0.003	5400334032	0.5000	0.6518	
							RPD = 5.49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.539	8.537	0.002	1668353746	0.5000	0.5881	
2	8.696	8.692	0.004	5077033272	0.5000	0.5701	
						RPD = 3.12	

21 Acifluorfen

1	9.578	9.577	0.001	1241223393	0.5000	0.6100	
2	9.716	9.710	0.006	4100306829	0.5000	0.5129	
						RPD = 17.30	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE0900005.D

Injection Date: 09-May-2018 18:19:23

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ic h7

Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul

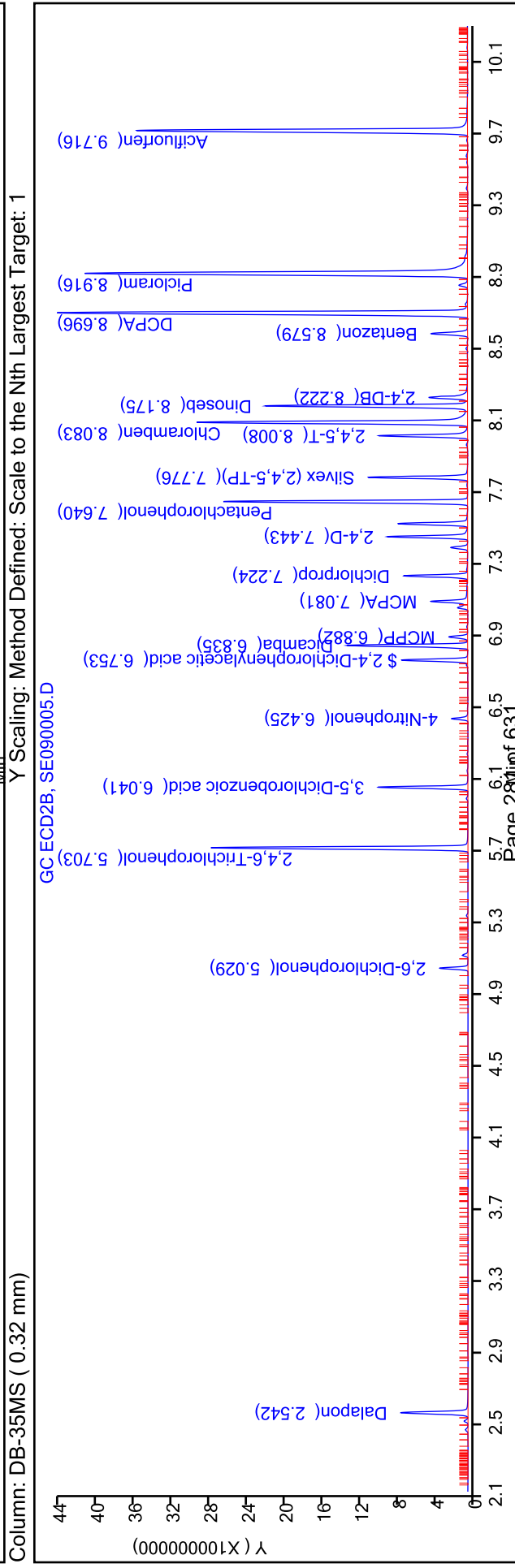
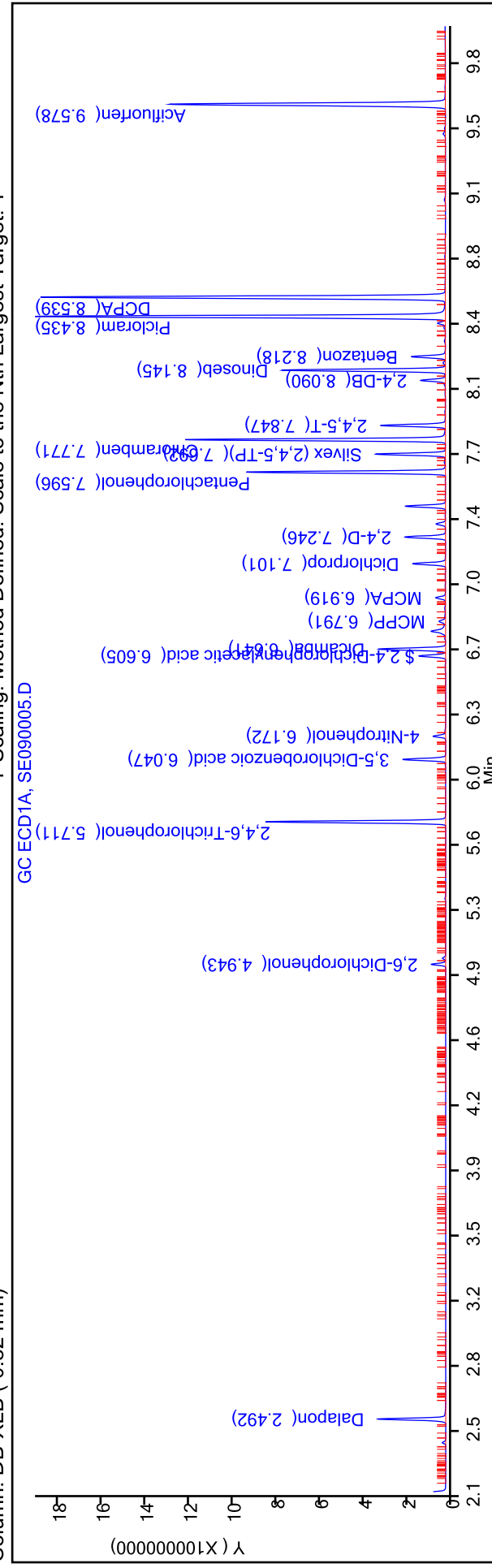
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 09-May-2018 18:39:00 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:31 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.491	2.491	0.000	117859465	0.2500	0.2433	
2	2.542	2.540	0.002	343706065	0.2500	0.2439	
							RPD = 0.25

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	23392908	NC	NC	
2	5.029	5.028	0.001	121382918	NC	NC	
							RPD = 0.73

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	300214321	NC	NC	
2	5.702	5.700	0.002	1233407049	NC	NC	
							RPD = 0.43

4 3,5-Dichlorobenzoic acid

1	6.047	6.047	0.000	76558268	0.2500	0.2476	
2	6.041	6.040	0.001	402937011	0.2500	0.2491	
							RPD = 0.61

5 4-Nitrophenol

1	6.172	6.173	-0.001	24787202	0.2500	0.2490	
2	6.425	6.426	-0.001	70418420	0.2500	0.2264	
							RPD = 9.51

\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	48018827	0.2500	0.2432	
2	6.752	6.752	0.000	306481984	0.2500	0.2463	
							RPD = 1.27

7 Dicamba

1	6.642	6.642	0.000	125123739	0.1250	0.1270	
2	6.834	6.833	0.001	564195778	0.1250	0.1272	
							RPD = 0.20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	15798581	25.0	24.4	
2	6.881	6.880	0.001	95134406	25.0	24.7	
						RPD = 1.51	
9 MCPA							
1	6.917	6.916	0.001	20303334	25.0	23.8	
2	7.080	7.078	0.002	189250340	25.0	24.5	
						RPD = 2.63	
10 Dichlorprop							
1	7.101	7.102	-0.001	62746255	0.2500	0.2450	
2	7.224	7.223	0.001	290450649	0.2500	0.2373	
						RPD = 3.19	
11 2,4-D							
1	7.245	7.246	-0.001	77679142	0.2500	0.2461	
2	7.444	7.443	0.001	361394001	0.2500	0.2476	
						RPD = 0.58	
12 Pentachlorophenol							
1	7.595	7.594	0.001	331633513	0.0625	0.0654	
2	7.639	7.637	0.002	1120470146	0.0625	0.0664	
						RPD = 1.51	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	122984337	0.0625	0.0657	
2	7.775	7.774	0.001	436902458	0.0625	0.0651	
						RPD = 0.92	
14 Chloramben							
1	7.770	7.770	0.000	428728783	0.2500	0.2616	
2	8.083	8.081	0.002	1447513965	0.2500	0.2674	
						RPD = 2.16	
15 2,4,5-T							
1	7.848	7.848	0.000	118284366	0.0625	0.0634	
2	8.008	8.008	0.000	402466907	0.0625	0.0646	
						RPD = 1.79	
16 2,4-DB							
1	8.091	8.091	0.000	44656333	0.2500	0.2534	
2	8.223	8.222	0.001	212450773	0.2500	0.2420	
						RPD = 4.60	
17 Dinoseb							
1	8.144	8.144	0.000	291379006	0.2500	0.2633	
2	8.175	8.173	0.002	901988457	0.2500	0.2750	
						RPD = 4.33	
18 Bentazon							
1	8.218	8.218	0.000	64493999	0.2500	0.2506	
2	8.580	8.578	0.002	186627828	0.2500	0.2507	
						RPD = 0.02	
19 Picloram							
1	8.434	8.433	0.001	724514848	0.2500	0.2714	
2	8.916	8.913	0.003	2365516502	0.2500	0.2855	
						RPD = 5.04	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.539	8.537	0.002	762299063	0.2500	0.2687	
2	8.695	8.692	0.003	2416371573	0.2500	0.2713	
						RPD = 0.96	

21 Acifluorfen

1	9.579	9.577	0.002	560772453	0.2500	0.2756	
2	9.714	9.710	0.004	1719149943	0.2500	0.2314	
						RPD = 17.41	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

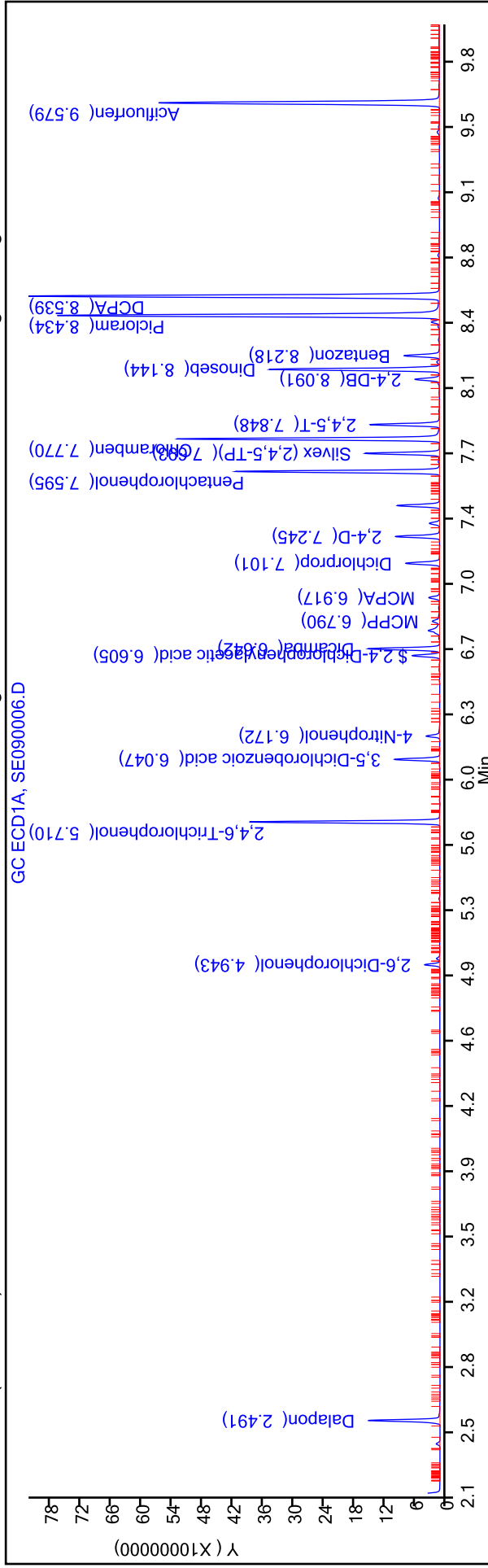
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE0900006.D
 Injection Date: 09-May-2018 18:39:00
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

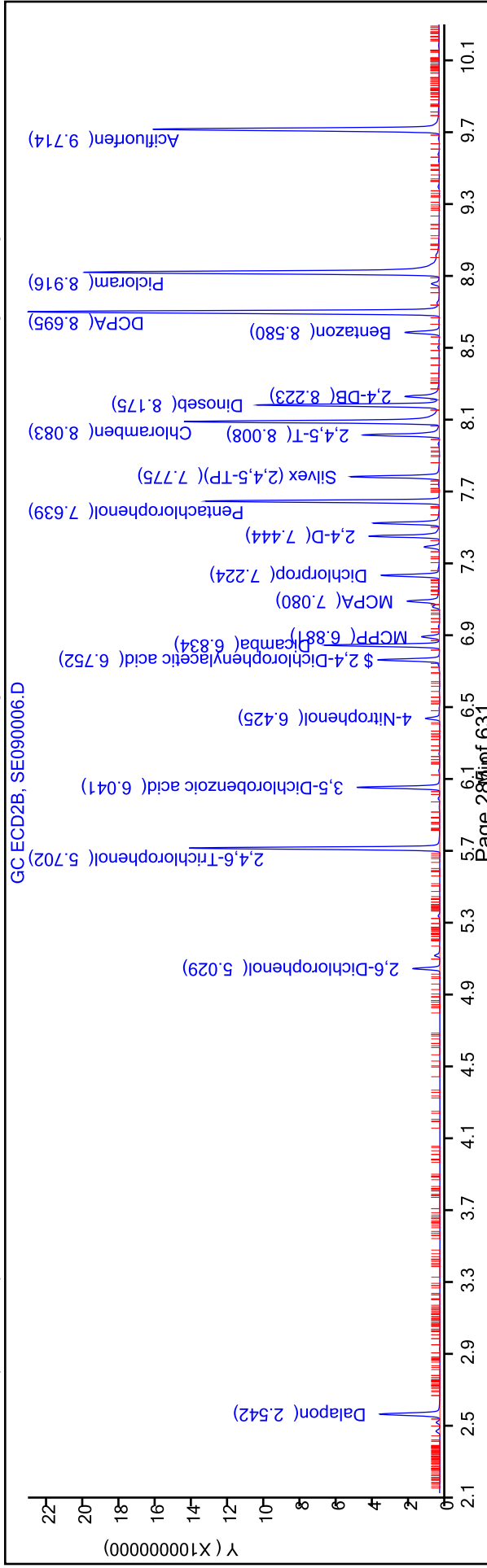
Operator ID: GEM
 Worklist Smp#: 6
 ALS Bottle#: 6

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 09-May-2018 18:58:34 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:41 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	85561651	0.1750	0.1754	
2	2.541	2.540	0.001	245675180	0.1750	0.1743	
						RPD = 0.60	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	16820806	NC	NC	
2	5.028	5.028	0.000	87350522	NC	NC	
						RPD = 0.81	
3 2,4,6-Trichlorophenol							
1	5.711	5.710	0.001	210985965	NC	NC	
2	5.702	5.700	0.002	868535448	NC	NC	
						RPD = 0.63	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	55316182	0.1750	0.1789	
2	6.040	6.040	0.000	285956578	0.1750	0.1768	
						RPD = 1.18	
5 4-Nitrophenol							
1	6.173	6.173	0.000	18148801	0.1750	0.1823	
2	6.426	6.426	0.000	50791322	0.1750	0.1633	
						RPD = 11.01	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	34610542	0.1750	0.1753	
2	6.753	6.752	0.001	217901405	0.1750	0.1751	
						RPD = 0.10	
7 Dicamba							
1	6.642	6.642	0.000	88963078	0.0875	0.0903	
2	6.833	6.833	0.000	399308905	0.0875	0.0900	
						RPD = 0.26	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090007.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	11735070	17.5	18.1	
2	6.881	6.880	0.001	70347241	17.5	18.0	
						RPD = 0.39	
9 MCPA							
1	6.917	6.916	0.001	15184702	17.5	17.8	
2	7.080	7.078	0.002	143685808	17.5	18.3	
						RPD = 2.96	
10 Dichlorprop							
1	7.103	7.102	0.001	45229626	0.1750	0.1766	
2	7.223	7.223	0.000	206211940	0.1750	0.1685	
						RPD = 4.70	
11 2,4-D							
1	7.246	7.246	0.000	55858354	0.1750	0.1770	
2	7.443	7.443	0.000	256797724	0.1750	0.1759	
						RPD = 0.61	
12 Pentachlorophenol							
1	7.595	7.594	0.001	232407815	0.0438	0.0459	
2	7.638	7.637	0.001	787462544	0.0438	0.0467	
						RPD = 1.80	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	86592112	0.0438	0.0463	
2	7.775	7.774	0.001	309540353	0.0438	0.0461	
						RPD = 0.30	
14 Chloramben							
1	7.770	7.770	0.000	300714561	0.1750	0.1835	
2	8.082	8.081	0.001	1017374760	0.1750	0.1879	
						RPD = 2.36	
15 2,4,5-T							
1	7.848	7.848	0.000	84308974	0.0438	0.0452	
2	8.008	8.008	0.000	281806659	0.0438	0.0452	
						RPD = 0.01	
16 2,4-DB							
1	8.091	8.091	0.000	31842206	0.1750	0.1807	
2	8.223	8.222	0.001	160878564	0.1750	0.1833	
						RPD = 1.41	
17 Dinoseb							
1	8.145	8.144	0.001	205511059	0.1750	0.1857	
2	8.175	8.173	0.002	624797611	0.1750	0.1905	
						RPD = 2.52	
18 Bentazon							
1	8.218	8.218	0.000	46220417	0.1750	0.1796	
2	8.580	8.578	0.002	132529059	0.1750	0.1780	
						RPD = 0.89	
19 Picloram							
1	8.434	8.433	0.001	504113503	0.1750	0.1889	
2	8.915	8.913	0.002	1614105282	0.1750	0.1948	
						RPD = 3.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	532179764	0.1750	0.1876	
2	8.694	8.692	0.002	1692976152	0.1750	0.1901	
						RPD = 1.32	

21 Acifluorfen

1	9.578	9.577	0.001	389652410	0.1750	0.1915	
2	9.713	9.710	0.003	1145964479	0.1750	0.1637	
						RPD = 15.65	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\CSGS\20180509-47236.b\SE090007.D
Injection Date: 09-May-2018 18:58:34
Lims ID: ic h5
Instrument ID: CSGS

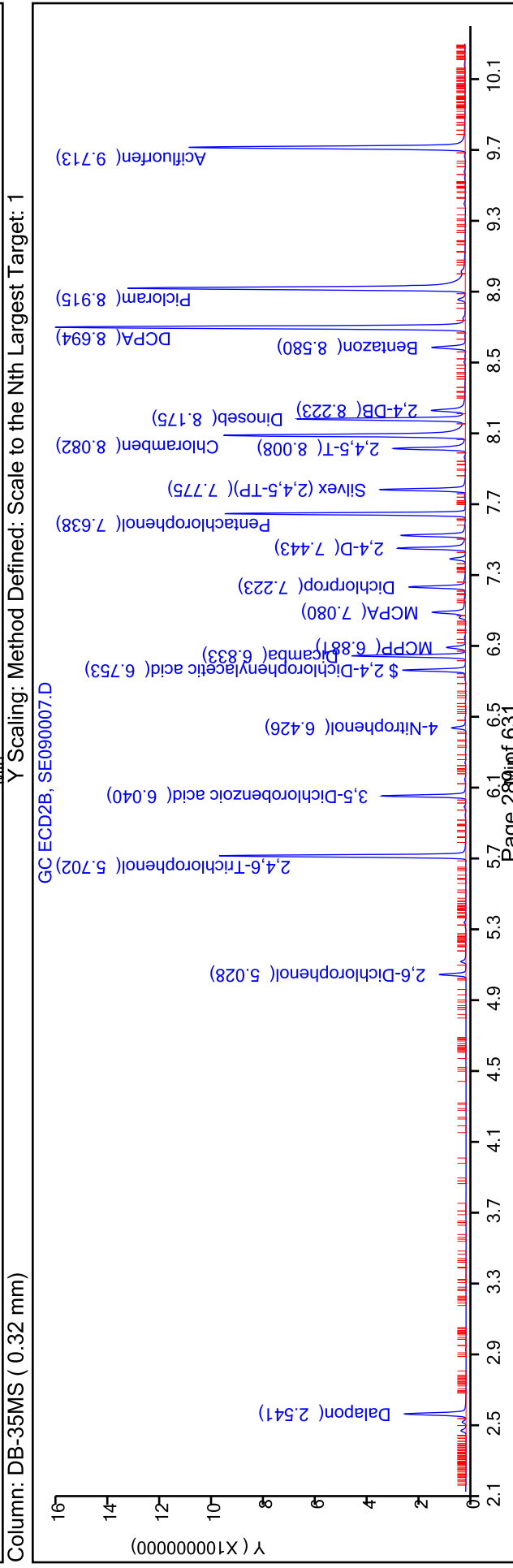
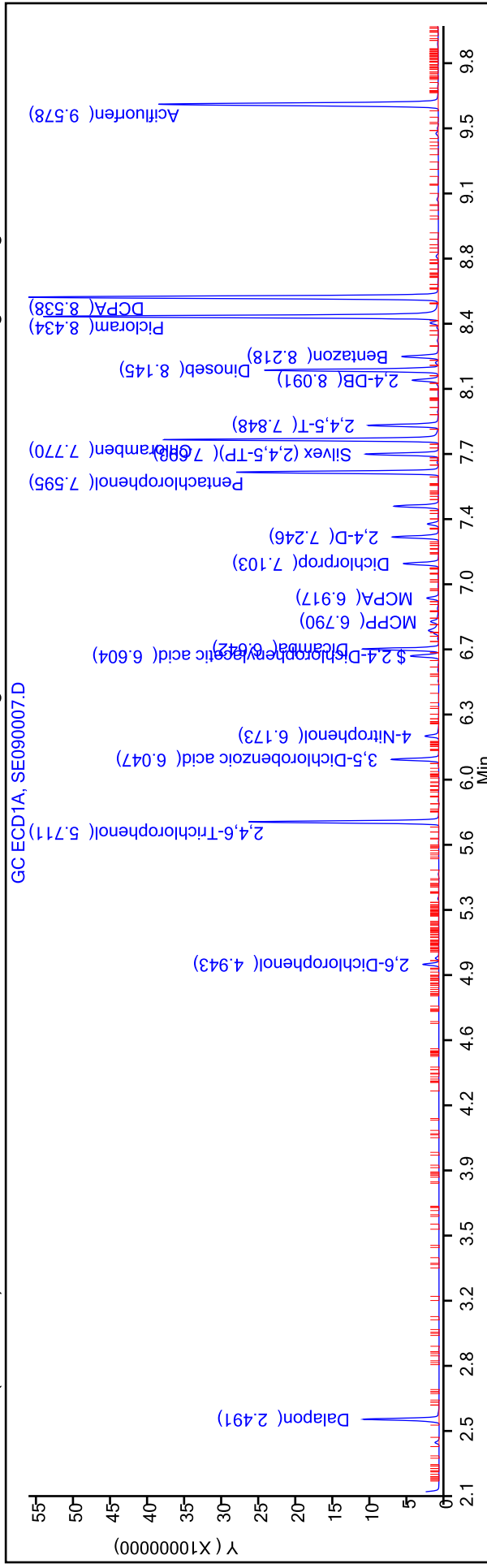
Operator ID: GEM
Worklist Smp#: 7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 09-May-2018 19:18:17 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:32:52 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	48692714	0.1000	0.0979	
2	2.540	2.540	0.000	134282444	0.1000	0.0953	
						RPD = 2.67	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	9632391	NC	NC	
2	5.028	5.028	0.000	49153025	NC	NC	
						RPD = 0.94	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	113343196	NC	NC	
2	5.700	5.700	0.000	470539202	NC	NC	
						RPD = 1.47	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	30671888	0.1000	0.0992	
2	6.040	6.040	0.000	157142720	0.1000	0.0972	
						RPD = 2.08	
5 4-Nitrophenol							
1	6.173	6.173	0.000	10063608	0.1000	0.1011	
2	6.426	6.426	0.000	28701977	0.1000	0.0923	
						RPD = 9.12	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	19396979	0.1000	0.0982	
2	6.752	6.752	0.000	121598006	0.1000	0.0977	
						RPD = 0.53	
7 Dicamba							
1	6.642	6.642	0.000	48666881	0.0500	0.0494	
2	6.833	6.833	0.000	218858895	0.0500	0.0494	
						RPD = 0.07	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	6799750	10.0	10.5	
2	6.880	6.880	0.000	42804626	10.0	10.6	
						RPD = 0.84	
9 MCPA							
1	6.916	6.916	0.000	8784914	10.0	10.2	
2	7.078	7.078	0.000	87635867	10.0	10.8	
						RPD = 5.05	
10 Dichlorprop							
1	7.102	7.102	0.000	25183834	0.1000	0.0983	
2	7.223	7.223	0.000	116304622	0.1000	0.0950	
						RPD = 3.42	
11 2,4-D							
1	7.246	7.246	0.000	31351468	0.1000	0.0993	
2	7.443	7.443	0.000	141286640	0.1000	0.0968	
						RPD = 2.60	
12 Pentachlorophenol							
1	7.594	7.594	0.000	124451497	0.0250	0.0246	
2	7.637	7.637	0.000	426702551	0.0250	0.0253	
						RPD = 2.98	
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	46478268	0.0250	0.0248	
2	7.774	7.774	0.000	165575880	0.0250	0.0247	
						RPD = 0.64	
14 Chloramben							
1	7.770	7.770	0.000	159803441	0.1000	0.0975	
2	8.081	8.081	0.000	534232051	0.1000	0.0987	
						RPD = 1.17	
15 2,4,5-T							
1	7.848	7.848	0.000	45407307	0.0250	0.0244	
2	8.008	8.008	0.000	150219829	0.0250	0.0241	
						RPD = 1.02	
16 2,4-DB							
1	8.091	8.091	0.000	17140092	0.1000	0.0973	
2	8.222	8.222	0.000	89229518	0.1000	0.1017	
						RPD = 4.40	
17 Dinoseb							
1	8.144	8.144	0.000	108913733	0.1000	0.0984	
2	8.173	8.173	0.000	319720996	0.1000	0.0975	
						RPD = 0.98	
18 Bentazon							
1	8.218	8.218	0.000	25386610	0.1000	0.0986	
2	8.578	8.578	0.000	72241071	0.1000	0.0970	
						RPD = 1.65	
19 Picloram							
1	8.433	8.433	0.000	265884971	0.1000	0.0996	
2	8.913	8.913	0.000	817209657	0.1000	0.0986	
						RPD = 1.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.537	8.537	0.000	286279694	0.1000	0.1009	
2	8.692	8.692	0.000	903362678	0.1000	0.1014	
						RPD = 0.51	

21 Acifluorfen

1	9.577	9.577	0.000	204134092	0.1000	0.1003	
2	9.710	9.710	0.000	561519505	0.1000	0.0946	
						RPD = 5.86	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090008.D

Operator ID: GEM
Worklist Smp#: 8

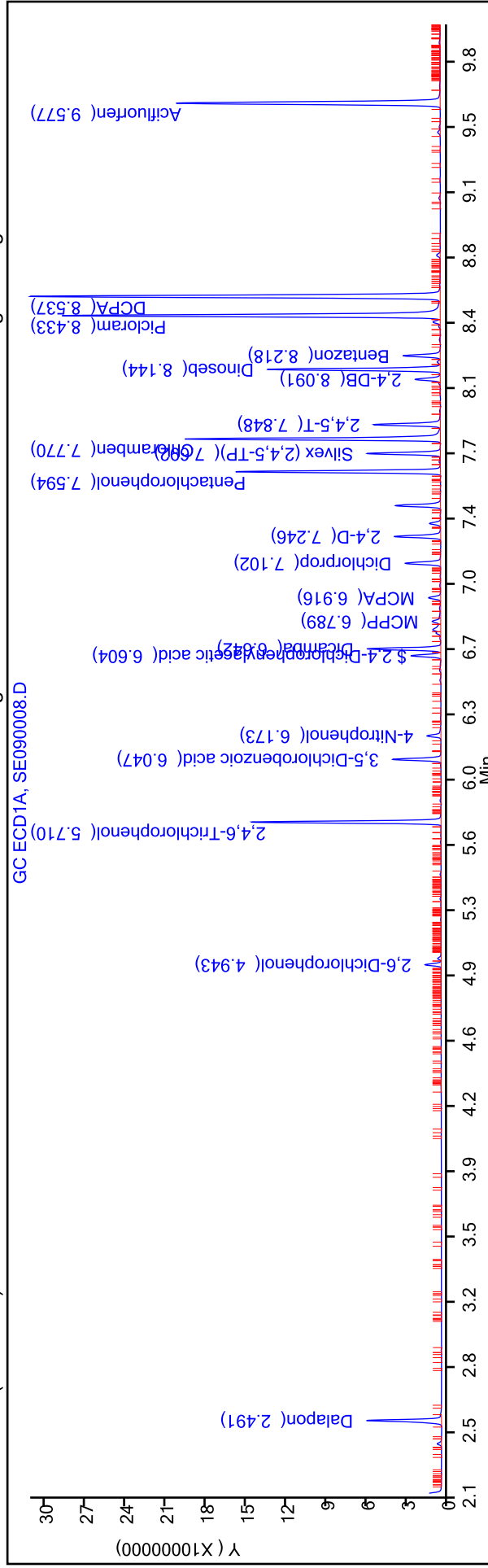
Injection Date: 09-May-2018 19:18:17
Instrument ID: CSGS

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

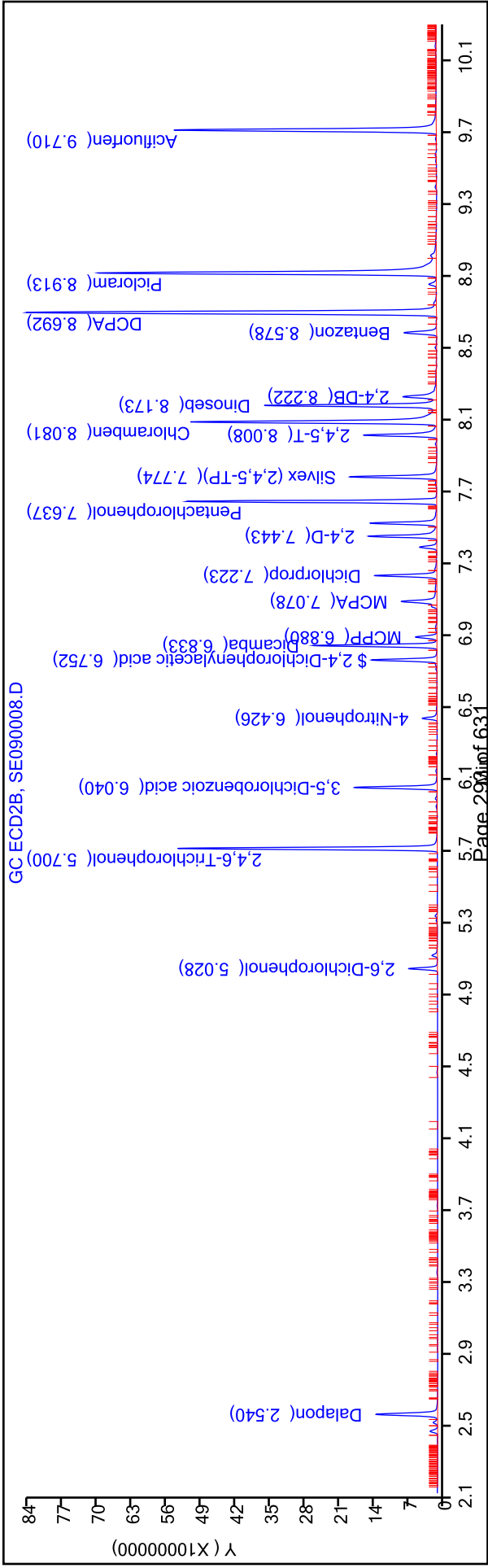
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 09-May-2018 19:37:54 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:11 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	26486244	0.0500	0.0512	
2	2.541	2.540	0.001	68276472	0.0500	0.0484	
						RPD = 5.48	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	5042831	NC	NC	
2	5.028	5.028	0.000	25694947	NC	NC	
						RPD = 1.09	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	53550343	NC	NC	
2	5.700	5.700	0.000	226578608	NC	NC	
						RPD = 3.37	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	15124840	0.0500	0.0489	
2	6.041	6.040	0.001	78811020	0.0500	0.0487	
						RPD = 0.39	
5 4-Nitrophenol							
1	6.174	6.173	0.001	5013484	0.0500	0.0504	
2	6.428	6.426	0.002	15379120	0.0500	0.0494	
						RPD = 1.84	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	9824392	0.0500	0.0498	
2	6.753	6.752	0.001	61074468	0.0500	0.0491	
						RPD = 1.36	
7 Dicamba							
1	6.641	6.642	-0.001	23742571	0.0250	0.0241	
2	6.833	6.833	0.000	106662608	0.0250	0.0241	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.788	6.789	-0.001	3508507	5.00	5.41	
2	6.881	6.880	0.001	24151794	5.00	5.53	
						RPD = 2.14	
9 MCPA							
1	6.916	6.916	0.000	4645587	5.00	5.36	
2	7.078	7.078	0.000	48125167	5.00	5.44	
						RPD = 1.65	
10 Dichlorprop							
1	7.102	7.102	0.000	12671217	0.0500	0.0495	
2	7.223	7.223	0.000	58567059	0.0500	0.0478	
						RPD = 3.33	
11 2,4-D							
1	7.247	7.246	0.001	15677896	0.0500	0.0497	
2	7.443	7.443	0.000	69419021	0.0500	0.0476	
						RPD = 4.36	
12 Pentachlorophenol							
1	7.595	7.594	0.001	58438516	0.0125	0.0115	
2	7.637	7.637	0.000	203051099	0.0125	0.0120	
						RPD = 4.31	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	21972097	0.0125	0.0117	
2	7.774	7.774	0.000	78461272	0.0125	0.0117	
						RPD = 0.40	
14 Chloramben							
1	7.771	7.770	0.001	74407541	0.0500	0.0454	
2	8.082	8.081	0.001	253737337	0.0500	0.0469	
						RPD = 3.16	
15 2,4,5-T							
1	7.848	7.848	0.000	22227236	0.0125	0.0119	
2	8.008	8.008	0.000	71548434	0.0125	0.0115	
						RPD = 3.76	
16 2,4-DB							
1	8.092	8.091	0.001	8499475	0.0500	0.0482	
2	8.223	8.222	0.001	45093077	0.0500	0.0514	
						RPD = 6.30	
17 Dinoseb							
1	8.145	8.144	0.001	50192922	0.0500	0.0454	
2	8.173	8.173	0.000	141523650	0.0500	0.0431	
						RPD = 5.01	
18 Bentazon							
1	8.218	8.218	0.000	12591827	0.0500	0.0489	
2	8.580	8.578	0.002	35628390	0.0500	0.0479	
						RPD = 2.22	
19 Picloram							
1	8.435	8.433	0.002	124854571	0.0500	0.0468	
2	8.913	8.913	0.000	374069812	0.0500	0.0451	
						RPD = 3.55	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	135870891	0.0500	0.0479	
2	8.693	8.692	0.001	429416896	0.0500	0.0482	
						RPD = 0.67	

21 Acifluorfen

1	9.578	9.577	0.001	92428968	0.0500	0.0454	
2	9.712	9.710	0.002	237117322	0.0500	0.0563	
						RPD = 21.33	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

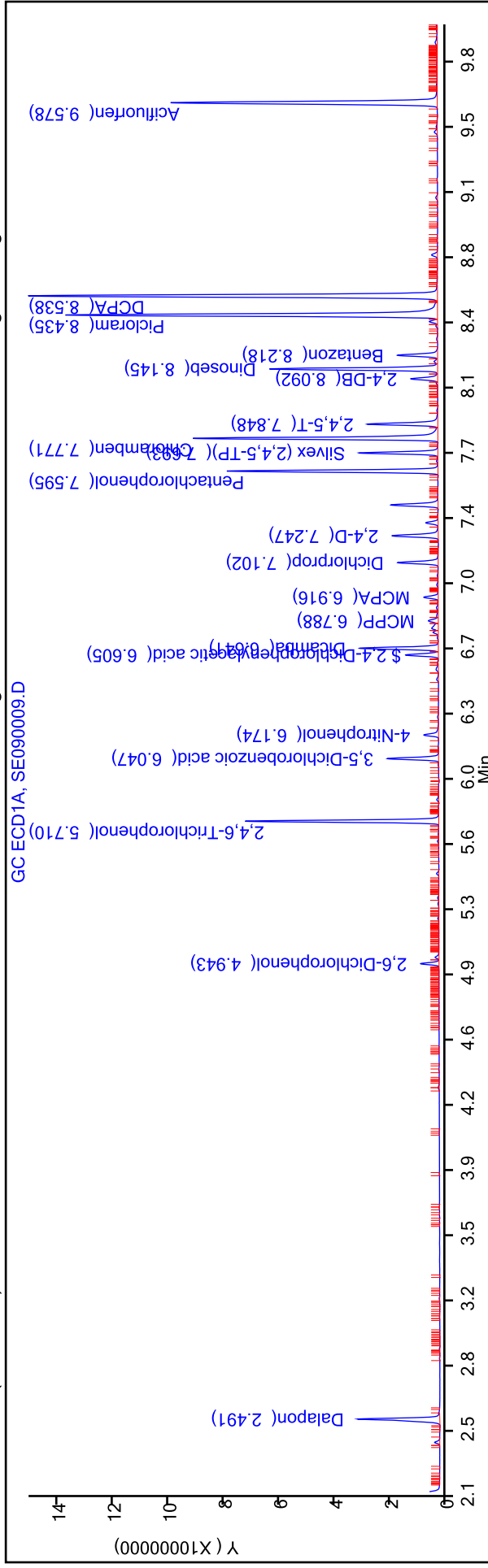
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090009.D
 Injection Date: 09-May-2018 19:37:54
 Lims ID: ic h3
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

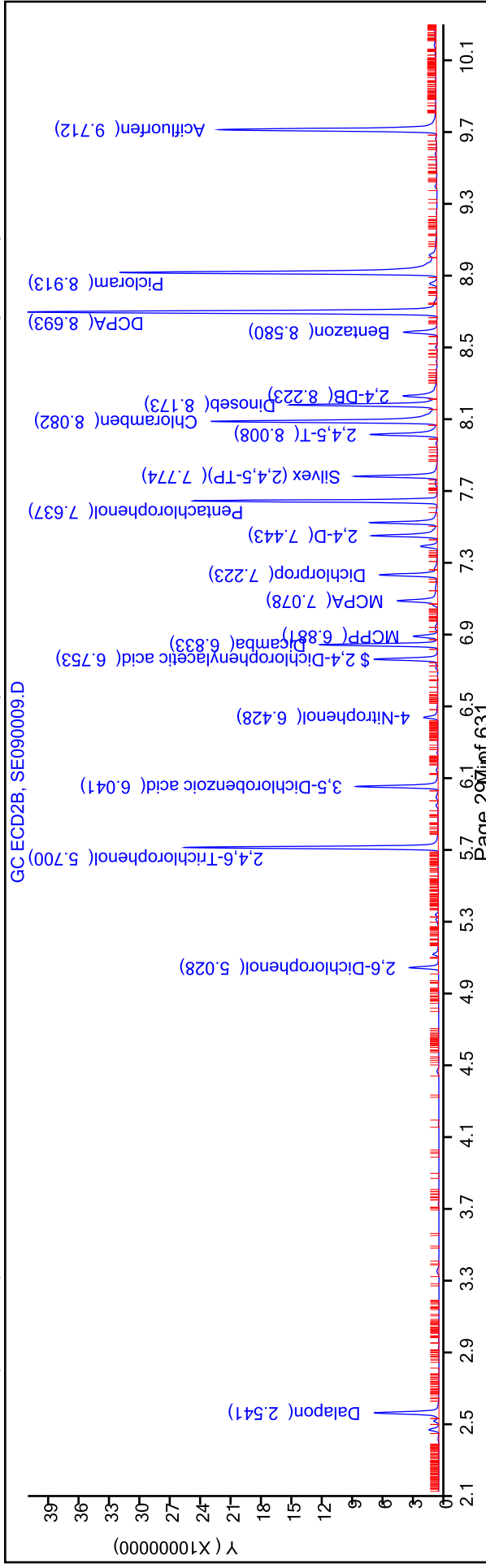
Operator ID: GEM
 Worklist Smp#: 9
 ALS Bottle#: 9

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 09-May-2018 19:57:37 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:30 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:25:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.490	2.491	-0.001	14657660	0.0250	0.0263	
2	2.540	2.540	0.000	34680649	0.0250	0.0246	
						RPD = 6.70	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	2643396	NC	NC	
2	5.029	5.028	0.001	13247063	NC	NC	
						RPD = 2.75	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	25414505	NC	NC	
2	5.700	5.700	0.000	107319552	NC	NC	
						RPD = 3.17	
4 3,5-Dichlorobenzoic acid							
1	6.047	6.047	0.000	7620330	0.0250	0.0246	
2	6.041	6.040	0.001	38364540	0.0250	0.0237	
						RPD = 3.83	
5 4-Nitrophenol							
1	6.175	6.173	0.002	2605390	0.0250	0.0262	
2	6.427	6.426	0.001	8778298	0.0250	0.0282	
						RPD = 7.54	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	4981736	0.0250	0.0252	
2	6.752	6.752	0.000	30704507	0.0250	0.0247	
						RPD = 2.22	
7 Dicamba							
1	6.642	6.642	0.000	11616649	0.0125	0.0118	
2	6.832	6.833	-0.001	51691784	0.0125	0.0117	
						RPD = 1.13	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090010.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	1745483	2.50	2.69	
2	6.880	6.880	0.000	13914604	2.50	2.76	
						RPD = 2.42	
9 MCPA							
1	6.917	6.916	0.001	2425365	2.50	2.73	
2	7.078	7.078	0.000	28551579	2.50	2.80	
						RPD = 2.54	
10 Dichlorprop							
1	7.103	7.102	0.001	6423668	0.0250	0.0251	
2	7.223	7.223	0.000	31462180	0.0250	0.0257	
						RPD = 2.46	
11 2,4-D							
1	7.247	7.246	0.001	7737754	0.0250	0.0245	
2	7.442	7.443	-0.001	34715108	0.0250	0.0238	
						RPD = 3.05	
12 Pentachlorophenol							
1	7.595	7.594	0.001	27542680	0.006250	0.005435	
2	7.637	7.637	0.000	94352178	0.006250	0.005595	
						RPD = 2.89	
13 Silvex (2,4,5-TP)							
1	7.692	7.692	0.000	10459084	0.006250	0.005589	
2	7.774	7.774	0.000	37061107	0.006250	0.005524	
						RPD = 1.18	
14 Chloramben							
1	7.772	7.770	0.002	35018105	0.0250	0.0214	
2	8.082	8.081	0.001	120073751	0.0250	0.0222	
						RPD = 3.71	
15 2,4,5-T							
1	7.849	7.848	0.001	10974501	0.006250	0.005886	
2	8.007	8.008	-0.001	33976230	0.006250	0.005452	
						RPD = 7.65	
16 2,4-DB							
1	8.092	8.091	0.001	4239618	0.0250	0.0241	
2	8.223	8.222	0.001	22663618	0.0250	0.0258	
						RPD = 7.05	
17 Dinoseb							
1	8.145	8.144	0.001	24507489	0.0250	0.0221	
2	8.173	8.173	0.000	66394703	0.0250	0.0202	
						RPD = 9.00	
18 Bentazon							
1	8.219	8.218	0.001	6315524	0.0250	0.0245	
2	8.580	8.578	0.002	17606131	0.0250	0.0236	
						RPD = 3.71	
19 Picloram							
1	8.436	8.433	0.003	59686028	0.0250	0.0224	
2	8.913	8.913	0.000	171088600	0.0250	0.0206	
						RPD = 7.97	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	64463537	0.0250	0.0227	
2	8.692	8.692	0.000	202718580	0.0250	0.0228	
						RPD = 0.17	

21 Acifluorfen

1	9.578	9.577	0.001	45279726	0.0250	0.0223	
2	9.711	9.710	0.001	108783467	0.0250	0.0411	
						RPD = 59.50	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090010.D
Injection Date: 09-May-2018 19:57:37
Lims ID: ic h2
Instrument ID: CSGS

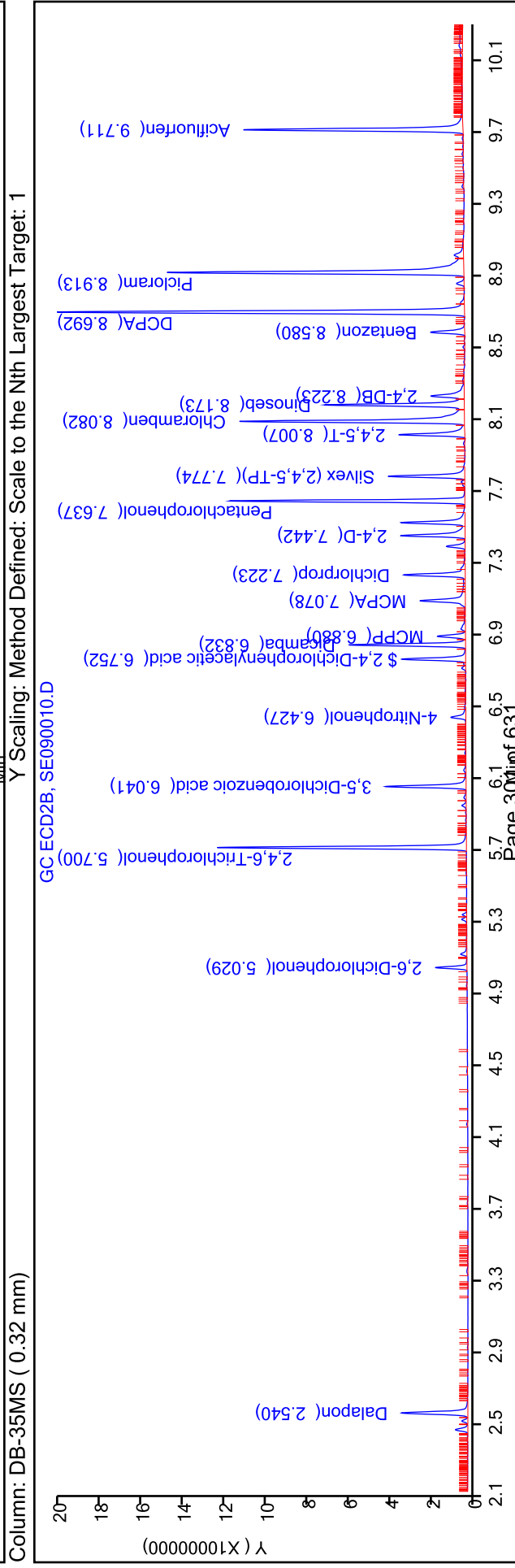
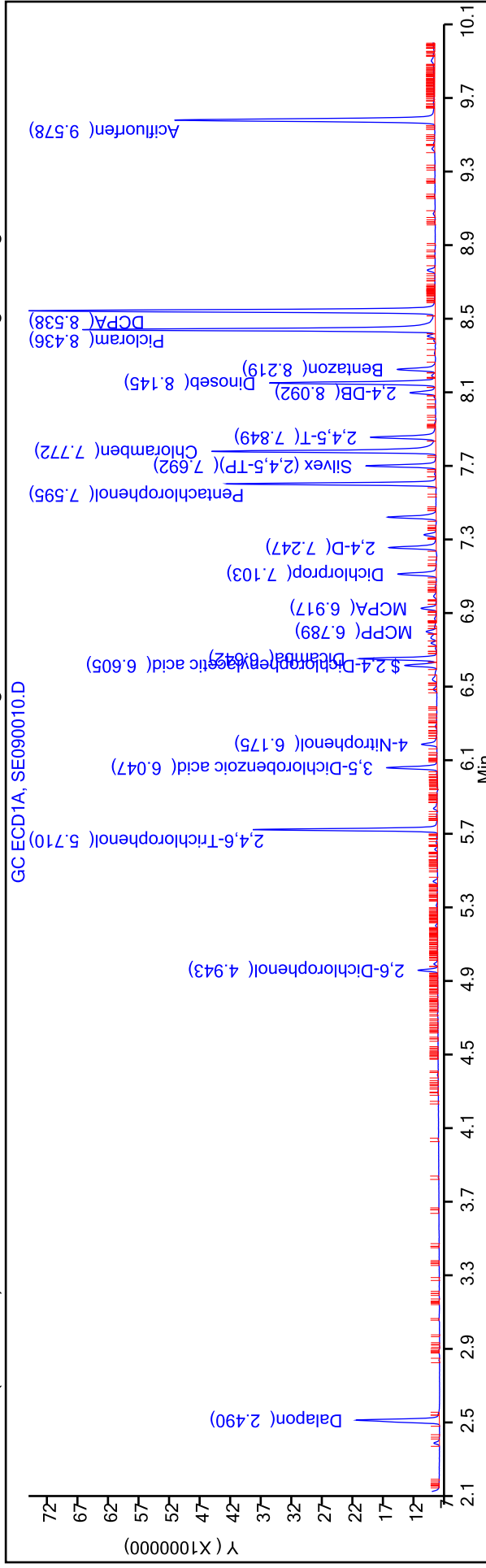
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 09-May-2018 20:17:14 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:33:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:26:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.489	2.491	-0.002	6790041	0.0100	0.009774	
2	2.539	2.540	-0.001	14490384	0.0100	0.0103	
						RPD = 5.07	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	1126471	NC	NC	
2	5.029	5.028	0.001	5671182	NC	NC	
						RPD = 2.29	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	9125808	NC	NC	
2	5.699	5.700	-0.001	39546213	NC	NC	
						RPD = 5.76	
4 3,5-Dichlorobenzoic acid							
1	6.048	6.047	0.001	2944716	0.0100	0.009523	
2	6.042	6.040	0.002	15640455	0.0100	0.009670	
						RPD = 1.52	
5 4-Nitrophenol							
1	6.177	6.173	0.004	1040738	0.0100	0.0105	
2	6.429	6.426	0.003	3984898	0.0100	0.0128	
						RPD = 20.26	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.605	6.604	0.001	2000718	0.0100	0.0101	
2	6.754	6.752	0.002	12141554	0.0100	0.009758	
						RPD = 3.77	
7 Dicamba							
1	6.641	6.642	-0.001	4372331	0.005000	0.004437	
2	6.834	6.833	0.001	19774183	0.005000	0.004459	
						RPD = 0.50	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.790	6.789	0.001	517455	1.00	0.7977	
2	6.882	6.880	0.002	6429640	1.00	0.7323	
						RPD = 8.55	
9 MCPA							
1	6.917	6.916	0.001	913431	1.00	0.9482	
2	7.081	7.078	0.003	12826943	1.00	0.6828	
						RPD = 32.55	
10 Dichlorprop							
1	7.104	7.102	0.002	2539480	0.0100	0.0099	
2	7.224	7.223	0.001	13374924	0.0100	0.0109	
						RPD = 9.72	
11 2,4-D							
1	7.248	7.246	0.002	3047545	0.0100	0.009656	
2	7.445	7.443	0.002	13933080	0.0100	0.009544	
						RPD = 1.16	
12 Pentachlorophenol							
1	7.595	7.594	0.001	9895451	0.002500	0.001953	
2	7.638	7.637	0.001	33742162	0.002500	0.002001	
						RPD = 2.43	
13 Silvex (2,4,5-TP)							
1	7.694	7.692	0.002	3859632	0.002500	0.002063	
2	7.776	7.774	0.002	13743986	0.002500	0.002049	
						RPD = 0.68	
14 Chloramben							
1	7.772	7.770	0.002	12786212	0.0100	0.007803	
2	8.083	8.081	0.002	43902837	0.0100	0.008109	
						RPD = 3.84	
15 2,4,5-T							
1	7.849	7.848	0.001	4426368	0.002500	0.002374	
2	8.009	8.008	0.001	13763803	0.002500	0.002209	
						RPD = 7.22	
16 2,4-DB							
1	8.093	8.091	0.002	1551068	0.0100	0.008803	
2	8.225	8.222	0.003	8072867	0.0100	0.009197	
						RPD = 4.38	
17 Dinoseb							
1	8.145	8.144	0.001	8830536	0.0100	0.007980	
2	8.174	8.173	0.001	23228618	0.0100	0.007081	
						RPD = 11.94	
18 Bentazon							
1	8.219	8.218	0.001	2372651	0.0100	0.009220	
2	8.582	8.578	0.004	6834492	0.0100	0.009180	
						RPD = 0.43	
19 Picloram							
1	8.436	8.433	0.003	20683643	0.0100	0.007749	
2	8.914	8.913	0.001	60165899	0.0100	0.007261	
						RPD = 6.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.539	8.537	0.002	22721047	0.0100	0.008009	
2	8.694	8.692	0.002	71194571	0.0100	0.007994	
						RPD = 0.19	

21 Acifluorfen

1	9.579	9.577	0.002	15904730	0.0100	0.007816	
2	9.714	9.710	0.004	36049429	0.0100	0.0325	
						RPD = 122.46	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

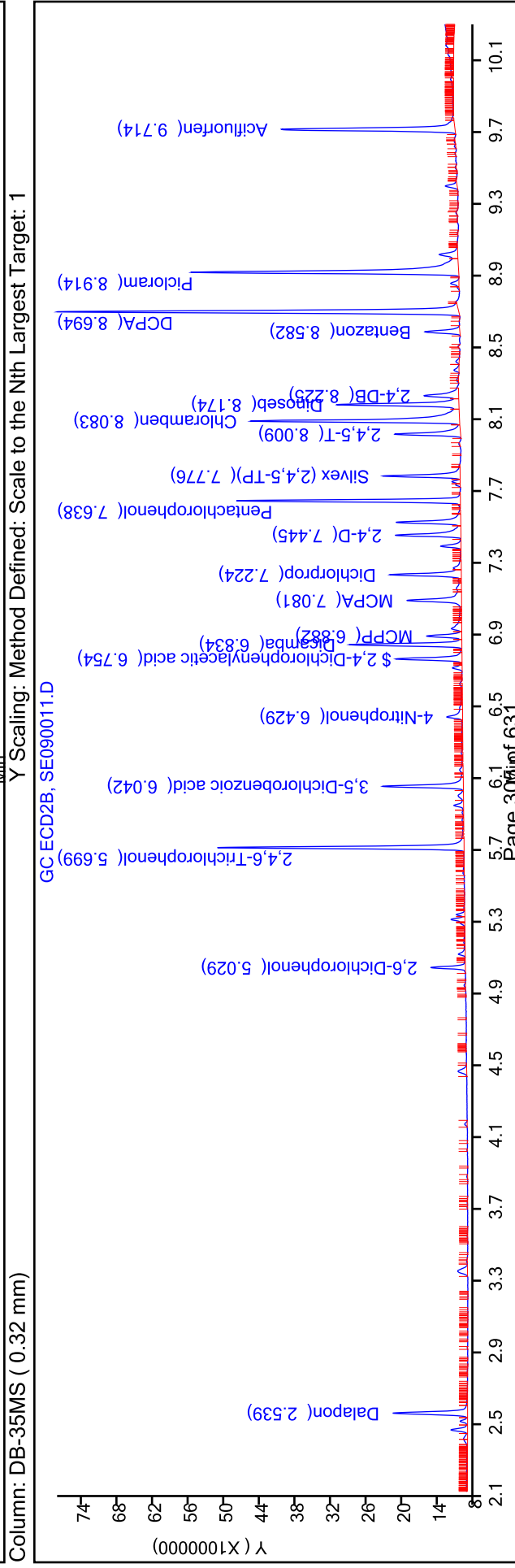
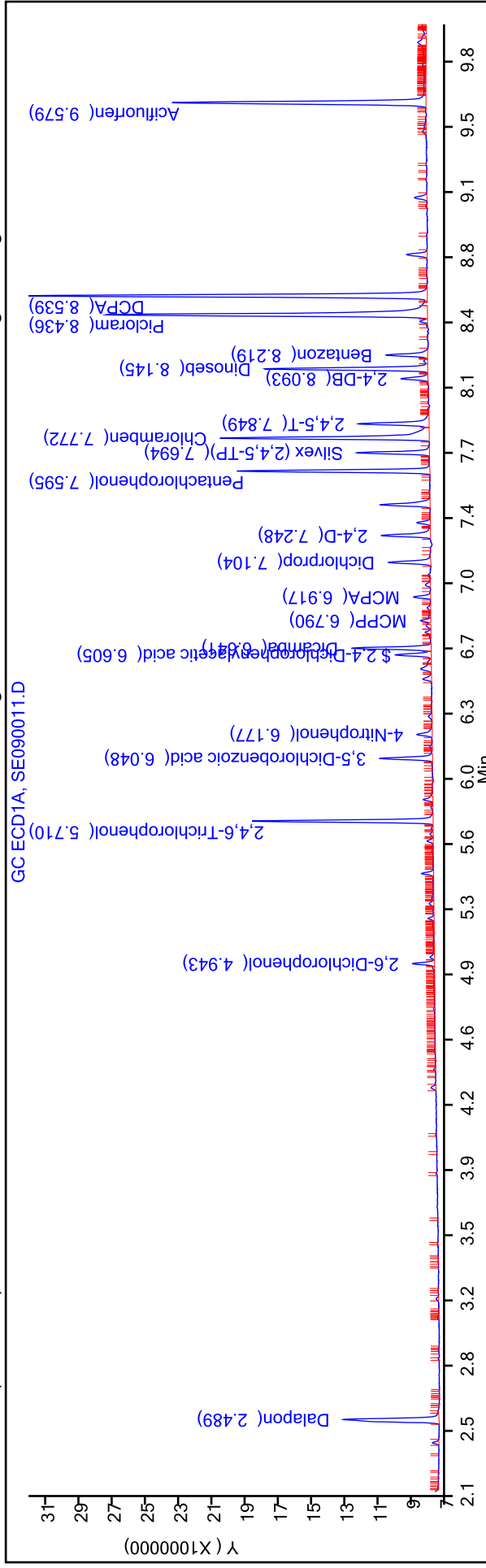
SGHERB-1_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Injection Date: 09-May-2018 20:17:14 Instrument ID: CSGS
 Lims ID: ic h1
 Client ID:
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 11
 ALS Bottle#: 11



Calibration

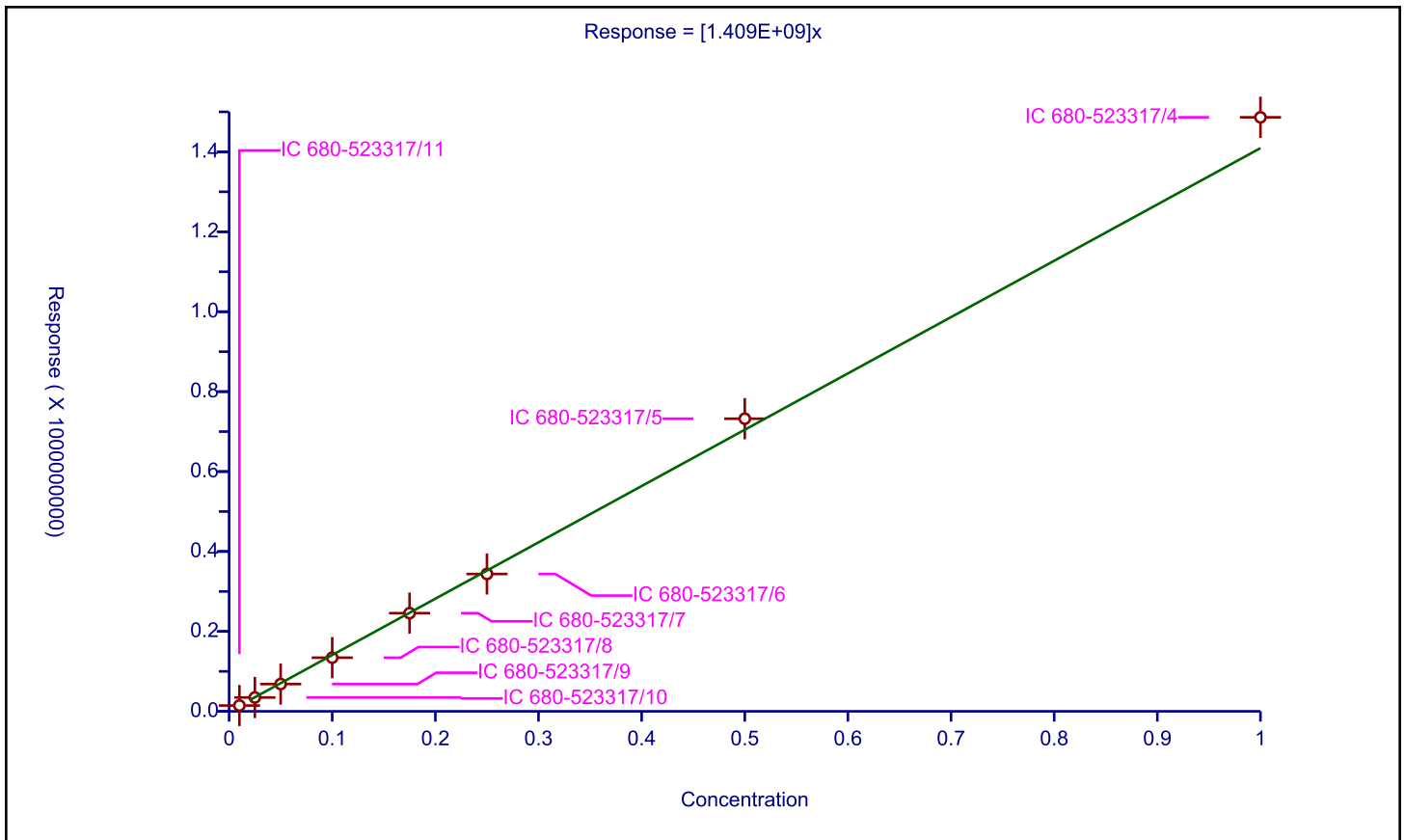
/ Dalapon

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

Curve Coefficients	
Intercept:	0
Slope:	1.409E+09

Error Coefficients	
Standard Error:	31200000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	14490384.0			1449038400.0	Y
2	IC 680-523317/10	0.025	34680649.0			1387225960.0	Y
3	IC 680-523317/9	0.05	68276472.0			1365529440.0	Y
4	IC 680-523317/8	0.1	134282444.0			1342824440.0	Y
5	IC 680-523317/7	0.175	245675180.0			1403858171.42857	Y
6	IC 680-523317/6	0.25	343706065.0			1374824260.0	Y
7	IC 680-523317/5	0.5	732221950.0			1464443900.0	Y
8	IC 680-523317/4	1.0	1486390376.0			1486390376.0	Y



Calibration

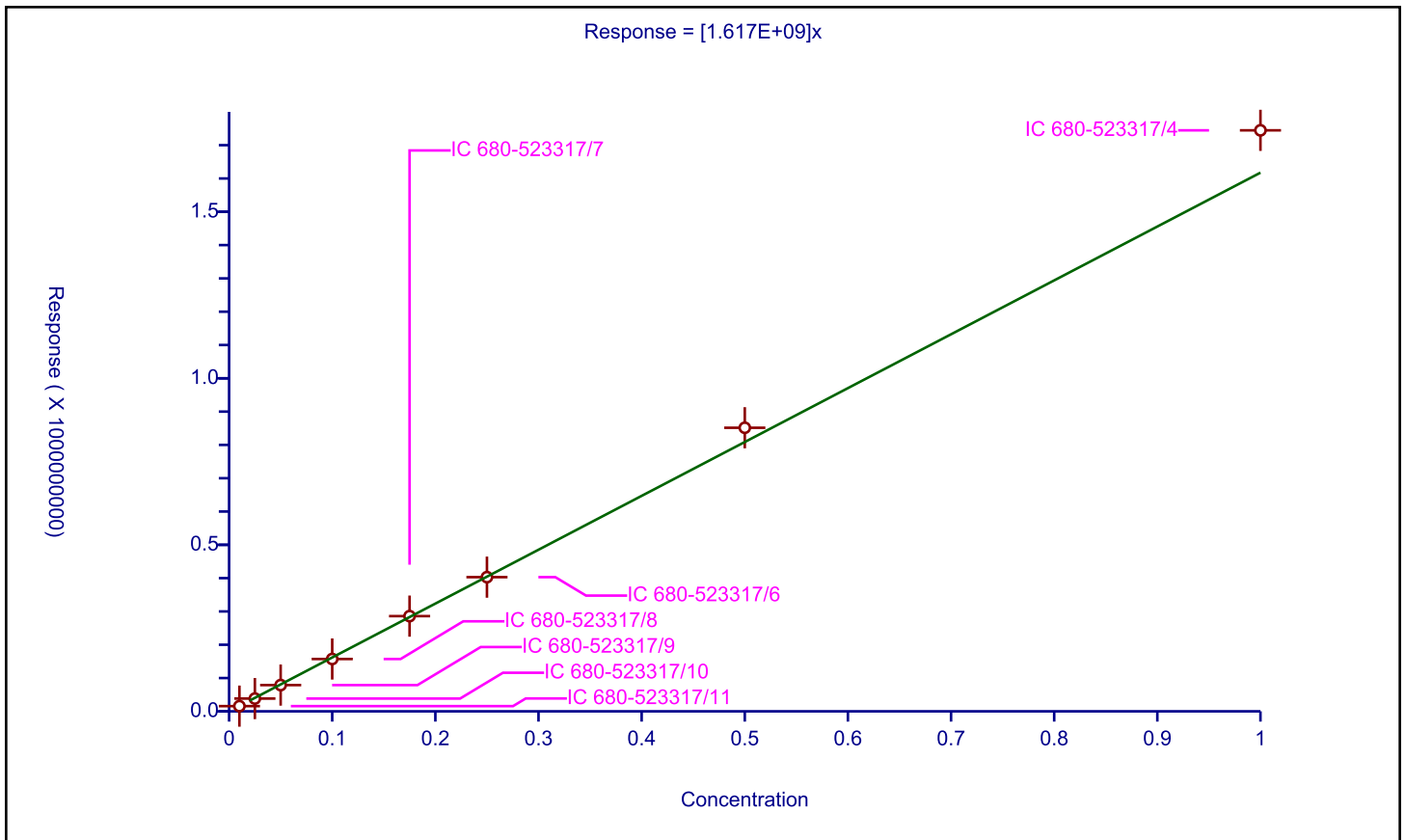
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.617E+09

Error Coefficients	
Standard Error:	50800000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	15640455.0			1564045500.0	Y
2	IC 680-523317/10	0.025	38364540.0			1534581600.0	Y
3	IC 680-523317/9	0.05	78811020.0			1576220400.0	Y
4	IC 680-523317/8	0.1	157142720.0			1571427200.0	Y
5	IC 680-523317/7	0.175	285956578.0			1634037588.57143	Y
6	IC 680-523317/6	0.25	402937011.0			1611748044.0	Y
7	IC 680-523317/5	0.5	851491539.0			1702983078.0	Y
8	IC 680-523317/4	1.0	1744604922.0			1744604922.0	Y



Calibration

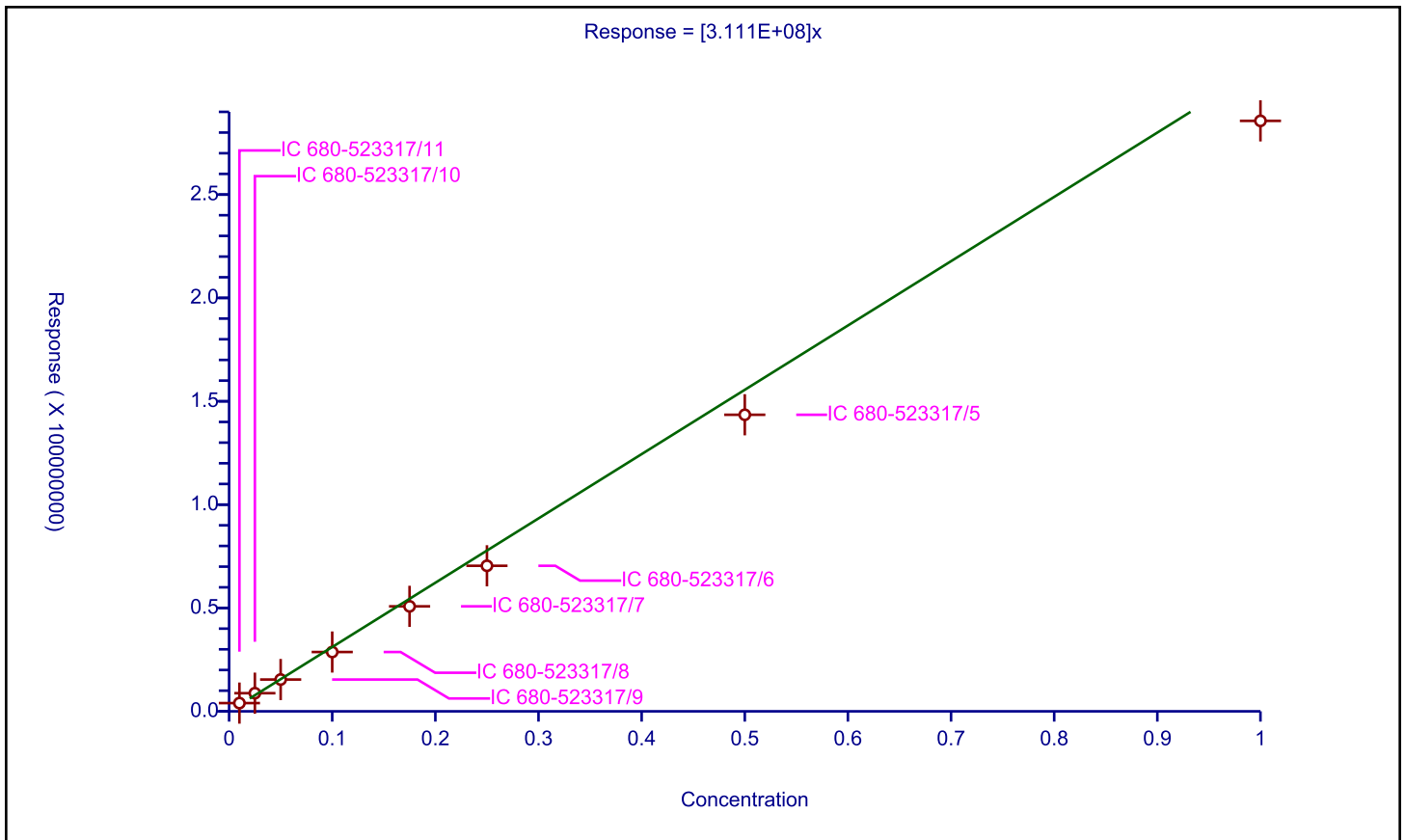
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	3.111E+08

Error Coefficients	
Standard Error:	11100000
Relative Standard Error:	13.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	3984898.0			398489800.0	Y
2	IC 680-523317/10	0.025	8778298.0			351131920.0	Y
3	IC 680-523317/9	0.05	15379120.0			307582400.0	Y
4	IC 680-523317/8	0.1	28701977.0			287019770.0	Y
5	IC 680-523317/7	0.175	50791322.0			290236125.714286	Y
6	IC 680-523317/6	0.25	70418420.0			281673680.0	Y
7	IC 680-523317/5	0.5	143473602.0			286947204.0	Y
8	IC 680-523317/4	1.0	285656847.0			285656847.0	Y



Calibration

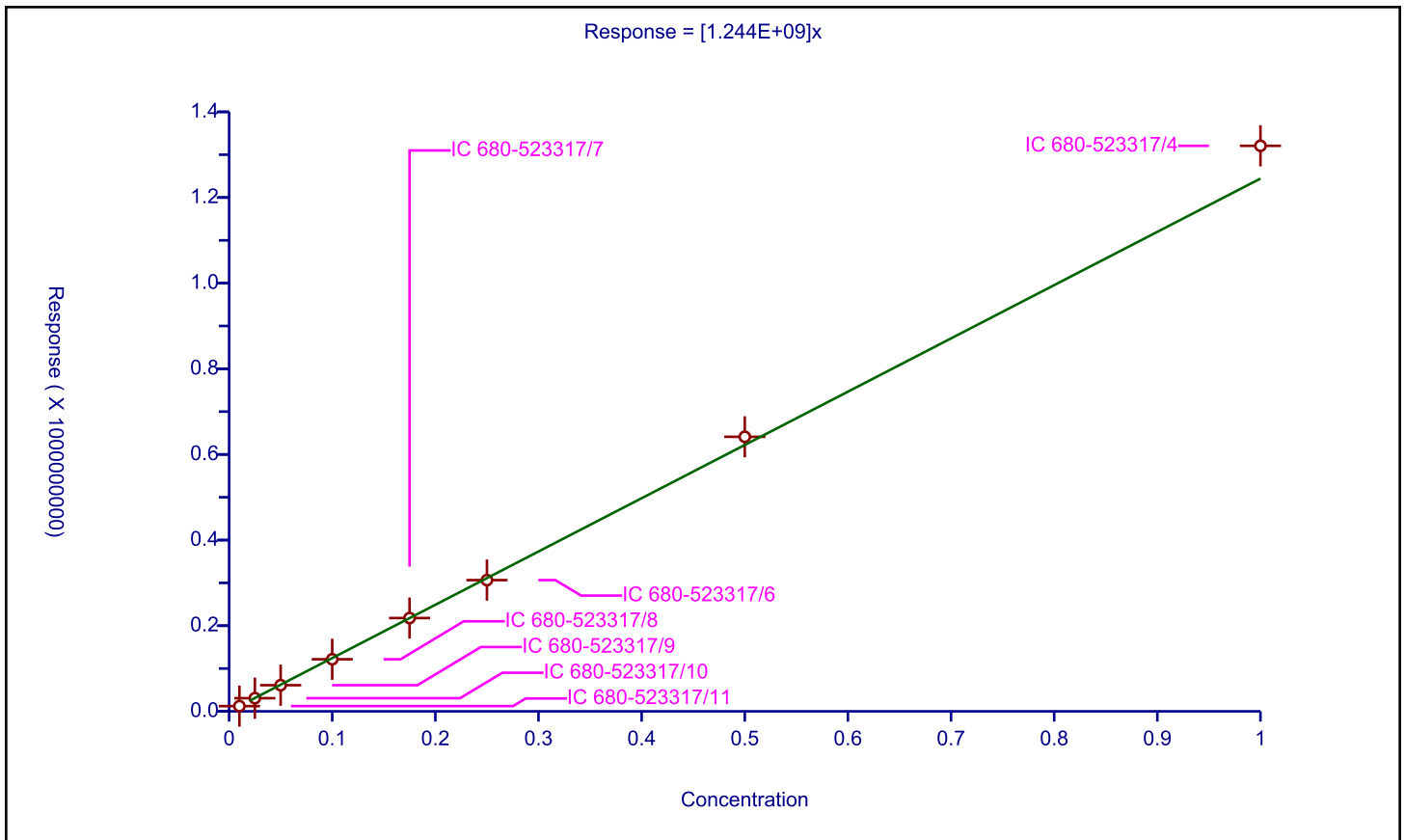
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.244E+09

Error Coefficients	
Standard Error:	29900000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	12141554.0			1214155400.0	Y
2	IC 680-523317/10	0.025	30704507.0			1228180280.0	Y
3	IC 680-523317/9	0.05	61074468.0			1221489360.0	Y
4	IC 680-523317/8	0.1	121598006.0			1215980060.0	Y
5	IC 680-523317/7	0.175	217901405.0			1245150885.71429	Y
6	IC 680-523317/6	0.25	306481984.0			1225927936.0	Y
7	IC 680-523317/5	0.5	641182661.0			1282365322.0	Y
8	IC 680-523317/4	1.0	1320744257.0			1320744257.0	Y



Calibration

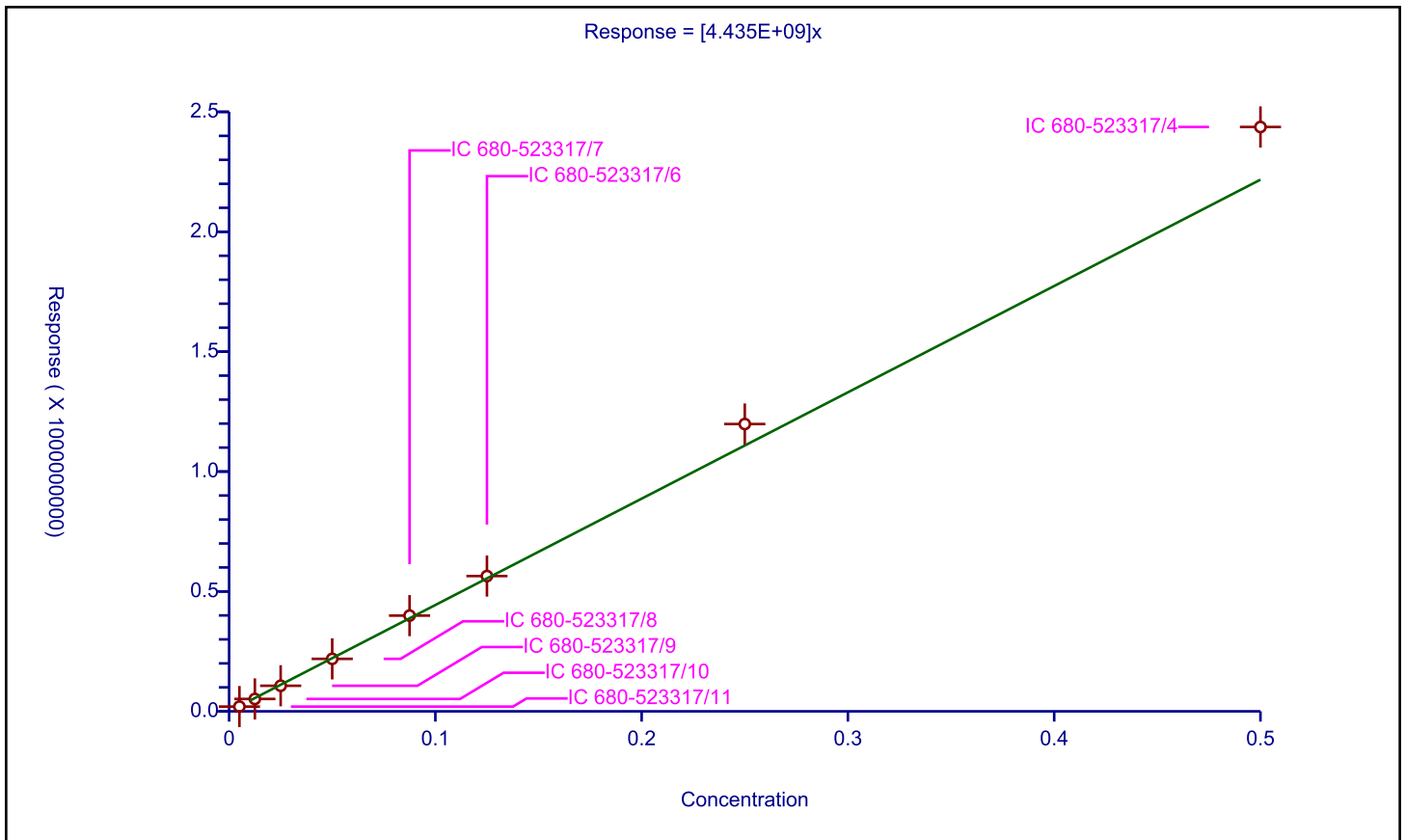
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	4.435E+09

Error Coefficients	
Standard Error:	89900000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.005	19774183.0			3954836600.0	Y
2	IC 680-523317/10	0.0125	51691784.0			4135342720.0	Y
3	IC 680-523317/9	0.025	106662608.0			4266504320.0	Y
4	IC 680-523317/8	0.05	218858895.0			4377177900.0	Y
5	IC 680-523317/7	0.0875	399308905.0			4563530342.85714	Y
6	IC 680-523317/6	0.125	564195778.0			4513566224.0	Y
7	IC 680-523317/5	0.25	1198198735.0			4792794940.0	Y
8	IC 680-523317/4	0.5	2436964400.0			4873928800.0	Y



Calibration

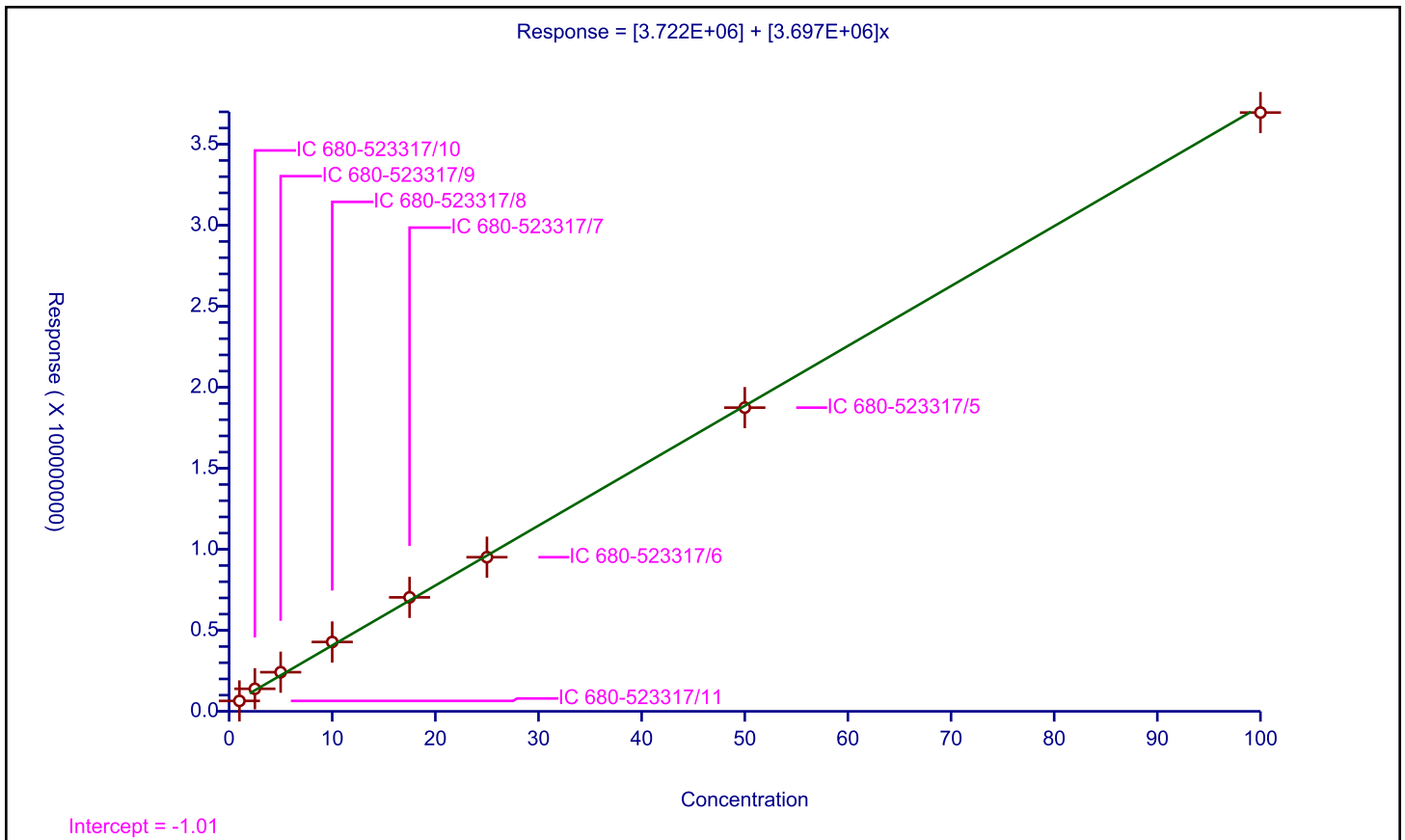
/ MCPP

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

Curve Coefficients	
Intercept:	3.722E+06
Slope:	3.697E+06

Error Coefficients	
Standard Error:	2260000
Relative Standard Error:	12.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	1.0	6429640.0			6429640.0	Y
2	IC 680-523317/10	2.5	13914604.0			5565841.6	Y
3	IC 680-523317/9	5.0	24151794.0			4830358.8	Y
4	IC 680-523317/8	10.0	42804626.0			4280462.6	Y
5	IC 680-523317/7	17.5	70347241.0			4019842.342857	Y
6	IC 680-523317/6	25.0	95134406.0			3805376.24	Y
7	IC 680-523317/5	50.0	187460762.0			3749215.24	Y
8	IC 680-523317/4	100.0	369583811.0			3695838.11	Y



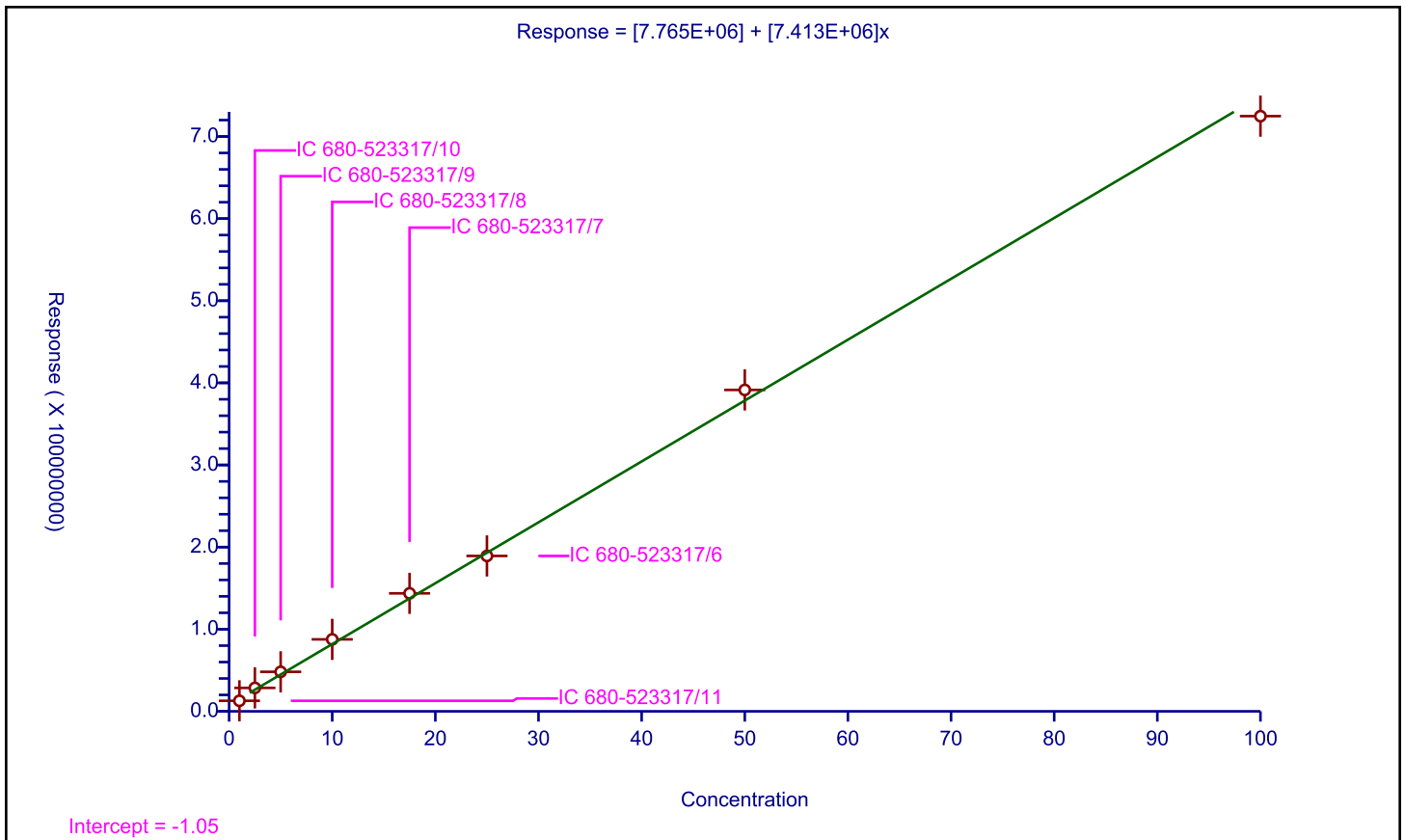
Calibration

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

Curve Coefficients	
Intercept:	7.765E+06
Slope:	7.413E+06

Error Coefficients	
Standard Error:	12000000
Relative Standard Error:	15.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	1.0	12826943.0			12826943.0	Y
2	IC 680-523317/10	2.5	28551579.0			11420631.6	Y
3	IC 680-523317/9	5.0	48125167.0			9625033.4	Y
4	IC 680-523317/8	10.0	87635867.0			8763586.7	Y
5	IC 680-523317/7	17.5	143685808.0			8210617.6	Y
6	IC 680-523317/6	25.0	189250340.0			7570013.6	Y
7	IC 680-523317/5	50.0	391405967.0			7828119.34	Y
8	IC 680-523317/4	100.0	724807549.0			7248075.49	Y



Calibration

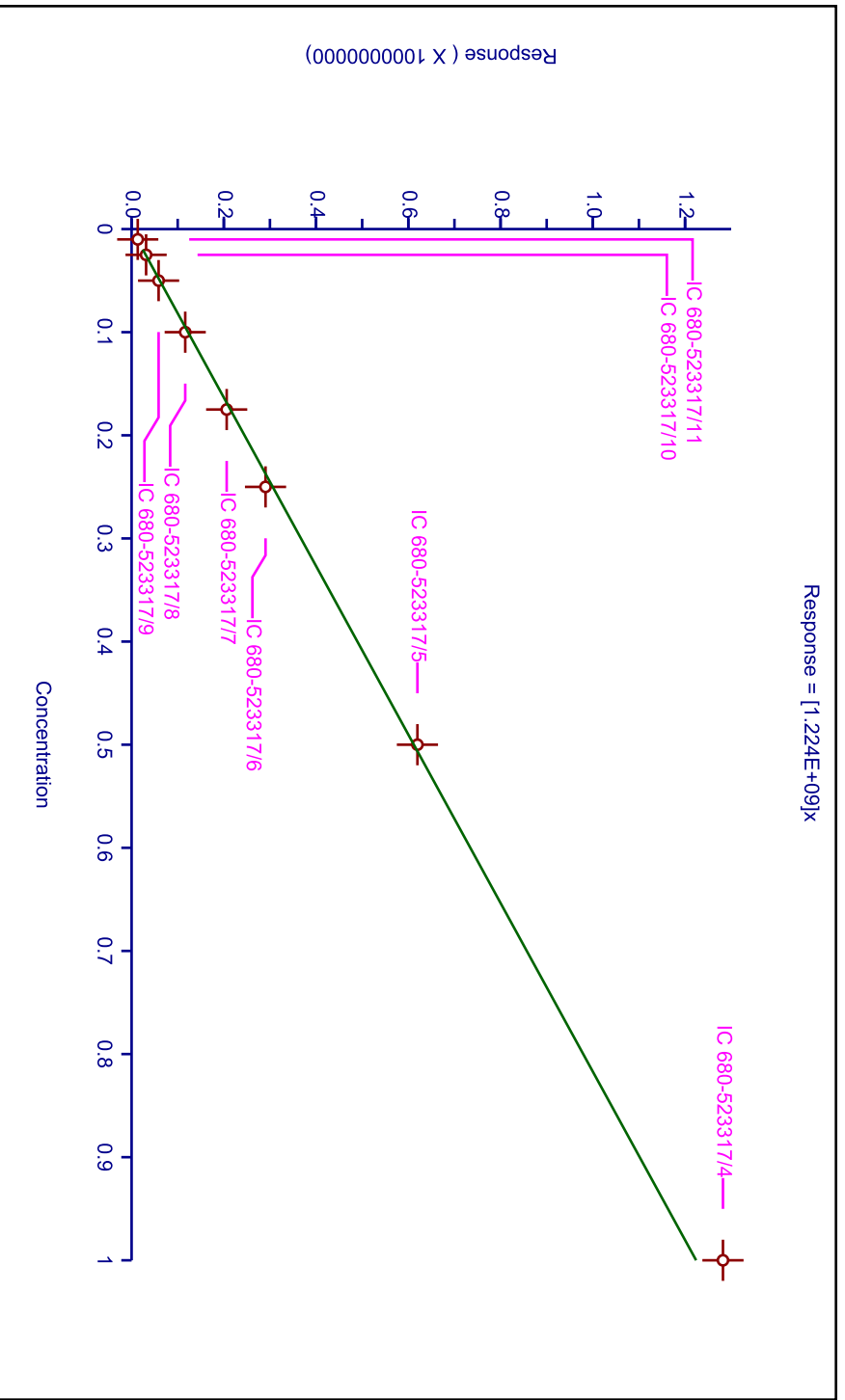
/ Dichlorprop

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

Curve Coefficients
 Intercept: 0
 Slope: 1.224E+09

Error Coefficients
 Standard Error: 23300000
 Relative Standard Error: 5.4
 Correlation Coefficient: 0.999
 Coefficient of Determination (Adjusted): 0.996

ID Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	13374924.0		1337492400.0	Y
2	IC 680-523317/10	0.025	31462180.0		1258487200.0	Y
3	IC 680-523317/9	0.05	58567059.0		1171341180.0	Y
4	IC 680-523317/8	0.1	116304622.0		1163046220.0	Y
5	IC 680-523317/7	0.175	206211940.0		1178353942.85714	Y
6	IC 680-523317/6	0.25	290450649.0		1161802596.0	Y
7	IC 680-523317/5	0.5	619789858.0		1239579716.0	Y
8	IC 680-523317/4	1.0	1282238794.0		1282238794.0	Y



Calibration

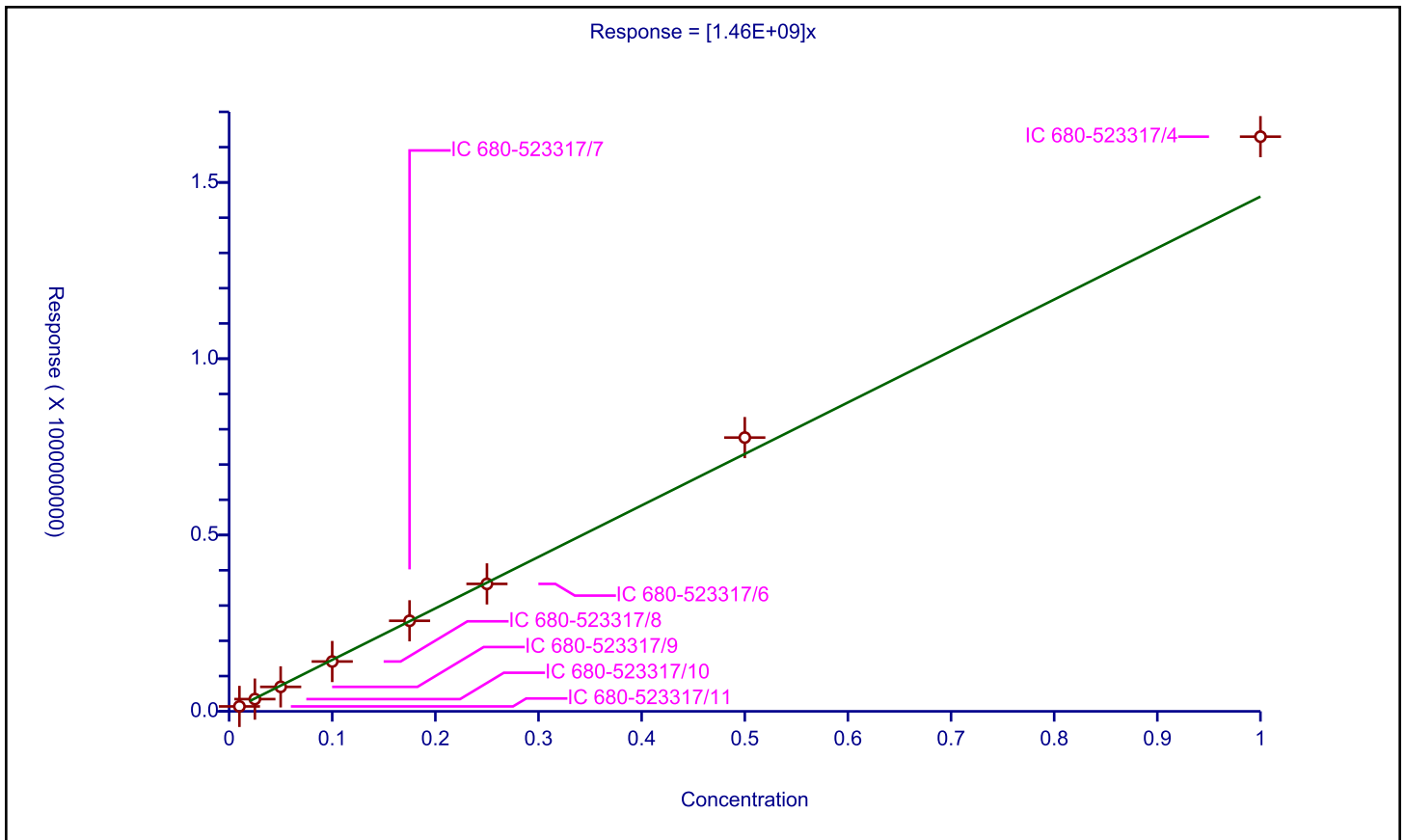
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	1.46E+09

Error Coefficients	
Standard Error:	66600000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	13933080.0			1393308000.0	Y
2	IC 680-523317/10	0.025	34715108.0			1388604320.0	Y
3	IC 680-523317/9	0.05	69419021.0			1388380420.0	Y
4	IC 680-523317/8	0.1	141286640.0			1412866400.0	Y
5	IC 680-523317/7	0.175	256797724.0			1467415565.71429	Y
6	IC 680-523317/6	0.25	361394001.0			1445576004.0	Y
7	IC 680-523317/5	0.5	776315154.0			1552630308.0	Y
8	IC 680-523317/4	1.0	1629748617.0			1629748617.0	Y



Calibration

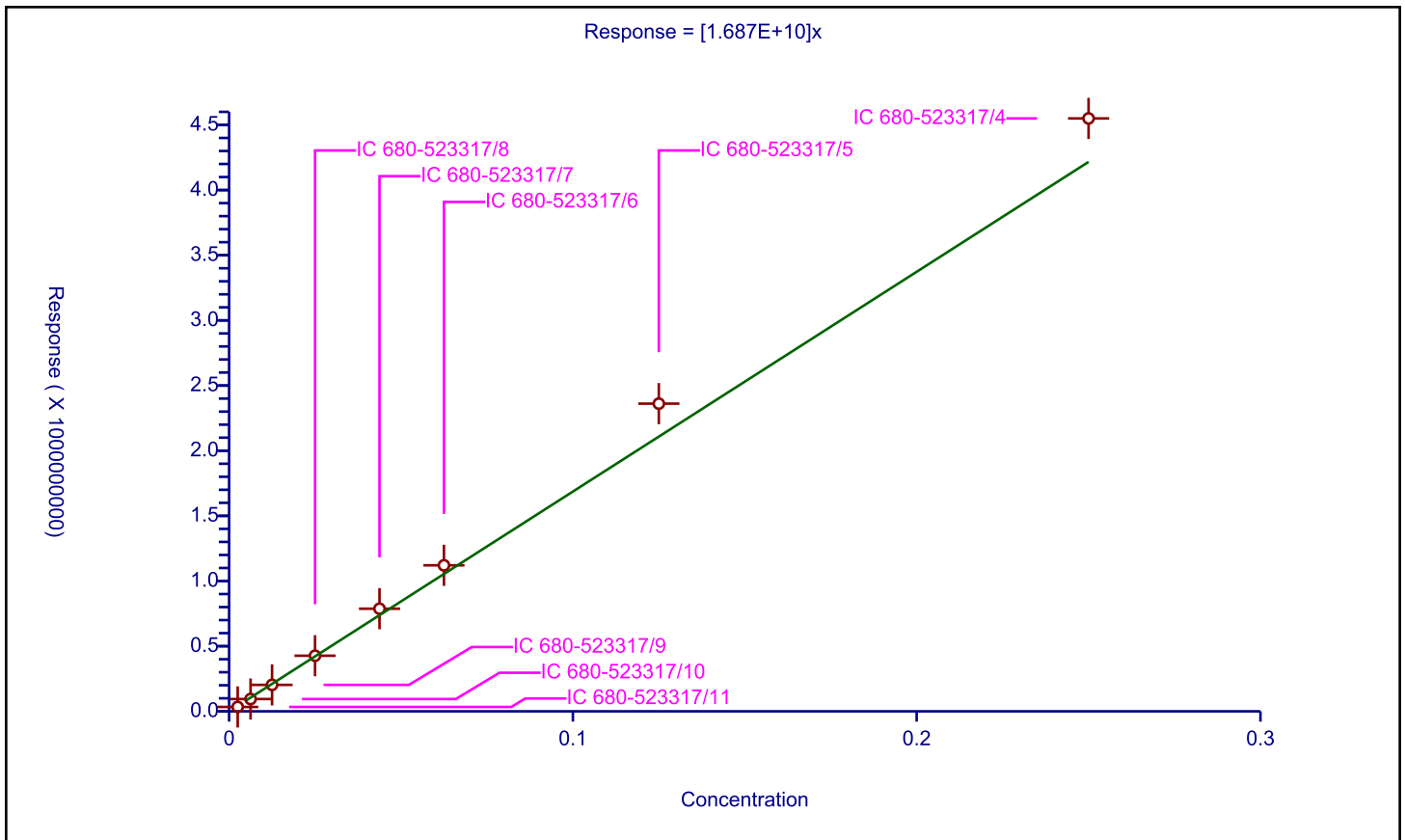
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	1.687E+10

Error Coefficients	
Standard Error:	161000000
Relative Standard Error:	10.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	33742162.0			13496864800.0	Y
2	IC 680-523317/10	0.00625	94352178.0			15096348480.0	Y
3	IC 680-523317/9	0.0125	203051099.0			16244087920.0	Y
4	IC 680-523317/8	0.025	426702551.0			17068102040.0	Y
5	IC 680-523317/7	0.04375	787462544.0			17999143862.8571	Y
6	IC 680-523317/6	0.0625	1120470146.0			17927522336.0	Y
7	IC 680-523317/5	0.125	2361098559.0			18888788472.0	Y
8	IC 680-523317/4	0.25	4549801262.0			18199205048.0	Y



Calibration

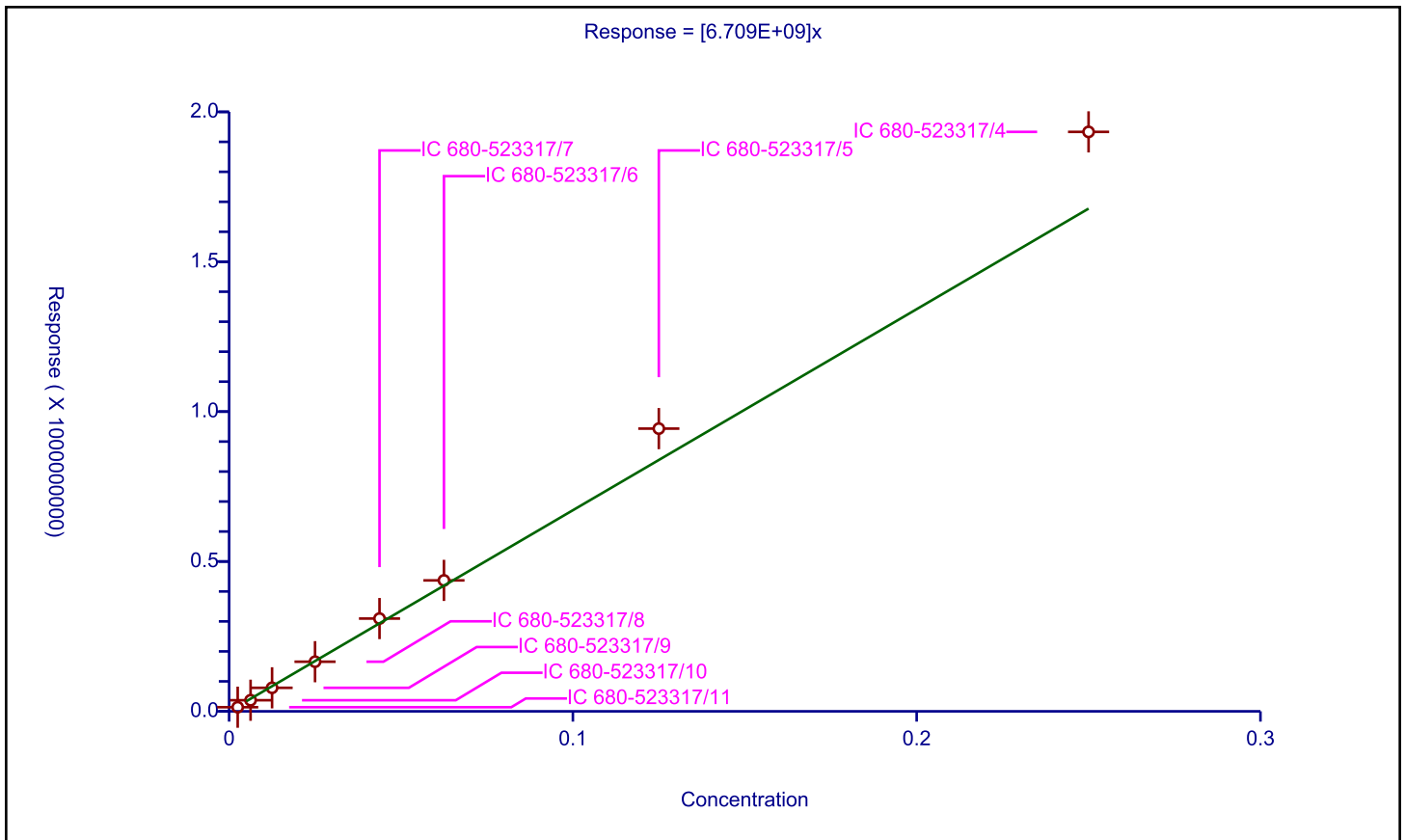
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	6.709E+09

Error Coefficients	
Standard Error:	105000000
Relative Standard Error:	11.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	13743986.0			5497594400.0	Y
2	IC 680-523317/10	0.00625	37061107.0			5929777120.0	Y
3	IC 680-523317/9	0.0125	78461272.0			6276901760.0	Y
4	IC 680-523317/8	0.025	165575880.0			6623035200.0	Y
5	IC 680-523317/7	0.04375	309540353.0			7075208068.57143	Y
6	IC 680-523317/6	0.0625	436902458.0			6990439328.0	Y
7	IC 680-523317/5	0.125	943300131.0			7546401048.0	Y
8	IC 680-523317/4	0.25	1933247676.0			7732990704.0	Y



Calibration

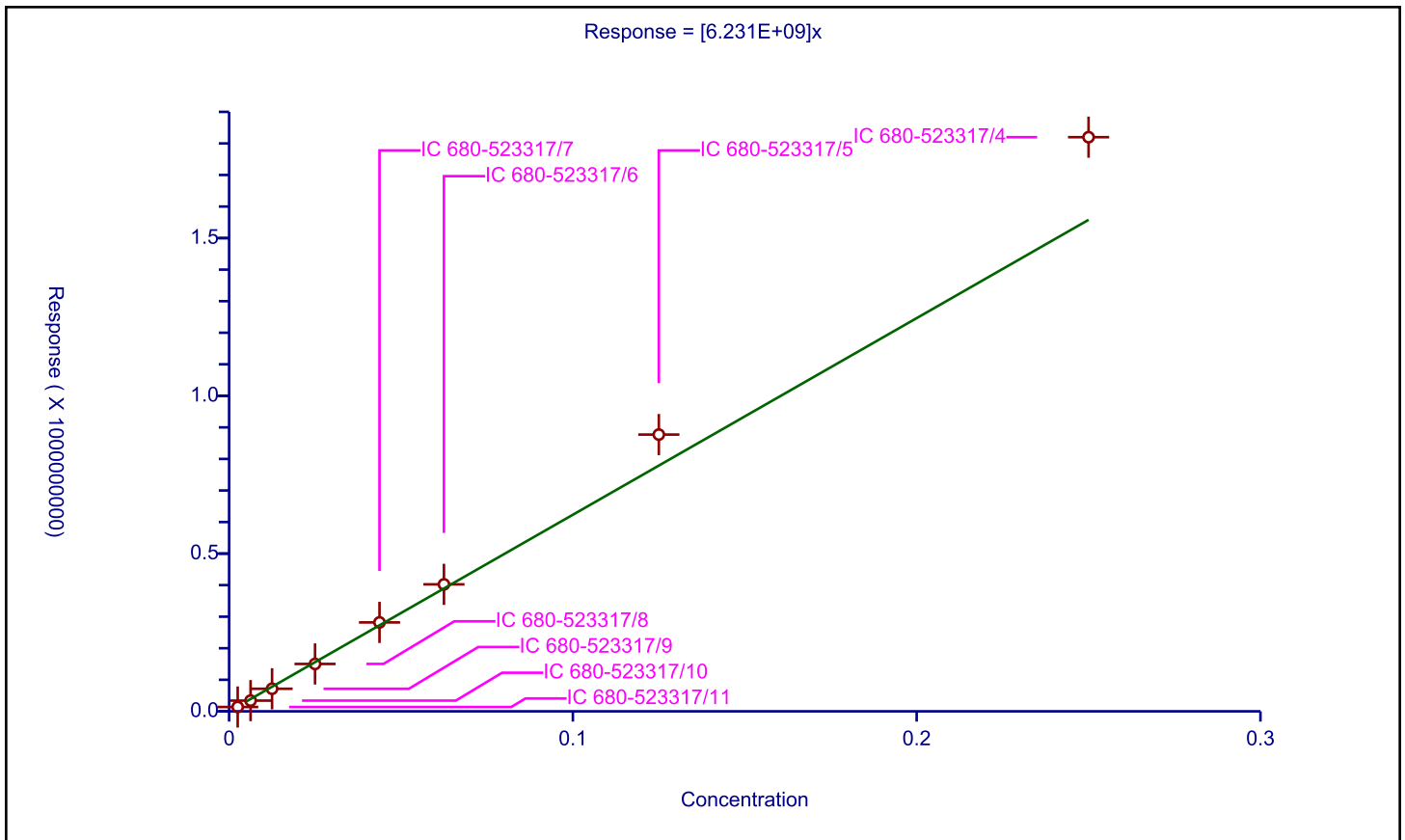
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	6.231E+09

Error Coefficients	
Standard Error:	106000000
Relative Standard Error:	11.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.0025	13763803.0			5505521200.0	Y
2	IC 680-523317/10	0.00625	33976230.0			5436196800.0	Y
3	IC 680-523317/9	0.0125	71548434.0			5723874720.0	Y
4	IC 680-523317/8	0.025	150219829.0			6008793160.0	Y
5	IC 680-523317/7	0.04375	281806659.0			6441295062.85714	Y
6	IC 680-523317/6	0.0625	402466907.0			6439470512.0	Y
7	IC 680-523317/5	0.125	877205524.0			7017644192.0	Y
8	IC 680-523317/4	0.25	1819790712.0			7279162848.0	Y



Calibration

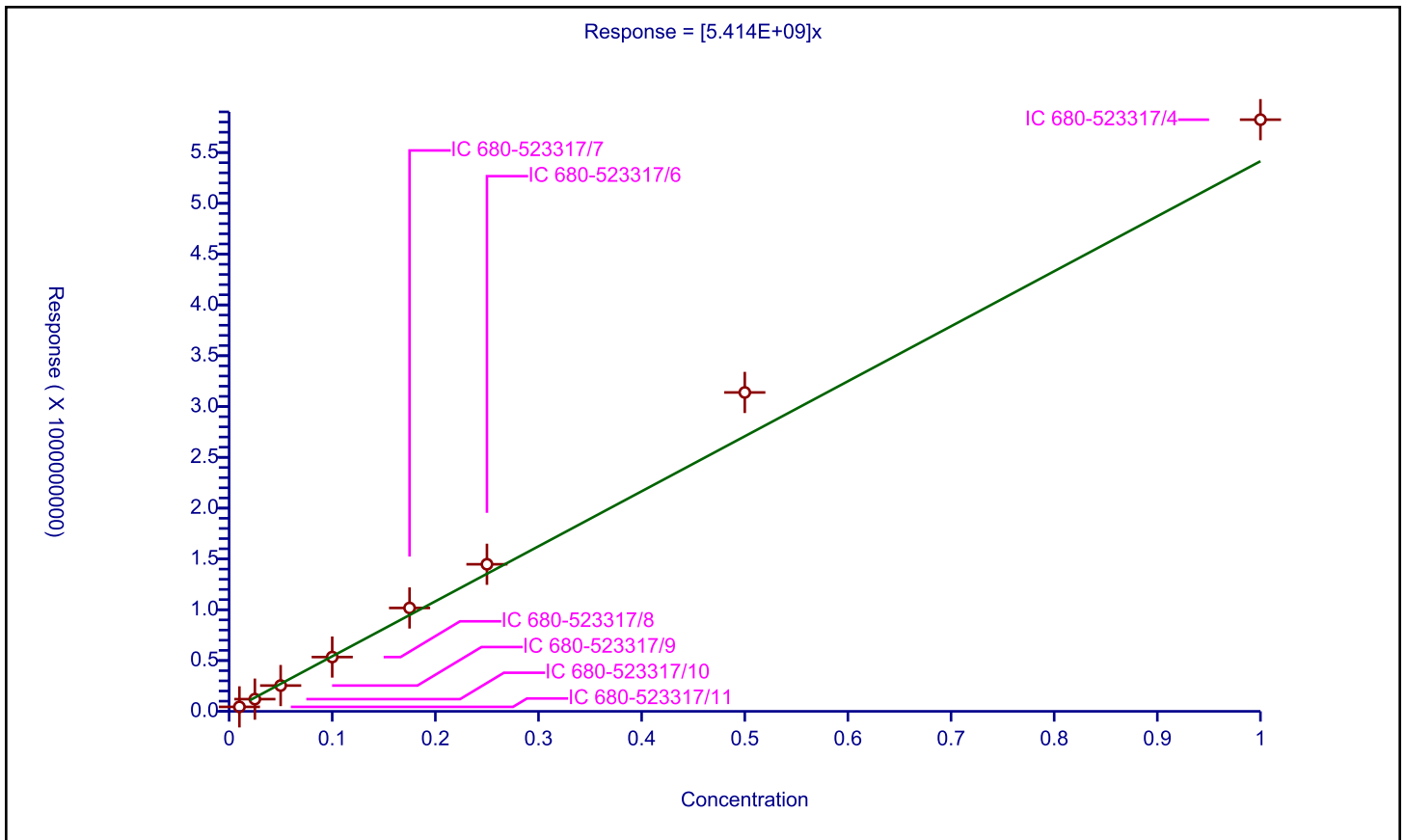
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	5.414E+09

Error Coefficients	
Standard Error:	229000000
Relative Standard Error:	11.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	43902837.0			4390283700.0	Y
2	IC 680-523317/10	0.025	120073751.0			4802950040.0	Y
3	IC 680-523317/9	0.05	253737337.0			5074746740.0	Y
4	IC 680-523317/8	0.1	534232051.0			5342320510.0	Y
5	IC 680-523317/7	0.175	1017374760.0			5813570057.14286	Y
6	IC 680-523317/6	0.25	1447513965.0			5790055860.0	Y
7	IC 680-523317/5	0.5	3138504970.0			6277009940.0	Y
8	IC 680-523317/4	1.0	5823384953.0			5823384953.0	Y



Calibration

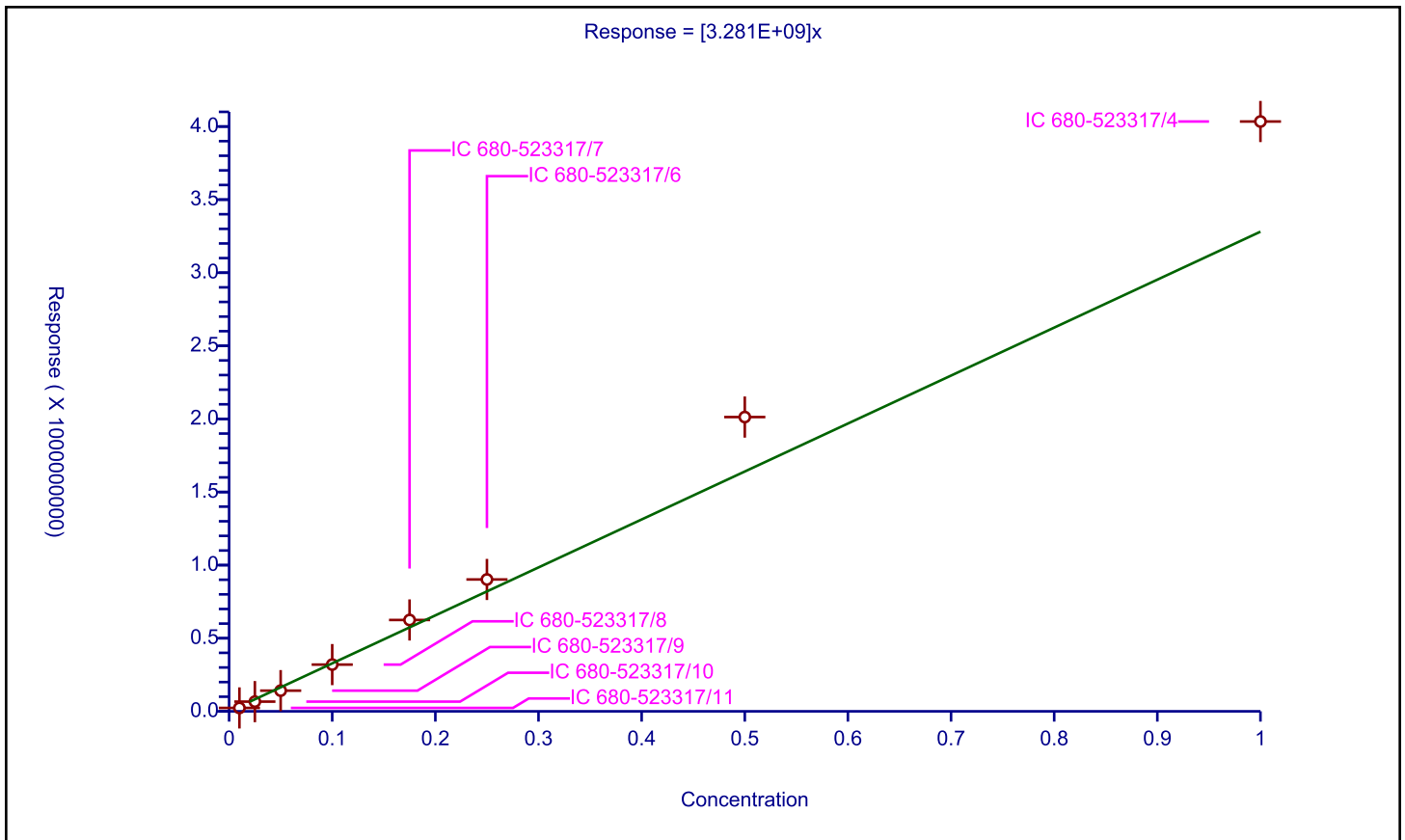
/ Dinoseb

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

Curve Coefficients	
Intercept:	0
Slope:	3.281E+09

Error Coefficients	
Standard Error:	320000000
Relative Standard Error:	19.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	23228618.0			2322861800.0	Y
2	IC 680-523317/10	0.025	66394703.0			2655788120.0	Y
3	IC 680-523317/9	0.05	141523650.0			2830473000.0	Y
4	IC 680-523317/8	0.1	319720996.0			3197209960.0	Y
5	IC 680-523317/7	0.175	624797611.0			3570272062.85714	Y
6	IC 680-523317/6	0.25	901988457.0			3607953828.0	Y
7	IC 680-523317/5	0.5	2012769159.0			4025538318.0	Y
8	IC 680-523317/4	1.0	4034212367.0			4034212367.0	Y



Calibration

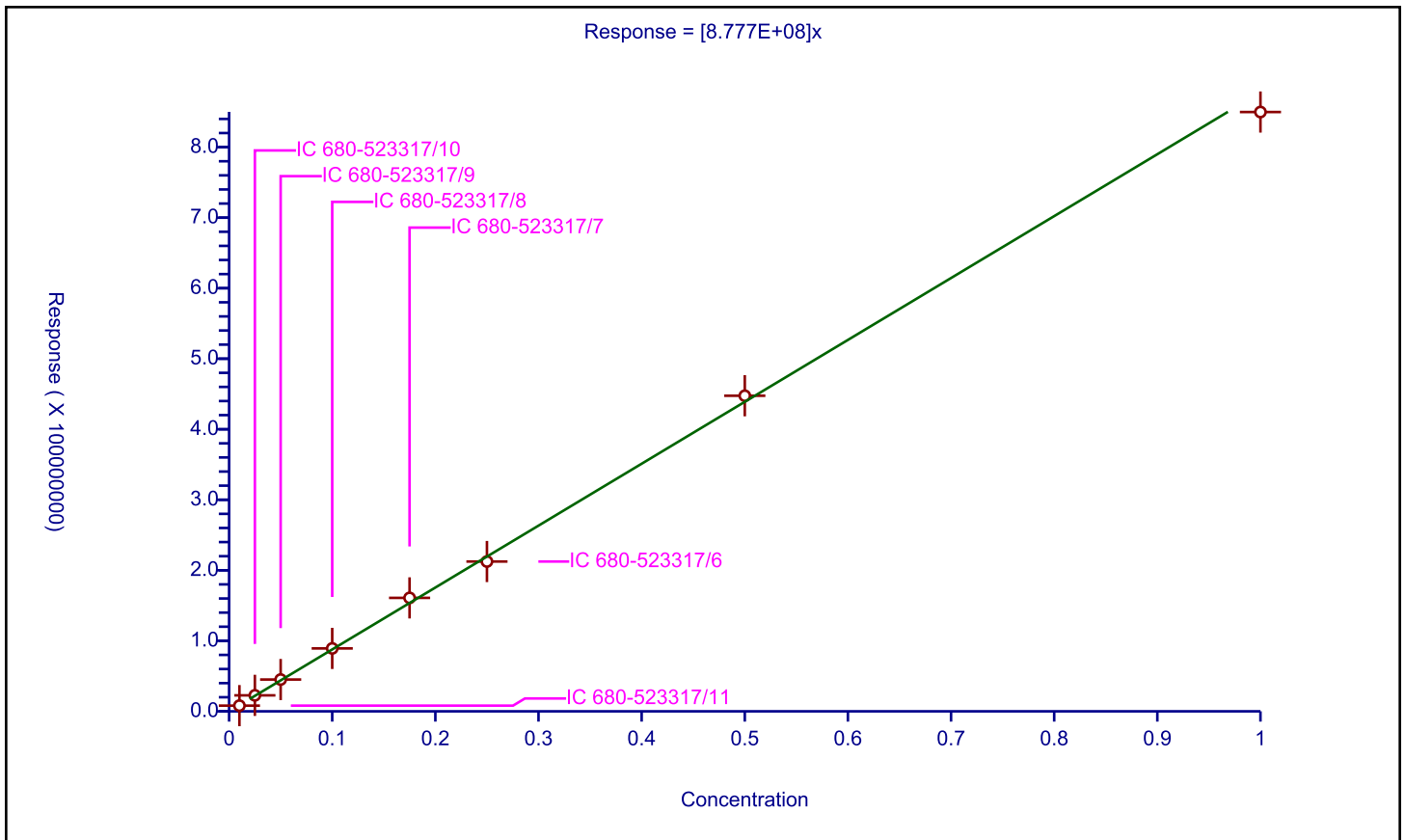
/ 2,4-DB

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

Curve Coefficients	
Intercept:	0
Slope:	8.777E+08

Error Coefficients	
Standard Error:	11700000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	8072867.0			807286700.0	Y
2	IC 680-523317/10	0.025	22663618.0			906544720.0	Y
3	IC 680-523317/9	0.05	45093077.0			901861540.0	Y
4	IC 680-523317/8	0.1	89229518.0			892295180.0	Y
5	IC 680-523317/7	0.175	160878564.0			919306080.0	Y
6	IC 680-523317/6	0.25	212450773.0			849803092.0	Y
7	IC 680-523317/5	0.5	447502886.0			895005772.0	Y
8	IC 680-523317/4	1.0	849802206.0			849802206.0	Y



Calibration

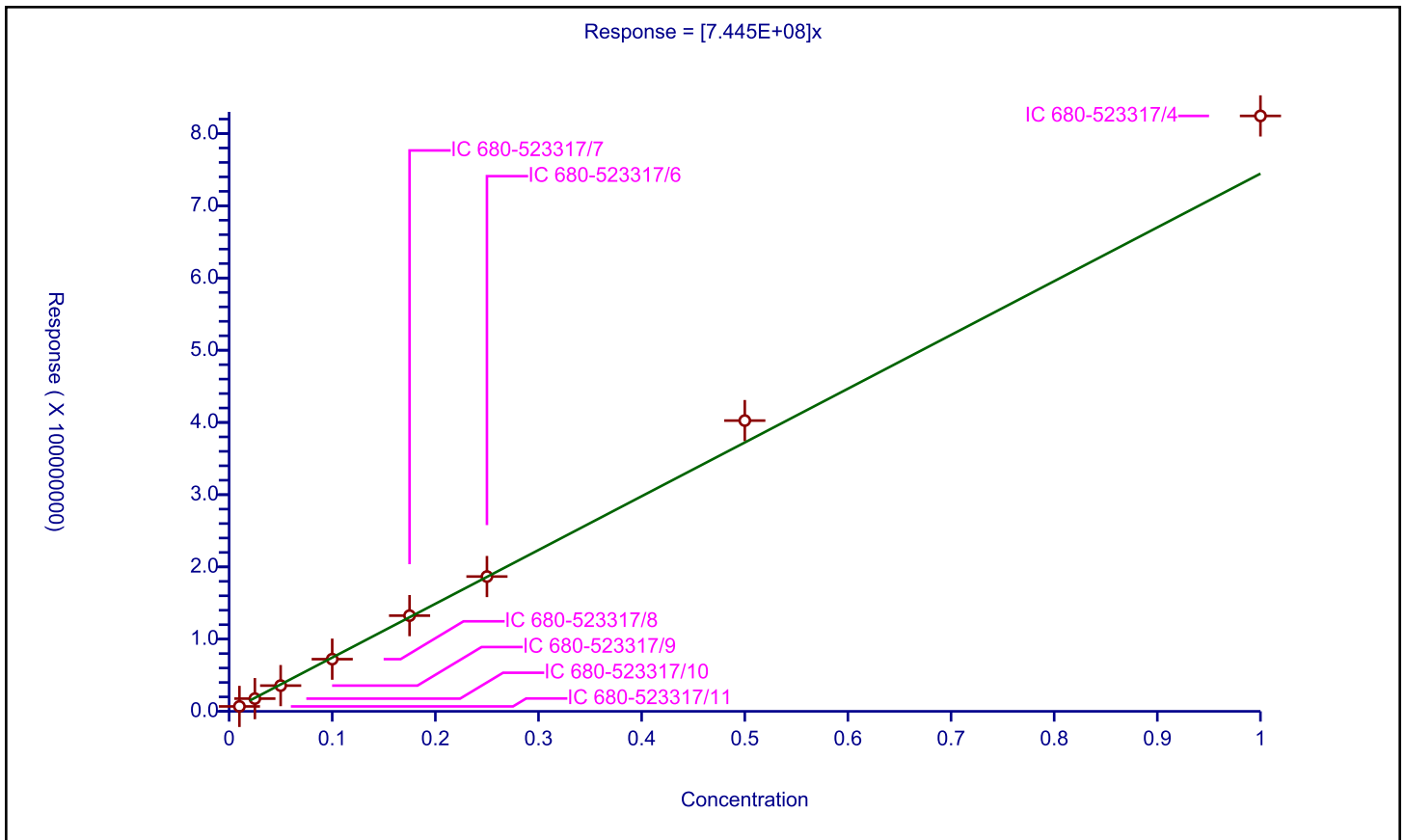
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	7.445E+08

Error Coefficients	
Standard Error:	32300000
Relative Standard Error:	6.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	6834492.0			683449200.0	Y
2	IC 680-523317/10	0.025	17606131.0			704245240.0	Y
3	IC 680-523317/9	0.05	35628390.0			712567800.0	Y
4	IC 680-523317/8	0.1	72241071.0			722410710.0	Y
5	IC 680-523317/7	0.175	132529059.0			757308908.571429	Y
6	IC 680-523317/6	0.25	186627828.0			746511312.0	Y
7	IC 680-523317/5	0.5	402556641.0			805113282.0	Y
8	IC 680-523317/4	1.0	824414003.0			824414003.0	Y



Calibration

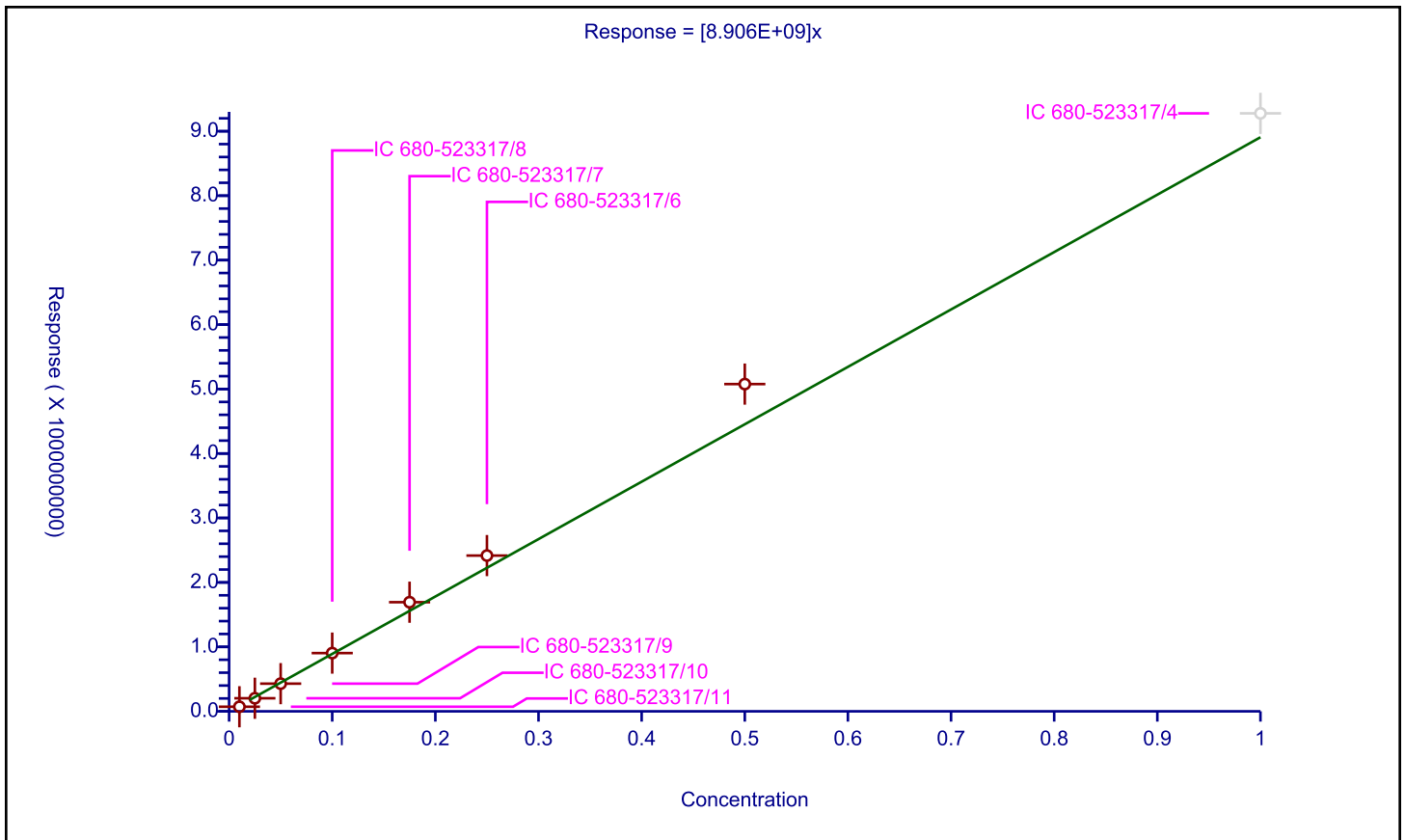
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	8.906E+09

Error Coefficients	
Standard Error:	272000000
Relative Standard Error:	11.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	71194571.0			7119457100.0	Y
2	IC 680-523317/10	0.025	202718580.0			8108743200.0	Y
3	IC 680-523317/9	0.05	429416896.0			8588337920.0	Y
4	IC 680-523317/8	0.1	903362678.0			9033626780.0	Y
5	IC 680-523317/7	0.175	1692976152.0			9674149440.0	Y
6	IC 680-523317/6	0.25	2416371573.0			9665486292.0	Y
7	IC 680-523317/5	0.5	5077033272.0			10154066544.0	Y
8	IC 680-523317/4	1.0	9277203223.0			9277203223.0	N



Calibration

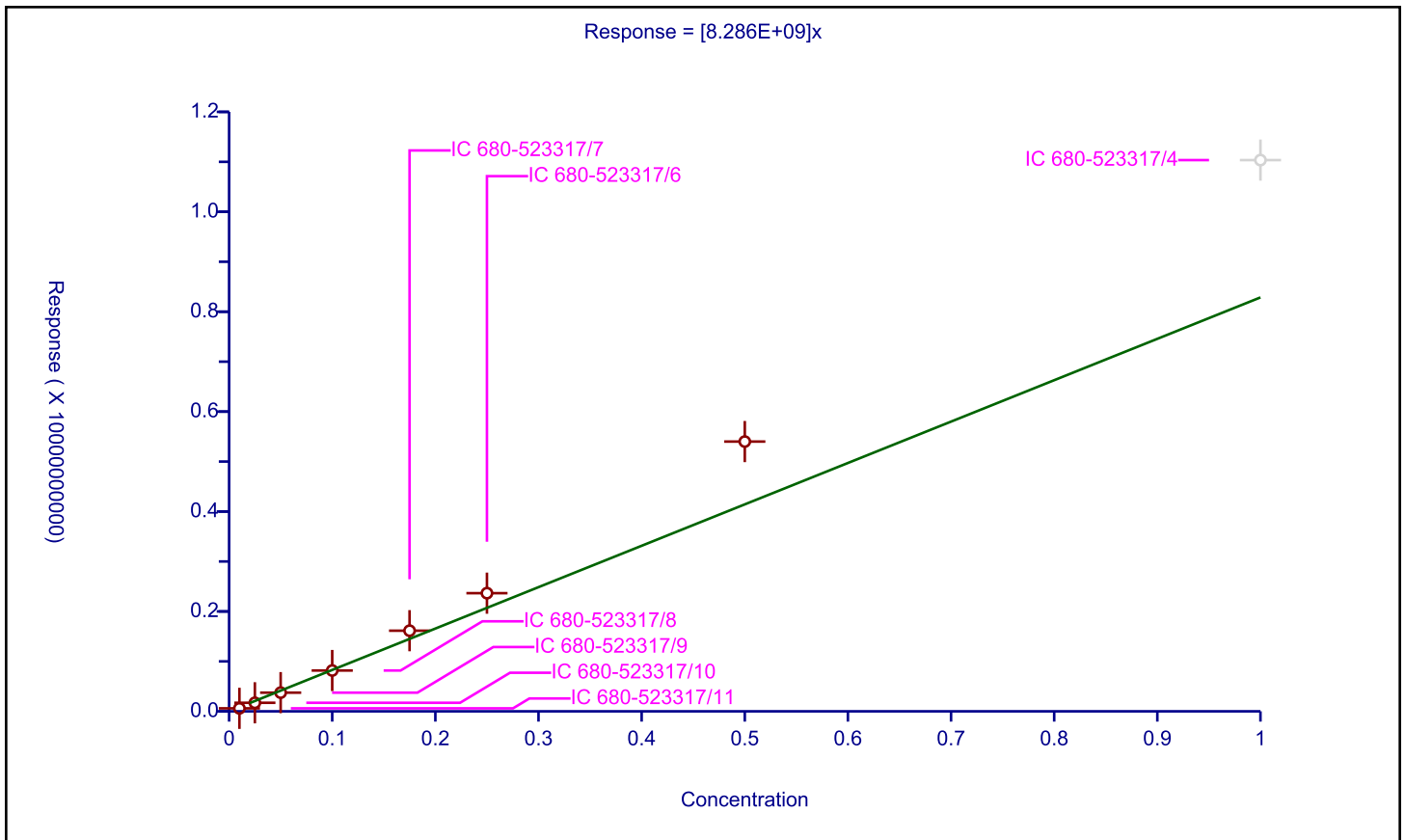
/ Picloram

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

Curve Coefficients	
Intercept:	0
Slope:	8.286E+09

Error Coefficients	
Standard Error:	532000000
Relative Standard Error:	20.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.956

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	60165899.0			6016589900.0	Y
2	IC 680-523317/10	0.025	171088600.0			6843544000.0	Y
3	IC 680-523317/9	0.05	374069812.0			7481396240.0	Y
4	IC 680-523317/8	0.1	817209657.0			8172096570.0	Y
5	IC 680-523317/7	0.175	1614105282.0			9223458754.28572	Y
6	IC 680-523317/6	0.25	2365516502.0			9462066008.0	Y
7	IC 680-523317/5	0.5	5400334032.0			10800668064.0	Y
8	IC 680-523317/4	1.0	11034840048.0			11034840048.0	N



Calibration

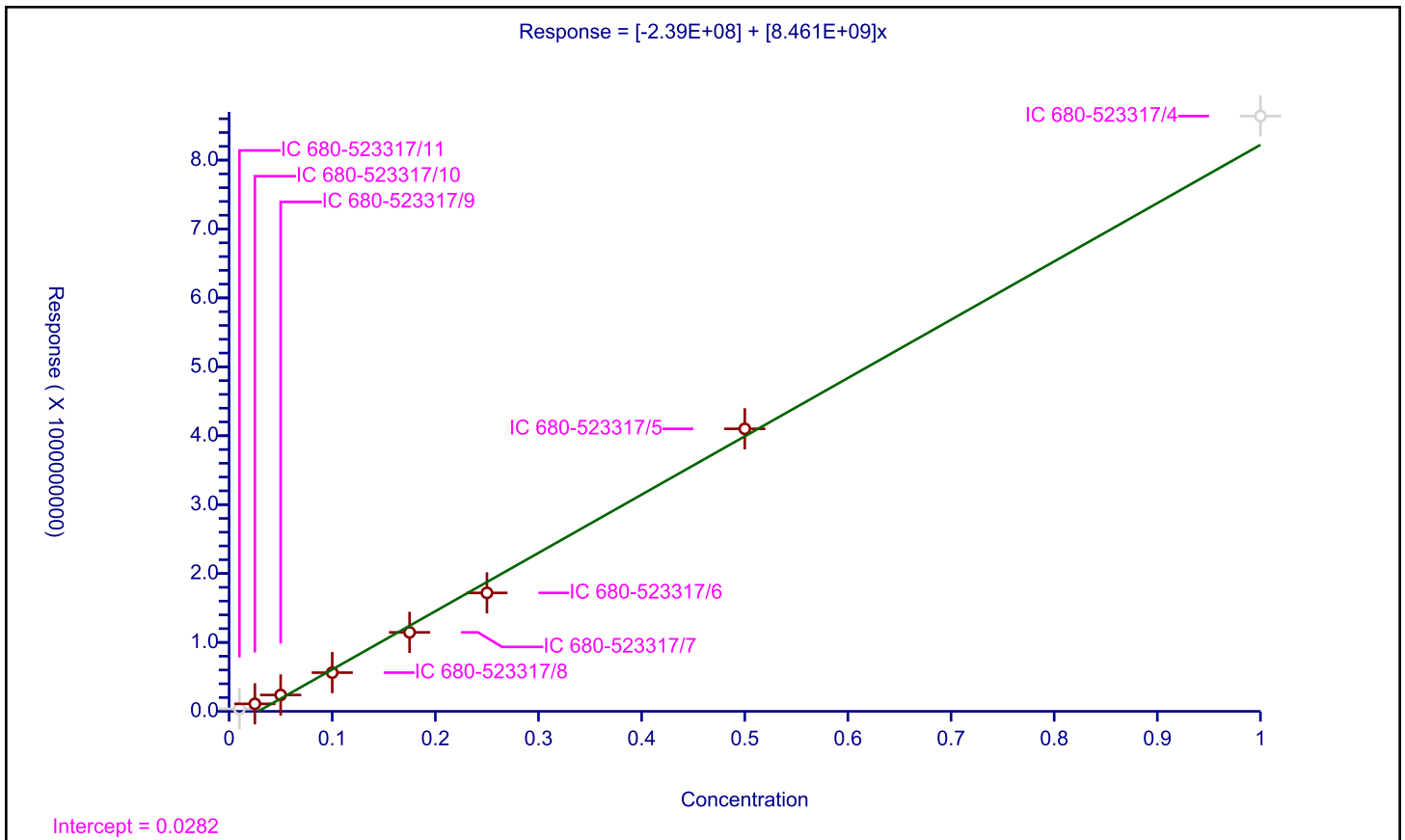
/ Acifluorfen

Curve Type: Linear
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.39E+08
Slope:	8.461E+09

Error Coefficients	
Standard Error:	131000000
Relative Standard Error:	33.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523317/11	0.01	36049429.0			3604942900.0	N
2	IC 680-523317/10	0.025	108783467.0			4351338680.0	Y
3	IC 680-523317/9	0.05	237117322.0			4742346440.0	Y
4	IC 680-523317/8	0.1	561519505.0			5615195050.0	Y
5	IC 680-523317/7	0.175	1145964479.0			6548368451.42857	Y
6	IC 680-523317/6	0.25	1719149943.0			6876599772.0	Y
7	IC 680-523317/5	0.5	4100306829.0			8200613658.0	Y
8	IC 680-523317/4	1.0	8638829439.0			8638829439.0	N



FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57204

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	++++	2.435	2.436	2.434	2.437	2.436	2.436	2.436	2.414 - 2.454	2.436
3,5-Dichlorobenzoic acid	6.015	6.015	6.015	6.015	6.014	6.014	6.014	6.014	6.005 - 6.025	6.015
4-Nitrophenol	6.144	6.144	6.141	6.141	6.140	6.140	6.139	6.139	6.131 - 6.151	6.141
Dicamba	6.608	6.609	6.608	6.609	6.608	6.608	6.607	6.609	6.599 - 6.619	6.608
MCPP	6.757	6.757	6.756	6.757	6.757	6.757	6.758	6.761	6.747 - 6.767	6.758
MCPA	6.883	6.884	6.883	6.883	6.884	6.884	6.885	6.888	6.873 - 6.893	6.884
Dichlorprop	7.070	7.070	7.069	7.069	7.069	7.068	7.068	7.069	7.059 - 7.079	7.069
2,4-D	7.215	7.215	7.213	7.214	7.212	7.212	7.212	7.213	7.204 - 7.224	7.213
Pentachlorophenol	7.562	7.562	7.561	7.562	7.562	7.562	7.562	7.564	7.552 - 7.572	7.562
Silvex (2,4,5-TP)	7.662	7.661	7.661	7.661	7.662	7.662	7.661	7.661	7.651 - 7.671	7.661
Chloramben	7.740	7.740	7.739	7.739	7.739	7.738	7.738	7.740	7.729 - 7.749	7.739
2,4,5-T	7.817	7.818	7.816	7.816	7.816	7.816	7.816	7.816	7.806 - 7.826	7.816
2,4-DB	8.061	8.060	8.059	8.059	8.059	8.058	8.057	8.058	8.049 - 8.069	8.059
Dinoseb	8.112	8.113	8.112	8.112	8.112	8.112	8.112	8.113	8.103 - 8.123	8.112
Bentazon	8.185	8.185	8.184	8.184	8.184	8.183	8.184	8.185	8.174 - 8.194	8.184
Picloram	8.401	8.401	8.399	8.399	8.400	8.399	8.399	8.401	8.389 - 8.409	8.400
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.502	8.503	8.502	8.504	8.503	8.503	8.504	8.506	8.494 - 8.514	8.503
Acifluorfen	9.541	9.543	9.541	9.543	9.542	9.542	9.542	9.545	9.533 - 9.553	9.543
2,4-Dichlorophenylacetic acid (Surr)	++++	6.573	6.572	6.572	6.572	6.572	6.572	6.572	6.562 - 6.582	6.572

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57204

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	+++++	425466680	417333840	393083260	Lin2	-422831.35	434317273											0.9950
3,5-Dichlorobenzoic acid	475365914	429248068	419316466	445432487	Ave		283999151			12.3			20.0					
4-Nitrophenol	359391900 304731257	259477520 271512312	277447620 265580398	249038430 284813773	Ave		92446979.1			13.4			20.0					
Dicamba	116682800 1068255600 1006175600	815946680 771655200 904138312	97416140 832708400 889610616	85154640 783341800 965139634	Ave		902628145			11.7			20.0					
MCPP	593694 673461	532551 609848	630380 616690	563004 563752	Ave		597922.495			7.5			20.0					
MCPA	1032647 828780	771806 733781	808329 665897	694617 653774	Lin1	442417.200	672658.940								0.9940			0.9900
Dichlorprop	299495300 248538754	210240520 222722320	219626240 214087318	198316610 228040422	Ave		230133436			13.7			20.0					
2,4-D	328229300 298580629	250118480 268581372	258393500 260956174	237109120 283206384	Ave		273146870			10.7			20.0					
Pentachlorophenol	4466525200 4976300777	3466659200 4611789840	3853016400 4607816120	3804726960 5184827392	Ave		4371457736			13.8			20.0					
Silvex (2,4,5-TP)	1702858400 1792979017	1306466720 1678190096	1433926080 1664299856	1411822200 1777843544	Ave		1596048239			11.6			20.0					
Chloramben	1320280700 1488510709	1067440840 1432421924	1190884060 1453858096	1190261580 1691205537	Ave		1354357931			14.9			20.0					
2,4,5-T	1740120800 1693245394	1352074240 1594846624	1439267600 1556130672	1384174120 1648471104	Ave		1551041319			9.4			20.0					
2,4-DB	1732409000 1528338800	1294238880 147262332	135454160 144712624	130865080 152037719	Ave		145729072			9.9			20.0					
Dinoseb	960946300 1015301286	717795920 967555344	800621220 930777290	780832810 1081702187	Ave		906941545			14.0			20.0					

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57204

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2							
Bentazon	281190200 232494326	197017200 221186052	203829500 213725444	196518460 223603698	Ave	221195610			12.4			20.0			
Picloram	215230000 239164776	1706193720 2422168940	1954537320 2499075456	1973474620 3000904008	Ave	2262537728			17.9			20.0			
Tetraphthalic acid, tetrachloro-, dimethyl	2516695800 2601138046	1976854680 2491334688	2169539400 2519232452	2164278250 2871660154	Ave	2413841684			12.0			20.0			
Acifluorfen	1668406200 1985912429	1260872520 2047417004	1503391480 2032831204	1485392750 2547153916	Qua	-2384687.6	866603389						0.9990		0.9900
2,4-Dichlorophenylacetic acid (Surr)	++++ 194625280	164114200 171684468	172740980 166138544	156748890 177446511	Ave	171928410			7.0			20.0			

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57204

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Dalapon	Lin2	++++ 107312017	10636667 209658233	20866692 445432487	39308326	83189035	++++ 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
3,5-Dichlorobenzoic acid	Ave	3593919 67878078	6486938 132790199	13872381 284813773	24903843	53327970	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
4-Nitrophenol	Ave	1166828 22420839	2039867 42115762	4870807 81893704	8515464	18010823	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Dicamba	Ave	5341278 113017289	9645690 222402654	20817710 482569817	39167090	88040365	0.00500 0.125	0.0125 0.250	0.0250 0.500	0.0500	0.0875			
MCP	Ave	593694 15246200	1331377 30834503	3151900 56375223	5630043	11785560	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5			
MCPA	Lin1	1032647 18344524	1929514 33294860	4041645 65377356	6946174	14503654	1.00 25.0	2.50 50.0	5.00 100	10.0	17.5			
Dichlorprop	Ave	2994953 55680580	5256013 107043659	10981312 228040422	19831661	43494282	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
2,4-D	Ave	3282293 67145343	6252962 130478087	12919675 283206384	23710912	52251610	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Pentachlorophenol	Ave	11166313 288236865	21666620 575977015	48162705 1296206848	95118174	217713159	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438			
Silvex (2,4,5-TP)	Ave	4257146 104886881	8165417 208037482	17924076 444460886	35295555	78442832	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438			
Chloramben	Ave	13202807 358105481	26686021 726929048	59544203 1691205537	119026158	260489374	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
2,4,5-T	Ave	4350302 99677914	8450464 194516334	17990845 412117776	34604353	74079486	0.00250 0.0625	0.00625 0.125	0.0125 0.250	0.0250	0.0438			
2,4-DB	Ave	1732409 368115583	32356647 72356312	6772708 152037719	13086508	26745929	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Dinoseb	Ave	9609463 241888836	17944898 465388645	40031061 1081702187	78083281	177677725	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Bentazon	Ave	2811902 55296513	4925430 106862722	10191475 223603698	19651846	40686507	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57204

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Picloram	Ave	21523000 605542235	42654843 1249537728	97726866 3000904008	197347462	418538358	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	25166958 622833672	49421367 1259616226	108476970 2871660154	216427825	455199158	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Acifluorfen	Qua	16684062 511854251	31521813 1016415602	75169574 2547153916	148539275	347534675	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	++++ 42921117	4102855 83069272	8637049 177446511	15674889	34059424	++++ 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			

Curve Type Legend:
 Ave = Average
 Lin1 = Linear 1/conc
 Lin2 = Linear 1/conc^2
 Qua = Quadratic

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 11-May-2018 11:46:27 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:16 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	445432487	1.00	1.03	
2	2.490	2.487	0.003	1564268680	1.00	1.13	
						RPD = 9.46	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	84362002	NC	NC	
2	4.997	4.996	0.001	491495600	NC	NC	
						RPD = 0.94	
3 2,4,6-Trichlorophenol							
1	5.679	5.678	0.001	1193993944	NC	NC	
2	5.672	5.668	0.004	4815793939	NC	NC	
						RPD = 6.57	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	284813773	1.00	1.00	
2	6.011	6.009	0.002	1694404983	1.00	1.10	
						RPD = 9.66	
5 4-Nitrophenol							
1	6.139	6.141	-0.002	81893704	1.00	0.8858	
2	6.392	6.394	-0.002	266999376	1.00	1.05	
						RPD = 16.55	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	177446511	1.00	1.03	
2	6.721	6.720	0.001	1298301676	1.00	1.14	
						RPD = 9.63	
7 Dicamba							
1	6.609	6.609	0.000	482569817	0.5000	0.5346	
2	6.804	6.800	0.004	2404283458	0.5000	0.5665	
						RPD = 5.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.761	6.757	0.004	56375223	100.0	94.3	
2	6.852	6.848	0.004	381942979	100.0	102.6	
						RPD = 8.45	
9 MCPA							
1	6.888	6.883	0.005	65377356	100.0	96.5	
2	7.051	7.046	0.005	746688222	100.0	104.3	
						RPD = 7.72	
10 Dichlorprop							
1	7.069	7.069	0.000	228040422	1.00	0.99	
2	7.194	7.191	0.003	1258500696	1.00	1.10	
						RPD = 10.23	
11 2,4-D							
1	7.213	7.214	-0.001	283206384	1.00	1.04	
2	7.413	7.412	0.001	1543015821	1.00	1.23	
						RPD = 16.70	
12 Pentachlorophenol							
1	7.564	7.562	0.002	1296206848	0.2500	0.2965	
2	7.610	7.605	0.005	4357611017	0.2500	0.2779	
						RPD = 6.47	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	444460886	0.2500	0.2785	
2	7.746	7.744	0.002	1856270815	0.2500	0.3074	
						RPD = 9.87	
14 Chloramben							
1	7.740	7.739	0.001	1691205537	1.00	1.25	
2	8.052	8.049	0.003	5403593588	1.00	1.14	
						RPD = 8.95	
15 2,4,5-T							
1	7.816	7.816	0.000	412117776	0.2500	0.2657	
2	7.978	7.976	0.002	1686681883	0.2500	0.3287	
						RPD = 21.20	
16 2,4-DB							
1	8.058	8.059	-0.001	152037719	1.00	1.04	
2	8.191	8.190	0.001	815688293	1.00	1.12	
						RPD = 7.23	
17 Dinoseb							
1	8.113	8.113	0.000	1081702187	1.00	1.19	
2	8.146	8.141	0.005	3848176282	1.00	1.09	
						RPD = 8.92	
18 Bentazon							
1	8.185	8.184	0.001	223603698	1.00	1.01	
2	8.546	8.544	0.002	773013995	1.00	1.10	
						RPD = 8.20	
19 Picloram							
1	8.401	8.399	0.002	3000904008	1.00	1.33	
2	8.884	8.877	0.007	9495361307	1.00	1.05	
						RPD = 23.16	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.506	8.504	0.002	2871660154	1.00	1.19	
2	8.664	8.658	0.006	8774731681	1.00	1.08	
						RPD = 9.58	

21 Acifluorfen

1	9.545	9.543	0.002	2547153916	1.00	1.00	
2	9.683	9.677	0.006	8061124513	1.00	1.00	
						RPD = 0.22	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-8_00011

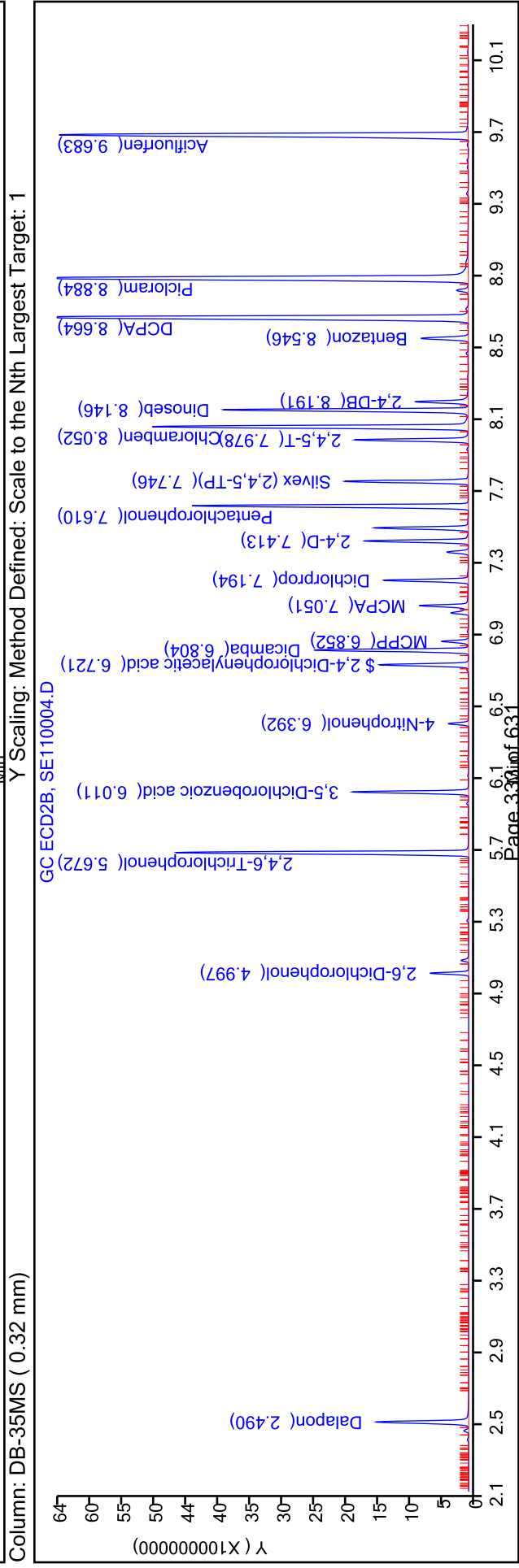
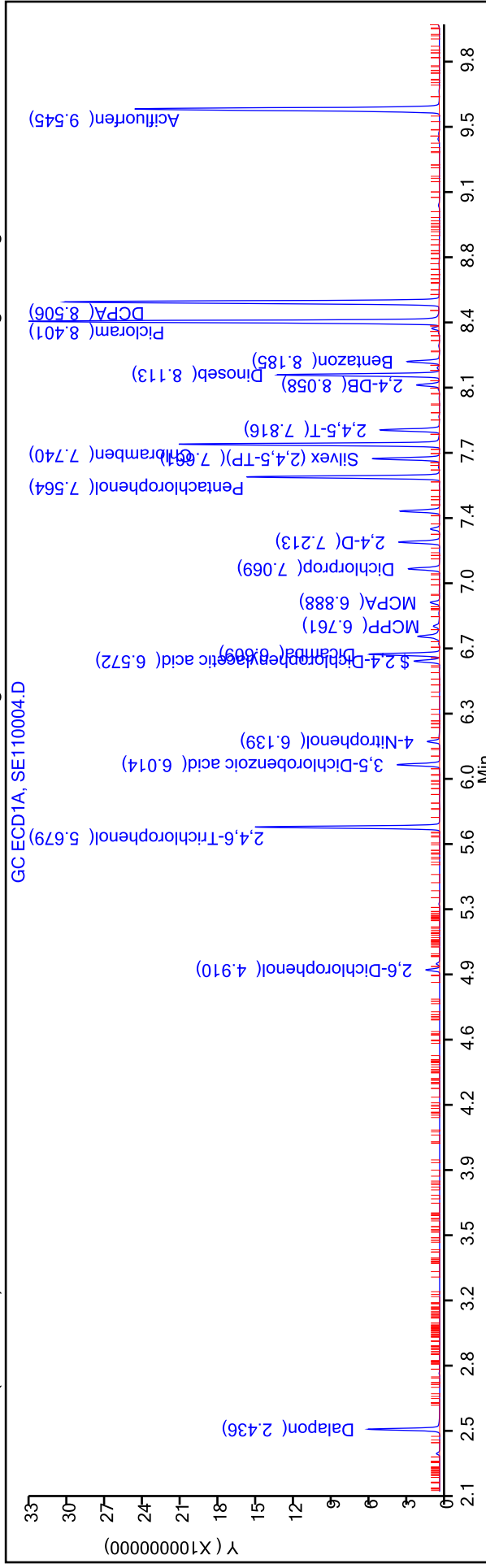
Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110004.D
 Injection Date: 11-May-2018 11:46:27
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 4
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 4

Method Defined: Scale to the Nth Largest Target: 1
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 11-May-2018 12:06:02 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:23 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	209658233	0.5000	0.4837	
2	2.488	2.487	0.001	713286748	0.5000	0.5146	
						RPD = 6.18	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	40538544	NC	NC	
2	4.997	4.996	0.001	230188115	NC	NC	
						RPD = 1.17	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	538201950	NC	NC	
2	5.671	5.668	0.003	2375427992	NC	NC	
						RPD = 2.44	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	132790199	0.5000	0.4676	
2	6.009	6.009	0.000	763230217	0.5000	0.4976	
						RPD = 6.22	
5 4-Nitrophenol							
1	6.139	6.141	-0.002	42115762	0.5000	0.4556	
2	6.392	6.394	-0.002	118457210	0.5000	0.4639	
						RPD = 1.81	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	83069272	0.5000	0.4832	
2	6.720	6.720	0.000	580202590	0.5000	0.5079	
						RPD = 4.99	
7 Dicamba							
1	6.607	6.609	-0.002	222402654	0.2500	0.2464	
2	6.802	6.800	0.002	1095984345	0.2500	0.2582	
						RPD = 4.69	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.758	6.757	0.001	30834503	50.0	51.6	
2	6.850	6.848	0.002	174315420	50.0	46.3	
						RPD = 10.75	
9 MCPA							
1	6.885	6.883	0.002	33294860	50.0	48.8	
2	7.048	7.046	0.002	339905374	50.0	47.0	
						RPD = 3.82	
10 Dichlorprop							
1	7.068	7.069	-0.001	107043659	0.5000	0.4651	
2	7.192	7.191	0.001	551527466	0.5000	0.4811	
						RPD = 3.37	
11 2,4-D							
1	7.212	7.214	-0.002	130478087	0.5000	0.4777	
2	7.411	7.412	-0.001	670180977	0.5000	0.5324	
						RPD = 10.83	
12 Pentachlorophenol							
1	7.562	7.562	0.000	575977015	0.1250	0.1318	
2	7.607	7.605	0.002	2104701924	0.1250	0.1342	
						RPD = 1.87	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	208037482	0.1250	0.1303	
2	7.745	7.744	0.001	820494148	0.1250	0.1359	
						RPD = 4.15	
14 Chloramben							
1	7.738	7.739	-0.001	726929048	0.5000	0.5367	
2	8.051	8.049	0.002	2579520319	0.5000	0.5450	
						RPD = 1.53	
15 2,4,5-T							
1	7.816	7.816	0.000	194516334	0.1250	0.1254	
2	7.977	7.976	0.001	735201390	0.1250	0.1433	
						RPD = 13.31	
16 2,4-DB							
1	8.057	8.059	-0.002	72356312	0.5000	0.4965	
2	8.190	8.190	0.000	355862410	0.5000	0.4893	
						RPD = 1.46	
17 Dinoseb							
1	8.112	8.113	-0.001	465388645	0.5000	0.5131	
2	8.143	8.141	0.002	1621278512	0.5000	0.4988	
						RPD = 2.83	
18 Bentazon							
1	8.184	8.184	0.000	106862722	0.5000	0.4831	
2	8.544	8.544	0.000	357621900	0.5000	0.5076	
						RPD = 4.95	
19 Picloram							
1	8.399	8.399	0.000	1249537728	0.5000	0.5523	
2	8.879	8.877	0.002	4465456894	0.5000	0.4992	
						RPD = 10.10	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.504	8.504	0.000	1259616226	0.5000	0.5218	
2	8.661	8.658	0.003	4420541185	0.5000	0.5446	
						RPD = 4.26	

21 Acifluorfen

1	9.542	9.543	-0.001	1016415602	0.5000	0.4856	
2	9.680	9.677	0.003	3521187147	0.5000	0.5013	
						RPD = 3.17	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110005.D
Injection Date: 11-May-2018 12:06:02
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 5

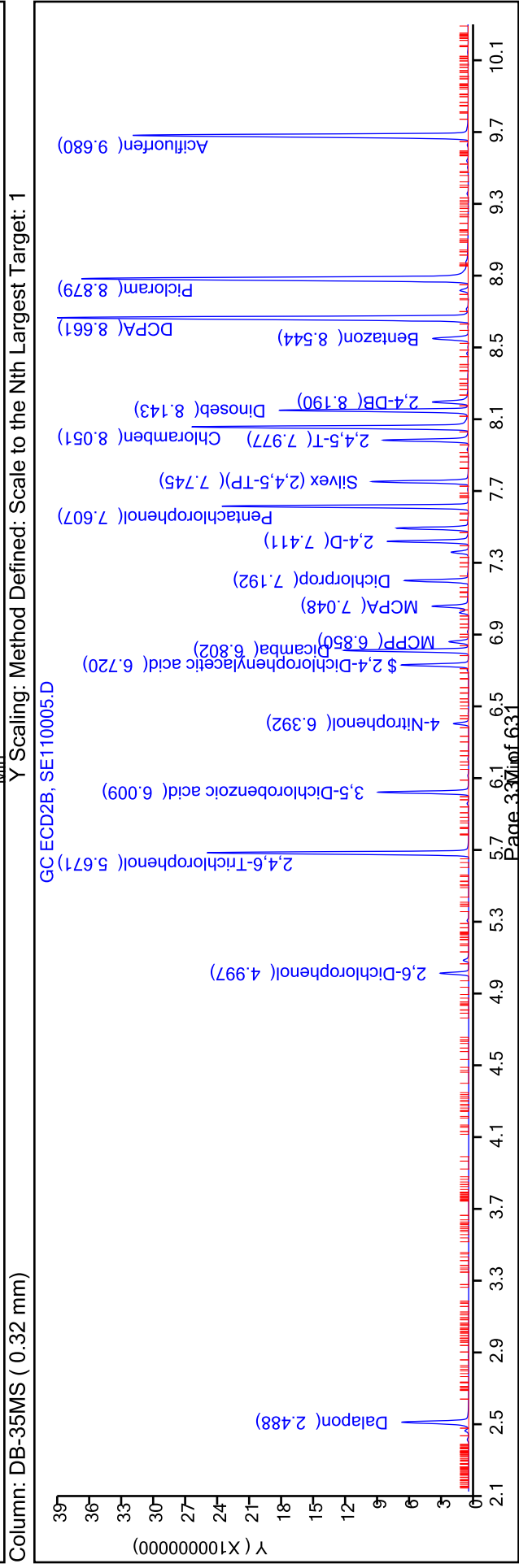
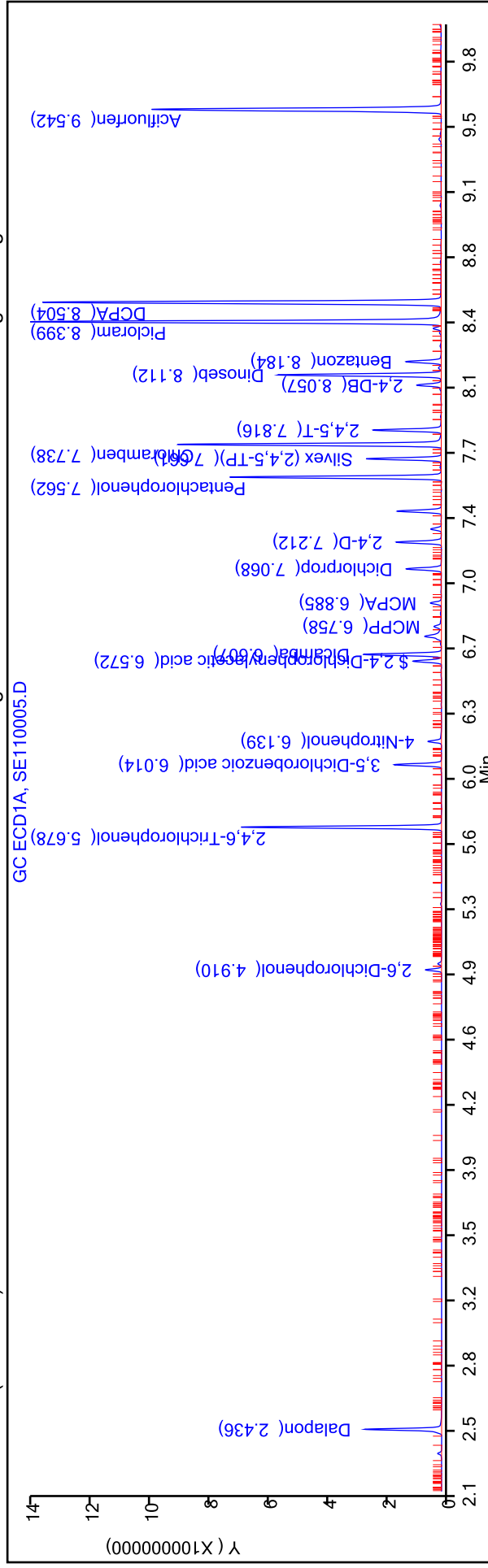
Lims ID: ic h7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 11-May-2018 12:25:37 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:31 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	107312017	0.2500	0.2481	
2	2.488	2.487	0.001	349811806	0.2500	0.2524	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	21230930	NC	NC	
2	4.997	4.996	0.001	116495350	NC	NC	
						RPD = 3.79	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	268607524	NC	NC	
2	5.670	5.668	0.002	1191757936	NC	NC	
						RPD = 2.96	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	67878078	0.2500	0.2390	
2	6.008	6.009	-0.001	381708442	0.2500	0.2488	
						RPD = 4.03	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	22420839	0.2500	0.2425	
2	6.392	6.394	-0.002	62120881	0.2500	0.2433	
						RPD = 0.31	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	42921117	0.2500	0.2496	
2	6.720	6.720	0.000	292178575	0.2500	0.2558	
						RPD = 2.42	
7 Dicamba							
1	6.608	6.609	-0.001	113017289	0.1250	0.1252	
2	6.800	6.800	0.000	544423487	0.1250	0.1283	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	15246200	25.0	25.5	
2	6.848	6.848	0.000	94830943	25.0	24.8	
						RPD = 2.95	
9 MCPA							
1	6.884	6.883	0.001	18344524	25.0	26.6	
2	7.047	7.046	0.001	183361188	25.0	25.0	
						RPD = 6.38	
10 Dichlorprop							
1	7.068	7.069	-0.001	55680580	0.2500	0.2419	
2	7.192	7.191	0.001	274754281	0.2500	0.2397	
						RPD = 0.95	
11 2,4-D							
1	7.212	7.214	-0.002	67145343	0.2500	0.2458	
2	7.411	7.412	-0.001	329478639	0.2500	0.2617	
						RPD = 6.27	
12 Pentachlorophenol							
1	7.562	7.562	0.000	288236865	0.0625	0.0659	
2	7.606	7.605	0.001	1054239941	0.0625	0.0672	
						RPD = 1.96	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	104886881	0.0625	0.0657	
2	7.744	7.744	0.000	401209207	0.0625	0.0664	
						RPD = 1.09	
14 Chloramben							
1	7.738	7.739	-0.001	358105481	0.2500	0.2644	
2	8.049	8.049	0.000	1290053084	0.2500	0.2726	
						RPD = 3.04	
15 2,4,5-T							
1	7.816	7.816	0.000	99677914	0.0625	0.0643	
2	7.976	7.976	0.000	353637241	0.0625	0.0689	
						RPD = 6.99	
16 2,4-DB							
1	8.058	8.059	-0.001	36815583	0.2500	0.2526	
2	8.189	8.190	-0.001	177870018	0.2500	0.2446	
						RPD = 3.24	
17 Dinoseb							
1	8.112	8.113	-0.001	241888836	0.2500	0.2667	
2	8.142	8.141	0.001	779848561	0.2500	0.2534	
						RPD = 5.14	
18 Bentazon							
1	8.183	8.184	-0.001	55296513	0.2500	0.2500	
2	8.543	8.544	-0.001	175704103	0.2500	0.2494	
						RPD = 0.23	
19 Picloram							
1	8.399	8.399	0.000	605542235	0.2500	0.2676	
2	8.877	8.877	0.000	2108705379	0.2500	0.2406	
						RPD = 10.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.503	8.504	-0.001	622833672	0.2500	0.2580	
2	8.658	8.658	0.000	2238371220	0.2500	0.2757	
						RPD = 6.64	

21 Acifluorfen

1	9.542	9.543	-0.001	511854251	0.2500	0.2692	
2	9.678	9.677	0.001	1640697173	0.2500	0.2580	
						RPD = 4.25	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

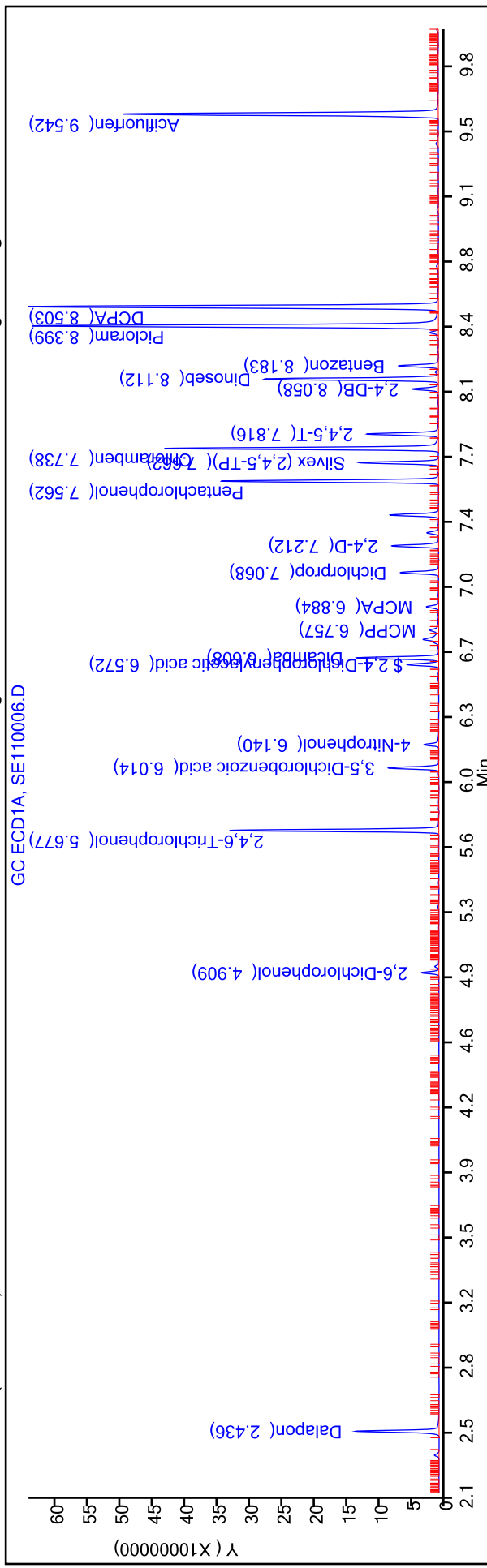
Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110006.D
Injection Date: 11-May-2018 12:25:37
Lims ID: ic h6
Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS
Column: DB-XLB (0.32 mm)

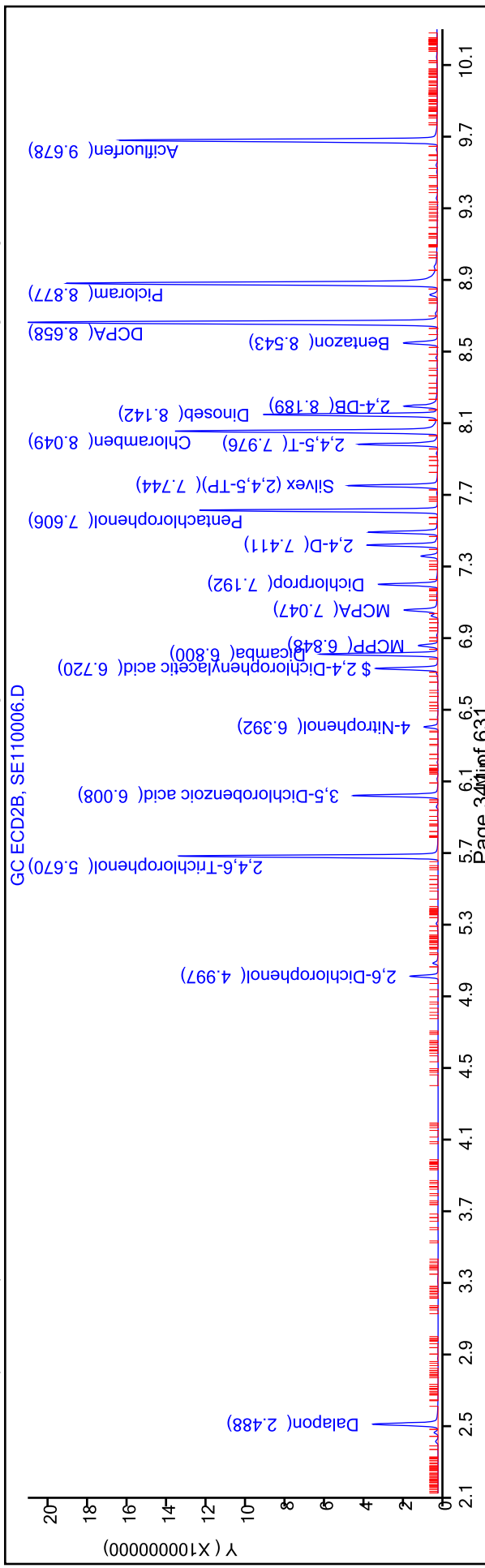
Operator ID: GEM
Worklist Smp#: 6
ALS Bottle#: 6

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 11-May-2018 12:45:20 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:40 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.437	2.434	0.003	83189035	0.1750	0.1925	
2	2.490	2.487	0.003	265579123	0.1750	0.1916	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	16215566	NC	NC	
2	4.997	4.996	0.001	90391556	NC	NC	
						RPD = 1.65	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	201951399	NC	NC	
2	5.669	5.668	0.001	904140464	NC	NC	
						RPD = 3.86	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	53327970	0.1750	0.1878	
2	6.009	6.009	0.000	293024588	0.1750	0.1910	
						RPD = 1.72	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	18010823	0.1750	0.1948	
2	6.392	6.394	-0.002	48885059	0.1750	0.1914	
						RPD = 1.75	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	34059424	0.1750	0.1981	
2	6.720	6.720	0.000	224534201	0.1750	0.1966	
						RPD = 0.79	
7 Dicamba							
1	6.608	6.609	-0.001	88040365	0.0875	0.0975	
2	6.801	6.800	0.001	416741253	0.0875	0.0982	
						RPD = 0.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	11785560	17.5	19.7	
2	6.849	6.848	0.001	74790568	17.5	19.3	
						RPD = 1.99	
9 MCPA							
1	6.884	6.883	0.001	14503654	17.5	20.9	
2	7.047	7.046	0.001	141491800	17.5	19.1	
						RPD = 9.15	
10 Dichlorprop							
1	7.069	7.069	0.000	43494282	0.1750	0.1890	
2	7.192	7.191	0.001	209080697	0.1750	0.1824	
						RPD = 3.56	
11 2,4-D							
1	7.212	7.214	-0.002	52251610	0.1750	0.1913	
2	7.412	7.412	0.000	249572099	0.1750	0.1983	
						RPD = 3.57	
12 Pentachlorophenol							
1	7.562	7.562	0.000	217713159	0.0438	0.0498	
2	7.607	7.605	0.002	799764932	0.0438	0.0510	
						RPD = 2.39	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	78442832	0.0438	0.0491	
2	7.744	7.744	0.000	298650918	0.0438	0.0495	
						RPD = 0.62	
14 Chloramben							
1	7.739	7.739	0.000	260489374	0.1750	0.1923	
2	8.050	8.049	0.001	932682423	0.1750	0.1971	
						RPD = 2.43	
15 2,4,5-T							
1	7.816	7.816	0.000	74079486	0.0438	0.0478	
2	7.976	7.976	0.000	258556779	0.0438	0.0504	
						RPD = 5.36	
16 2,4-DB							
1	8.059	8.059	0.000	26745929	0.1750	0.1835	
2	8.190	8.190	0.000	131785359	0.1750	0.1812	
						RPD = 1.28	
17 Dinoseb							
1	8.112	8.113	-0.001	177677725	0.1750	0.1959	
2	8.142	8.141	0.001	552864347	0.1750	0.1846	
						RPD = 5.93	
18 Bentazon							
1	8.184	8.184	0.000	40686507	0.1750	0.1839	
2	8.545	8.544	0.001	129567561	0.1750	0.1839	
						RPD = 0.01	
19 Picloram							
1	8.400	8.399	0.001	418538358	0.1750	0.1850	
2	8.878	8.877	0.001	1412087067	0.1750	0.1642	
						RPD = 11.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.503	8.504	-0.001	455199158	0.1750	0.1886	
2	8.659	8.658	0.001	1606795319	0.1750	0.1979	
						RPD = 4.84	

21 Acifluorfen

1	9.543	9.543	0.000	347534675	0.1750	0.1900	
2	9.678	9.677	0.001	1042379023	0.1750	0.1740	
						RPD = 8.82	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110007.D

Operator ID: GEM
Worklist Smp#: 7

Injection Date: 11-May-2018 12:45:20

Instrument ID: CSGS

Client ID: ic h5

Dil. Factor: 1.0000

ALS Bottle#: 7

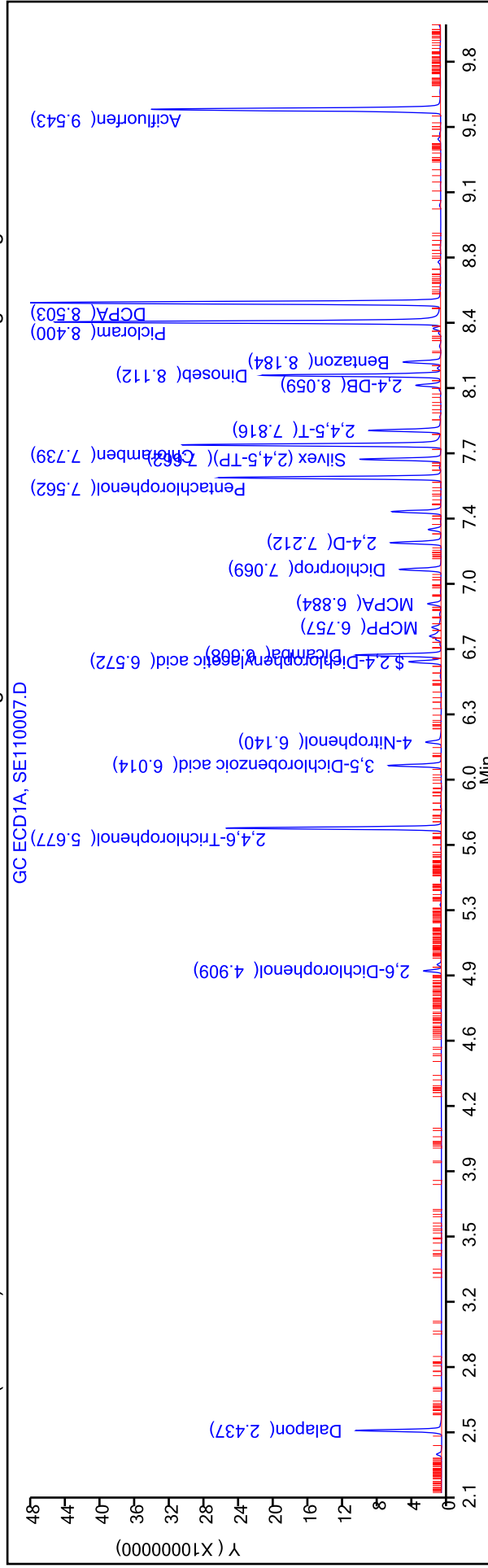
Injection Vol: 1.0 ul

Limit Group: 8151A - DOD_V5

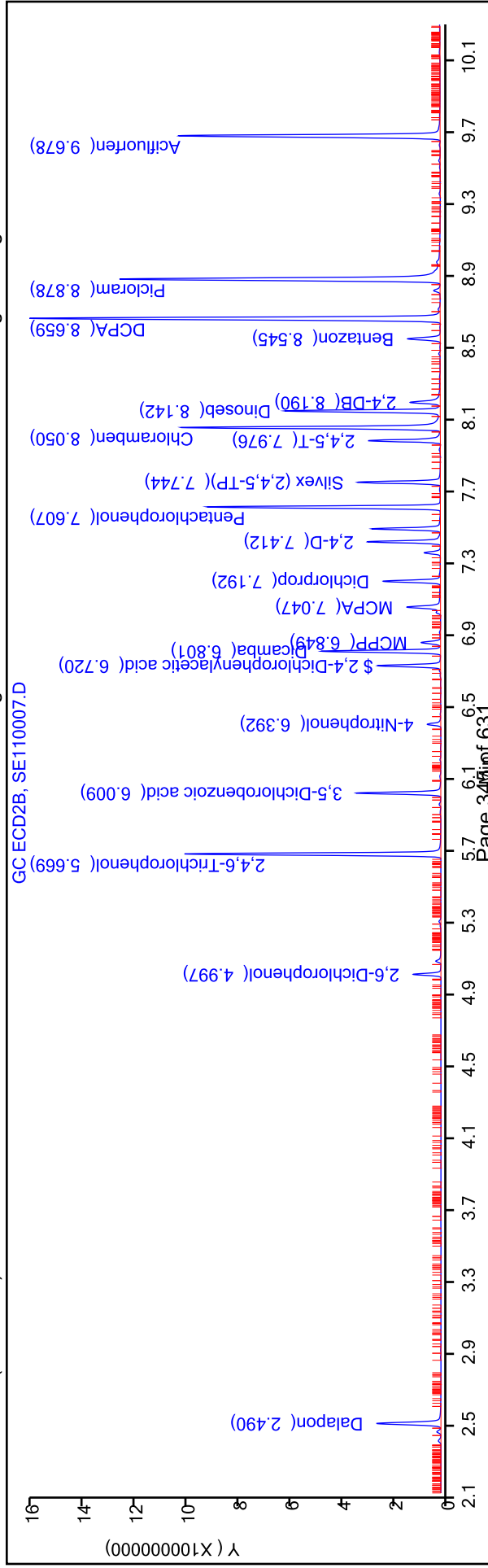
Method: Herbicides_CSGS

Column: DB-XLB (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 11-May-2018 13:05:09 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:50 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.434	2.434	0.000	39308326	0.1000	0.0915	
2	2.487	2.487	0.000	122554551	0.1000	0.0884	
						RPD = 3.41	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	8281104	NC	NC	
2	4.996	4.996	0.000	42242380	NC	NC	
						RPD = 8.44	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	92332408	NC	NC	
2	5.668	5.668	0.000	398541878	NC	NC	
						RPD = 0.21	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	24903843	0.1000	0.0877	
2	6.009	6.009	0.000	132008139	0.1000	0.0861	
						RPD = 1.88	
5 4-Nitrophenol							
1	6.141	6.141	0.000	8515464	0.1000	0.0921	
2	6.394	6.394	0.000	22006274	0.1000	0.0862	
						RPD = 6.65	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	15674889	0.1000	0.0912	
2	6.720	6.720	0.000	101682600	0.1000	0.0890	
						RPD = 2.40	
7 Dicamba							
1	6.609	6.609	0.000	39167090	0.0500	0.0434	
2	6.800	6.800	0.000	183882413	0.0500	0.0433	
						RPD = 0.15	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110008.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	5630043	10.0	9.42	
2	6.848	6.848	0.000	38524610	10.0	9.49	
						RPD = 0.77	
9 MCPA							
1	6.883	6.883	0.000	6946174	10.0	9.67	
2	7.046	7.046	0.000	72537648	10.0	9.37	
						RPD = 3.18	
10 Dichlorprop							
1	7.069	7.069	0.000	19831661	0.1000	0.0862	
2	7.191	7.191	0.000	95482366	0.1000	0.0833	
						RPD = 3.41	
11 2,4-D							
1	7.214	7.214	0.000	23710912	0.1000	0.0868	
2	7.412	7.412	0.000	110280549	0.1000	0.0876	
						RPD = 0.91	
12 Pentachlorophenol							
1	7.562	7.562	0.000	95118174	0.0250	0.0218	
2	7.605	7.605	0.000	348275036	0.0250	0.0222	
						RPD = 2.07	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	35295555	0.0250	0.0221	
2	7.744	7.744	0.000	129809387	0.0250	0.0215	
						RPD = 2.84	
14 Chloramben							
1	7.739	7.739	0.000	119026158	0.1000	0.0879	
2	8.049	8.049	0.000	421826031	0.1000	0.0891	
						RPD = 1.40	
15 2,4,5-T							
1	7.816	7.816	0.000	34604353	0.0250	0.0223	
2	7.976	7.976	0.000	112357736	0.0250	0.0219	
						RPD = 1.87	
16 2,4-DB							
1	8.059	8.059	0.000	13086508	0.1000	0.0898	
2	8.190	8.190	0.000	67025442	0.1000	0.0922	
						RPD = 2.59	
17 Dinoseb							
1	8.113	8.113	0.000	78083281	0.1000	0.0861	
2	8.141	8.141	0.000	218861678	0.1000	0.0814	
						RPD = 5.66	
18 Bentazon							
1	8.184	8.184	0.000	19651846	0.1000	0.0888	
2	8.544	8.544	0.000	61472612	0.1000	0.0873	
						RPD = 1.80	
19 Picloram							
1	8.399	8.399	0.000	197347462	0.1000	0.0872	
2	8.877	8.877	0.000	609692907	0.1000	0.0761	
						RPD = 13.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.504	8.504	0.000	216427825	0.1000	0.0897	
2	8.658	8.658	0.000	728552811	0.1000	0.0897	
						RPD = 0.10	

21 Acifluorfen

1	9.543	9.543	0.000	148539275	0.1000	0.0862	
2	9.677	9.677	0.000	397160260	0.1000	0.0789	
						RPD = 8.83	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110008.D
Injection Date: 11-May-2018 13:05:09
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 8

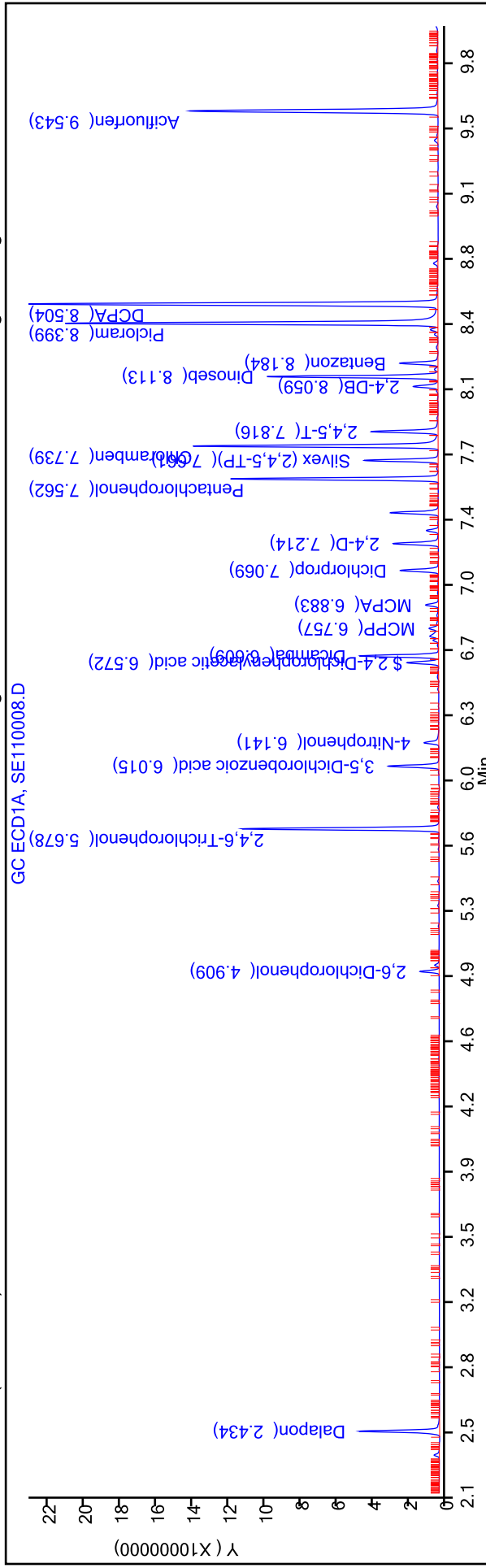
Lims ID: ic h4
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

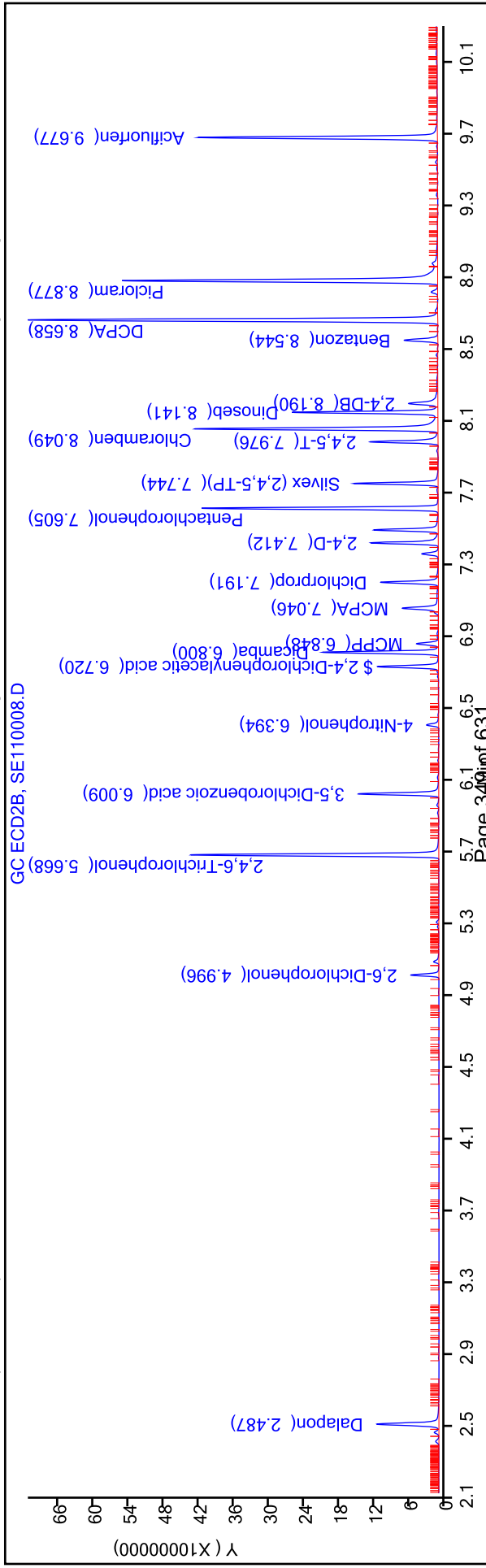
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 11-May-2018 13:24:48 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:23:04 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	20866692	0.0500	0.0490	
2	2.487	2.487	0.000	64357695	0.0500	0.0464	
						RPD = 5.43	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	4778853	NC	NC	
2	4.997	4.996	0.001	23332577	NC	NC	
						RPD = 9.56	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	47398750	NC	NC	
2	5.668	5.668	0.000	201332318	NC	NC	
						RPD = 1.40	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	13872381	0.0500	0.0488	
2	6.009	6.009	0.000	69054511	0.0500	0.0450	
						RPD = 8.16	
5 4-Nitrophenol							
1	6.141	6.141	0.000	4870807	0.0500	0.0527	
2	6.395	6.394	0.001	12366861	0.0500	0.0484	
						RPD = 8.42	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	8637049	0.0500	0.0502	
2	6.720	6.720	0.000	53622932	0.0500	0.0469	
						RPD = 6.78	
7 Dicamba							
1	6.608	6.609	-0.001	20817710	0.0250	0.0231	
2	6.800	6.800	0.000	94232129	0.0250	0.0222	
						RPD = 3.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.756	6.757	-0.001	3151900	5.00	5.27	
2	6.848	6.848	0.000	22633447	5.00	5.18	
						RPD = 1.74	
9 MCPA							
1	6.883	6.883	0.000	4041645	5.00	5.35	
2	7.046	7.046	0.000	43466245	5.00	5.27	
						RPD = 1.46	
10 Dichlorprop							
1	7.069	7.069	0.000	10981312	0.0500	0.0477	
2	7.191	7.191	0.000	50621343	0.0500	0.0442	
						RPD = 7.75	
11 2,4-D							
1	7.213	7.214	-0.001	12919675	0.0500	0.0473	
2	7.411	7.412	-0.001	56670134	0.0500	0.0450	
						RPD = 4.94	
12 Pentachlorophenol							
1	7.561	7.562	-0.001	48162705	0.0125	0.0110	
2	7.605	7.605	0.000	173538123	0.0125	0.0111	
						RPD = 0.46	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	17924076	0.0125	0.0112	
2	7.743	7.744	-0.001	63684741	0.0125	0.0105	
						RPD = 6.29	
14 Chloramben							
1	7.739	7.739	0.000	59544203	0.0500	0.0440	
2	8.049	8.049	0.000	208906785	0.0500	0.0441	
						RPD = 0.39	
15 2,4,5-T							
1	7.816	7.816	0.000	17990845	0.0125	0.0116	
2	7.976	7.976	0.000	55311764	0.0125	0.0108	
						RPD = 7.32	
16 2,4-DB							
1	8.059	8.059	0.000	6772708	0.0500	0.0465	
2	8.191	8.190	0.001	35061794	0.0500	0.0482	
						RPD = 3.67	
17 Dinoseb							
1	8.112	8.113	-0.001	40031061	0.0500	0.0441	
2	8.141	8.141	0.000	105727247	0.0500	0.0458	
						RPD = 3.62	
18 Bentazon							
1	8.184	8.184	0.000	10191475	0.0500	0.0461	
2	8.544	8.544	0.000	31859951	0.0500	0.0452	
						RPD = 1.86	
19 Picloram							
1	8.399	8.399	0.000	97726866	0.0500	0.0432	
2	8.876	8.877	-0.001	287961730	0.0500	0.0408	
						RPD = 5.59	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.502	8.504	-0.002	108476970	0.0500	0.0449	
2	8.657	8.658	-0.001	363162816	0.0500	0.0447	
						RPD = 0.45	

21 Acifluorfen

1	9.541	9.543	-0.002	75169574	0.0500	0.0452	
2	9.676	9.677	-0.001	182510548	0.0500	0.0461	
						RPD = 1.97	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110009.D
Injection Date: 11-May-2018 13:24:48
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 9

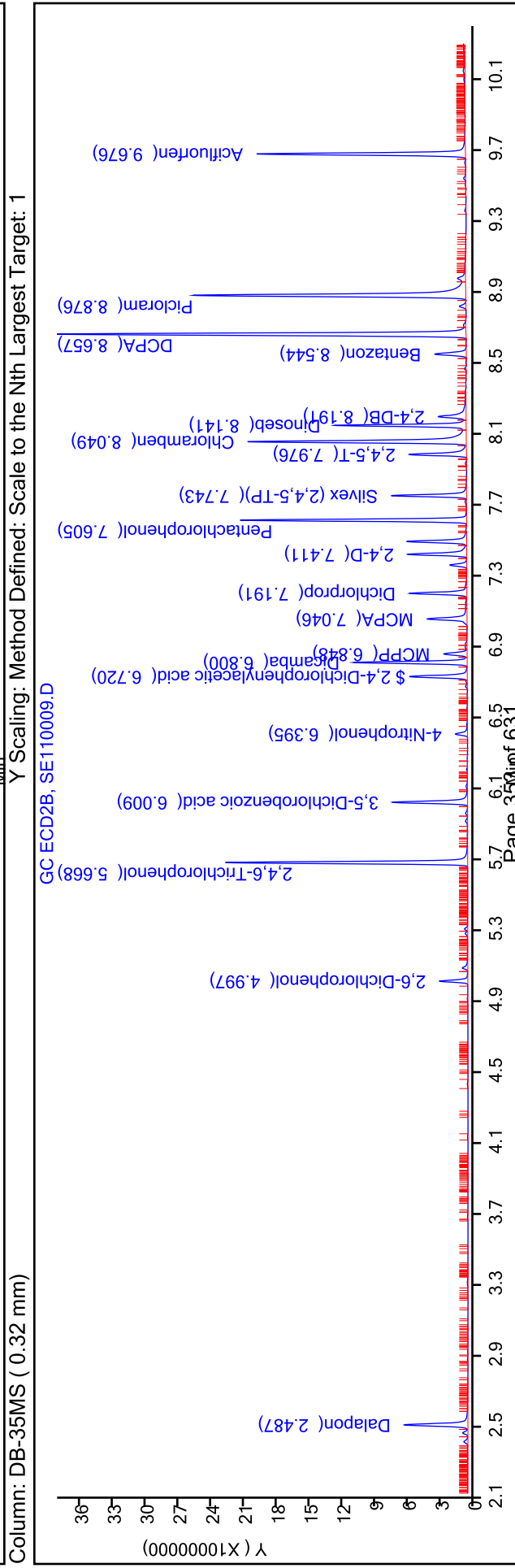
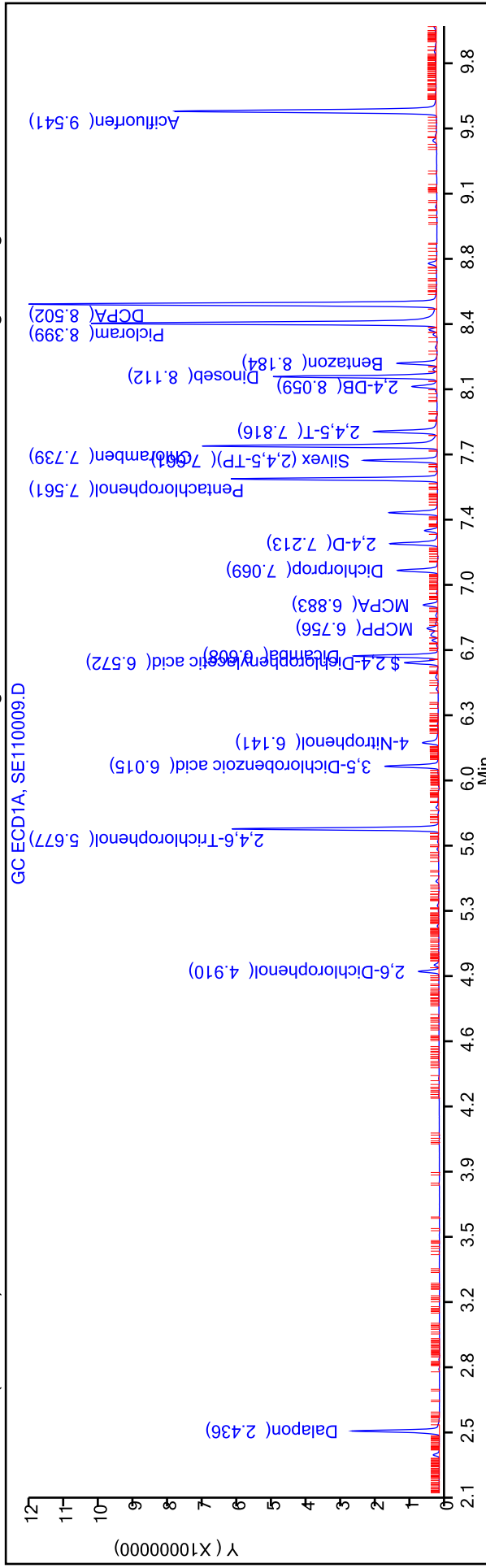
Lims ID: ic h3
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 9

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 11-May-2018 13:44:30 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:23:19 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.435	2.434	0.001	10636667	0.0250	0.0255	
2	2.486	2.487	-0.001	32076139	0.0250	0.0231	
						RPD = 9.57	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	2350207	NC	NC	
2	4.997	4.996	0.001	11844418	NC	NC	
						RPD = 3.12	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	21271269	NC	NC	
2	5.669	5.668	0.001	90591973	NC	NC	
						RPD = 1.13	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	6486938	0.0250	0.0228	
2	6.010	6.009	0.001	32970058	0.0250	0.0215	
						RPD = 6.08	
5 4-Nitrophenol							
1	6.144	6.141	0.003	2039867	0.0250	0.0221	
2	6.396	6.394	0.002	5603900	0.0250	0.0219	
						RPD = 0.54	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.573	6.572	0.001	4102855	0.0250	0.0239	
2	6.721	6.720	0.001	24918814	0.0250	0.0218	
						RPD = 8.98	
7 Dicamba							
1	6.609	6.609	0.000	9645690	0.0125	0.0107	
2	6.800	6.800	0.000	43185212	0.0125	0.0102	
						RPD = 4.90	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	1331377	2.50	2.23	
2	6.849	6.848	0.001	11960487	2.50	2.29	
						RPD = 2.66	
9 MCPA							
1	6.884	6.883	0.001	1929514	2.50	2.21	
2	7.048	7.046	0.002	22165214	2.50	2.27	
						RPD = 2.83	
10 Dichlorprop							
1	7.070	7.069	0.001	5256013	0.0250	0.0228	
2	7.192	7.191	0.001	25683211	0.0250	0.0224	
						RPD = 1.93	
11 2,4-D							
1	7.215	7.214	0.001	6252962	0.0250	0.0229	
2	7.413	7.412	0.001	26250068	0.0250	0.0209	
						RPD = 9.33	
12 Pentachlorophenol							
1	7.562	7.562	0.000	21666620	0.006250	0.004956	
2	7.605	7.605	0.000	76363785	0.006250	0.004871	
						RPD = 1.75	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	8165417	0.006250	0.005116	
2	7.745	7.744	0.001	29112863	0.006250	0.004821	
						RPD = 5.94	
14 Chloramben							
1	7.740	7.739	0.001	26686021	0.0250	0.0197	
2	8.050	8.049	0.001	93206115	0.0250	0.0197	
						RPD = 0.05	
15 2,4,5-T							
1	7.818	7.816	0.002	8450464	0.006250	0.005448	
2	7.977	7.976	0.001	25357515	0.006250	0.004942	
						RPD = 9.74	
16 2,4-DB							
1	8.060	8.059	0.001	3235647	0.0250	0.0222	
2	8.192	8.190	0.002	16541201	0.0250	0.0227	
						RPD = 2.41	
17 Dinoseb							
1	8.113	8.113	0.000	17944898	0.0250	0.0198	
2	8.141	8.141	0.000	44543235	0.0250	0.0264	
						RPD = 28.58	
18 Bentazon							
1	8.185	8.184	0.001	4925430	0.0250	0.0223	
2	8.545	8.544	0.001	15434944	0.0250	0.0219	
						RPD = 1.62	
19 Picloram							
1	8.401	8.399	0.002	42654843	0.0250	0.0189	
2	8.877	8.877	0.000	118110292	0.0250	0.0222	
						RPD = 16.35	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.503	8.504	-0.001	49421367	0.0250	0.0205	
2	8.657	8.658	-0.001	161482853	0.0250	0.0199	
						RPD = 2.88	

21 Acifluorfen

1	9.543	9.543	0.000	31521813	0.0250	0.0200	
2	9.677	9.677	0.000	70468139	0.0250	0.0287	
						RPD = 35.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D
Injection Date: 11-May-2018 13:44:30
Lims ID: ic h2
Instrument ID: CSGS

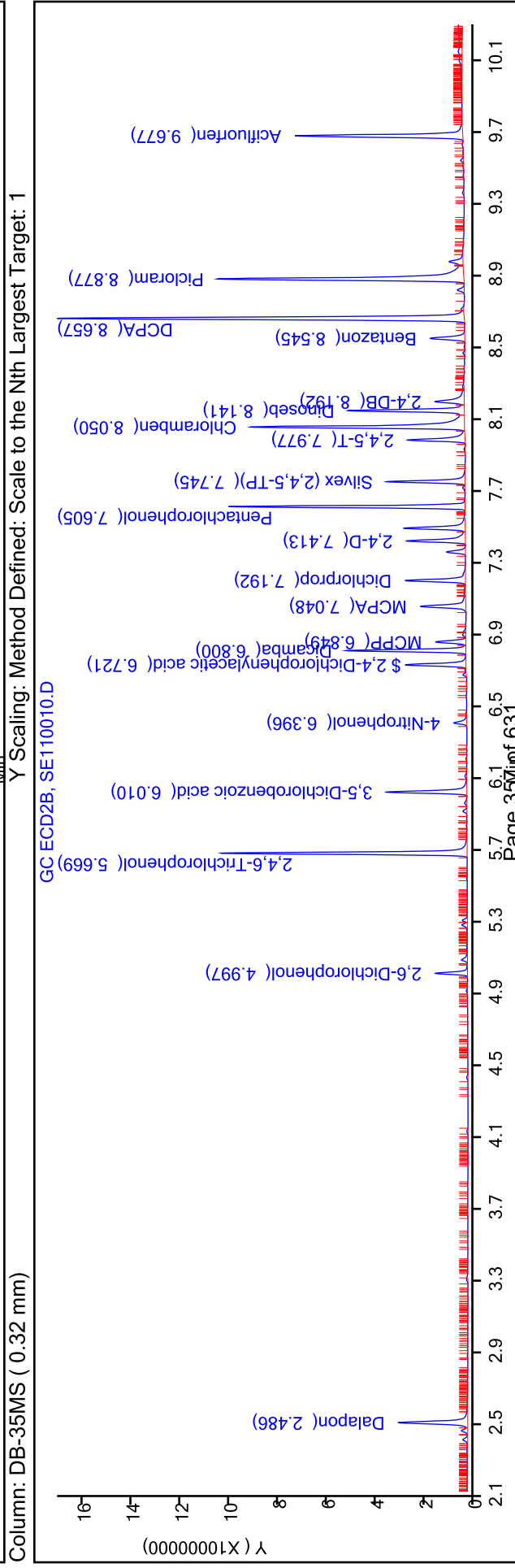
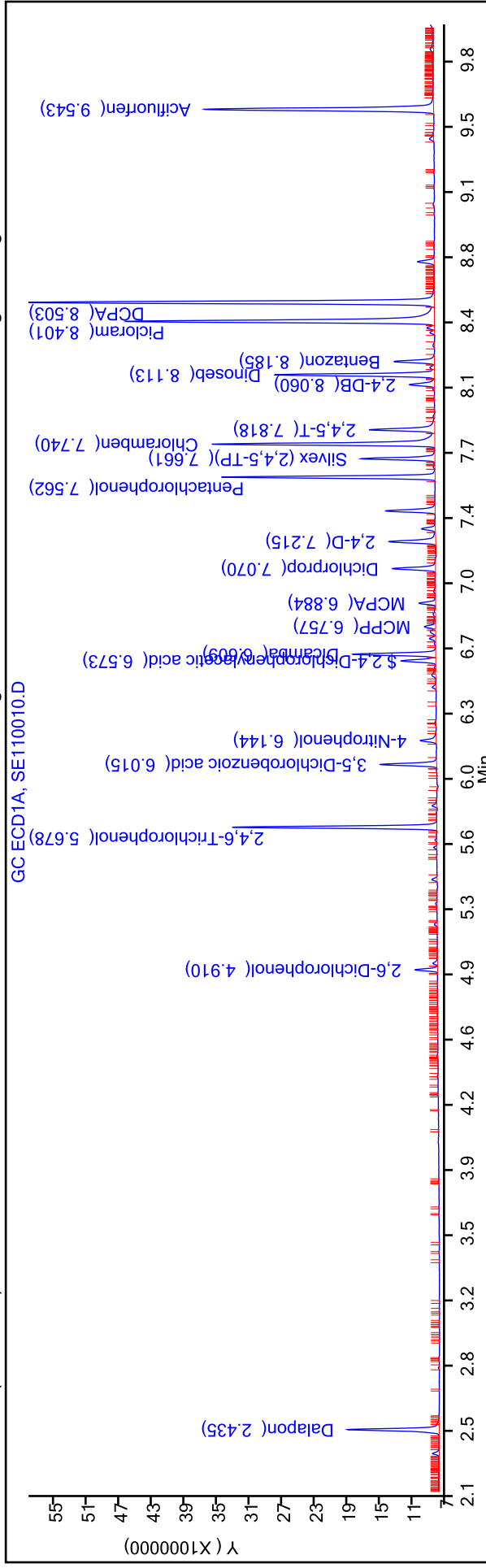
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 11-May-2018 14:04:11 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:08 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 11-May-2018 16:20:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.439	2.434	0.005	6581903	0.0100	0.0161	
2	2.491	2.487	0.004	18041326	0.0100	0.0130	
							RPD = 21.37

2 2,6-Dichlorophenol

1	4.910	4.909	0.001	1371251	NC	NC	
2	4.997	4.996	0.001	6784740	NC	NC	
							RPD = 17.58

3 2,4,6-Trichlorophenol

1	5.677	5.678	-0.001	11180842	NC	NC	
2	5.667	5.668	-0.001	47838983	NC	NC	
							RPD = 0.67

4 3,5-Dichlorobenzoic acid

1	6.015	6.015	0.000	3593919	0.0100	0.0127	
2	6.010	6.009	0.001	18292581	0.0100	0.0119	
							RPD = 5.93

5 4-Nitrophenol

1	6.144	6.141	0.003	1166828	0.0100	0.0126	
2	6.397	6.394	0.003	3194768	0.0100	0.0125	
							RPD = 0.88

\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	2379510	0.0100	0.0138	
2	6.722	6.720	0.002	14177101	0.0100	0.0124	
							RPD = 10.89

7 Dicamba

1	6.608	6.609	-0.001	5341278	0.005000	0.005917	
2	6.800	6.800	0.000	23704598	0.005000	0.005585	
							RPD = 5.78

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	593694	1.00	0.99	
2	6.849	6.848	0.001	7413369	1.00	1.05	
						RPD = 5.94	
9 MCPA							
1	6.883	6.883	0.000	1032647	1.00	0.8775	
2	7.048	7.046	0.002	13307227	1.00	1.03	
						RPD = 15.72	
10 Dichlorprop							
1	7.070	7.069	0.001	2994953	0.0100	0.0130	
2	7.192	7.191	0.001	16334415	0.0100	0.0142	
						RPD = 9.06	
11 2,4-D							
1	7.215	7.214	0.001	3282293	0.0100	0.0120	
2	7.413	7.412	0.001	14413840	0.0100	0.0114	
						RPD = 4.83	
12 Pentachlorophenol							
1	7.562	7.562	0.000	11166313	0.002500	0.002554	
2	7.605	7.605	0.000	39948581	0.002500	0.002548	
						RPD = 0.25	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	4257146	0.002500	0.002667	
2	7.744	7.744	0.000	15326717	0.002500	0.002538	
						RPD = 4.97	
14 Chloramben							
1	7.740	7.739	0.001	13202807	0.0100	0.009748	
2	8.050	8.049	0.001	46864588	0.0100	0.0099	
						RPD = 1.56	
15 2,4,5-T							
1	7.817	7.816	0.001	4350302	0.002500	0.002805	
2	7.977	7.976	0.001	13726331	0.002500	0.002675	
						RPD = 4.73	
16 2,4-DB							
1	8.061	8.059	0.002	1732409	0.0100	0.0119	
2	8.192	8.190	0.002	7931034	0.0100	0.0109	
						RPD = 8.62	
17 Dinoseb							
1	8.112	8.113	-0.001	9609463	0.0100	0.0106	
2	8.141	8.141	0.000	23285232	0.0100	0.0196	
						RPD = 59.77	
18 Bentazon							
1	8.185	8.184	0.001	2811902	0.0100	0.0127	
2	8.544	8.544	0.000	8350330	0.0100	0.0119	
						RPD = 6.99	
19 Picloram							
1	8.401	8.399	0.002	21523000	0.0100	0.009513	
2	8.877	8.877	0.000	60007266	0.0100	0.0158	
						RPD = 49.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.502	8.504	-0.002	25166958	0.0100	0.0104	
2	8.657	8.658	-0.001	81828951	0.0100	0.0101	
						RPD = 3.37	

21 Acifluorfen

1	9.541	9.543	-0.002	16684062	0.0100	0.0113	
2	9.677	9.677	0.000	36263377	0.0100	0.0234	
						RPD = 69.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-1_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
Injection Date: 11-May-2018 14:04:11 Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 11

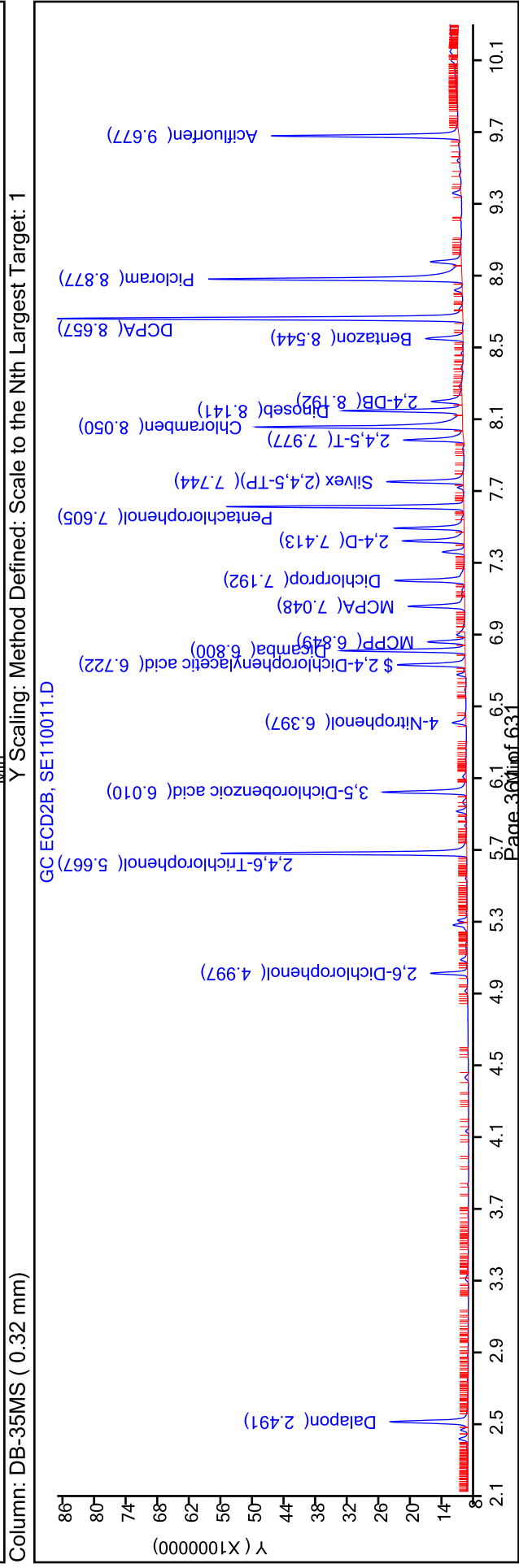
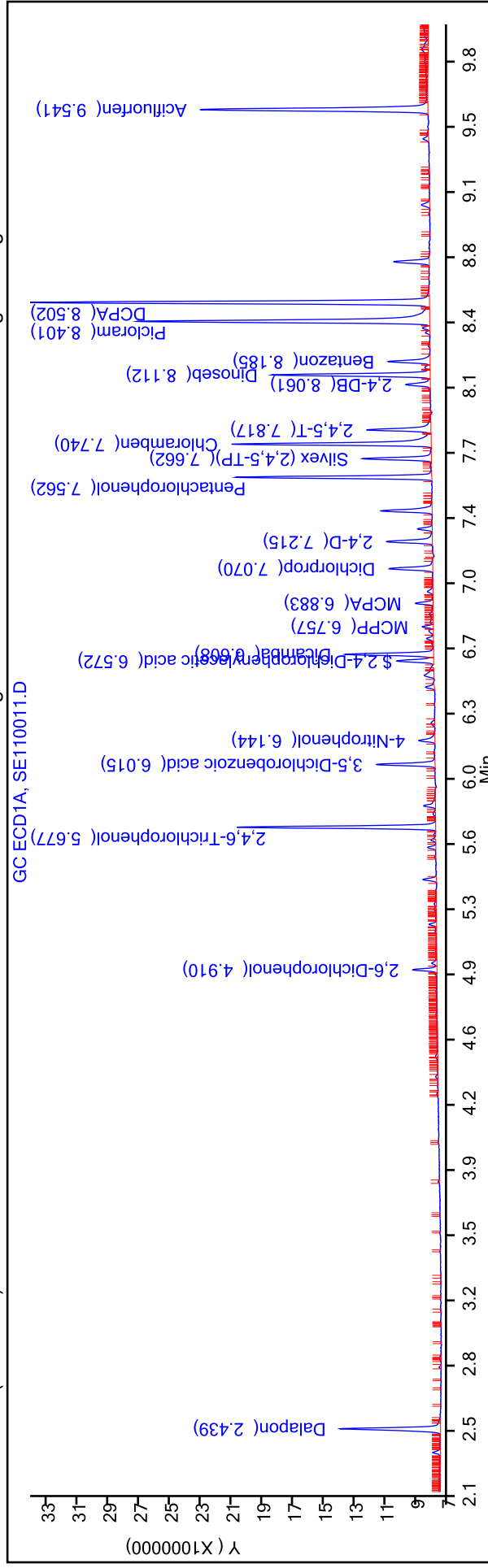
Lims ID: ic h1

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 11

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

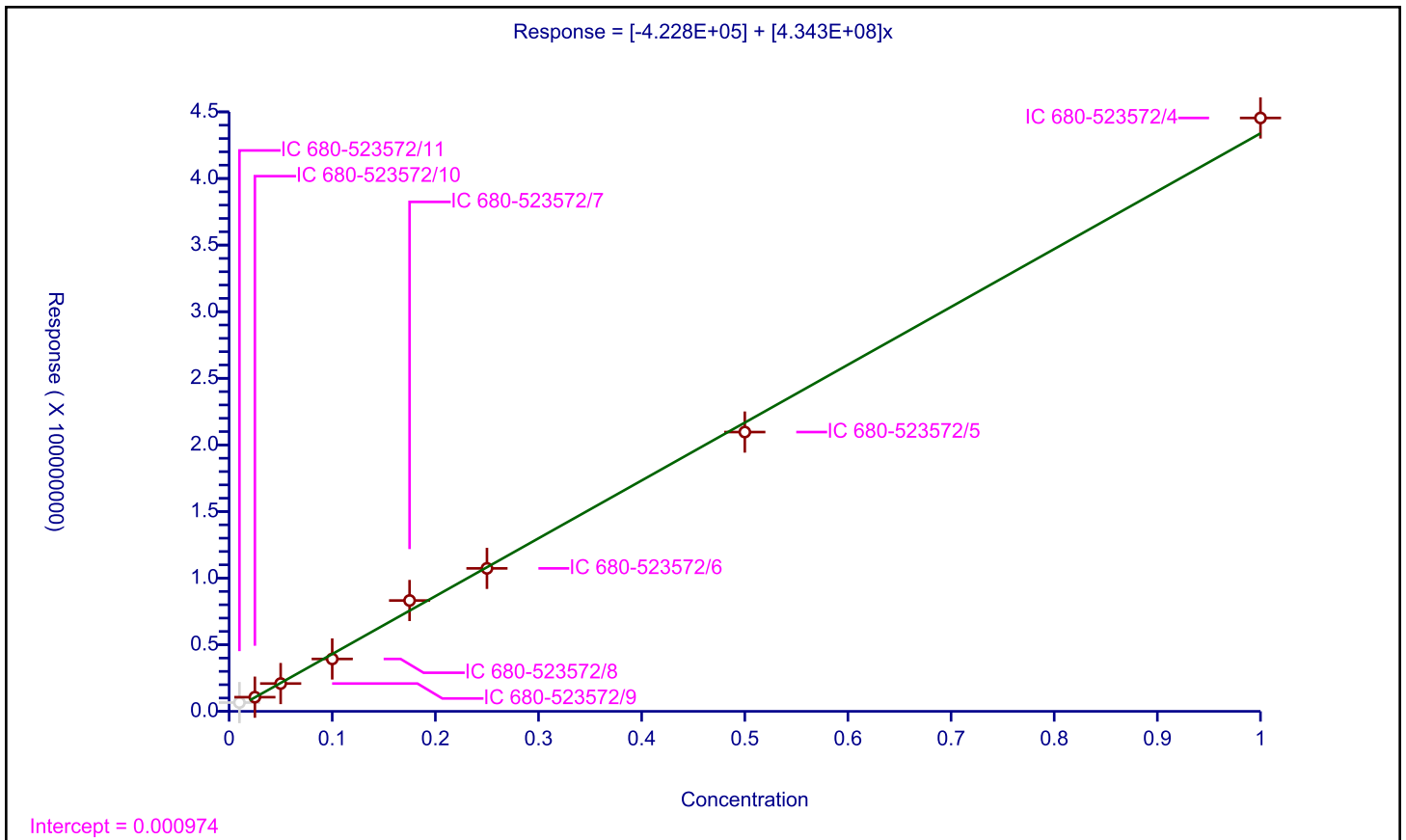
/ Dalapon

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base:
RF Rounding: 0

Curve Coefficients	
Intercept:	-4.228E+05
Slope:	4.343E+08

Error Coefficients	
Standard Error:	7150000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	6581903.0			658190300.0	N
2	IC 680-523572/10	0.025	10636667.0			425466680.0	Y
3	IC 680-523572/9	0.05	20866692.0			417333840.0	Y
4	IC 680-523572/8	0.1	39308326.0			393083260.0	Y
5	IC 680-523572/7	0.175	83189035.0			475365914.285714	Y
6	IC 680-523572/6	0.25	107312017.0			429248068.0	Y
7	IC 680-523572/5	0.5	209658233.0			419316466.0	Y
8	IC 680-523572/4	1.0	445432487.0			445432487.0	Y



Calibration

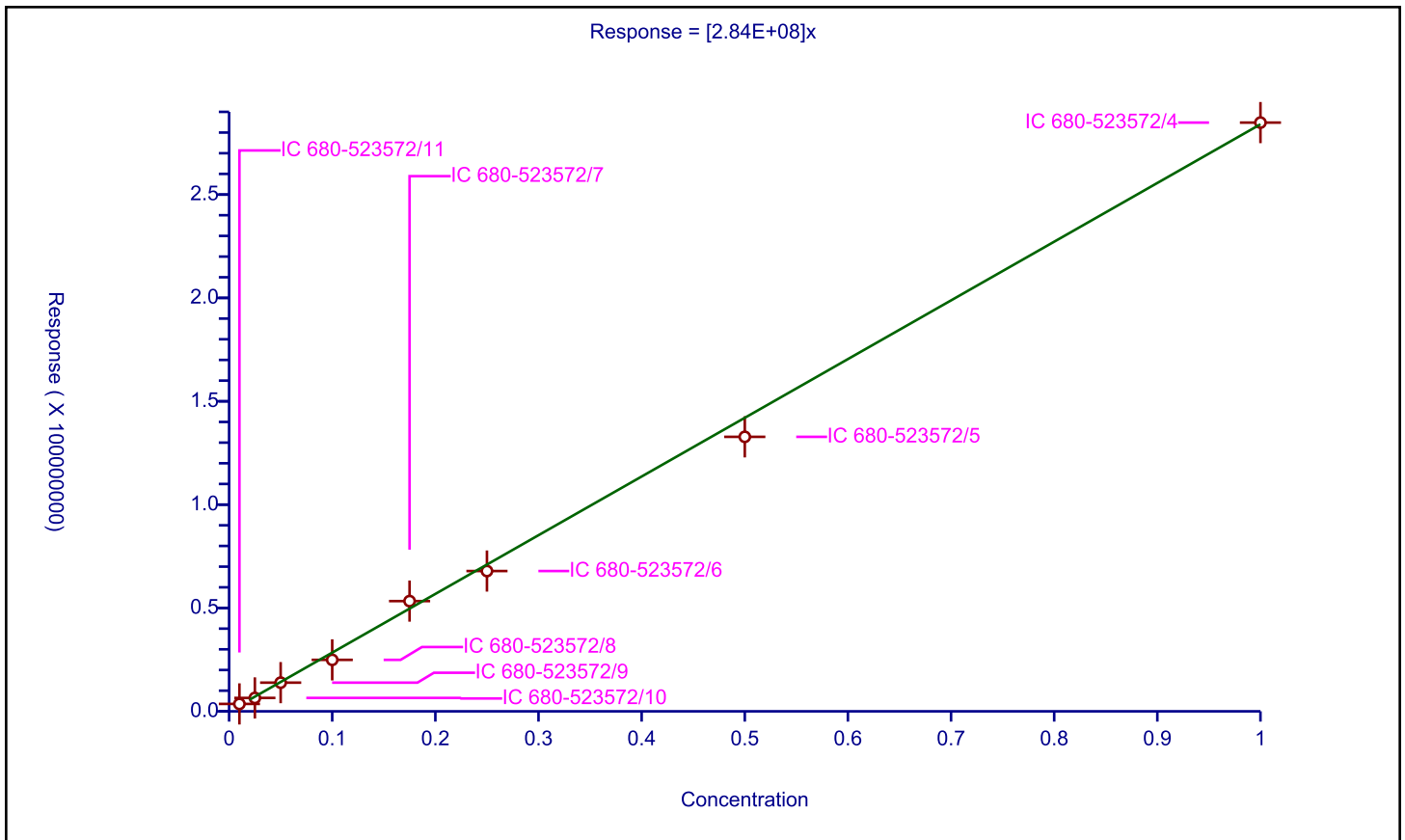
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	2.84E+08

Error Coefficients	
Standard Error:	4170000
Relative Standard Error:	12.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	3593919.0			359391900.0	Y
2	IC 680-523572/10	0.025	6486938.0			259477520.0	Y
3	IC 680-523572/9	0.05	13872381.0			277447620.0	Y
4	IC 680-523572/8	0.1	24903843.0			249038430.0	Y
5	IC 680-523572/7	0.175	53327970.0			304731257.142857	Y
6	IC 680-523572/6	0.25	67878078.0			271512312.0	Y
7	IC 680-523572/5	0.5	132790199.0			265580398.0	Y
8	IC 680-523572/4	1.0	284813773.0			284813773.0	Y



Calibration

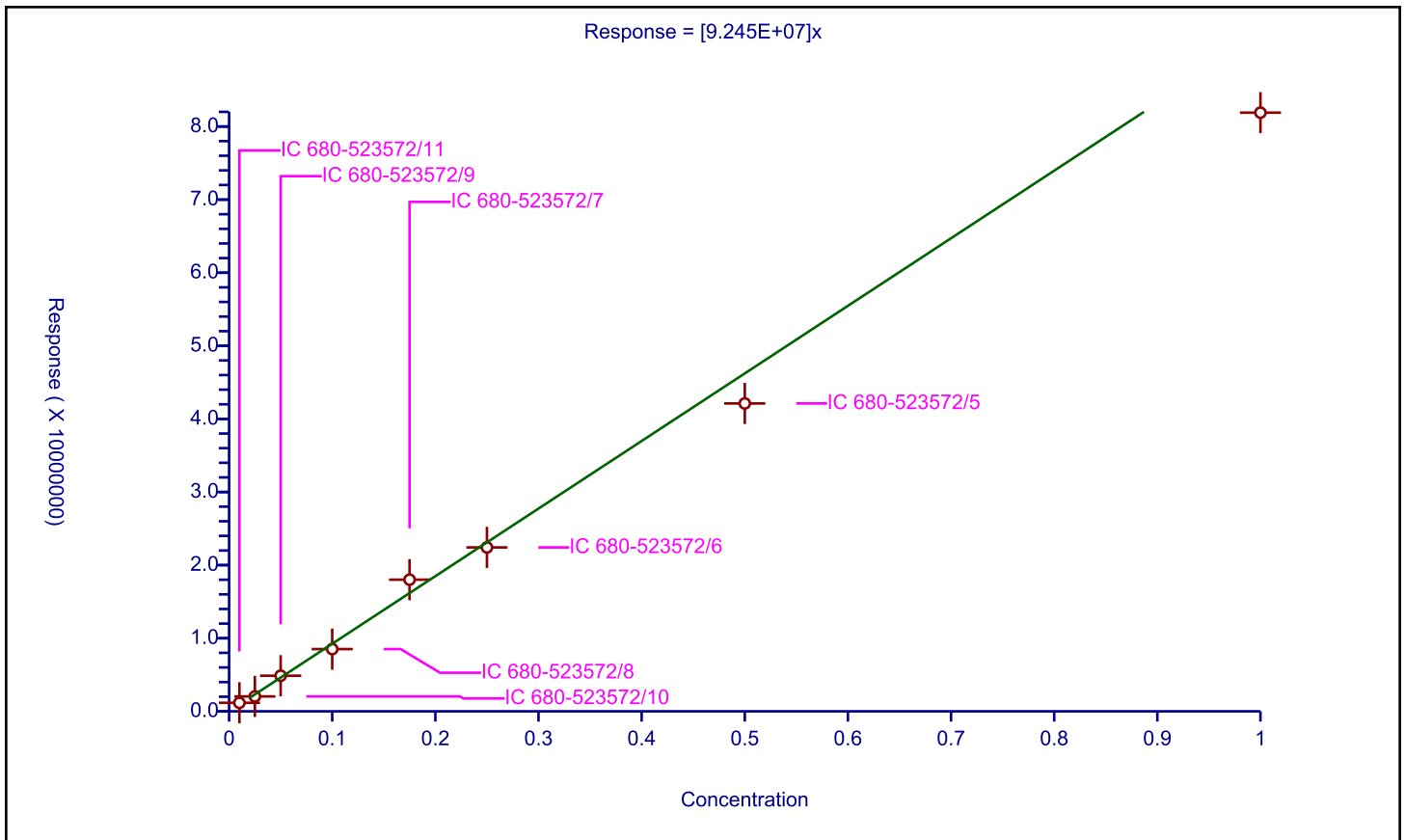
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	9.245E+07

Error Coefficients	
Standard Error:	4360000
Relative Standard Error:	13.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	1166828.0			116682800.0	Y
2	IC 680-523572/10	0.025	2039867.0			81594680.0	Y
3	IC 680-523572/9	0.05	4870807.0			97416140.0	Y
4	IC 680-523572/8	0.1	8515464.0			85154640.0	Y
5	IC 680-523572/7	0.175	18010823.0			102918988.571429	Y
6	IC 680-523572/6	0.25	22420839.0			89683356.0	Y
7	IC 680-523572/5	0.5	42115762.0			84231524.0	Y
8	IC 680-523572/4	1.0	81893704.0			81893704.0	Y



Calibration

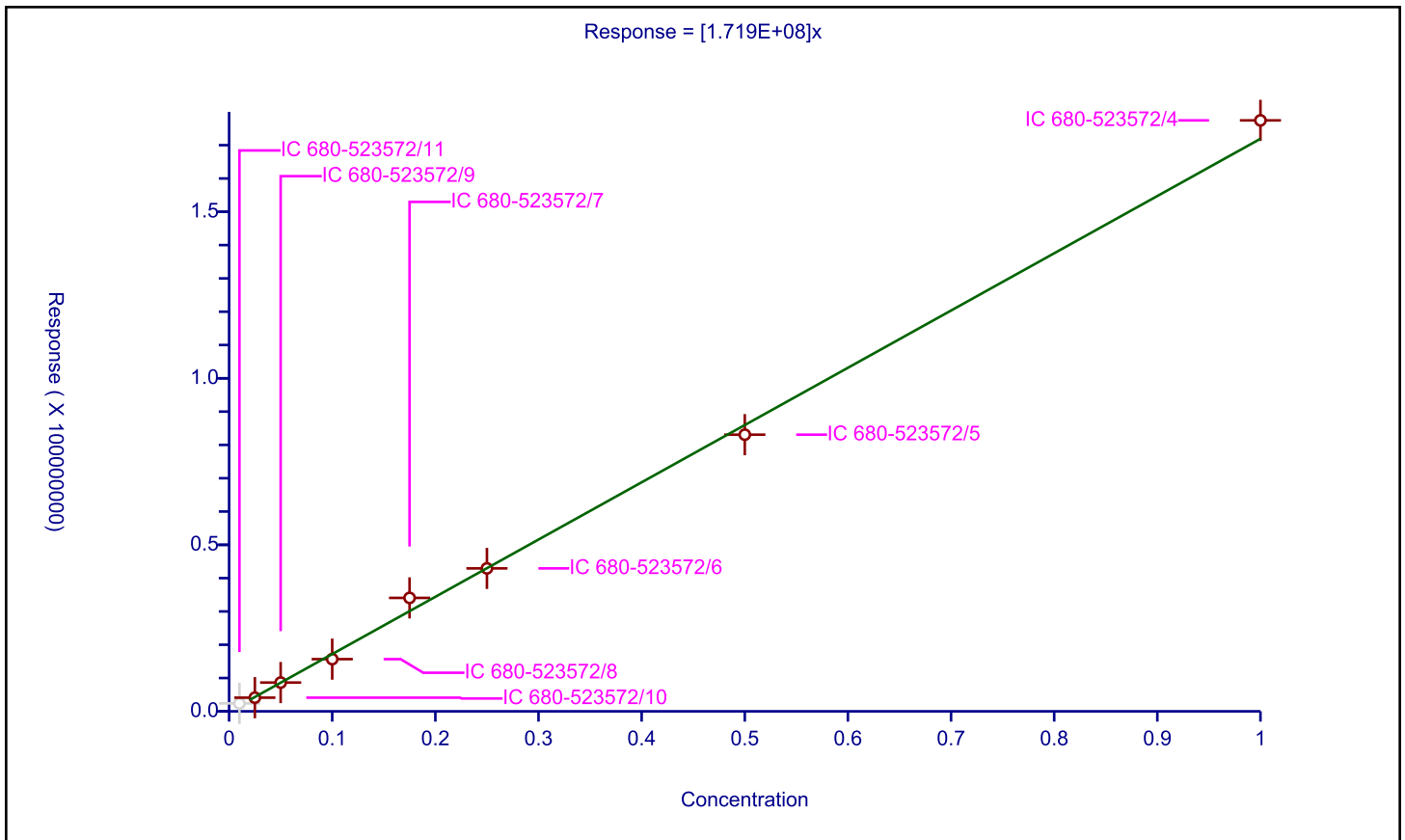
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.719E+08

Error Coefficients	
Standard Error:	3080000
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	2379510.0			237951000.0	N
2	IC 680-523572/10	0.025	4102855.0			164114200.0	Y
3	IC 680-523572/9	0.05	8637049.0			172740980.0	Y
4	IC 680-523572/8	0.1	15674889.0			156748890.0	Y
5	IC 680-523572/7	0.175	34059424.0			194625280.0	Y
6	IC 680-523572/6	0.25	42921117.0			171684468.0	Y
7	IC 680-523572/5	0.5	83069272.0			166138544.0	Y
8	IC 680-523572/4	1.0	177446511.0			177446511.0	Y



Calibration

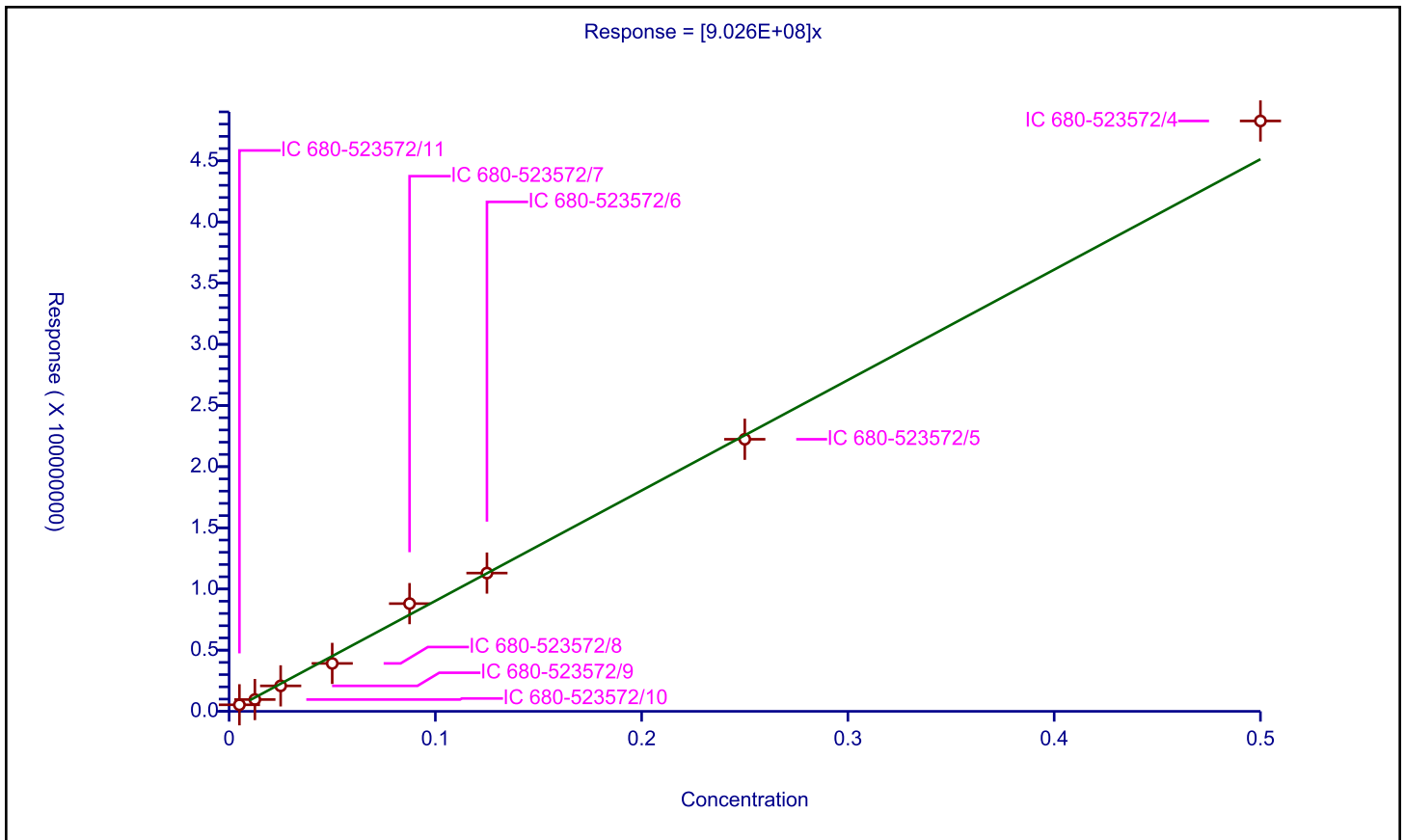
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	9.026E+08

Error Coefficients	
Standard Error:	12600000
Relative Standard Error:	11.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.005	5341278.0			1068255600.0	Y
2	IC 680-523572/10	0.0125	9645690.0			771655200.0	Y
3	IC 680-523572/9	0.025	20817710.0			832708400.0	Y
4	IC 680-523572/8	0.05	39167090.0			783341800.0	Y
5	IC 680-523572/7	0.0875	88040365.0			1006175600.0	Y
6	IC 680-523572/6	0.125	113017289.0			904138312.0	Y
7	IC 680-523572/5	0.25	222402654.0			889610616.0	Y
8	IC 680-523572/4	0.5	482569817.0			965139634.0	Y



Calibration

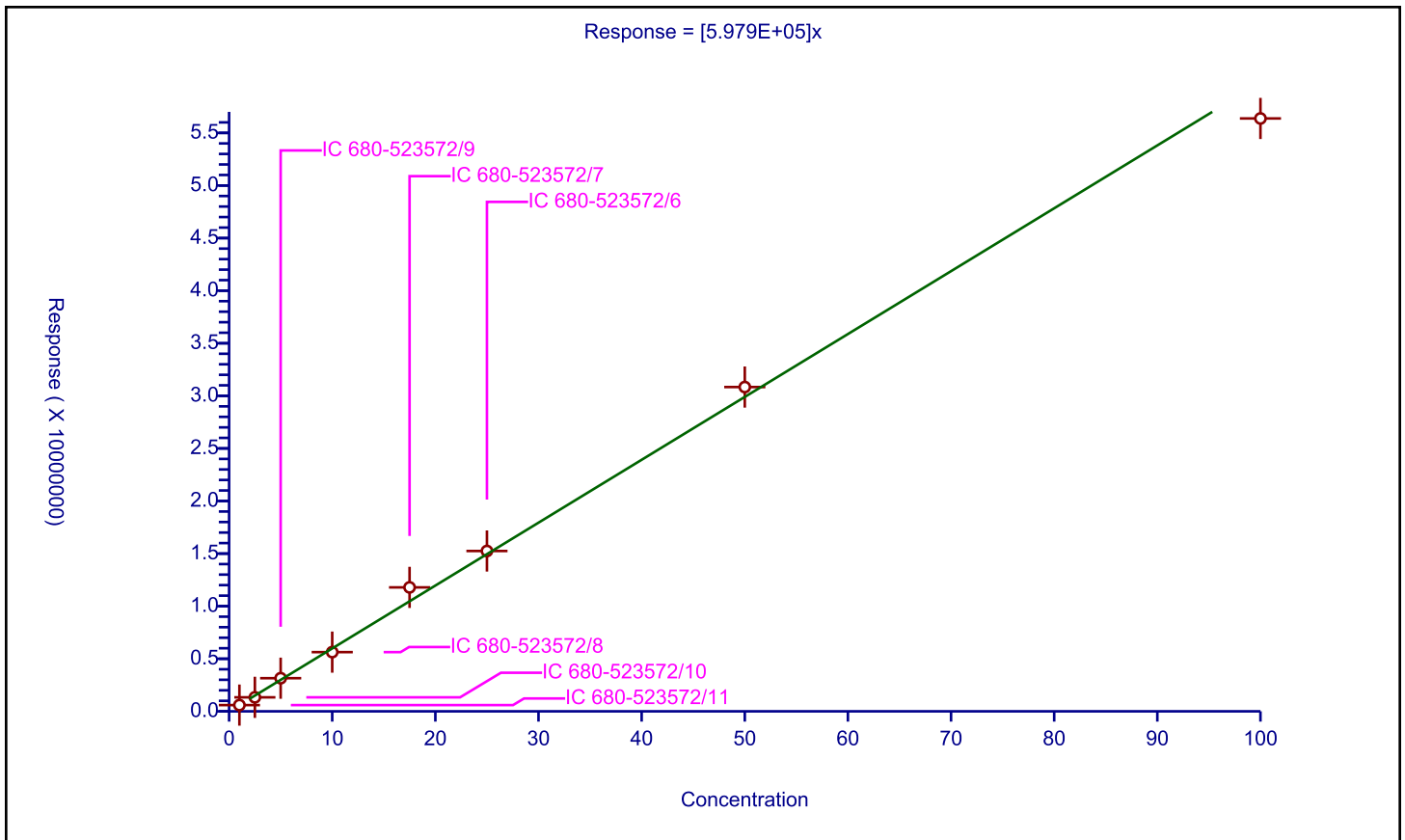
/ MCPP

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

Curve Coefficients	
Intercept:	0
Slope:	5.979E+05

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	1.0	593694.0			593694.0	Y
2	IC 680-523572/10	2.5	1331377.0			532550.8	Y
3	IC 680-523572/9	5.0	3151900.0			630380.0	Y
4	IC 680-523572/8	10.0	5630043.0			563004.3	Y
5	IC 680-523572/7	17.5	11785560.0			673460.571429	Y
6	IC 680-523572/6	25.0	15246200.0			609848.0	Y
7	IC 680-523572/5	50.0	30834503.0			616690.06	Y
8	IC 680-523572/4	100.0	56375223.0			563752.23	Y



Calibration

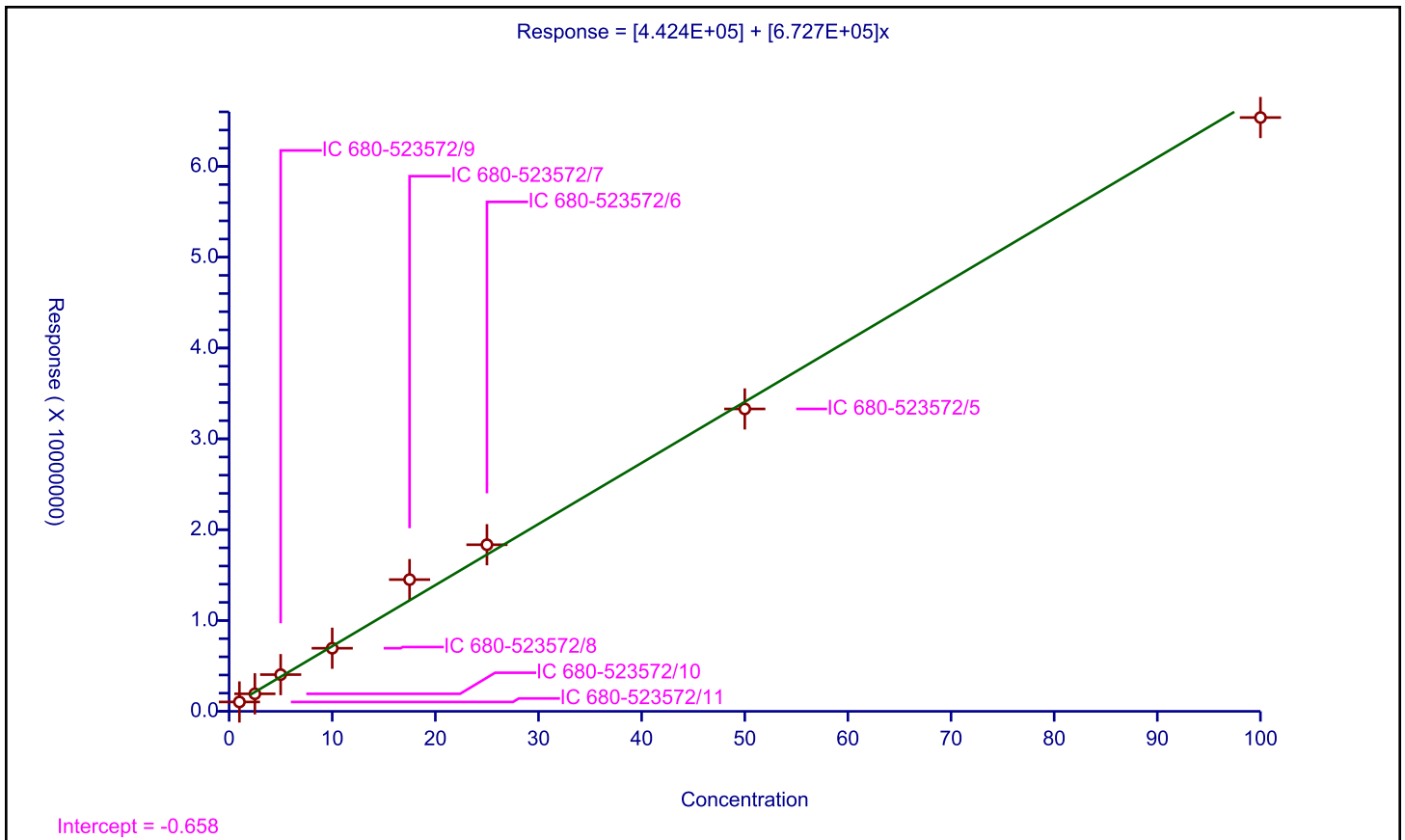
/ MCPA

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

Curve Coefficients	
Intercept:	4.424E+05
Slope:	6.727E+05

Error Coefficients	
Standard Error:	1450000
Relative Standard Error:	11.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	1.0	1032647.0			1032647.0	Y
2	IC 680-523572/10	2.5	1929514.0			771805.6	Y
3	IC 680-523572/9	5.0	4041645.0			808329.0	Y
4	IC 680-523572/8	10.0	6946174.0			694617.4	Y
5	IC 680-523572/7	17.5	14503654.0			828780.228571	Y
6	IC 680-523572/6	25.0	18344524.0			733780.96	Y
7	IC 680-523572/5	50.0	33294860.0			665897.2	Y
8	IC 680-523572/4	100.0	65377356.0			653773.56	Y



Calibration

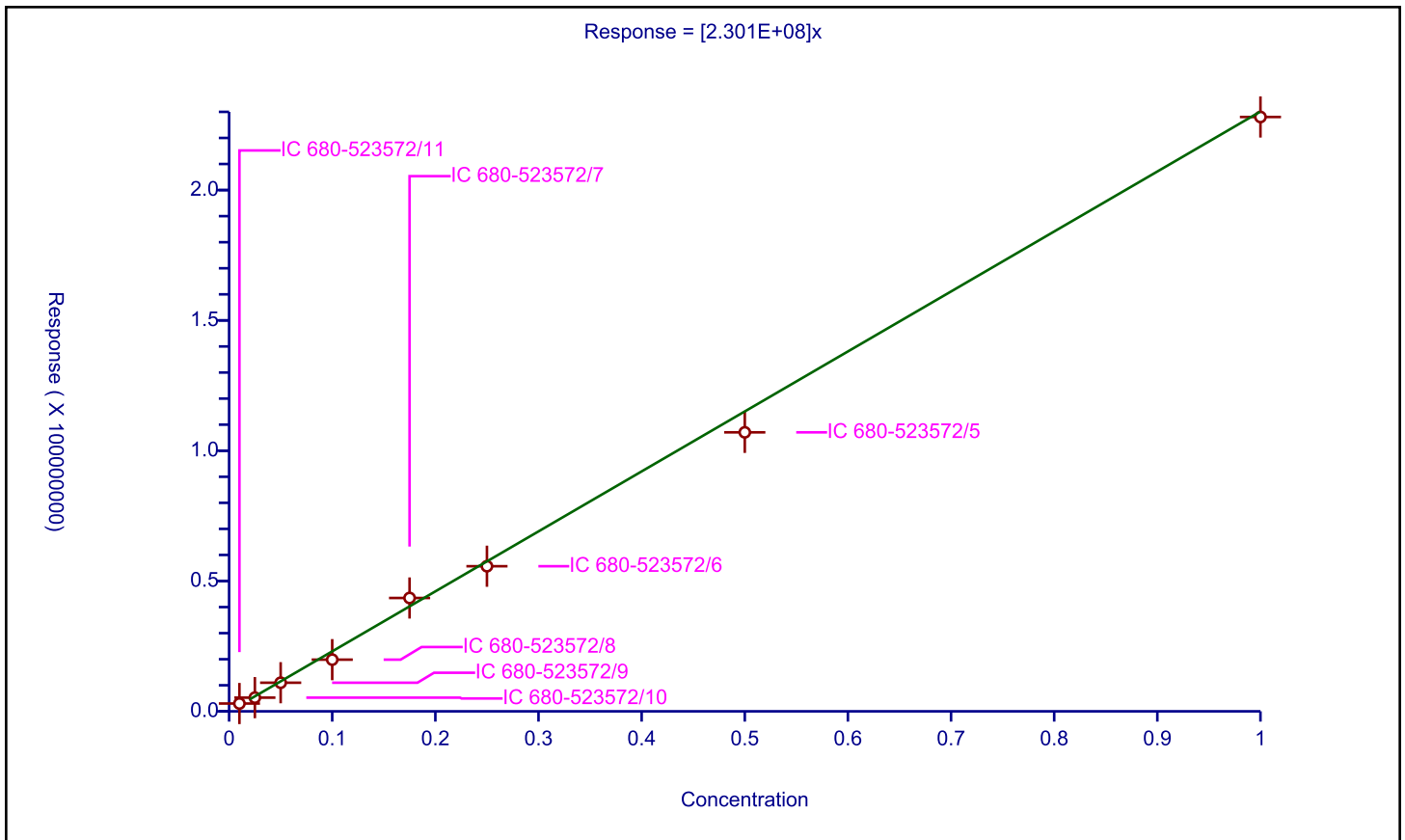
/ Dichlorprop

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

Curve Coefficients	
Intercept:	0
Slope:	2.301E+08

Error Coefficients	
Standard Error:	3660000
Relative Standard Error:	13.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	2994953.0			299495300.0	Y
2	IC 680-523572/10	0.025	5256013.0			210240520.0	Y
3	IC 680-523572/9	0.05	10981312.0			219626240.0	Y
4	IC 680-523572/8	0.1	19831661.0			198316610.0	Y
5	IC 680-523572/7	0.175	43494282.0			248538754.285714	Y
6	IC 680-523572/6	0.25	55680580.0			222722320.0	Y
7	IC 680-523572/5	0.5	107043659.0			214087318.0	Y
8	IC 680-523572/4	1.0	228040422.0			228040422.0	Y



Calibration

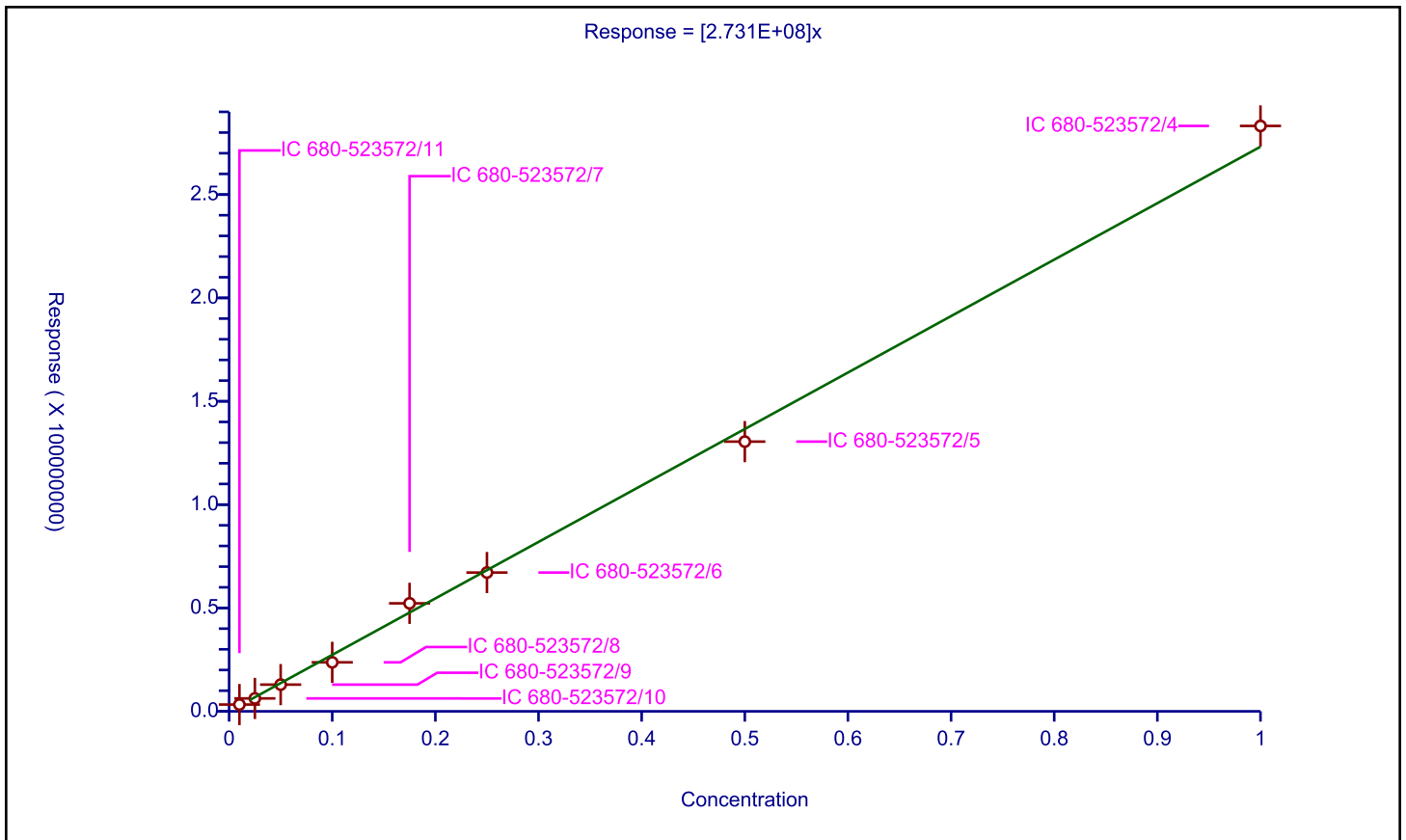
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	2.731E+08

Error Coefficients	
Standard Error:	4980000
Relative Standard Error:	10.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	3282293.0			328229300.0	Y
2	IC 680-523572/10	0.025	6252962.0			250118480.0	Y
3	IC 680-523572/9	0.05	12919675.0			258393500.0	Y
4	IC 680-523572/8	0.1	23710912.0			237109120.0	Y
5	IC 680-523572/7	0.175	52251610.0			298580628.571429	Y
6	IC 680-523572/6	0.25	67145343.0			268581372.0	Y
7	IC 680-523572/5	0.5	130478087.0			260956174.0	Y
8	IC 680-523572/4	1.0	283206384.0			283206384.0	Y



Calibration

/ Pentachlorophenol

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

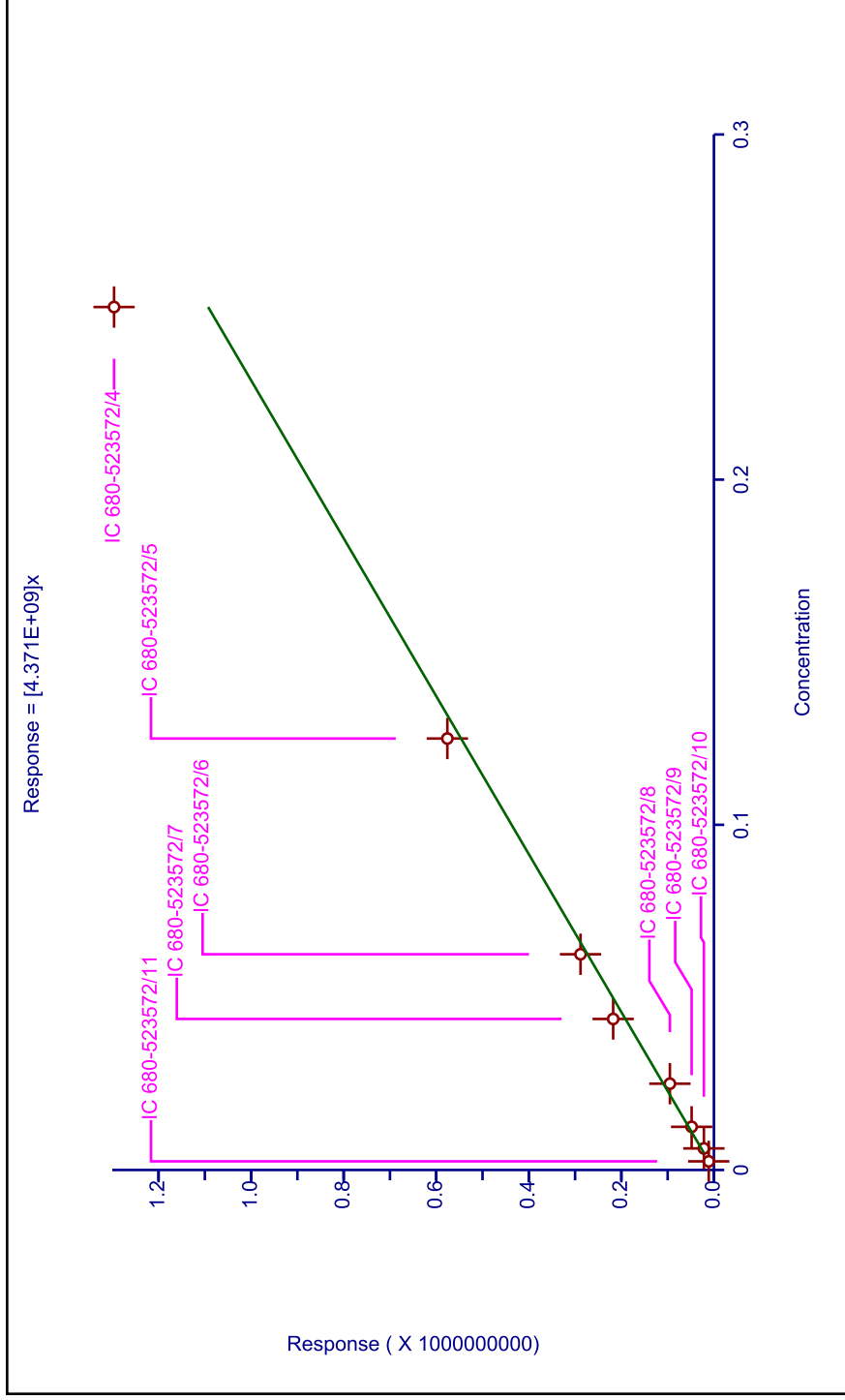
Curve Coefficients

Intercept: 0
Slope: 4.371E+09

Error Coefficients

Standard Error: 78800000
Relative Standard Error: 13.8
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	11166313.0		4466525200.0		Y
2	IC 680-523572/10	0.00625	21666620.0		3466659200.0		Y
3	IC 680-523572/9	0.0125	48162705.0		3853016400.0		Y
4	IC 680-523572/8	0.025	95118174.0		3804726960.0		Y
5	IC 680-523572/7	0.04375	217713159.0		4976300777.14286		Y
6	IC 680-523572/6	0.0625	288236865.0		4611789840.0		Y
7	IC 680-523572/5	0.125	575977015.0		4607816120.0		Y
8	IC 680-523572/4	0.25	1296206848.0		5184827392.0		Y



Calibration

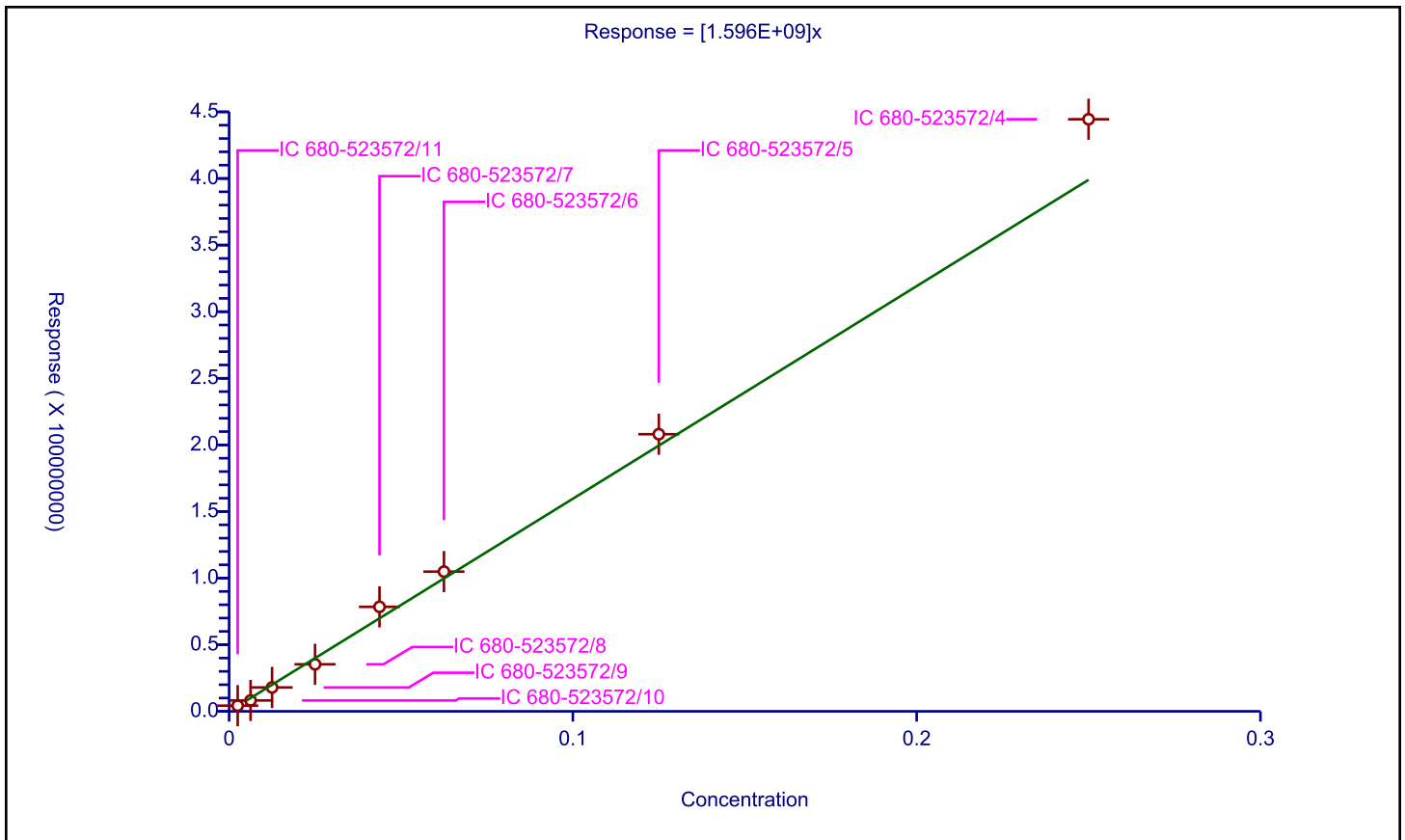
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	1.596E+09

Error Coefficients	
Standard Error:	18000000
Relative Standard Error:	11.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	4257146.0			1702858400.0	Y
2	IC 680-523572/10	0.00625	8165417.0			1306466720.0	Y
3	IC 680-523572/9	0.0125	17924076.0			1433926080.0	Y
4	IC 680-523572/8	0.025	35295555.0			1411822200.0	Y
5	IC 680-523572/7	0.04375	78442832.0			1792979017.14286	Y
6	IC 680-523572/6	0.0625	104886881.0			1678190096.0	Y
7	IC 680-523572/5	0.125	208037482.0			1664299856.0	Y
8	IC 680-523572/4	0.25	444460886.0			1777843544.0	Y



Calibration

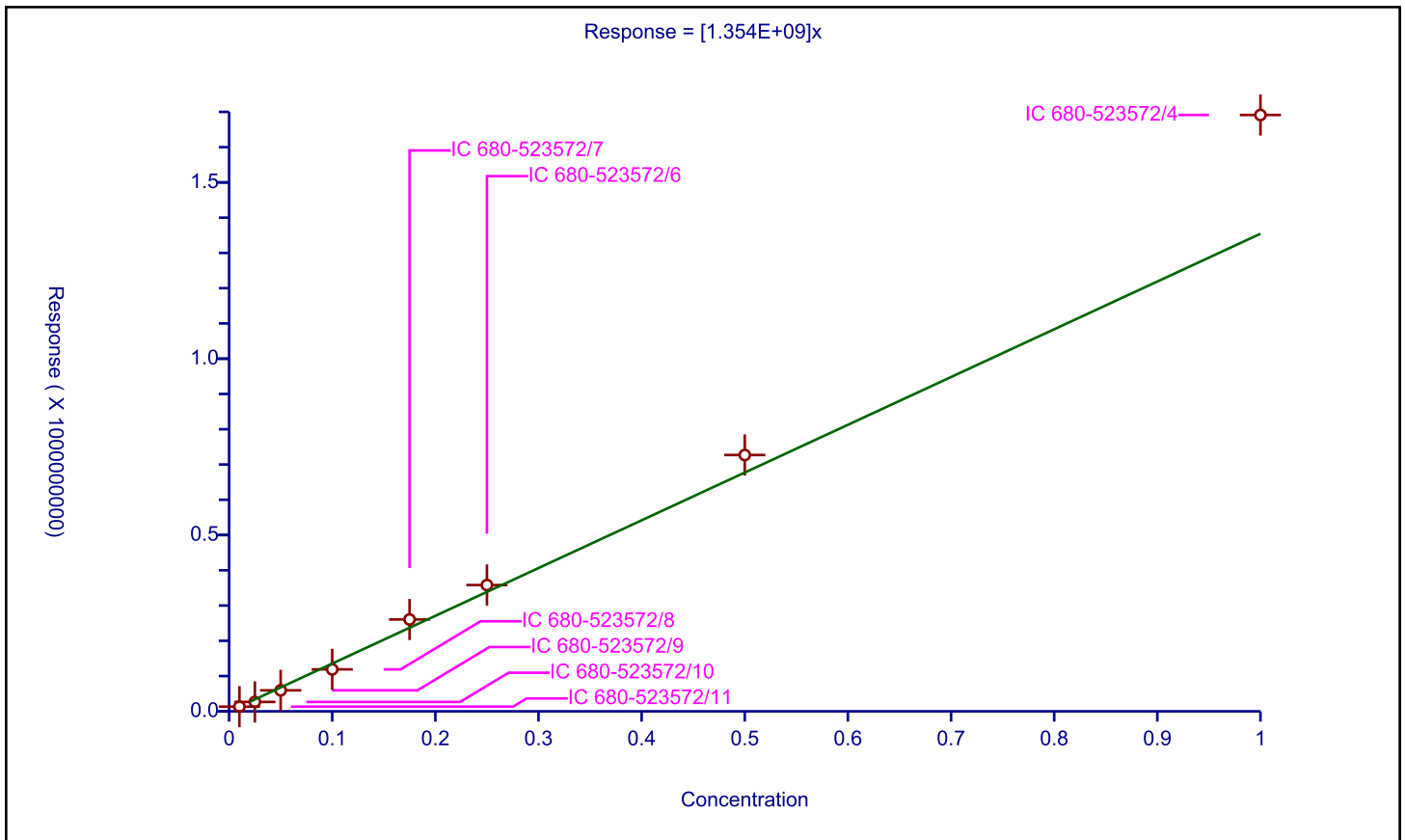
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	1.354E+09

Error Coefficients	
Standard Error:	129000000
Relative Standard Error:	14.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	13202807.0			1320280700.0	Y
2	IC 680-523572/10	0.025	26686021.0			1067440840.0	Y
3	IC 680-523572/9	0.05	59544203.0			1190884060.0	Y
4	IC 680-523572/8	0.1	119026158.0			1190261580.0	Y
5	IC 680-523572/7	0.175	260489374.0			1488510708.57143	Y
6	IC 680-523572/6	0.25	358105481.0			1432421924.0	Y
7	IC 680-523572/5	0.5	726929048.0			1453858096.0	Y
8	IC 680-523572/4	1.0	1691205537.0			1691205537.0	Y



Calibration

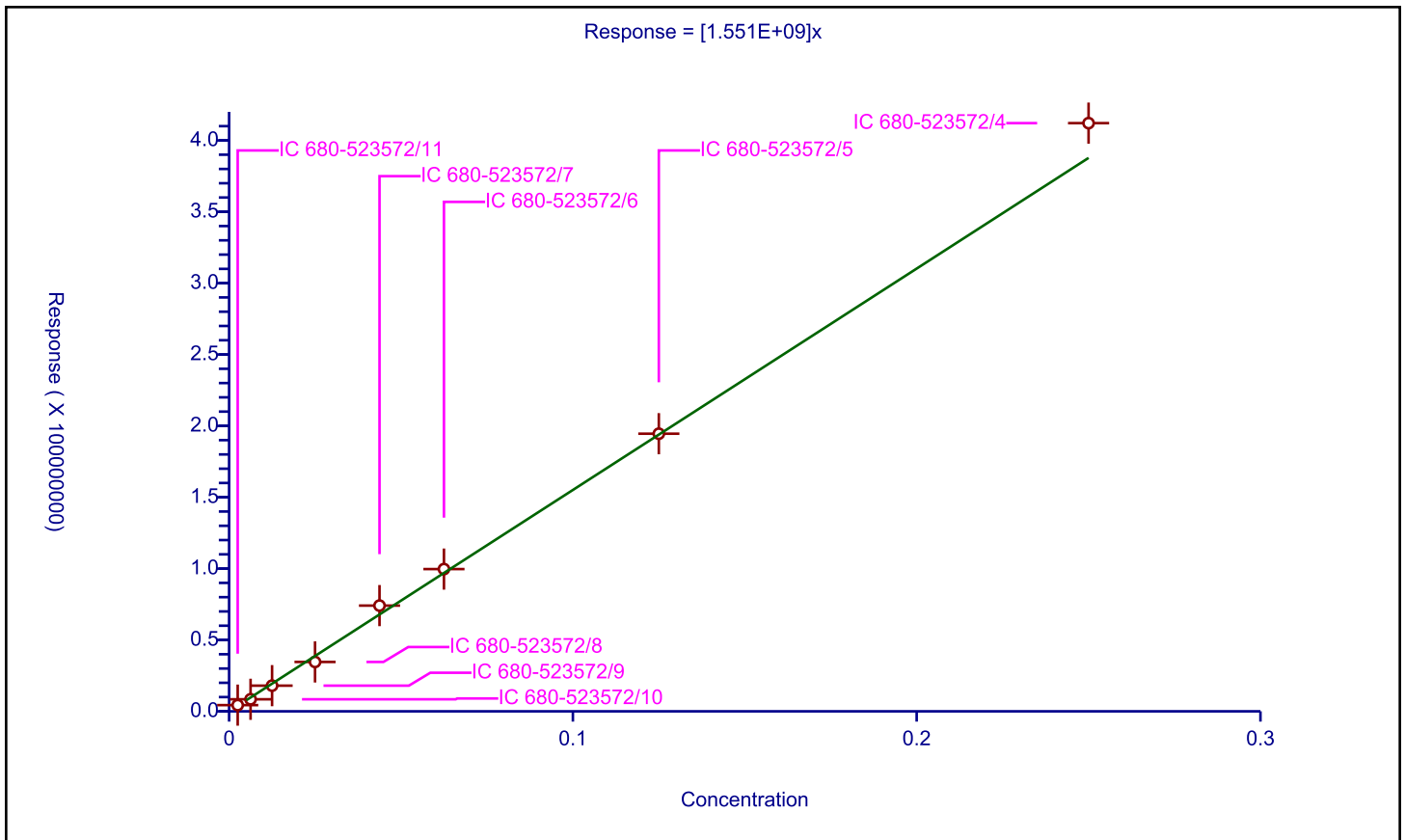
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	1.551E+09

Error Coefficients	
Standard Error:	9720000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	4350302.0			1740120800.0	Y
2	IC 680-523572/10	0.00625	8450464.0			1352074240.0	Y
3	IC 680-523572/9	0.0125	17990845.0			1439267600.0	Y
4	IC 680-523572/8	0.025	34604353.0			1384174120.0	Y
5	IC 680-523572/7	0.04375	74079486.0			1693245394.28571	Y
6	IC 680-523572/6	0.0625	99677914.0			1594846624.0	Y
7	IC 680-523572/5	0.125	194516334.0			1556130672.0	Y
8	IC 680-523572/4	0.25	412117776.0			1648471104.0	Y



Calibration

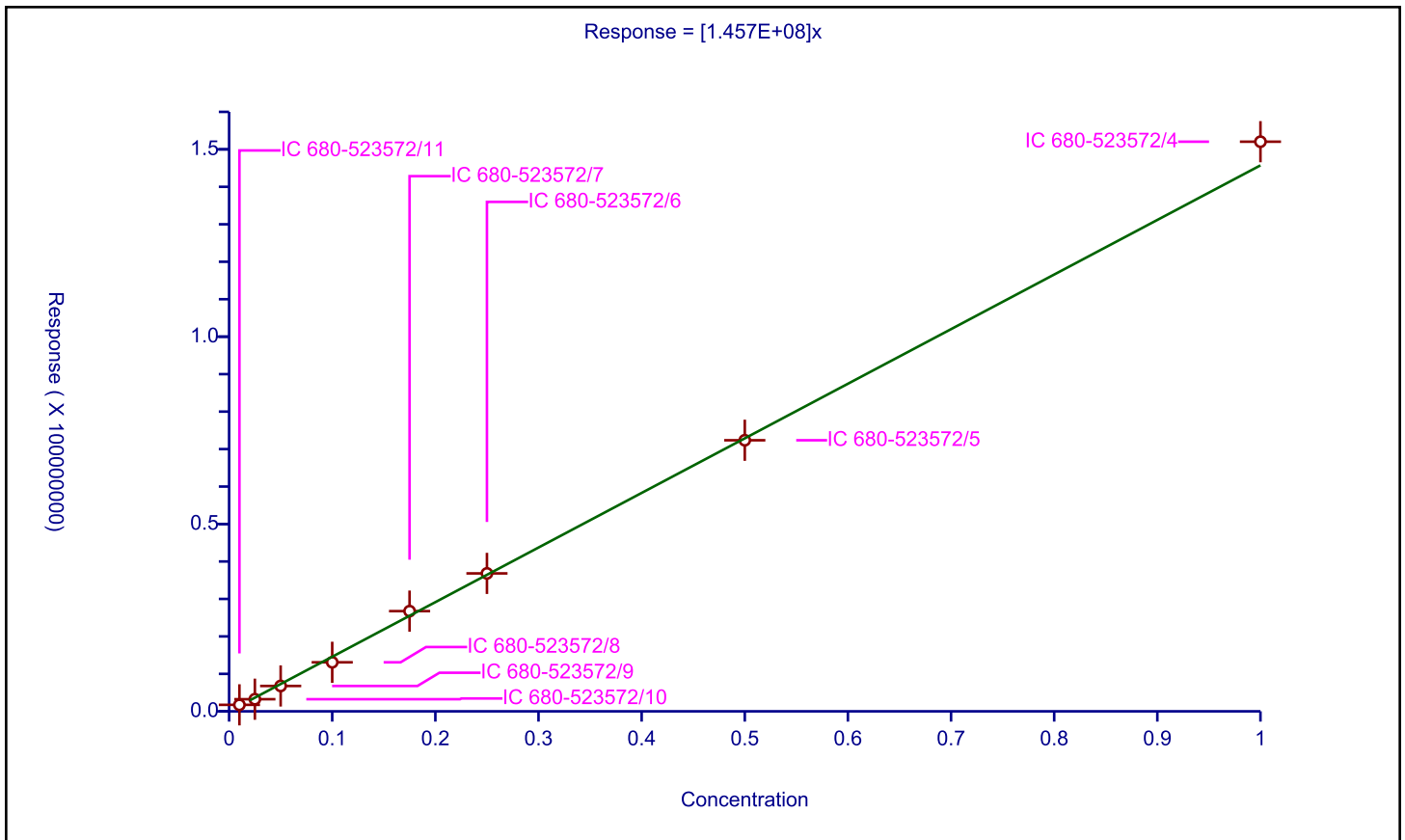
/ 2,4-DB

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

Curve Coefficients	
Intercept:	0
Slope:	1.457E+08

Error Coefficients	
Standard Error:	2520000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	1732409.0			173240900.0	Y
2	IC 680-523572/10	0.025	3235647.0			129425880.0	Y
3	IC 680-523572/9	0.05	6772708.0			135454160.0	Y
4	IC 680-523572/8	0.1	13086508.0			130865080.0	Y
5	IC 680-523572/7	0.175	26745929.0			152833880.0	Y
6	IC 680-523572/6	0.25	36815583.0			147262332.0	Y
7	IC 680-523572/5	0.5	72356312.0			144712624.0	Y
8	IC 680-523572/4	1.0	152037719.0			152037719.0	Y



Calibration

/ Dinoseb

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

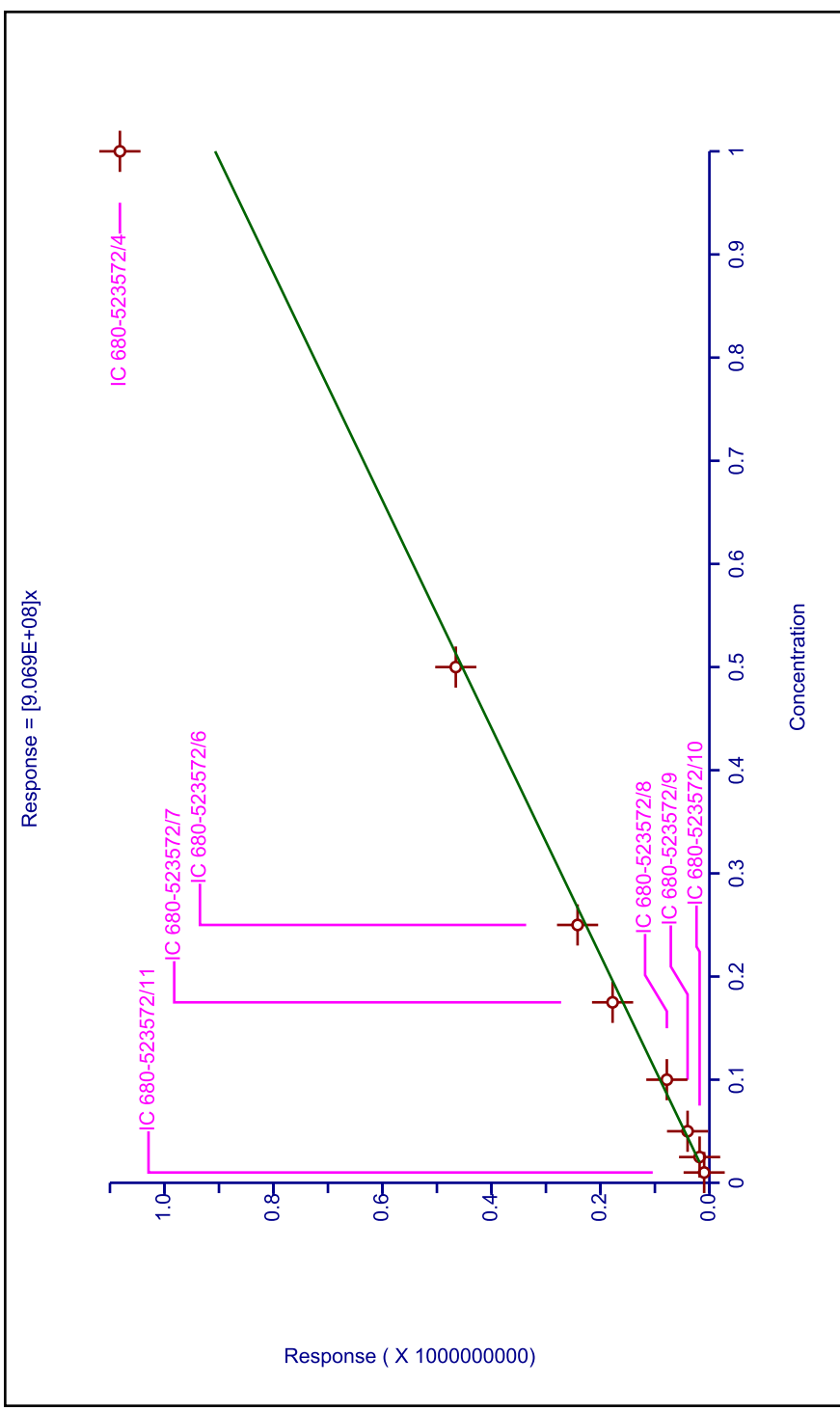
Curve Coefficients

Intercept: 0
 Slope: 9.069E+08

Error Coefficients

Standard Error: 67100000
 Relative Standard Error: 14.0
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.975

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	9609463.0			960946300.0	Y
2	IC 680-523572/10	0.025	17944898.0			717795920.0	Y
3	IC 680-523572/9	0.05	40031061.0			800621220.0	Y
4	IC 680-523572/8	0.1	78083281.0			780832810.0	Y
5	IC 680-523572/7	0.175	177677725.0			1015301285.71429	Y
6	IC 680-523572/6	0.25	24188836.0			967555344.0	Y
7	IC 680-523572/5	0.5	465388645.0			930777290.0	Y
8	IC 680-523572/4	1.0	1081702187.0			1081702187.0	Y



Calibration

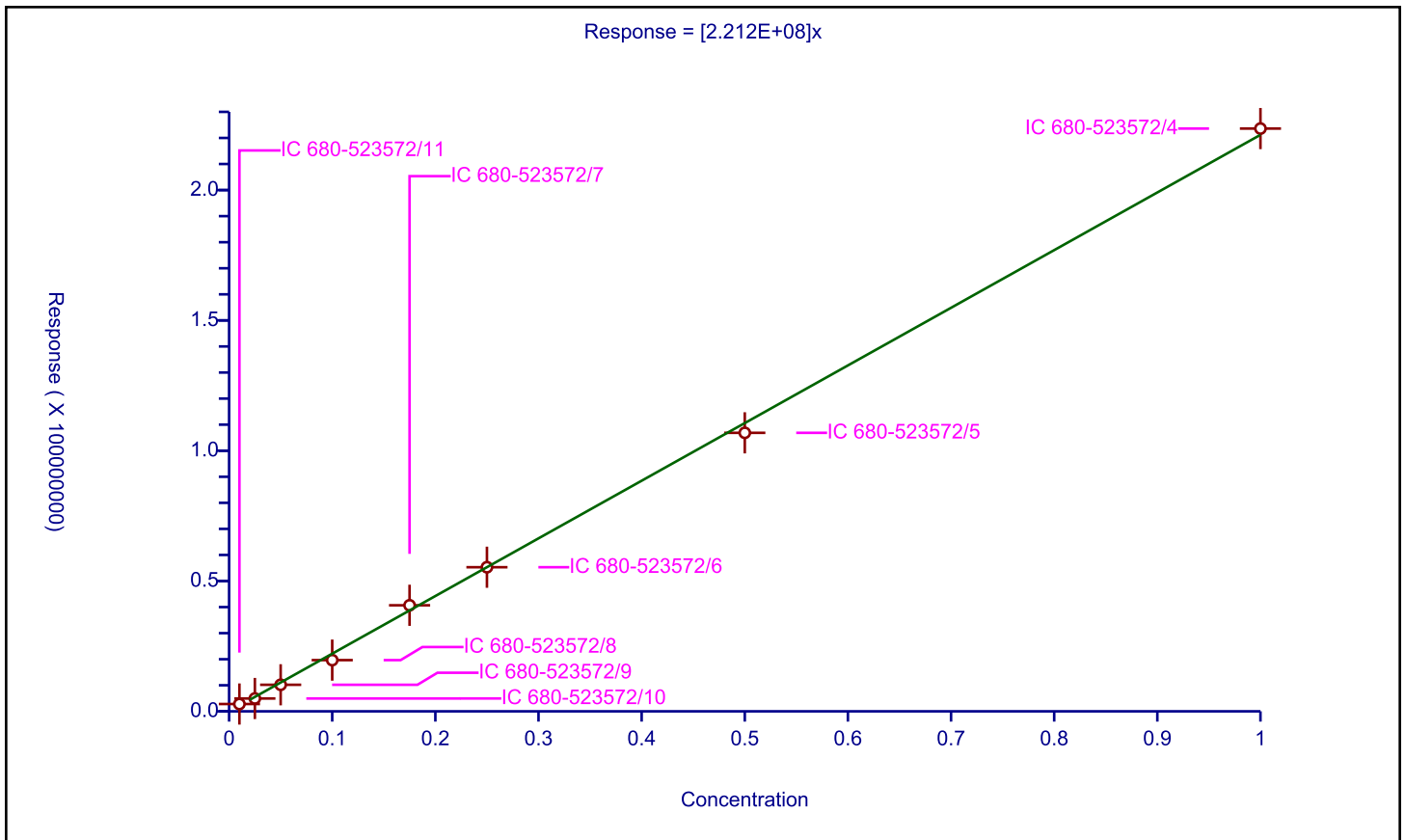
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	2.212E+08

Error Coefficients	
Standard Error:	2110000
Relative Standard Error:	12.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	2811902.0			281190200.0	Y
2	IC 680-523572/10	0.025	4925430.0			197017200.0	Y
3	IC 680-523572/9	0.05	10191475.0			203829500.0	Y
4	IC 680-523572/8	0.1	19651846.0			196518460.0	Y
5	IC 680-523572/7	0.175	40686507.0			232494325.714286	Y
6	IC 680-523572/6	0.25	55296513.0			221186052.0	Y
7	IC 680-523572/5	0.5	106862722.0			213725444.0	Y
8	IC 680-523572/4	1.0	223603698.0			223603698.0	Y



Calibration

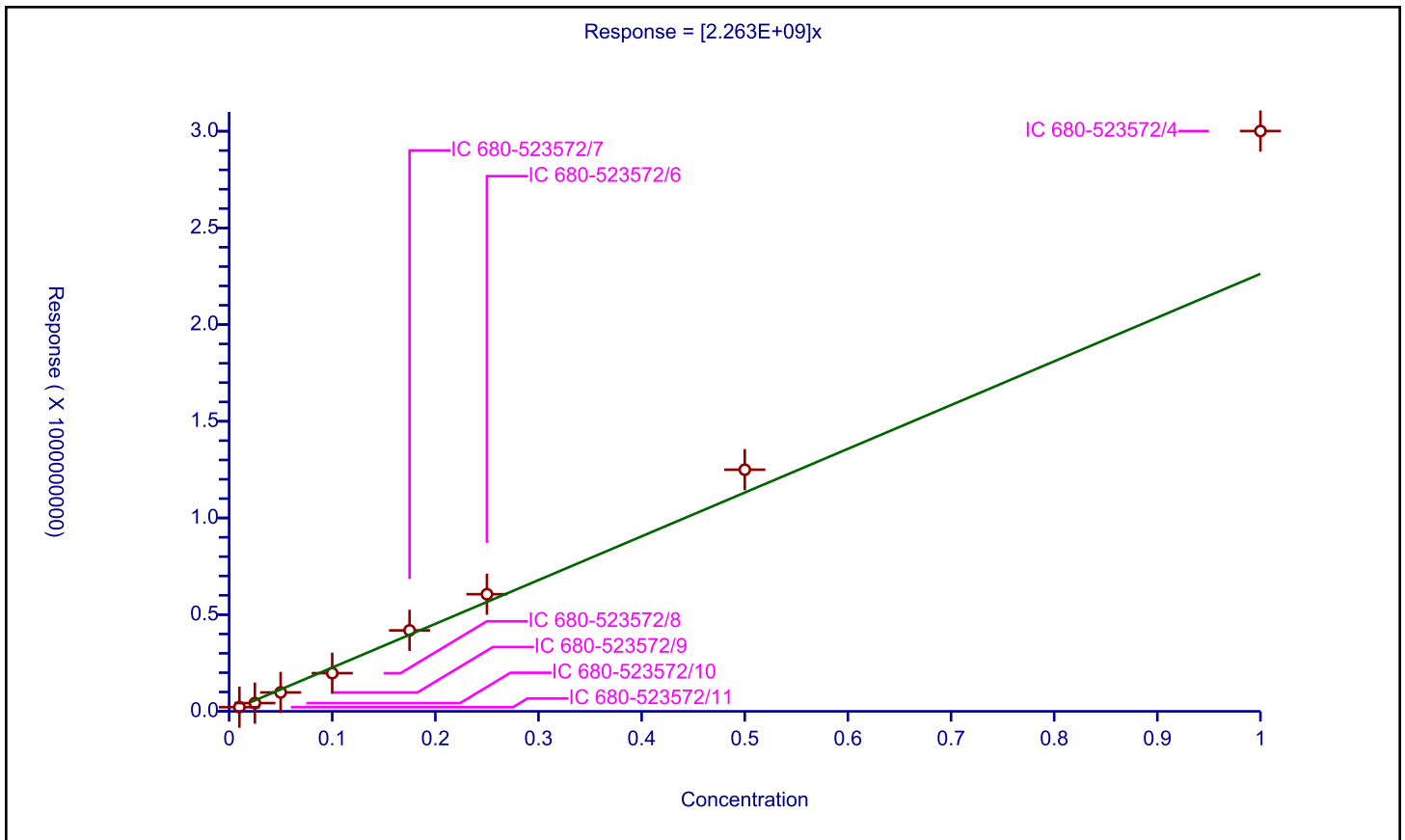
/ Picloram

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

Curve Coefficients	
Intercept:	0
Slope:	2.263E+09

Error Coefficients	
Standard Error:	283000000
Relative Standard Error:	17.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	21523000.0			2152300000.0	Y
2	IC 680-523572/10	0.025	42654843.0			1706193720.0	Y
3	IC 680-523572/9	0.05	97726866.0			1954537320.0	Y
4	IC 680-523572/8	0.1	197347462.0			1973474620.0	Y
5	IC 680-523572/7	0.175	418538358.0			2391647760.0	Y
6	IC 680-523572/6	0.25	605542235.0			2422168940.0	Y
7	IC 680-523572/5	0.5	1249537728.0			2499075456.0	Y
8	IC 680-523572/4	1.0	3000904008.0			3000904008.0	Y



Calibration

/DCPA

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

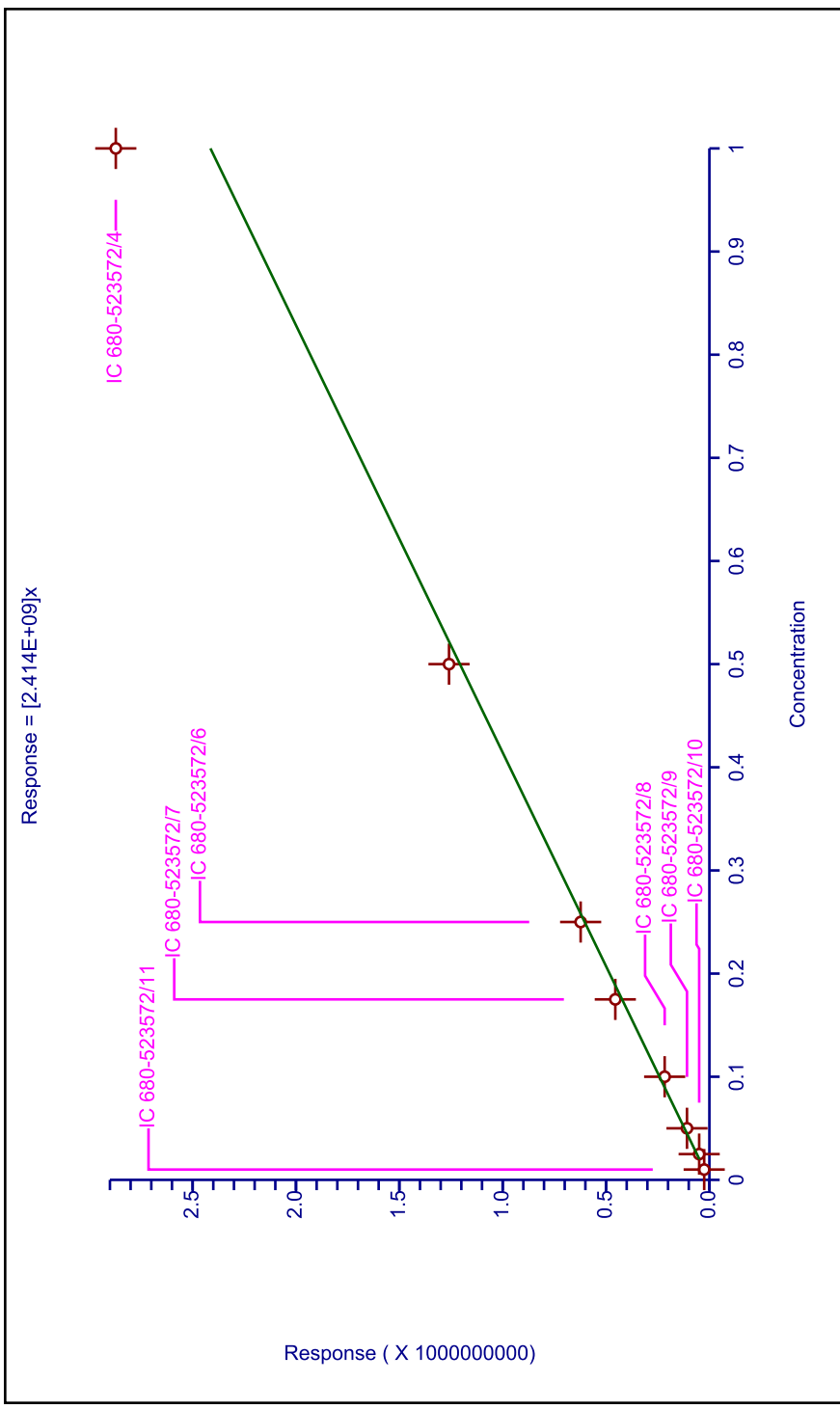
Curve Coefficients

Intercept: 0
 Slope: 2.414E+09

Error Coefficients

Standard Error: 175000000
 Relative Standard Error: 12.0
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.982

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	25166958.0			2516695800.0	Y
2	IC 680-523572/10	0.025	49421367.0			1976854680.0	Y
3	IC 680-523572/9	0.05	108476970.0			2169539400.0	Y
4	IC 680-523572/8	0.1	216427825.0			2164278250.0	Y
5	IC 680-523572/7	0.175	455199158.0			2601138045.71429	Y
6	IC 680-523572/6	0.25	622833672.0			2491334688.0	Y
7	IC 680-523572/5	0.5	1259616226.0			2519232452.0	Y
8	IC 680-523572/4	1.0	2871660154.0			2871660154.0	Y



Calibration

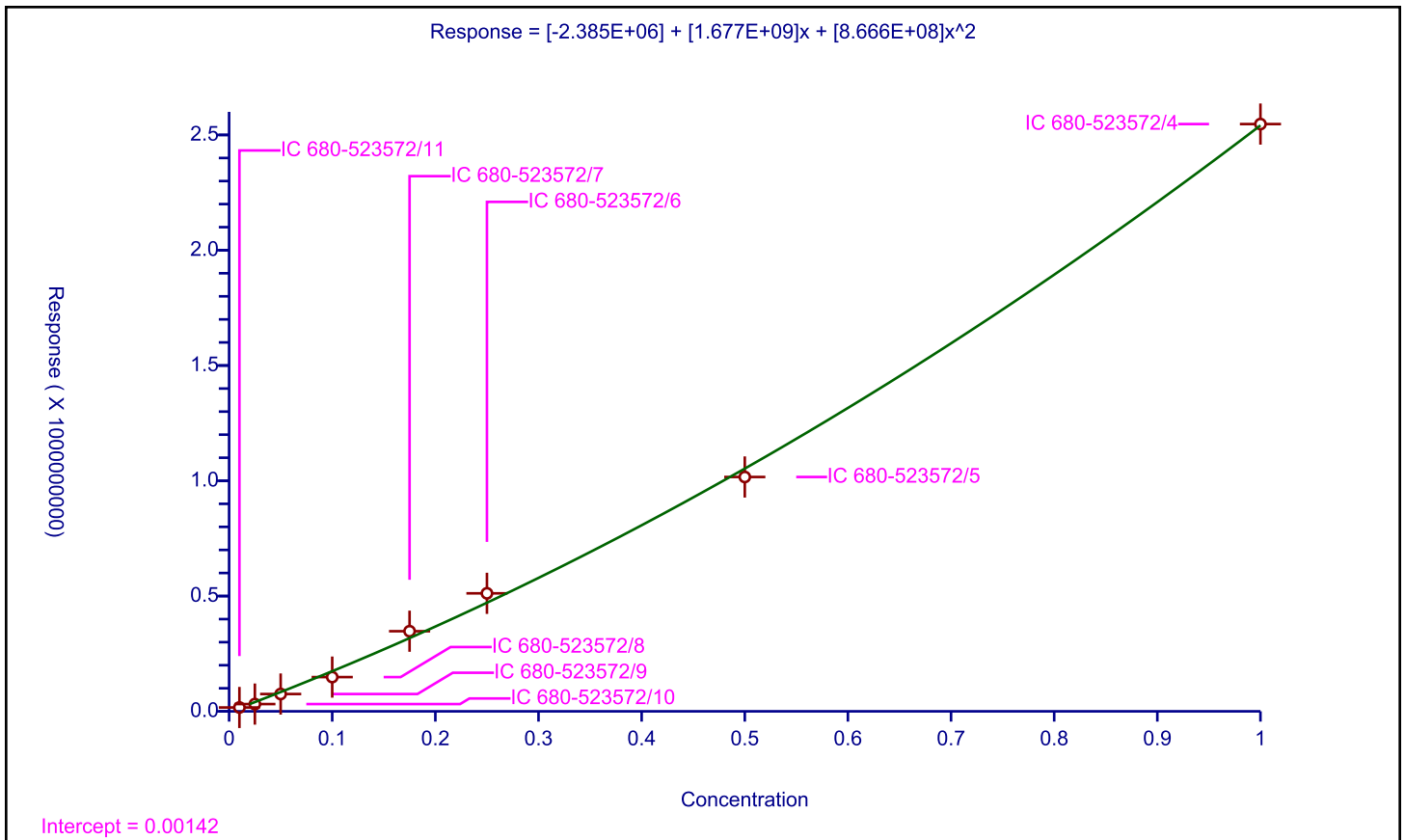
/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.385E+06
Slope:	1.677E+09
Second Order:	8.666E+08

Error Coefficients	
Standard Error:	30700000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	16684062.0			1668406200.0	Y
2	IC 680-523572/10	0.025	31521813.0			1260872520.0	Y
3	IC 680-523572/9	0.05	75169574.0			1503391480.0	Y
4	IC 680-523572/8	0.1	148539275.0			1485392750.0	Y
5	IC 680-523572/7	0.175	347534675.0			1985912428.57143	Y
6	IC 680-523572/6	0.25	511854251.0			2047417004.0	Y
7	IC 680-523572/5	0.5	1016415602.0			2032831204.0	Y
8	IC 680-523572/4	1.0	2547153916.0			2547153916.0	Y



FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57205

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	++++	2.486	2.487	2.487	2.490	2.488	2.488	2.490	2.467 - 2.507	2.488
3,5-Dichlorobenzoic acid	6.010	6.010	6.009	6.009	6.009	6.008	6.009	6.011	5.999 - 6.019	6.009
4-Nitrophenol	6.397	6.396	6.395	6.394	6.392	6.392	6.392	6.392	6.384 - 6.404	6.394
Dicamba	6.800	6.800	6.800	6.800	6.801	6.800	6.802	6.804	6.790 - 6.810	6.801
MCPP	6.849	6.849	6.848	6.848	6.849	6.848	6.850	6.852	6.838 - 6.858	6.849
MCPA	7.048	7.048	7.046	7.046	7.047	7.047	7.048	7.051	7.036 - 7.056	7.048
Dichlorprop	7.192	7.192	7.191	7.191	7.192	7.192	7.192	7.192	7.181 - 7.201	7.192
2,4-D	7.413	7.413	7.411	7.412	7.412	7.411	7.411	7.411	7.402 - 7.422	7.412
Pentachlorophenol	7.605	7.605	7.605	7.605	7.607	7.606	7.607	7.610	7.595 - 7.615	7.606
Silvex (2,4,5-TP)	7.744	7.745	7.743	7.744	7.744	7.744	7.745	7.746	7.734 - 7.754	7.744
2,4,5-T	7.977	7.977	7.976	7.976	7.976	7.976	7.977	7.977	7.966 - 7.986	7.976
Chloramben	8.050	8.050	8.049	8.049	8.049	8.049	8.051	8.052	8.039 - 8.059	8.050
Dinoseb	8.141	8.141	8.141	8.141	8.142	8.142	8.143	8.143	8.131 - 8.151	8.142
2,4-DB	8.192	8.192	8.191	8.190	8.190	8.189	8.190	8.191	8.180 - 8.200	8.191
Bentazon	8.544	8.545	8.544	8.544	8.545	8.543	8.544	8.546	8.534 - 8.554	8.544
Tetrathalic acid, tetrachloro-, dimethyl ester	8.657	8.657	8.657	8.658	8.659	8.658	8.661	8.664	8.648 - 8.668	8.659
Picloram	8.877	8.877	8.876	8.877	8.878	8.877	8.879	8.884	8.867 - 8.887	8.878
Acifluorfen	9.677	9.677	9.676	9.677	9.678	9.678	9.680	9.683	9.667 - 9.687	9.678
2,4-Dichlorophenylacetic acid (Surr)	++++	6.721	6.720	6.720	6.720	6.720	6.720	6.721	6.710 - 6.730	6.720

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57205

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	+++++	1283045560	1287153900	1225545510	Ave	1386204194			9.2		20.0							
3,5-Dichlorobenzoic acid	1517594989	1399247224	1426573496	1564268680	Ave	1533919679			12.3		20.0							
4-Nitrophenol	1829258100	1318802320	1381090220	1320081390	Ave				12.8		20.0							
	1674426217	1526833768	1526460434	1694404983	Ave				12.7		20.0							
	319476800	224156000	247337220	220062740	Ave													
	279343194	248483524	236914420	266999376	Ave													
Dicamba	4740919600	3454816960	3769285160	3677648260	Ave	4244164919												
	4762757177	4355387896	4383937380	4808566916	Ave													
MCPP	7413369	4784195	45266689	3852461	Lin1	3527032.22											0.9970	
	4273747	3793238	34866308	3819430	Lin2	6011499.22											0.9940	
MCPA	13307227	8866086	8693249	7253765	Lin2													
	8085246	7334448	6798107	7466882	Ave				19.9		20.0							
Dichlorprop	1633441500	1027328440	1012426860	954823660	Ave	1146405622												
	1194746840	1099017124	1103054932	+++++	Ave				12.8		20.0							
2,4-D	1441384000	1050002720	1133402680	1102805490	Ave	1258856811												
	1426126280	1317914556	1340361954	+++++	Ave													
Pentachlorophenol	1597943240	1221820560	1388304984	1393100144	Ave				13.4		20.0							
	1828034130	1686783900	1683761530	1743044400	Ave													
					Qua													
Silvex (2,4,5-TP)	6130686800	4658058080	5094779280	5192375480	Ave	6038823762												
	6826306697	6419347312	6563953184	7425083260	Ave													
2,4,5-T	5490532400	4057202400	4424941120	4494309440	Ave	5130951653												
	5909869234	5658195856	5881611120	+++++	Ave													
Chloramben	4686458800	3728244600	4178135700	4218260310	Ave	4732944977												
	5329613846	5160212336	5159040638	5403595588	Ave													
Dinoseb	2328523200	1781729400	2114544940	2188616780	Qua													
	3159224840	3119394244	3242557024	+++++	Qua	-38264769											0.9970	

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57205

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2							
2,4-DB	793103400 753059194	661648040 711480072	701235880 711724820	670254420 815688293	Ave	727274265			7.6		20.0				
Bentazon	835033000 740386063	617397760 702816412	637199020 715243800	614726120 773013995	Ave	704477021			11.2		20.0				
Tetraphthalic acid, tetrachloro-, dimethyl	8182895100 9181687537	6459314120 8953484880	7263256320 8841082370	7285528110 8774731681	Ave	8117747515			12.3		20.0				
Picloram	6000726600 8069068954	4724411680 8434821516	5759234600 8930913788	6096929070 9495361307	Lin1	-84315949	9114649496					0.9920			0.9900
Acifluorfen	3626337700 5956451560	2818725560 6562788692	3650210960 7042374294	3971602600 8061124513	Qua	-112490563	6314935669	1863236203				0.9990			0.9900
2,4-Dichlorophenylacetic acid (Surr)	1283052577	996752560 1168714300	1072458640 1160405180	1016826000 1298301676	Ave	1142358705			10.5		20.0				

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57205

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523572/11	SE110011.D
Level 2	IC 680-523572/10	SE110010.D
Level 3	IC 680-523572/9	SE110009.D
Level 4	IC 680-523572/8	SE110008.D
Level 5	IC 680-523572/7	SE110007.D
Level 6	IC 680-523572/6	SE110006.D
Level 7	IC 680-523572/5	SE110005.D
Level 8	IC 680-523572/4	SE110004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Dalapon	Ave	349811806	32076139	64357695	122554551	265579123	++++	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
3,5-Dichlorobenzoic acid	Ave	18292581	32970058	69054511	132008139	293024588	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
4-Nitrophenol	Ave	381708442	763230217	1694404983	22006274	48885059	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
Dicamba	Ave	3194768	5603900	12366861	183882413	416741253	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
MCPA	Lin1	62120881	118457210	266999376	38524610	74790568	1.00	2.50	5.00	10.0	17.5	25.0	50.0	100
Dichlorprop	Ave	7413369	11960487	22633447	72537648	141491800	1.00	2.50	5.00	10.0	17.5	25.0	50.0	100
2,4-D	Ave	13307227	22165214	43466245	95482366	209080697	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
Pentachlorophenol	Ave	183361188	339905374	746688222	110280549	249572099	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
Silvex (2,4,5-TP)	Ave	16334415	25683211	50621343	348275036	799764932	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625
2,4,5-T	Ave	274754281	551527466	112357736	129809387	298650918	0.0250	0.0625	0.125	0.250	0.438	0.625	1.25	2.50
Chloramben	Ave	14413840	26250068	56670134	421826031	932682423	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
Dinoseb	Qua	329478639	670180977	173538123	218861678	552864347	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
2,4-DB	Ave	39948581	76363785	105727247	67025442	131785359	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00
Bentazon	Ave	1054239941	2104701924	4357611017	61472612	129567561	0.0100	0.0250	0.0500	0.100	0.175	0.250	0.500	1.00

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151865-1 Analy Batch No.: 523572

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2018 11:46 Calibration End Date: 05/11/2018 14:04 Calibration ID: 57205

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	81828951 2238371220	161482853 4420541185	363162816 8774731681	728552811	1606795319	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Picloram	Lin1	60007266 2108705379	118110292 4465456894	287961730 9495361307	609692907	1412087067	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
Acifluorfen	Qua	36263377 1640697173	70468139 3521187147	182510548 8061124513	397160260	1042379023	0.0100 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	++++ 292178575	24918814 580202590	53622932 1298301676	101682600	224534201	++++ 0.250	0.0250 0.500	0.0500 1.00	0.100	0.175			

Curve Type Legend:
 Ave = Average
 Lin1 = Linear 1/conc
 Lin2 = Linear 1/conc^2
 Qua = Quadratic

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 11-May-2018 11:46:27 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:16 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Dalapon

1	2.436	2.434	0.002	445432487	1.00	1.03	
2	2.490	2.487	0.003	1564268680	1.00	1.13	
							RPD = 9.46

2 2,6-Dichlorophenol

1	4.910	4.909	0.001	84362002	NC	NC	
2	4.997	4.996	0.001	491495600	NC	NC	
							RPD = 0.94

3 2,4,6-Trichlorophenol

1	5.679	5.678	0.001	1193993944	NC	NC	
2	5.672	5.668	0.004	4815793939	NC	NC	
							RPD = 6.57

4 3,5-Dichlorobenzoic acid

1	6.014	6.015	-0.001	284813773	1.00	1.00	
2	6.011	6.009	0.002	1694404983	1.00	1.10	
							RPD = 9.66

5 4-Nitrophenol

1	6.139	6.141	-0.002	81893704	1.00	0.8858	
2	6.392	6.394	-0.002	266999376	1.00	1.05	
							RPD = 16.55

\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	177446511	1.00	1.03	
2	6.721	6.720	0.001	1298301676	1.00	1.14	
							RPD = 9.63

7 Dicamba

1	6.609	6.609	0.000	482569817	0.5000	0.5346	
2	6.804	6.800	0.004	2404283458	0.5000	0.5665	
							RPD = 5.79

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.761	6.757	0.004	56375223	100.0	94.3	
2	6.852	6.848	0.004	381942979	100.0	102.6	
						RPD = 8.45	
9 MCPA							
1	6.888	6.883	0.005	65377356	100.0	96.5	
2	7.051	7.046	0.005	746688222	100.0	104.3	
						RPD = 7.72	
10 Dichlorprop							
1	7.069	7.069	0.000	228040422	1.00	0.99	
2	7.194	7.191	0.003	1258500696	1.00	1.10	
						RPD = 10.23	
11 2,4-D							
1	7.213	7.214	-0.001	283206384	1.00	1.04	
2	7.413	7.412	0.001	1543015821	1.00	1.23	
						RPD = 16.70	
12 Pentachlorophenol							
1	7.564	7.562	0.002	1296206848	0.2500	0.2965	
2	7.610	7.605	0.005	4357611017	0.2500	0.2779	
						RPD = 6.47	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	444460886	0.2500	0.2785	
2	7.746	7.744	0.002	1856270815	0.2500	0.3074	
						RPD = 9.87	
14 Chloramben							
1	7.740	7.739	0.001	1691205537	1.00	1.25	
2	8.052	8.049	0.003	5403593588	1.00	1.14	
						RPD = 8.95	
15 2,4,5-T							
1	7.816	7.816	0.000	412117776	0.2500	0.2657	
2	7.978	7.976	0.002	1686681883	0.2500	0.3287	
						RPD = 21.20	
16 2,4-DB							
1	8.058	8.059	-0.001	152037719	1.00	1.04	
2	8.191	8.190	0.001	815688293	1.00	1.12	
						RPD = 7.23	
17 Dinoseb							
1	8.113	8.113	0.000	1081702187	1.00	1.19	
2	8.146	8.141	0.005	3848176282	1.00	1.09	
						RPD = 8.92	
18 Bentazon							
1	8.185	8.184	0.001	223603698	1.00	1.01	
2	8.546	8.544	0.002	773013995	1.00	1.10	
						RPD = 8.20	
19 Picloram							
1	8.401	8.399	0.002	3000904008	1.00	1.33	
2	8.884	8.877	0.007	9495361307	1.00	1.05	
						RPD = 23.16	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.506	8.504	0.002	2871660154	1.00	1.19	
2	8.664	8.658	0.006	8774731681	1.00	1.08	
						RPD = 9.58	

21 Acifluorfen

1	9.545	9.543	0.002	2547153916	1.00	1.00	
2	9.683	9.677	0.006	8061124513	1.00	1.00	
						RPD = 0.22	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

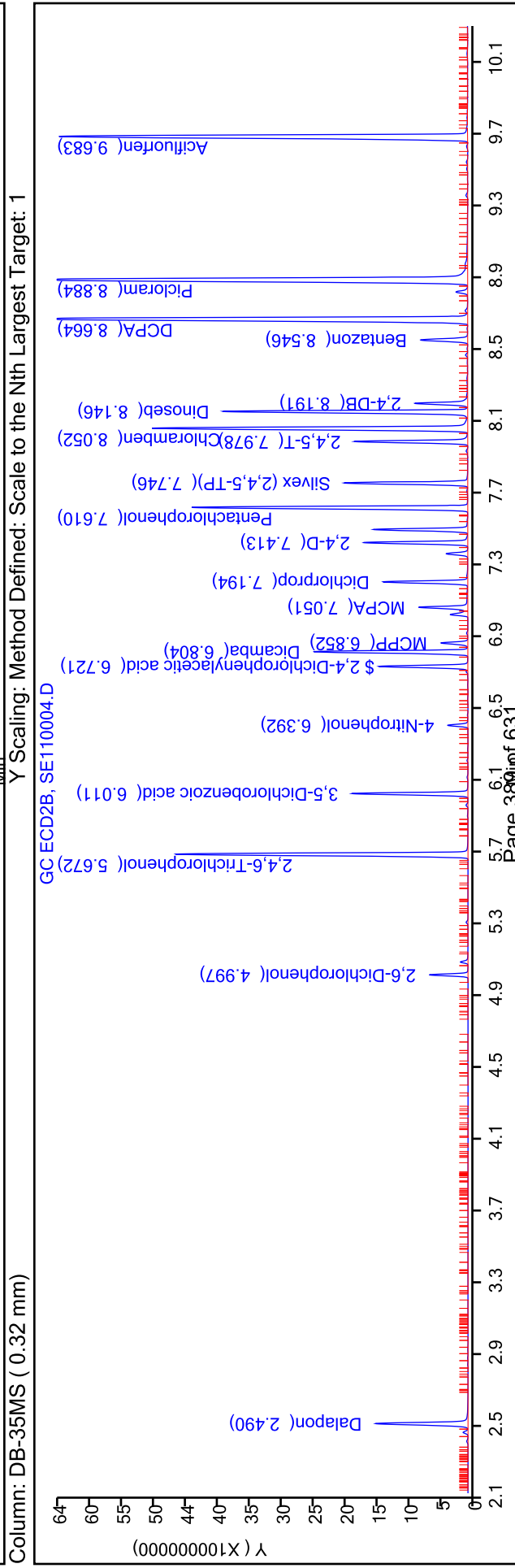
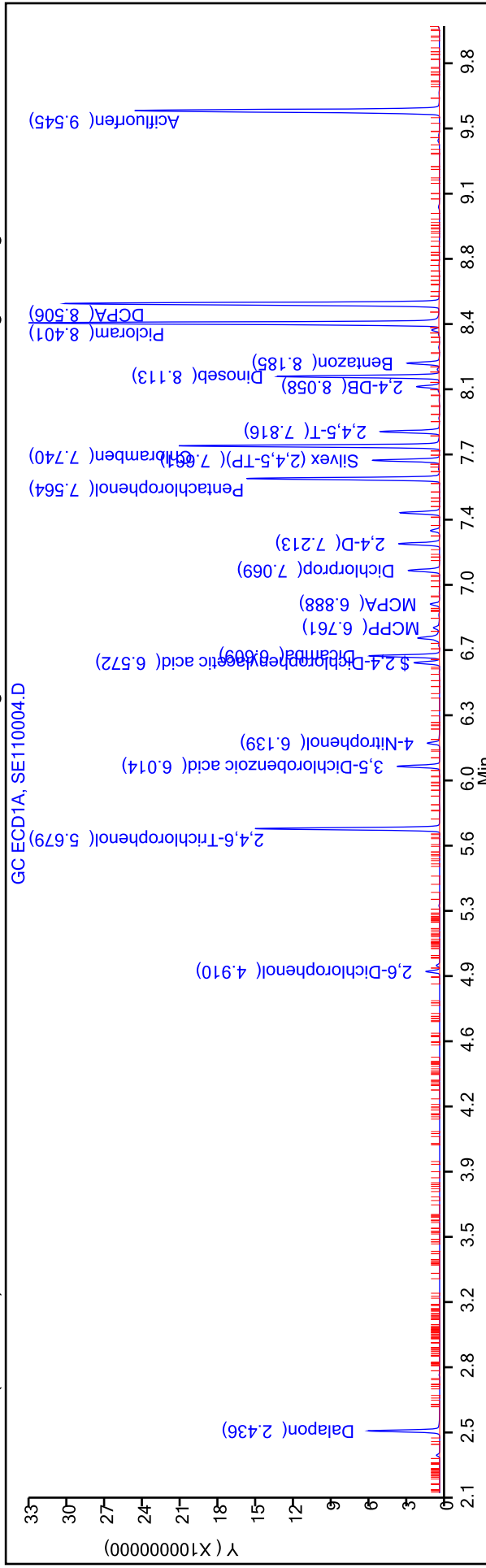
SGHERB-8_00011

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110004.D
 Injection Date: 11-May-2018 11:46:27
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 4
 ALS Bottle#: 4



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 11-May-2018 12:06:02 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:23 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Dalapon							
1	2.436	2.434	0.002	209658233	0.5000	0.4837	
2	2.488	2.487	0.001	713286748	0.5000	0.5146	
						RPD = 6.18	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	40538544	NC	NC	
2	4.997	4.996	0.001	230188115	NC	NC	
						RPD = 1.17	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	538201950	NC	NC	
2	5.671	5.668	0.003	2375427992	NC	NC	
						RPD = 2.44	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	132790199	0.5000	0.4676	
2	6.009	6.009	0.000	763230217	0.5000	0.4976	
						RPD = 6.22	
5 4-Nitrophenol							
1	6.139	6.141	-0.002	42115762	0.5000	0.4556	
2	6.392	6.394	-0.002	118457210	0.5000	0.4639	
						RPD = 1.81	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	83069272	0.5000	0.4832	
2	6.720	6.720	0.000	580202590	0.5000	0.5079	
						RPD = 4.99	
7 Dicamba							
1	6.607	6.609	-0.002	222402654	0.2500	0.2464	
2	6.802	6.800	0.002	1095984345	0.2500	0.2582	
						RPD = 4.69	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.758	6.757	0.001	30834503	50.0	51.6	
2	6.850	6.848	0.002	174315420	50.0	46.3	
						RPD = 10.75	
9 MCPA							
1	6.885	6.883	0.002	33294860	50.0	48.8	
2	7.048	7.046	0.002	339905374	50.0	47.0	
						RPD = 3.82	
10 Dichlorprop							
1	7.068	7.069	-0.001	107043659	0.5000	0.4651	
2	7.192	7.191	0.001	551527466	0.5000	0.4811	
						RPD = 3.37	
11 2,4-D							
1	7.212	7.214	-0.002	130478087	0.5000	0.4777	
2	7.411	7.412	-0.001	670180977	0.5000	0.5324	
						RPD = 10.83	
12 Pentachlorophenol							
1	7.562	7.562	0.000	575977015	0.1250	0.1318	
2	7.607	7.605	0.002	2104701924	0.1250	0.1342	
						RPD = 1.87	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	208037482	0.1250	0.1303	
2	7.745	7.744	0.001	820494148	0.1250	0.1359	
						RPD = 4.15	
14 Chloramben							
1	7.738	7.739	-0.001	726929048	0.5000	0.5367	
2	8.051	8.049	0.002	2579520319	0.5000	0.5450	
						RPD = 1.53	
15 2,4,5-T							
1	7.816	7.816	0.000	194516334	0.1250	0.1254	
2	7.977	7.976	0.001	735201390	0.1250	0.1433	
						RPD = 13.31	
16 2,4-DB							
1	8.057	8.059	-0.002	72356312	0.5000	0.4965	
2	8.190	8.190	0.000	355862410	0.5000	0.4893	
						RPD = 1.46	
17 Dinoseb							
1	8.112	8.113	-0.001	465388645	0.5000	0.5131	
2	8.143	8.141	0.002	1621278512	0.5000	0.4988	
						RPD = 2.83	
18 Bentazon							
1	8.184	8.184	0.000	106862722	0.5000	0.4831	
2	8.544	8.544	0.000	357621900	0.5000	0.5076	
						RPD = 4.95	
19 Picloram							
1	8.399	8.399	0.000	1249537728	0.5000	0.5523	
2	8.879	8.877	0.002	4465456894	0.5000	0.4992	
						RPD = 10.10	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.504	8.504	0.000	1259616226	0.5000	0.5218	
2	8.661	8.658	0.003	4420541185	0.5000	0.5446	
						RPD = 4.26	

21 Acifluorfen

1	9.542	9.543	-0.001	1016415602	0.5000	0.4856	
2	9.680	9.677	0.003	3521187147	0.5000	0.5013	
						RPD = 3.17	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110005.D
Injection Date: 11-May-2018 12:06:02
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 5

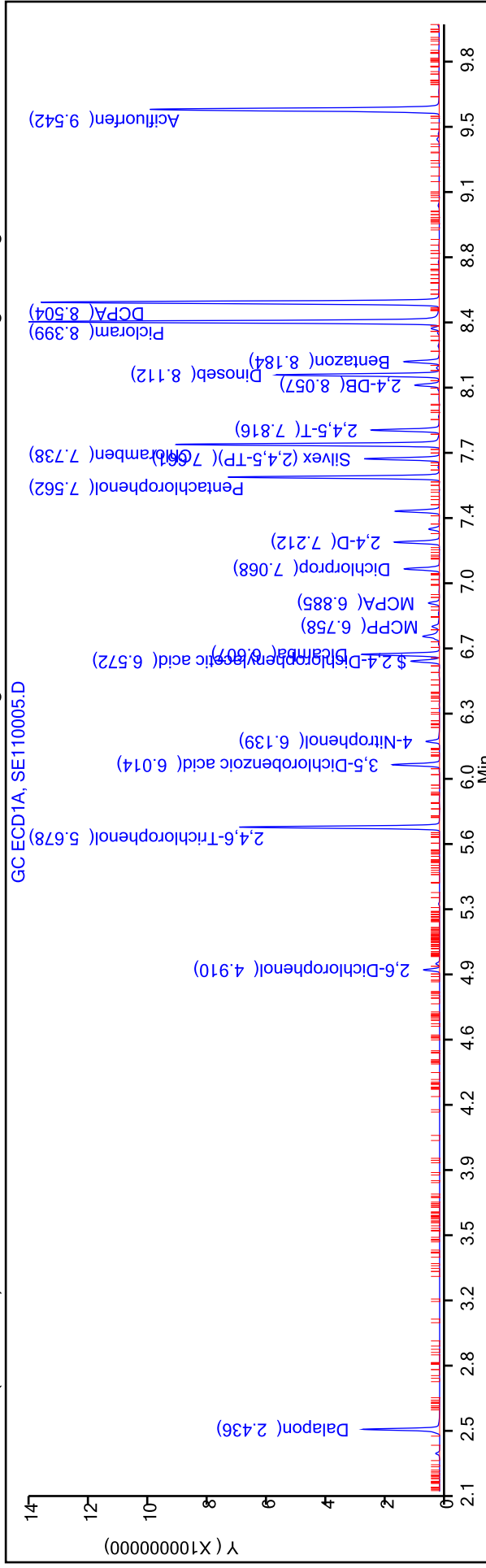
Lims ID: ic h7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

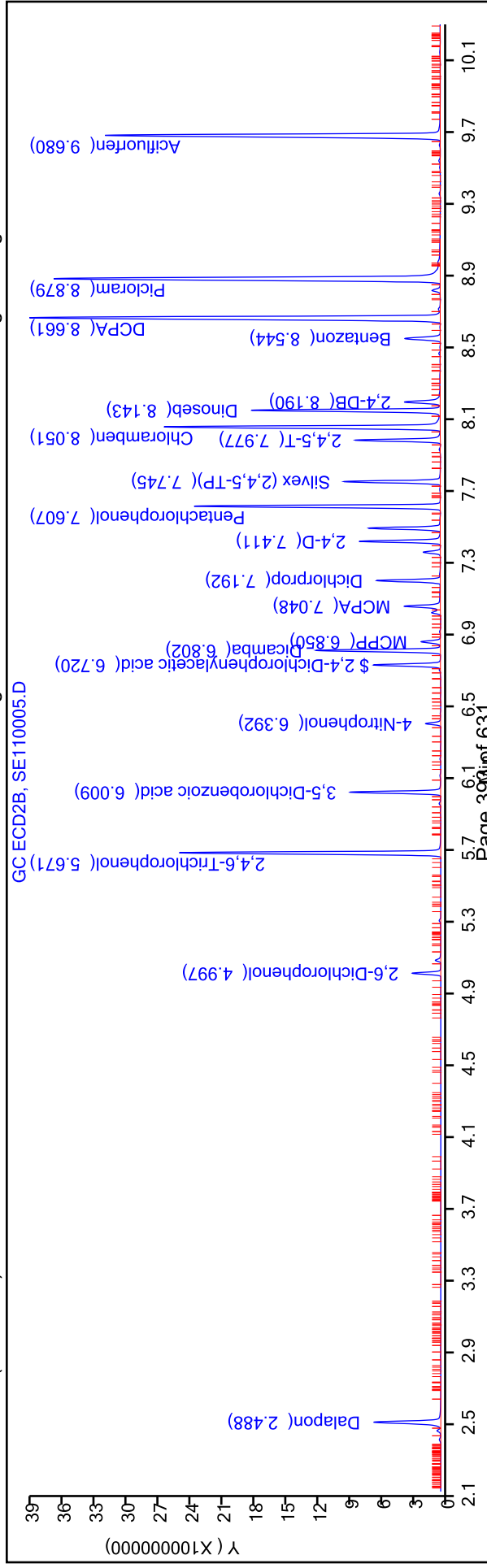
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 11-May-2018 12:25:37 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:31 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	107312017	0.2500	0.2481	
2	2.488	2.487	0.001	349811806	0.2500	0.2524	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	21230930	NC	NC	
2	4.997	4.996	0.001	116495350	NC	NC	
						RPD = 3.79	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	268607524	NC	NC	
2	5.670	5.668	0.002	1191757936	NC	NC	
						RPD = 2.96	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	67878078	0.2500	0.2390	
2	6.008	6.009	-0.001	381708442	0.2500	0.2488	
						RPD = 4.03	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	22420839	0.2500	0.2425	
2	6.392	6.394	-0.002	62120881	0.2500	0.2433	
						RPD = 0.31	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	42921117	0.2500	0.2496	
2	6.720	6.720	0.000	292178575	0.2500	0.2558	
						RPD = 2.42	
7 Dicamba							
1	6.608	6.609	-0.001	113017289	0.1250	0.1252	
2	6.800	6.800	0.000	544423487	0.1250	0.1283	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	15246200	25.0	25.5	
2	6.848	6.848	0.000	94830943	25.0	24.8	
						RPD = 2.95	
9 MCPA							
1	6.884	6.883	0.001	18344524	25.0	26.6	
2	7.047	7.046	0.001	183361188	25.0	25.0	
						RPD = 6.38	
10 Dichlorprop							
1	7.068	7.069	-0.001	55680580	0.2500	0.2419	
2	7.192	7.191	0.001	274754281	0.2500	0.2397	
						RPD = 0.95	
11 2,4-D							
1	7.212	7.214	-0.002	67145343	0.2500	0.2458	
2	7.411	7.412	-0.001	329478639	0.2500	0.2617	
						RPD = 6.27	
12 Pentachlorophenol							
1	7.562	7.562	0.000	288236865	0.0625	0.0659	
2	7.606	7.605	0.001	1054239941	0.0625	0.0672	
						RPD = 1.96	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	104886881	0.0625	0.0657	
2	7.744	7.744	0.000	401209207	0.0625	0.0664	
						RPD = 1.09	
14 Chloramben							
1	7.738	7.739	-0.001	358105481	0.2500	0.2644	
2	8.049	8.049	0.000	1290053084	0.2500	0.2726	
						RPD = 3.04	
15 2,4,5-T							
1	7.816	7.816	0.000	99677914	0.0625	0.0643	
2	7.976	7.976	0.000	353637241	0.0625	0.0689	
						RPD = 6.99	
16 2,4-DB							
1	8.058	8.059	-0.001	36815583	0.2500	0.2526	
2	8.189	8.190	-0.001	177870018	0.2500	0.2446	
						RPD = 3.24	
17 Dinoseb							
1	8.112	8.113	-0.001	241888836	0.2500	0.2667	
2	8.142	8.141	0.001	779848561	0.2500	0.2534	
						RPD = 5.14	
18 Bentazon							
1	8.183	8.184	-0.001	55296513	0.2500	0.2500	
2	8.543	8.544	-0.001	175704103	0.2500	0.2494	
						RPD = 0.23	
19 Picloram							
1	8.399	8.399	0.000	605542235	0.2500	0.2676	
2	8.877	8.877	0.000	2108705379	0.2500	0.2406	
						RPD = 10.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.503	8.504	-0.001	622833672	0.2500	0.2580	
2	8.658	8.658	0.000	2238371220	0.2500	0.2757	
						RPD = 6.64	

21 Acifluorfen

1	9.542	9.543	-0.001	511854251	0.2500	0.2692	
2	9.678	9.677	0.001	1640697173	0.2500	0.2580	
						RPD = 4.25	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

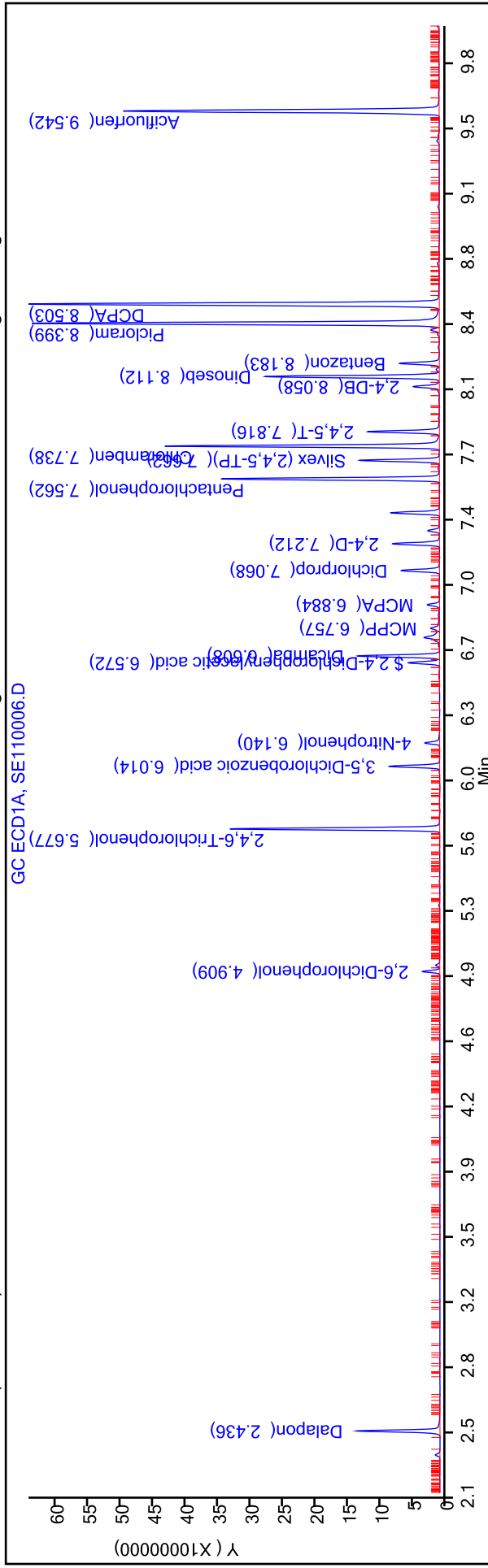
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110006.D
 Injection Date: 11-May-2018 12:25:37
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

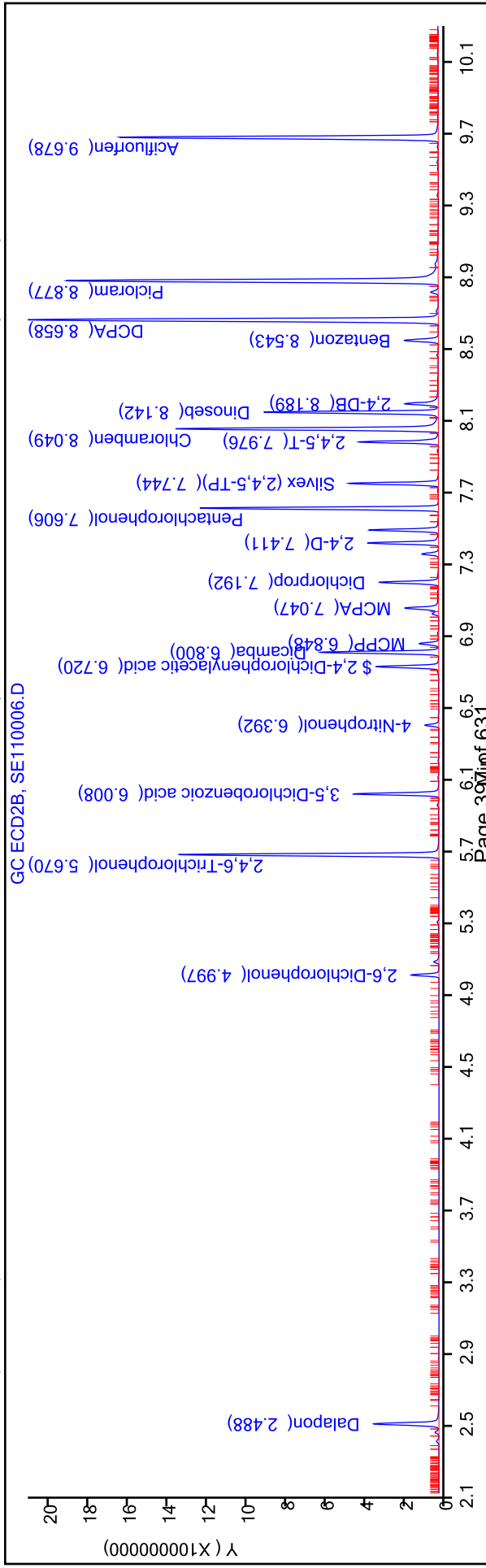
Operator ID: GEM
 Worklist Smp#: 6
 ALS Bottle#: 6

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 11-May-2018 12:45:20 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:40 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.437	2.434	0.003	83189035	0.1750	0.1925	
2	2.490	2.487	0.003	265579123	0.1750	0.1916	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	16215566	NC	NC	
2	4.997	4.996	0.001	90391556	NC	NC	
						RPD = 1.65	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	201951399	NC	NC	
2	5.669	5.668	0.001	904140464	NC	NC	
						RPD = 3.86	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	53327970	0.1750	0.1878	
2	6.009	6.009	0.000	293024588	0.1750	0.1910	
						RPD = 1.72	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	18010823	0.1750	0.1948	
2	6.392	6.394	-0.002	48885059	0.1750	0.1914	
						RPD = 1.75	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	34059424	0.1750	0.1981	
2	6.720	6.720	0.000	224534201	0.1750	0.1966	
						RPD = 0.79	
7 Dicamba							
1	6.608	6.609	-0.001	88040365	0.0875	0.0975	
2	6.801	6.800	0.001	416741253	0.0875	0.0982	
						RPD = 0.67	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110007.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	11785560	17.5	19.7	
2	6.849	6.848	0.001	74790568	17.5	19.3	
						RPD = 1.99	
9 MCPA							
1	6.884	6.883	0.001	14503654	17.5	20.9	
2	7.047	7.046	0.001	141491800	17.5	19.1	
						RPD = 9.15	
10 Dichlorprop							
1	7.069	7.069	0.000	43494282	0.1750	0.1890	
2	7.192	7.191	0.001	209080697	0.1750	0.1824	
						RPD = 3.56	
11 2,4-D							
1	7.212	7.214	-0.002	52251610	0.1750	0.1913	
2	7.412	7.412	0.000	249572099	0.1750	0.1983	
						RPD = 3.57	
12 Pentachlorophenol							
1	7.562	7.562	0.000	217713159	0.0438	0.0498	
2	7.607	7.605	0.002	799764932	0.0438	0.0510	
						RPD = 2.39	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	78442832	0.0438	0.0491	
2	7.744	7.744	0.000	298650918	0.0438	0.0495	
						RPD = 0.62	
14 Chloramben							
1	7.739	7.739	0.000	260489374	0.1750	0.1923	
2	8.050	8.049	0.001	932682423	0.1750	0.1971	
						RPD = 2.43	
15 2,4,5-T							
1	7.816	7.816	0.000	74079486	0.0438	0.0478	
2	7.976	7.976	0.000	258556779	0.0438	0.0504	
						RPD = 5.36	
16 2,4-DB							
1	8.059	8.059	0.000	26745929	0.1750	0.1835	
2	8.190	8.190	0.000	131785359	0.1750	0.1812	
						RPD = 1.28	
17 Dinoseb							
1	8.112	8.113	-0.001	177677725	0.1750	0.1959	
2	8.142	8.141	0.001	552864347	0.1750	0.1846	
						RPD = 5.93	
18 Bentazon							
1	8.184	8.184	0.000	40686507	0.1750	0.1839	
2	8.545	8.544	0.001	129567561	0.1750	0.1839	
						RPD = 0.01	
19 Picloram							
1	8.400	8.399	0.001	418538358	0.1750	0.1850	
2	8.878	8.877	0.001	1412087067	0.1750	0.1642	
						RPD = 11.92	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.503	8.504	-0.001	455199158	0.1750	0.1886	
2	8.659	8.658	0.001	1606795319	0.1750	0.1979	
						RPD = 4.84	

21 Acifluorfen

1	9.543	9.543	0.000	347534675	0.1750	0.1900	
2	9.678	9.677	0.001	1042379023	0.1750	0.1740	
						RPD = 8.82	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110007.D
Injection Date: 11-May-2018 12:45:20
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 7

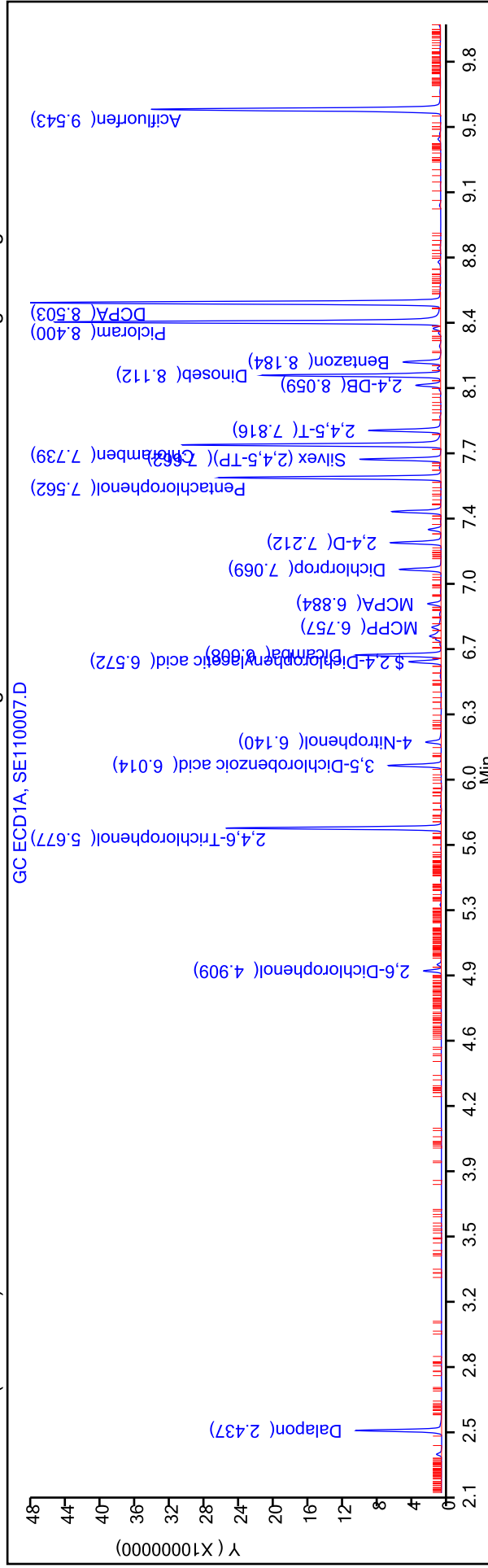
Lims ID: ic h5

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

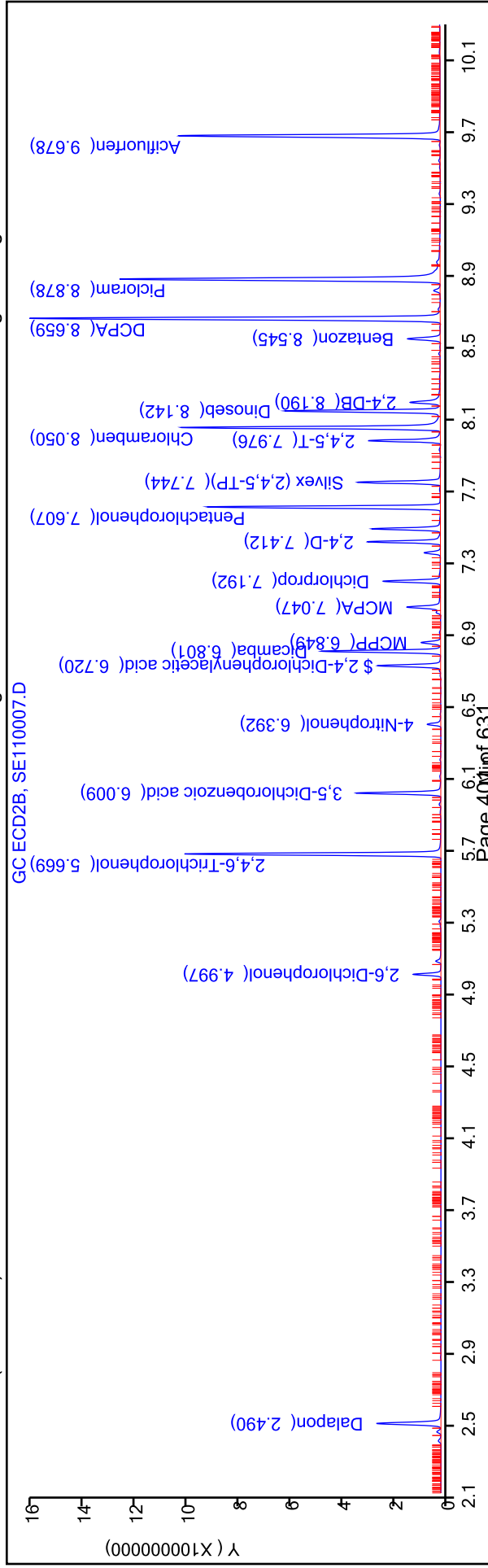
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 11-May-2018 13:05:09 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:50 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.434	2.434	0.000	39308326	0.1000	0.0915	
2	2.487	2.487	0.000	122554551	0.1000	0.0884	
						RPD = 3.41	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	8281104	NC	NC	
2	4.996	4.996	0.000	42242380	NC	NC	
						RPD = 8.44	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	92332408	NC	NC	
2	5.668	5.668	0.000	398541878	NC	NC	
						RPD = 0.21	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	24903843	0.1000	0.0877	
2	6.009	6.009	0.000	132008139	0.1000	0.0861	
						RPD = 1.88	
5 4-Nitrophenol							
1	6.141	6.141	0.000	8515464	0.1000	0.0921	
2	6.394	6.394	0.000	22006274	0.1000	0.0862	
						RPD = 6.65	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	15674889	0.1000	0.0912	
2	6.720	6.720	0.000	101682600	0.1000	0.0890	
						RPD = 2.40	
7 Dicamba							
1	6.609	6.609	0.000	39167090	0.0500	0.0434	
2	6.800	6.800	0.000	183882413	0.0500	0.0433	
						RPD = 0.15	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	5630043	10.0	9.42	
2	6.848	6.848	0.000	38524610	10.0	9.49	
						RPD = 0.77	
9 MCPA							
1	6.883	6.883	0.000	6946174	10.0	9.67	
2	7.046	7.046	0.000	72537648	10.0	9.37	
						RPD = 3.18	
10 Dichlorprop							
1	7.069	7.069	0.000	19831661	0.1000	0.0862	
2	7.191	7.191	0.000	95482366	0.1000	0.0833	
						RPD = 3.41	
11 2,4-D							
1	7.214	7.214	0.000	23710912	0.1000	0.0868	
2	7.412	7.412	0.000	110280549	0.1000	0.0876	
						RPD = 0.91	
12 Pentachlorophenol							
1	7.562	7.562	0.000	95118174	0.0250	0.0218	
2	7.605	7.605	0.000	348275036	0.0250	0.0222	
						RPD = 2.07	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	35295555	0.0250	0.0221	
2	7.744	7.744	0.000	129809387	0.0250	0.0215	
						RPD = 2.84	
14 Chloramben							
1	7.739	7.739	0.000	119026158	0.1000	0.0879	
2	8.049	8.049	0.000	421826031	0.1000	0.0891	
						RPD = 1.40	
15 2,4,5-T							
1	7.816	7.816	0.000	34604353	0.0250	0.0223	
2	7.976	7.976	0.000	112357736	0.0250	0.0219	
						RPD = 1.87	
16 2,4-DB							
1	8.059	8.059	0.000	13086508	0.1000	0.0898	
2	8.190	8.190	0.000	67025442	0.1000	0.0922	
						RPD = 2.59	
17 Dinoseb							
1	8.113	8.113	0.000	78083281	0.1000	0.0861	
2	8.141	8.141	0.000	218861678	0.1000	0.0814	
						RPD = 5.66	
18 Bentazon							
1	8.184	8.184	0.000	19651846	0.1000	0.0888	
2	8.544	8.544	0.000	61472612	0.1000	0.0873	
						RPD = 1.80	
19 Picloram							
1	8.399	8.399	0.000	197347462	0.1000	0.0872	
2	8.877	8.877	0.000	609692907	0.1000	0.0761	
						RPD = 13.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.504	8.504	0.000	216427825	0.1000	0.0897	
2	8.658	8.658	0.000	728552811	0.1000	0.0897	
						RPD = 0.10	

21 Acifluorfen

1	9.543	9.543	0.000	148539275	0.1000	0.0862	
2	9.677	9.677	0.000	397160260	0.1000	0.0789	
						RPD = 8.83	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110008.D
Injection Date: 11-May-2018 13:05:09
Lims ID: ic h4
Instrument ID: CSGS

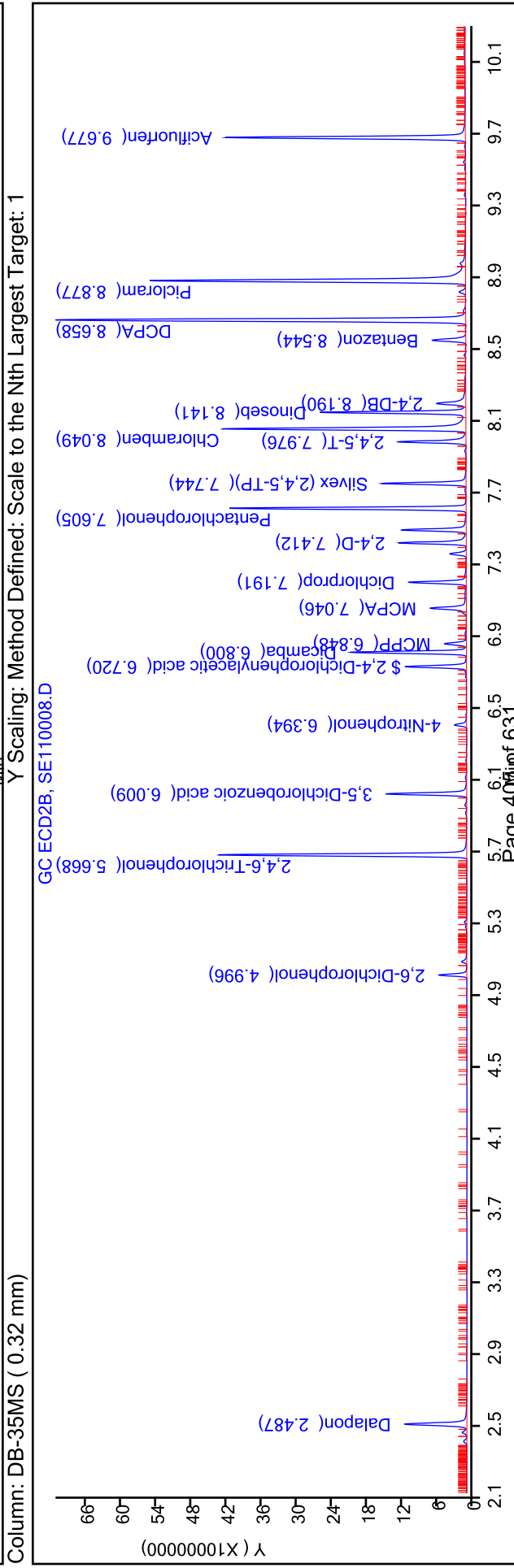
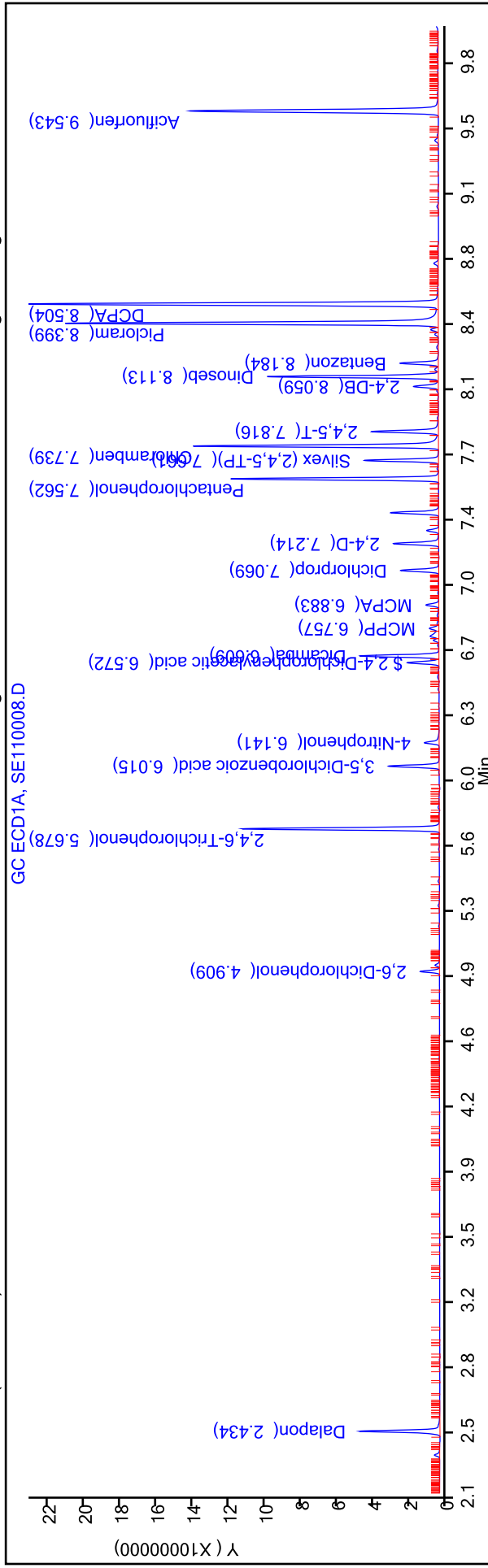
Operator ID: GEM
Worklist Smp#: 8

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 11-May-2018 13:24:48 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:23:04 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	20866692	0.0500	0.0490	
2	2.487	2.487	0.000	64357695	0.0500	0.0464	
						RPD = 5.43	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	4778853	NC	NC	
2	4.997	4.996	0.001	23332577	NC	NC	
						RPD = 9.56	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	47398750	NC	NC	
2	5.668	5.668	0.000	201332318	NC	NC	
						RPD = 1.40	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	13872381	0.0500	0.0488	
2	6.009	6.009	0.000	69054511	0.0500	0.0450	
						RPD = 8.16	
5 4-Nitrophenol							
1	6.141	6.141	0.000	4870807	0.0500	0.0527	
2	6.395	6.394	0.001	12366861	0.0500	0.0484	
						RPD = 8.42	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	8637049	0.0500	0.0502	
2	6.720	6.720	0.000	53622932	0.0500	0.0469	
						RPD = 6.78	
7 Dicamba							
1	6.608	6.609	-0.001	20817710	0.0250	0.0231	
2	6.800	6.800	0.000	94232129	0.0250	0.0222	
						RPD = 3.80	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110009.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.756	6.757	-0.001	3151900	5.00	5.27	
2	6.848	6.848	0.000	22633447	5.00	5.18	
						RPD = 1.74	
9 MCPA							
1	6.883	6.883	0.000	4041645	5.00	5.35	
2	7.046	7.046	0.000	43466245	5.00	5.27	
						RPD = 1.46	
10 Dichlorprop							
1	7.069	7.069	0.000	10981312	0.0500	0.0477	
2	7.191	7.191	0.000	50621343	0.0500	0.0442	
						RPD = 7.75	
11 2,4-D							
1	7.213	7.214	-0.001	12919675	0.0500	0.0473	
2	7.411	7.412	-0.001	56670134	0.0500	0.0450	
						RPD = 4.94	
12 Pentachlorophenol							
1	7.561	7.562	-0.001	48162705	0.0125	0.0110	
2	7.605	7.605	0.000	173538123	0.0125	0.0111	
						RPD = 0.46	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	17924076	0.0125	0.0112	
2	7.743	7.744	-0.001	63684741	0.0125	0.0105	
						RPD = 6.29	
14 Chloramben							
1	7.739	7.739	0.000	59544203	0.0500	0.0440	
2	8.049	8.049	0.000	208906785	0.0500	0.0441	
						RPD = 0.39	
15 2,4,5-T							
1	7.816	7.816	0.000	17990845	0.0125	0.0116	
2	7.976	7.976	0.000	55311764	0.0125	0.0108	
						RPD = 7.32	
16 2,4-DB							
1	8.059	8.059	0.000	6772708	0.0500	0.0465	
2	8.191	8.190	0.001	35061794	0.0500	0.0482	
						RPD = 3.67	
17 Dinoseb							
1	8.112	8.113	-0.001	40031061	0.0500	0.0441	
2	8.141	8.141	0.000	105727247	0.0500	0.0458	
						RPD = 3.62	
18 Bentazon							
1	8.184	8.184	0.000	10191475	0.0500	0.0461	
2	8.544	8.544	0.000	31859951	0.0500	0.0452	
						RPD = 1.86	
19 Picloram							
1	8.399	8.399	0.000	97726866	0.0500	0.0432	
2	8.876	8.877	-0.001	287961730	0.0500	0.0408	
						RPD = 5.59	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.502	8.504	-0.002	108476970	0.0500	0.0449	
2	8.657	8.658	-0.001	363162816	0.0500	0.0447	
						RPD = 0.45	

21 Acifluorfen

1	9.541	9.543	-0.002	75169574	0.0500	0.0452	
2	9.676	9.677	-0.001	182510548	0.0500	0.0461	
						RPD = 1.97	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110009.D

Injection Date: 11-May-2018 13:24:48

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ic h3

Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul

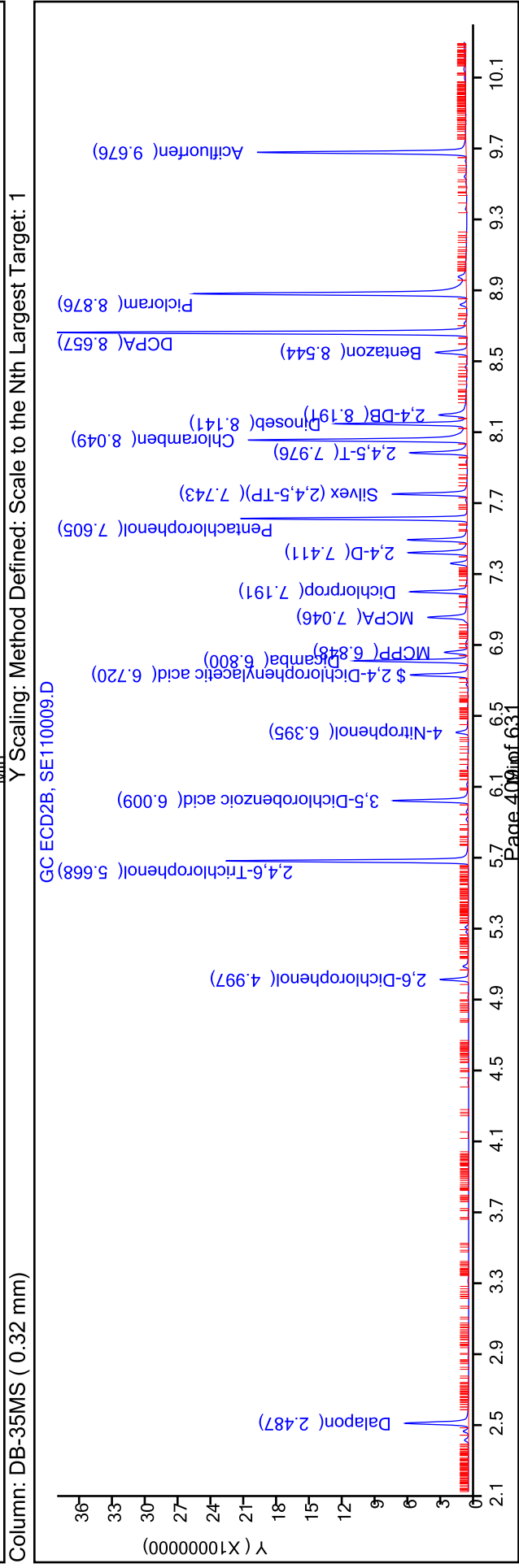
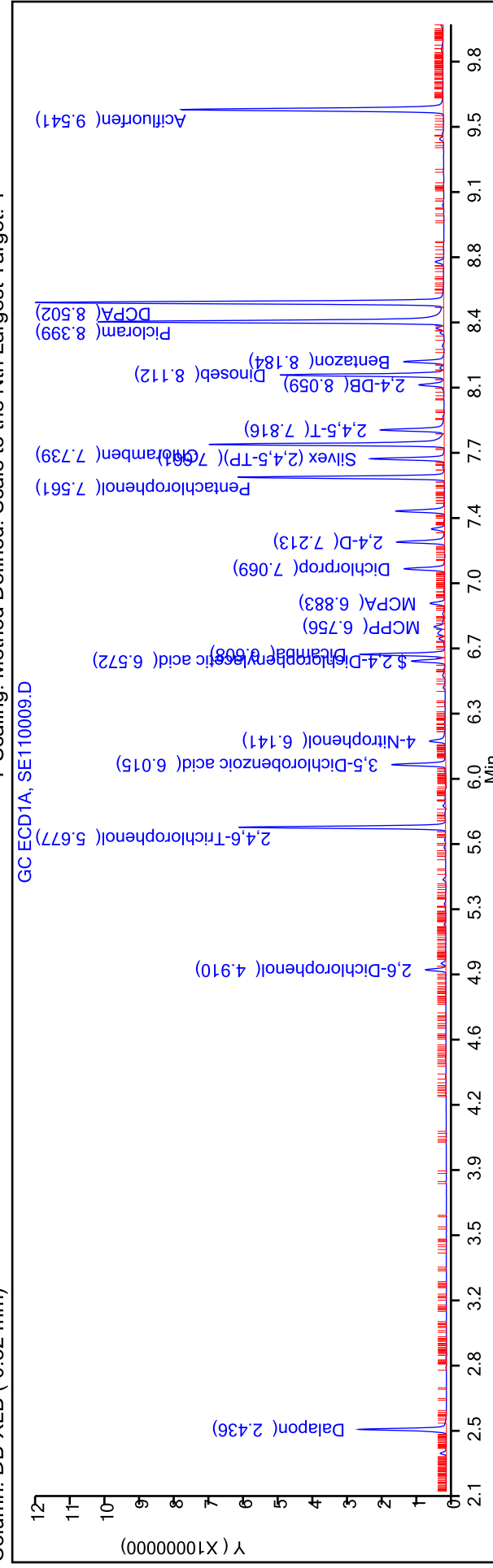
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 11-May-2018 13:44:30 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:23:19 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.435	2.434	0.001	10636667	0.0250	0.0255	
2	2.486	2.487	-0.001	32076139	0.0250	0.0231	
						RPD = 9.57	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	2350207	NC	NC	
2	4.997	4.996	0.001	11844418	NC	NC	
						RPD = 3.12	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	21271269	NC	NC	
2	5.669	5.668	0.001	90591973	NC	NC	
						RPD = 1.13	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	6486938	0.0250	0.0228	
2	6.010	6.009	0.001	32970058	0.0250	0.0215	
						RPD = 6.08	
5 4-Nitrophenol							
1	6.144	6.141	0.003	2039867	0.0250	0.0221	
2	6.396	6.394	0.002	5603900	0.0250	0.0219	
						RPD = 0.54	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.573	6.572	0.001	4102855	0.0250	0.0239	
2	6.721	6.720	0.001	24918814	0.0250	0.0218	
						RPD = 8.98	
7 Dicamba							
1	6.609	6.609	0.000	9645690	0.0125	0.0107	
2	6.800	6.800	0.000	43185212	0.0125	0.0102	
						RPD = 4.90	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	1331377	2.50	2.23	
2	6.849	6.848	0.001	11960487	2.50	2.29	
						RPD = 2.66	
9 MCPA							
1	6.884	6.883	0.001	1929514	2.50	2.21	
2	7.048	7.046	0.002	22165214	2.50	2.27	
						RPD = 2.83	
10 Dichlorprop							
1	7.070	7.069	0.001	5256013	0.0250	0.0228	
2	7.192	7.191	0.001	25683211	0.0250	0.0224	
						RPD = 1.93	
11 2,4-D							
1	7.215	7.214	0.001	6252962	0.0250	0.0229	
2	7.413	7.412	0.001	26250068	0.0250	0.0209	
						RPD = 9.33	
12 Pentachlorophenol							
1	7.562	7.562	0.000	21666620	0.006250	0.004956	
2	7.605	7.605	0.000	76363785	0.006250	0.004871	
						RPD = 1.75	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	8165417	0.006250	0.005116	
2	7.745	7.744	0.001	29112863	0.006250	0.004821	
						RPD = 5.94	
14 Chloramben							
1	7.740	7.739	0.001	26686021	0.0250	0.0197	
2	8.050	8.049	0.001	93206115	0.0250	0.0197	
						RPD = 0.05	
15 2,4,5-T							
1	7.818	7.816	0.002	8450464	0.006250	0.005448	
2	7.977	7.976	0.001	25357515	0.006250	0.004942	
						RPD = 9.74	
16 2,4-DB							
1	8.060	8.059	0.001	3235647	0.0250	0.0222	
2	8.192	8.190	0.002	16541201	0.0250	0.0227	
						RPD = 2.41	
17 Dinoseb							
1	8.113	8.113	0.000	17944898	0.0250	0.0198	
2	8.141	8.141	0.000	44543235	0.0250	0.0264	
						RPD = 28.58	
18 Bentazon							
1	8.185	8.184	0.001	4925430	0.0250	0.0223	
2	8.545	8.544	0.001	15434944	0.0250	0.0219	
						RPD = 1.62	
19 Picloram							
1	8.401	8.399	0.002	42654843	0.0250	0.0189	
2	8.877	8.877	0.000	118110292	0.0250	0.0222	
						RPD = 16.35	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.503	8.504	-0.001	49421367	0.0250	0.0205	
2	8.657	8.658	-0.001	161482853	0.0250	0.0199	
						RPD = 2.88	

21 Acifluorfen

1	9.543	9.543	0.000	31521813	0.0250	0.0200	
2	9.677	9.677	0.000	70468139	0.0250	0.0287	
						RPD = 35.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110010.D
Injection Date: 11-May-2018 13:44:30
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 10

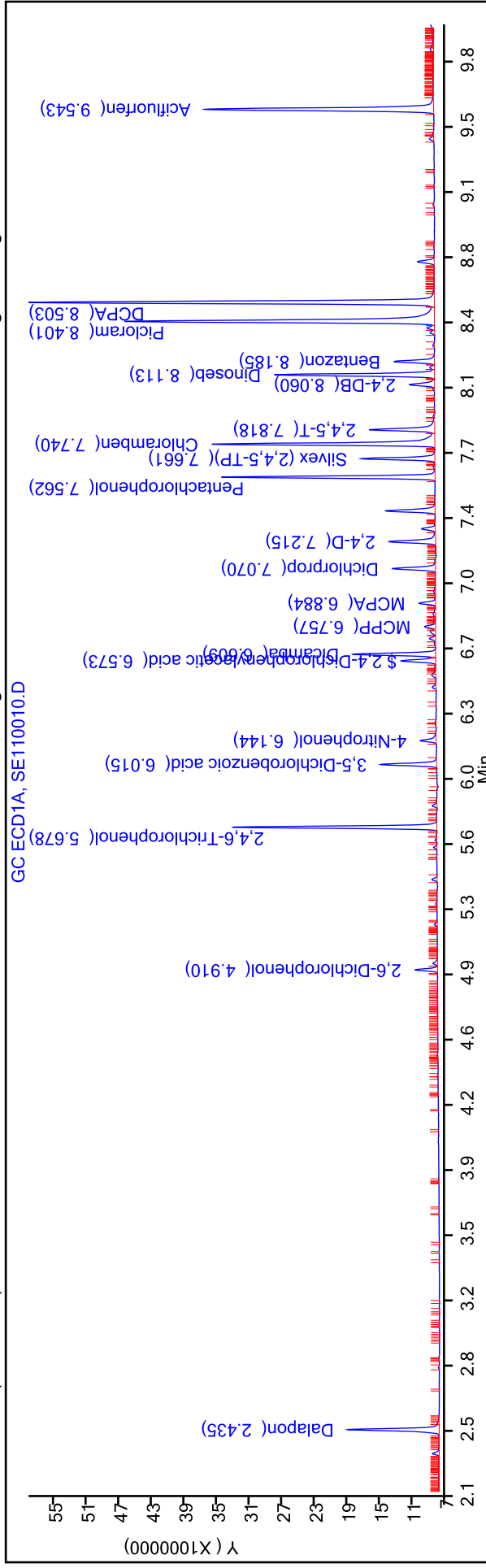
Lims ID: ic h2
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

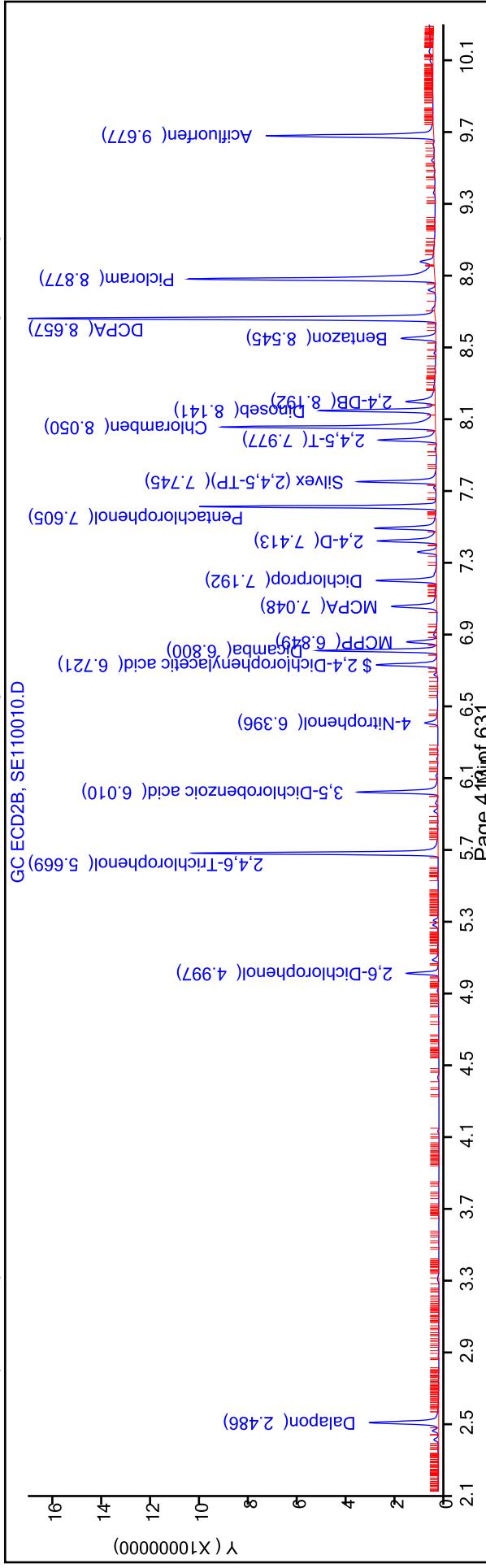
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 11-May-2018 14:04:11 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 16:22:08 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 11-May-2018 16:20:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.439	2.434	0.005	6581903	0.0100	0.0161	
2	2.491	2.487	0.004	18041326	0.0100	0.0130	
						RPD = 21.37	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	1371251	NC	NC	
2	4.997	4.996	0.001	6784740	NC	NC	
						RPD = 17.58	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	11180842	NC	NC	
2	5.667	5.668	-0.001	47838983	NC	NC	
						RPD = 0.67	
4 3,5-Dichlorobenzoic acid							
1	6.015	6.015	0.000	3593919	0.0100	0.0127	
2	6.010	6.009	0.001	18292581	0.0100	0.0119	
						RPD = 5.93	
5 4-Nitrophenol							
1	6.144	6.141	0.003	1166828	0.0100	0.0126	
2	6.397	6.394	0.003	3194768	0.0100	0.0125	
						RPD = 0.88	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	2379510	0.0100	0.0138	
2	6.722	6.720	0.002	14177101	0.0100	0.0124	
						RPD = 10.89	
7 Dicamba							
1	6.608	6.609	-0.001	5341278	0.005000	0.005917	
2	6.800	6.800	0.000	23704598	0.005000	0.005585	
						RPD = 5.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.757	6.757	0.000	593694	1.00	0.99	
2	6.849	6.848	0.001	7413369	1.00	1.05	
						RPD = 5.94	
9 MCPA							
1	6.883	6.883	0.000	1032647	1.00	0.8775	
2	7.048	7.046	0.002	13307227	1.00	1.03	
						RPD = 15.72	
10 Dichlorprop							
1	7.070	7.069	0.001	2994953	0.0100	0.0130	
2	7.192	7.191	0.001	16334415	0.0100	0.0142	
						RPD = 9.06	
11 2,4-D							
1	7.215	7.214	0.001	3282293	0.0100	0.0120	
2	7.413	7.412	0.001	14413840	0.0100	0.0114	
						RPD = 4.83	
12 Pentachlorophenol							
1	7.562	7.562	0.000	11166313	0.002500	0.002554	
2	7.605	7.605	0.000	39948581	0.002500	0.002548	
						RPD = 0.25	
13 Silvex (2,4,5-TP)							
1	7.662	7.661	0.001	4257146	0.002500	0.002667	
2	7.744	7.744	0.000	15326717	0.002500	0.002538	
						RPD = 4.97	
14 Chloramben							
1	7.740	7.739	0.001	13202807	0.0100	0.009748	
2	8.050	8.049	0.001	46864588	0.0100	0.0099	
						RPD = 1.56	
15 2,4,5-T							
1	7.817	7.816	0.001	4350302	0.002500	0.002805	
2	7.977	7.976	0.001	13726331	0.002500	0.002675	
						RPD = 4.73	
16 2,4-DB							
1	8.061	8.059	0.002	1732409	0.0100	0.0119	
2	8.192	8.190	0.002	7931034	0.0100	0.0109	
						RPD = 8.62	
17 Dinoseb							
1	8.112	8.113	-0.001	9609463	0.0100	0.0106	
2	8.141	8.141	0.000	23285232	0.0100	0.0196	
						RPD = 59.77	
18 Bentazon							
1	8.185	8.184	0.001	2811902	0.0100	0.0127	
2	8.544	8.544	0.000	8350330	0.0100	0.0119	
						RPD = 6.99	
19 Picloram							
1	8.401	8.399	0.002	21523000	0.0100	0.009513	
2	8.877	8.877	0.000	60007266	0.0100	0.0158	
						RPD = 49.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.502	8.504	-0.002	25166958	0.0100	0.0104	
2	8.657	8.658	-0.001	81828951	0.0100	0.0101	
						RPD = 3.37	

21 Acifluorfen

1	9.541	9.543	-0.002	16684062	0.0100	0.0113	
2	9.677	9.677	0.000	36263377	0.0100	0.0234	
						RPD = 69.68	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-1_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
Injection Date: 11-May-2018 14:04:11
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 11

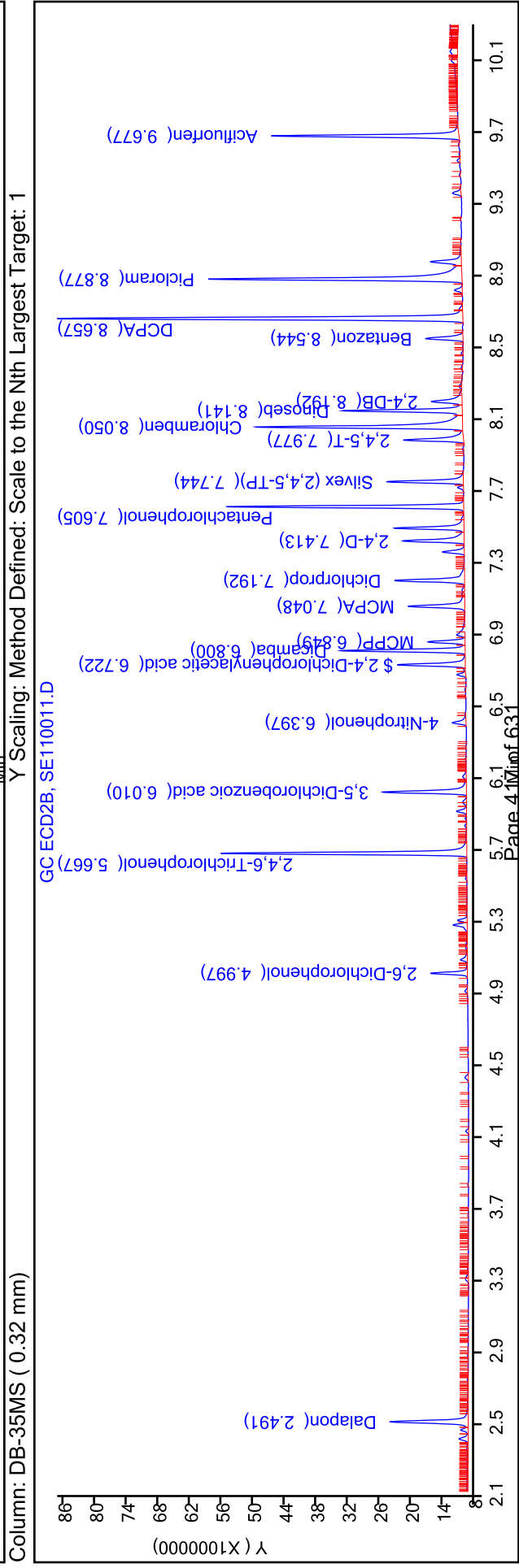
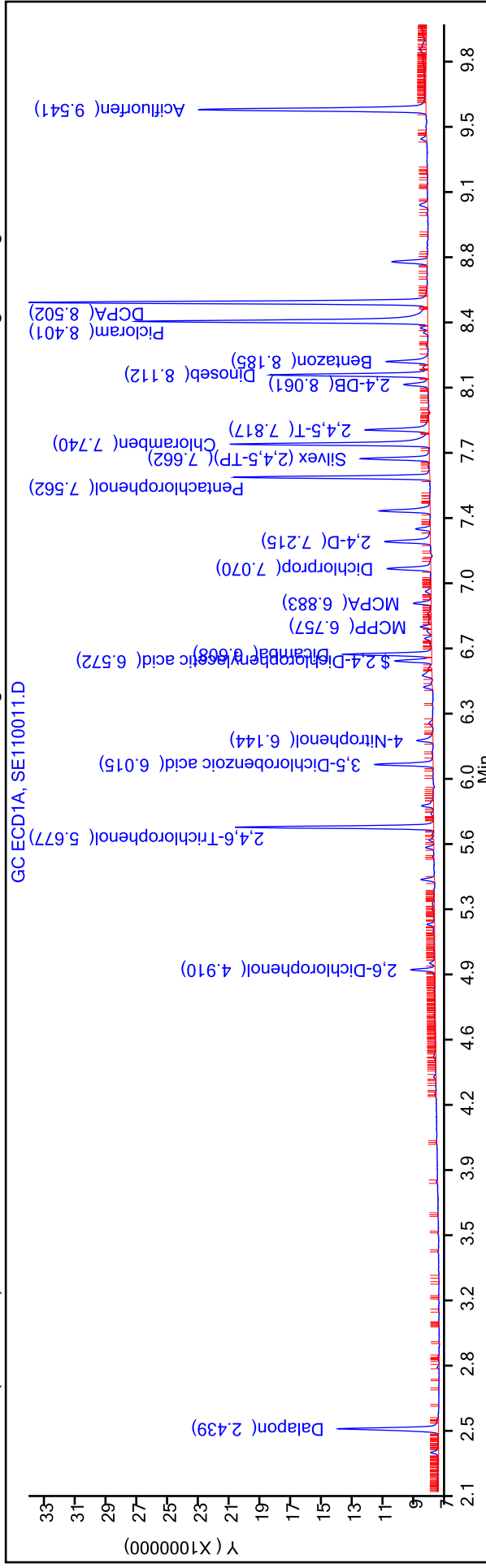
Lims ID: ic h1

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 11

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration

/ Dalapon

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

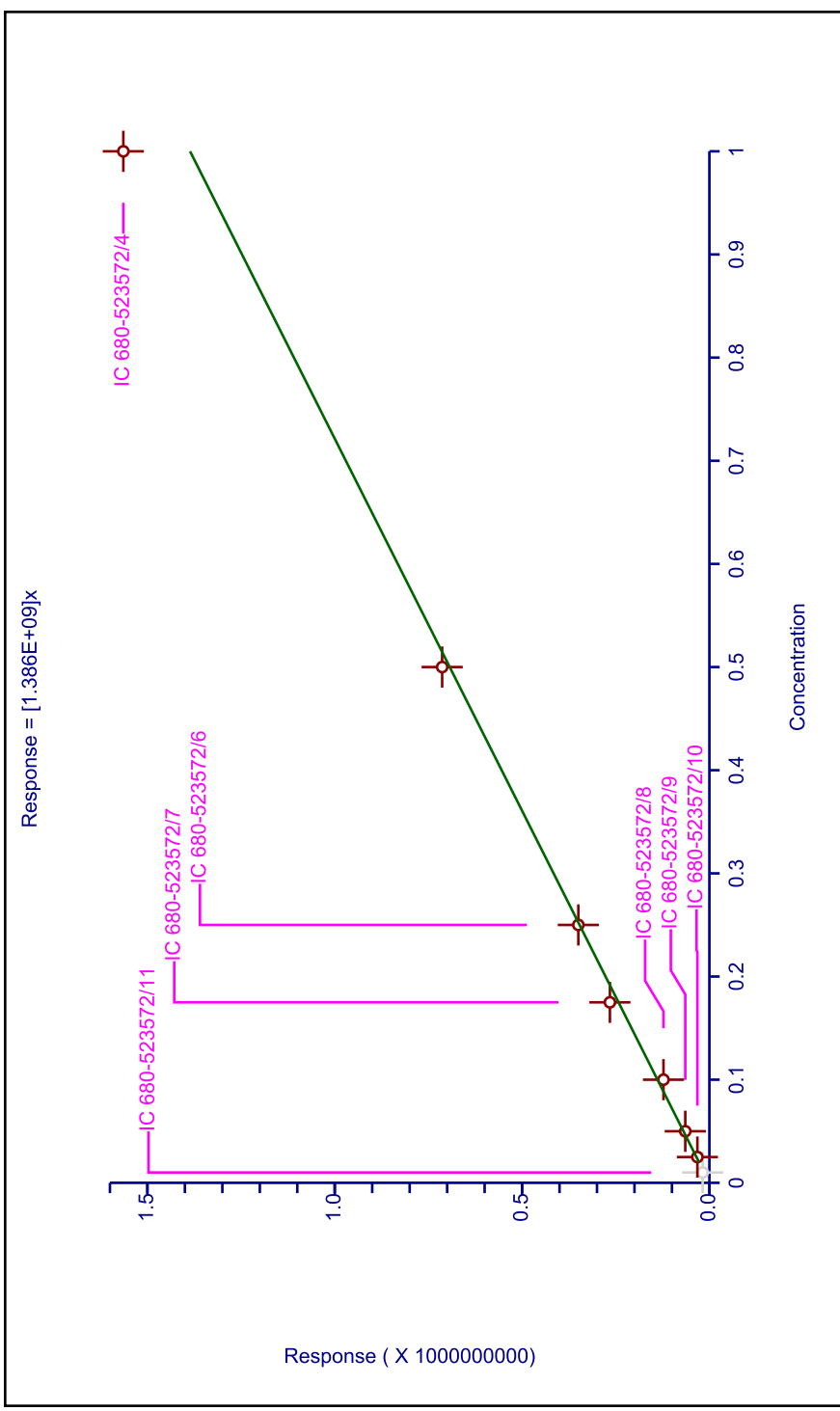
Curve Coefficients

Intercept: 0
 Slope: 1.386E+09

Error Coefficients

Standard Error: 74100000
 Relative Standard Error: 9.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	18041326.0			1804132600.0	N
2	IC 680-523572/10	0.025	32076139.0			1283045560.0	Y
3	IC 680-523572/9	0.05	64357695.0			1287153900.0	Y
4	IC 680-523572/8	0.1	122554551.0			1225545510.0	Y
5	IC 680-523572/7	0.175	265579123.0			1517594988.57143	Y
6	IC 680-523572/6	0.25	349811806.0			1399247224.0	Y
7	IC 680-523572/5	0.5	713286748.0			1426573496.0	Y
8	IC 680-523572/4	1.0	1564268680.0			1564268680.0	Y



Calibration

/ 3,5-Dichlorobenzoic acid

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

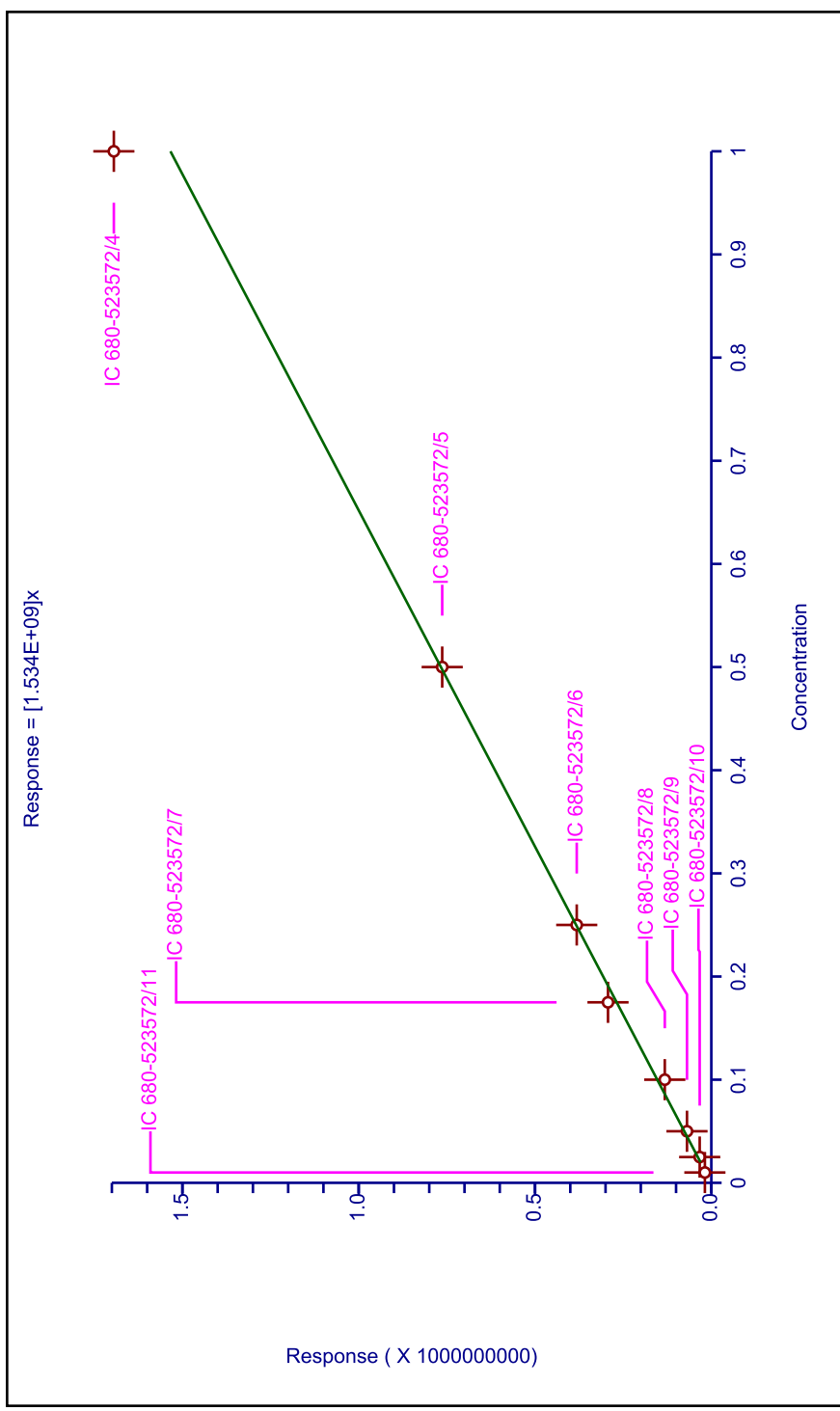
Curve Coefficients

Intercept: 0
Slope: 1.534E+09

Error Coefficients

Standard Error: 62000000
Relative Standard Error: 12.3
Correlation Coefficient: 0.997
Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	18292581.0		1829258100.0		Y
2	IC 680-523572/10	0.025	32970058.0		1318802320.0		Y
3	IC 680-523572/9	0.05	69054511.0		1381090220.0		Y
4	IC 680-523572/8	0.1	132008139.0		1320081390.0		Y
5	IC 680-523572/7	0.175	293024588.0		1674426217.14286		Y
6	IC 680-523572/6	0.25	381708442.0		1526833768.0		Y
7	IC 680-523572/5	0.5	763230217.0		1526460434.0		Y
8	IC 680-523572/4	1.0	1694404983.0		1694404983.0		Y



Calibration

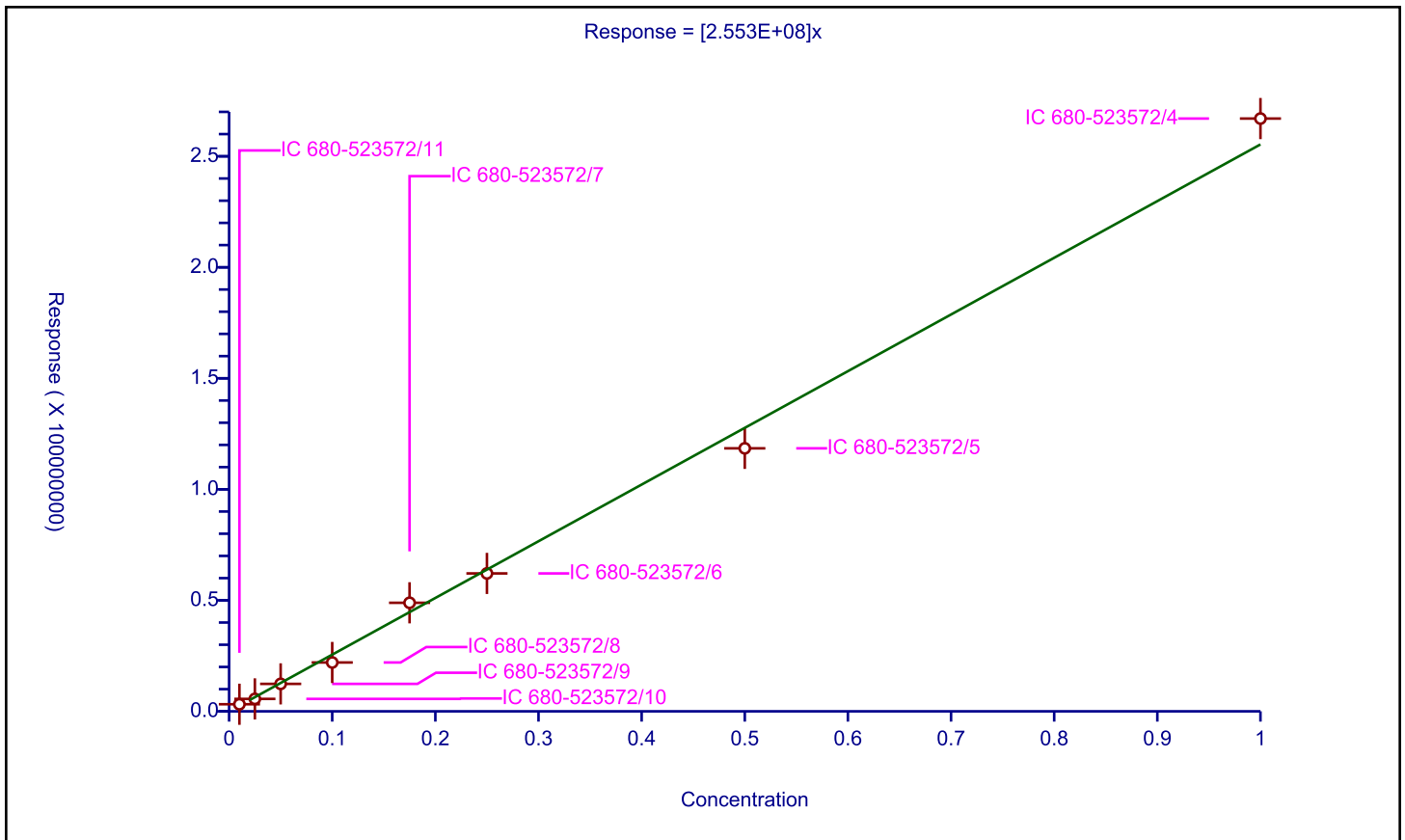
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	2.553E+08

Error Coefficients	
Standard Error:	6030000
Relative Standard Error:	12.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	3194768.0			319476800.0	Y
2	IC 680-523572/10	0.025	5603900.0			224156000.0	Y
3	IC 680-523572/9	0.05	12366861.0			247337220.0	Y
4	IC 680-523572/8	0.1	22006274.0			220062740.0	Y
5	IC 680-523572/7	0.175	48885059.0			279343194.285714	Y
6	IC 680-523572/6	0.25	62120881.0			248483524.0	Y
7	IC 680-523572/5	0.5	118457210.0			236914420.0	Y
8	IC 680-523572/4	1.0	266999376.0			266999376.0	Y



Calibration

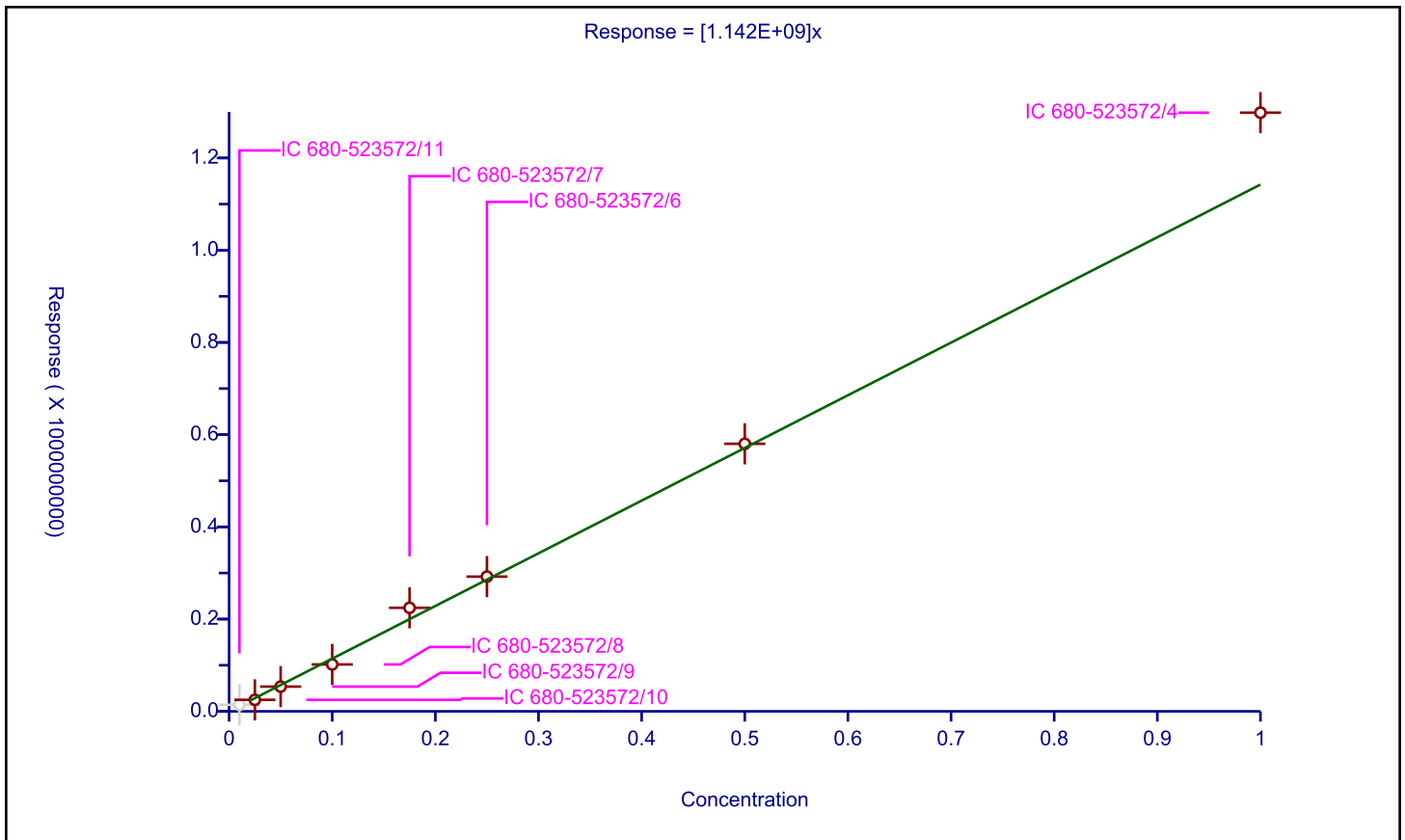
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.142E+09

Error Coefficients	
Standard Error:	64800000
Relative Standard Error:	10.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	14177101.0			1417710100.0	N
2	IC 680-523572/10	0.025	24918814.0			996752560.0	Y
3	IC 680-523572/9	0.05	53622932.0			1072458640.0	Y
4	IC 680-523572/8	0.1	101682600.0			1016826000.0	Y
5	IC 680-523572/7	0.175	224534201.0			1283052577.14286	Y
6	IC 680-523572/6	0.25	292178575.0			1168714300.0	Y
7	IC 680-523572/5	0.5	580202590.0			1160405180.0	Y
8	IC 680-523572/4	1.0	1298301676.0			1298301676.0	Y



Calibration

/ Dicamba

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

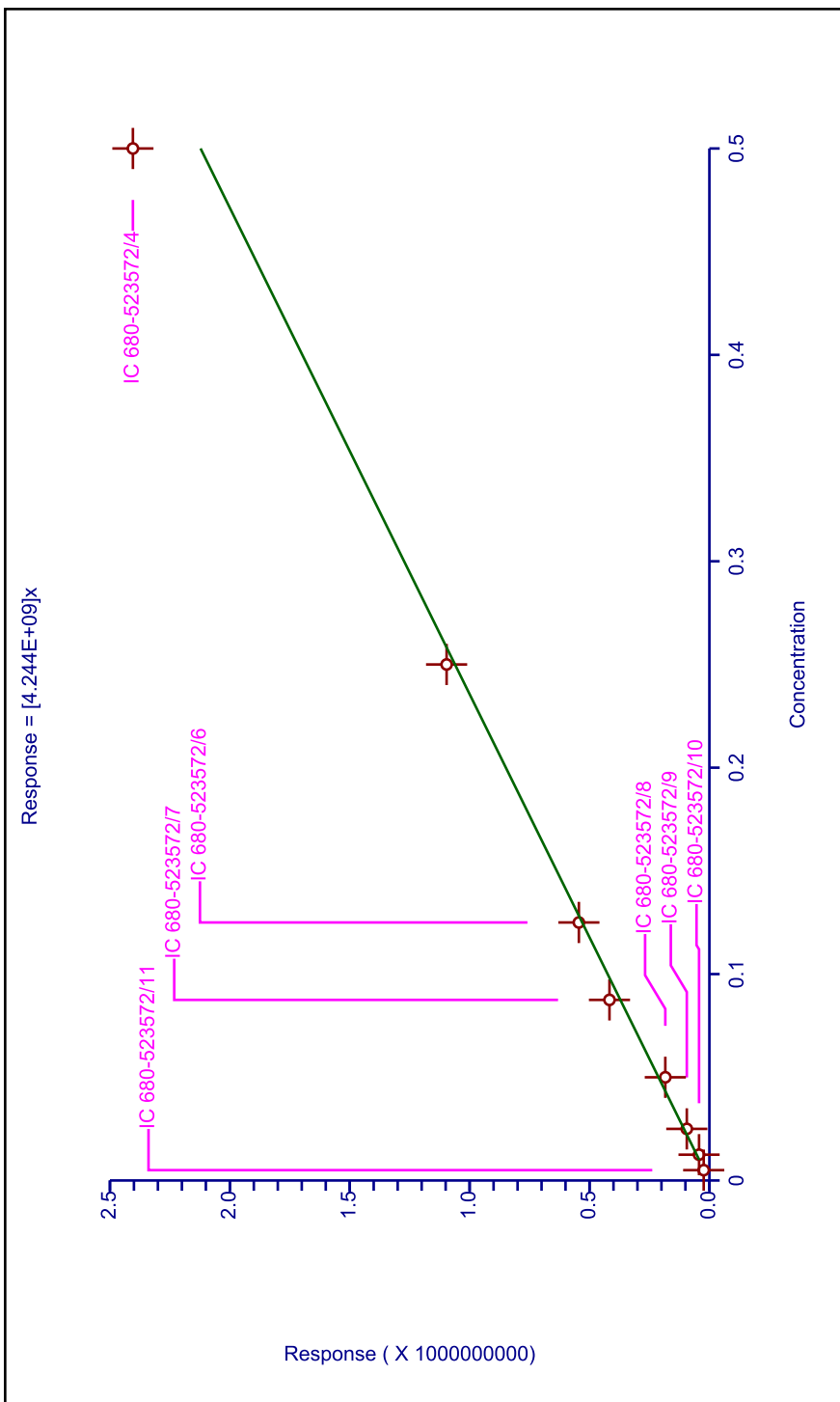
Curve Coefficients

Intercept: 0
 Slope: 4.244E+09

Error Coefficients

Standard Error: 110000000
 Relative Standard Error: 12.7
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.979

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.005	23704598.0			4740919600.0	Y
2	IC 680-523572/10	0.0125	43185212.0			3454816960.0	Y
3	IC 680-523572/9	0.025	94232129.0			3769285160.0	Y
4	IC 680-523572/8	0.05	183882413.0			3677648260.0	Y
5	IC 680-523572/7	0.0875	416741253.0			4762757177.14286	Y
6	IC 680-523572/6	0.125	544423487.0			4355387896.0	Y
7	IC 680-523572/5	0.25	1095984345.0			4383937380.0	Y
8	IC 680-523572/4	0.5	2404283458.0			4808566916.0	Y



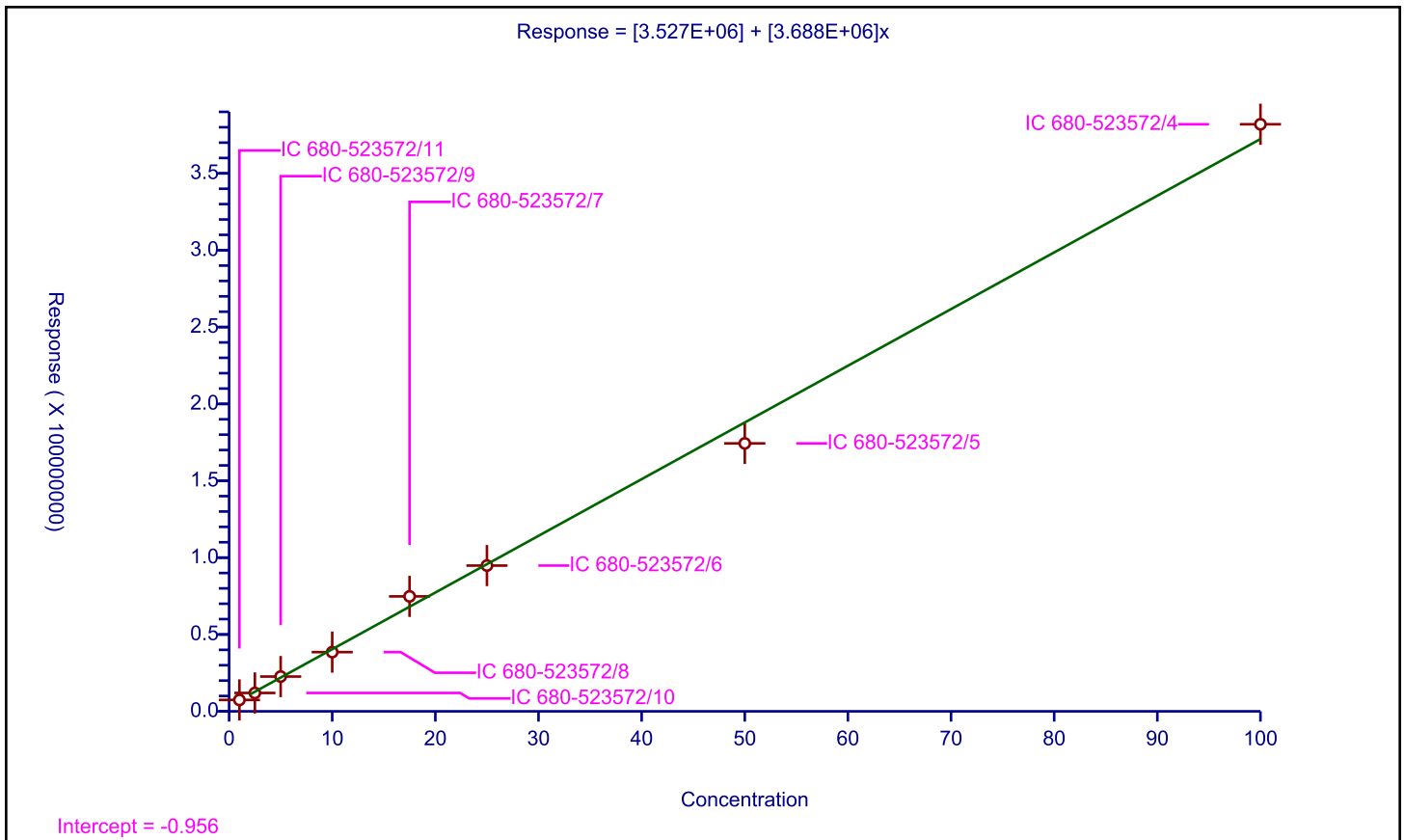
Calibration

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

Curve Coefficients	
Intercept:	3.527E+06
Slope:	3.688E+06

Error Coefficients	
Standard Error:	7400000
Relative Standard Error:	7.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	1.0	7413369.0			7413369.0	Y
2	IC 680-523572/10	2.5	11960487.0			4784194.8	Y
3	IC 680-523572/9	5.0	22633447.0			4526689.4	Y
4	IC 680-523572/8	10.0	38524610.0			3852461.0	Y
5	IC 680-523572/7	17.5	74790568.0			4273746.742857	Y
6	IC 680-523572/6	25.0	94830943.0			3793237.72	Y
7	IC 680-523572/5	50.0	174315420.0			3486308.4	Y
8	IC 680-523572/4	100.0	381942979.0			3819429.79	Y



Calibration

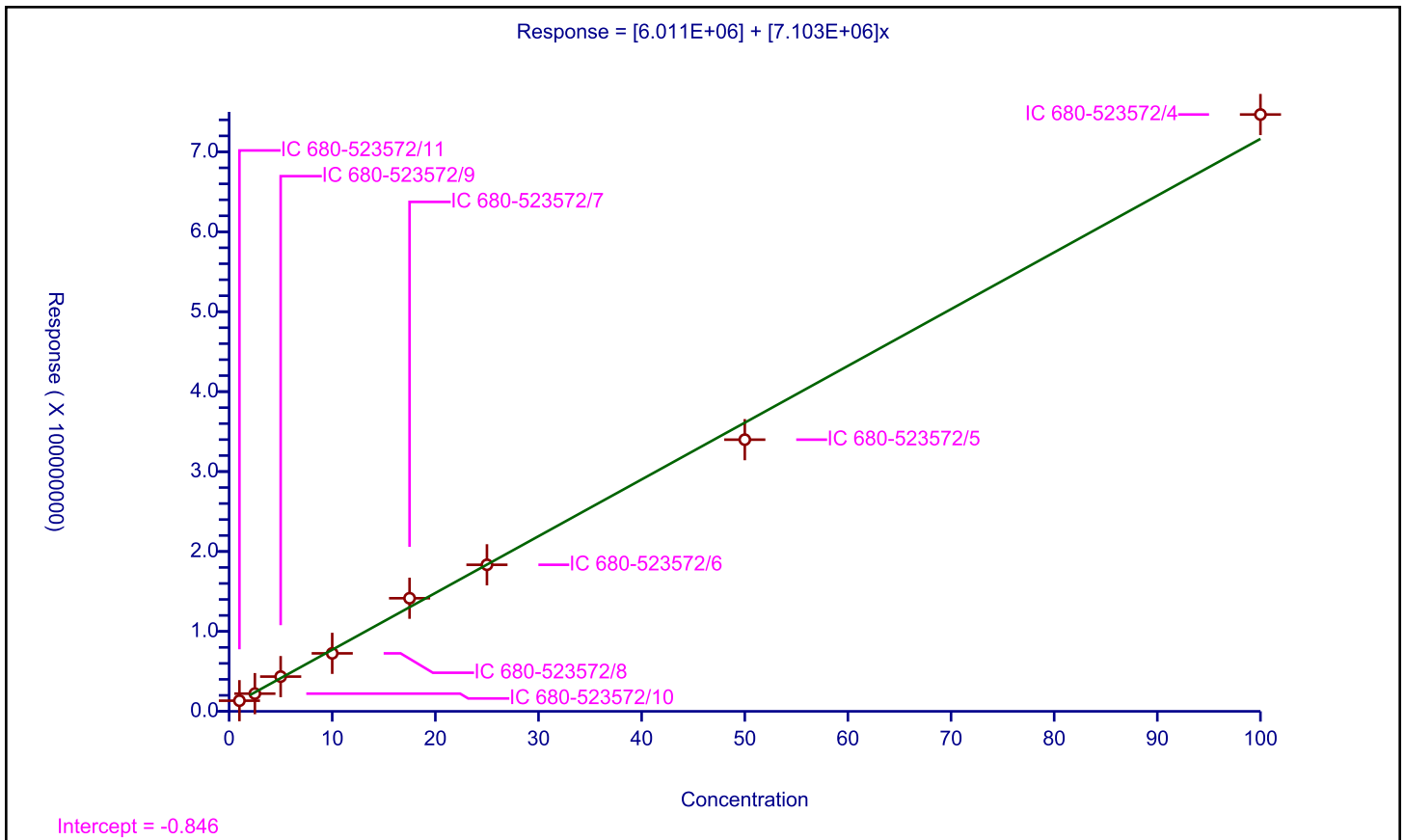
/ MCPA

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	6.011E+06
Slope:	7.103E+06

Error Coefficients	
Standard Error:	16000000
Relative Standard Error:	7.0
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	1.0	13307227.0			13307227.0	Y
2	IC 680-523572/10	2.5	22165214.0			8866085.6	Y
3	IC 680-523572/9	5.0	43466245.0			8693249.0	Y
4	IC 680-523572/8	10.0	72537648.0			7253764.8	Y
5	IC 680-523572/7	17.5	141491800.0			8085245.714286	Y
6	IC 680-523572/6	25.0	183361188.0			7334447.52	Y
7	IC 680-523572/5	50.0	339905374.0			6798107.48	Y
8	IC 680-523572/4	100.0	746688222.0			7466882.22	Y



Calibration

/ Dichlorprop

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

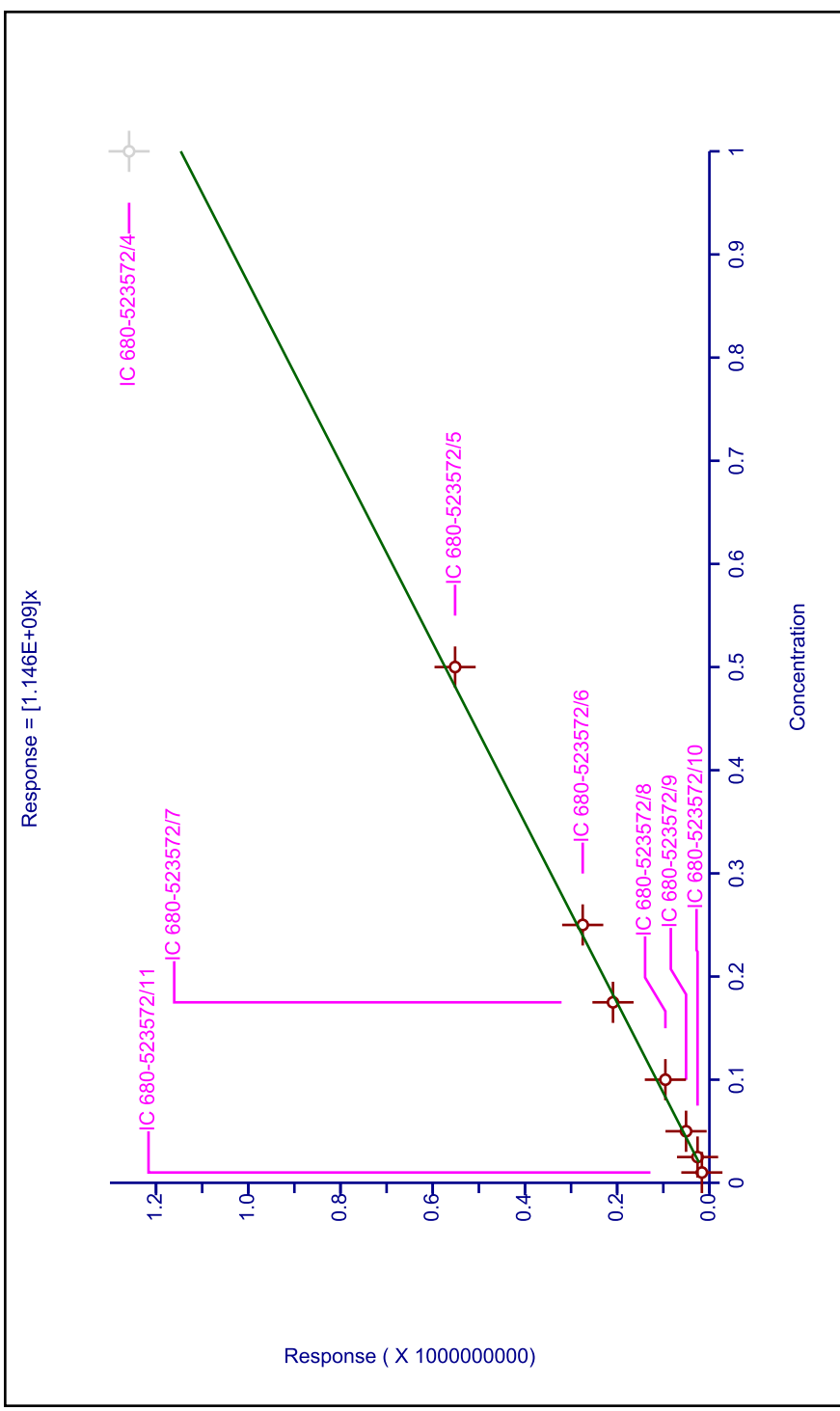
Curve Coefficients

Intercept: 0
 Slope: 1.146E+09

Error Coefficients

Standard Error: 13700000
 Relative Standard Error: 19.9
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.930

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	16334415.0			1633441500.0	Y
2	IC 680-523572/10	0.025	25683211.0			1027328440.0	Y
3	IC 680-523572/9	0.05	50621343.0			1012426860.0	Y
4	IC 680-523572/8	0.1	95482366.0			954823660.0	Y
5	IC 680-523572/7	0.175	209080697.0			1194746840.0	Y
6	IC 680-523572/6	0.25	274754281.0			1099017124.0	Y
7	IC 680-523572/5	0.5	551527466.0			1103054932.0	Y
8	IC 680-523572/4	1.0	1258500696.0			1258500696.0	N



Calibration

/ 2,4-D

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

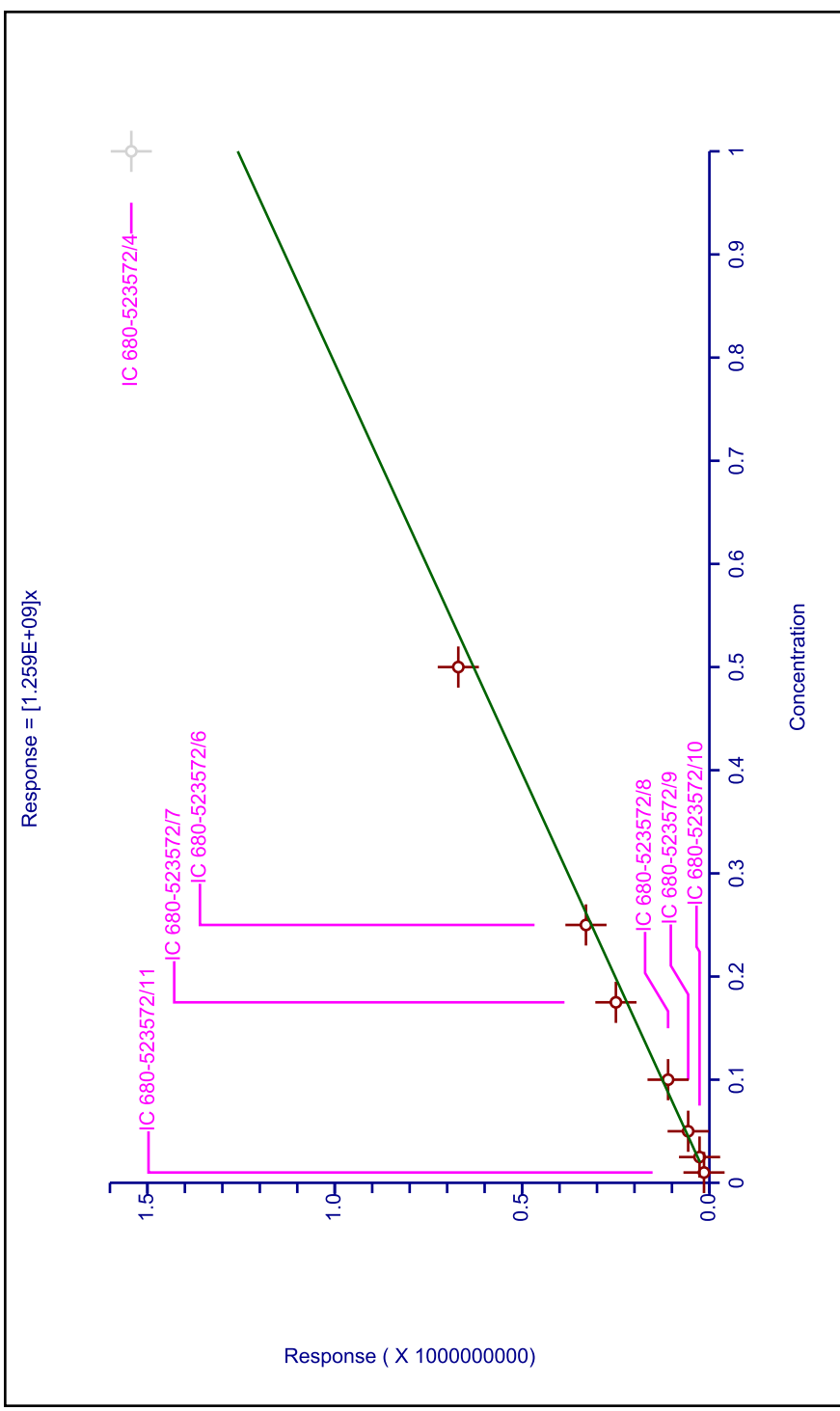
Curve Coefficients

Intercept: 0
 Slope: 1.259E+09

Error Coefficients

Standard Error: 22500000
 Relative Standard Error: 12.8
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	14413840.0		1441384000.0		Y
2	IC 680-523572/10	0.025	26250068.0		1050002720.0		Y
3	IC 680-523572/9	0.05	56670134.0		1133402680.0		Y
4	IC 680-523572/8	0.1	110280549.0		1102805490.0		Y
5	IC 680-523572/7	0.175	249572099.0		1426126280.0		Y
6	IC 680-523572/6	0.25	329478639.0		1317914556.0		Y
7	IC 680-523572/5	0.5	670180977.0		1340361954.0		Y
8	IC 680-523572/4	1.0	1543015821.0		1543015821.0		N



Calibration

/ Pentachlorophenol

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

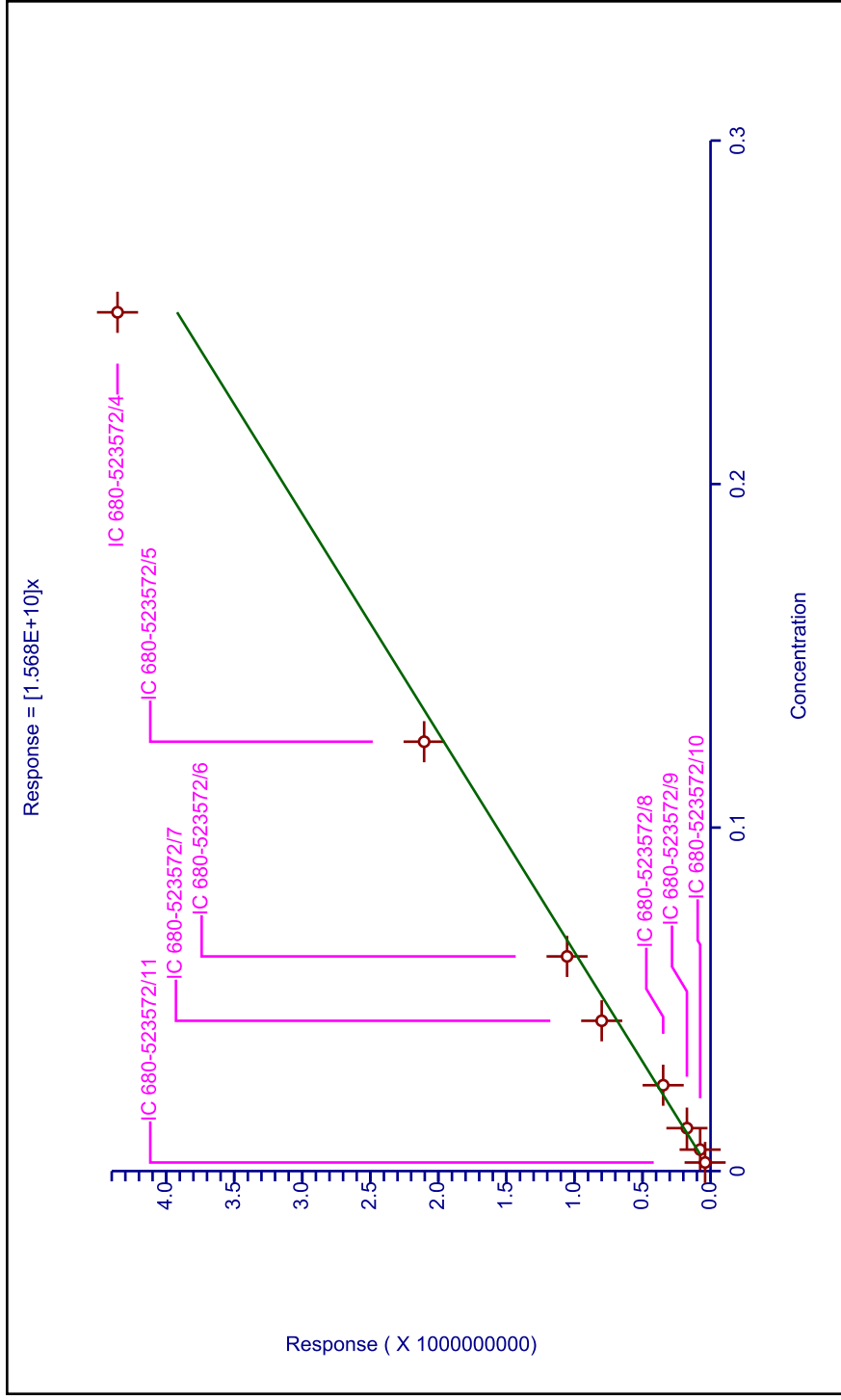
Curve Coefficients

Intercept: 0
Slope: 1.568E+10

Error Coefficients

Standard Error: 183000000
Relative Standard Error: 13.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	39948581.0			15979432400.0	Y
2	IC 680-523572/10	0.00625	76363785.0			12218205600.0	Y
3	IC 680-523572/9	0.0125	173538123.0			13883049840.0	Y
4	IC 680-523572/8	0.025	348275036.0			13931001440.0	Y
5	IC 680-523572/7	0.04375	799764932.0			18280341302.8571	Y
6	IC 680-523572/6	0.0625	1054239941.0			16867839056.0	Y
7	IC 680-523572/5	0.125	2104701924.0			16837615392.0	Y
8	IC 680-523572/4	0.25	4357611017.0			17430444068.0	Y



Calibration

/ Silvex (2,4,5-TP)

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

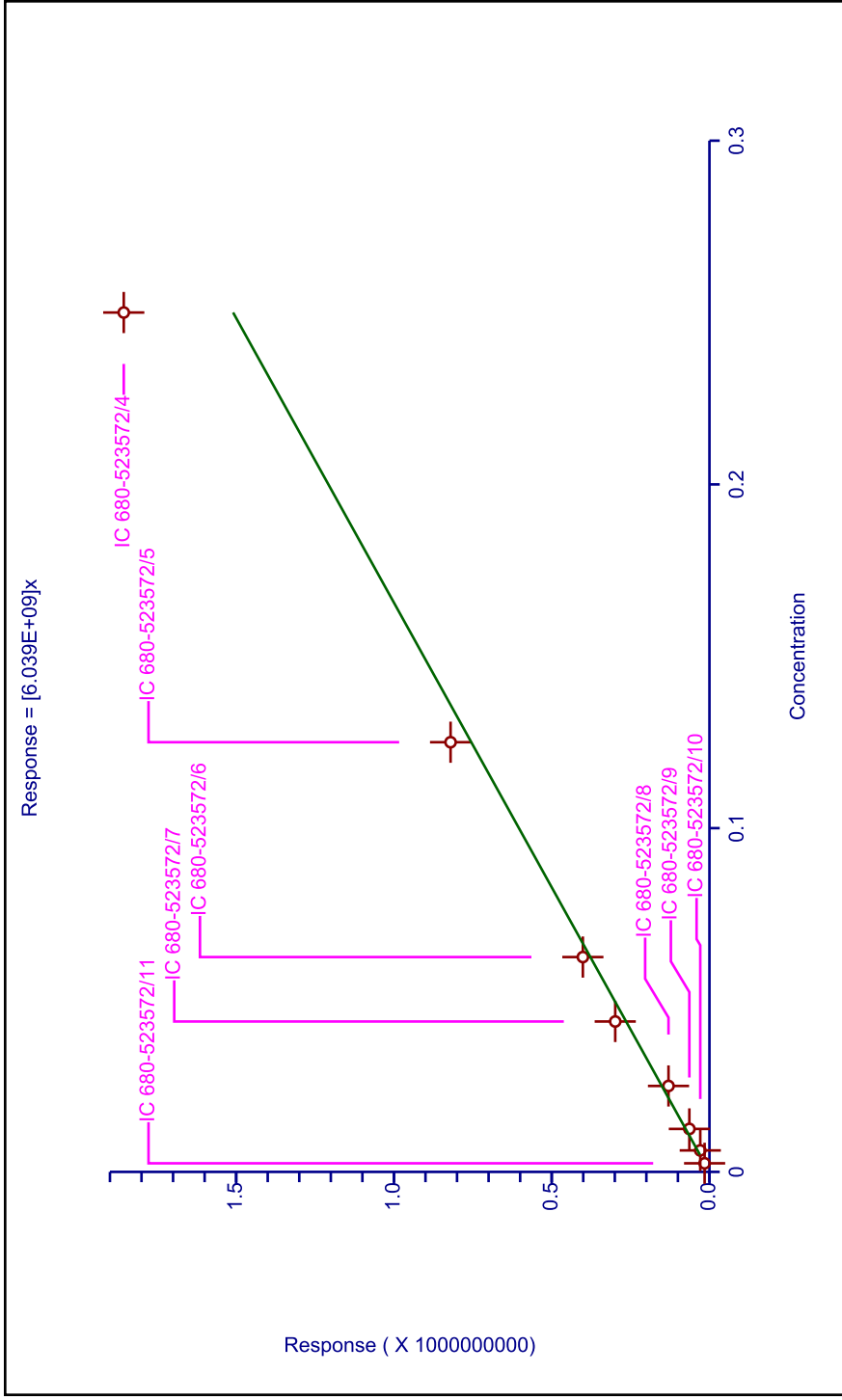
Curve Coefficients

Intercept: 0
 Slope: 6.039E+09

Error Coefficients

Standard Error: 135000000
 Relative Standard Error: 15.9
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.969

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	15326717.0		6130686800.0		Y
2	IC 680-523572/10	0.00625	29112863.0		4658058080.0		Y
3	IC 680-523572/9	0.0125	63684741.0		5094779280.0		Y
4	IC 680-523572/8	0.025	129809387.0		5192375480.0		Y
5	IC 680-523572/7	0.04375	298650918.0		6826306697.14286		Y
6	IC 680-523572/6	0.0625	401209207.0		6419347312.0		Y
7	IC 680-523572/5	0.125	820494148.0		6563953184.0		Y
8	IC 680-523572/4	0.25	1856270815.0		7425083260.0		Y



Calibration

/ 2,4,5-T

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

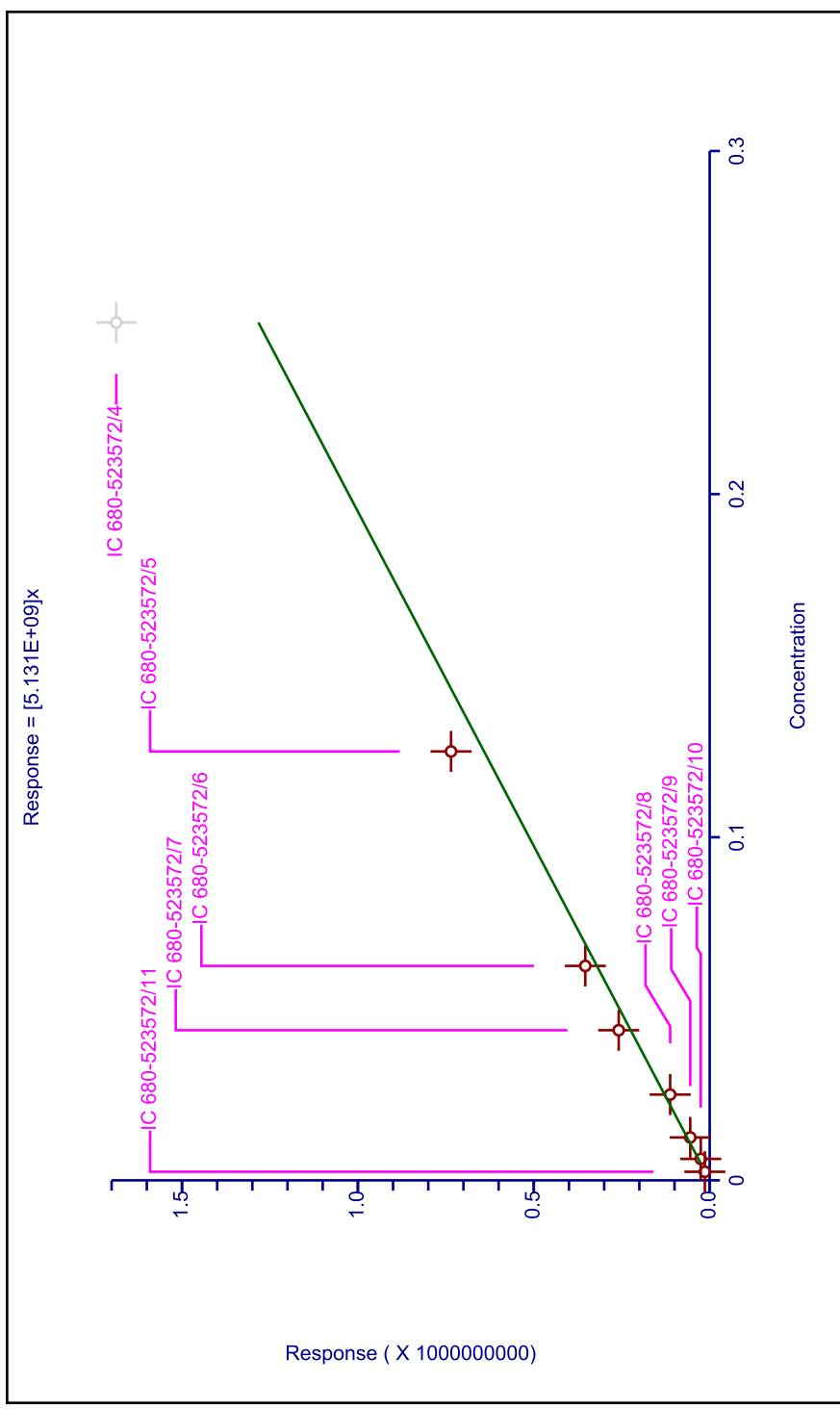
Curve Coefficients

Intercept: 0
 Slope: 5.131E+09

Error Coefficients

Standard Error: 43600000
 Relative Standard Error: 15.2
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.970

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.0025	13726331.0		5490532400.0	5490532400.0	Y
2	IC 680-523572/10	0.00625	25357515.0		4057202400.0	4057202400.0	Y
3	IC 680-523572/9	0.0125	55311764.0		4424941120.0	4424941120.0	Y
4	IC 680-523572/8	0.025	112357736.0		4494309440.0	4494309440.0	Y
5	IC 680-523572/7	0.04375	258556779.0		5909869234.28572	5909869234.28572	Y
6	IC 680-523572/6	0.0625	353637241.0		5658195856.0	5658195856.0	Y
7	IC 680-523572/5	0.125	735201390.0		5881611120.0	5881611120.0	Y
8	IC 680-523572/4	0.25	1686681883.0		6746727532.0	6746727532.0	N



Calibration

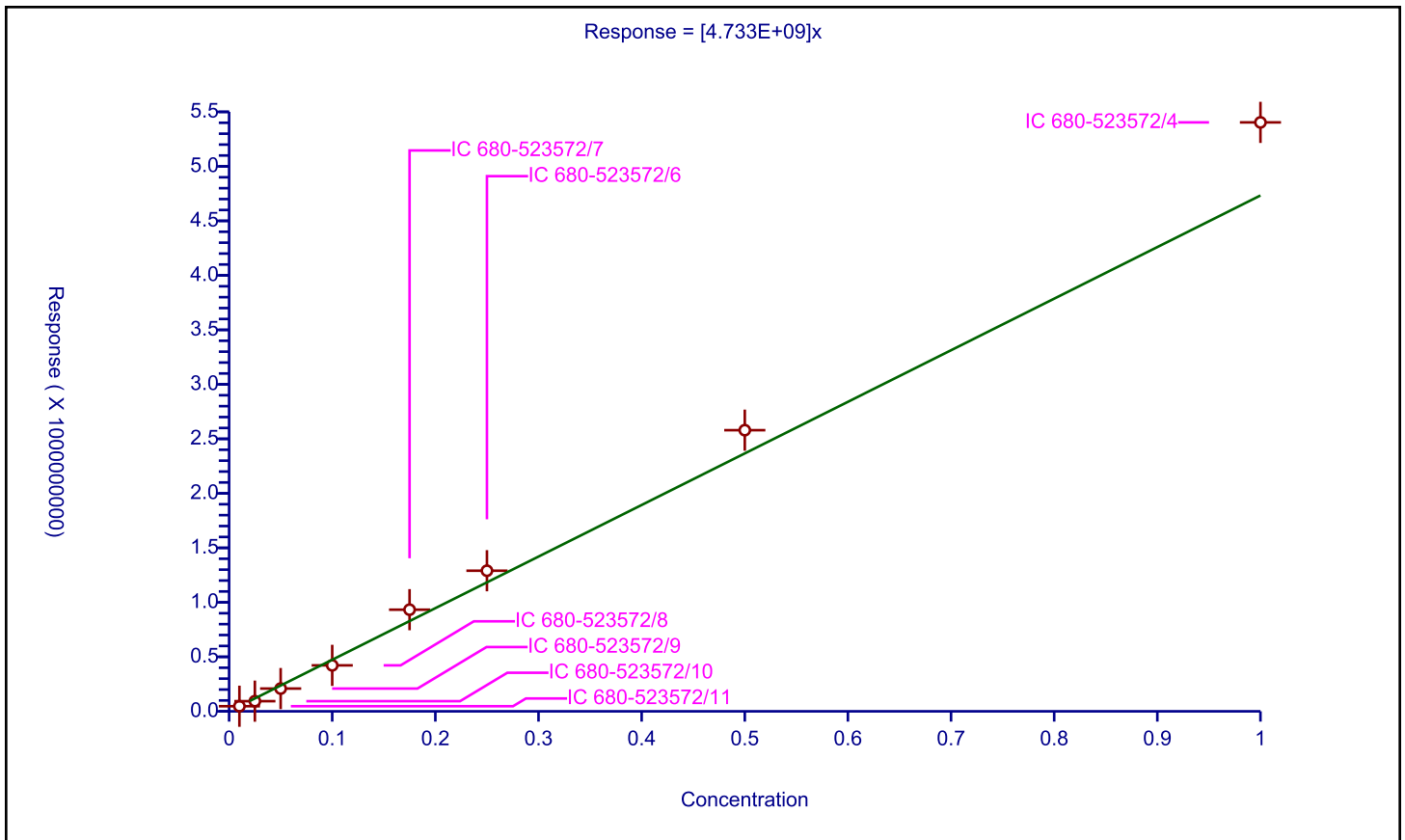
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	4.733E+09

Error Coefficients	
Standard Error:	273000000
Relative Standard Error:	13.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	46864588.0			4686458800.0	Y
2	IC 680-523572/10	0.025	93206115.0			3728244600.0	Y
3	IC 680-523572/9	0.05	208906785.0			4178135700.0	Y
4	IC 680-523572/8	0.1	421826031.0			4218260310.0	Y
5	IC 680-523572/7	0.175	932682423.0			5329613845.71429	Y
6	IC 680-523572/6	0.25	1290053084.0			5160212336.0	Y
7	IC 680-523572/5	0.5	2579520319.0			5159040638.0	Y
8	IC 680-523572/4	1.0	5403593588.0			5403593588.0	Y



Calibration

/ Dinoseb

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

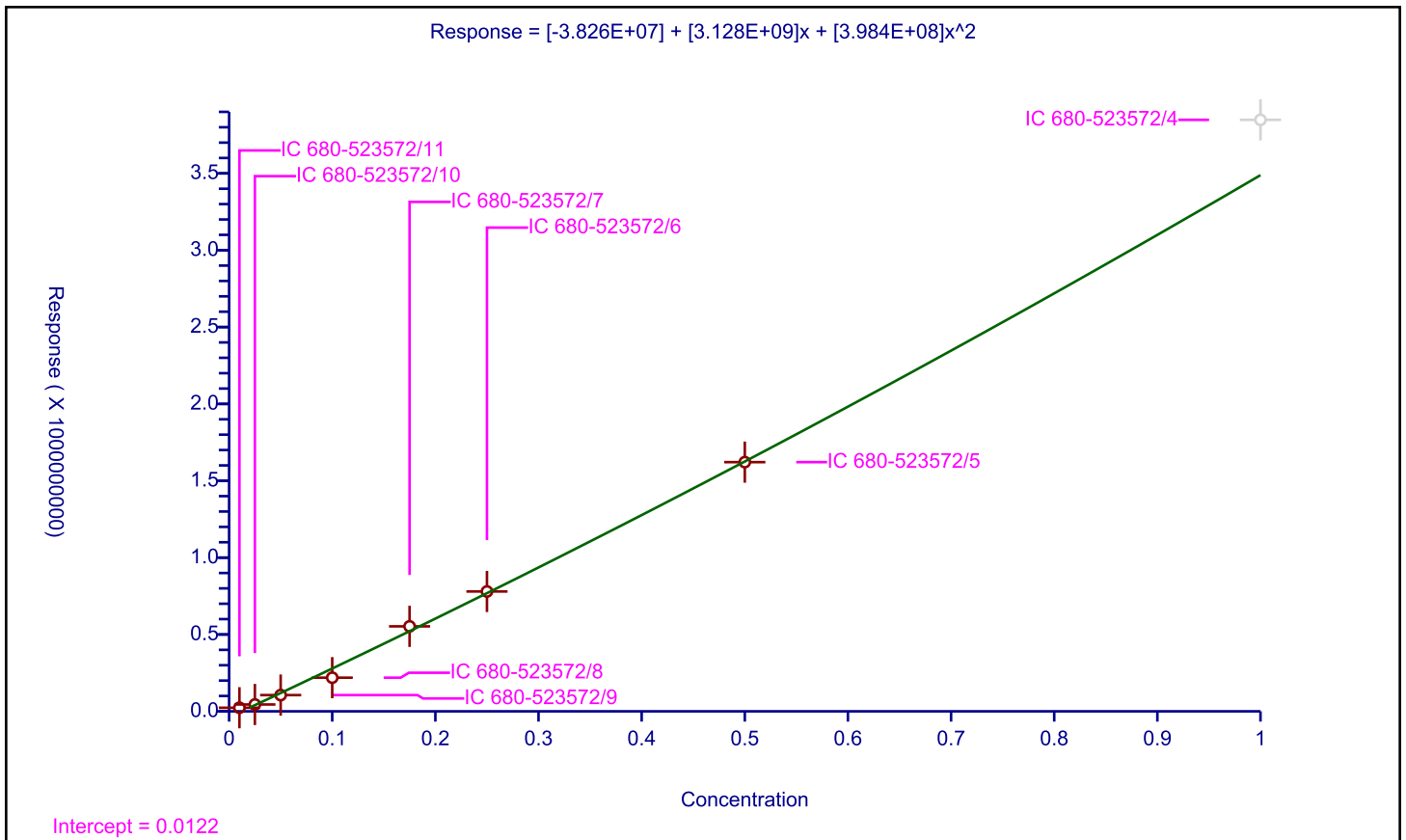
Curve Coefficients

Intercept: -3.826E+07
 Slope: 3.128E+09
 Second Order: 3.984E+08

Error Coefficients

Standard Error: 38100000
 Relative Standard Error: 49.4
 Correlation Coefficient: 0.997
 Coefficient of Determination (Adjusted): 0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	23285232.0			2328523200.0	Y
2	IC 680-523572/10	0.025	44543235.0			1781729400.0	Y
3	IC 680-523572/9	0.05	105727247.0			2114544940.0	Y
4	IC 680-523572/8	0.1	218861678.0			2188616780.0	Y
5	IC 680-523572/7	0.175	552864347.0			3159224840.0	Y
6	IC 680-523572/6	0.25	779848561.0			3119394244.0	Y
7	IC 680-523572/5	0.5	1621278512.0			3242557024.0	Y
8	IC 680-523572/4	1.0	3848176282.0			3848176282.0	N



Calibration

/ 2,4-DB

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

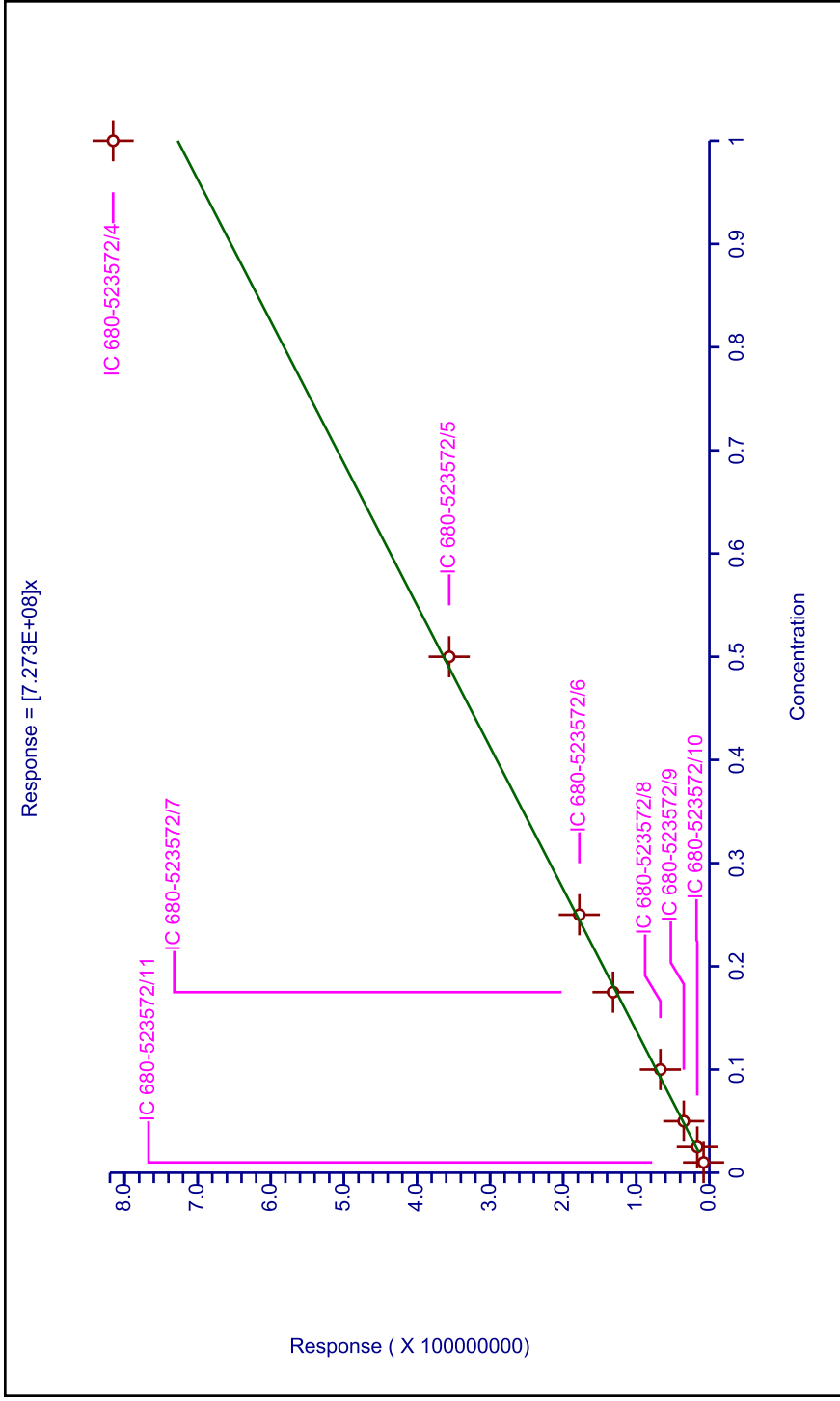
Curve Coefficients

Intercept: 0
 Slope: 7.273E+08

Error Coefficients

Standard Error: 33700000
 Relative Standard Error: 7.6
 Correlation Coefficient: 0.996
 Coefficient of Determination (Adjusted): 0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	7931034.0		793103400.0		Y
2	IC 680-523572/10	0.025	16541201.0		661648040.0		Y
3	IC 680-523572/9	0.05	35061794.0		701235880.0		Y
4	IC 680-523572/8	0.1	67025442.0		670254420.0		Y
5	IC 680-523572/7	0.175	131785359.0		753059194.285714		Y
6	IC 680-523572/6	0.25	177870018.0		711480072.0		Y
7	IC 680-523572/5	0.5	355862410.0		711724820.0		Y
8	IC 680-523572/4	1.0	815688293.0		815688293.0		Y



Calibration

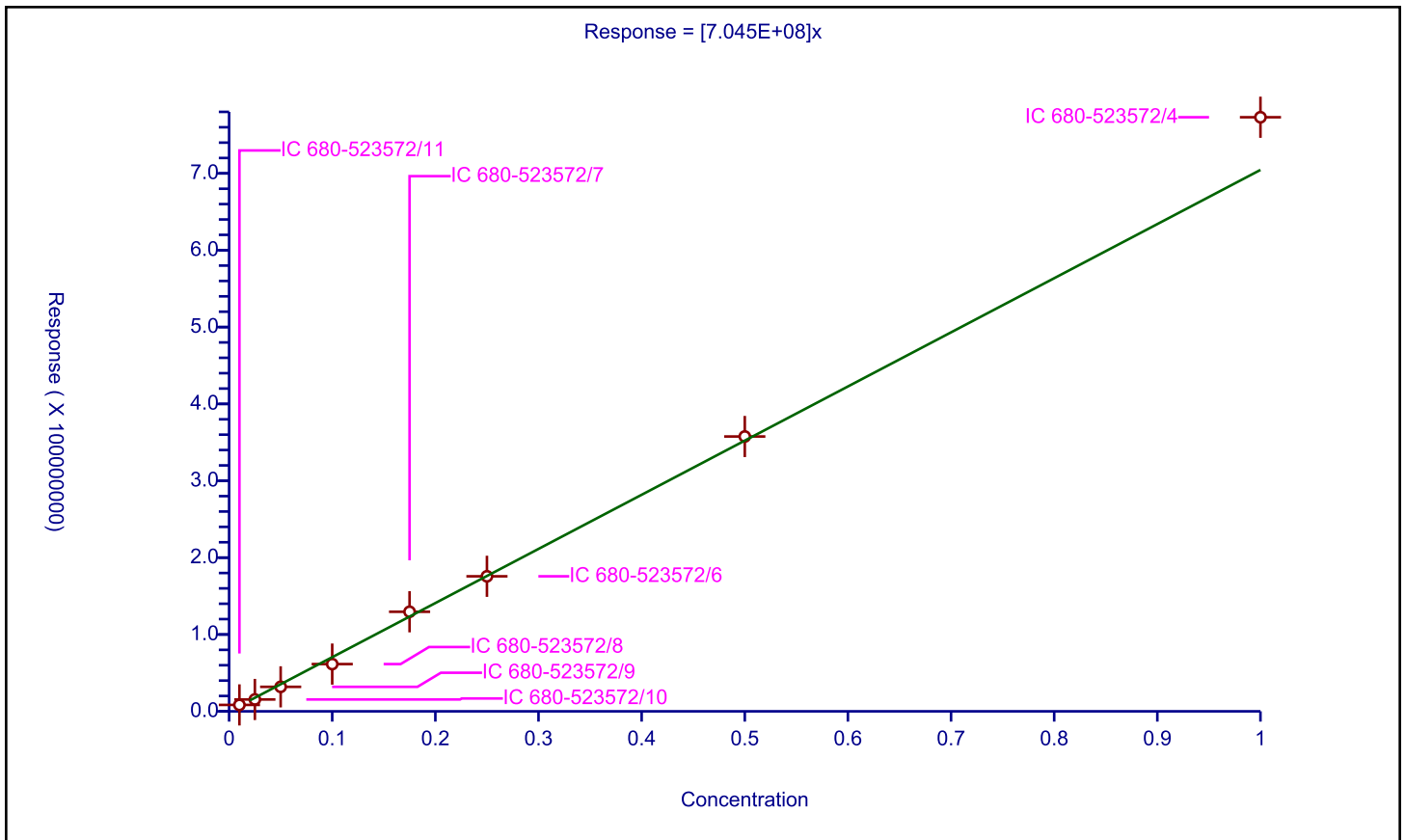
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	7.045E+08

Error Coefficients	
Standard Error:	26400000
Relative Standard Error:	11.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	8350330.0			835033000.0	Y
2	IC 680-523572/10	0.025	15434944.0			617397760.0	Y
3	IC 680-523572/9	0.05	31859951.0			637199020.0	Y
4	IC 680-523572/8	0.1	61472612.0			614726120.0	Y
5	IC 680-523572/7	0.175	129567561.0			740386062.857143	Y
6	IC 680-523572/6	0.25	175704103.0			702816412.0	Y
7	IC 680-523572/5	0.5	357621900.0			715243800.0	Y
8	IC 680-523572/4	1.0	773013995.0			773013995.0	Y



Calibration

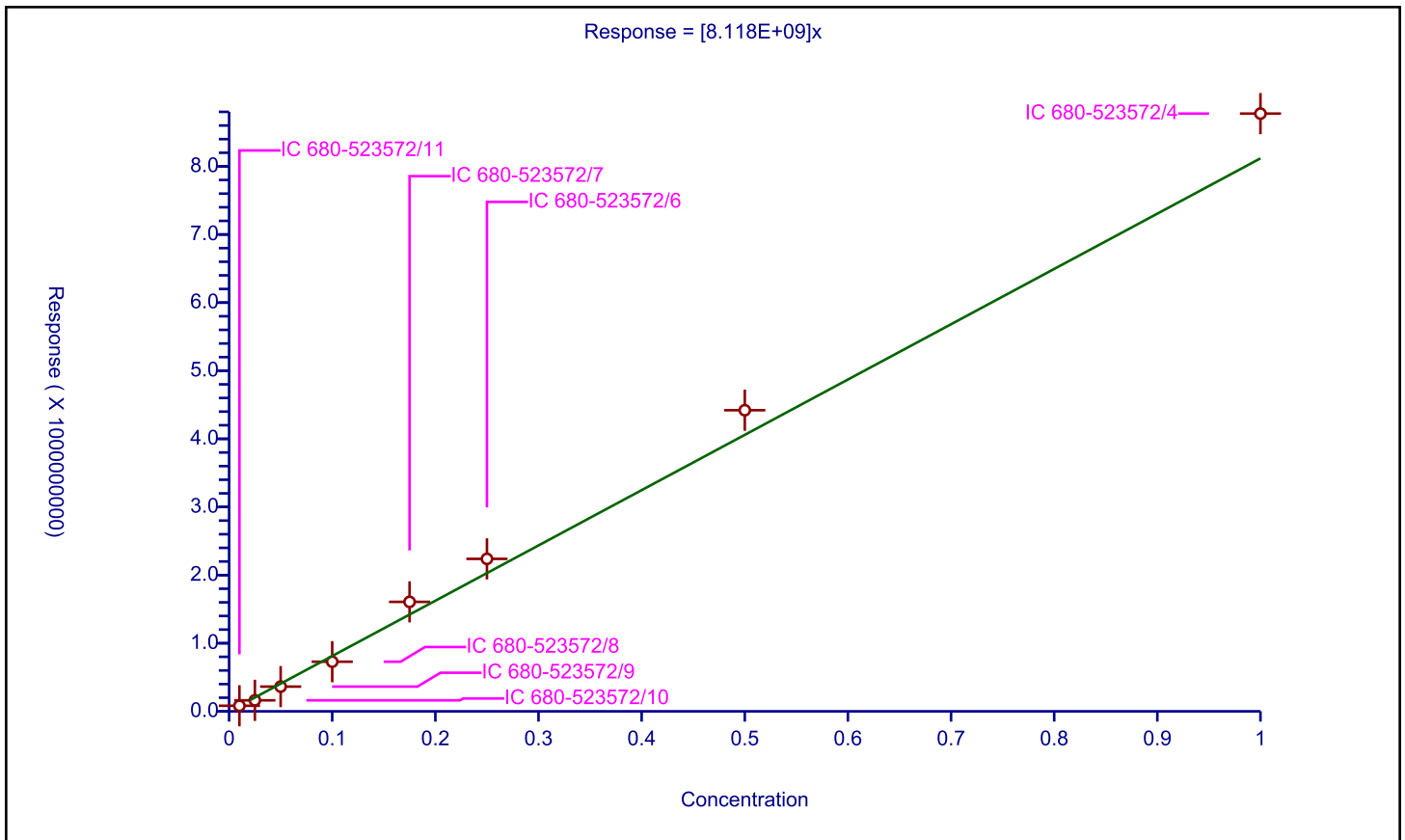
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	8.118E+09

Error Coefficients	
Standard Error:	305000000
Relative Standard Error:	12.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	81828951.0			8182895100.0	Y
2	IC 680-523572/10	0.025	161482853.0			6459314120.0	Y
3	IC 680-523572/9	0.05	363162816.0			7263256320.0	Y
4	IC 680-523572/8	0.1	728552811.0			7285528110.0	Y
5	IC 680-523572/7	0.175	1606795319.0			9181687537.14286	Y
6	IC 680-523572/6	0.25	2238371220.0			8953484880.0	Y
7	IC 680-523572/5	0.5	4420541185.0			8841082370.0	Y
8	IC 680-523572/4	1.0	8774731681.0			8774731681.0	Y



Calibration

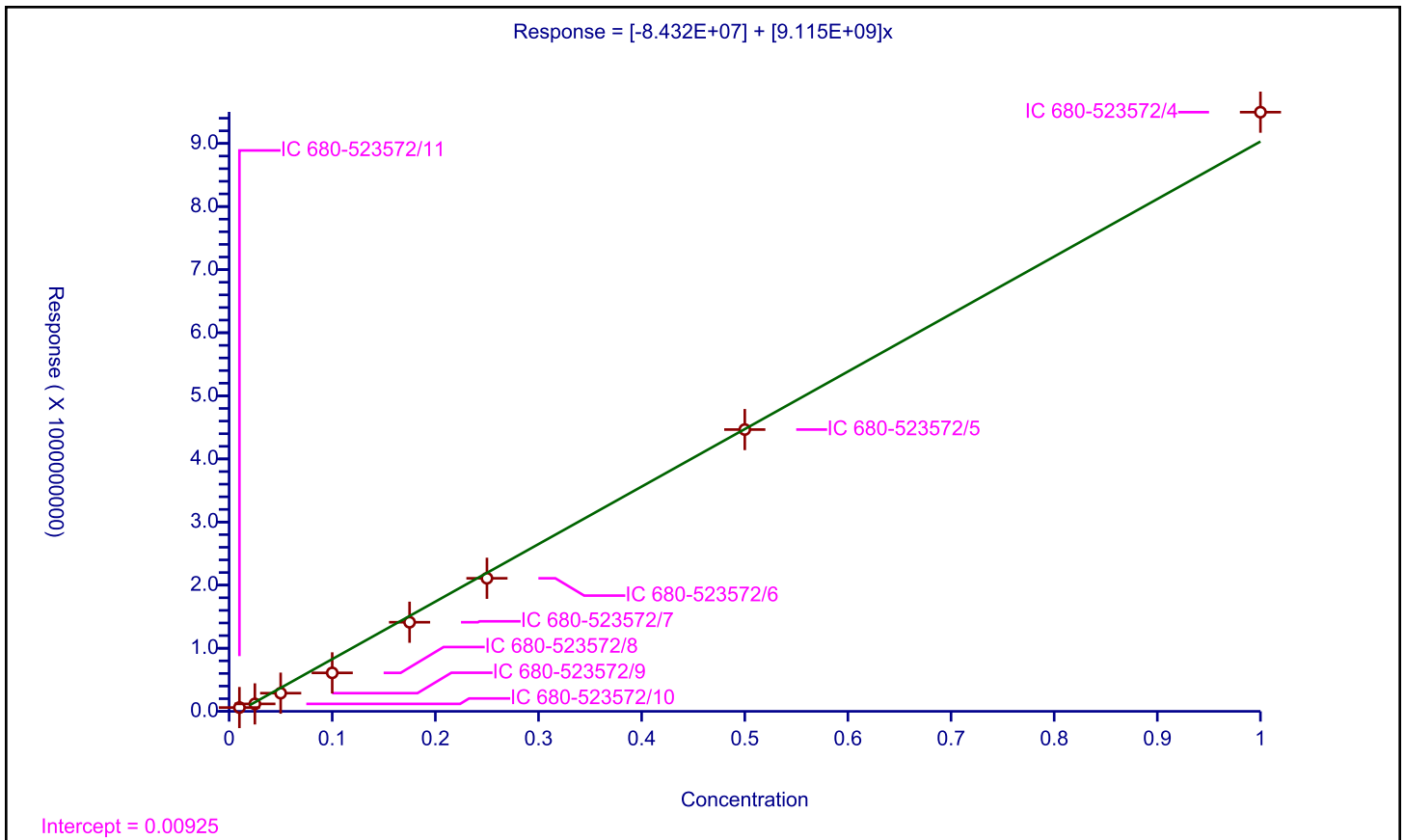
/ Picloram

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

Curve Coefficients	
Intercept:	-8.432E+07
Slope:	9.115E+09

Error Coefficients	
Standard Error:	220000000
Relative Standard Error:	27.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	60007266.0			6000726600.0	Y
2	IC 680-523572/10	0.025	118110292.0			4724411680.0	Y
3	IC 680-523572/9	0.05	287961730.0			5759234600.0	Y
4	IC 680-523572/8	0.1	609692907.0			6096929070.0	Y
5	IC 680-523572/7	0.175	1412087067.0			8069068954.28572	Y
6	IC 680-523572/6	0.25	2108705379.0			8434821516.0	Y
7	IC 680-523572/5	0.5	4465456894.0			8930913788.0	Y
8	IC 680-523572/4	1.0	9495361307.0			9495361307.0	Y



Calibration

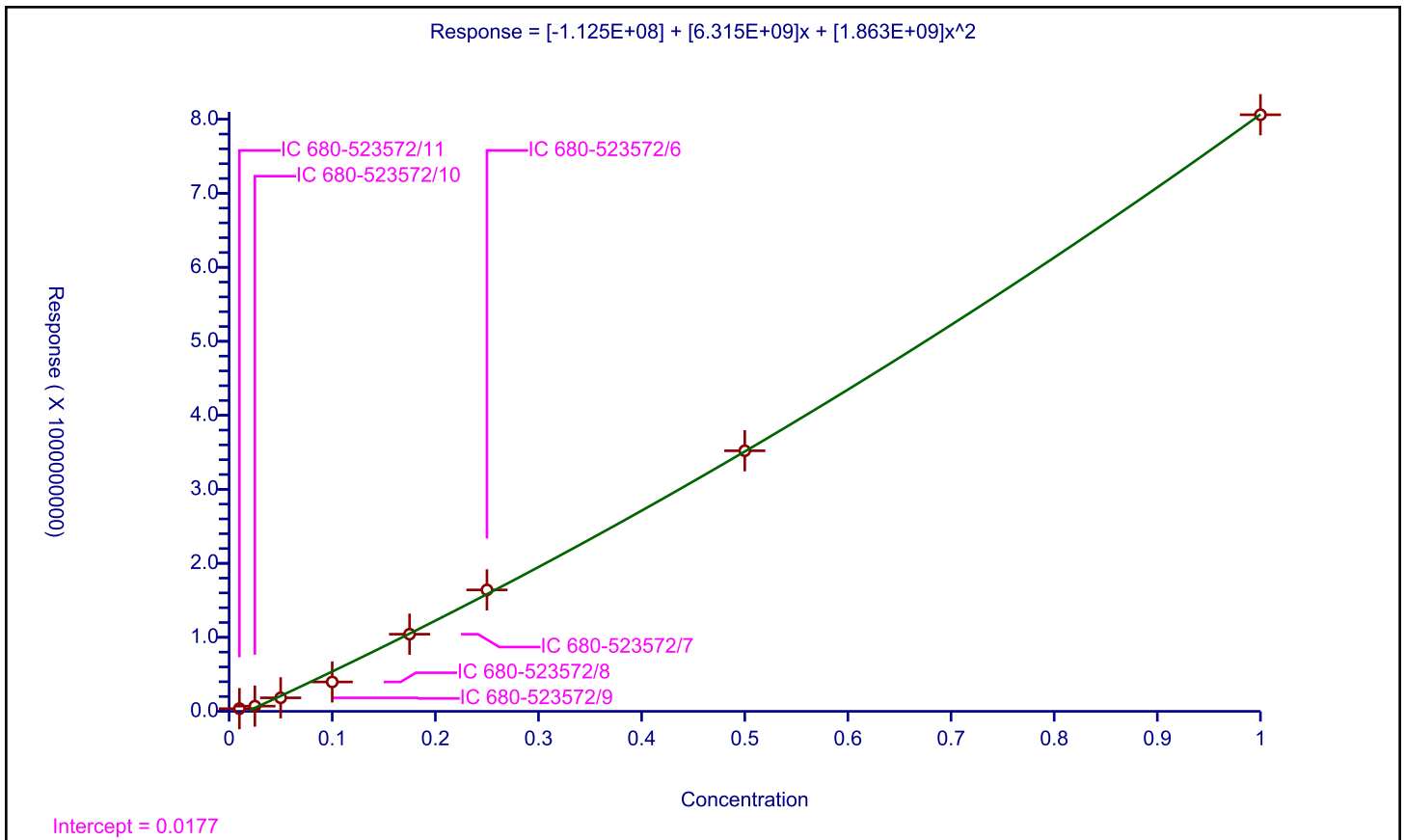
/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-1.125E+08
Slope:	6.315E+09
Second Order:	1.863E+09

Error Coefficients	
Standard Error:	79700000
Relative Standard Error:	61.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523572/11	0.01	36263377.0			3626337700.0	Y
2	IC 680-523572/10	0.025	70468139.0			2818725560.0	Y
3	IC 680-523572/9	0.05	182510548.0			3650210960.0	Y
4	IC 680-523572/8	0.1	397160260.0			3971602600.0	Y
5	IC 680-523572/7	0.175	1042379023.0			5956451560.0	Y
6	IC 680-523572/6	0.25	1640697173.0			6562788692.0	Y
7	IC 680-523572/5	0.5	3521187147.0			7042374294.0	Y
8	IC 680-523572/4	1.0	8061124513.0			8061124513.0	Y



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523317/12 Calibration Date: 05/09/2018 20:36
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		486553537		0.175	0.175	-0.3	20.0
3,5-Dichlorobenzoic acid	Ave	309205739	313964291		0.178	0.175	1.5	20.0
4-Nitrophenol	Ave	99563067	103704354		0.182	0.175	4.2	20.0
Dicamba	Ave	985452559	1006284549		0.0893	0.0875	2.1	20.0
MCPP	Ave	648656	686461		18.5	17.5	5.8	20.0
MCPA	Lin2		857183		17.6	17.5	0.5	20.0
Dichlorprop	Ave	256140387	255033703		0.174	0.175	-0.4	20.0
2,4-D	Ave	315615394	316910109		0.176	0.175	0.4	20.0
Pentachlorophenol	Ave	5067705785	5273415657		0.0455	0.0438	4.1	20.0
Silvex (2,4,5-TP)	Ave	1871206069	1959686446		0.0458	0.0438	4.7	20.0
Chloramben	Ave	1638631616	1695304126		0.181	0.175	3.5	20.0
2,4,5-T	Ave	1864427231	1902970583		0.0447	0.0438	2.1	20.0
2,4-DB	Ave	176196398	180631360		0.179	0.175	2.5	20.0
Dinoseb	Ave	1106610481	1175946086		0.186	0.175	6.3	20.0
Bentazon	Ave	257343496	260760840		0.177	0.175	1.3	20.0
Picloram	Ave	2669090691	2866909983		0.188	0.175	7.4	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2836827415	3044796143		0.188	0.175	7.3	20.0
Acifluorfen	Ave	2034814874	2242439280		0.193	0.175	10.2	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	197437216	196206617		0.174	0.175	-0.6	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523317/12 Calibration Date: 05/09/2018 20:36
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.05	6.04	6.06
4-Nitrophenol	6.17	6.16	6.18
Dicamba	6.64	6.63	6.65
MCPP	6.79	6.78	6.80
MCPA	6.92	6.91	6.93
Dichlorprop	7.10	7.09	7.11
2,4-D	7.25	7.24	7.26
Pentachlorophenol	7.60	7.58	7.60
Silvex (2,4,5-TP)	7.69	7.68	7.70
Chloramben	7.77	7.76	7.78
2,4,5-T	7.85	7.84	7.86
2,4-DB	8.09	8.08	8.10
Dinoseb	8.14	8.13	8.15
Bentazon	8.22	8.21	8.23
Picloram	8.43	8.42	8.44
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.54	8.53	8.55
Acifluorfen	9.58	9.57	9.59
2,4-Dichlorophenylacetic acid (Surr)	6.60	6.59	6.61

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 20:36:48 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:34:31 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.492	2.491	0.001	85146869	0.1750	0.1745	
2	2.541	2.540	0.001	241542359	0.1750	0.1714	
						RPD = 1.79	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	16749778	NC	NC	
2	5.029	5.028	0.001	86944012	NC	NC	
						RPD = 0.77	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	209484794	NC	NC	
2	5.702	5.700	0.002	863707068	NC	NC	
						RPD = 0.78	
4 3,5-Dichlorobenzoic acid							
1	6.048	6.047	0.001	54943751	0.1750	0.1777	
2	6.041	6.040	0.001	284727485	0.1750	0.1760	
						RPD = 0.94	
5 4-Nitrophenol							
1	6.173	6.173	0.000	18148262	0.1750	0.1823	
2	6.426	6.426	0.000	50634392	0.1750	0.1628	
						RPD = 11.31	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	34336158	0.1750	0.1739	
2	6.753	6.752	0.001	217354343	0.1750	0.1747	
						RPD = 0.45	
7 Dicamba							
1	6.641	6.642	-0.001	88049898	0.0875	0.0893	
2	6.834	6.833	0.001	397098791	0.0875	0.0895	
						RPD = 0.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	12013071	17.5	18.5	
2	6.881	6.880	0.001	70684559	17.5	18.1	
						RPD = 2.22	
9 MCPA							
1	6.917	6.916	0.001	15000707	17.5	17.6	
2	7.079	7.078	0.001	142473047	17.5	18.2	
						RPD = 3.29	
10 Dichlorprop							
1	7.103	7.102	0.001	44630898	0.1750	0.1742	
2	7.223	7.223	0.000	205646749	0.1750	0.1680	
						RPD = 3.65	
11 2,4-D							
1	7.245	7.246	-0.001	55459269	0.1750	0.1757	
2	7.443	7.443	0.000	253807544	0.1750	0.1739	
						RPD = 1.06	
12 Pentachlorophenol							
1	7.595	7.594	0.001	230711935	0.0438	0.0455	
2	7.638	7.637	0.001	783133353	0.0438	0.0464	
						RPD = 1.98	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	85736282	0.0438	0.0458	
2	7.775	7.774	0.001	304069662	0.0438	0.0453	
						RPD = 1.09	
14 Chloramben							
1	7.771	7.770	0.001	296678222	0.1750	0.1811	
2	8.082	8.081	0.001	997076330	0.1750	0.1842	
						RPD = 1.70	
15 2,4,5-T							
1	7.848	7.848	0.000	83254963	0.0438	0.0447	
2	8.008	8.008	0.000	277672888	0.0438	0.0446	
						RPD = 0.21	
16 2,4-DB							
1	8.090	8.091	-0.001	31610488	0.1750	0.1794	
2	8.223	8.222	0.001	151469161	0.1750	0.1726	
						RPD = 3.89	
17 Dinoseb							
1	8.144	8.144	0.000	205790565	0.1750	0.1860	
2	8.174	8.173	0.001	621462449	0.1750	0.1894	
						RPD = 1.85	
18 Bentazon							
1	8.218	8.218	0.000	45633147	0.1750	0.1773	
2	8.581	8.578	0.003	130083341	0.1750	0.1747	
						RPD = 1.48	
19 Picloram							
1	8.434	8.433	0.001	501709247	0.1750	0.1880	
2	8.916	8.913	0.003	1591011007	0.1750	0.1920	
						RPD = 2.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	532839325	0.1750	0.1878	
2	8.695	8.692	0.003	1677532363	0.1750	0.1884	
						RPD = 0.28	

21 Acifluorfen

1	9.578	9.577	0.001	392426874	0.1750	0.1929	
2	9.713	9.710	0.003	1146078930	0.1750	0.1637	
						RPD = 16.35	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

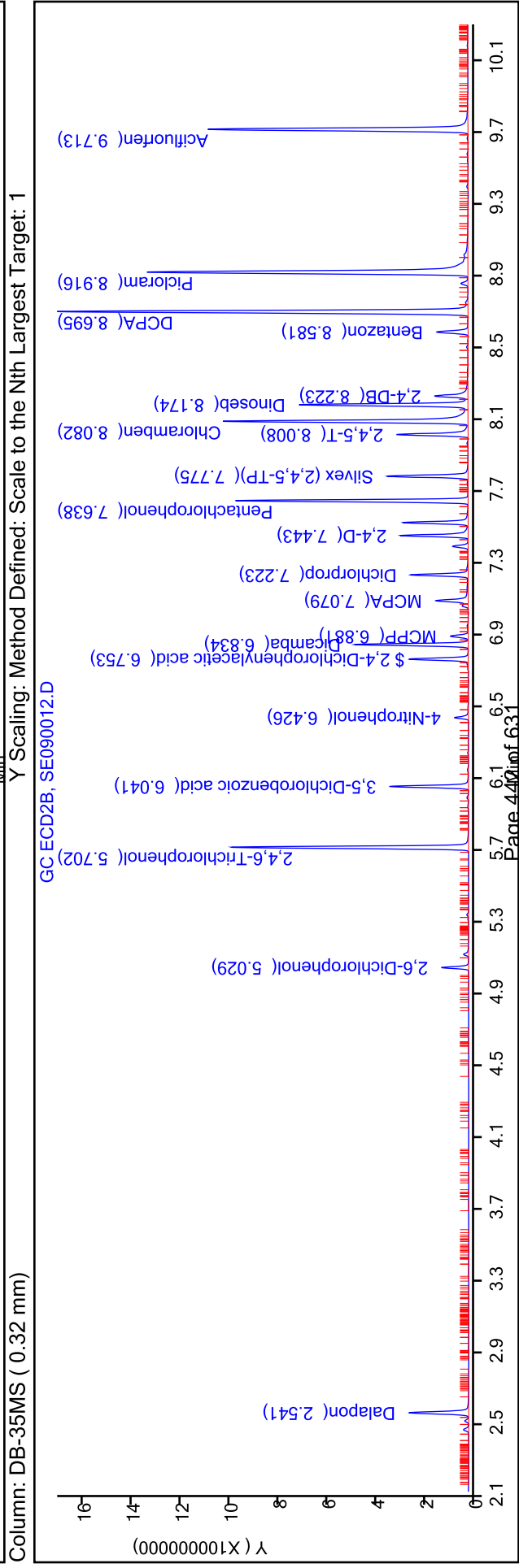
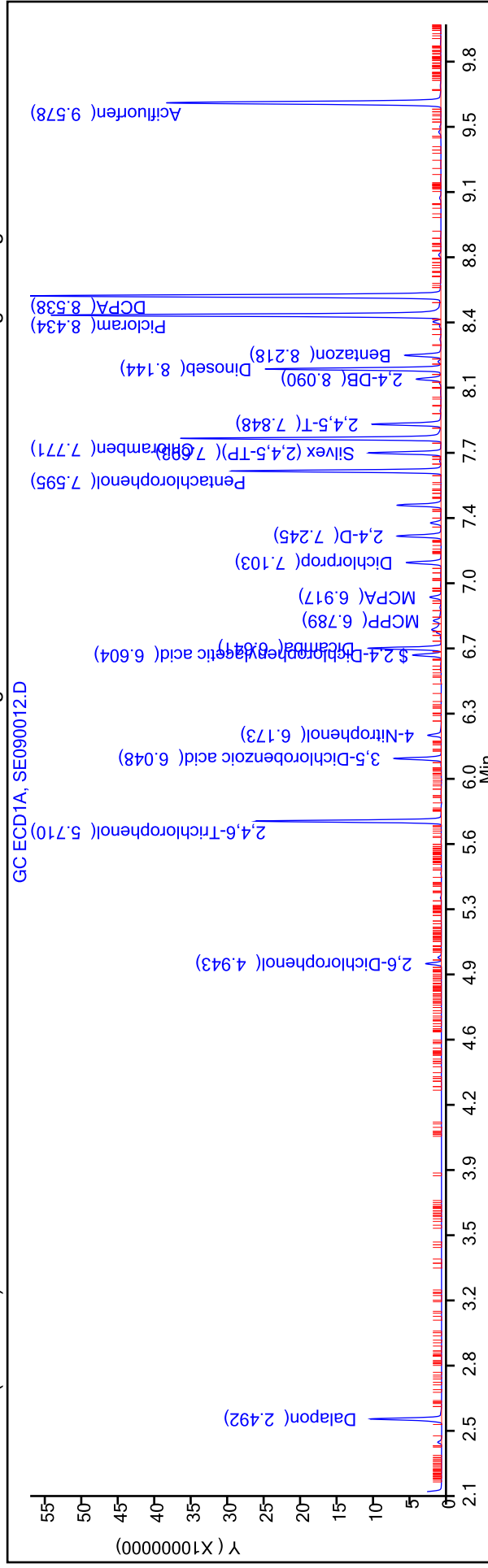
SGHERBICV_00014

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090012.D
 Injection Date: 09-May-2018 20:36:48
 Lims ID: icv herb
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 12
 ALS Bottle#: 12



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523317/12 Calibration Date: 05/09/2018 20:36
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1409266868	1380242051		0.171	0.175	-2.1	20.0
3,5-Dichlorobenzoic acid	Ave	1617456042	1627014200		0.176	0.175	0.6	20.0
4-Nitrophenol	Ave	311092218	289339383		0.163	0.175	-7.0	20.0
Dicamba	Ave	4434710231	4538271897		0.0895	0.0875	2.3	20.0
MCPP	Lin1		4039118		18.1	17.5	3.5	20.0
MCPA	Lin1		8141317		18.2	17.5	3.8	20.0
Dichlorprop	Ave	1224042756	1175124280		0.168	0.175	-4.0	20.0
2,4-D	Ave	1459816204	1450328823		0.174	0.175	-0.6	20.0
Pentachlorophenol	Ave	16865007870	17900190926		0.0464	0.0438	6.1	20.0
Silvex (2,4,5-TP)	Ave	6709043454	6950163703		0.0453	0.0438	3.6	20.0
2,4,5-T	Ave	6231494812	6346808869		0.0446	0.0438	1.9	20.0
Chloramben	Ave	5414290225	5697579029		0.184	0.175	5.2	20.0
Dinoseb	Ave	3280538682	3551213994		0.189	0.175	8.3	20.0
2,4-DB	Ave	877738161	865538063		0.173	0.175	-1.4	20.0
Bentazon	Ave	744502557	743333377		0.175	0.175	-0.2	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8906266754	9585899217		0.188	0.175	7.6	20.0
Picloram	Ave	8285688505	9091491469		0.192	0.175	9.7	20.0
Acifluorfen	Lin		6549022457		0.164	0.175	-6.5	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1244249188	1242024817		0.175	0.175	-0.2	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523317/12 Calibration Date: 05/09/2018 20:36
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.54	2.52	2.56
3,5-Dichlorobenzoic acid	6.04	6.03	6.05
4-Nitrophenol	6.43	6.42	6.44
Dicamba	6.83	6.82	6.84
MCPP	6.88	6.87	6.89
MCPA	7.08	7.07	7.09
Dichlorprop	7.22	7.21	7.23
2,4-D	7.44	7.43	7.45
Pentachlorophenol	7.64	7.63	7.65
Silvex (2,4,5-TP)	7.78	7.76	7.78
2,4,5-T	8.01	8.00	8.02
Chloramben	8.08	8.07	8.09
Dinoseb	8.17	8.16	8.18
2,4-DB	8.22	8.21	8.23
Bentazon	8.58	8.57	8.59
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.70	8.68	8.70
Picloram	8.92	8.90	8.92
Acifluorfen	9.71	9.70	9.72
2,4-Dichlorophenylacetic acid (Surr)	6.75	6.74	6.76

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 20:36:48 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 10:34:31 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 10:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.492	2.491	0.001	85146869	0.1750	0.1745	
2	2.541	2.540	0.001	241542359	0.1750	0.1714	
							RPD = 1.79

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	16749778	NC	NC	
2	5.029	5.028	0.001	86944012	NC	NC	
							RPD = 0.77

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	209484794	NC	NC	
2	5.702	5.700	0.002	863707068	NC	NC	
							RPD = 0.78

4 3,5-Dichlorobenzoic acid

1	6.048	6.047	0.001	54943751	0.1750	0.1777	
2	6.041	6.040	0.001	284727485	0.1750	0.1760	
							RPD = 0.94

5 4-Nitrophenol

1	6.173	6.173	0.000	18148262	0.1750	0.1823	
2	6.426	6.426	0.000	50634392	0.1750	0.1628	
							RPD = 11.31

\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	34336158	0.1750	0.1739	
2	6.753	6.752	0.001	217354343	0.1750	0.1747	
							RPD = 0.45

7 Dicamba

1	6.641	6.642	-0.001	88049898	0.0875	0.0893	
2	6.834	6.833	0.001	397098791	0.0875	0.0895	
							RPD = 0.22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	12013071	17.5	18.5	
2	6.881	6.880	0.001	70684559	17.5	18.1	
						RPD = 2.22	
9 MCPA							
1	6.917	6.916	0.001	15000707	17.5	17.6	
2	7.079	7.078	0.001	142473047	17.5	18.2	
						RPD = 3.29	
10 Dichlorprop							
1	7.103	7.102	0.001	44630898	0.1750	0.1742	
2	7.223	7.223	0.000	205646749	0.1750	0.1680	
						RPD = 3.65	
11 2,4-D							
1	7.245	7.246	-0.001	55459269	0.1750	0.1757	
2	7.443	7.443	0.000	253807544	0.1750	0.1739	
						RPD = 1.06	
12 Pentachlorophenol							
1	7.595	7.594	0.001	230711935	0.0438	0.0455	
2	7.638	7.637	0.001	783133353	0.0438	0.0464	
						RPD = 1.98	
13 Silvex (2,4,5-TP)							
1	7.693	7.692	0.001	85736282	0.0438	0.0458	
2	7.775	7.774	0.001	304069662	0.0438	0.0453	
						RPD = 1.09	
14 Chloramben							
1	7.771	7.770	0.001	296678222	0.1750	0.1811	
2	8.082	8.081	0.001	997076330	0.1750	0.1842	
						RPD = 1.70	
15 2,4,5-T							
1	7.848	7.848	0.000	83254963	0.0438	0.0447	
2	8.008	8.008	0.000	277672888	0.0438	0.0446	
						RPD = 0.21	
16 2,4-DB							
1	8.090	8.091	-0.001	31610488	0.1750	0.1794	
2	8.223	8.222	0.001	151469161	0.1750	0.1726	
						RPD = 3.89	
17 Dinoseb							
1	8.144	8.144	0.000	205790565	0.1750	0.1860	
2	8.174	8.173	0.001	621462449	0.1750	0.1894	
						RPD = 1.85	
18 Bentazon							
1	8.218	8.218	0.000	45633147	0.1750	0.1773	
2	8.581	8.578	0.003	130083341	0.1750	0.1747	
						RPD = 1.48	
19 Picloram							
1	8.434	8.433	0.001	501709247	0.1750	0.1880	
2	8.916	8.913	0.003	1591011007	0.1750	0.1920	
						RPD = 2.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.538	8.537	0.001	532839325	0.1750	0.1878	
2	8.695	8.692	0.003	1677532363	0.1750	0.1884	
						RPD = 0.28	

21 Acifluorfen

1	9.578	9.577	0.001	392426874	0.1750	0.1929	
2	9.713	9.710	0.003	1146078930	0.1750	0.1637	
						RPD = 16.35	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090012.D
Injection Date: 09-May-2018 20:36:48
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 12

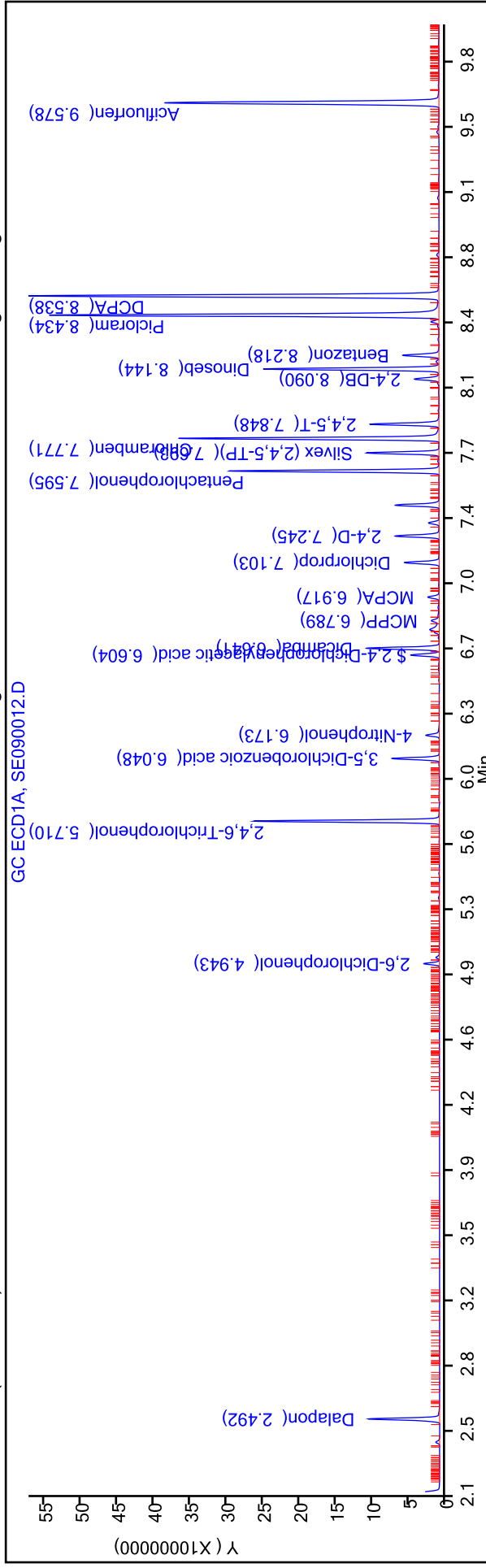
Lims ID: icv herb

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

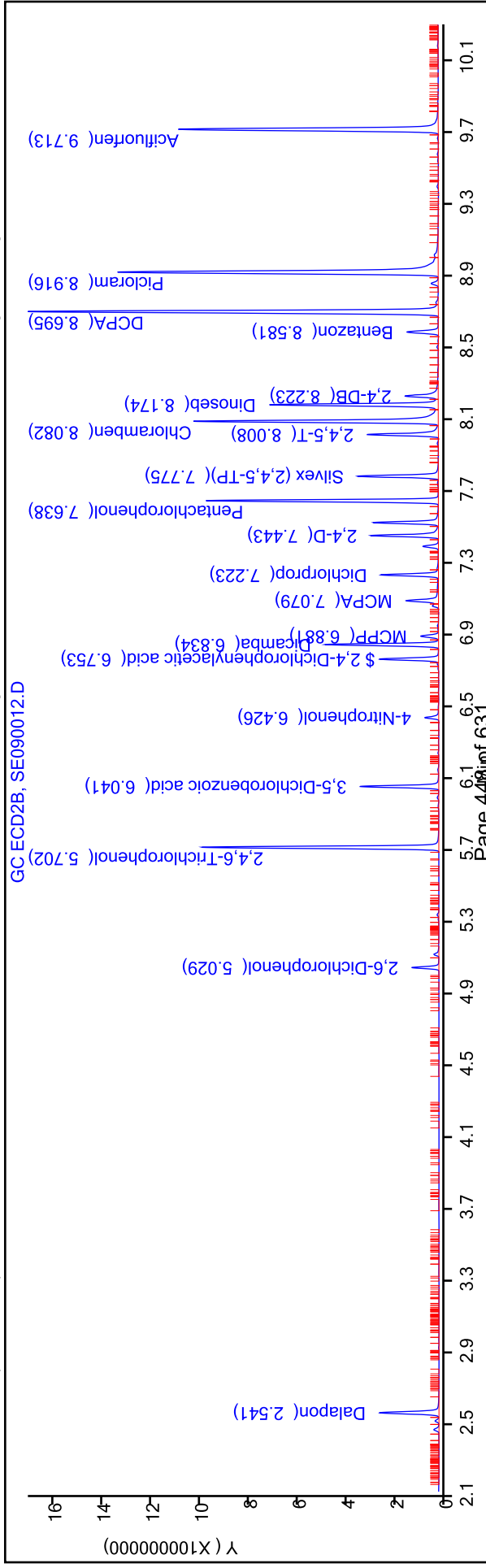
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/32 Calibration Date: 05/10/2018 03:09
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090032.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		483092737		0.173	0.175	-1.0	20.0
3,5-Dichlorobenzoic acid	Ave	309205739	318651571		0.180	0.175	3.1	20.0
4-Nitrophenol	Ave	99563067	103963983		0.183	0.175	4.4	20.0
Dicamba	Ave	985452559	1027045726		0.0912	0.0875	4.2	20.0
MCPP	Ave	648656	725179		19.6	17.5	11.8	20.0
MCPA	Lin2		868113		17.8	17.5	1.8	20.0
Dichlorprop	Ave	256140387	257736606		0.176	0.175	0.6	20.0
2,4-D	Ave	315615394	320574760		0.178	0.175	1.6	20.0
Pentachlorophenol	Ave	5067705785	5351963017		0.0462	0.0438	5.6	20.0
Silvex (2,4,5-TP)	Ave	1871206069	1979546491		0.0463	0.0438	5.8	20.0
Chloramben	Ave	1638631616	1701022354		0.182	0.175	3.8	20.0
2,4,5-T	Ave	1864427231	1909288229		0.0448	0.0438	2.4	20.0
2,4-DB	Ave	176196398	181880371		0.181	0.175	3.2	20.0
Dinoseb	Ave	1106610481	1231461851		0.195	0.175	11.3	20.0
Bentazon	Ave	257343496	261819914		0.178	0.175	1.7	20.0
Picloram	Ave	2669090691	2939218274		0.193	0.175	10.1	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2836827415	3051254771		0.188	0.175	7.6	20.0
Acifluorfen	Ave	2034814874	2465182183		0.212	0.175	21.2*	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	197437216	199772549		0.177	0.175	1.2	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/32 Calibration Date: 05/10/2018 03:09
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090032.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.05	6.04	6.06
4-Nitrophenol	6.17	6.16	6.18
Dicamba	6.64	6.63	6.65
MCPP	6.79	6.78	6.80
MCPA	6.92	6.91	6.93
Dichlorprop	7.10	7.09	7.11
2,4-D	7.24	7.24	7.26
Pentachlorophenol	7.59	7.58	7.60
Silvex (2,4,5-TP)	7.69	7.68	7.70
Chloramben	7.77	7.76	7.78
2,4,5-T	7.85	7.84	7.86
2,4-DB	8.09	8.08	8.10
Dinoseb	8.14	8.13	8.15
Bentazon	8.22	8.21	8.23
Picloram	8.43	8.42	8.44
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.54	8.53	8.55
Acifluorfen	9.58	9.57	9.59
2,4-Dichlorophenylacetic acid (Surr)	6.60	6.59	6.61

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-May-2018 03:09:27 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-032
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:25:21 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:00:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	84541229	0.1750	0.1732	
2	2.541	2.540	0.001	248577594	0.1750	0.1764	
						RPD = 1.81	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	16933187	NC	NC	
2	5.029	5.028	0.001	87900761	NC	NC	
						RPD = 0.77	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	213170807	NC	NC	
2	5.702	5.700	0.002	884449932	NC	NC	
						RPD = 1.41	
4 3,5-Dichlorobenzoic acid							
1	6.046	6.047	-0.001	55764025	0.1750	0.1803	
2	6.041	6.040	0.001	292163936	0.1750	0.1806	
						RPD = 0.16	
5 4-Nitrophenol							
1	6.172	6.173	-0.001	18193697	0.1750	0.1827	
2	6.425	6.426	-0.001	52487575	0.1750	0.1687	
						RPD = 7.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	34960196	0.1750	0.1771	
2	6.753	6.752	0.001	222867006	0.1750	0.1791	
						RPD = 1.15	
7 Dicamba							
1	6.641	6.642	-0.001	89866501	0.0875	0.0912	
2	6.833	6.833	0.000	408629977	0.0875	0.0921	
						RPD = 1.04	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	12690638	17.5	19.6	
2	6.881	6.880	0.001	72255379	17.5	18.5	
						RPD = 5.39	
9 MCPA							
1	6.916	6.916	0.000	15191976	17.5	17.8	
2	7.079	7.078	0.001	147652533	17.5	18.9	
						RPD = 5.79	
10 Dichlorprop							
1	7.101	7.102	-0.001	45103906	0.1750	0.1761	
2	7.223	7.223	0.000	210811899	0.1750	0.1722	
						RPD = 2.22	
11 2,4-D							
1	7.244	7.246	-0.002	56100583	0.1750	0.1777	
2	7.443	7.443	0.000	258671532	0.1750	0.1772	
						RPD = 0.31	
12 Pentachlorophenol							
1	7.594	7.594	0.000	234148382	0.0438	0.0462	
2	7.638	7.637	0.001	803621097	0.0438	0.0477	
						RPD = 3.08	
13 Silvex (2,4,5-TP)							
1	7.691	7.692	-0.001	86605159	0.0438	0.0463	
2	7.773	7.774	-0.001	313800302	0.0438	0.0468	
						RPD = 1.05	
14 Chloramben							
1	7.769	7.770	-0.001	297678912	0.1750	0.1817	
2	8.081	8.081	0.000	1003940255	0.1750	0.1854	
						RPD = 2.05	
15 2,4,5-T							
1	7.846	7.848	-0.002	83531360	0.0438	0.0448	
2	8.006	8.008	-0.002	287592941	0.0438	0.0462	
						RPD = 2.97	
16 2,4-DB							
1	8.089	8.091	-0.002	31829065	0.1750	0.1806	
2	8.221	8.222	-0.001	150173632	0.1750	0.1711	
						RPD = 5.43	
17 Dinoseb							
1	8.143	8.144	-0.001	215505824	0.1750	0.1947	
2	8.173	8.173	0.000	661515837	0.1750	0.2016	
						RPD = 3.48	
18 Bentazon							
1	8.217	8.218	-0.001	45818485	0.1750	0.1780	
2	8.578	8.578	0.000	133431687	0.1750	0.1792	
						RPD = 0.66	
19 Picloram							
1	8.433	8.433	0.000	514363198	0.1750	0.1927	
2	8.913	8.913	0.000	1683046117	0.1750	0.2031	
						RPD = 5.26	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.537	8.537	0.000	533969585	0.1750	0.1882	
2	8.693	8.692	0.001	1724824181	0.1750	0.1937	
						RPD = 2.85	

21 Acifluorfen

1	9.576	9.577	-0.001	431406882	0.1750	0.2120	
2	9.712	9.710	0.002	1304158427	0.1750	0.1824	
						RPD = 15.02	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D
Injection Date: 10-May-2018 03:09:27
Lims ID: ccv h5
Instrument ID: CSGS

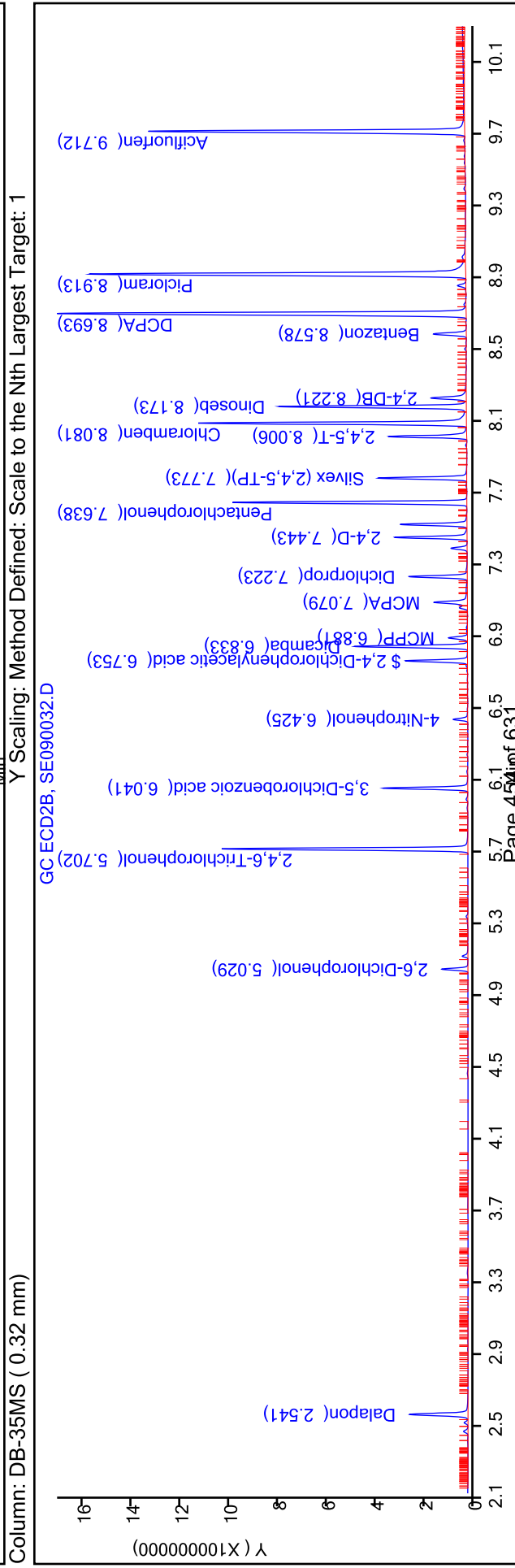
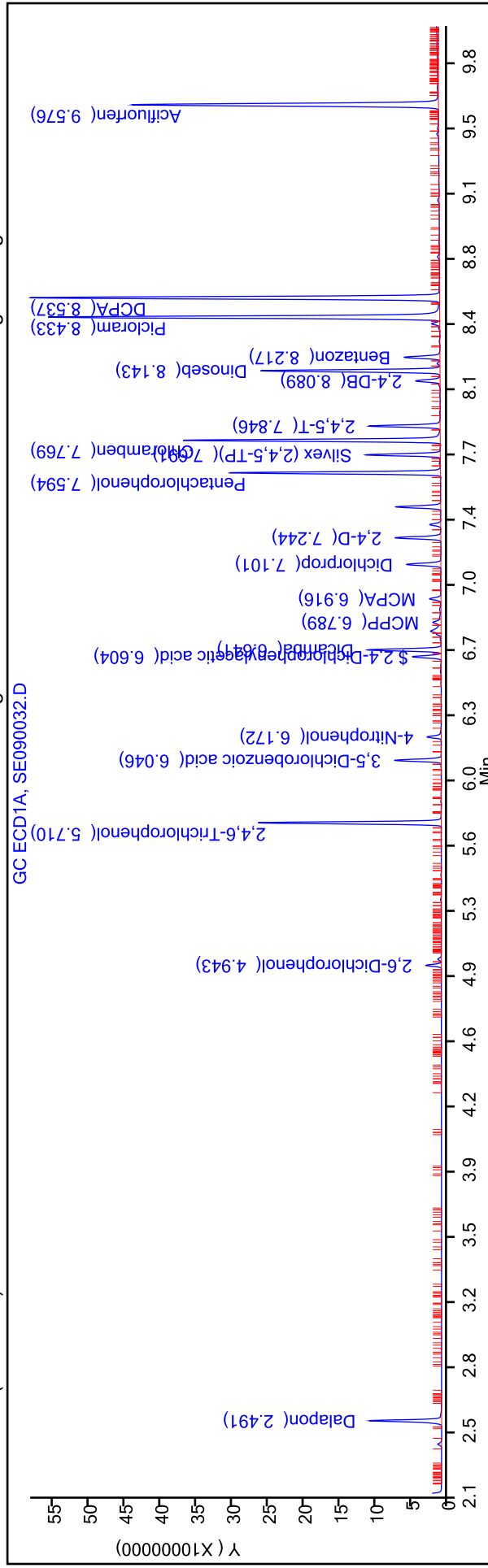
Operator ID: GEM
Worklist Smp#: 32

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 32

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/32 Calibration Date: 05/10/2018 03:09
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090032.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1409266868	1420443394		0.176	0.175	0.8	20.0
3,5-Dichlorobenzoic acid	Ave	1617456042	1669508206		0.181	0.175	3.2	20.0
4-Nitrophenol	Ave	311092218	299929000		0.169	0.175	-3.6	20.0
Dicamba	Ave	4434710231	4670056880		0.0921	0.0875	5.3	20.0
MCPP	Lin1		4128879		18.5	17.5	5.9	20.0
MCPA	Lin1		8437288		18.9	17.5	7.8	20.0
Dichlorprop	Ave	1224042756	1204639423		0.172	0.175	-1.6	20.0
2,4-D	Ave	1459816204	1478123040		0.177	0.175	1.3	20.0
Pentachlorophenol	Ave	16865007870	18368482217		0.0477	0.0438	8.9	20.0
Silvex (2,4,5-TP)	Ave	6709043454	7172578331		0.0468	0.0438	6.9	20.0
2,4,5-T	Ave	6231494812	6573552937		0.0462	0.0438	5.5	20.0
Chloramben	Ave	5414290225	5736801457		0.185	0.175	6.0	20.0
Dinoseb	Ave	3280538682	3780090497		0.202	0.175	15.2	20.0
2,4-DB	Ave	877738161	858135040		0.171	0.175	-2.2	20.0
Bentazon	Ave	744502557	762466783		0.179	0.175	2.4	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8906266754	9856138177		0.194	0.175	10.7	20.0
Picloram	Ave	8285688505	9617406383		0.203	0.175	16.1	20.0
Acifluorfen	Lin		7452333869		0.182	0.175	4.2	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1244249188	1273525749		0.179	0.175	2.4	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/32 Calibration Date: 05/10/2018 03:09
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090032.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.54	2.52	2.56
3,5-Dichlorobenzoic acid	6.04	6.03	6.05
4-Nitrophenol	6.43	6.42	6.44
Dicamba	6.83	6.82	6.84
MCPP	6.88	6.87	6.89
MCPA	7.08	7.07	7.09
Dichlorprop	7.22	7.21	7.23
2,4-D	7.44	7.43	7.45
Pentachlorophenol	7.64	7.63	7.65
Silvex (2,4,5-TP)	7.77	7.76	7.78
2,4,5-T	8.01	8.00	8.02
Chloramben	8.08	8.07	8.09
Dinoseb	8.17	8.16	8.18
2,4-DB	8.22	8.21	8.23
Bentazon	8.58	8.57	8.59
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.69	8.68	8.70
Picloram	8.91	8.90	8.92
Acifluorfen	9.71	9.70	9.72
2,4-Dichlorophenylacetic acid (Surr)	6.75	6.74	6.76

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-May-2018 03:09:27 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-032
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:25:21 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:00:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	84541229	0.1750	0.1732	
2	2.541	2.540	0.001	248577594	0.1750	0.1764	
						RPD = 1.81	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	16933187	NC	NC	
2	5.029	5.028	0.001	87900761	NC	NC	
						RPD = 0.77	
3 2,4,6-Trichlorophenol							
1	5.710	5.710	0.000	213170807	NC	NC	
2	5.702	5.700	0.002	884449932	NC	NC	
						RPD = 1.41	
4 3,5-Dichlorobenzoic acid							
1	6.046	6.047	-0.001	55764025	0.1750	0.1803	
2	6.041	6.040	0.001	292163936	0.1750	0.1806	
						RPD = 0.16	
5 4-Nitrophenol							
1	6.172	6.173	-0.001	18193697	0.1750	0.1827	
2	6.425	6.426	-0.001	52487575	0.1750	0.1687	
						RPD = 7.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	34960196	0.1750	0.1771	
2	6.753	6.752	0.001	222867006	0.1750	0.1791	
						RPD = 1.15	
7 Dicamba							
1	6.641	6.642	-0.001	89866501	0.0875	0.0912	
2	6.833	6.833	0.000	408629977	0.0875	0.0921	
						RPD = 1.04	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.789	6.789	0.000	12690638	17.5	19.6	
2	6.881	6.880	0.001	72255379	17.5	18.5	
						RPD = 5.39	
9 MCPA							
1	6.916	6.916	0.000	15191976	17.5	17.8	
2	7.079	7.078	0.001	147652533	17.5	18.9	
						RPD = 5.79	
10 Dichlorprop							
1	7.101	7.102	-0.001	45103906	0.1750	0.1761	
2	7.223	7.223	0.000	210811899	0.1750	0.1722	
						RPD = 2.22	
11 2,4-D							
1	7.244	7.246	-0.002	56100583	0.1750	0.1777	
2	7.443	7.443	0.000	258671532	0.1750	0.1772	
						RPD = 0.31	
12 Pentachlorophenol							
1	7.594	7.594	0.000	234148382	0.0438	0.0462	
2	7.638	7.637	0.001	803621097	0.0438	0.0477	
						RPD = 3.08	
13 Silvex (2,4,5-TP)							
1	7.691	7.692	-0.001	86605159	0.0438	0.0463	
2	7.773	7.774	-0.001	313800302	0.0438	0.0468	
						RPD = 1.05	
14 Chloramben							
1	7.769	7.770	-0.001	297678912	0.1750	0.1817	
2	8.081	8.081	0.000	1003940255	0.1750	0.1854	
						RPD = 2.05	
15 2,4,5-T							
1	7.846	7.848	-0.002	83531360	0.0438	0.0448	
2	8.006	8.008	-0.002	287592941	0.0438	0.0462	
						RPD = 2.97	
16 2,4-DB							
1	8.089	8.091	-0.002	31829065	0.1750	0.1806	
2	8.221	8.222	-0.001	150173632	0.1750	0.1711	
						RPD = 5.43	
17 Dinoseb							
1	8.143	8.144	-0.001	215505824	0.1750	0.1947	
2	8.173	8.173	0.000	661515837	0.1750	0.2016	
						RPD = 3.48	
18 Bentazon							
1	8.217	8.218	-0.001	45818485	0.1750	0.1780	
2	8.578	8.578	0.000	133431687	0.1750	0.1792	
						RPD = 0.66	
19 Picloram							
1	8.433	8.433	0.000	514363198	0.1750	0.1927	
2	8.913	8.913	0.000	1683046117	0.1750	0.2031	
						RPD = 5.26	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.537	8.537	0.000	533969585	0.1750	0.1882	
2	8.693	8.692	0.001	1724824181	0.1750	0.1937	
						RPD = 2.85	

21 Acifluorfen

1	9.576	9.577	-0.001	431406882	0.1750	0.2120	
2	9.712	9.710	0.002	1304158427	0.1750	0.1824	
						RPD = 15.02	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090032.D
Injection Date: 10-May-2018 03:09:27
Lims ID: ccv h5
Instrument ID: CSGS

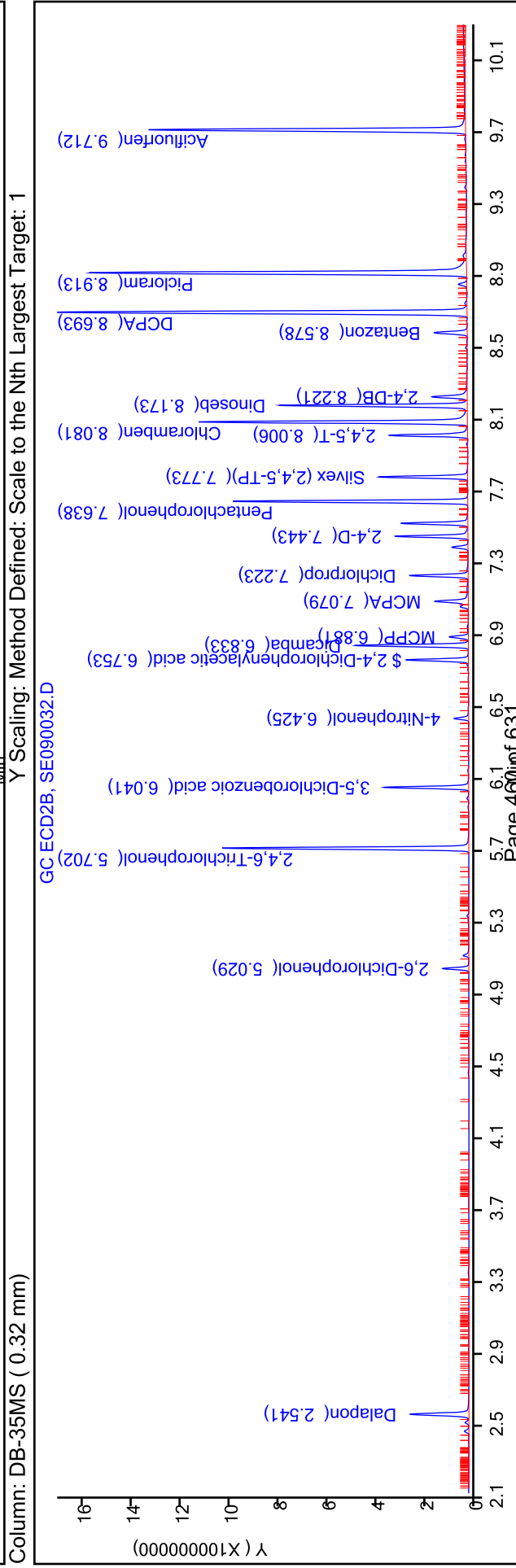
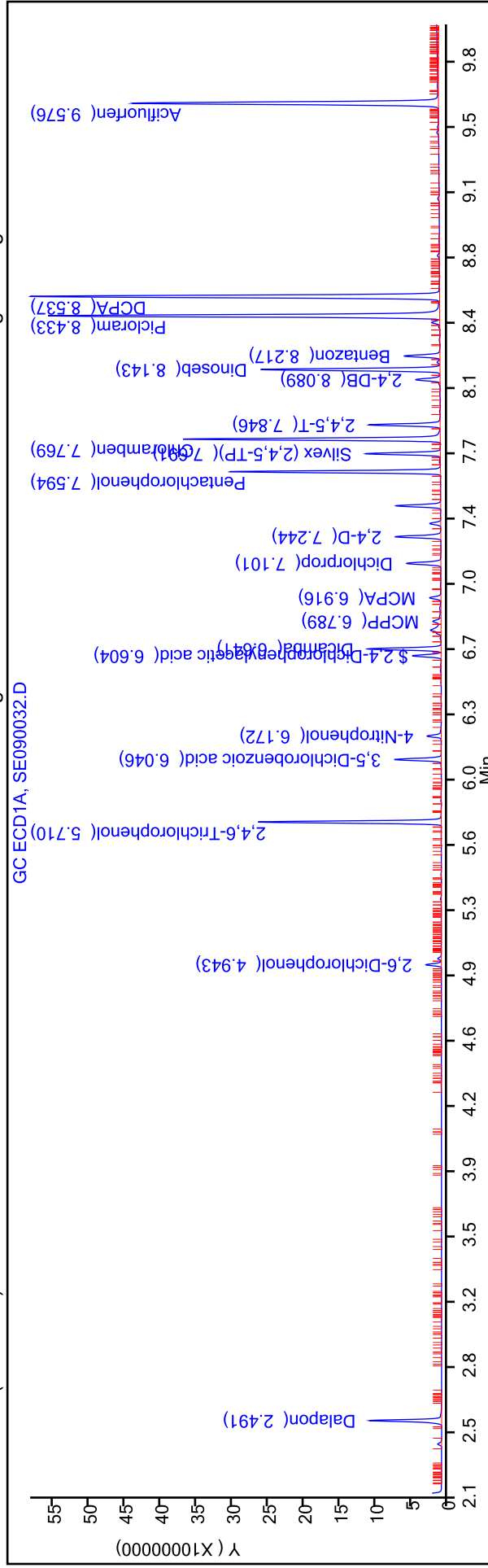
Operator ID: GEM
Worklist Smp#: 32

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 32

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/47 Calibration Date: 05/10/2018 08:03
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090047.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		469960310		0.0943	0.100	-5.7	20.0
3,5-Dichlorobenzoic acid	Ave	309205739	309583470		0.100	0.100	0.1	20.0
4-Nitrophenol	Ave	99563067	105968570		0.106	0.100	6.4	20.0
Dicamba	Ave	985452559	961247540		0.0488	0.0500	-2.5	20.0
MCPP	Ave	648656	728975		11.2	10.0	12.4	20.0
MCPA	Lin2		778452		9.06	10.0	-9.4	20.0
Dichlorprop	Ave	256140387	245178430		0.0957	0.100	-4.3	20.0
2,4-D	Ave	315615394	300253550		0.0951	0.100	-4.9	20.0
Pentachlorophenol	Ave	5067705785	4851183840		0.0239	0.0250	-4.3	20.0
Silvex (2,4,5-TP)	Ave	1871206069	1746421360		0.0233	0.0250	-6.7	20.0
Chloramben	Ave	1638631616	1405450040		0.0858	0.100	-14.2	20.0
2,4,5-T	Ave	1864427231	1695212640		0.0227	0.0250	-9.1	20.0
2,4-DB	Ave	176196398	158954680		0.0902	0.100	-9.8	20.0
Dinoseb	Ave	1106610481	1053653720		0.0952	0.100	-4.8	20.0
Bentazon	Ave	257343496	210864440		0.0819	0.100	-18.1	20.0
Picloram	Ave	2669090691	2219969100		0.0832	0.100	-16.8	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2836827415	2536966070		0.0894	0.100	-10.6	20.0
Acifluorfen	Ave	2034814874	1921921500		0.0945	0.100	-5.5	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	197437216	193483910		0.0980	0.100	-2.0	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/47 Calibration Date: 05/10/2018 08:03
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090047.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.05	6.04	6.06
4-Nitrophenol	6.17	6.16	6.18
Dicamba	6.64	6.63	6.65
MCPP	6.79	6.78	6.80
MCPA	6.92	6.91	6.93
Dichlorprop	7.10	7.09	7.11
2,4-D	7.24	7.24	7.26
Pentachlorophenol	7.59	7.58	7.60
Silvex (2,4,5-TP)	7.69	7.68	7.70
Chloramben	7.77	7.76	7.78
2,4,5-T	7.85	7.84	7.86
2,4-DB	8.09	8.08	8.10
Dinoseb	8.14	8.13	8.15
Bentazon	8.22	8.21	8.23
Picloram	8.43	8.42	8.44
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.54	8.53	8.55
Acifluorfen	9.58	9.57	9.59
2,4-Dichlorophenylacetic acid (Surr)	6.60	6.59	6.61

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090047.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-May-2018 08:03:37 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-047
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	46996031	0.1000	0.0943	
2	2.540	2.540	0.000	136540399	0.1000	0.0969	
						RPD = 2.71	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	9554737	NC	NC	
2	5.029	5.028	0.001	49268048	NC	NC	
						RPD = 0.10	
3 2,4,6-Trichlorophenol							
1	5.709	5.710	-0.001	114614335	NC	NC	
2	5.700	5.700	0.000	477546813	NC	NC	
						RPD = 1.84	
4 3,5-Dichlorobenzoic acid							
1	6.046	6.047	-0.001	30958347	0.1000	0.1001	
2	6.039	6.040	-0.001	160306833	0.1000	0.0991	
						RPD = 1.02	
5 4-Nitrophenol							
1	6.173	6.173	0.000	10596857	0.1000	0.1064	
2	6.425	6.426	-0.001	30027658	0.1000	0.0965	
						RPD = 9.77	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	19348391	0.1000	0.0980	
2	6.752	6.752	0.000	121115819	0.1000	0.0973	
						RPD = 0.67	
7 Dicamba							
1	6.640	6.642	-0.002	48062377	0.0500	0.0488	
2	6.833	6.833	0.000	216289510	0.0500	0.0488	
						RPD = 0.00	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090047.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.788	6.789	-0.001	7289747	10.0	11.2	
2	6.879	6.880	-0.001	40911067	10.0	10.1	
						RPD = 11.07	
9 MCPA							
1	6.915	6.916	-0.001	7784520	10.0	9.06	
2	7.078	7.078	0.000	84412748	10.0	10.3	
						RPD = 13.17	
10 Dichlorprop							
1	7.101	7.102	-0.001	24517843	0.1000	0.0957	
2	7.222	7.223	-0.001	109237101	0.1000	0.0892	
						RPD = 7.00	
11 2,4-D							
1	7.244	7.246	-0.002	30025355	0.1000	0.0951	
2	7.441	7.443	-0.002	133519333	0.1000	0.0915	
						RPD = 3.93	
12 Pentachlorophenol							
1	7.594	7.594	0.000	121279596	0.0250	0.0239	
2	7.637	7.637	0.000	418366792	0.0250	0.0248	
						RPD = 3.59	
13 Silvex (2,4,5-TP)							
1	7.691	7.692	-0.001	43660534	0.0250	0.0233	
2	7.773	7.774	-0.001	154753865	0.0250	0.0231	
						RPD = 1.15	
14 Chloramben							
1	7.769	7.770	-0.001	140545004	0.1000	0.0858	
2	8.079	8.081	-0.002	478196503	0.1000	0.0883	
						RPD = 2.93	
15 2,4,5-T							
1	7.846	7.848	-0.002	42380316	0.0250	0.0227	
2	8.005	8.008	-0.003	141406748	0.0250	0.0227	
						RPD = 0.17	
16 2,4-DB							
1	8.089	8.091	-0.002	15895468	0.1000	0.0902	
2	8.220	8.222	-0.002	75149130	0.1000	0.0856	
						RPD = 5.23	
17 Dinoseb							
1	8.143	8.144	-0.001	105365372	0.1000	0.0952	
2	8.172	8.173	-0.001	312200723	0.1000	0.0952	
						RPD = 0.05	
18 Bentazon							
1	8.216	8.218	-0.002	21086444	0.1000	0.0819	
2	8.578	8.578	0.000	62722419	0.1000	0.0842	
						RPD = 2.78	
19 Picloram							
1	8.432	8.433	-0.001	221996910	0.1000	0.0832	
2	8.912	8.913	-0.001	710169446	0.1000	0.0857	
						RPD = 3.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.535	8.537	-0.002	253696607	0.1000	0.0894	
2	8.691	8.692	-0.001	815830203	0.1000	0.0916	
						RPD = 2.40	

21 Acifluorfen

1	9.575	9.577	-0.002	192192150	0.1000	0.0945	
2	9.709	9.710	-0.001	529952050	0.1000	0.0909	
						RPD = 3.85	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\CSGS\20180509-47236.b\SE090047.D
Injection Date: 10-May-2018 08:03:37
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 47

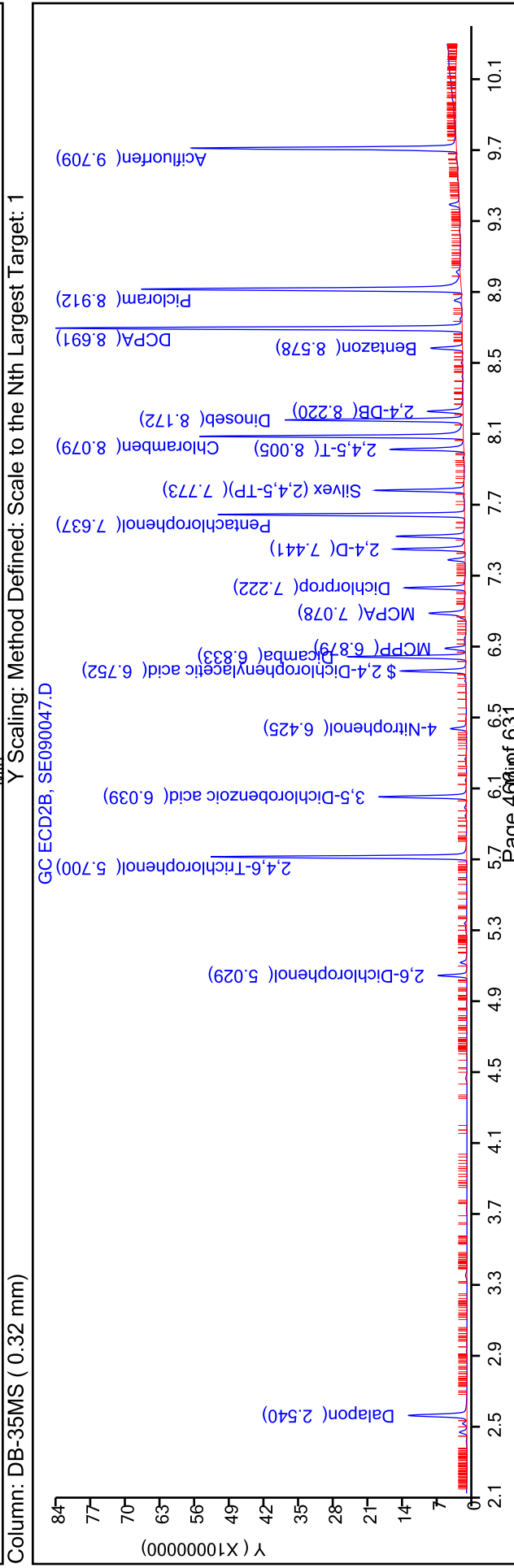
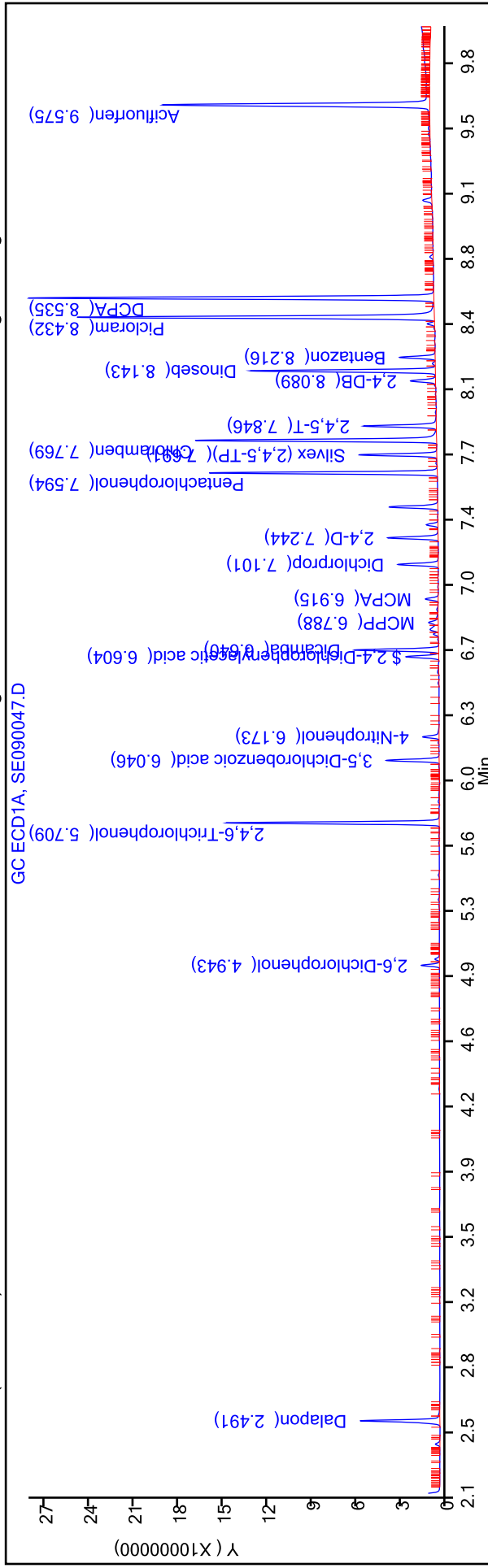
Lims ID: ccv h4
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 47

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/47 Calibration Date: 05/10/2018 08:03
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090047.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1409266868	1365403990		0.0969	0.100	-3.1	20.0
3,5-Dichlorobenzoic acid	Ave	1617456042	1603068330		0.0991	0.100	-0.9	20.0
4-Nitrophenol	Ave	311092218	300276580		0.0965	0.100	-3.5	20.0
Dicamba	Ave	4434710231	4325790200		0.0488	0.0500	-2.5	20.0
MCPP	Lin1		4091107		10.1	10.0	0.6	20.0
MCPA	Lin1		8441275		10.3	10.0	3.4	20.0
Dichlorprop	Ave	1224042756	1092371010		0.0892	0.100	-10.8	20.0
2,4-D	Ave	1459816204	1335193330		0.0915	0.100	-8.5	20.0
Pentachlorophenol	Ave	16865007870	16734671680		0.0248	0.0250	-0.8	20.0
Silvex (2,4,5-TP)	Ave	6709043454	6190154600		0.0231	0.0250	-7.7	20.0
2,4,5-T	Ave	6231494812	5656269920		0.0227	0.0250	-9.2	20.0
Chloramben	Ave	5414290225	4781965030		0.0883	0.100	-11.7	20.0
Dinoseb	Ave	3280538682	3122007230		0.0952	0.100	-4.8	20.0
2,4-DB	Ave	877738161	751491300		0.0856	0.100	-14.4	20.0
Bentazon	Ave	744502557	627224190		0.0842	0.100	-15.8	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8906266754	8158302030		0.0916	0.100	-8.4	20.0
Picloram	Ave	8285688505	7101694460		0.0857	0.100	-14.3	20.0
Acifluorfen	Lin		5299520500		0.0909	0.100	-9.1	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1244249188	1211158190		0.0973	0.100	-2.7	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523317/47 Calibration Date: 05/10/2018 08:03
 Instrument ID: CSGS Calib Start Date: 05/09/2018 17:59
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/09/2018 20:17
 Lab File ID: SE090047.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.54	2.52	2.56
3,5-Dichlorobenzoic acid	6.04	6.03	6.05
4-Nitrophenol	6.43	6.42	6.44
Dicamba	6.83	6.82	6.84
MCPP	6.88	6.87	6.89
MCPA	7.08	7.07	7.09
Dichlorprop	7.22	7.21	7.23
2,4-D	7.44	7.43	7.45
Pentachlorophenol	7.64	7.63	7.65
Silvex (2,4,5-TP)	7.77	7.76	7.78
2,4,5-T	8.01	8.00	8.02
Chloramben	8.08	8.07	8.09
Dinoseb	8.17	8.16	8.18
2,4-DB	8.22	8.21	8.23
Bentazon	8.58	8.57	8.59
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.69	8.68	8.70
Picloram	8.91	8.90	8.92
Acifluorfen	9.71	9.70	9.72
2,4-Dichlorophenylacetic acid (Surr)	6.75	6.74	6.76

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090047.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 10-May-2018 08:03:37 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-047
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.491	2.491	0.000	46996031	0.1000	0.0943	
2	2.540	2.540	0.000	136540399	0.1000	0.0969	
						RPD = 2.71	
2 2,6-Dichlorophenol							
1	4.943	4.943	0.000	9554737	NC	NC	
2	5.029	5.028	0.001	49268048	NC	NC	
						RPD = 0.10	
3 2,4,6-Trichlorophenol							
1	5.709	5.710	-0.001	114614335	NC	NC	
2	5.700	5.700	0.000	477546813	NC	NC	
						RPD = 1.84	
4 3,5-Dichlorobenzoic acid							
1	6.046	6.047	-0.001	30958347	0.1000	0.1001	
2	6.039	6.040	-0.001	160306833	0.1000	0.0991	
						RPD = 1.02	
5 4-Nitrophenol							
1	6.173	6.173	0.000	10596857	0.1000	0.1064	
2	6.425	6.426	-0.001	30027658	0.1000	0.0965	
						RPD = 9.77	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.604	6.604	0.000	19348391	0.1000	0.0980	
2	6.752	6.752	0.000	121115819	0.1000	0.0973	
						RPD = 0.67	
7 Dicamba							
1	6.640	6.642	-0.002	48062377	0.0500	0.0488	
2	6.833	6.833	0.000	216289510	0.0500	0.0488	
						RPD = 0.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.788	6.789	-0.001	7289747	10.0	11.2	
2	6.879	6.880	-0.001	40911067	10.0	10.1	
						RPD = 11.07	
9 MCPA							
1	6.915	6.916	-0.001	7784520	10.0	9.06	
2	7.078	7.078	0.000	84412748	10.0	10.3	
						RPD = 13.17	
10 Dichlorprop							
1	7.101	7.102	-0.001	24517843	0.1000	0.0957	
2	7.222	7.223	-0.001	109237101	0.1000	0.0892	
						RPD = 7.00	
11 2,4-D							
1	7.244	7.246	-0.002	30025355	0.1000	0.0951	
2	7.441	7.443	-0.002	133519333	0.1000	0.0915	
						RPD = 3.93	
12 Pentachlorophenol							
1	7.594	7.594	0.000	121279596	0.0250	0.0239	
2	7.637	7.637	0.000	418366792	0.0250	0.0248	
						RPD = 3.59	
13 Silvex (2,4,5-TP)							
1	7.691	7.692	-0.001	43660534	0.0250	0.0233	
2	7.773	7.774	-0.001	154753865	0.0250	0.0231	
						RPD = 1.15	
14 Chloramben							
1	7.769	7.770	-0.001	140545004	0.1000	0.0858	
2	8.079	8.081	-0.002	478196503	0.1000	0.0883	
						RPD = 2.93	
15 2,4,5-T							
1	7.846	7.848	-0.002	42380316	0.0250	0.0227	
2	8.005	8.008	-0.003	141406748	0.0250	0.0227	
						RPD = 0.17	
16 2,4-DB							
1	8.089	8.091	-0.002	15895468	0.1000	0.0902	
2	8.220	8.222	-0.002	75149130	0.1000	0.0856	
						RPD = 5.23	
17 Dinoseb							
1	8.143	8.144	-0.001	105365372	0.1000	0.0952	
2	8.172	8.173	-0.001	312200723	0.1000	0.0952	
						RPD = 0.05	
18 Bentazon							
1	8.216	8.218	-0.002	21086444	0.1000	0.0819	
2	8.578	8.578	0.000	62722419	0.1000	0.0842	
						RPD = 2.78	
19 Picloram							
1	8.432	8.433	-0.001	221996910	0.1000	0.0832	
2	8.912	8.913	-0.001	710169446	0.1000	0.0857	
						RPD = 3.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.535	8.537	-0.002	253696607	0.1000	0.0894	
2	8.691	8.692	-0.001	815830203	0.1000	0.0916	
						RPD = 2.40	

21 Acifluorfen

1	9.575	9.577	-0.002	192192150	0.1000	0.0945	
2	9.709	9.710	-0.001	529952050	0.1000	0.0909	
						RPD = 3.85	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090047.D

Operator ID: GEM
Worklist Smp#: 47

Injection Date: 10-May-2018 08:03:37

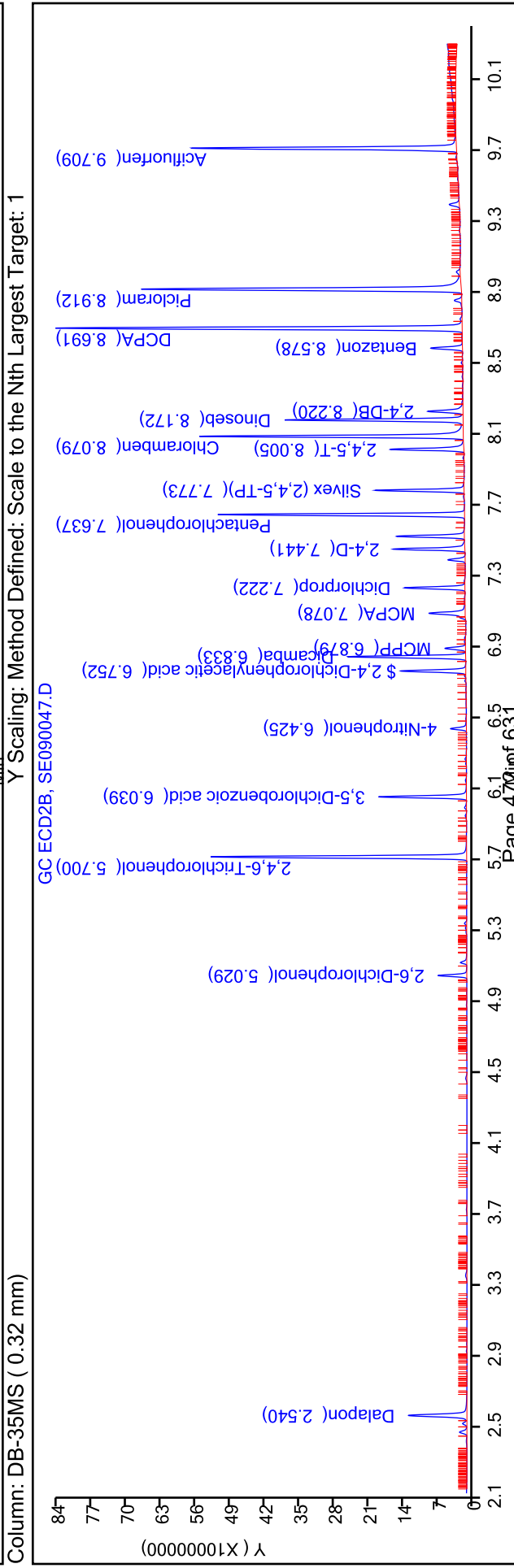
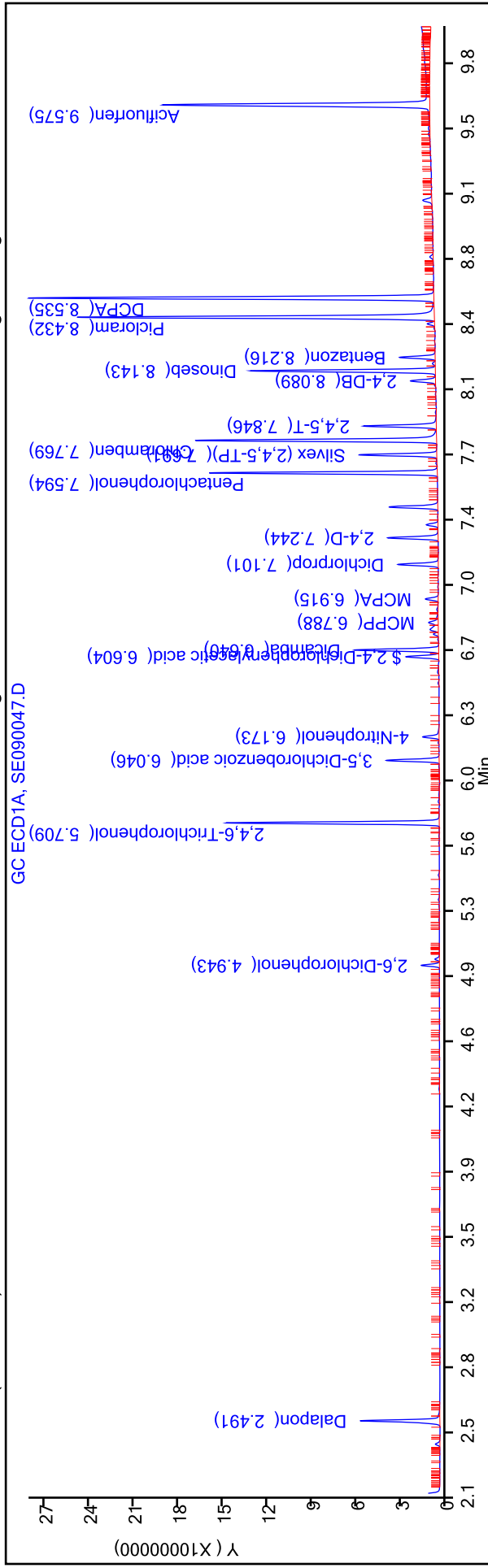
Lims ID: ccv h4
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 47

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523572/12 Calibration Date: 05/11/2018 14:23
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		415152560		0.168	0.175	-3.9	20.0
3,5-Dichlorobenzoic acid	Ave	283999151	281315046		0.173	0.175	-0.9	20.0
4-Nitrophenol	Ave	92446979	95302463		0.180	0.175	3.1	20.0
Dicamba	Ave	902628145	899377760		0.0872	0.0875	-0.4	20.0
MCPP	Ave	597922	640092		18.7	17.5	7.1	20.0
MCPA	Lin1		769661		19.4	17.5	10.7	20.0
Dichlorprop	Ave	230133436	223367034		0.170	0.175	-2.9	20.0
2,4-D	Ave	273146870	267442800		0.171	0.175	-2.1	20.0
Pentachlorophenol	Ave	4371457736	4435690926		0.0444	0.0438	1.5	20.0
Silvex (2,4,5-TP)	Ave	1596048239	1627692617		0.0446	0.0438	2.0	20.0
Chloramben	Ave	1354357931	1374551514		0.178	0.175	1.5	20.0
2,4,5-T	Ave	1551041319	1571778331		0.0443	0.0438	1.3	20.0
2,4-DB	Ave	145729072	146248457		0.176	0.175	0.4	20.0
Dinoseb	Ave	906941545	917696446		0.177	0.175	1.2	20.0
Bentazon	Ave	221195610	216692486		0.171	0.175	-2.0	20.0
Picloram	Ave	2262537728	2231508577		0.181	0.175	-1.4	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2413841684	2435233034		0.177	0.175	0.9	20.0
Acifluorfen	Qua		1712252269		0.166	0.175	-5.2	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	171928410	175445326		0.179	0.175	2.0	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523572/12 Calibration Date: 05/11/2018 14:23
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.44	2.41	2.45
3,5-Dichlorobenzoic acid	6.01	6.01	6.03
4-Nitrophenol	6.14	6.13	6.15
Dicamba	6.61	6.60	6.62
MCPP	6.76	6.75	6.77
MCPA	6.88	6.87	6.89
Dichlorprop	7.07	7.06	7.08
2,4-D	7.21	7.20	7.22
Pentachlorophenol	7.56	7.55	7.57
Silvex (2,4,5-TP)	7.66	7.65	7.67
Chloramben	7.74	7.73	7.75
2,4,5-T	7.82	7.81	7.83
2,4-DB	8.06	8.05	8.07
Dinoseb	8.11	8.10	8.12
Bentazon	8.18	8.17	8.19
Picloram	8.40	8.39	8.41
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.50	8.49	8.51
Acifluorfen	9.54	9.53	9.55
2,4-Dichlorophenylacetic acid (Surr)	6.57	6.56	6.58

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-May-2018 14:23:54 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 15:48:36 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 11-May-2018 15:40:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.437	2.434	0.003	72651698	0.1750	0.1683	
2	2.489	2.487	0.002	223460880	0.1750	0.1612	
						RPD = 4.28	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	15388626	NC	NC	
2	4.997	4.996	0.001	77994557	NC	NC	
						RPD = 11.14	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	186321398	NC	NC	M
2	5.669	5.668	0.001	772677793	NC	NC	M
						RPD = 3.79	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	49230133	0.1750	0.1733	M
2	6.009	6.009	0.000	253614433	0.1750	0.1653	M
						RPD = 4.73	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	16677931	0.1750	0.1804	M
2	6.393	6.394	-0.001	42375809	0.1750	0.1660	M
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	30702932	0.1750	0.1786	M
2	6.719	6.720	-0.001	195113343	0.1750	0.1708	M
						RPD = 4.45	
7 Dicamba							
1	6.608	6.609	-0.001	78695554	0.0875	0.0872	M
2	6.800	6.800	0.000	359979206	0.0875	0.0848	M
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.757	6.757	0.000	11201613	17.5	18.7	
2	6.849	6.848	0.001	66188230	17.5	17.0	M
RPD = 9.77							
9 MCPA							M
1	6.884	6.883	0.001	13469065	17.5	19.4	
2	7.047	7.046	0.001	125220404	17.5	16.8	M
RPD = 14.29							
10 Dichlorprop							M
1	7.069	7.069	0.000	39089231	0.1750	0.1699	
2	7.191	7.191	0.000	183879182	0.1750	0.1604	M
RPD = 5.73							
11 2,4-D							M
1	7.213	7.214	-0.001	46802490	0.1750	0.1713	
2	7.411	7.412	-0.001	220136421	0.1750	0.1749	M
RPD = 2.04							
12 Pentachlorophenol							M
1	7.562	7.562	0.000	194061478	0.0438	0.0444	
2	7.605	7.605	0.000	696751567	0.0438	0.0444	M
RPD = 0.11							
13 Silvex (2,4,5-TP)							M
1	7.661	7.661	0.000	71211552	0.0438	0.0446	
2	7.744	7.744	0.000	266557621	0.0438	0.0441	M
RPD = 1.07							
14 Chloramben							M
1	7.738	7.739	-0.001	240546515	0.1750	0.1776	
2	8.049	8.049	0.000	842916070	0.1750	0.1781	M
RPD = 0.27							
15 2,4,5-T							M
1	7.816	7.816	0.000	68765302	0.0438	0.0443	
2	7.976	7.976	0.000	232256864	0.0438	0.0453	M
RPD = 2.08							
16 2,4-DB							M
1	8.059	8.059	0.000	25593480	0.1750	0.1756	
2	8.189	8.190	-0.001	123400421	0.1750	0.1697	M
RPD = 3.45							
17 Dinoseb							M
1	8.112	8.113	-0.001	160596878	0.1750	0.1771	
2	8.141	8.141	0.000	480425704	0.1750	0.1625	M
RPD = 8.61							
18 Bentazon							M
1	8.184	8.184	0.000	37921185	0.1750	0.1714	
2	8.544	8.544	0.000	120950385	0.1750	0.1717	M
RPD = 0.15							
19 Picloram							M
1	8.399	8.399	0.000	390514001	0.1750	0.1810	
2	8.876	8.877	-0.001	1268832439	0.1750	0.1765	M
RPD = 2.54							

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.503	8.504	-0.001	426165781	0.1750	0.1766	
2	8.658	8.658	0.000	1442357771	0.1750	0.1777	M
						RPD = 0.64	

21 Acifluorfen							M
1	9.541	9.543	-0.002	299644147	0.1750	0.1659	
2	9.678	9.677	0.001	858463960	0.1750	0.1473	M
						RPD = 11.83	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 12

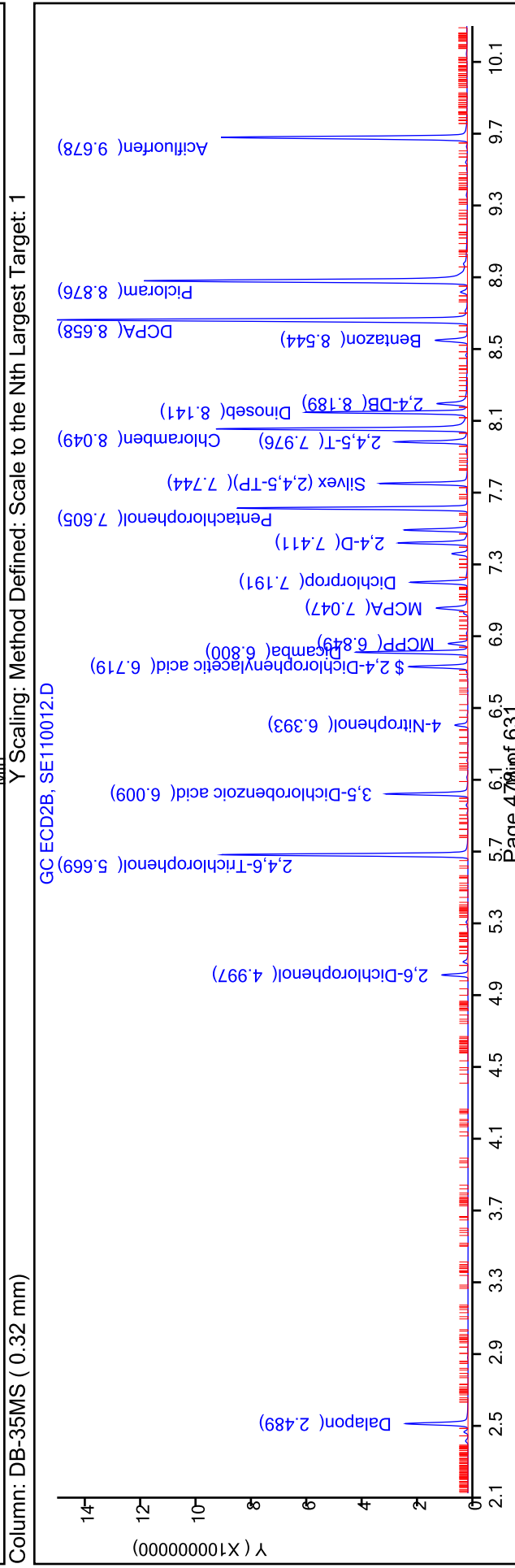
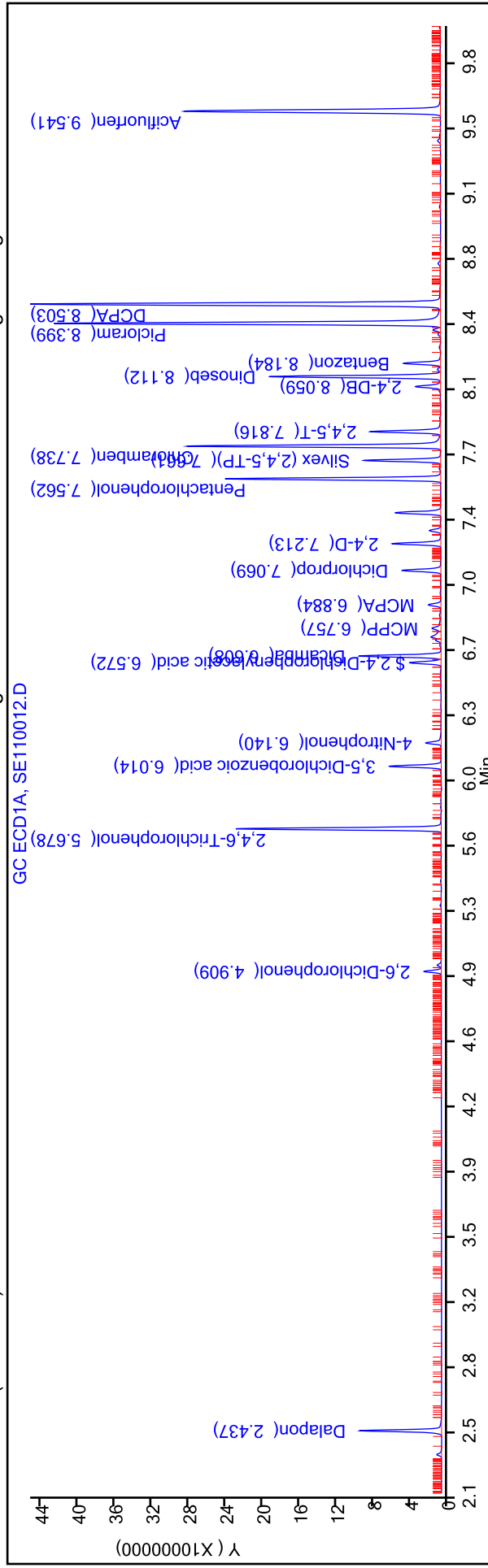
Lims ID: icv herb
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523572/12 Calibration Date: 05/11/2018 14:23
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1386204194	1276919314		0.161	0.175	-7.9	20.0
3,5-Dichlorobenzoic acid	Ave	1533919679	1449225331		0.165	0.175	-5.5	20.0
4-Nitrophenol	Ave	255346659	242147480		0.166	0.175	-5.2	20.0
Dicamba	Ave	4244164919	4114048069		0.0848	0.0875	-3.1	20.0
MCPP	Lin1		3782185		17.0	17.5	-2.9	20.0
MCPA	Lin2		7155452		16.8	17.5	-4.1	20.0
Dichlorprop	Ave	1146405622	1050738183		0.160	0.175	-8.3	20.0
2,4-D	Ave	1258856811	1257922406		0.175	0.175	-0.0	20.0
Pentachlorophenol	Ave	15678491137	15925750103		0.0444	0.0438	1.6	20.0
Silvex (2,4,5-TP)	Ave	6038823762	6092745623		0.0441	0.0438	0.9	20.0
2,4,5-T	Ave	5130951653	5308728320		0.0453	0.0438	3.5	20.0
Chloramben	Ave	4732944977	4816663257		0.178	0.175	1.8	20.0
Dinoseb	Qua		2745289737		0.162	0.175	-7.2	20.0
2,4-DB	Ave	727274265	705145263		0.170	0.175	-3.0	20.0
Bentazon	Ave	704477021	691145057		0.172	0.175	-1.9	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8117747515	8242044406		0.178	0.175	1.5	20.0
Picloram	Lin1		7250471080		0.176	0.175	0.9	20.0
Acifluorfen	Qua		4905508343		0.147	0.175	-15.8	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1142358705	1114933389		0.171	0.175	-2.4	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523572/12 Calibration Date: 05/11/2018 14:23
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.01	6.00	6.02
4-Nitrophenol	6.39	6.38	6.40
Dicamba	6.80	6.79	6.81
MCPP	6.85	6.84	6.86
MCPA	7.05	7.04	7.06
Dichlorprop	7.19	7.18	7.20
2,4-D	7.41	7.40	7.42
Pentachlorophenol	7.61	7.60	7.62
Silvex (2,4,5-TP)	7.74	7.73	7.75
2,4,5-T	7.98	7.97	7.99
Chloramben	8.05	8.04	8.06
Dinoseb	8.14	8.13	8.15
2,4-DB	8.19	8.18	8.20
Bentazon	8.54	8.53	8.55
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.66	8.65	8.67
Picloram	8.88	8.87	8.89
Acifluorfen	9.68	9.67	9.69
2,4-Dichlorophenylacetic acid (Surr)	6.72	6.71	6.73

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-May-2018 14:23:54 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 11-May-2018 15:48:36 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 11-May-2018 15:40:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.437	2.434	0.003	72651698	0.1750	0.1683	
2	2.489	2.487	0.002	223460880	0.1750	0.1612	
						RPD = 4.28	
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	15388626	NC	NC	
2	4.997	4.996	0.001	77994557	NC	NC	
						RPD = 11.14	
3 2,4,6-Trichlorophenol							
1	5.678	5.678	0.000	186321398	NC	NC	M
2	5.669	5.668	0.001	772677793	NC	NC	M
						RPD = 3.79	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	49230133	0.1750	0.1733	M
2	6.009	6.009	0.000	253614433	0.1750	0.1653	M
						RPD = 4.73	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	16677931	0.1750	0.1804	M
2	6.393	6.394	-0.001	42375809	0.1750	0.1660	M
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	30702932	0.1750	0.1786	M
2	6.719	6.720	-0.001	195113343	0.1750	0.1708	M
						RPD = 4.45	
7 Dicamba							
1	6.608	6.609	-0.001	78695554	0.0875	0.0872	M
2	6.800	6.800	0.000	359979206	0.0875	0.0848	M
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.757	6.757	0.000	11201613	17.5	18.7	
2	6.849	6.848	0.001	66188230	17.5	17.0	M
							RPD = 9.77
9 MCPA							M
1	6.884	6.883	0.001	13469065	17.5	19.4	
2	7.047	7.046	0.001	125220404	17.5	16.8	M
							RPD = 14.29
10 Dichlorprop							M
1	7.069	7.069	0.000	39089231	0.1750	0.1699	
2	7.191	7.191	0.000	183879182	0.1750	0.1604	M
							RPD = 5.73
11 2,4-D							M
1	7.213	7.214	-0.001	46802490	0.1750	0.1713	
2	7.411	7.412	-0.001	220136421	0.1750	0.1749	M
							RPD = 2.04
12 Pentachlorophenol							M
1	7.562	7.562	0.000	194061478	0.0438	0.0444	
2	7.605	7.605	0.000	696751567	0.0438	0.0444	M
							RPD = 0.11
13 Silvex (2,4,5-TP)							M
1	7.661	7.661	0.000	71211552	0.0438	0.0446	
2	7.744	7.744	0.000	266557621	0.0438	0.0441	M
							RPD = 1.07
14 Chloramben							M
1	7.738	7.739	-0.001	240546515	0.1750	0.1776	
2	8.049	8.049	0.000	842916070	0.1750	0.1781	M
							RPD = 0.27
15 2,4,5-T							M
1	7.816	7.816	0.000	68765302	0.0438	0.0443	
2	7.976	7.976	0.000	232256864	0.0438	0.0453	M
							RPD = 2.08
16 2,4-DB							M
1	8.059	8.059	0.000	25593480	0.1750	0.1756	
2	8.189	8.190	-0.001	123400421	0.1750	0.1697	M
							RPD = 3.45
17 Dinoseb							M
1	8.112	8.113	-0.001	160596878	0.1750	0.1771	
2	8.141	8.141	0.000	480425704	0.1750	0.1625	M
							RPD = 8.61
18 Bentazon							M
1	8.184	8.184	0.000	37921185	0.1750	0.1714	
2	8.544	8.544	0.000	120950385	0.1750	0.1717	M
							RPD = 0.15
19 Picloram							M
1	8.399	8.399	0.000	390514001	0.1750	0.1810	
2	8.876	8.877	-0.001	1268832439	0.1750	0.1765	M
							RPD = 2.54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA M

1	8.503	8.504	-0.001	426165781	0.1750	0.1766	
2	8.658	8.658	0.000	1442357771	0.1750	0.1777	M

RPD = 0.64

21 Acifluorfen M

1	9.541	9.543	-0.002	299644147	0.1750	0.1659	
2	9.678	9.677	0.001	858463960	0.1750	0.1473	M

RPD = 11.83

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 12

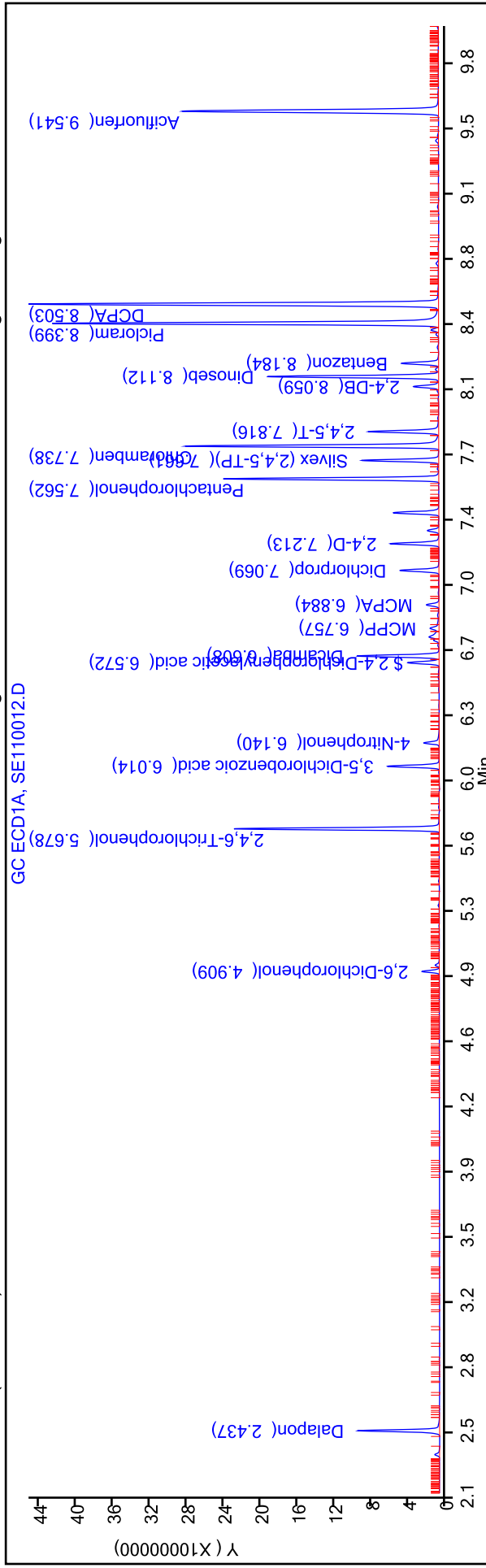
Lims ID: icv herb
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

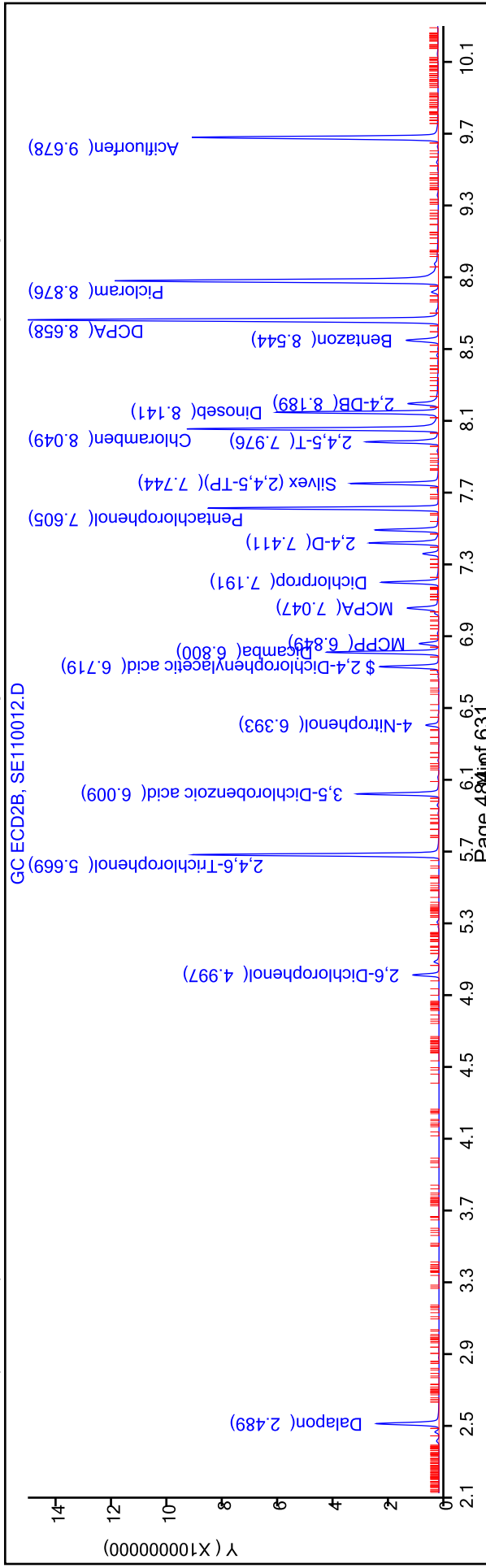
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

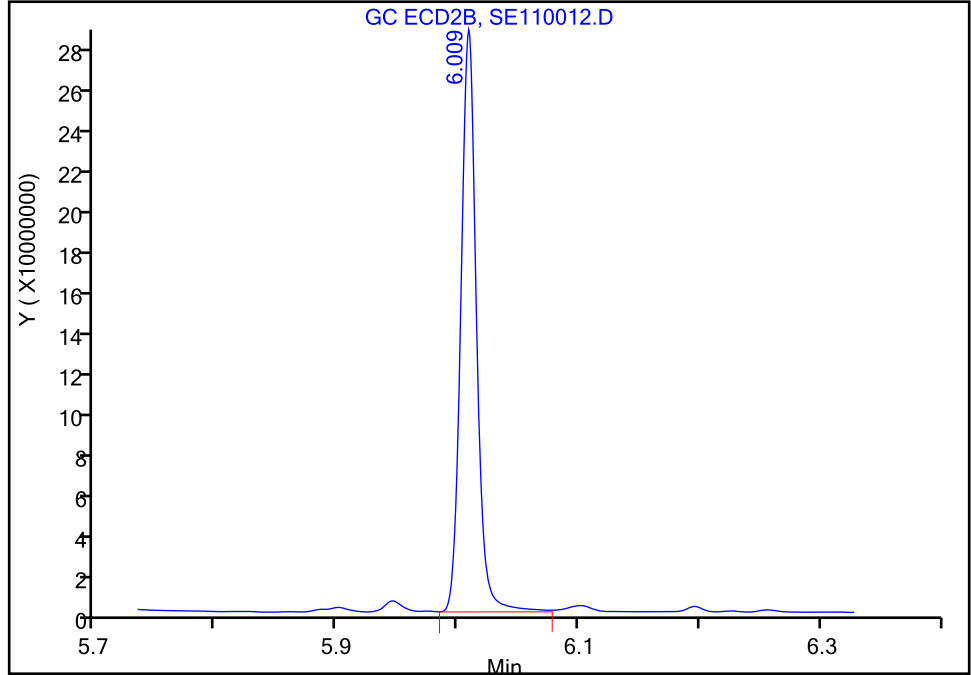
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Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

4 3,5-Dichlorobenzoic acid, CAS: 51-36-5

Signal: 2

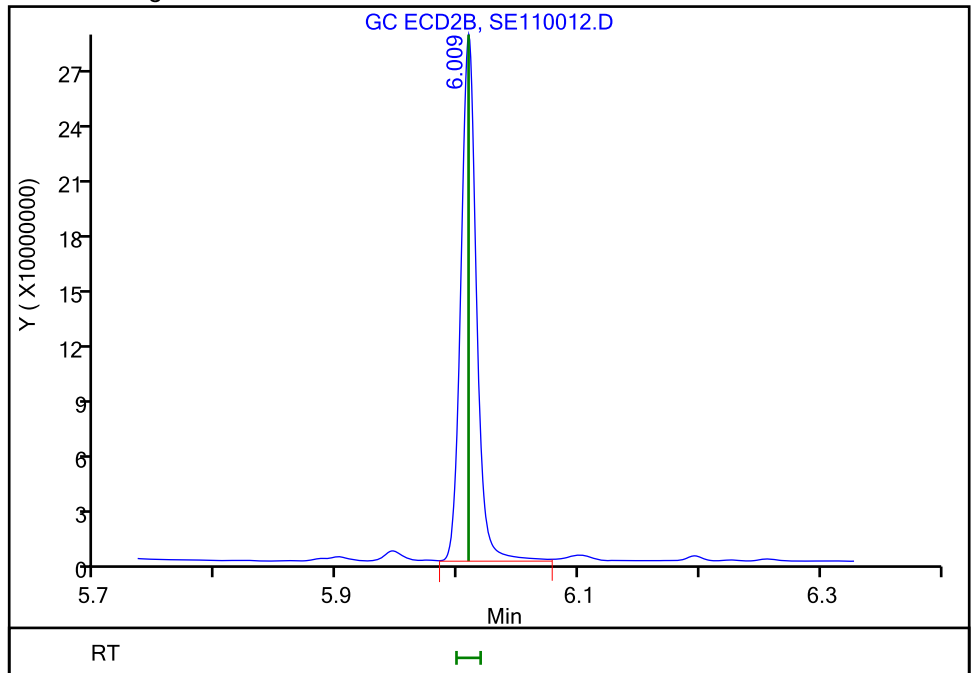
RT: 6.01
Area: 252592455
Amount: 0.164671
Amount Units: ug/ml

Processing Integration Results



RT: 6.01
Area: 253614433
Amount: 0.165337
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

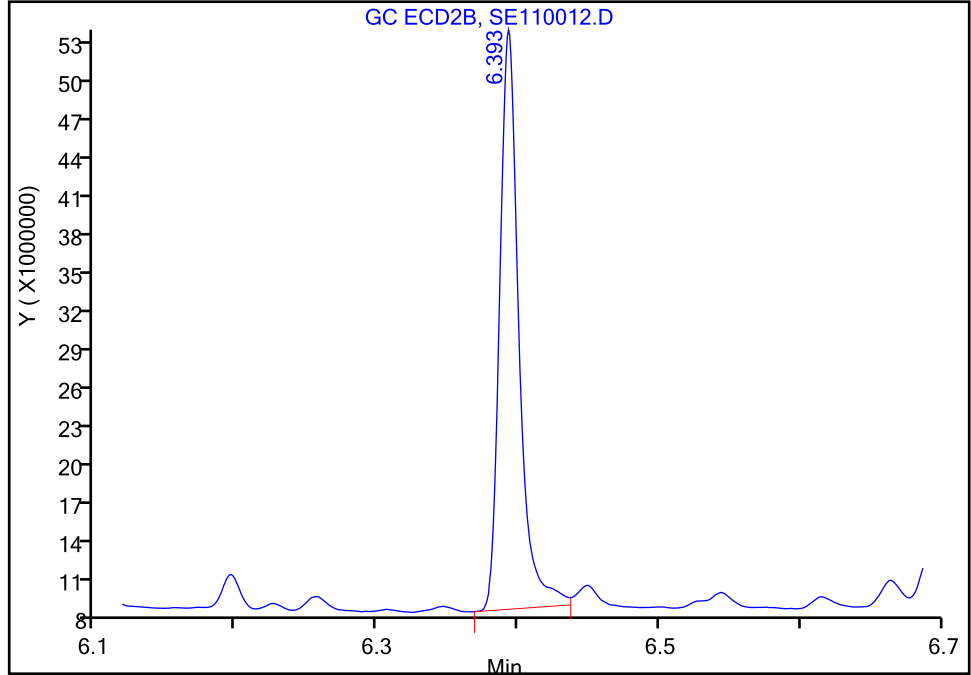
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Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

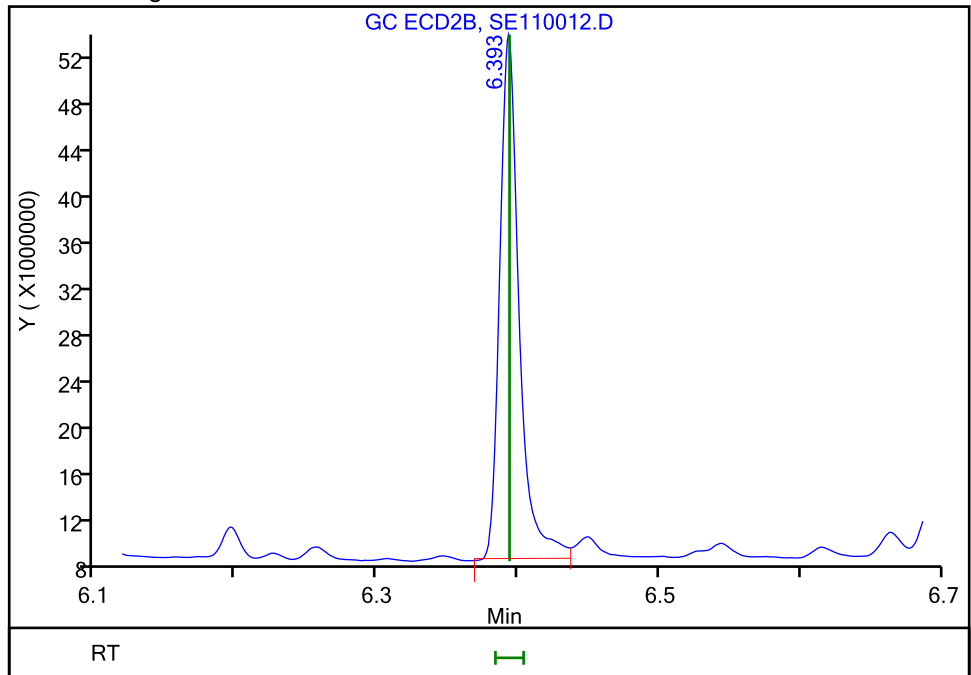
RT: 6.39
Area: 42065720
Amount: 0.164740
Amount Units: ug/ml

Processing Integration Results



RT: 6.39
Area: 42375809
Amount: 0.165954
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

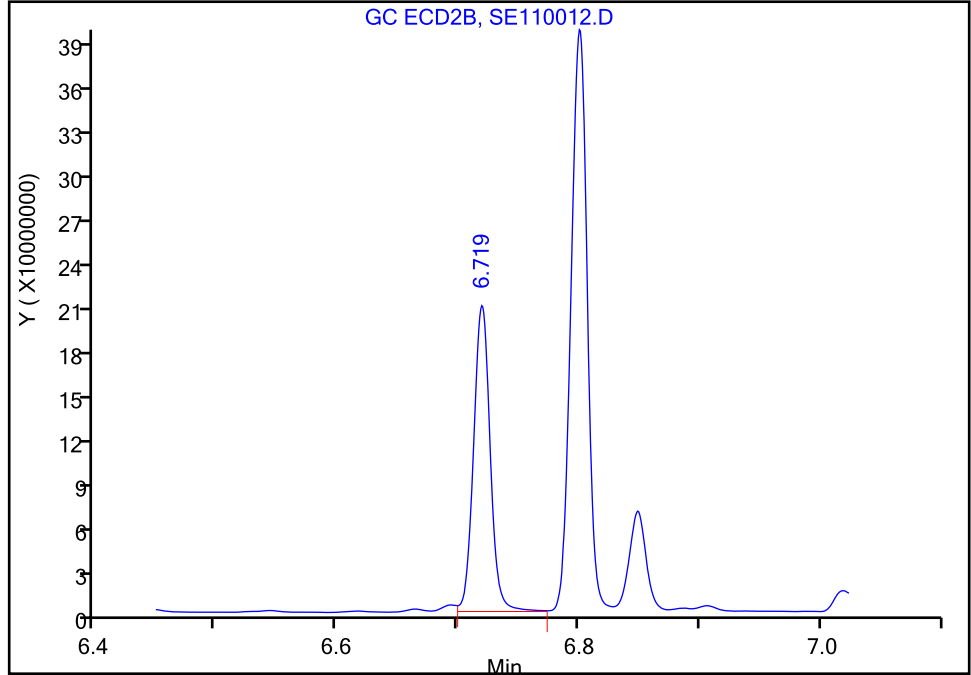
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Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

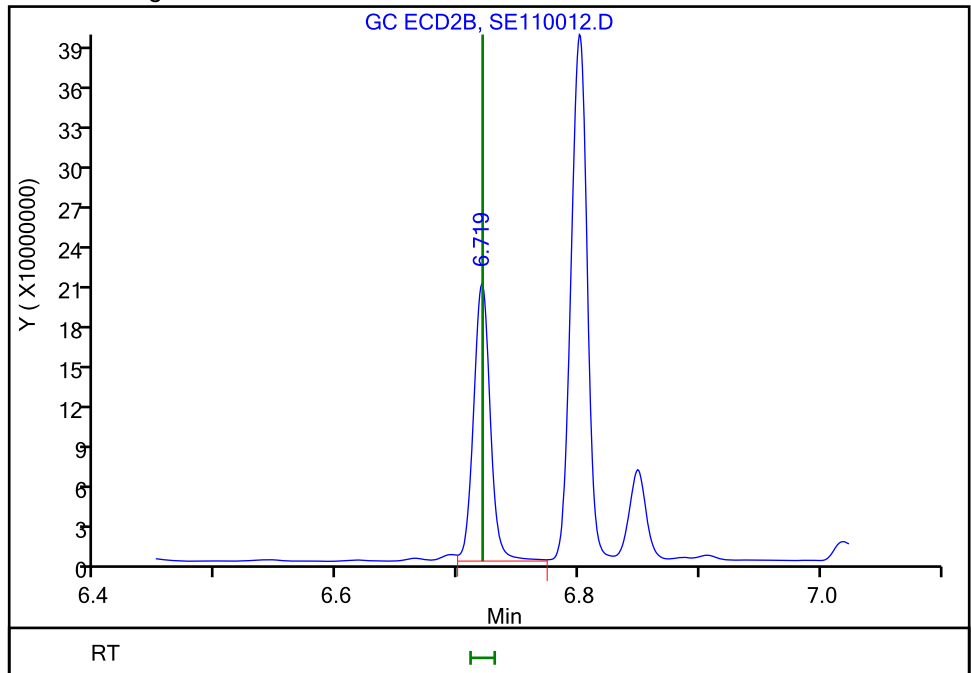
RT: 6.72
Area: 193137405
Amount: 0.169069
Amount Units: ug/ml

Processing Integration Results



RT: 6.72
Area: 195113343
Amount: 0.170799
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

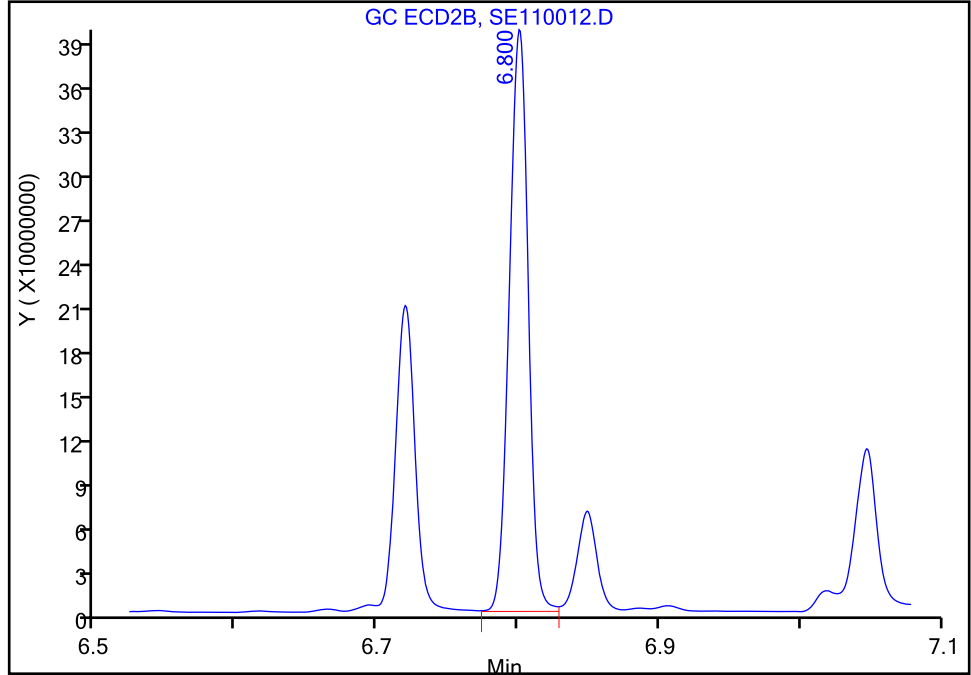
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

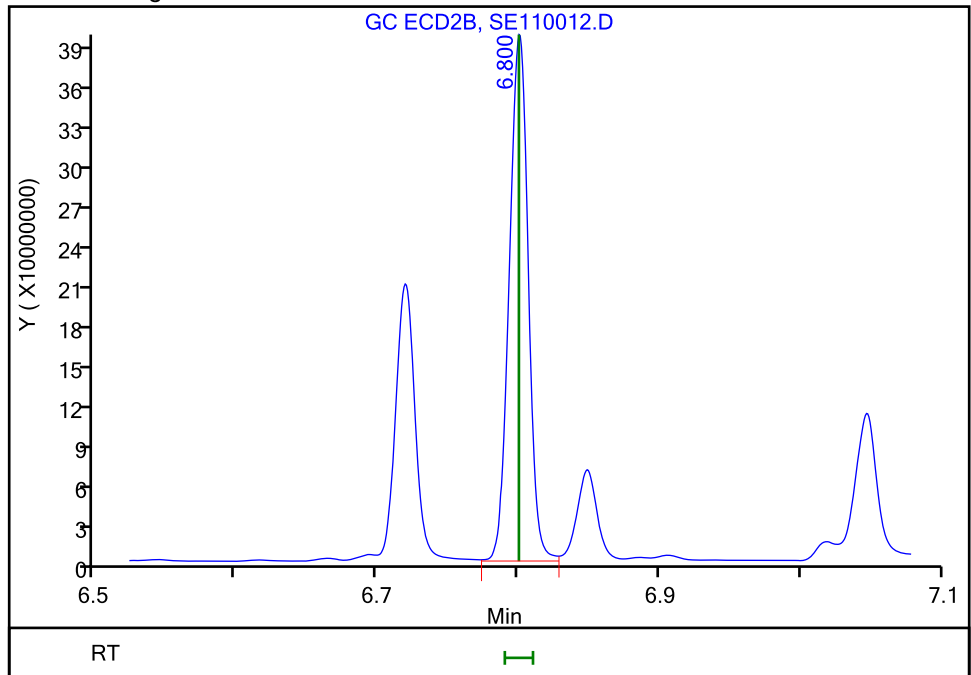
RT: 6.80
Area: 358438760
Amount: 0.084454
Amount Units: ug/ml

Processing Integration Results



RT: 6.80
Area: 359979206
Amount: 0.084817
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

TestAmerica Savannah

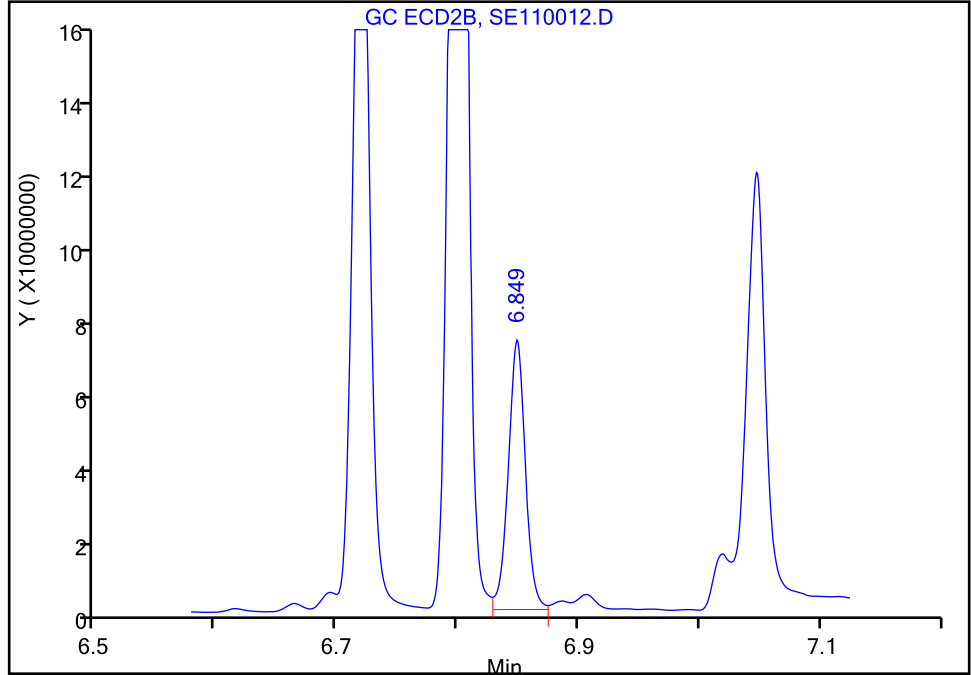
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

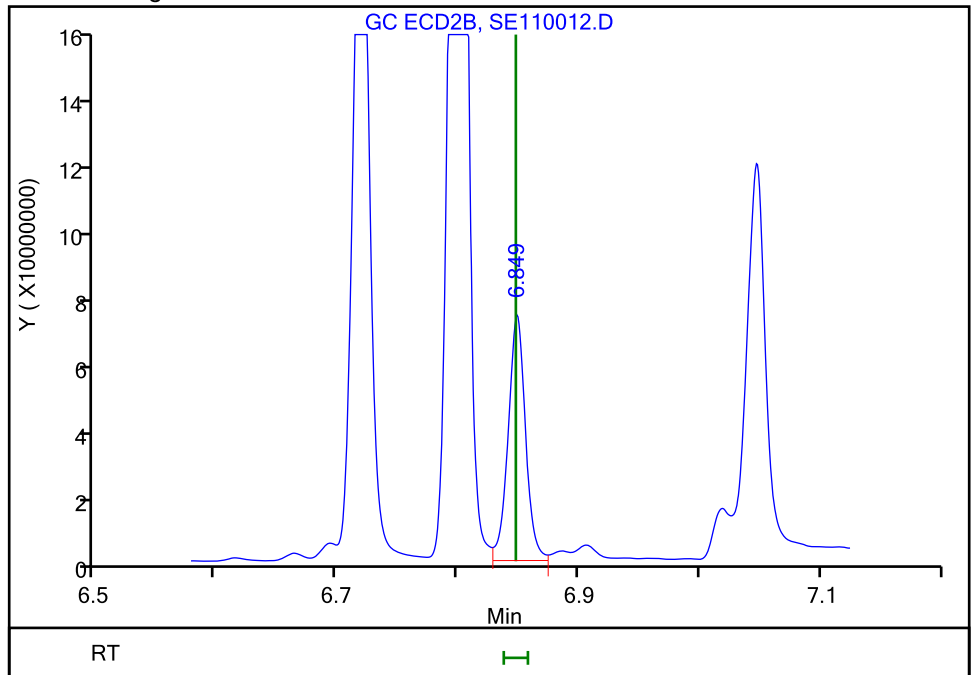
RT: 6.85
Area: 64786756
Amount: 16.701882
Amount Units: ug/ml

Processing Integration Results



RT: 6.85
Area: 66188230
Amount: 16.989962
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

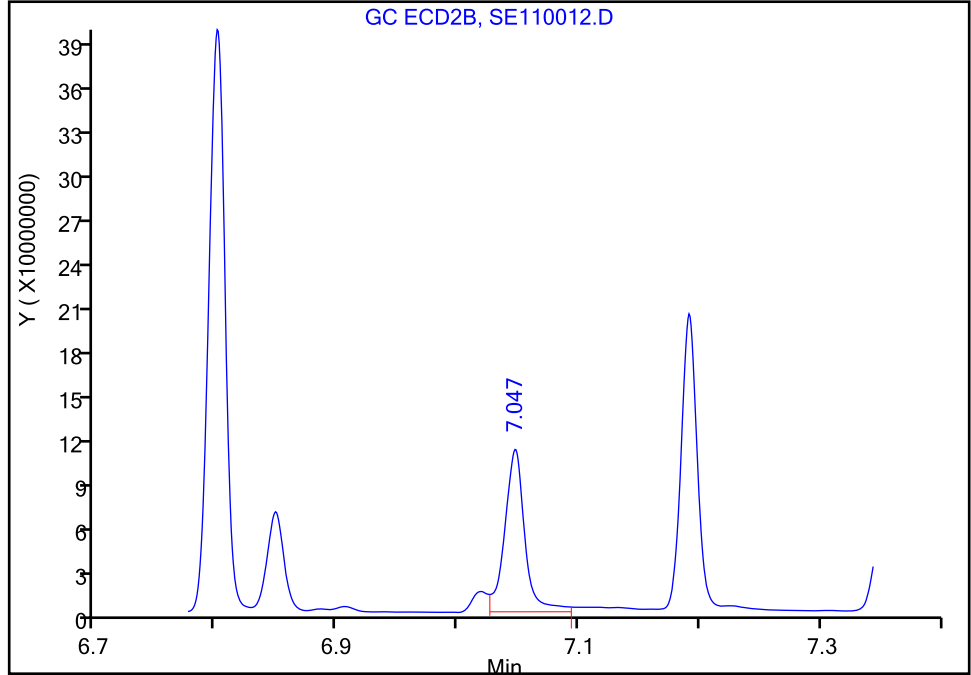
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

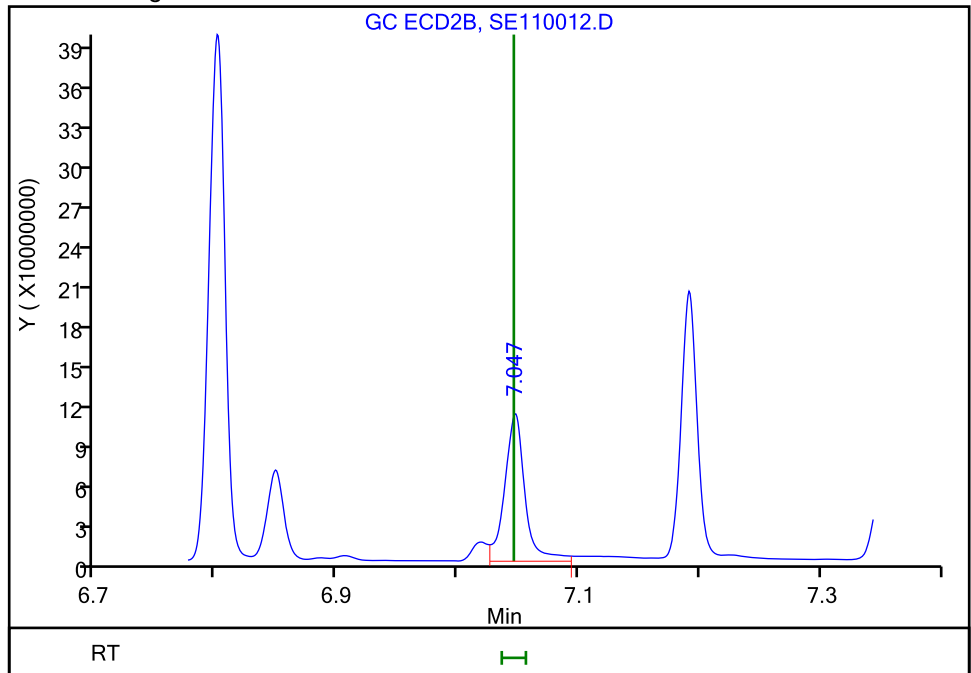
RT: 7.05
Area: 122784637
Amount: 16.440801
Amount Units: ug/ml

Processing Integration Results



RT: 7.05
Area: 125220404
Amount: 16.783740
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

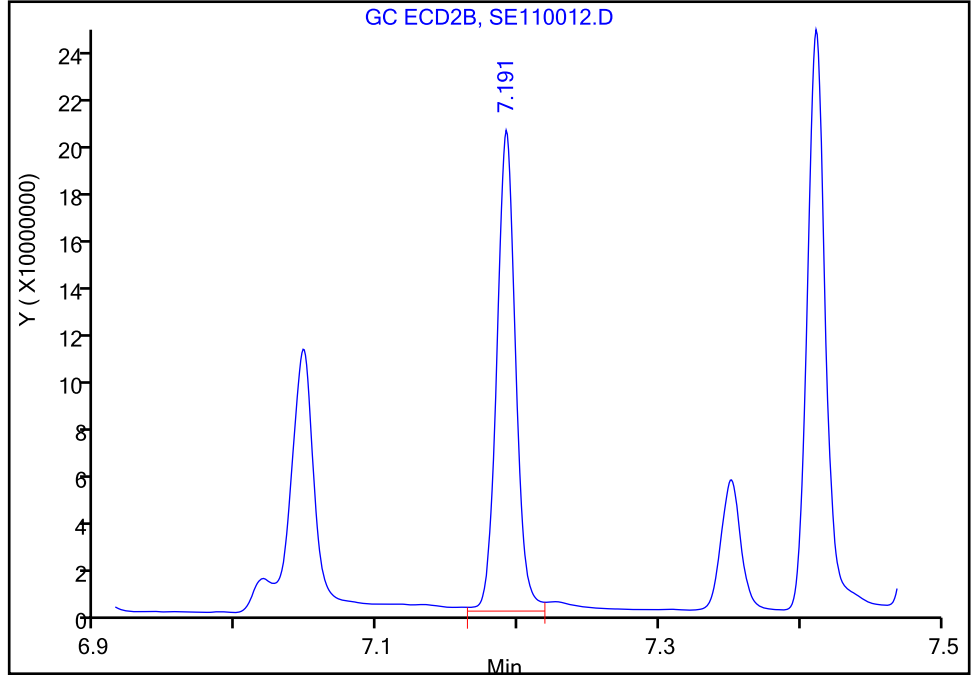
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

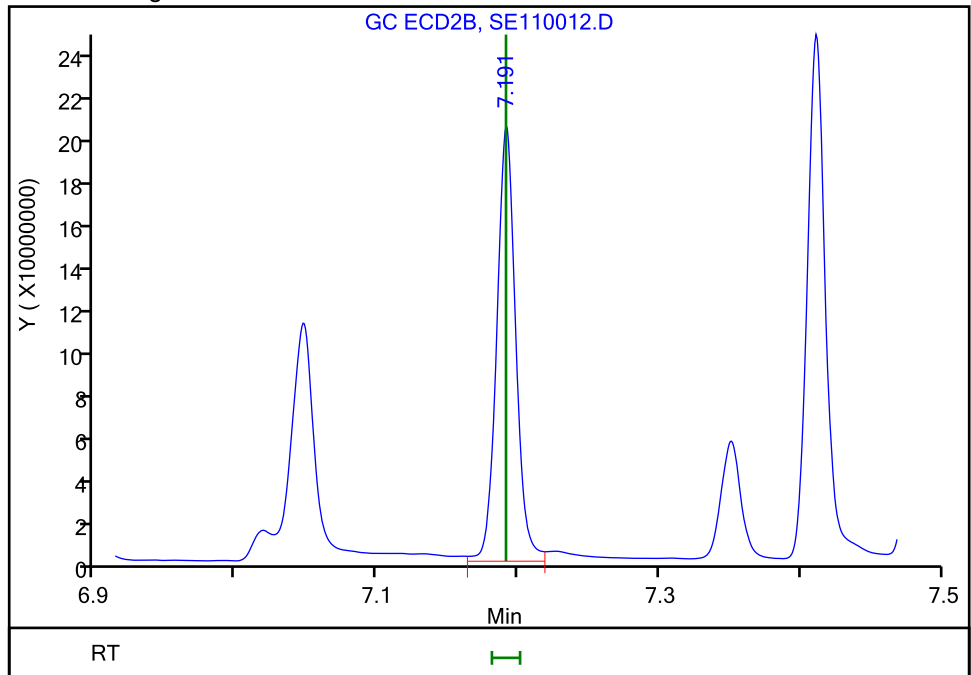
RT: 7.19
Area: 181628986
Amount: 0.156520
Amount Units: ug/ml

Processing Integration Results



RT: 7.19
Area: 183879182
Amount: 0.160396
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

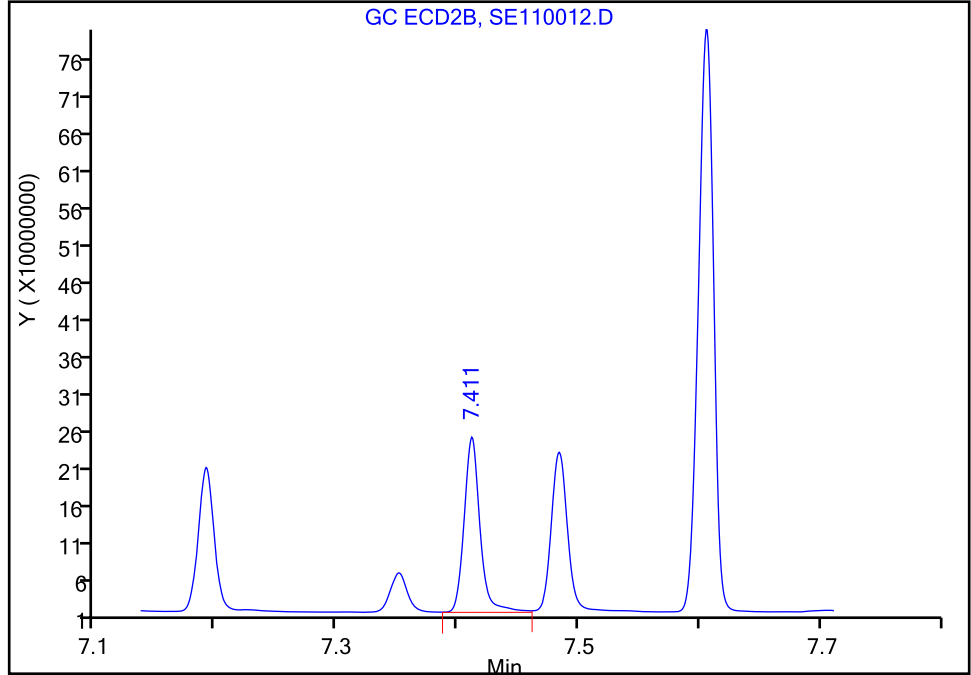
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

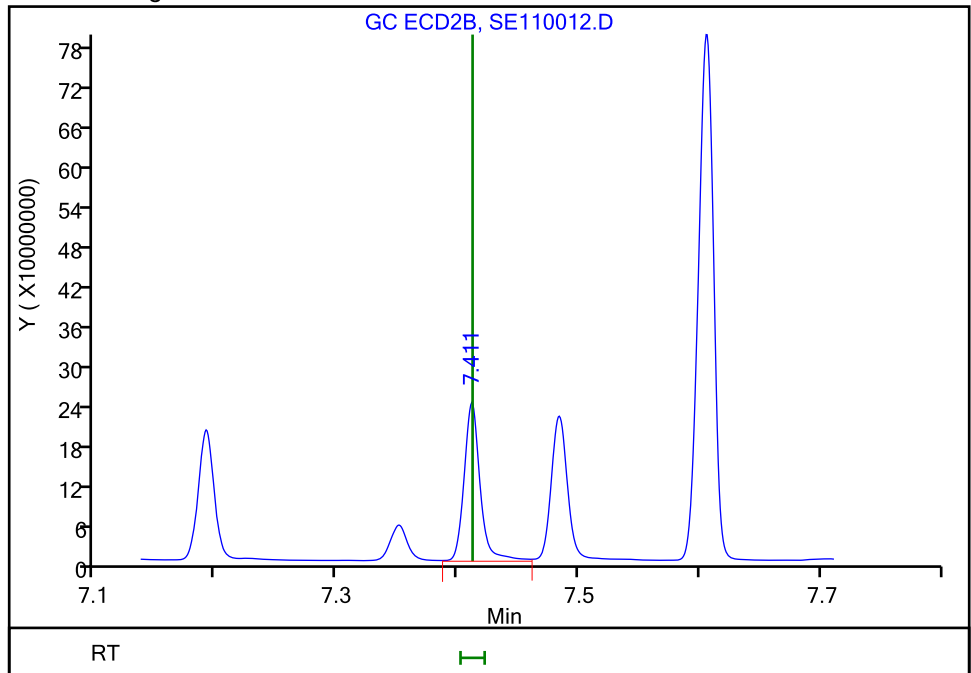
RT: 7.41
Area: 216483300
Amount: 0.167249
Amount Units: ug/ml

Processing Integration Results



RT: 7.41
Area: 220136421
Amount: 0.174870
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

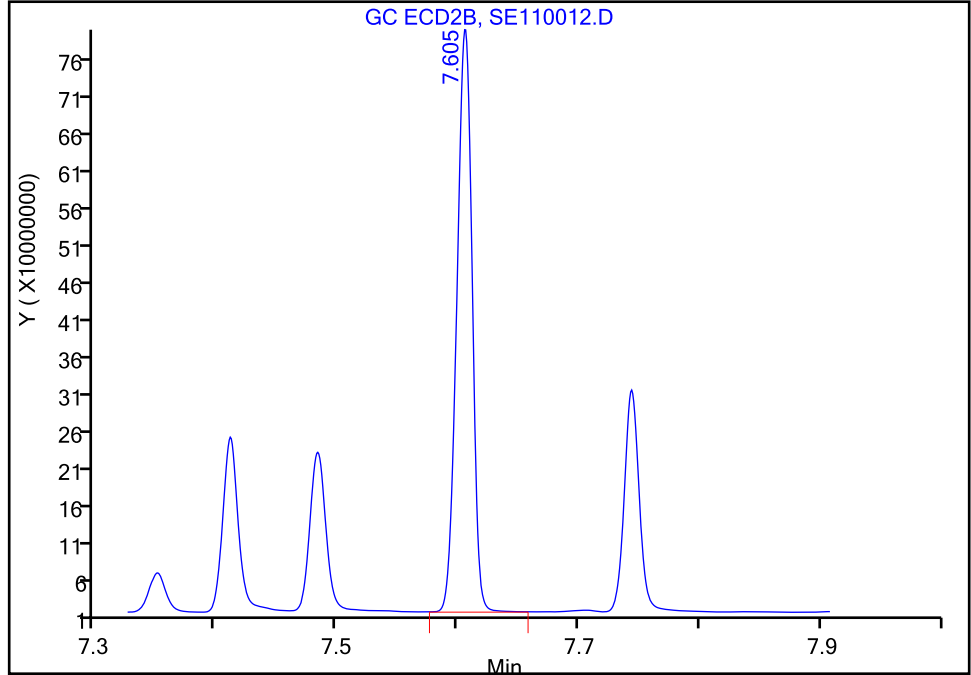
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

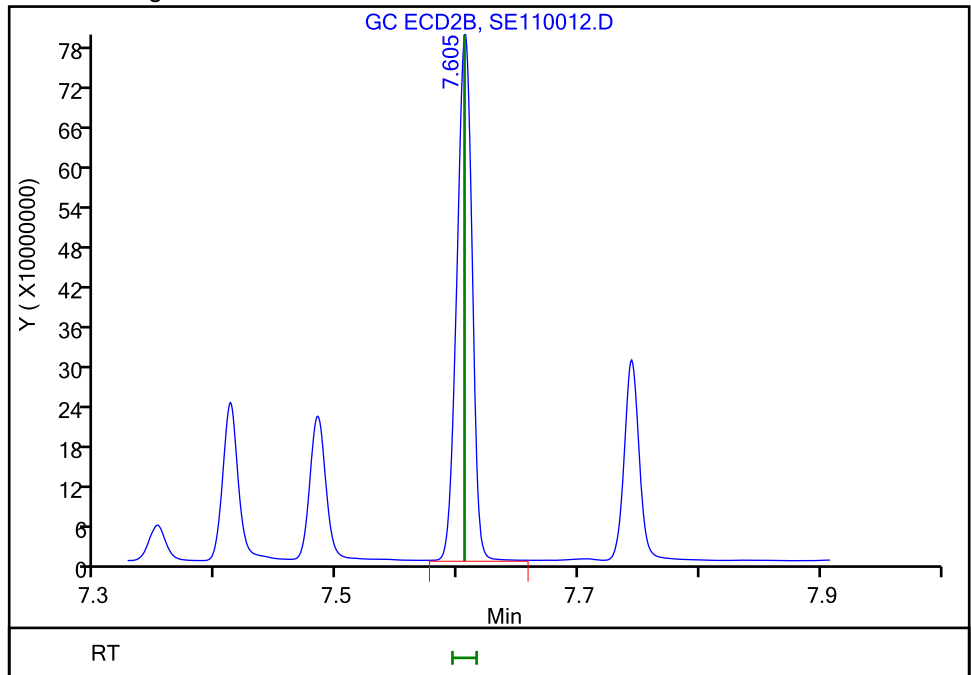
RT: 7.61
Area: 691927788
Amount: 0.044132
Amount Units: ug/ml

Processing Integration Results



RT: 7.61
Area: 696751567
Amount: 0.044440
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

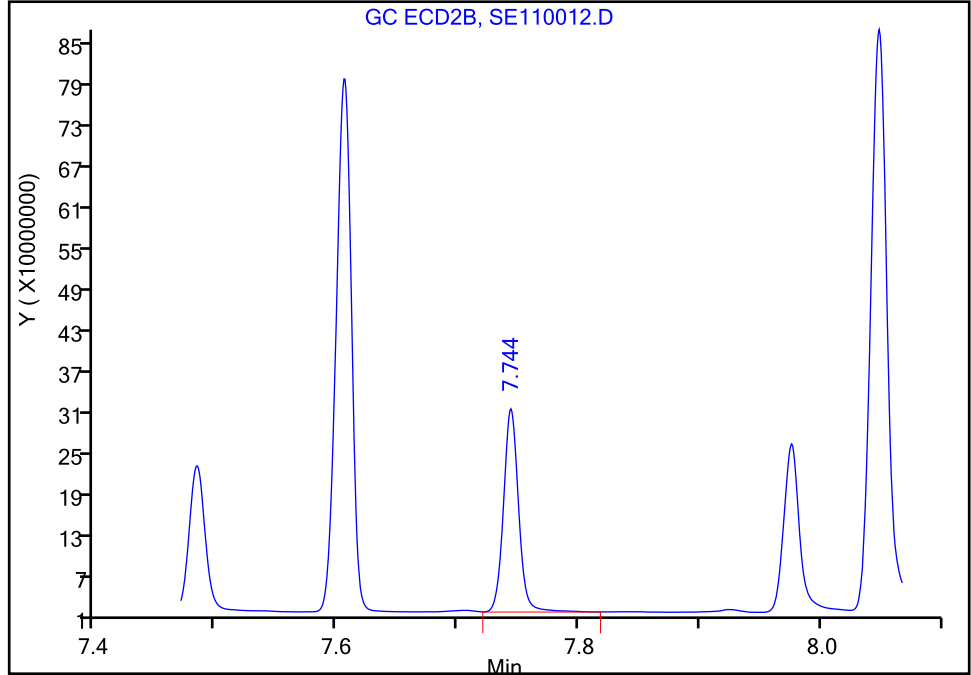
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

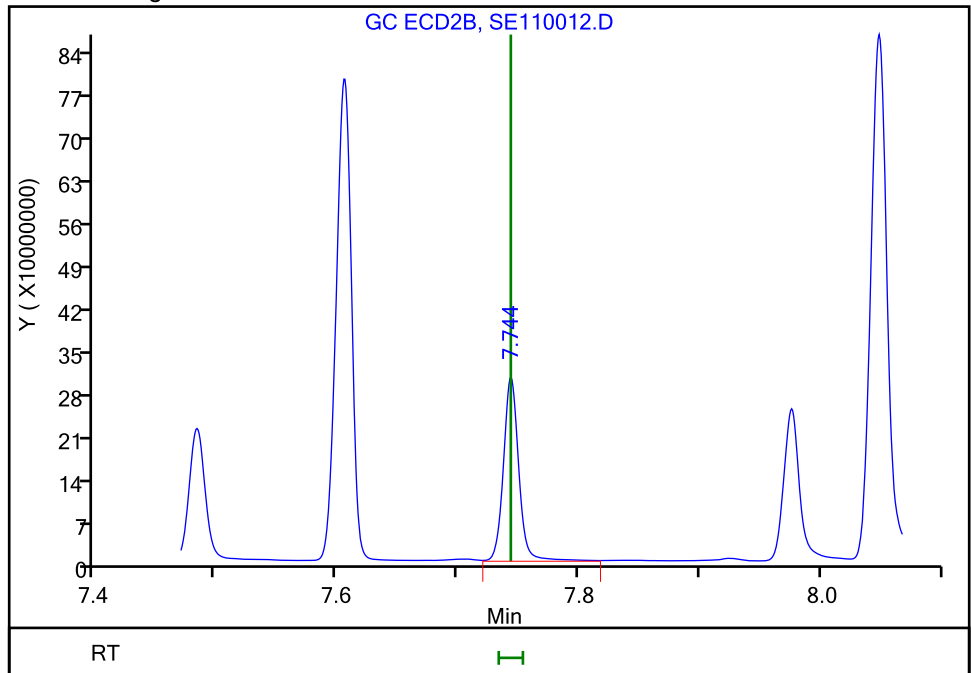
RT: 7.74
Area: 260440826
Amount: 0.043128
Amount Units: ug/ml

Processing Integration Results



RT: 7.74
Area: 266557621
Amount: 0.044141
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

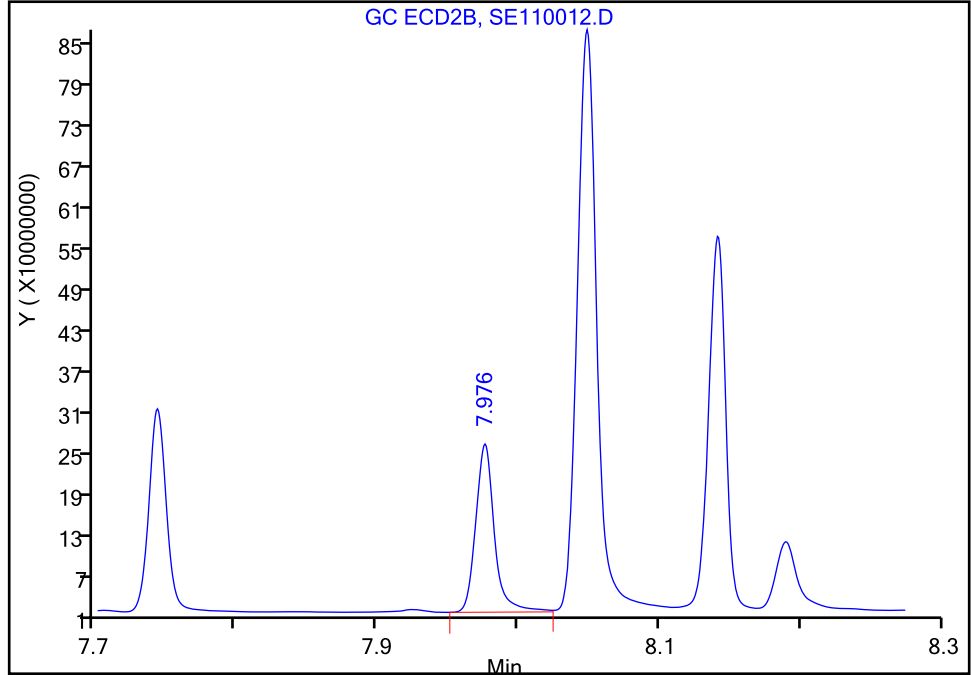
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

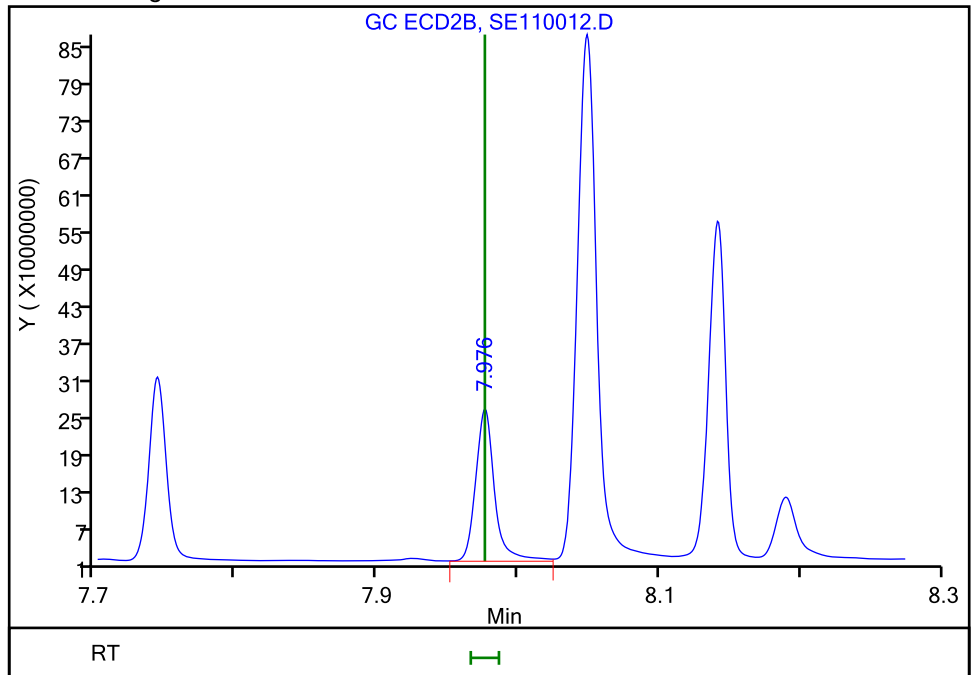
RT: 7.98
Area: 228626529
Amount: 0.042871
Amount Units: ug/ml

Processing Integration Results



RT: 7.98
Area: 232256864
Amount: 0.045266
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

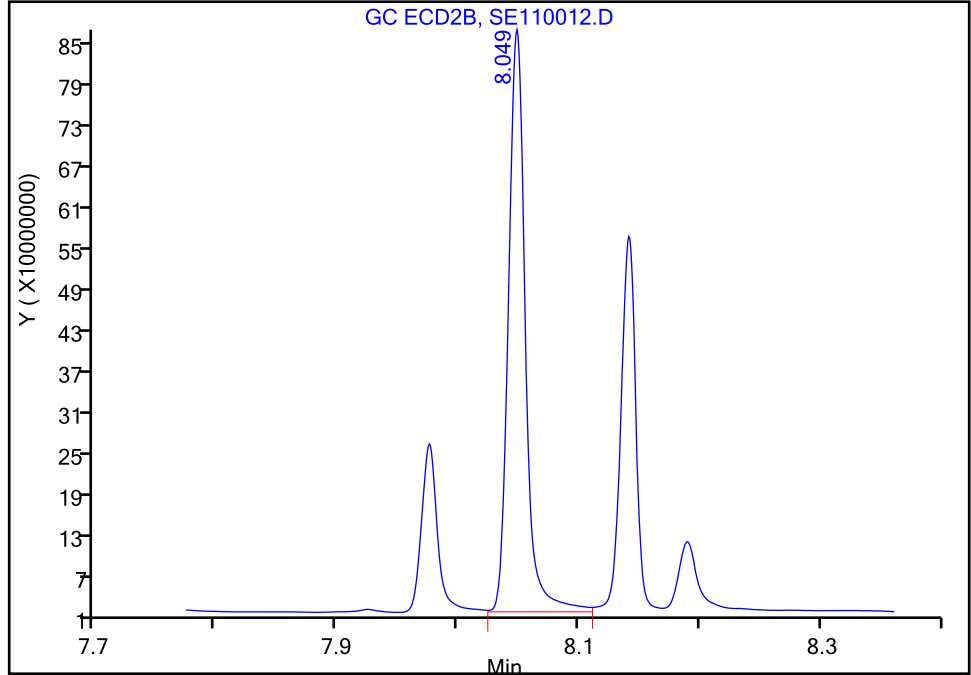
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

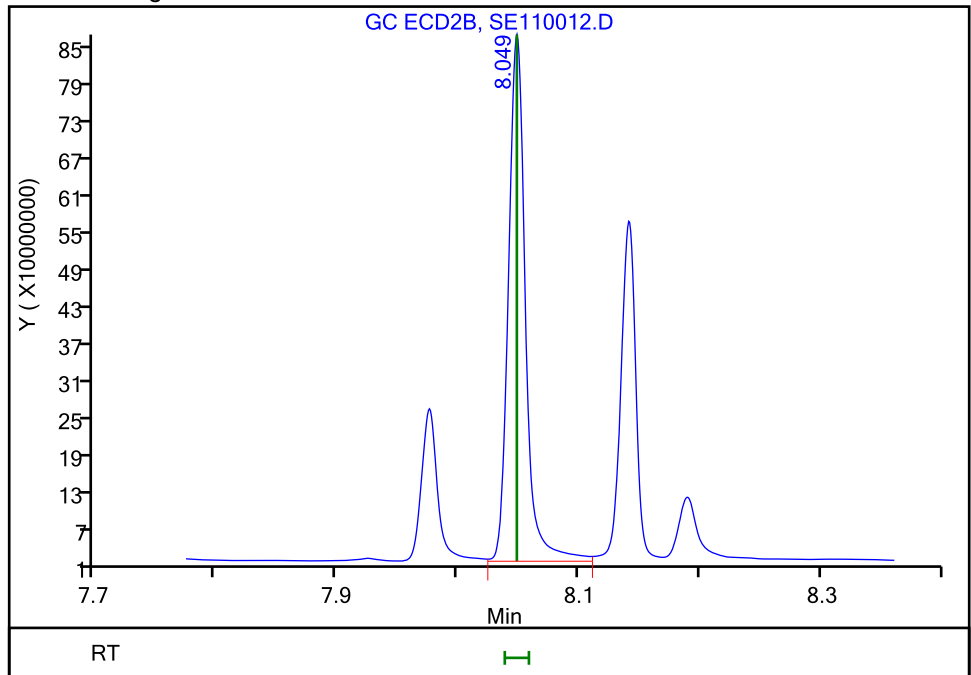
RT: 8.05
Area: 836662045
Amount: 0.176774
Amount Units: ug/ml

Processing Integration Results



RT: 8.05
Area: 842916070
Amount: 0.178095
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

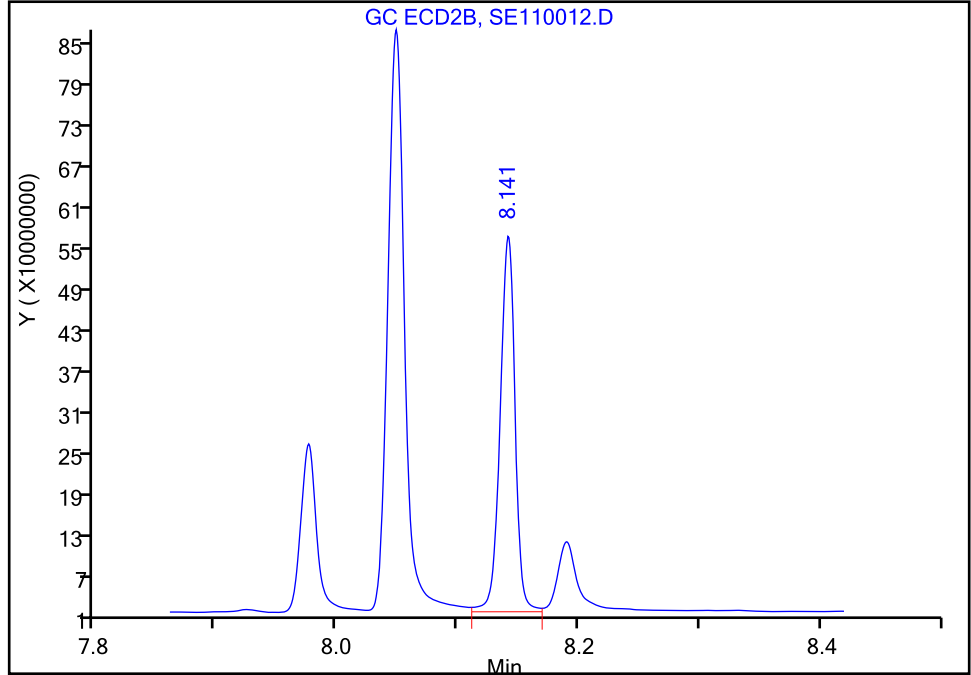
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

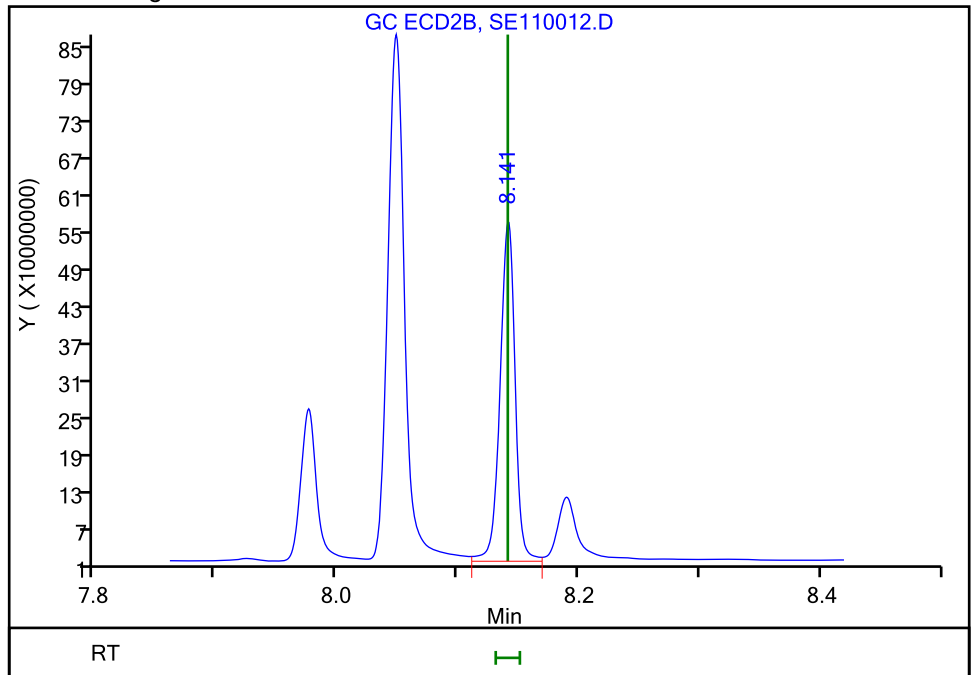
RT: 8.14
Area: 476023120
Amount: 0.161099
Amount Units: ug/ml

Processing Integration Results



RT: 8.14
Area: 480425704
Amount: 0.162451
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

TestAmerica Savannah

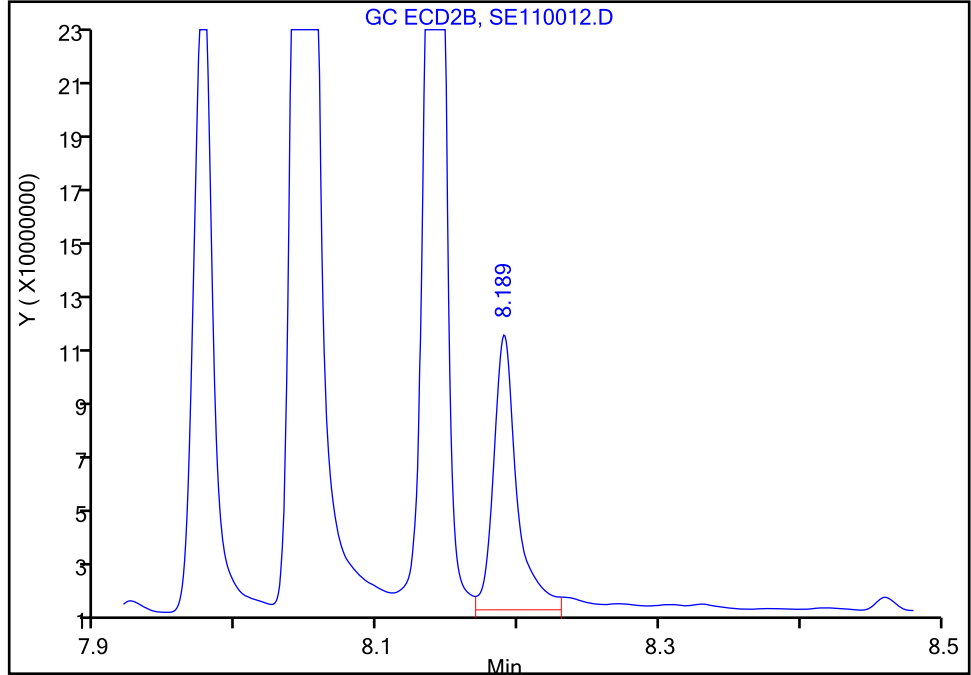
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

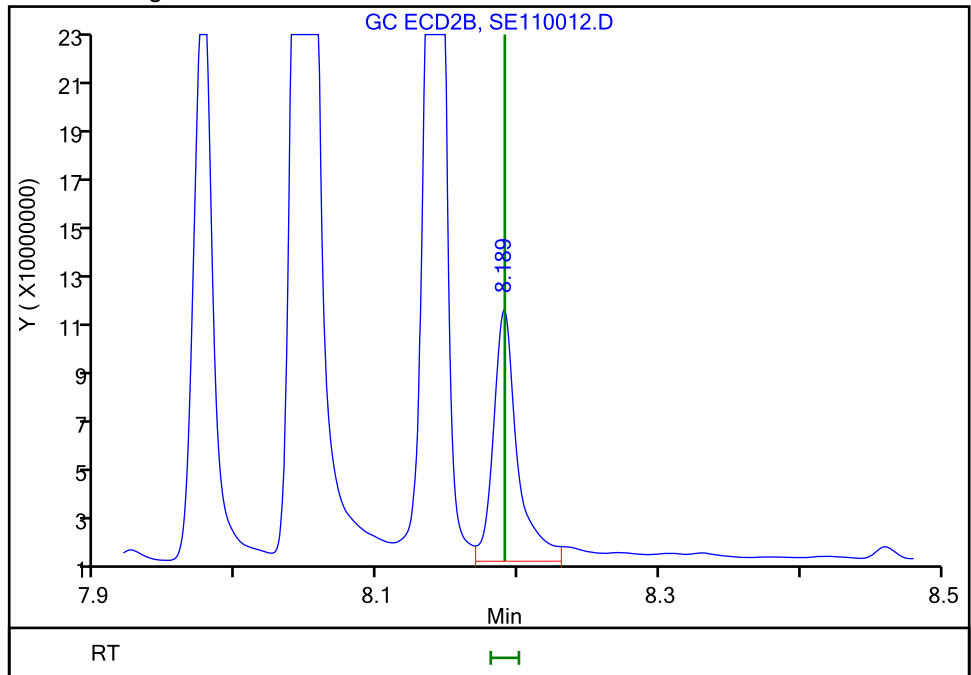
RT: 8.19
Area: 118656110
Amount: 0.163152
Amount Units: ug/ml

Processing Integration Results



RT: 8.19
Area: 123400421
Amount: 0.169675
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

TestAmerica Savannah

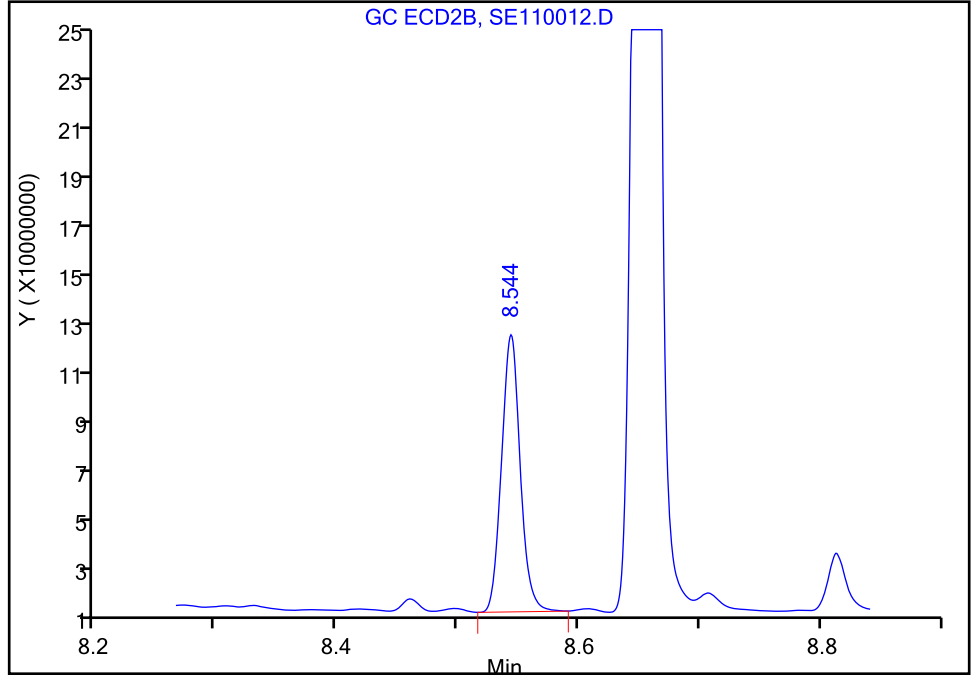
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

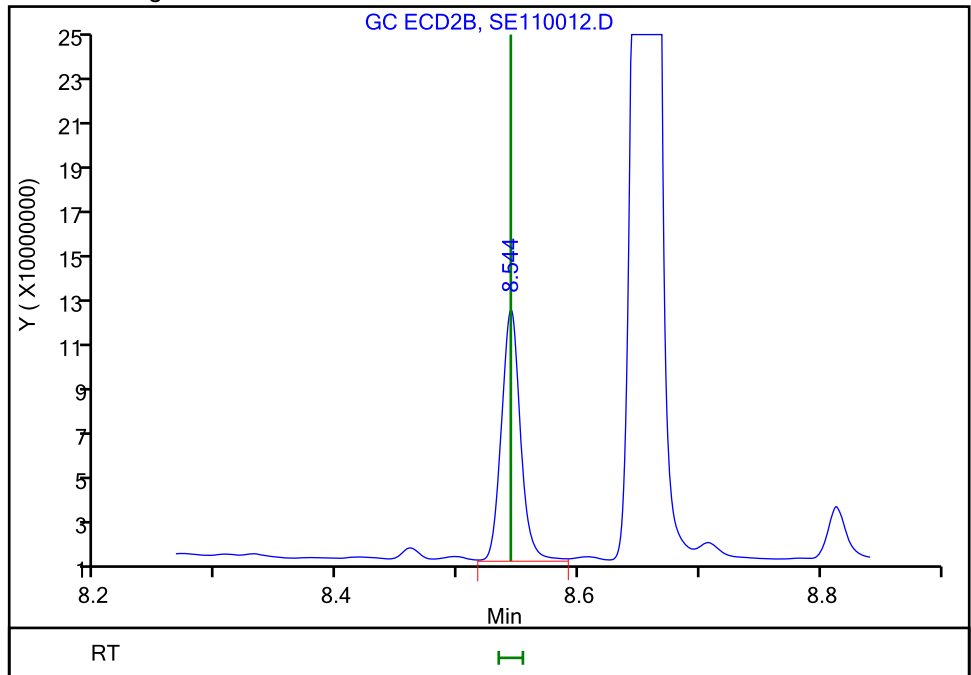
RT: 8.54
Area: 117490535
Amount: 0.166777
Amount Units: ug/ml

Processing Integration Results



RT: 8.54
Area: 120950385
Amount: 0.171688
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

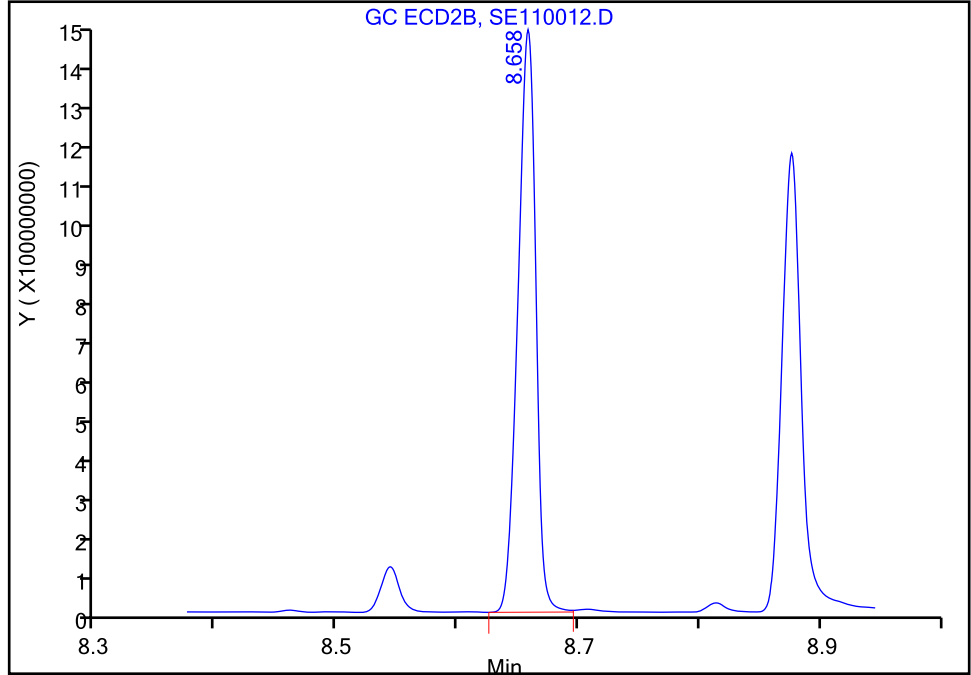
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

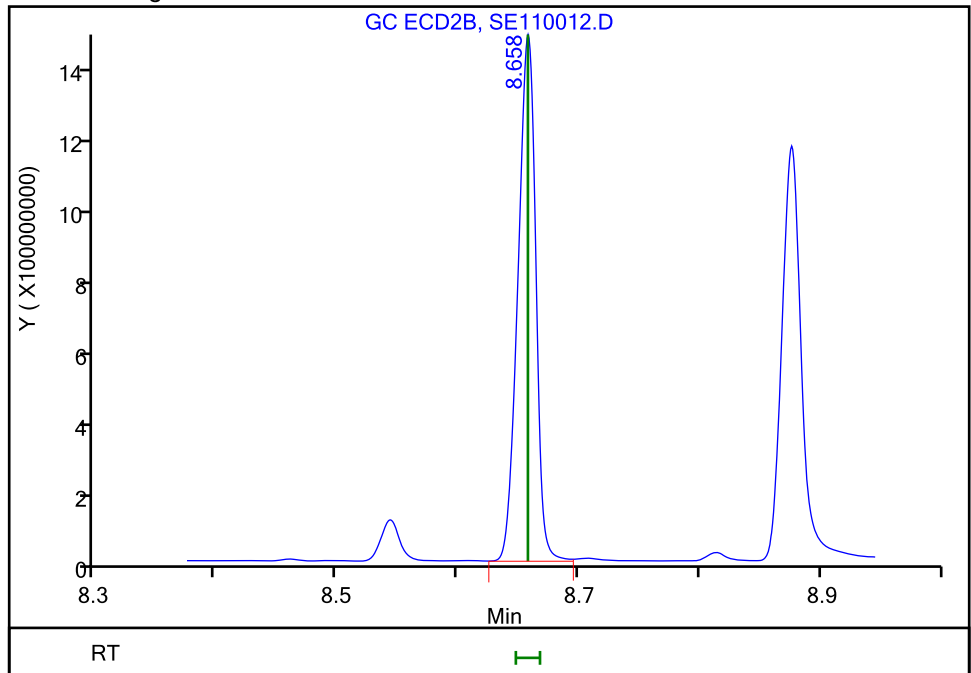
RT: 8.66
Area: 1438494306
Amount: 0.177204
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 1442357771
Amount: 0.177680
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

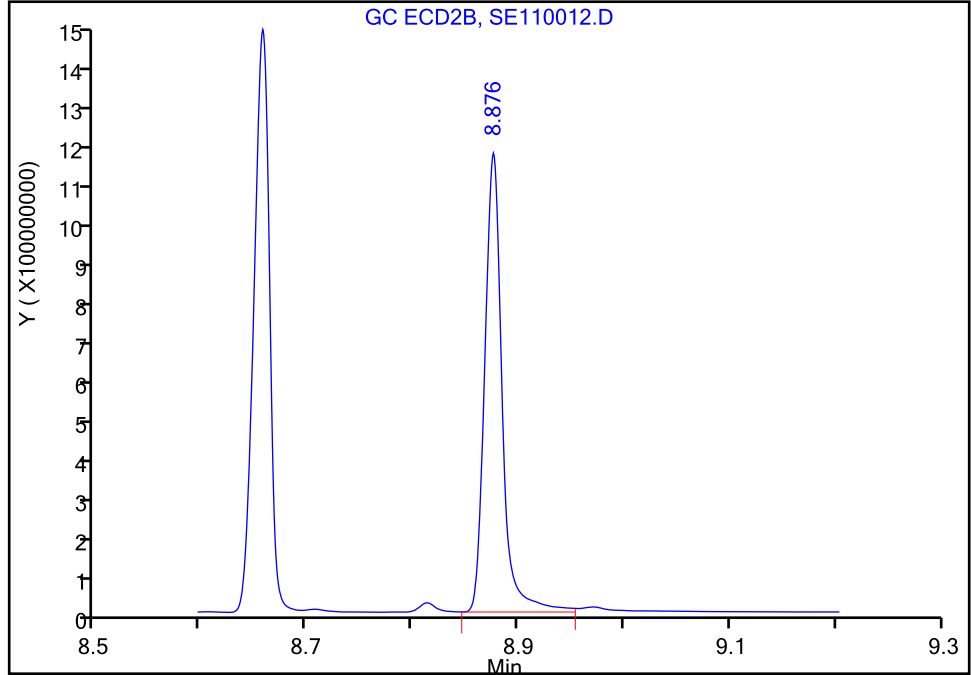
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

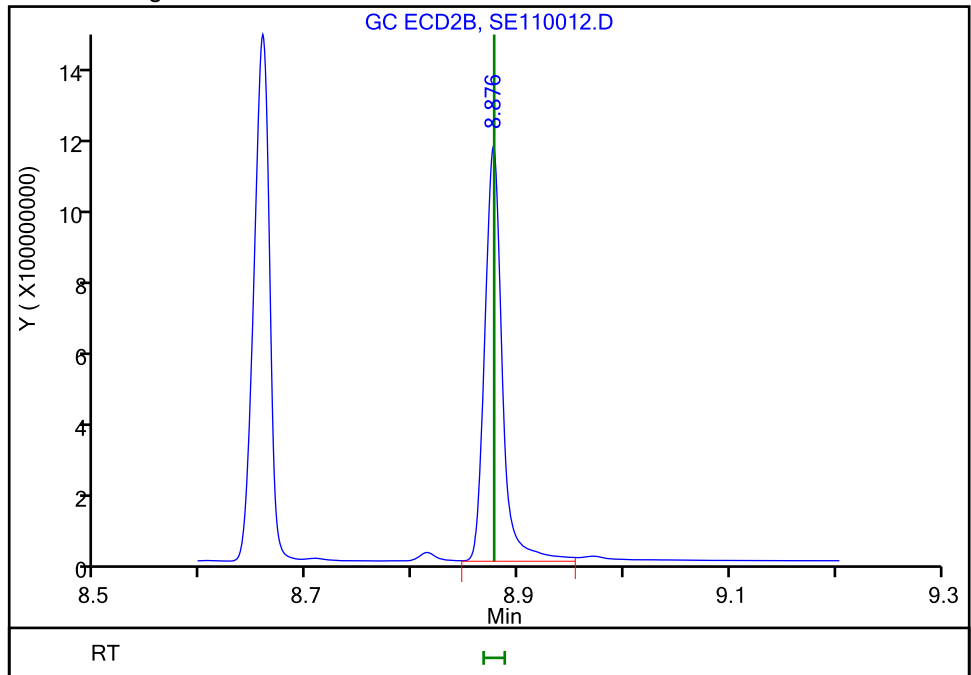
RT: 8.88
Area: 1260870185
Amount: 0.147585
Amount Units: ug/ml

Processing Integration Results



RT: 8.88
Area: 1268832439
Amount: 0.176498
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

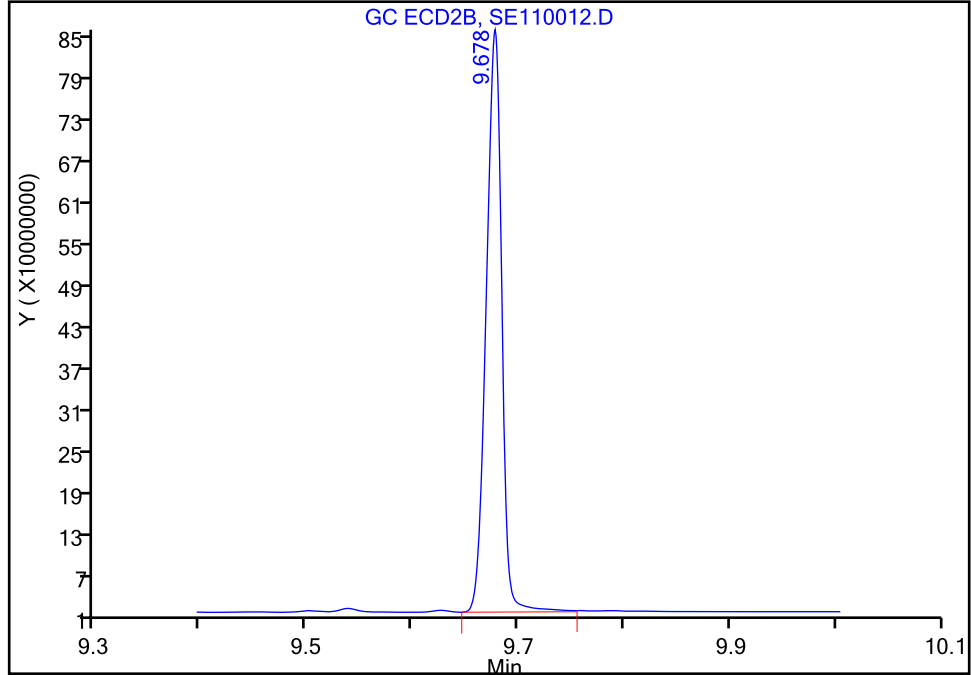
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110012.D
Injection Date: 11-May-2018 14:23:54 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

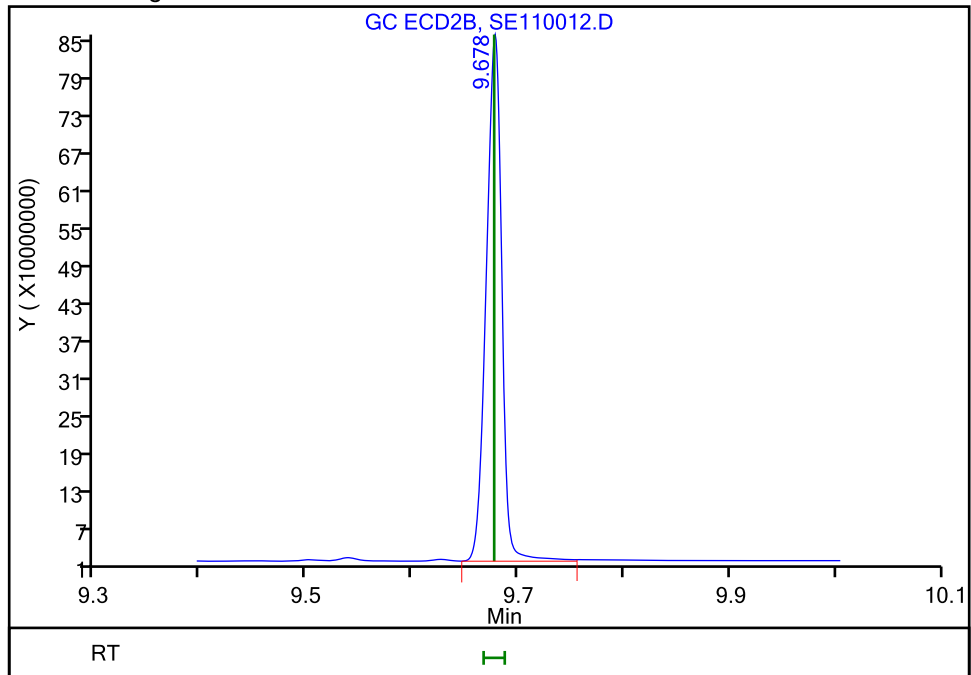
RT: 9.68
Area: 855336358
Amount: 0.146893
Amount Units: ug/ml

Processing Integration Results



RT: 9.68
Area: 858463960
Amount: 0.147349
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 11-May-2018 15:41:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/30 Calibration Date: 05/11/2018 20:17
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110030.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		369893910		0.0861	0.100	-13.9	20.0
3,5-Dichlorobenzoic acid	Ave	283999151	359349860		0.127	0.100	26.5*	20.0
4-Nitrophenol	Ave	92446979	88672310		0.0959	0.100	-4.1	20.0
Dicamba	Ave	902628145	825776440		0.0457	0.0500	-8.5	20.0
MCPP	Ave	597922	585423		9.79	10.0	-2.1	20.0
MCPA	Lin1		695396		9.68	10.0	-3.2	20.0
Dichlorprop	Ave	230133436	218785210		0.0951	0.100	-4.9	20.0
2,4-D	Ave	273146870	259613330		0.0950	0.100	-5.0	20.0
Pentachlorophenol	Ave	4371457736	4108383680		0.0235	0.0250	-6.0	20.0
Silvex (2,4,5-TP)	Ave	1596048239	1569939640		0.0246	0.0250	-1.6	20.0
Chloramben	Ave	1354357931	1329692920		0.0982	0.100	-1.8	20.0
2,4,5-T	Ave	1551041319	1555205680		0.0251	0.0250	0.3	20.0
2,4-DB	Ave	145729072	143811150		0.0987	0.100	-1.3	20.0
Dinoseb	Ave	906941545	949380620		0.105	0.100	4.7	20.0
Bentazon	Ave	221195610	217191740		0.0982	0.100	-1.8	20.0
Picloram	Ave	2262537728	2185002150		0.0966	0.100	-3.4	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2413841684	2327223070		0.0964	0.100	-3.6	20.0
Acifluorfen	Qua		1642013370		0.0947	0.100	-5.3	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	171928410	167618150		0.0975	0.100	-2.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/30 Calibration Date: 05/11/2018 20:17
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.44	2.41	2.45
3,5-Dichlorobenzoic acid	6.01	6.01	6.03
4-Nitrophenol	6.14	6.13	6.15
Dicamba	6.61	6.60	6.62
MCPP	6.76	6.75	6.77
MCPA	6.88	6.87	6.89
Dichlorprop	7.07	7.06	7.08
2,4-D	7.21	7.20	7.22
Pentachlorophenol	7.56	7.55	7.57
Silvex (2,4,5-TP)	7.66	7.65	7.67
Chloramben	7.74	7.73	7.75
2,4,5-T	7.82	7.81	7.83
2,4-DB	8.06	8.05	8.07
Dinoseb	8.11	8.10	8.12
Bentazon	8.18	8.17	8.19
Picloram	8.40	8.39	8.41
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.50	8.49	8.51
Acifluorfen	9.54	9.53	9.55
2,4-Dichlorophenylacetic acid (Surr)	6.57	6.56	6.58

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110030.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-May-2018 20:17:17 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-030
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:43:28

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	36989391	0.1000	0.0861	M
2	2.488	2.487	0.001	112062821	0.1000	0.0808	M
RPD = 6.35							
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	10037847	NC	NC	
2	4.996	4.996	0.000	43292311	NC	NC	
RPD = 26.19							
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	95458138	NC	NC	
2	5.667	5.668	-0.001	390928435	NC	NC	
RPD = 5.05							
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	35934986	0.1000	0.1265	M
2	6.008	6.009	-0.001	129504324	0.1000	0.0844	M
RPD = 39.92							
5 4-Nitrophenol							
1	6.139	6.141	-0.002	8867231	0.1000	0.0959	
2	6.391	6.394	-0.003	24868459	0.1000	0.0974	
RPD = 1.53							
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.571	6.572	-0.001	16761815	0.1000	0.0975	
2	6.719	6.720	-0.001	108389107	0.1000	0.0949	
RPD = 2.71							
7 Dicamba							
1	6.608	6.609	-0.001	41288822	0.0500	0.0457	
2	6.799	6.800	-0.001	179972807	0.0500	0.0424	
RPD = 7.57							

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.756	6.757	-0.001	5854229	10.0	9.79	
2	6.848	6.848	0.000	34680486	10.0	8.45	
						RPD = 14.74	
9 MCPA							
1	6.882	6.883	-0.001	6953958	10.0	9.68	
2	7.046	7.046	0.000	64802253	10.0	8.28	
						RPD = 15.63	
10 Dichlorprop							
1	7.068	7.069	-0.001	21878521	0.1000	0.0951	
2	7.190	7.191	-0.001	93744424	0.1000	0.0818	
						RPD = 15.04	
11 2,4-D							
1	7.212	7.214	-0.002	25961333	0.1000	0.0950	
2	7.410	7.412	-0.002	107906980	0.1000	0.0857	
						RPD = 10.32	
12 Pentachlorophenol							
1	7.561	7.562	-0.001	102709592	0.0250	0.0235	
2	7.603	7.605	-0.002	386033911	0.0250	0.0246	
						RPD = 4.68	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	39248491	0.0250	0.0246	
2	7.742	7.744	-0.002	132969194	0.0250	0.0220	
						RPD = 11.04	
14 Chloramben							
1	7.738	7.739	-0.001	132969292	0.1000	0.0982	
2	8.047	8.049	-0.002	437740182	0.1000	0.0925	
						RPD = 5.97	
15 2,4,5-T							
1	7.816	7.816	0.000	38880142	0.0250	0.0251	
2	7.974	7.976	-0.002	120572049	0.0250	0.0235	
						RPD = 6.46	
16 2,4-DB							
1	8.058	8.059	-0.001	14381115	0.1000	0.0987	
2	8.188	8.190	-0.002	69051843	0.1000	0.0949	
						RPD = 3.86	
17 Dinoseb							
1	8.112	8.113	-0.001	94938062	0.1000	0.1047	
2	8.141	8.141	0.000	255240219	0.1000	0.0927	
						RPD = 12.11	
18 Bentazon							
1	8.183	8.184	-0.001	21719174	0.1000	0.0982	
2	8.542	8.544	-0.002	61667926	0.1000	0.0875	
						RPD = 11.47	
19 Picloram							
1	8.398	8.399	-0.001	218500215	0.1000	0.0966	
2	8.875	8.877	-0.002	661093560	0.1000	0.0818	
						RPD = 16.59	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.501	8.504	-0.003	232722307	0.1000	0.0964	
2	8.656	8.658	-0.002	726935306	0.1000	0.0895	
						RPD = 7.38	

21 Acifluorfen

1	9.541	9.543	-0.002	164201337	0.1000	0.0947	
2	9.675	9.677	-0.002	499125279	0.1000	0.0942	
						RPD = 0.49	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

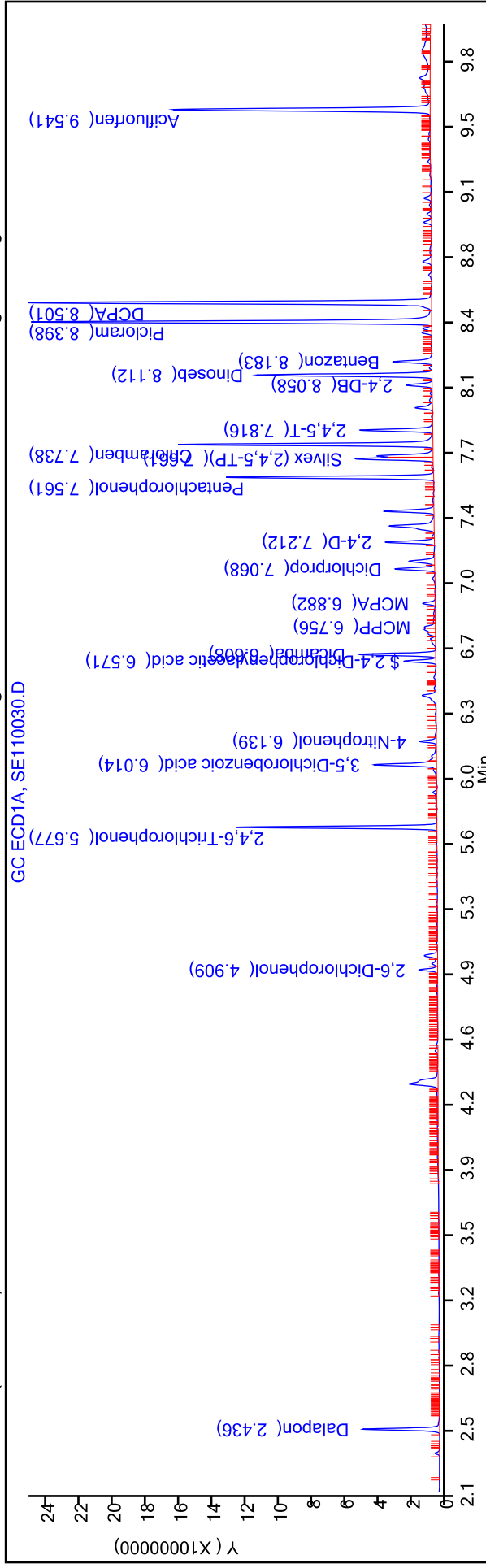
Amount Added: 1.00

Units: mL

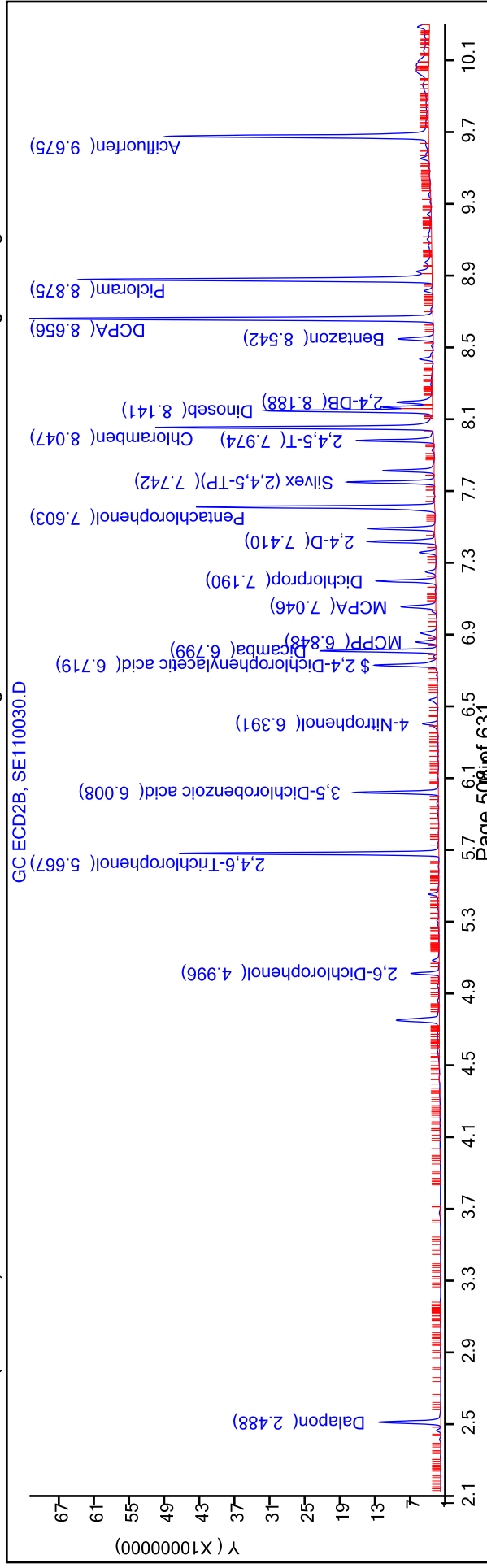
TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110030.D
 Injection Date: 11-May-2018 20:17:17
 Lims ID: ccv h4
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 30
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 30

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

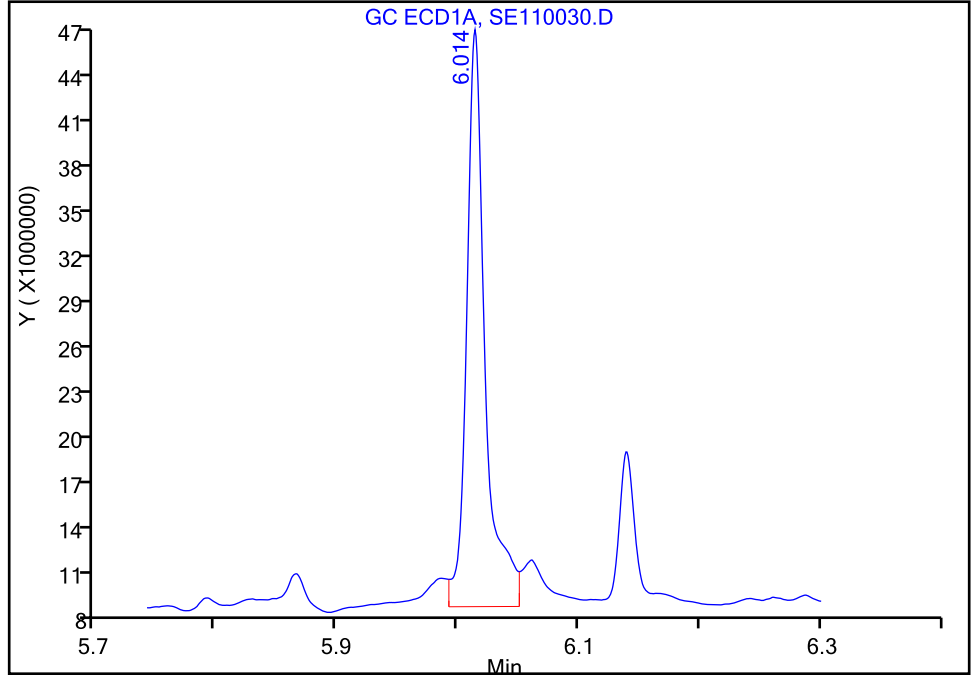
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Injection Date: 11-May-2018 20:17:17 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

4 3,5-Dichlorobenzoic acid, CAS: 51-36-5

Signal: 1

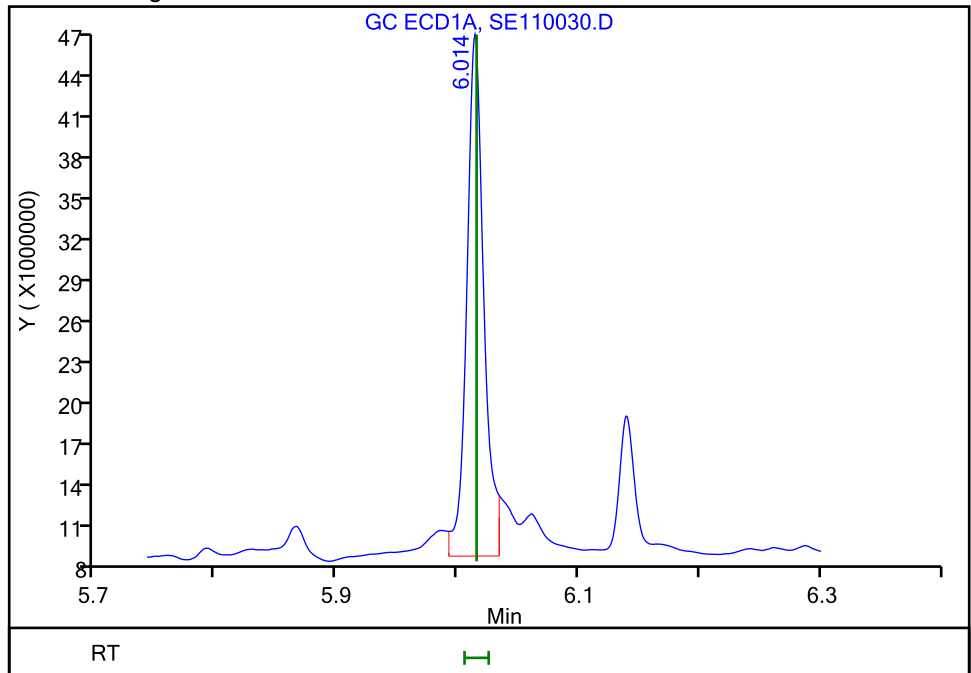
RT: 6.01
Area: 39161331
Amount: 0.137892
Amount Units: ug/ml

Processing Integration Results



RT: 6.01
Area: 35934986
Amount: 0.126532
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:43:13
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/30 Calibration Date: 05/11/2018 20:17
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110030.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1386204194	1120628210		0.0808	0.100	-19.2	20.0
3,5-Dichlorobenzoic acid	Ave	1533919679	1295043240		0.0844	0.100	-15.6	20.0
4-Nitrophenol	Ave	255346659	248684590		0.0974	0.100	-2.6	20.0
Dicamba	Ave	4244164919	3599456140		0.0424	0.0500	-15.2	20.0
MCPP	Lin1		3468049		8.45	10.0	-15.5	20.0
MCPA	Lin2		6480225		8.28	10.0	-17.2	20.0
Dichlorprop	Ave	1146405622	937444240		0.0818	0.100	-18.2	20.0
2,4-D	Ave	1258856811	1079069800		0.0857	0.100	-14.3	20.0
Pentachlorophenol	Ave	15678491137	15441356440		0.0246	0.0250	-1.5	20.0
Silvex (2,4,5-TP)	Ave	6038823762	5318767760		0.0220	0.0250	-11.9	20.0
2,4,5-T	Ave	5130951653	4822881960		0.0235	0.0250	-6.0	20.0
Chloramben	Ave	4732944977	4377401820		0.0925	0.100	-7.5	20.0
Dinoseb	Qua		2552402190		0.0927	0.100	-7.3	20.0
2,4-DB	Ave	727274265	690518430		0.0949	0.100	-5.1	20.0
Bentazon	Ave	704477021	616679260		0.0875	0.100	-12.5	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8117747515	7269353060		0.0895	0.100	-10.5	20.0
Picloram	Lin1		6610935600		0.0818	0.100	-18.2	20.0
Acifluorfen	Qua		4991252790		0.0942	0.100	-5.8	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1142358705	1083891070		0.0949	0.100	-5.1	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/30 Calibration Date: 05/11/2018 20:17
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.01	6.00	6.02
4-Nitrophenol	6.39	6.38	6.40
Dicamba	6.80	6.79	6.81
MCPP	6.85	6.84	6.86
MCPA	7.05	7.04	7.06
Dichlorprop	7.19	7.18	7.20
2,4-D	7.41	7.40	7.42
Pentachlorophenol	7.60	7.60	7.62
Silvex (2,4,5-TP)	7.74	7.73	7.75
2,4,5-T	7.97	7.97	7.99
Chloramben	8.05	8.04	8.06
Dinoseb	8.14	8.13	8.15
2,4-DB	8.19	8.18	8.20
Bentazon	8.54	8.53	8.55
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.66	8.65	8.67
Picloram	8.88	8.87	8.89
Acifluorfen	9.68	9.67	9.69
2,4-Dichlorophenylacetic acid (Surr)	6.72	6.71	6.73

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110030.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-May-2018 20:17:17 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-030
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:43:28

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.436	2.434	0.002	36989391	0.1000	0.0861	M
2	2.488	2.487	0.001	112062821	0.1000	0.0808	M
RPD = 6.35							
2 2,6-Dichlorophenol							
1	4.909	4.909	0.000	10037847	NC	NC	
2	4.996	4.996	0.000	43292311	NC	NC	
RPD = 26.19							
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	95458138	NC	NC	
2	5.667	5.668	-0.001	390928435	NC	NC	
RPD = 5.05							
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	35934986	0.1000	0.1265	M
2	6.008	6.009	-0.001	129504324	0.1000	0.0844	M
RPD = 39.92							
5 4-Nitrophenol							
1	6.139	6.141	-0.002	8867231	0.1000	0.0959	
2	6.391	6.394	-0.003	24868459	0.1000	0.0974	
RPD = 1.53							
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.571	6.572	-0.001	16761815	0.1000	0.0975	
2	6.719	6.720	-0.001	108389107	0.1000	0.0949	
RPD = 2.71							
7 Dicamba							
1	6.608	6.609	-0.001	41288822	0.0500	0.0457	
2	6.799	6.800	-0.001	179972807	0.0500	0.0424	
RPD = 7.57							

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.756	6.757	-0.001	5854229	10.0	9.79	
2	6.848	6.848	0.000	34680486	10.0	8.45	
						RPD = 14.74	
9 MCPA							
1	6.882	6.883	-0.001	6953958	10.0	9.68	
2	7.046	7.046	0.000	64802253	10.0	8.28	
						RPD = 15.63	
10 Dichlorprop							
1	7.068	7.069	-0.001	21878521	0.1000	0.0951	
2	7.190	7.191	-0.001	93744424	0.1000	0.0818	
						RPD = 15.04	
11 2,4-D							
1	7.212	7.214	-0.002	25961333	0.1000	0.0950	
2	7.410	7.412	-0.002	107906980	0.1000	0.0857	
						RPD = 10.32	
12 Pentachlorophenol							
1	7.561	7.562	-0.001	102709592	0.0250	0.0235	
2	7.603	7.605	-0.002	386033911	0.0250	0.0246	
						RPD = 4.68	
13 Silvex (2,4,5-TP)							
1	7.661	7.661	0.000	39248491	0.0250	0.0246	
2	7.742	7.744	-0.002	132969194	0.0250	0.0220	
						RPD = 11.04	
14 Chloramben							
1	7.738	7.739	-0.001	132969292	0.1000	0.0982	
2	8.047	8.049	-0.002	437740182	0.1000	0.0925	
						RPD = 5.97	
15 2,4,5-T							
1	7.816	7.816	0.000	38880142	0.0250	0.0251	
2	7.974	7.976	-0.002	120572049	0.0250	0.0235	
						RPD = 6.46	
16 2,4-DB							
1	8.058	8.059	-0.001	14381115	0.1000	0.0987	
2	8.188	8.190	-0.002	69051843	0.1000	0.0949	
						RPD = 3.86	
17 Dinoseb							
1	8.112	8.113	-0.001	94938062	0.1000	0.1047	
2	8.141	8.141	0.000	255240219	0.1000	0.0927	
						RPD = 12.11	
18 Bentazon							
1	8.183	8.184	-0.001	21719174	0.1000	0.0982	
2	8.542	8.544	-0.002	61667926	0.1000	0.0875	
						RPD = 11.47	
19 Picloram							
1	8.398	8.399	-0.001	218500215	0.1000	0.0966	
2	8.875	8.877	-0.002	661093560	0.1000	0.0818	
						RPD = 16.59	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.501	8.504	-0.003	232722307	0.1000	0.0964	
2	8.656	8.658	-0.002	726935306	0.1000	0.0895	
						RPD = 7.38	

21 Acifluorfen

1	9.541	9.543	-0.002	164201337	0.1000	0.0947	
2	9.675	9.677	-0.002	499125279	0.1000	0.0942	
						RPD = 0.49	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

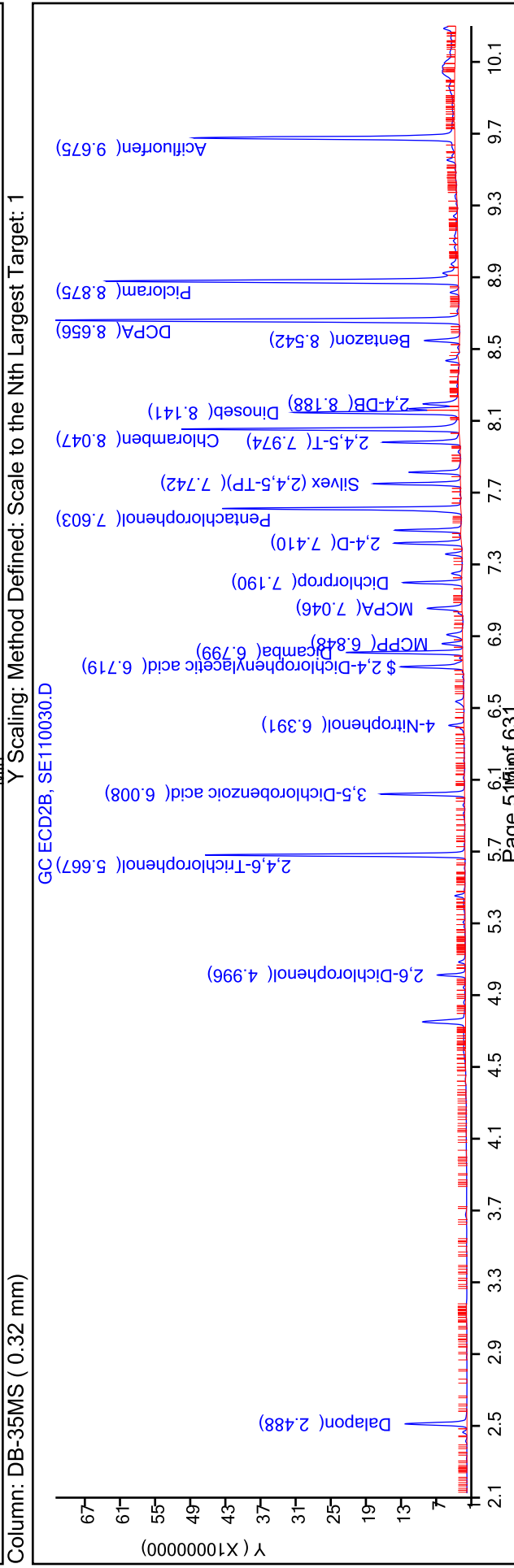
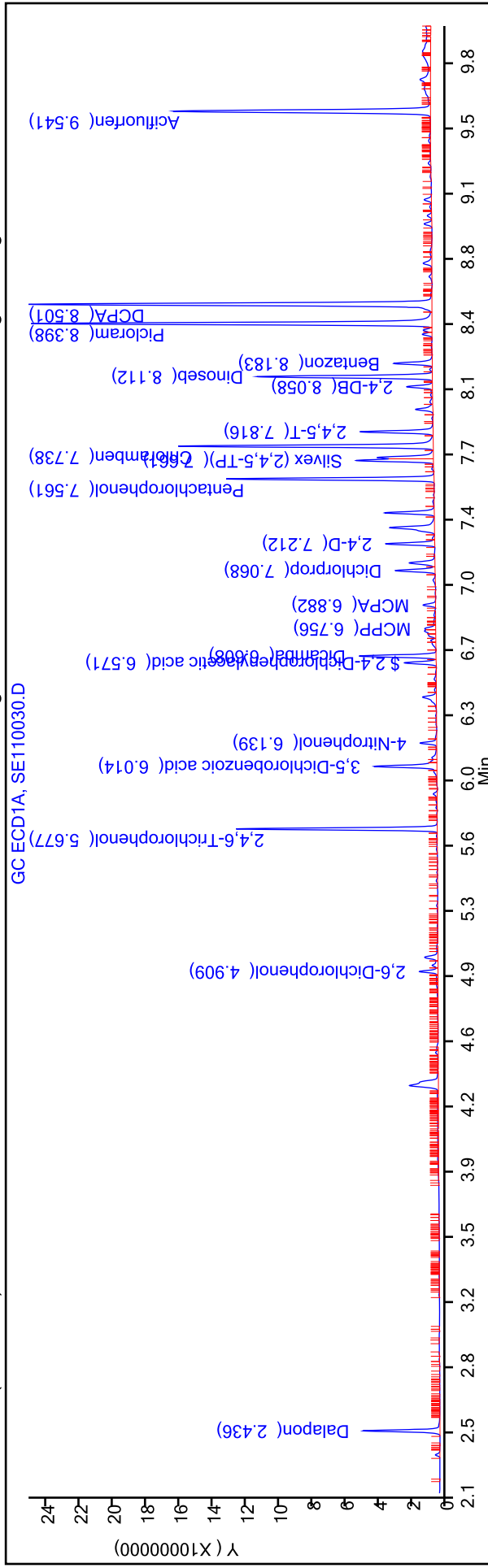
SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110030.D
 Injection Date: 11-May-2018 20:17:17 Instrument ID: CSGS
 Lims ID: ccv h4
 Client ID:
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 30
 ALS Bottle#: 30



TestAmerica Savannah

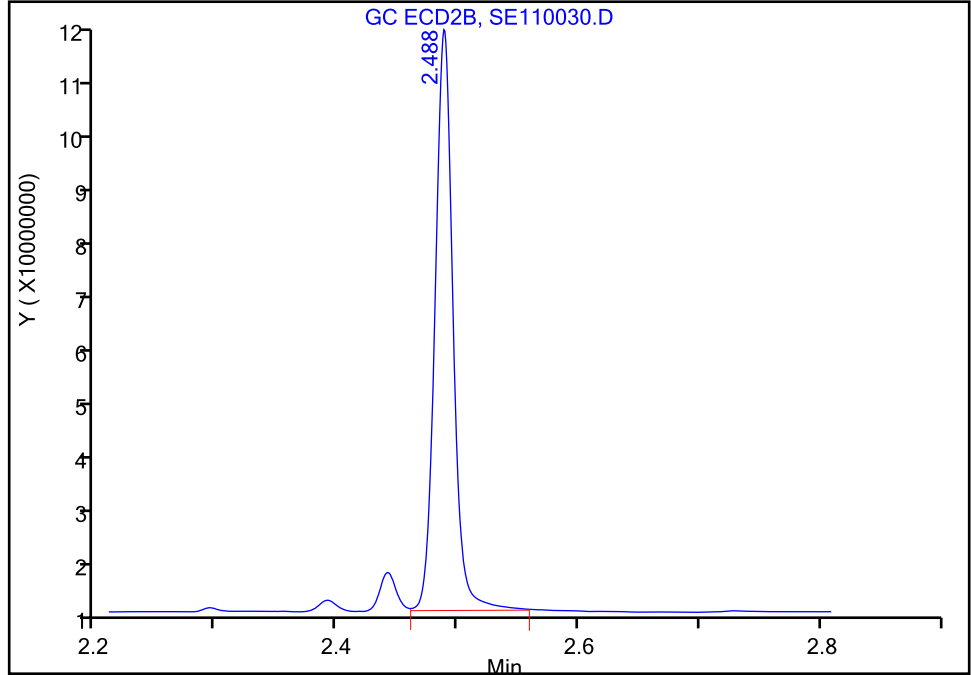
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Injection Date: 11-May-2018 20:17:17 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

1 Dalapon, CAS: 75-99-0

Signal: 2

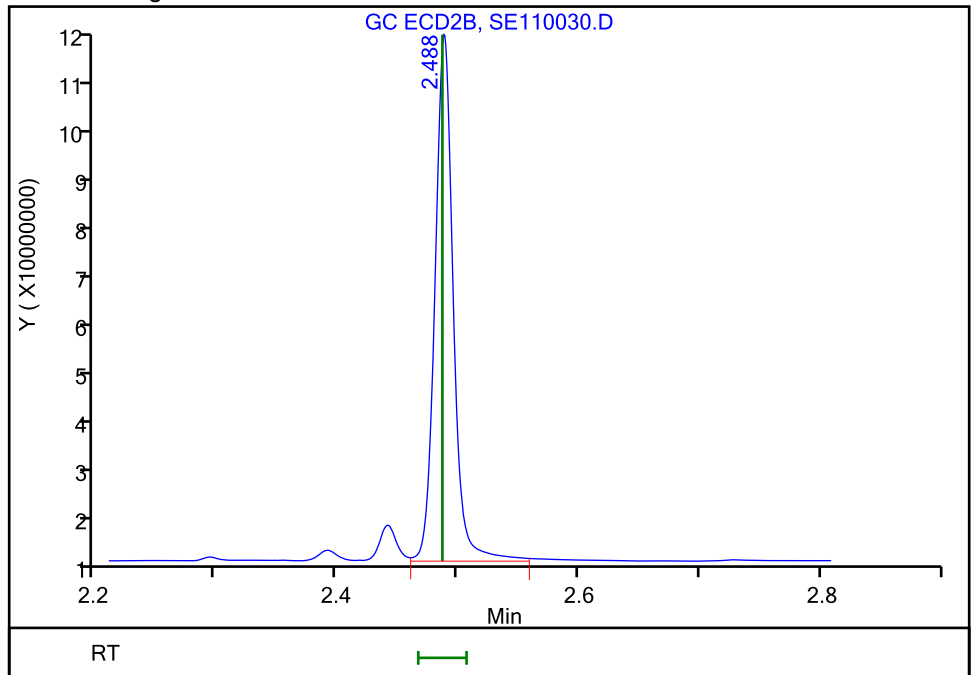
RT: 2.49
Area: 110053077
Amount: 0.079392
Amount Units: ug/ml

Processing Integration Results



RT: 2.49
Area: 112062821
Amount: 0.080841
Amount Units: ug/ml

Manual Integration Results



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/49 Calibration Date: 05/12/2018 02:29
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110049.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Lin2		370475994		0.150	0.175	-14.1	20.0
3,5-Dichlorobenzoic acid	Ave	283999151	256532611		0.158	0.175	-9.7	20.0
4-Nitrophenol	Ave	92446979	87307811		0.165	0.175	-5.6	20.0
Dicamba	Ave	902628145	811814983		0.0787	0.0875	-10.1	20.0
MCPP	Ave	597922	624029		18.3	17.5	4.4	20.0
MCPA	Lin1		732613		18.4	17.5	5.2	20.0
Dichlorprop	Ave	230133436	203908966		0.155	0.175	-11.4	20.0
2,4-D	Ave	273146870	250728183		0.161	0.175	-8.2	20.0
Pentachlorophenol	Ave	4371457736	4089356023		0.0409	0.0438	-6.5	20.0
Silvex (2,4,5-TP)	Ave	1596048239	1503264091		0.0412	0.0438	-5.8	20.0
Chloramben	Ave	1354357931	1249601909		0.161	0.175	-7.7	20.0
2,4,5-T	Ave	1551041319	1462206103		0.0412	0.0438	-5.7	20.0
2,4-DB	Ave	145729072	137485497		0.165	0.175	-5.7	20.0
Dinoseb	Ave	906941545	922562497		0.178	0.175	1.7	20.0
Bentazon	Ave	221195610	201806114		0.160	0.175	-8.8	20.0
Picloram	Ave	2262537728	1972899623		0.153	0.175	-12.8	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	2413841684	2200060286		0.160	0.175	-8.9	20.0
Acifluorfen	Qua		1322782280		0.131	0.175	-25.4*	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	171928410	160464514		0.163	0.175	-6.7	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/49 Calibration Date: 05/12/2018 02:29
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110049.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.44	2.41	2.45
3,5-Dichlorobenzoic acid	6.01	6.01	6.03
4-Nitrophenol	6.14	6.13	6.15
Dicamba	6.61	6.60	6.62
MCPP	6.76	6.75	6.77
MCPA	6.88	6.87	6.89
Dichlorprop	7.07	7.06	7.08
2,4-D	7.21	7.20	7.22
Pentachlorophenol	7.56	7.55	7.57
Silvex (2,4,5-TP)	7.66	7.65	7.67
Chloramben	7.74	7.73	7.75
2,4,5-T	7.82	7.81	7.83
2,4-DB	8.06	8.05	8.07
Dinoseb	8.11	8.10	8.12
Bentazon	8.18	8.17	8.19
Picloram	8.40	8.39	8.41
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.50	8.49	8.51
Acifluorfen	9.54	9.53	9.55
2,4-Dichlorophenylacetic acid (Surr)	6.57	6.56	6.58

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-May-2018 02:29:25 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-049
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.435	2.434	0.001	64833299	0.1750	0.1502	
2	2.487	2.487	0.000	194649115	0.1750	0.1404	
						RPD = 6.76	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	13847573	NC	NC	
2	4.997	4.996	0.001	69779343	NC	NC	
						RPD = 11.46	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	166524921	NC	NC	
2	5.668	5.668	0.000	683245650	NC	NC	
						RPD = 4.86	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	44893207	0.1750	0.1581	
2	6.008	6.009	-0.001	225669735	0.1750	0.1471	
						RPD = 7.18	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	15278867	0.1750	0.1653	
2	6.392	6.394	-0.002	39639265	0.1750	0.1552	
						RPD = 6.26	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.572	6.572	0.000	28081290	0.1750	0.1633	
2	6.719	6.720	-0.001	173176230	0.1750	0.1516	M
						RPD = 7.45	
7 Dicamba M							
1	6.608	6.609	-0.001	71033811	0.0875	0.0787	
2	6.801	6.800	0.001	313668829	0.0875	0.0739	M
						RPD = 6.28	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.757	6.757	0.000	10920504	17.5	18.3	
2	6.848	6.848	0.000	58367940	17.5	14.9	M
						RPD = 20.49	
9 MCPA							M
1	6.883	6.883	0.000	12820719	17.5	18.4	
2	7.046	7.046	0.000	107546076	17.5	14.3	M
						RPD = 25.12	
10 Dichlorprop							M
1	7.068	7.069	-0.001	35684069	0.1750	0.1551	
2	7.191	7.191	0.000	160265818	0.1750	0.1398	M
						RPD = 10.35	
11 2,4-D							M
1	7.212	7.214	-0.002	43877432	0.1750	0.1606	
2	7.411	7.412	-0.001	195120692	0.1750	0.1550	M
						RPD = 3.57	
12 Pentachlorophenol							M
1	7.562	7.562	0.000	178909326	0.0438	0.0409	
2	7.605	7.605	0.000	602721038	0.0438	0.0384	M
						RPD = 6.26	
13 Silvex (2,4,5-TP)							M
1	7.661	7.661	0.000	65767804	0.0438	0.0412	
2	7.743	7.744	-0.001	234399519	0.0438	0.0388	M
						RPD = 5.98	
14 Chloramben							M
1	7.738	7.739	-0.001	218680334	0.1750	0.1615	
2	8.048	8.049	-0.001	731348181	0.1750	0.1545	M
						RPD = 4.39	
15 2,4,5-T							M
1	7.816	7.816	0.000	63971517	0.0438	0.0412	
2	7.975	7.976	-0.001	209186266	0.0438	0.0408	M
						RPD = 1.16	
16 2,4-DB							M
1	8.058	8.059	-0.001	24059962	0.1750	0.1651	
2	8.189	8.190	-0.001	112290903	0.1750	0.1544	M
						RPD = 6.70	
17 Dinoseb							M
1	8.112	8.113	-0.001	161448437	0.1750	0.1780	
2	8.142	8.141	0.001	439400629	0.1750	0.1498	M
						RPD = 17.19	
18 Bentazon							M
1	8.184	8.184	0.000	35316070	0.1750	0.1597	
2	8.543	8.544	-0.001	110640123	0.1750	0.1571	M
						RPD = 1.65	
19 Picloram							M
1	8.399	8.399	0.000	345257434	0.1750	0.1526	
2	8.876	8.877	-0.001	1087585501	0.1750	0.1286	M
						RPD = 17.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.502	8.504	-0.002	385010550	0.1750	0.1595	
2	8.657	8.658	-0.001	1228989351	0.1750	0.1514	M
							RPD = 5.21

21 Acifluorfen							
1	9.542	9.543	-0.001	231486899	0.1750	0.1306	
2	9.676	9.677	-0.001	630622136	0.1750	0.1139	
							RPD = 13.73

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-5_00016

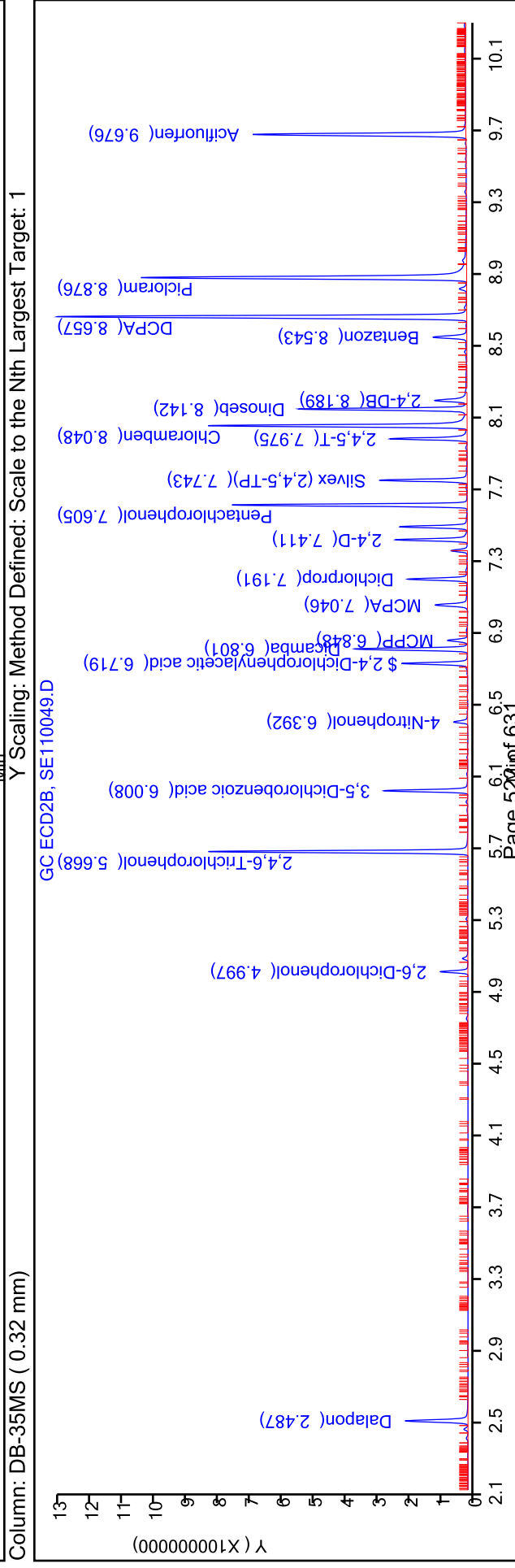
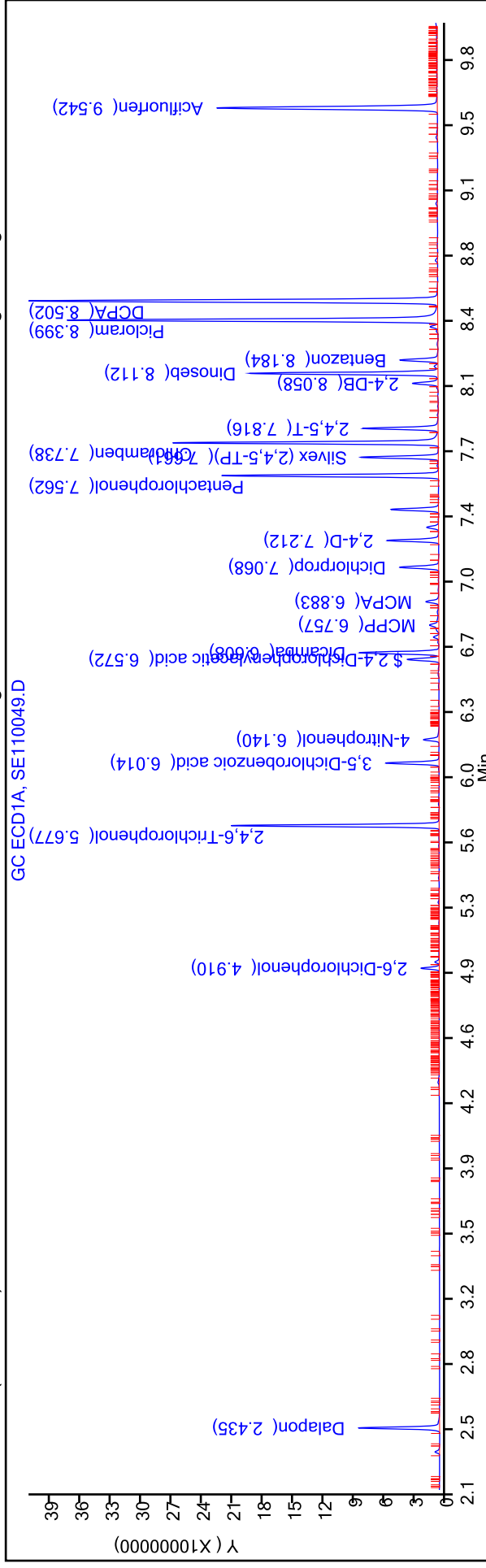
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Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
 Injection Date: 12-May-2018 02:29:25
 Lims ID: ccv h5
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 49
 ALS Bottle#: 49



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/49 Calibration Date: 05/12/2018 02:29
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110049.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1386204194	1112280657		0.140	0.175	-19.8	20.0
3,5-Dichlorobenzoic acid	Ave	1533919679	1289541343		0.147	0.175	-15.9	20.0
4-Nitrophenol	Ave	255346659	226510086		0.155	0.175	-11.3	20.0
Dicamba	Ave	4244164919	3584786617		0.0739	0.0875	-15.5	20.0
MCPP	Lin1		3335311		14.9	17.5	-15.0	20.0
MCPA	Lin2		6145490		14.3	17.5	-18.3	20.0
Dichlorprop	Ave	1146405622	915804674		0.140	0.175	-20.1*	20.0
2,4-D	Ave	1258856811	1114975383		0.155	0.175	-11.4	20.0
Pentachlorophenol	Ave	15678491137	13776480869		0.0384	0.0438	-12.1	20.0
Silvex (2,4,5-TP)	Ave	6038823762	5357703291		0.0388	0.0438	-11.3	20.0
2,4,5-T	Ave	5130951653	4781400366		0.0408	0.0438	-6.8	20.0
Chloramben	Ave	4732944977	4179132463		0.155	0.175	-11.7	20.0
Dinoseb	Qua		2510860737		0.150	0.175	-14.4	20.0
2,4-DB	Ave	727274265	641662303		0.154	0.175	-11.8	20.0
Bentazon	Ave	704477021	632229274		0.157	0.175	-10.3	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	8117747515	7022796291		0.151	0.175	-13.5	20.0
Picloram	Lin1		6214774291		0.129	0.175	-26.5*	20.0
Acifluorfen	Qua		3603555063		0.114	0.175	-34.9*	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1142358705	989578457		0.152	0.175	-13.4	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523572/49 Calibration Date: 05/12/2018 02:29
 Instrument ID: CSGS Calib Start Date: 05/11/2018 11:46
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/11/2018 14:04
 Lab File ID: SE110049.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.49	2.47	2.51
3,5-Dichlorobenzoic acid	6.01	6.00	6.02
4-Nitrophenol	6.39	6.38	6.40
Dicamba	6.80	6.79	6.81
MCPP	6.85	6.84	6.86
MCPA	7.05	7.04	7.06
Dichlorprop	7.19	7.18	7.20
2,4-D	7.41	7.40	7.42
Pentachlorophenol	7.61	7.60	7.62
Silvex (2,4,5-TP)	7.74	7.73	7.75
2,4,5-T	7.98	7.97	7.99
Chloramben	8.05	8.04	8.06
Dinoseb	8.14	8.13	8.15
2,4-DB	8.19	8.18	8.20
Bentazon	8.54	8.53	8.55
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.66	8.65	8.67
Picloram	8.88	8.87	8.89
Acifluorfen	9.68	9.67	9.69
2,4-Dichlorophenylacetic acid (Surr)	6.72	6.71	6.73

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-May-2018 02:29:25 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-049
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.435	2.434	0.001	64833299	0.1750	0.1502	
2	2.487	2.487	0.000	194649115	0.1750	0.1404	
						RPD = 6.76	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	13847573	NC	NC	
2	4.997	4.996	0.001	69779343	NC	NC	
						RPD = 11.46	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	166524921	NC	NC	
2	5.668	5.668	0.000	683245650	NC	NC	
						RPD = 4.86	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	44893207	0.1750	0.1581	
2	6.008	6.009	-0.001	225669735	0.1750	0.1471	
						RPD = 7.18	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	15278867	0.1750	0.1653	
2	6.392	6.394	-0.002	39639265	0.1750	0.1552	
						RPD = 6.26	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.572	6.572	0.000	28081290	0.1750	0.1633	
2	6.719	6.720	-0.001	173176230	0.1750	0.1516	M
						RPD = 7.45	
7 Dicamba M							
1	6.608	6.609	-0.001	71033811	0.0875	0.0787	
2	6.801	6.800	0.001	313668829	0.0875	0.0739	M
						RPD = 6.28	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.757	6.757	0.000	10920504	17.5	18.3	
2	6.848	6.848	0.000	58367940	17.5	14.9	M
							RPD = 20.49
9 MCPA							M
1	6.883	6.883	0.000	12820719	17.5	18.4	
2	7.046	7.046	0.000	107546076	17.5	14.3	M
							RPD = 25.12
10 Dichlorprop							M
1	7.068	7.069	-0.001	35684069	0.1750	0.1551	
2	7.191	7.191	0.000	160265818	0.1750	0.1398	M
							RPD = 10.35
11 2,4-D							M
1	7.212	7.214	-0.002	43877432	0.1750	0.1606	
2	7.411	7.412	-0.001	195120692	0.1750	0.1550	M
							RPD = 3.57
12 Pentachlorophenol							M
1	7.562	7.562	0.000	178909326	0.0438	0.0409	
2	7.605	7.605	0.000	602721038	0.0438	0.0384	M
							RPD = 6.26
13 Silvex (2,4,5-TP)							M
1	7.661	7.661	0.000	65767804	0.0438	0.0412	
2	7.743	7.744	-0.001	234399519	0.0438	0.0388	M
							RPD = 5.98
14 Chloramben							M
1	7.738	7.739	-0.001	218680334	0.1750	0.1615	
2	8.048	8.049	-0.001	731348181	0.1750	0.1545	M
							RPD = 4.39
15 2,4,5-T							M
1	7.816	7.816	0.000	63971517	0.0438	0.0412	
2	7.975	7.976	-0.001	209186266	0.0438	0.0408	M
							RPD = 1.16
16 2,4-DB							M
1	8.058	8.059	-0.001	24059962	0.1750	0.1651	
2	8.189	8.190	-0.001	112290903	0.1750	0.1544	M
							RPD = 6.70
17 Dinoseb							M
1	8.112	8.113	-0.001	161448437	0.1750	0.1780	
2	8.142	8.141	0.001	439400629	0.1750	0.1498	M
							RPD = 17.19
18 Bentazon							M
1	8.184	8.184	0.000	35316070	0.1750	0.1597	
2	8.543	8.544	-0.001	110640123	0.1750	0.1571	M
							RPD = 1.65
19 Picloram							M
1	8.399	8.399	0.000	345257434	0.1750	0.1526	
2	8.876	8.877	-0.001	1087585501	0.1750	0.1286	M
							RPD = 17.09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.502	8.504	-0.002	385010550	0.1750	0.1595	
2	8.657	8.658	-0.001	1228989351	0.1750	0.1514	M
							RPD = 5.21

21 Acifluorfen							
1	9.542	9.543	-0.001	231486899	0.1750	0.1306	
2	9.676	9.677	-0.001	630622136	0.1750	0.1139	
							RPD = 13.73

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-5_00016

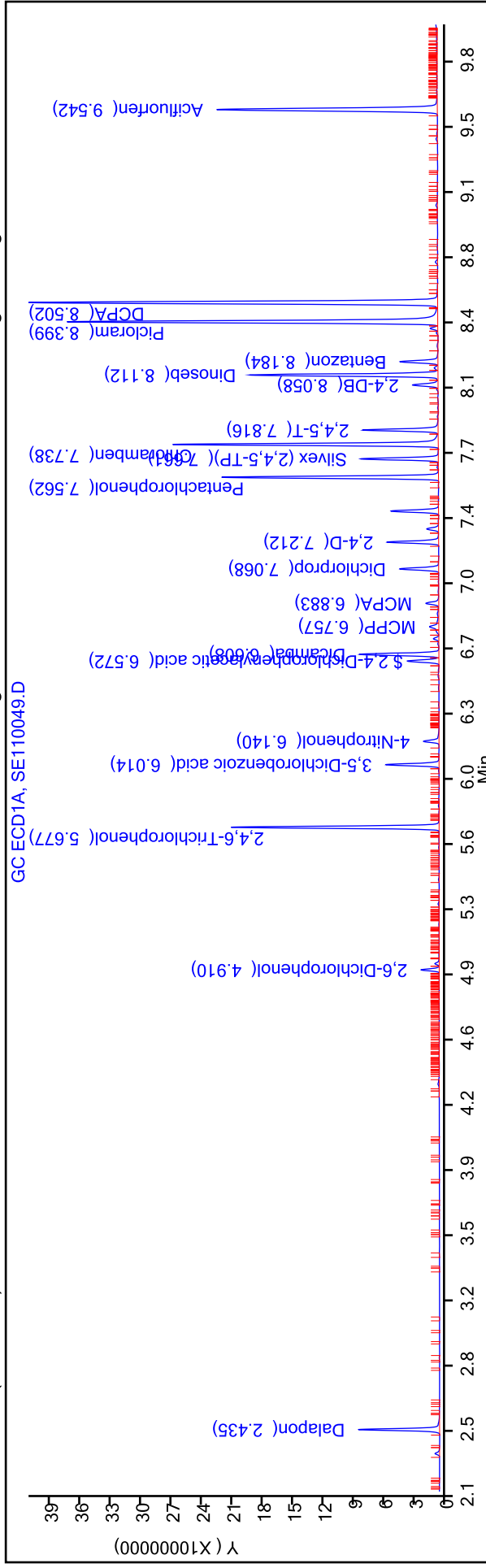
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Units: mL

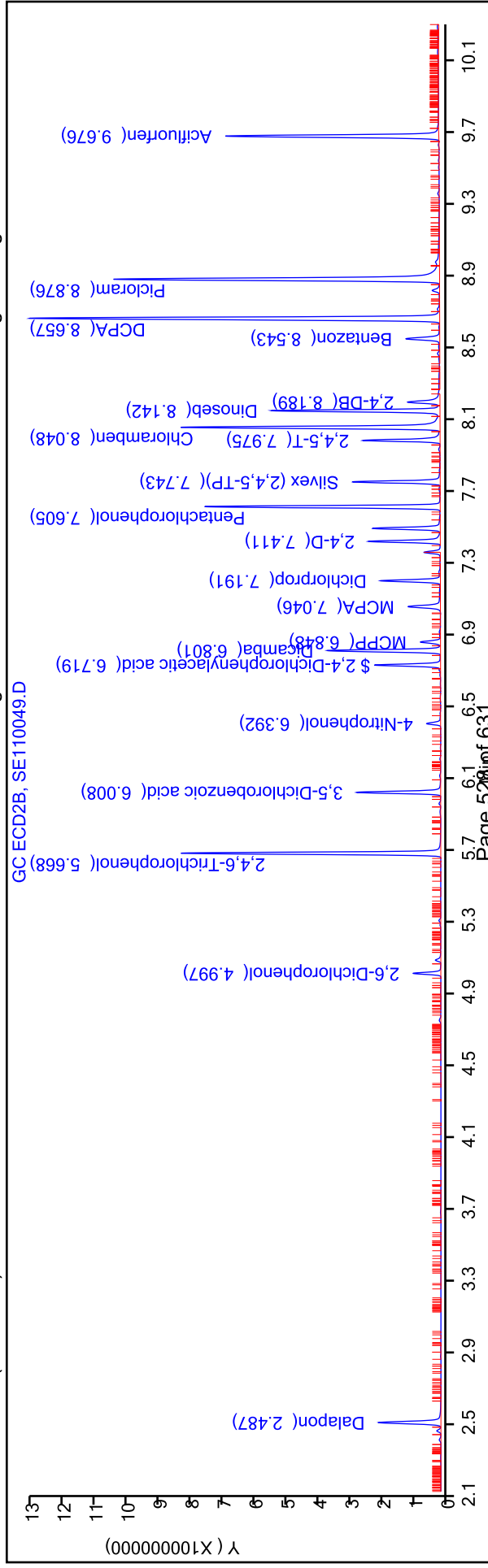
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 Injection Date: 12-May-2018 02:29:25
 Lims ID: ccv h5
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 49
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 49

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

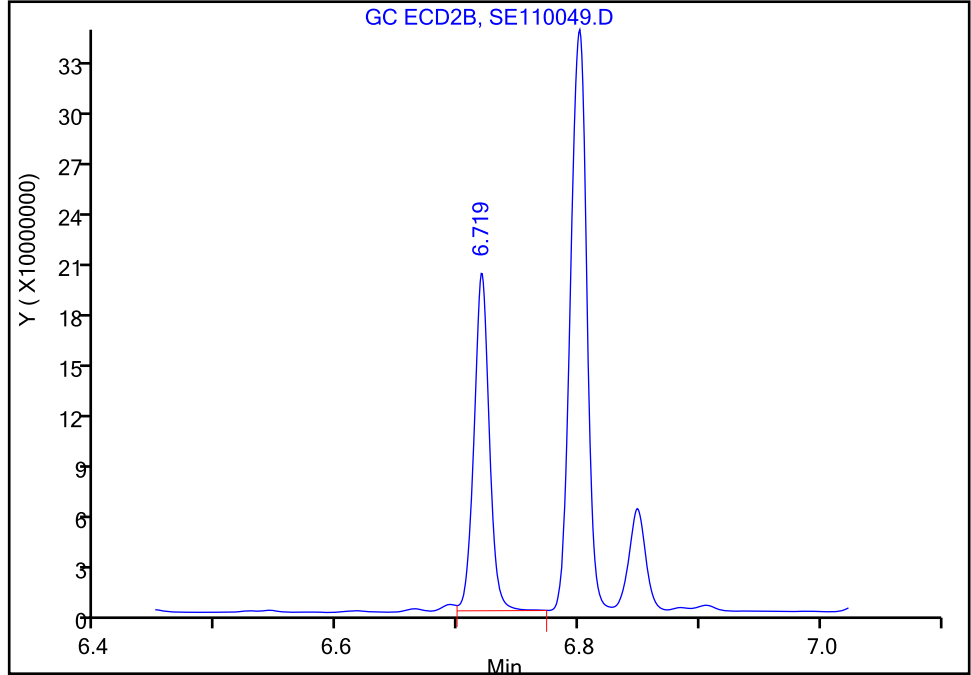
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Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

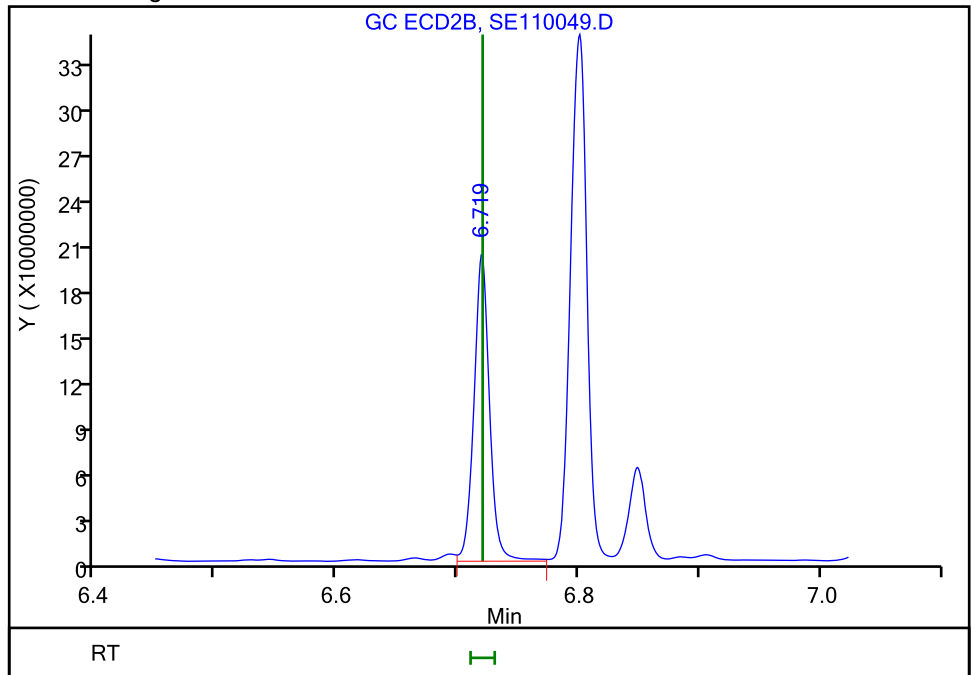
RT: 6.72
Area: 168980944
Amount: 0.147923
Amount Units: ug/ml

Processing Integration Results



RT: 6.72
Area: 173176230
Amount: 0.151595
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

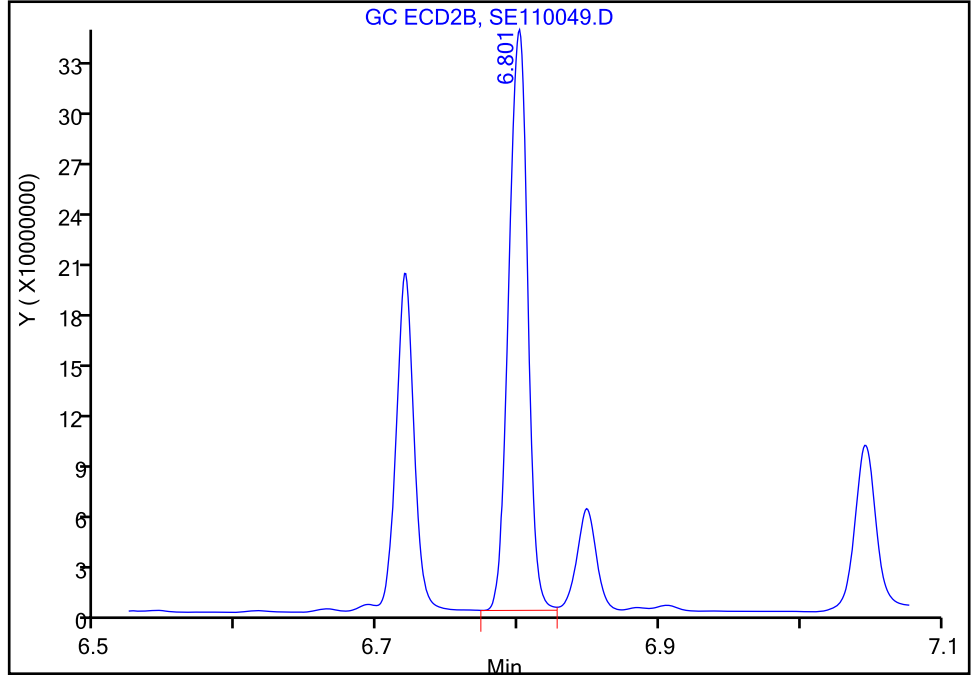
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Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

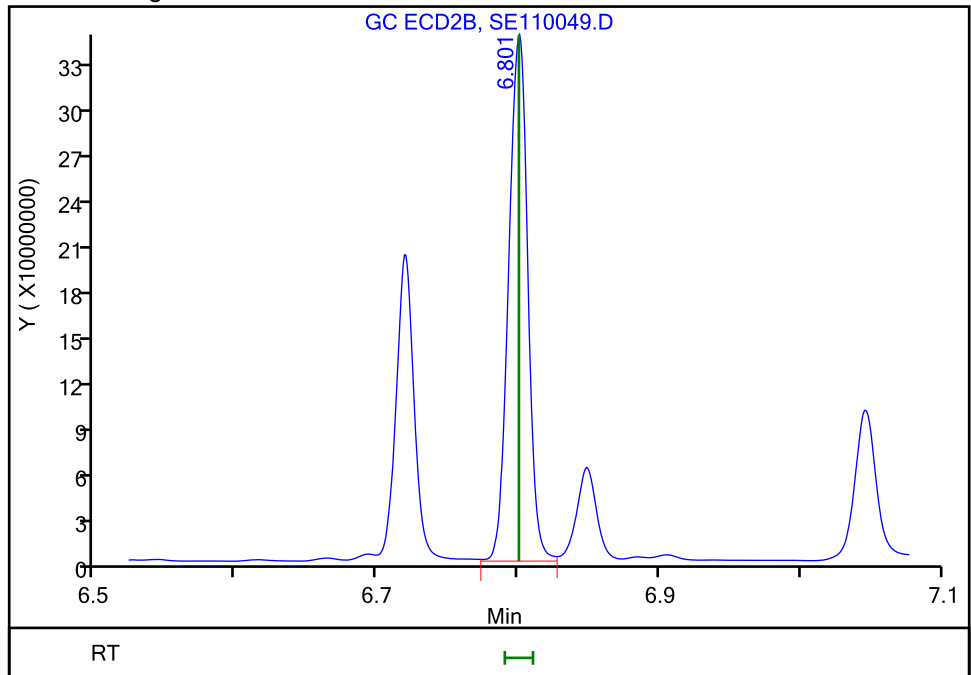
RT: 6.80
Area: 310269893
Amount: 0.073105
Amount Units: ug/ml

Processing Integration Results



RT: 6.80
Area: 313668829
Amount: 0.073906
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

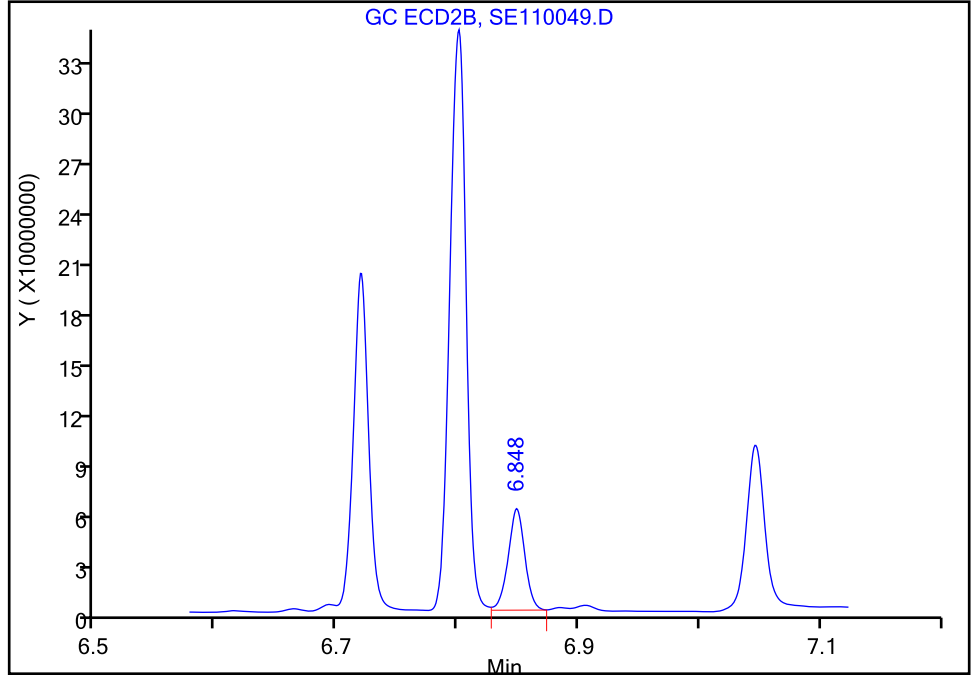
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Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

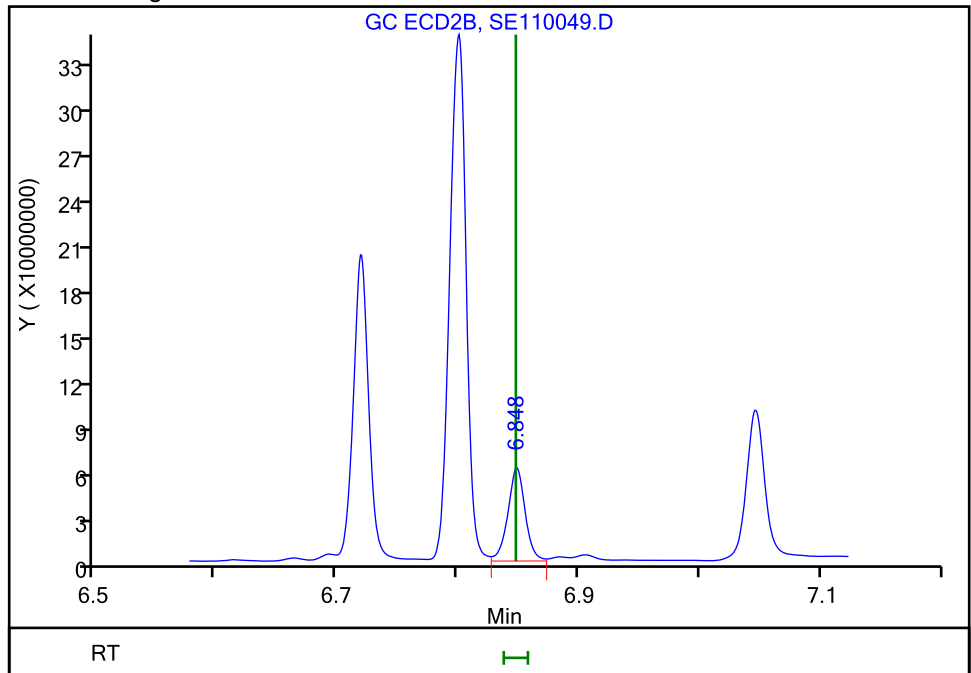
RT: 6.85
Area: 55302170
Amount: 14.038314
Amount Units: ug/ml

Processing Integration Results



RT: 6.85
Area: 58367940
Amount: 14.869568
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

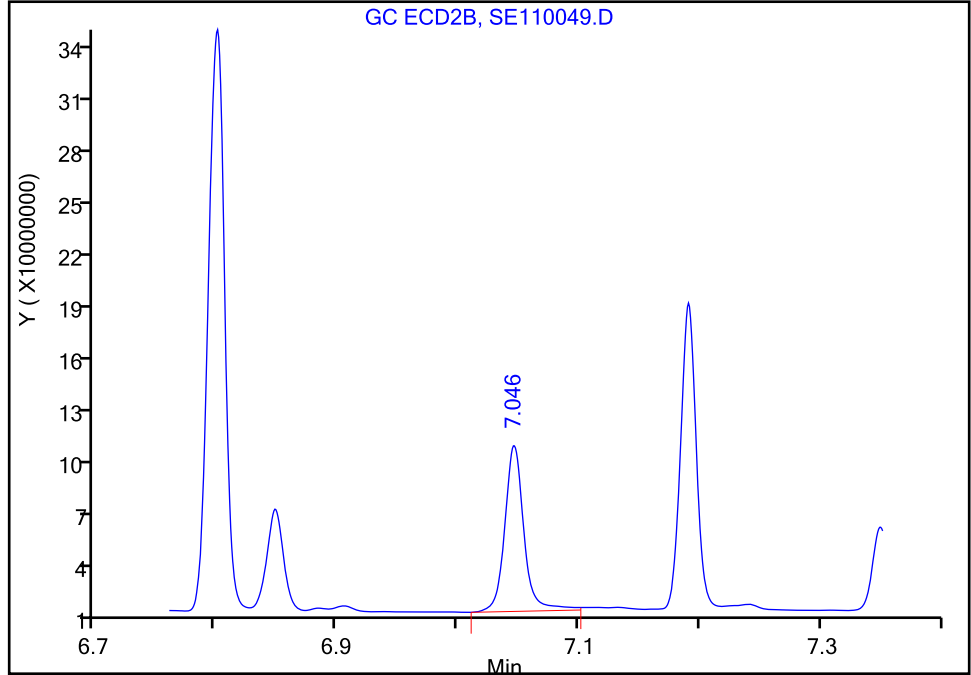
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Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

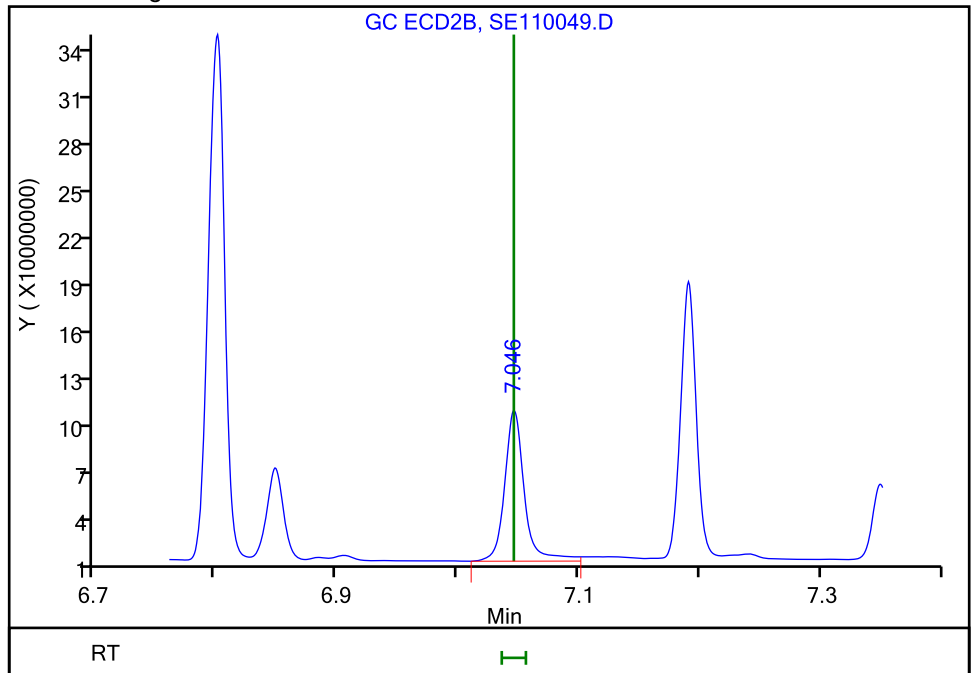
RT: 7.05
Area: 104118032
Amount: 13.812680
Amount Units: ug/ml

Processing Integration Results



RT: 7.05
Area: 107546076
Amount: 14.295324
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:18
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

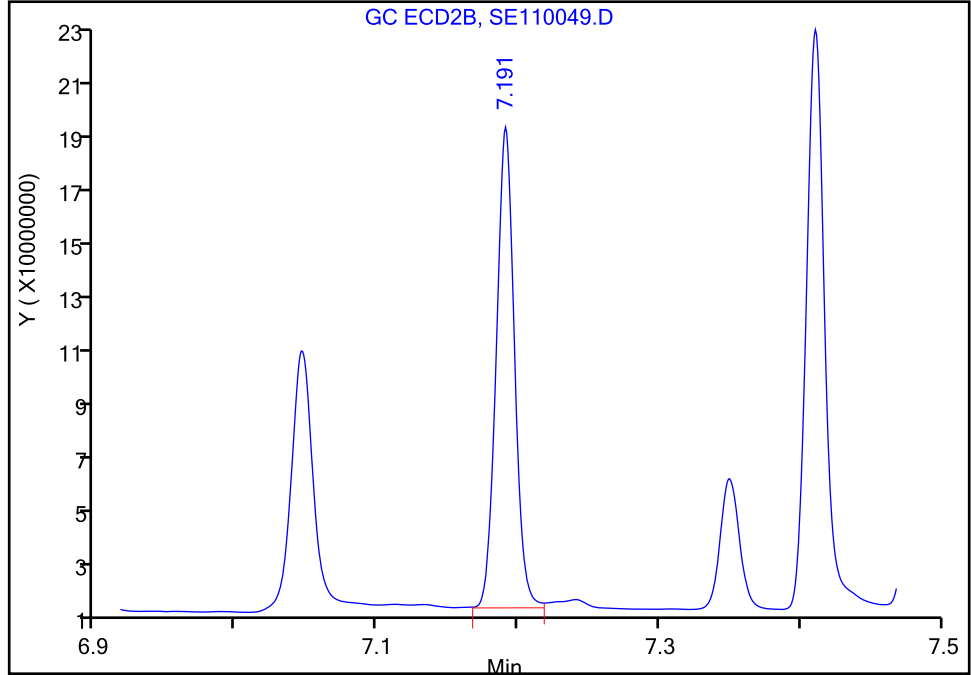
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

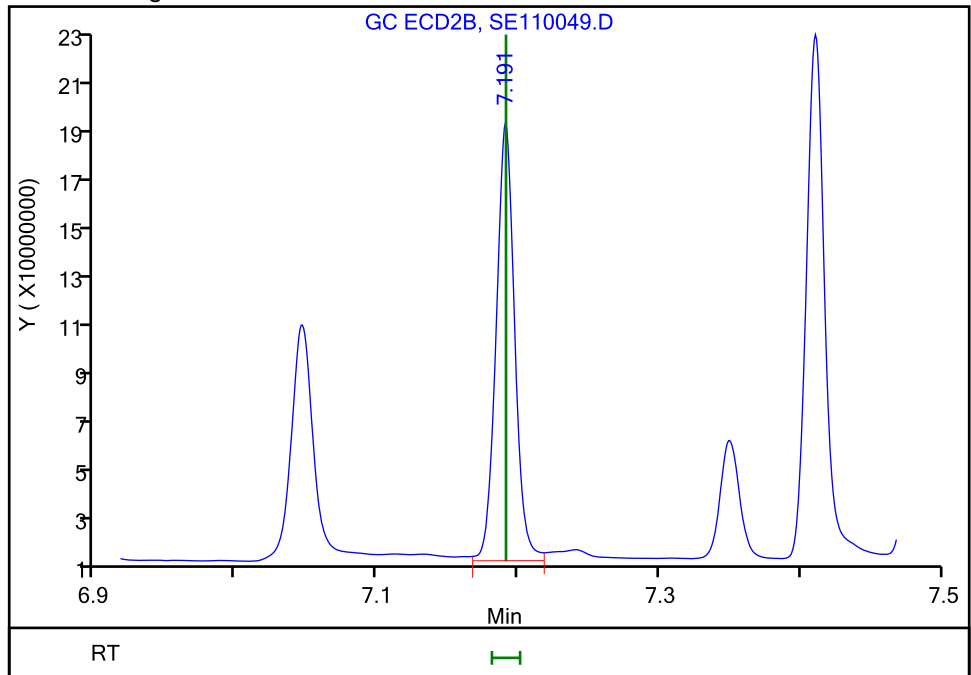
RT: 7.19
Area: 155969448
Amount: 0.136051
Amount Units: ug/ml

Processing Integration Results



RT: 7.19
Area: 160265818
Amount: 0.139799
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

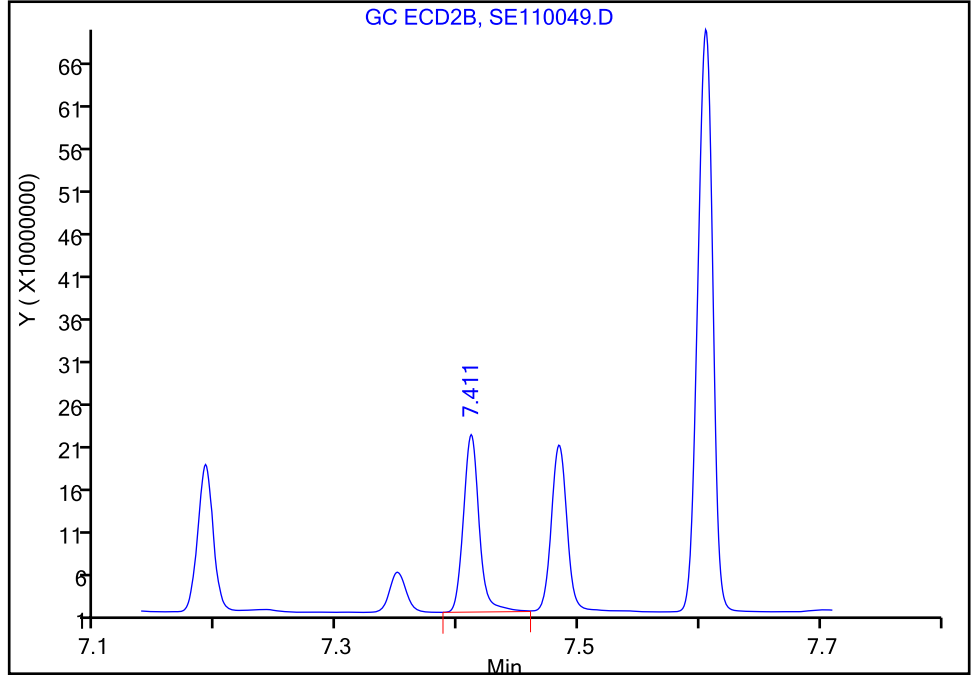
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

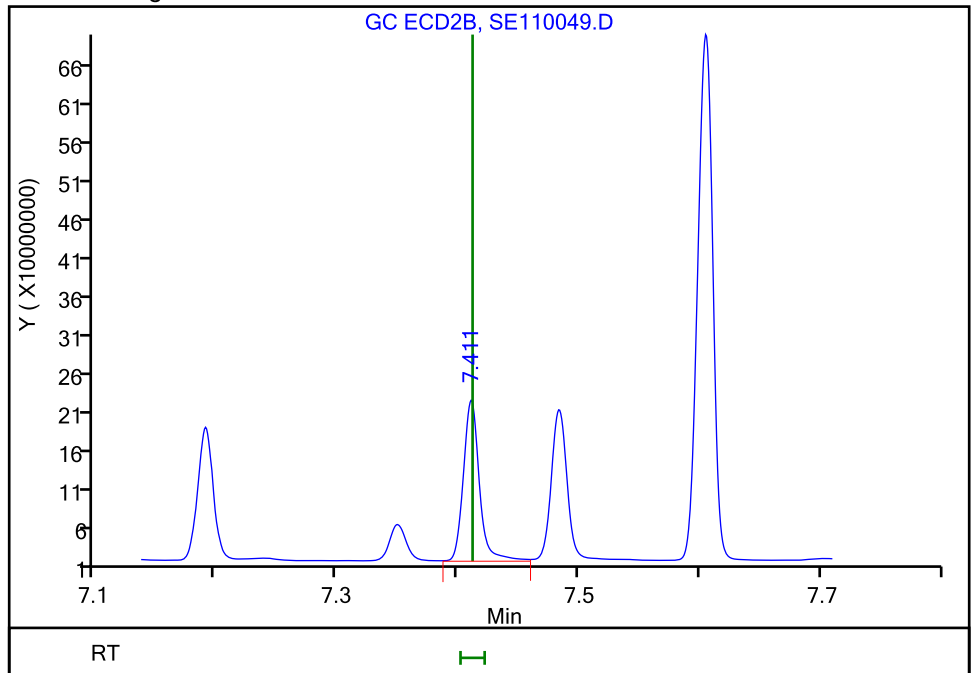
RT: 7.41
Area: 190438043
Amount: 0.151279
Amount Units: ug/ml

Processing Integration Results



RT: 7.41
Area: 195120692
Amount: 0.154998
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

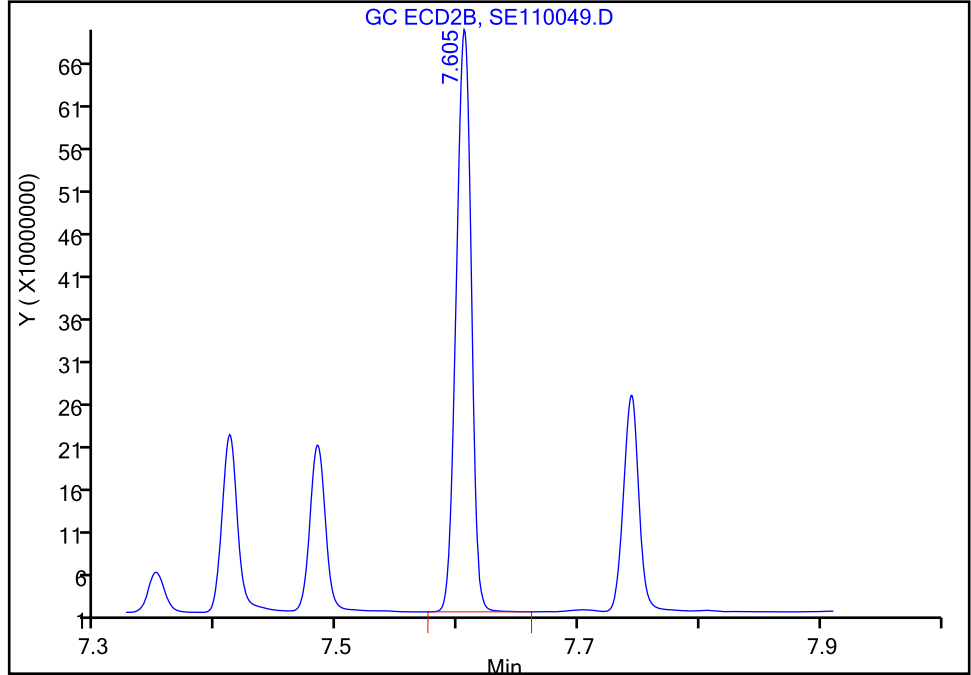
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

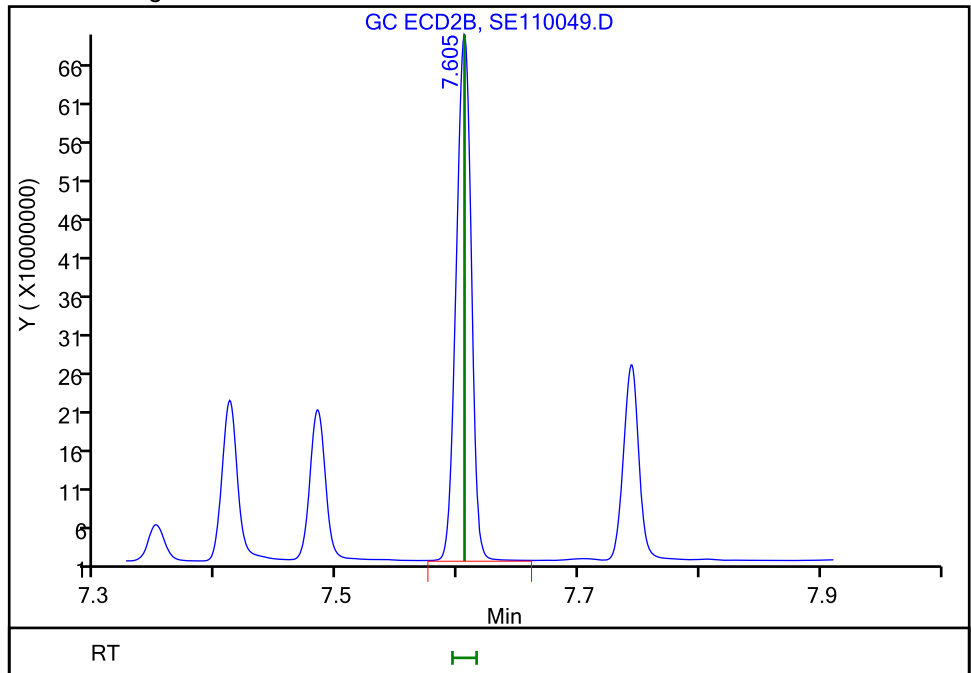
RT: 7.60
Area: 597685342
Amount: 0.038121
Amount Units: ug/ml

Processing Integration Results



RT: 7.60
Area: 602721038
Amount: 0.038443
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

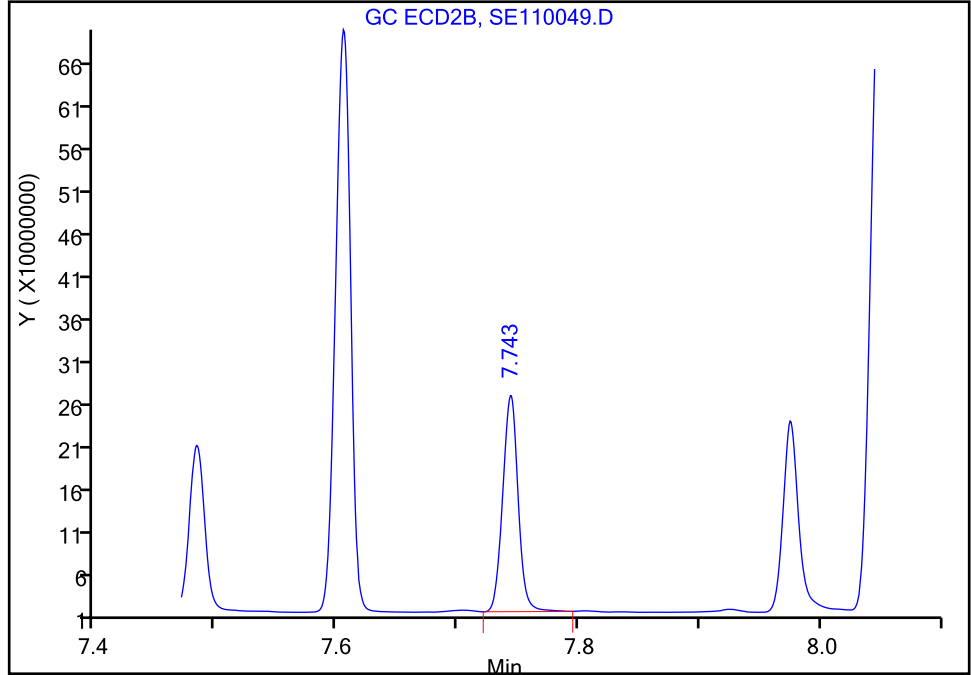
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

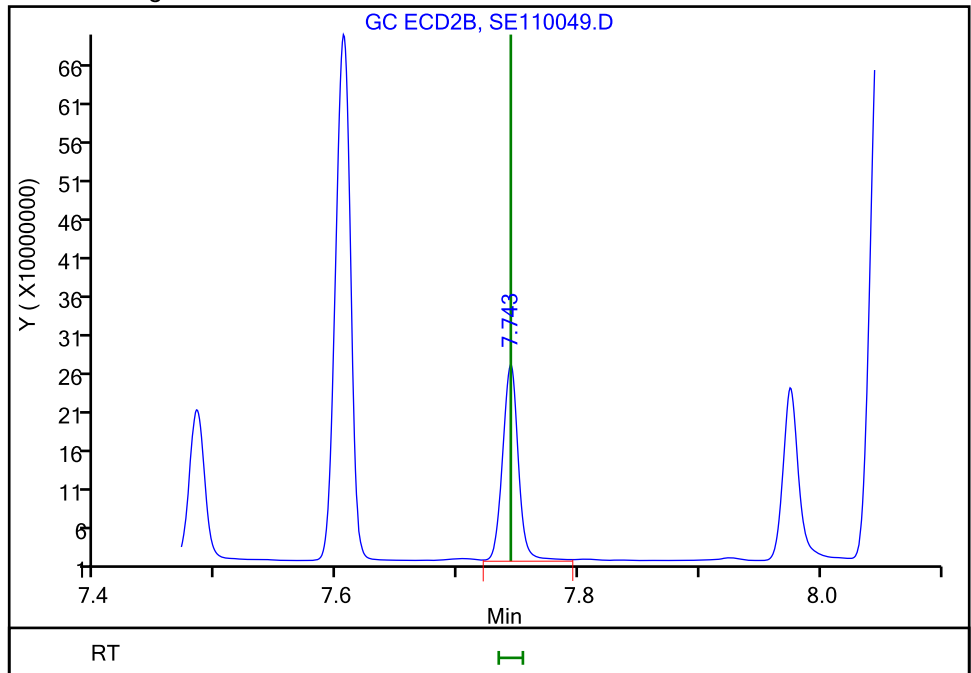
RT: 7.74
Area: 226845390
Amount: 0.037564
Amount Units: ug/ml

Processing Integration Results



RT: 7.74
Area: 234399519
Amount: 0.038815
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:21
Audit Action: Assigned New Baseline

TestAmerica Savannah

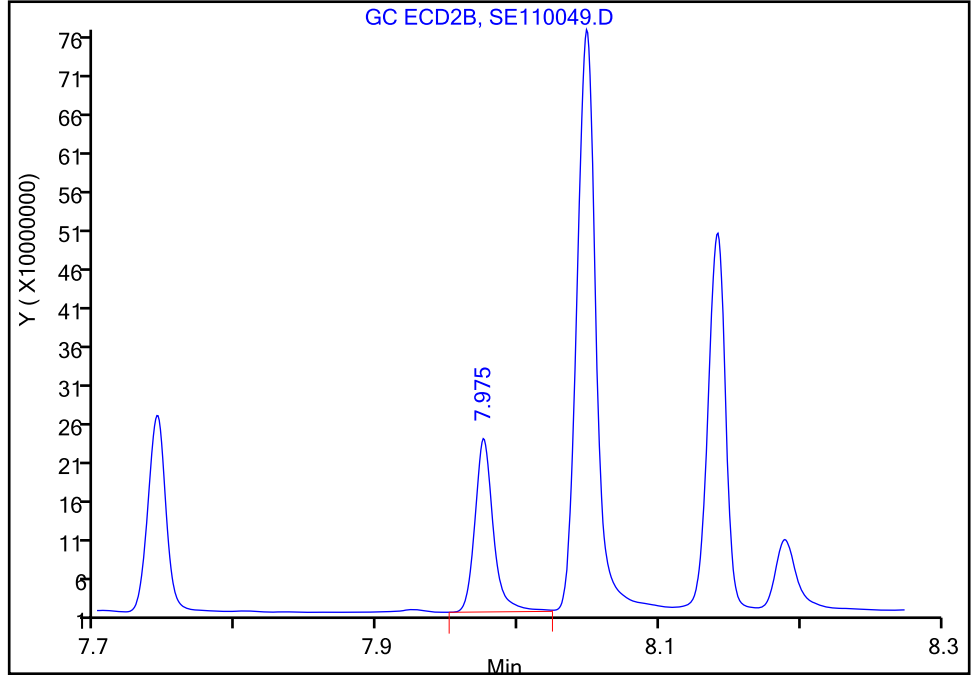
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

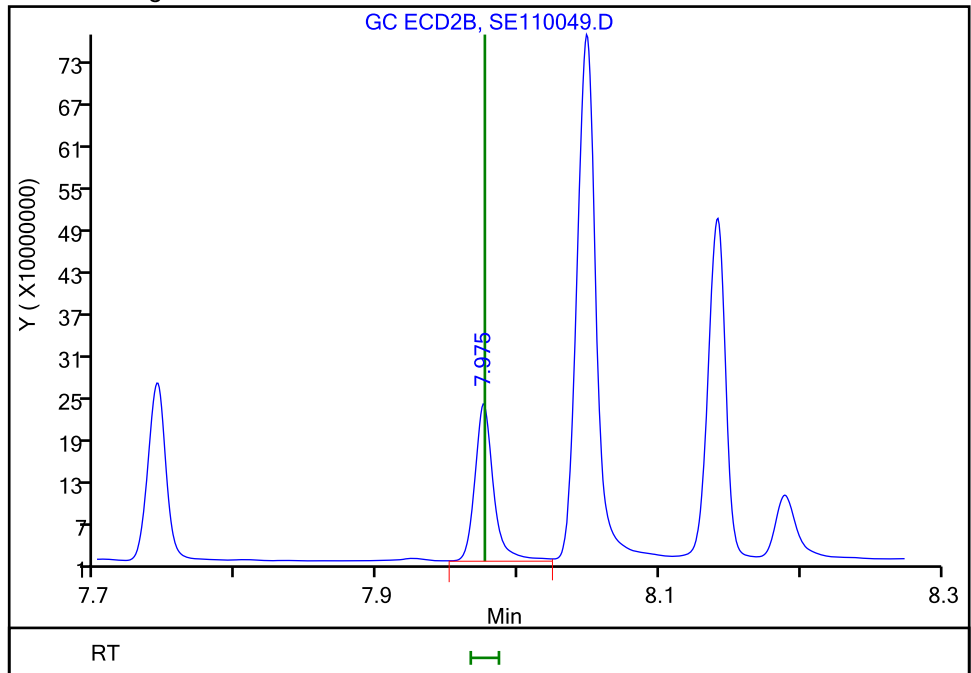
RT: 7.97
Area: 204202646
Amount: 0.039798
Amount Units: ug/ml

Processing Integration Results



RT: 7.97
Area: 209186266
Amount: 0.040769
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

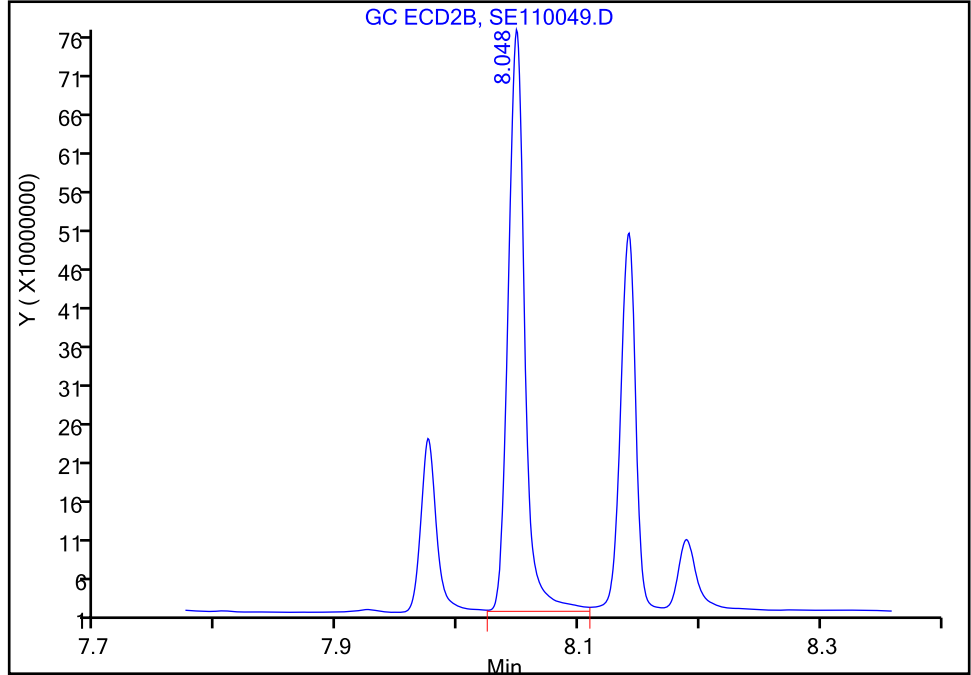
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

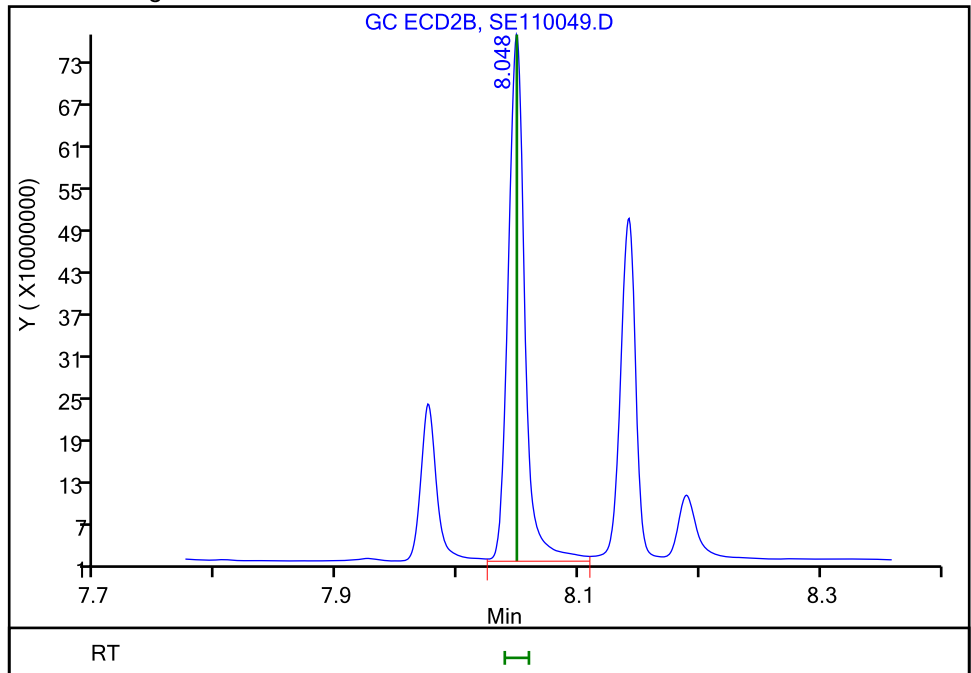
RT: 8.05
Area: 722798337
Amount: 0.152716
Amount Units: ug/ml

Processing Integration Results



RT: 8.05
Area: 731348181
Amount: 0.154523
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

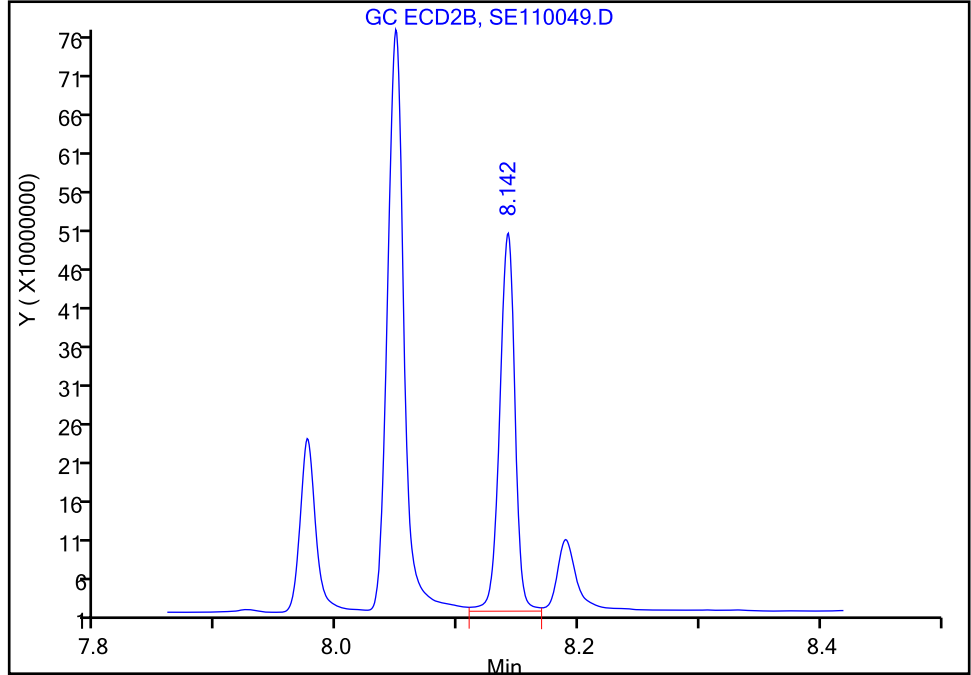
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

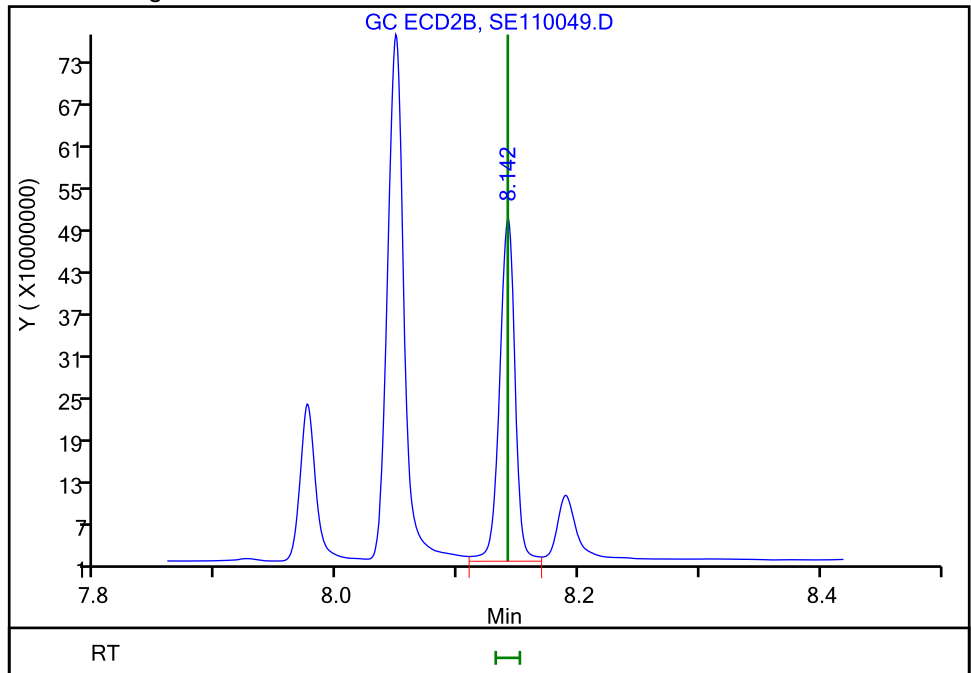
RT: 8.14
Area: 433169868
Amount: 0.147918
Amount Units: ug/ml

Processing Integration Results



RT: 8.14
Area: 439400629
Amount: 0.149838
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:21
Audit Action: Assigned New Baseline

TestAmerica Savannah

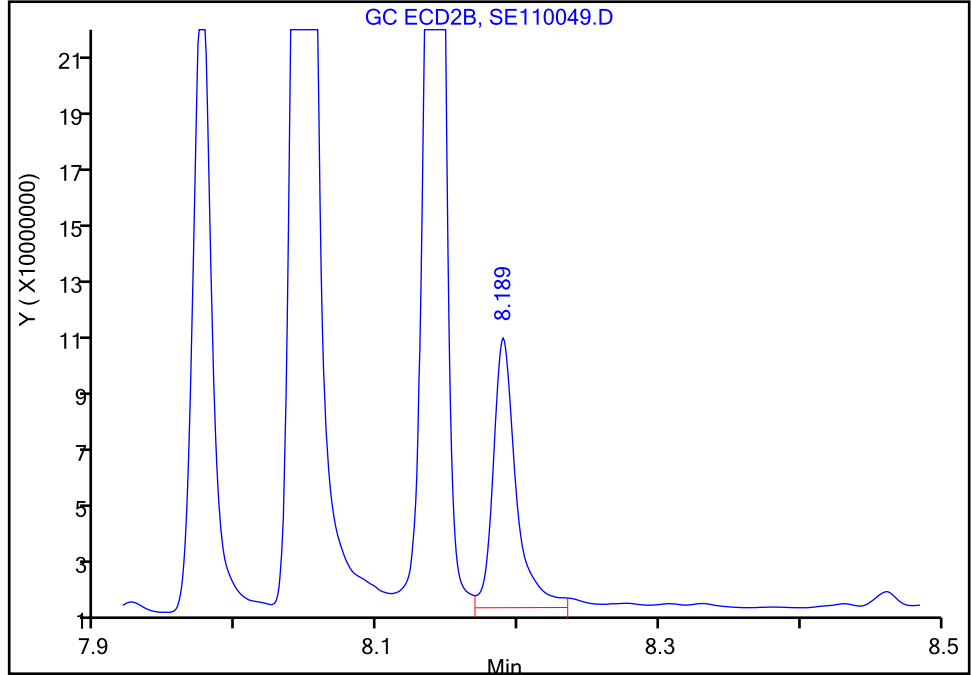
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

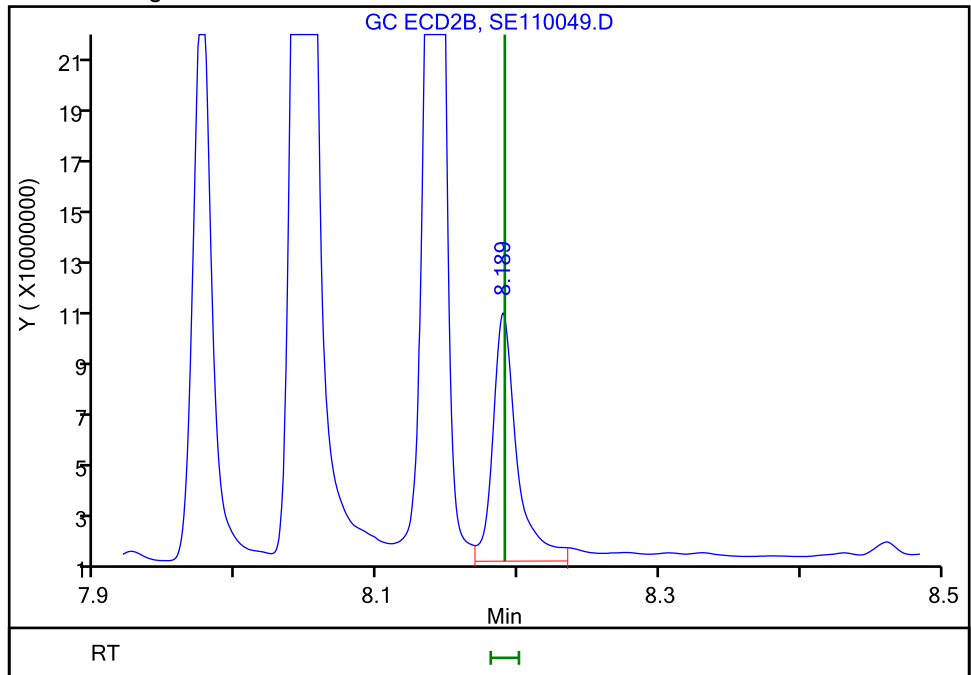
RT: 8.19
Area: 105286941
Amount: 0.144769
Amount Units: ug/ml

Processing Integration Results



RT: 8.19
Area: 112290903
Amount: 0.154400
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 12-May-2018 10:44:21
Audit Action: Assigned New Baseline

TestAmerica Savannah

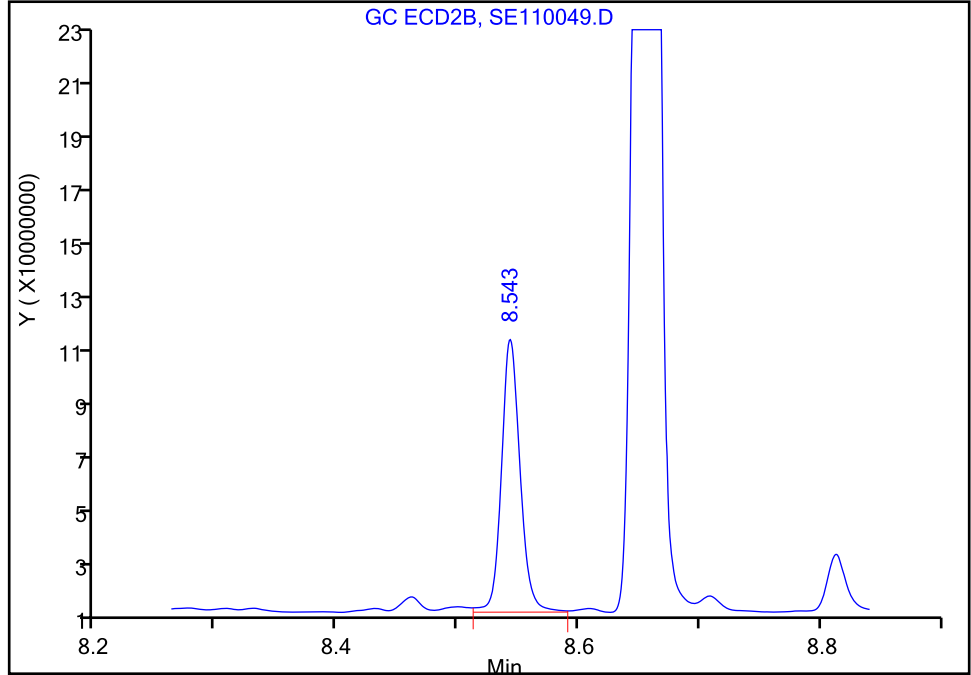
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

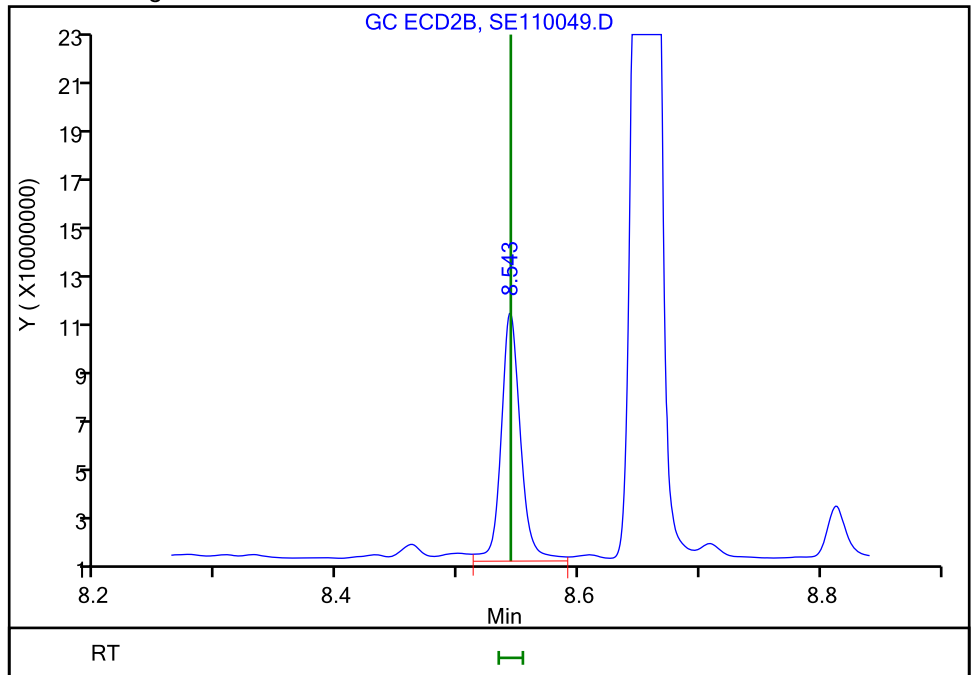
RT: 8.54
Area: 104998952
Amount: 0.149045
Amount Units: ug/ml

Processing Integration Results



RT: 8.54
Area: 110640123
Amount: 0.157053
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

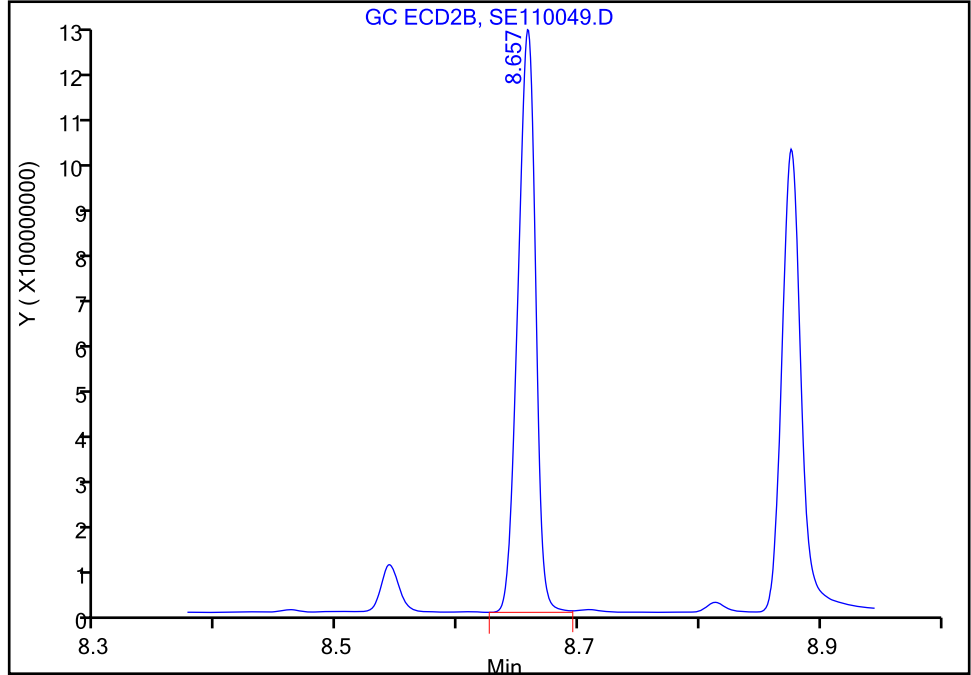
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

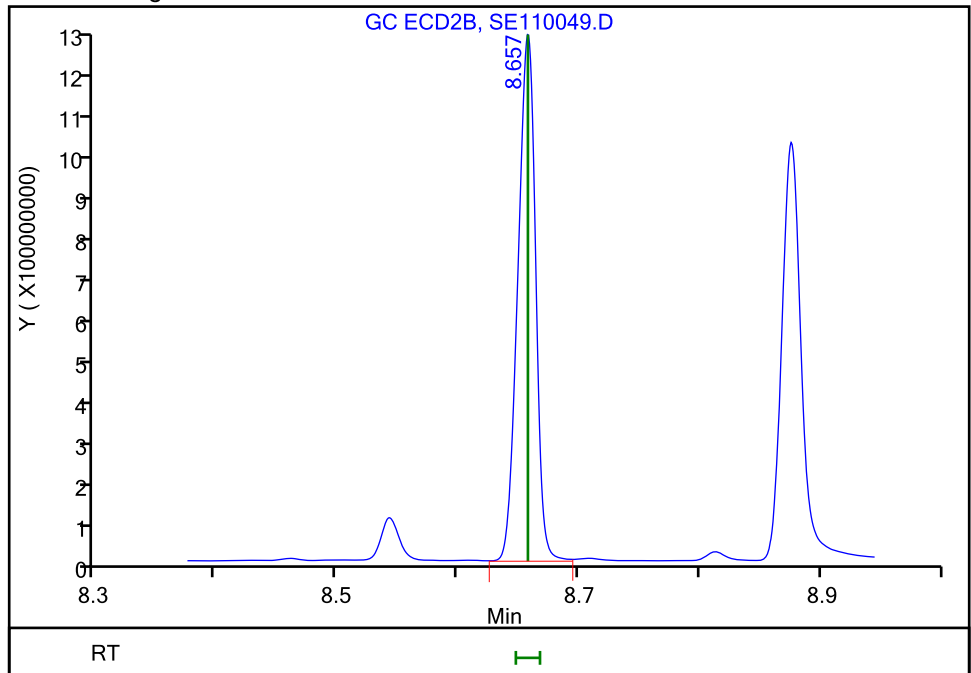
RT: 8.66
Area: 1224776504
Amount: 0.150876
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 1228989351
Amount: 0.151395
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

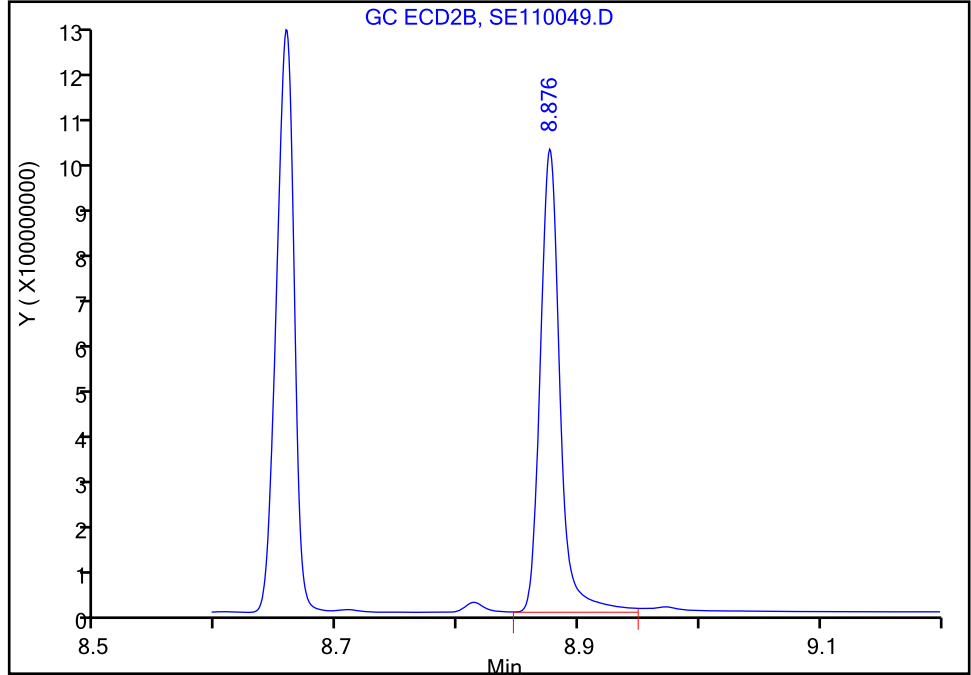
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110049.D
Injection Date: 12-May-2018 02:29:25 Instrument ID: CSGS
Lims ID: ccv h5
Client ID:
Operator ID: GEM ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

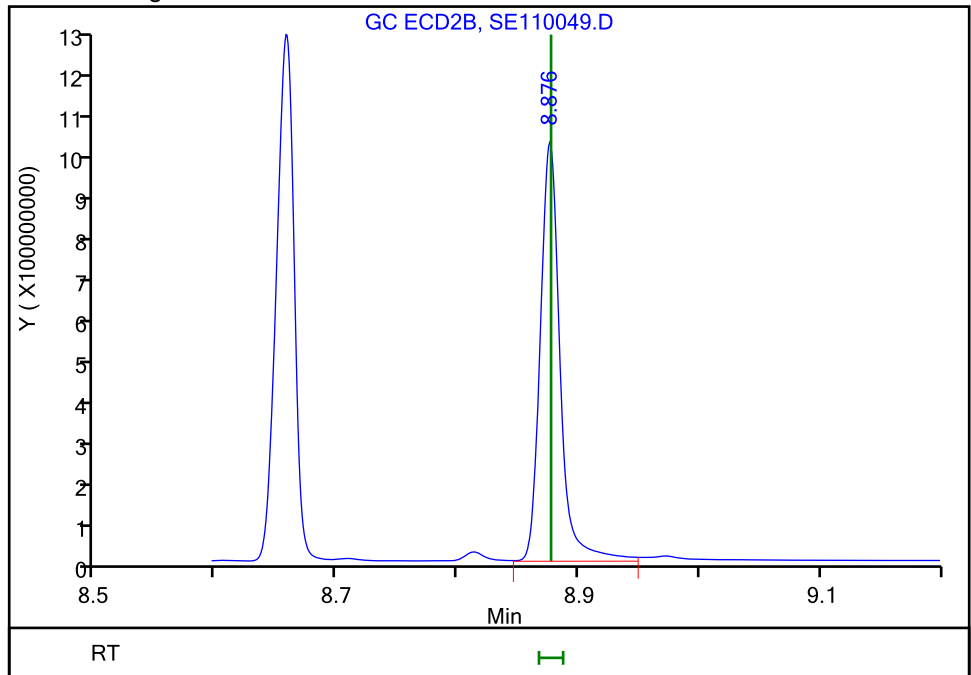
RT: 8.88
Area: 1082627076
Amount: 0.128029
Amount Units: ug/ml

Processing Integration Results



RT: 8.88
Area: 1087585501
Amount: 0.128573
Amount Units: ug/ml

Manual Integration Results



FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-522658/4-A
 Matrix: Solid Lab File ID: SE090034.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.63(g) Date Analyzed: 05/10/2018 03:48
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.2	U M	8.1	4.2	2.3
94-75-7	2,4-D	8.1	U	8.1	8.1	4.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	69		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090034.D
 Lims ID: MB 680-522658/4-A
 Client ID:
 Sample Type: MB
 Inject. Date: 10-May-2018 03:48:42 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-034
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	32697760	0.2000	0.1656	
2	6.751	6.752	-0.001	172716908	0.2000	0.1388	
						RPD = 17.61	

11 2,4-D

1	7.245	7.246	-0.001	1847430		0.005853	
2	7.443	7.443	0.000	6282664		0.004304	
						RPD = 30.51	

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090034.D

Injection Date: 10-May-2018 03:48:42

Instrument ID: CSGS

Operator ID: GEM

Lims ID: MB 680-522658/4-A

Worklist Smp#: 34

Client ID:

Injection Vol: 1.0 ul

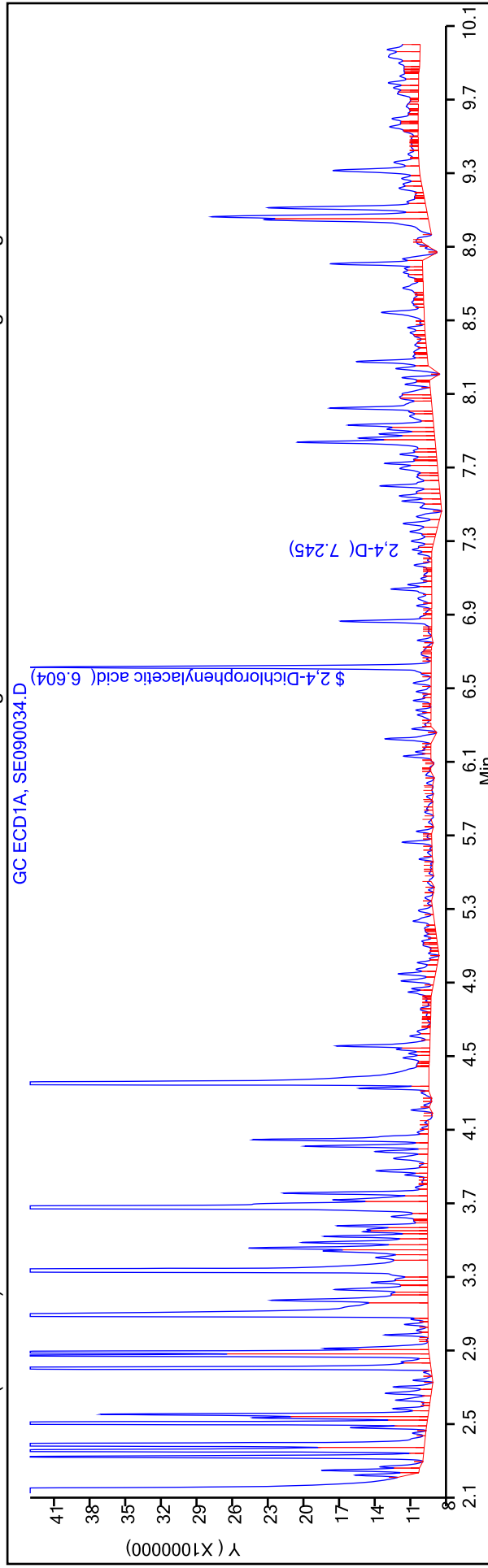
Dil. Factor: 1.0000

ALS Bottle#: 34

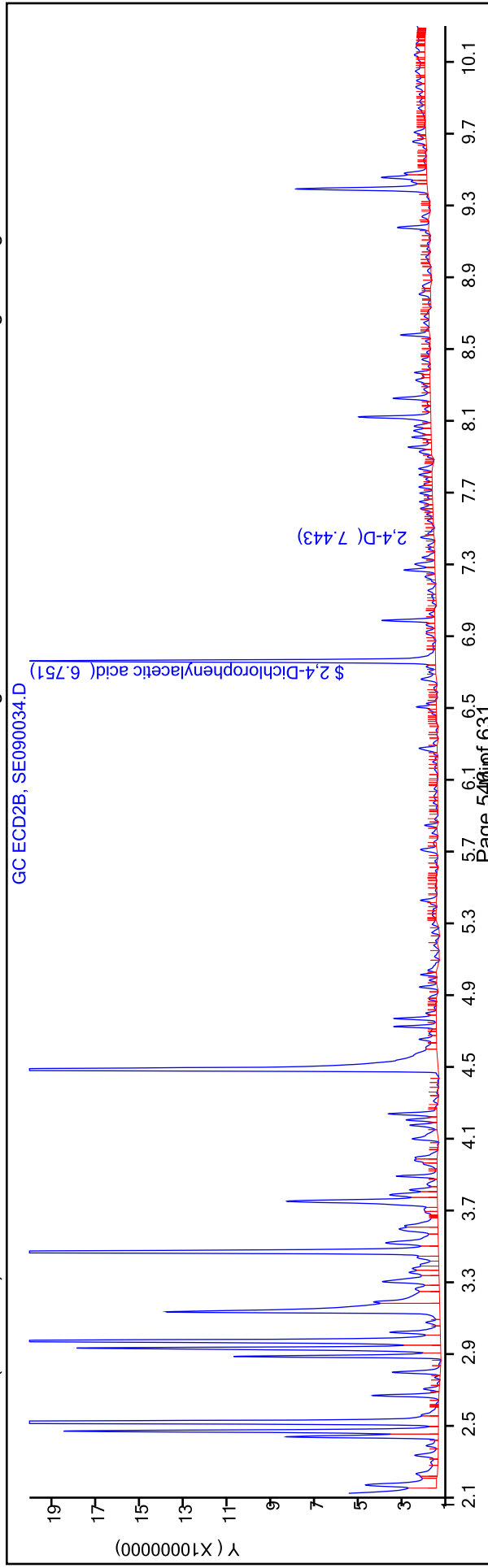
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090034.D
 Lims ID: MB 680-522658/4-A
 Client ID:
 Sample Type: MB
 Inject. Date: 10-May-2018 03:48:42 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-034
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:33

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1656	82.81

Surrogate Recovery, Detector: GC ECD2B

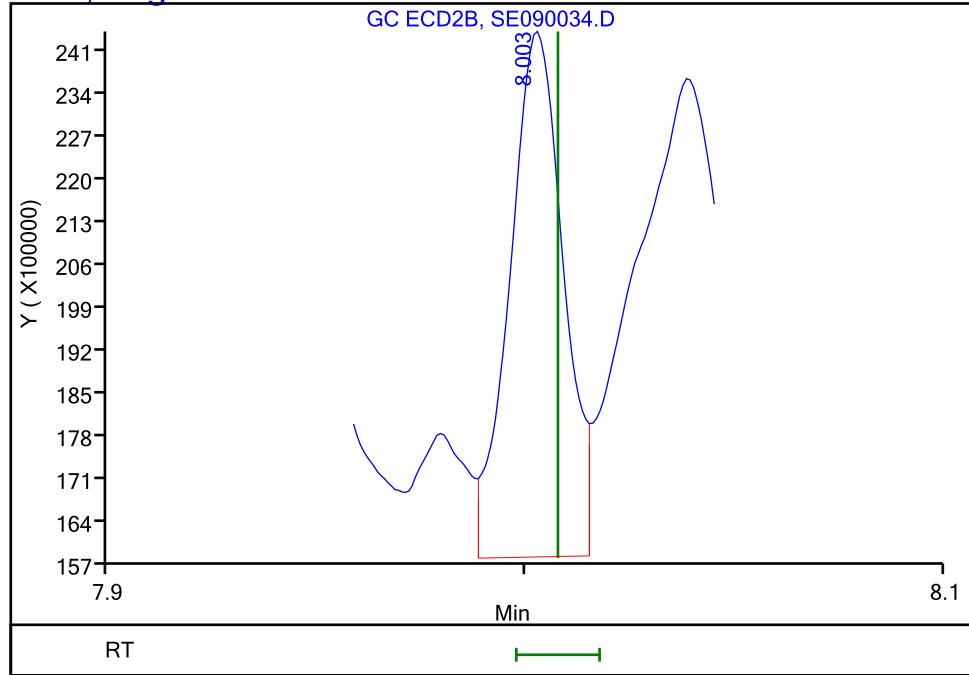
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1388	69.41

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090034.D
Injection Date: 10-May-2018 03:48:42 Instrument ID: CSGS
Lims ID: MB 680-522658/4-A
Client ID:
Operator ID: GEM ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

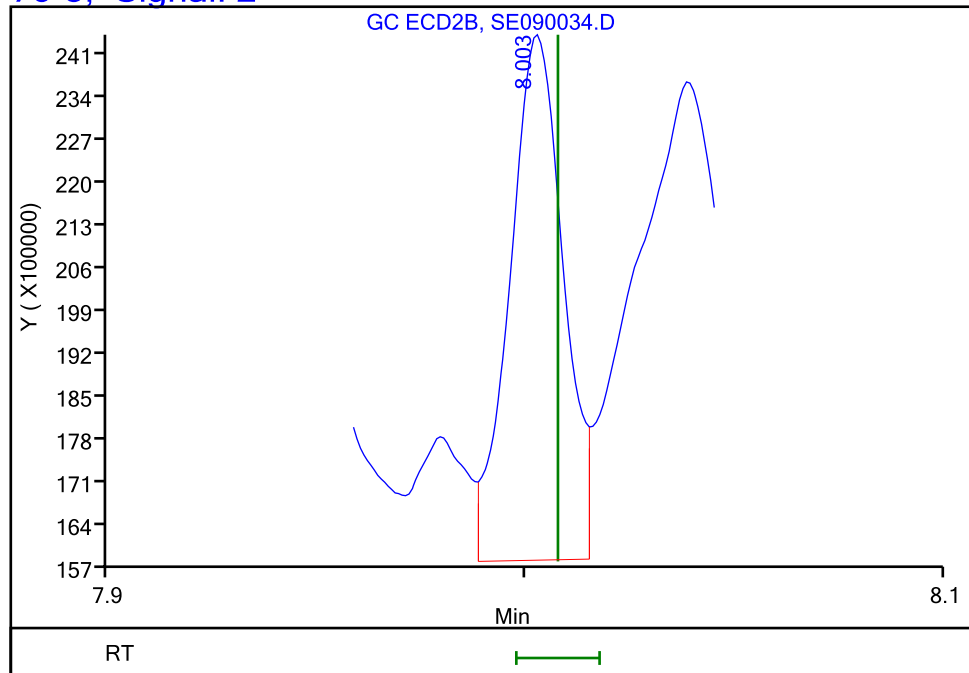
RT: 8.00
Response: 7692564
Amount: 0.001234



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.00
Response: 7692564
Amount: 0.001234



Reviewer: kellarj, 10-May-2018 11:19:33
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523317/33
 Matrix: Solid Lab File ID: SE090033.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/10/2018 03:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	86		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 03:29:06 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:01:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	170978225	1.00	0.8660
2	6.754	6.752	0.002	966106132	1.00	0.7765

RPD = 10.90

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D

Injection Date: 10-May-2018 03:29:06

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 ul

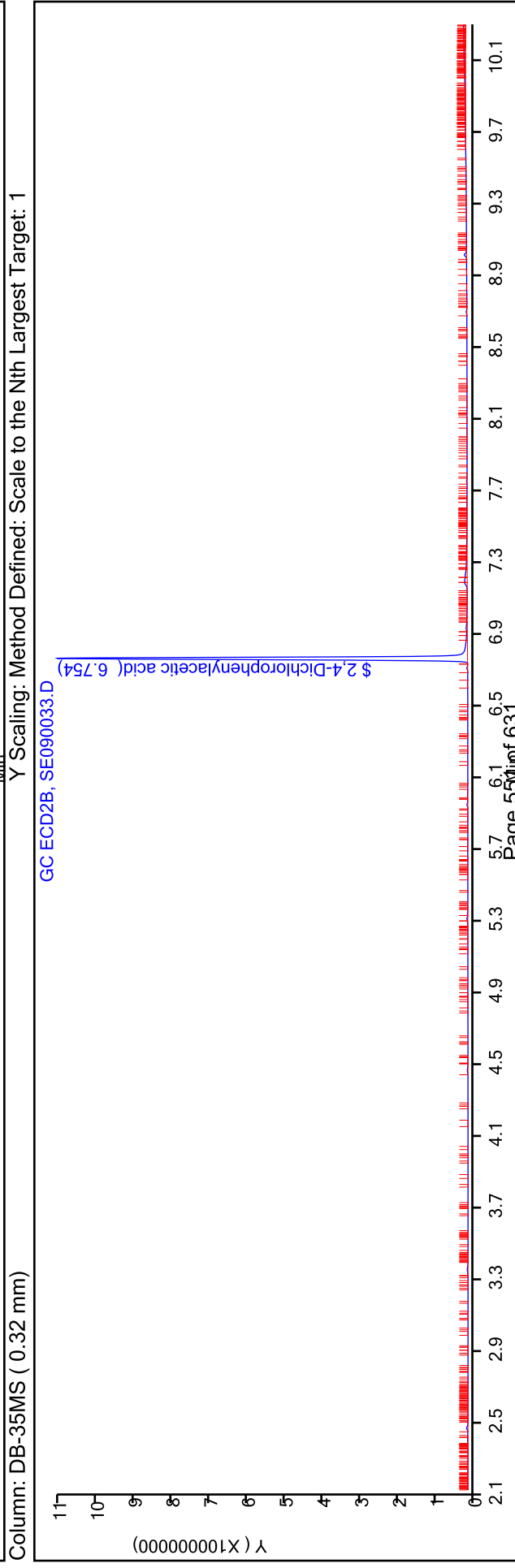
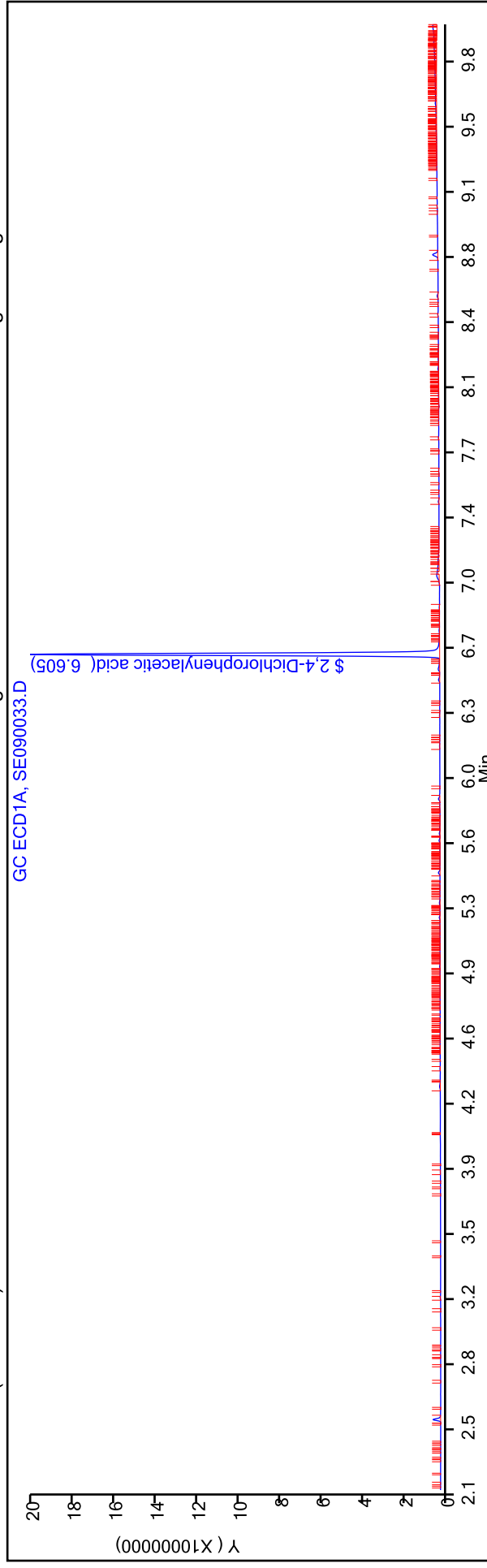
Dil. Factor: 1.0000

ALS Bottle#: 33

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 03:29:06 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:01:17

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8660	86.25

Surrogate Recovery, Detector: GC ECD2B

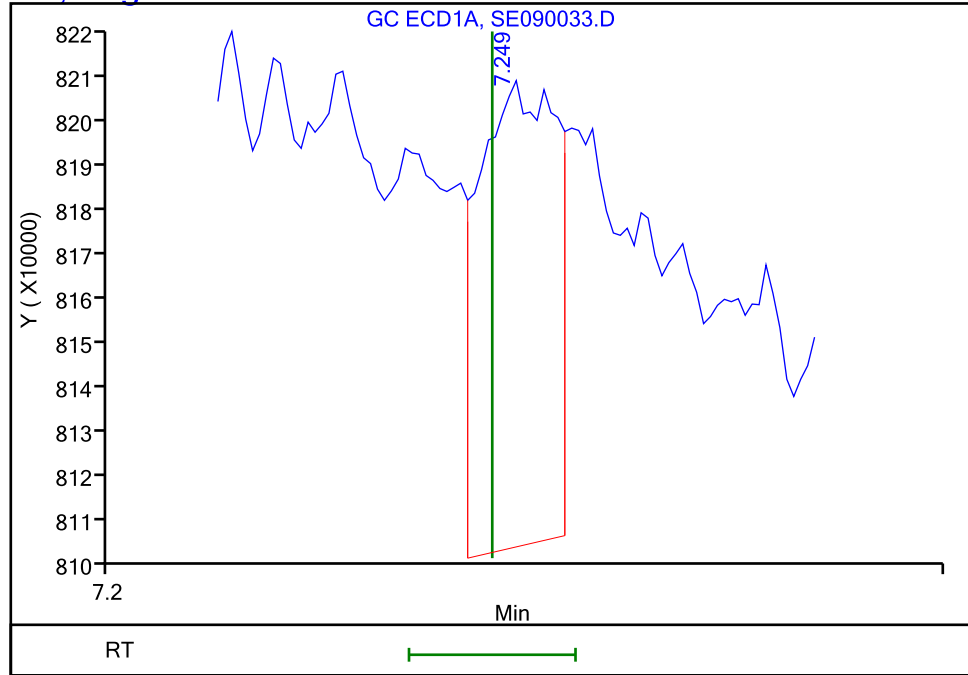
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7765	77.34

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
Injection Date: 10-May-2018 03:29:06 Instrument ID: CSGS
Lims ID: pibk
Client ID:
Operator ID: GEM ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

11 2,4-D, CAS: 94-75-7, Signal: 1

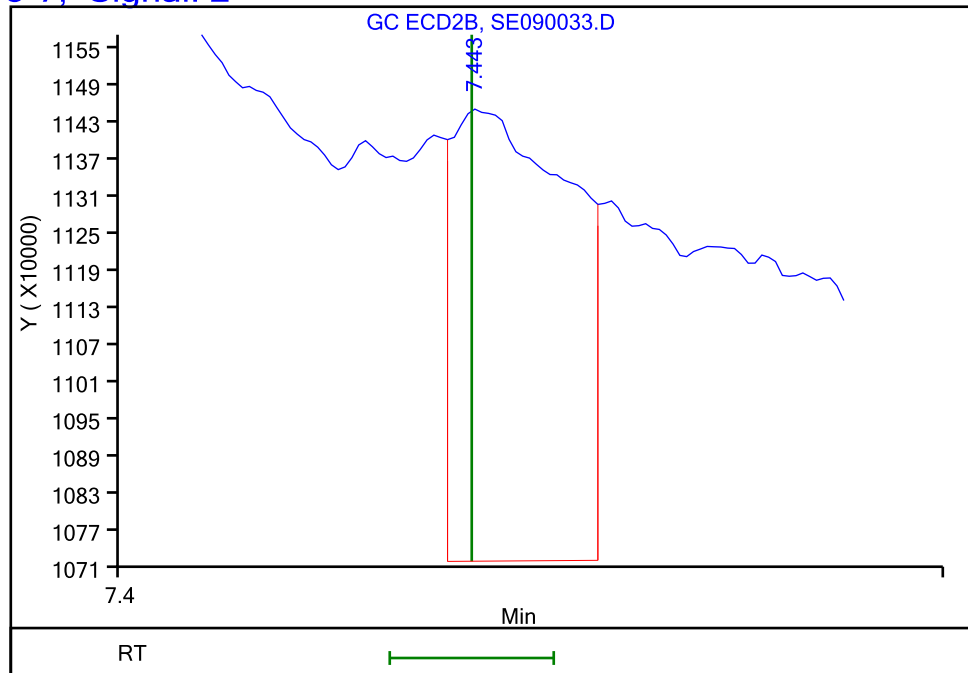
RT: 7.25
Response: 59805
Amount: 0.000189



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.44
Response: 722485
Amount: 0.000495



Reviewer: kellarj, 10-May-2018 11:01:17
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523317/33
 Matrix: Solid Lab File ID: SE090033.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/10/2018 03:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	77		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 03:29:06 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:01:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	170978225	1.00	0.8660
2	6.754	6.752	0.002	966106132	1.00	0.7765

RPD = 10.90

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D

Injection Date: 10-May-2018 03:29:06

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 ul

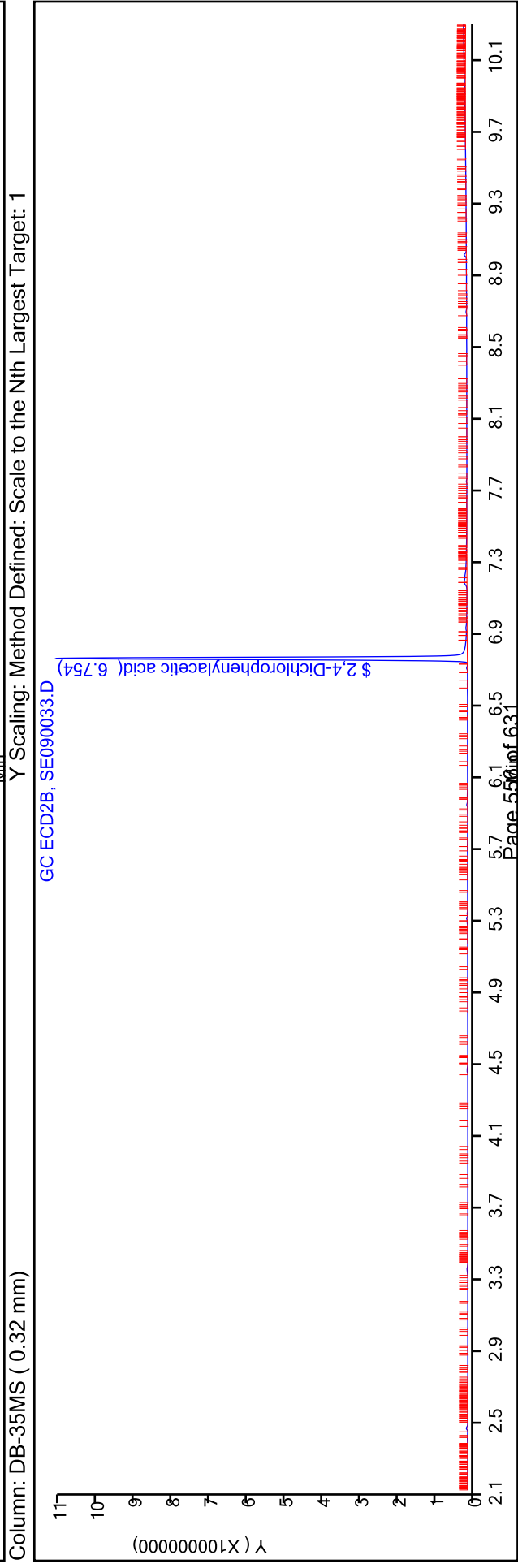
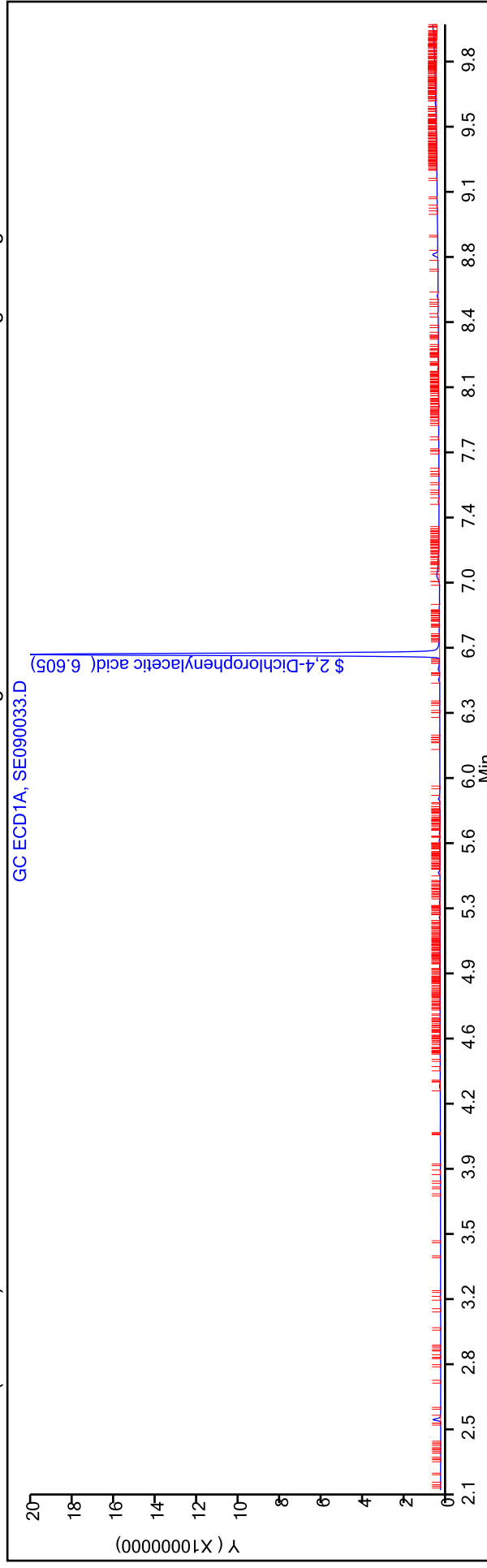
Dil. Factor: 1.0000

ALS Bottle#: 33

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 03:29:06 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 10-May-2018 11:01:17

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8660	86.25

Surrogate Recovery, Detector: GC ECD2B

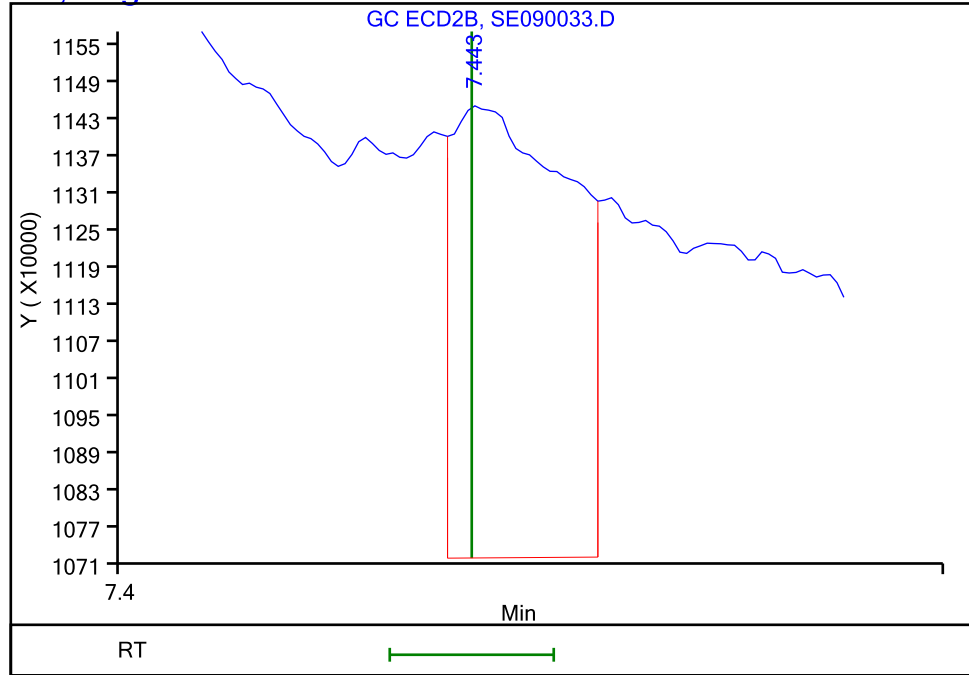
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7765	77.34

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090033.D
Injection Date: 10-May-2018 03:29:06 Instrument ID: CSGS
Lims ID: pibk
Client ID:
Operator ID: GEM ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

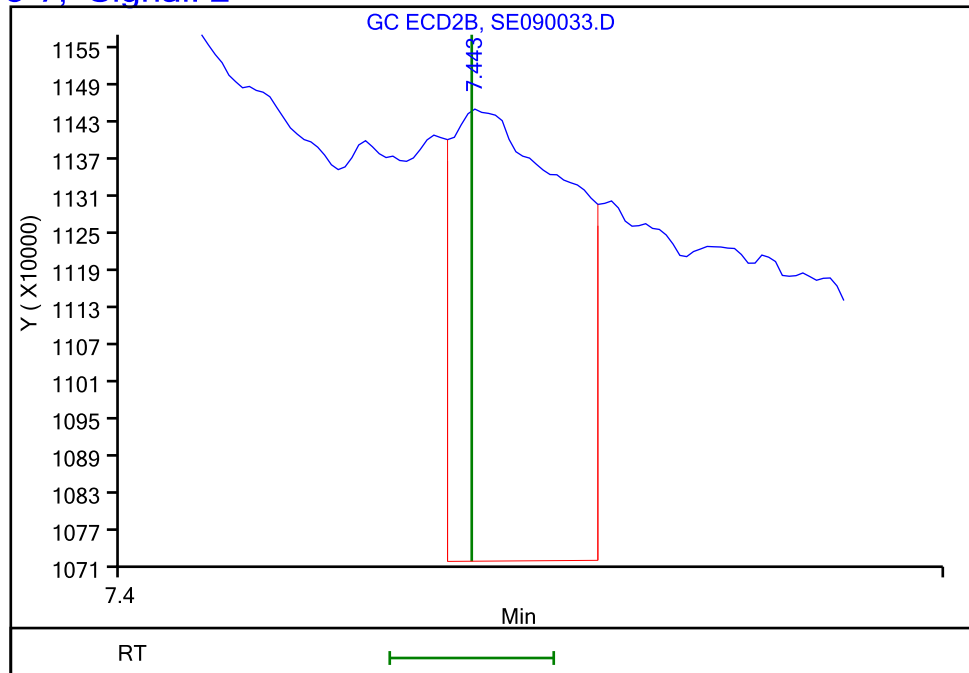
RT: 7.44
Response: 722485
Amount: 0.000495



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.44
Response: 722485
Amount: 0.000495



Reviewer: kellarj, 10-May-2018 11:01:17
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523317/48
 Matrix: Solid Lab File ID: SE090048.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/10/2018 08:23
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U M	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	92		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 08:23:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-048
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:23:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	183245489	1.00	0.9281	
2	6.753	6.752	0.001	1034493052	1.00	0.8314	
							RPD = 10.99

12 Pentachlorophenol

1	7.593	7.594	-0.001	828577		0.000164	
2	7.636	7.637	-0.001	2385060		0.000141	
							RPD = 14.48

13 Silvex (2,4,5-TP)

1	7.691	7.692	-0.001	412392		0.000220	
2	7.773	7.774	-0.001	1507149		0.000225	
							RPD = 1.91

14 Chloramben

1	7.770	7.770	0.000	645994		0.000394	
2	8.080	8.081	-0.001	2563953		0.000474	
							RPD = 18.28

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D

Injection Date: 10-May-2018 08:23:16

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 48

Client ID:

Injection Vol: 1.0 ul

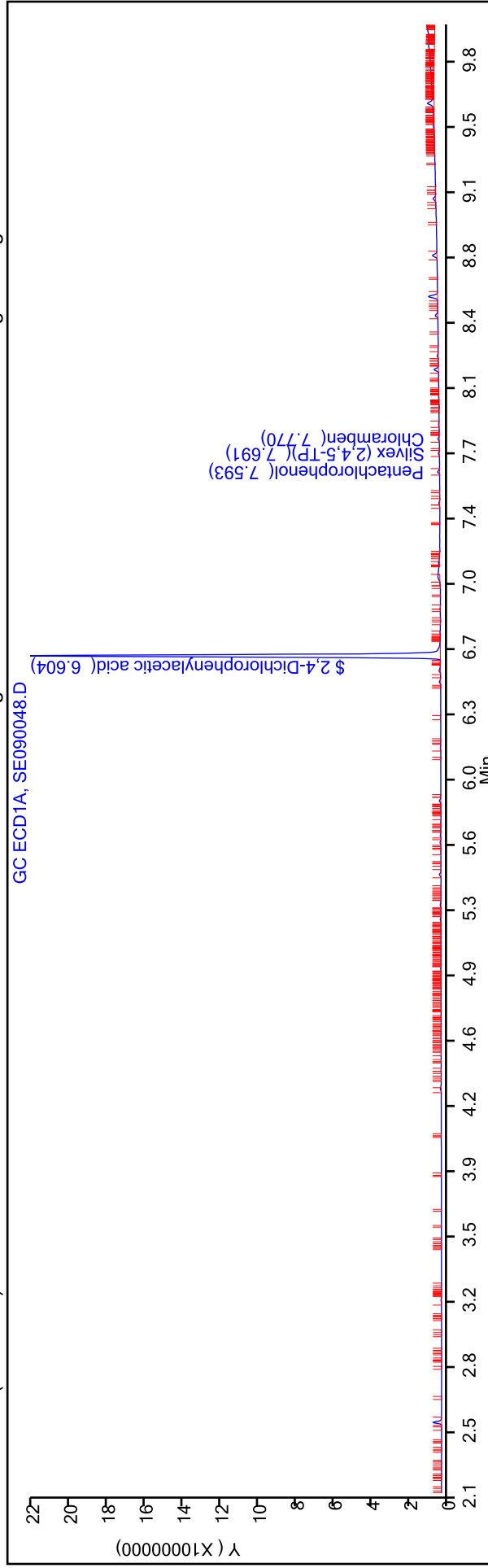
Dil. Factor: 1.0000

ALS Bottle#: 48

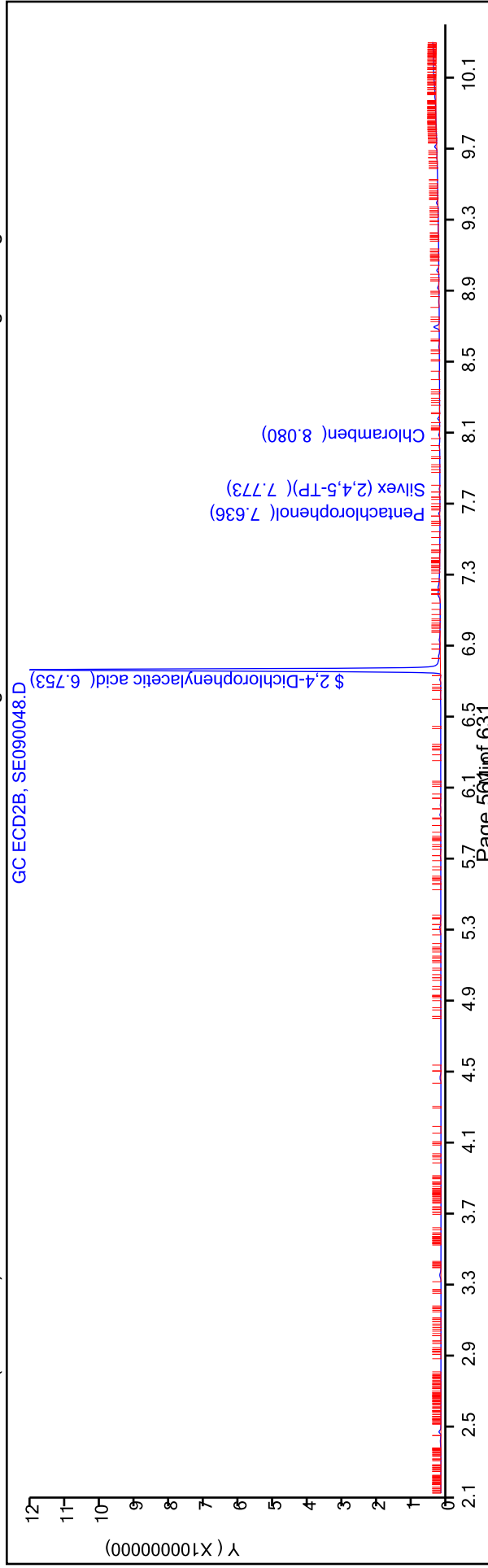
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 08:23:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-048
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:23:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:07

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.9281	92.44

Surrogate Recovery, Detector: GC ECD2B

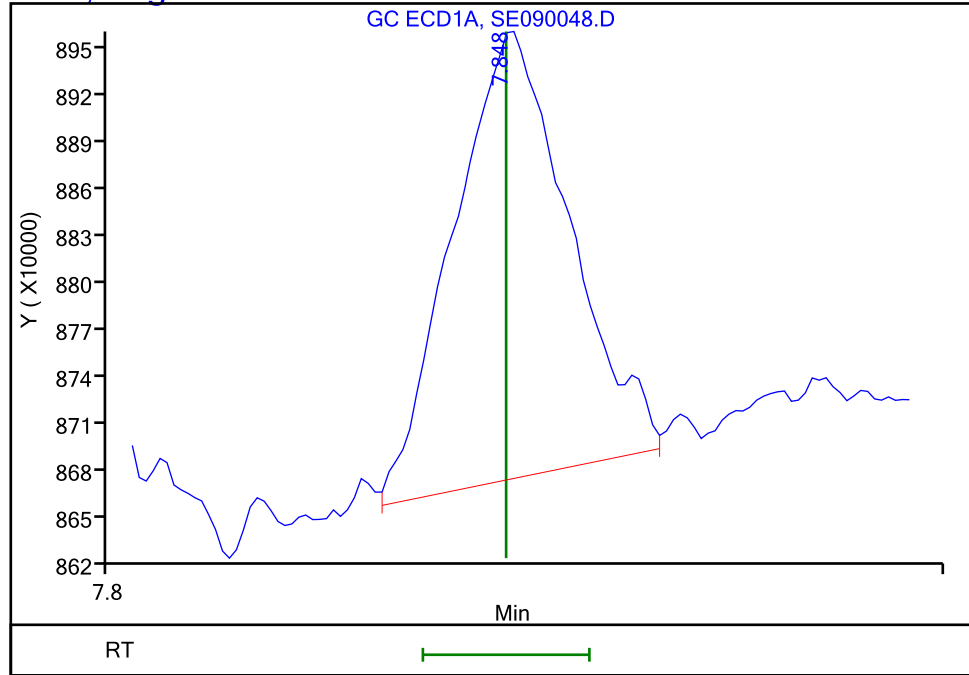
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8314	82.81

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
Injection Date: 10-May-2018 08:23:16 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

15 2,4,5-T, CAS: 93-76-5, Signal: 1

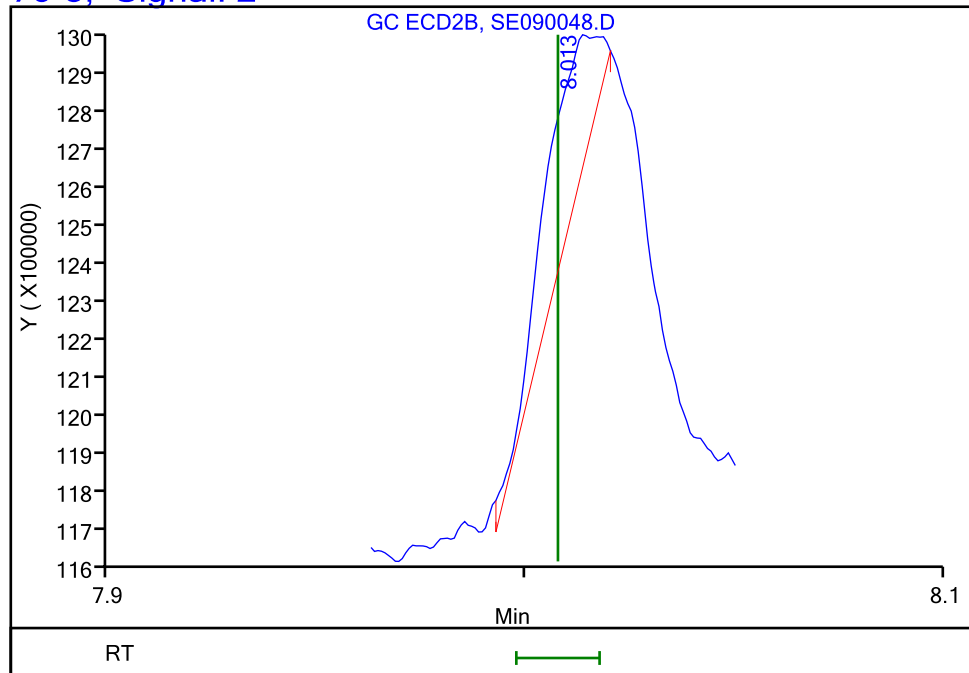
RT: 7.85
Response: 277360
Amount: 0.000149



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.01
Response: 365329
Amount: 0.000059



Reviewer: kellarj, 10-May-2018 11:19:07
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523317/48
 Matrix: Solid Lab File ID: SE090048.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/10/2018 08:23
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U M	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	83		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 08:23:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-048
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:23:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.604	6.604	0.000	183245489	1.00	0.9281	
2	6.753	6.752	0.001	1034493052	1.00	0.8314	
							RPD = 10.99

12 Pentachlorophenol

1	7.593	7.594	-0.001	828577		0.000164	
2	7.636	7.637	-0.001	2385060		0.000141	
							RPD = 14.48

13 Silvex (2,4,5-TP)

1	7.691	7.692	-0.001	412392		0.000220	
2	7.773	7.774	-0.001	1507149		0.000225	
							RPD = 1.91

14 Chloramben

1	7.770	7.770	0.000	645994		0.000394	
2	8.080	8.081	-0.001	2563953		0.000474	
							RPD = 18.28

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D

Injection Date: 10-May-2018 08:23:16

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 48

Client ID:

Injection Vol: 1.0 ul

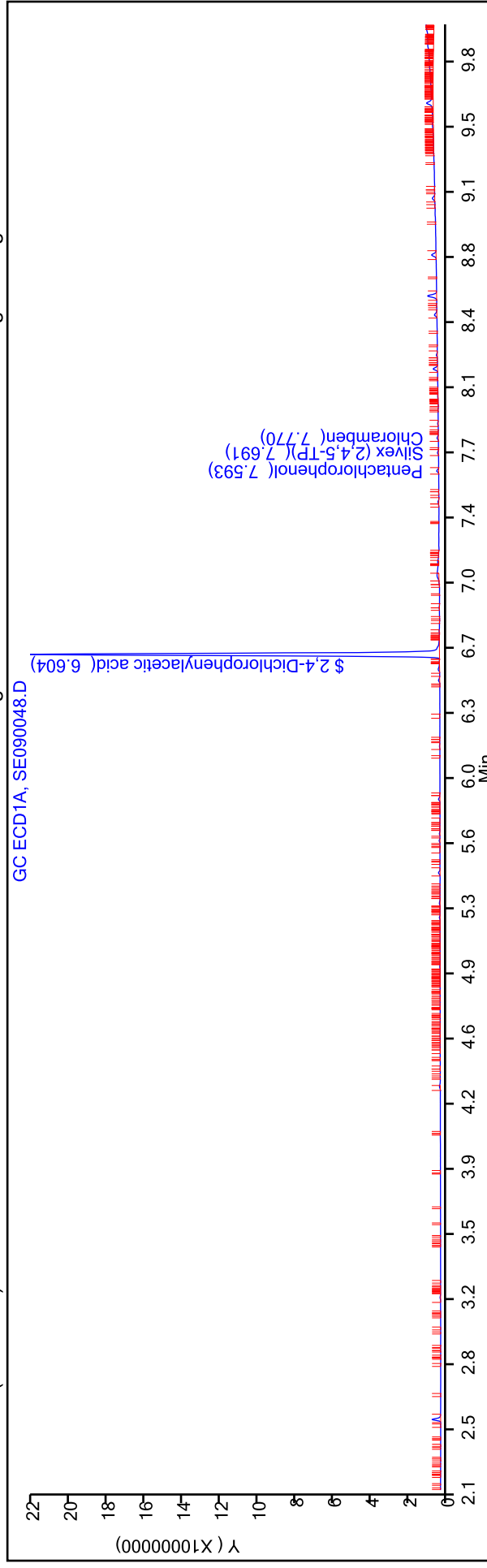
Dil. Factor: 1.0000

ALS Bottle#: 48

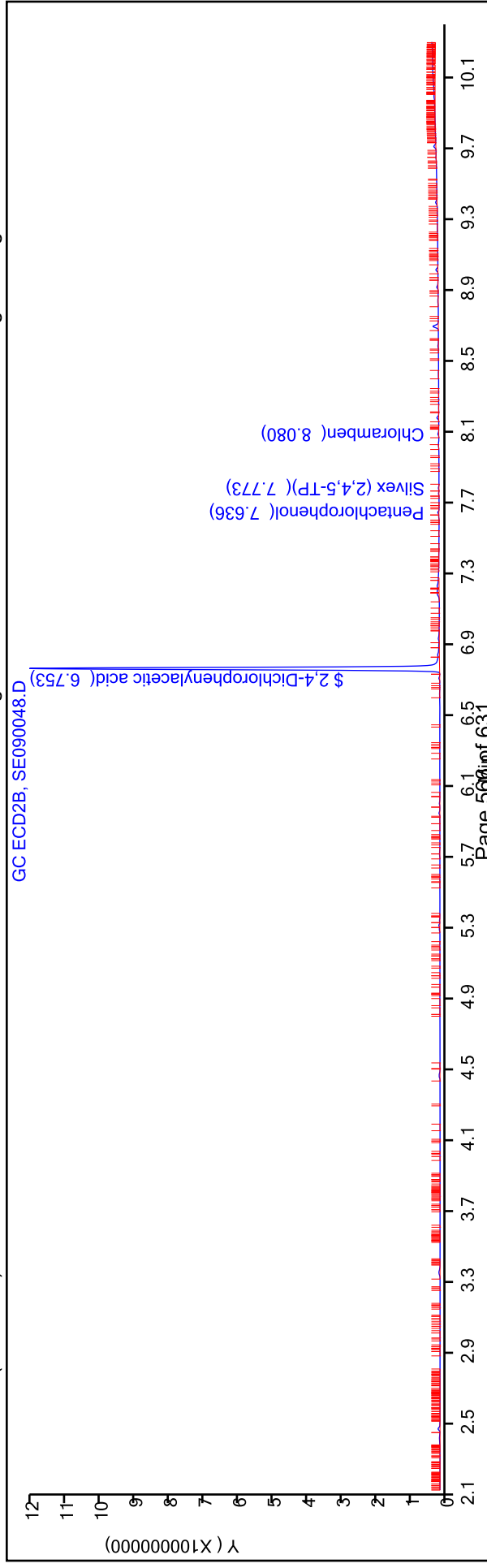
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 10-May-2018 08:23:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-048
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:23:50 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:07

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.9281	92.44

Surrogate Recovery, Detector: GC ECD2B

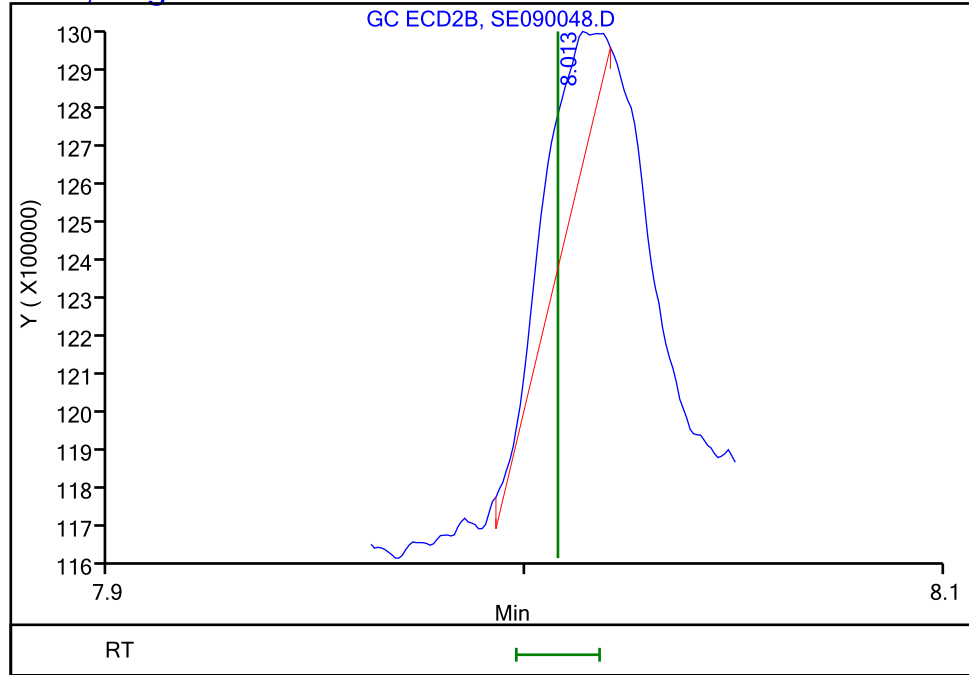
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8314	82.81

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090048.D
Injection Date: 10-May-2018 08:23:16 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

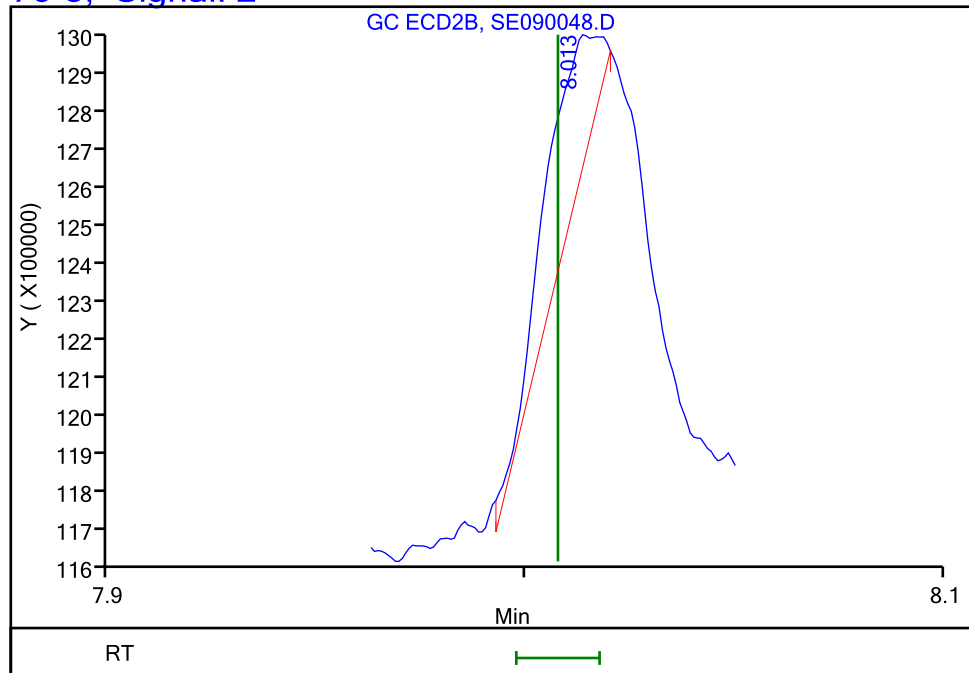
RT: 8.01
Response: 365329
Amount: 0.000059



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.01
Response: 365329
Amount: 0.000059



Reviewer: kellarj, 10-May-2018 11:19:07
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523572/31
 Matrix: Solid Lab File ID: SE110031.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/11/2018 20:36
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	92		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 11-May-2018 20:36:53 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:43:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	158609882	1.00	0.9225
2	6.721	6.720	0.001	883962620	1.00	0.7738

RPD = 17.54

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D

Injection Date: 11-May-2018 20:36:53

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 31

Client ID:

Injection Vol: 1.0 ul

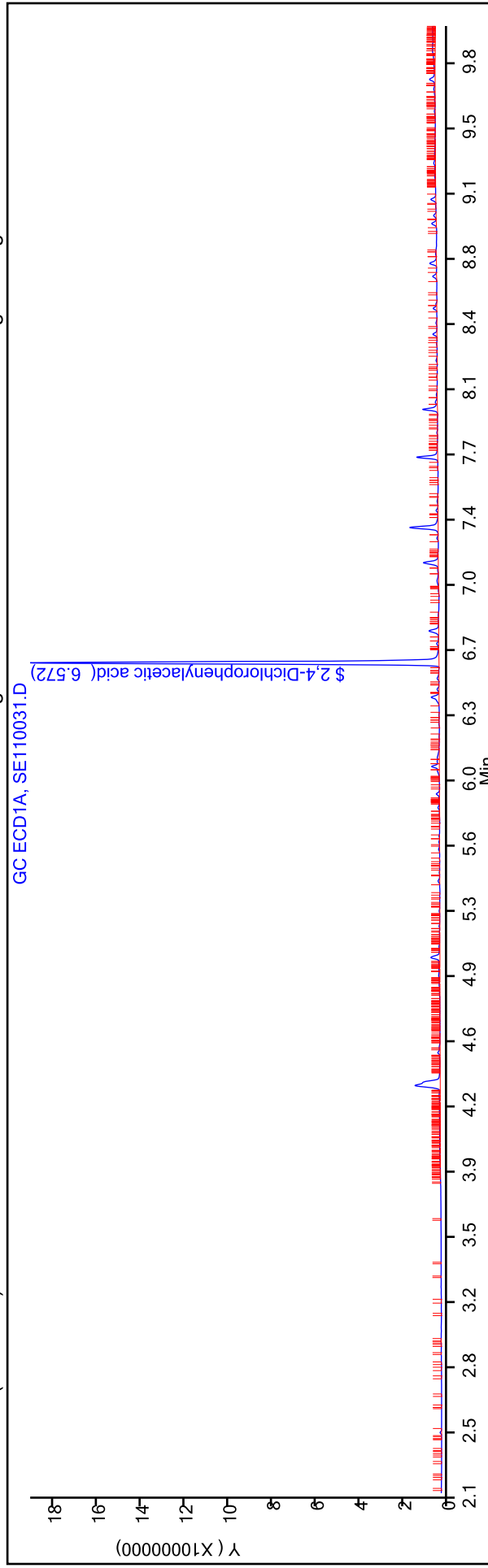
Dil. Factor: 1.0000

ALS Bottle#: 31

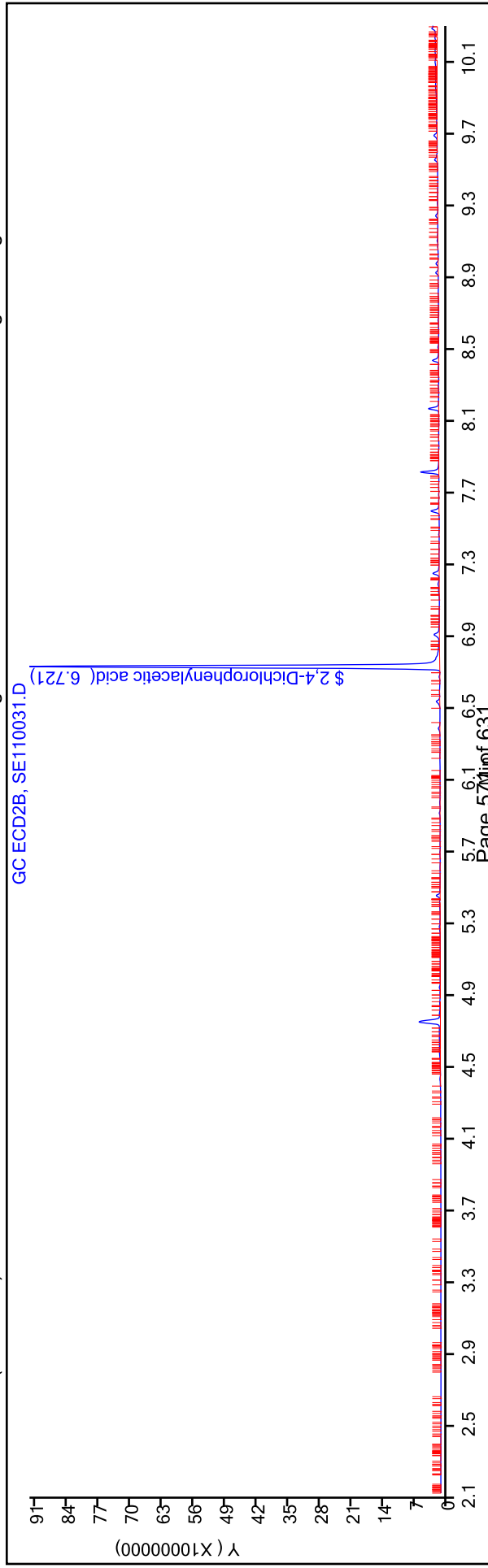
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 11-May-2018 20:36:53 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052
 First Level Reviewer: kellarj Date: 12-May-2018 10:43:40

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.9225	91.89

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7738	77.07

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523572/31
 Matrix: Solid Lab File ID: SE110031.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/11/2018 20:36
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	77		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 11-May-2018 20:36:53 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:43:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	158609882	1.00	0.9225
2	6.721	6.720	0.001	883962620	1.00	0.7738

RPD = 17.54

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D

Injection Date: 11-May-2018 20:36:53

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 31

Client ID:

Injection Vol: 1.0 ul

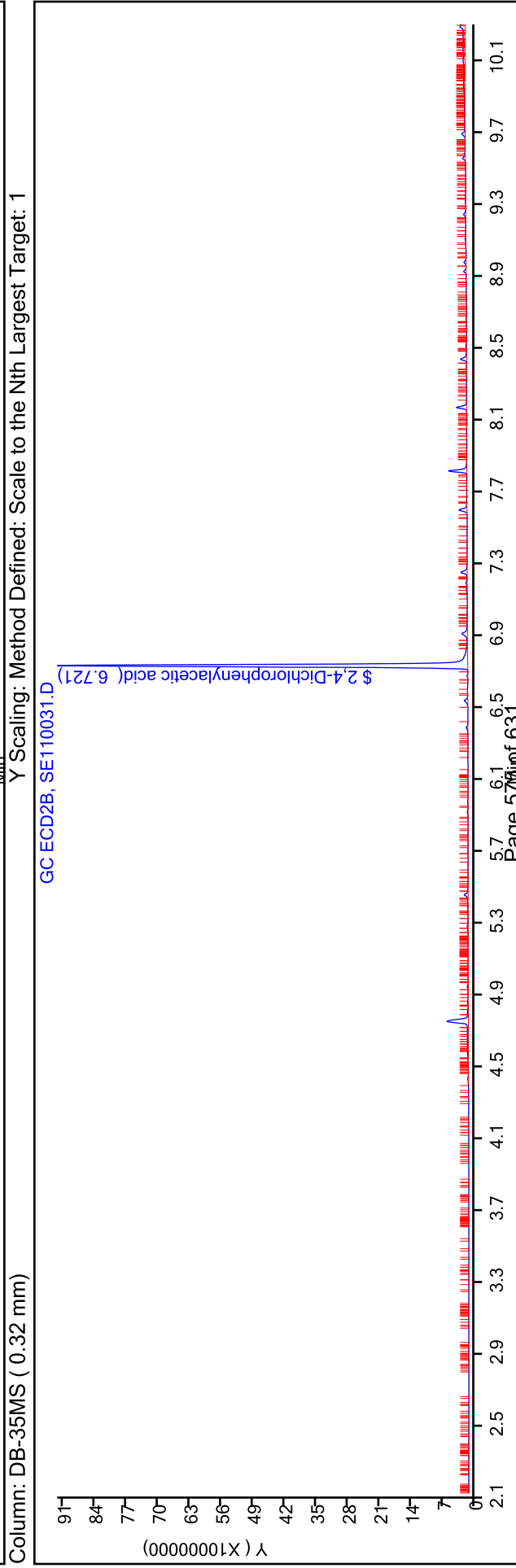
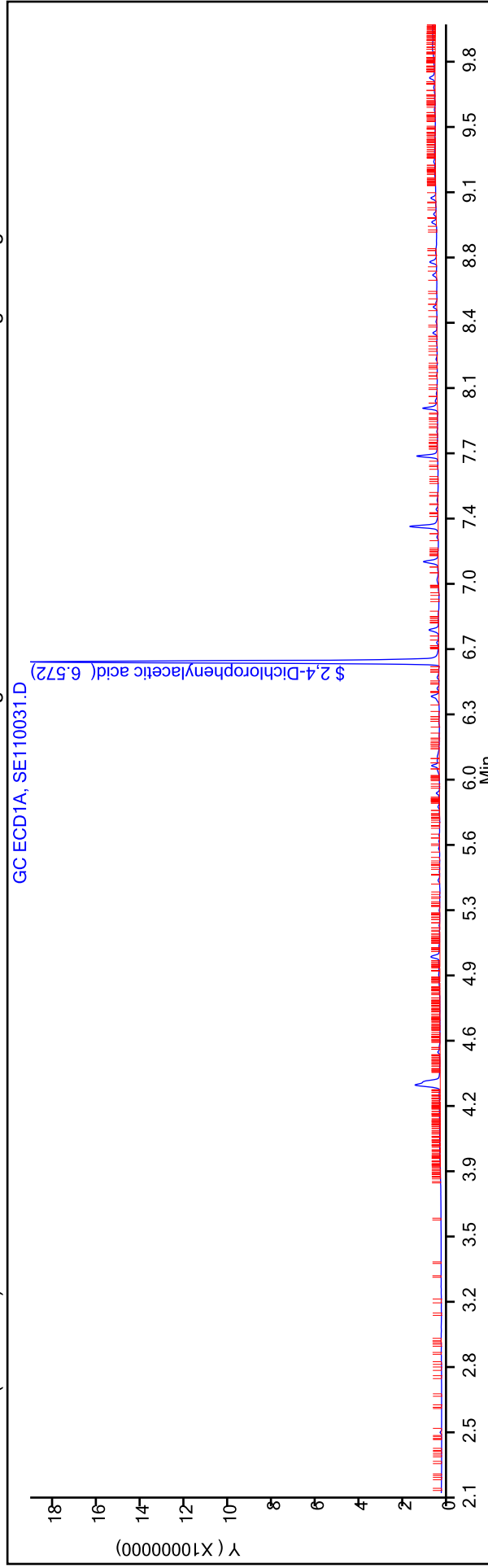
Dil. Factor: 1.0000

ALS Bottle#: 31

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110031.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 11-May-2018 20:36:53 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:14 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:43:40

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.9225	91.89

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7738	77.07

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523572/50
 Matrix: Solid Lab File ID: SE110050.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/12/2018 02:49
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U M	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	87		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 12-May-2018 02:49:09 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-050
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	150326217	1.00	0.8744
2	6.721	6.720	0.001	827674081	1.00	0.7245

RPD = 18.74

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D

Injection Date: 12-May-2018 02:49:09

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 50

Client ID:

Injection Vol: 1.0 ul

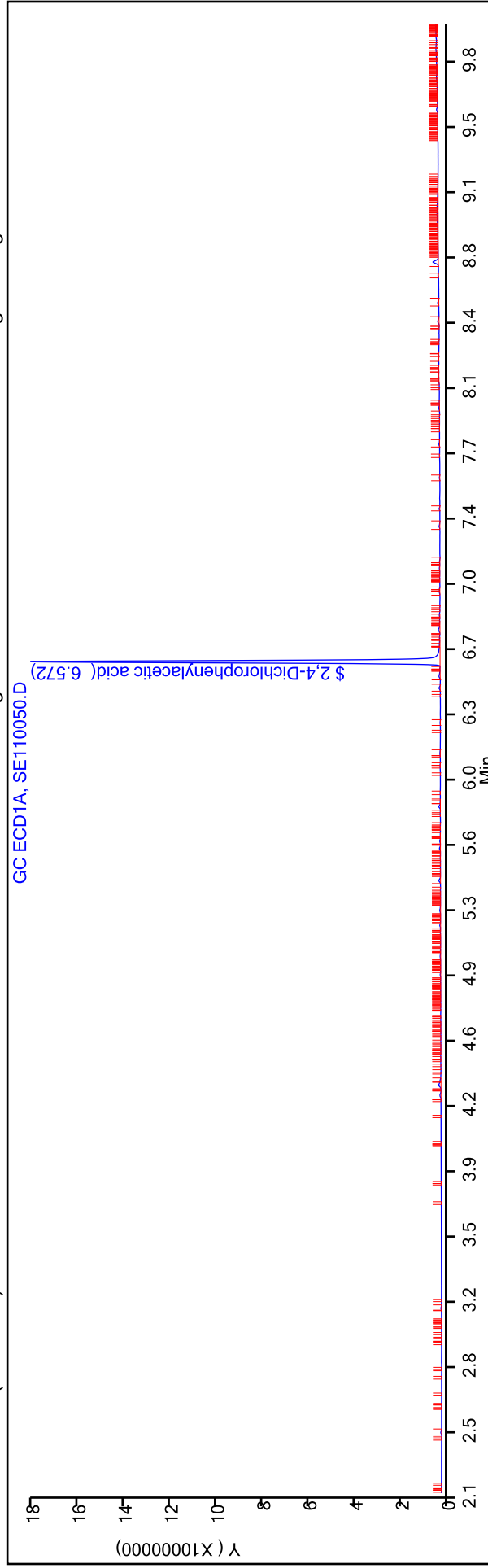
Dil. Factor: 1.0000

ALS Bottle#: 50

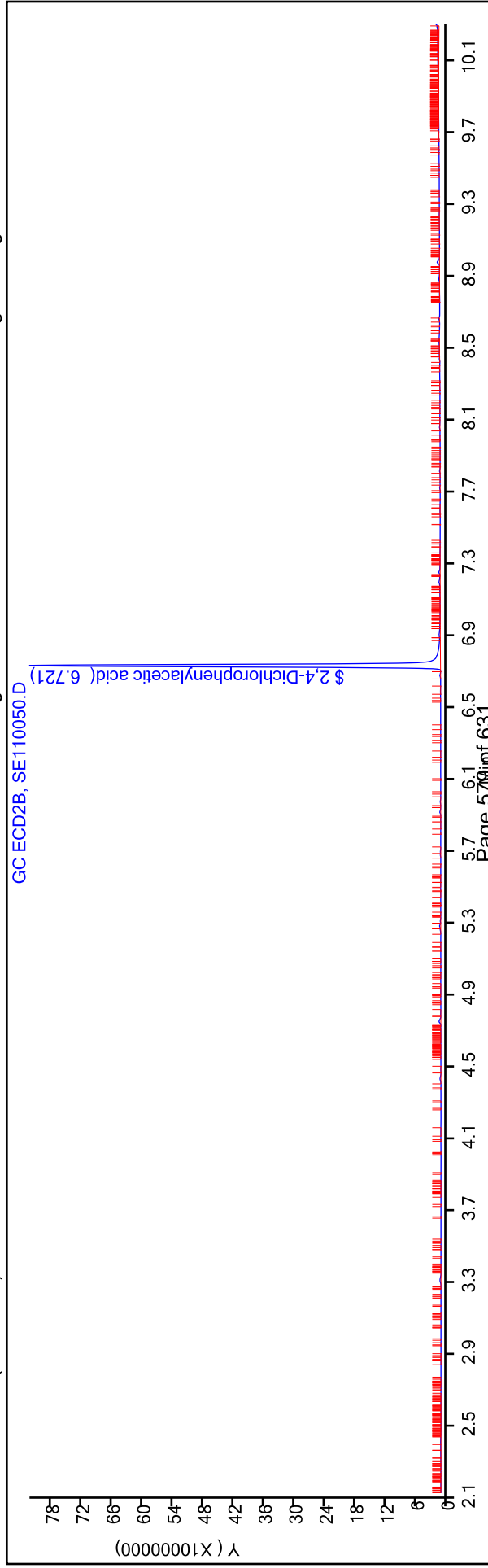
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 12-May-2018 02:49:09 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-050
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:44

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8744	87.09

Surrogate Recovery, Detector: GC ECD2B

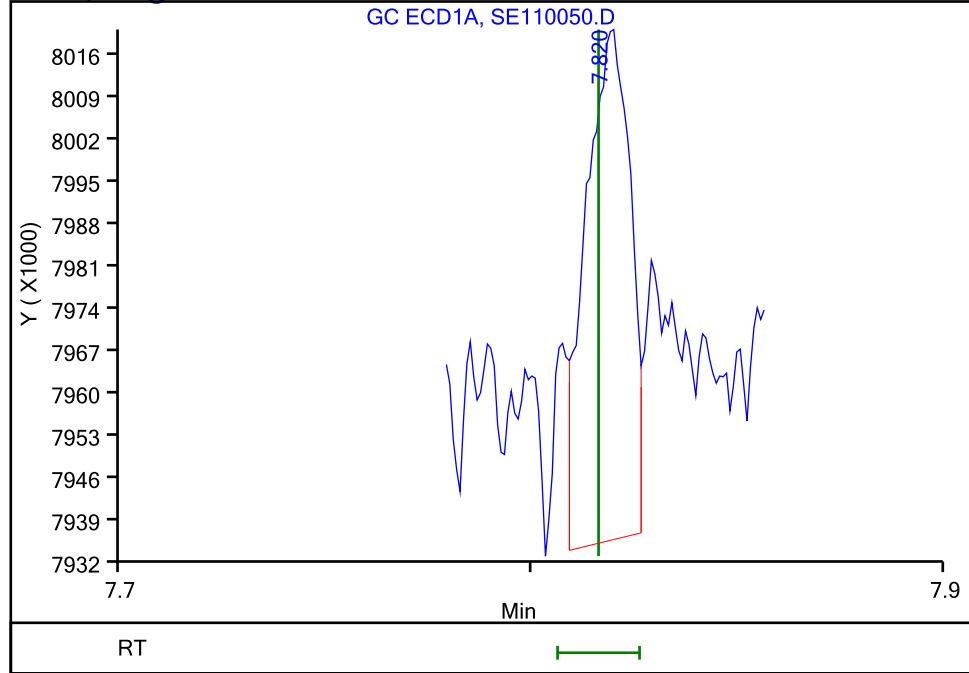
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7245	72.16

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
Injection Date: 12-May-2018 02:49:09 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

15 2,4,5-T, CAS: 93-76-5, Signal: 1

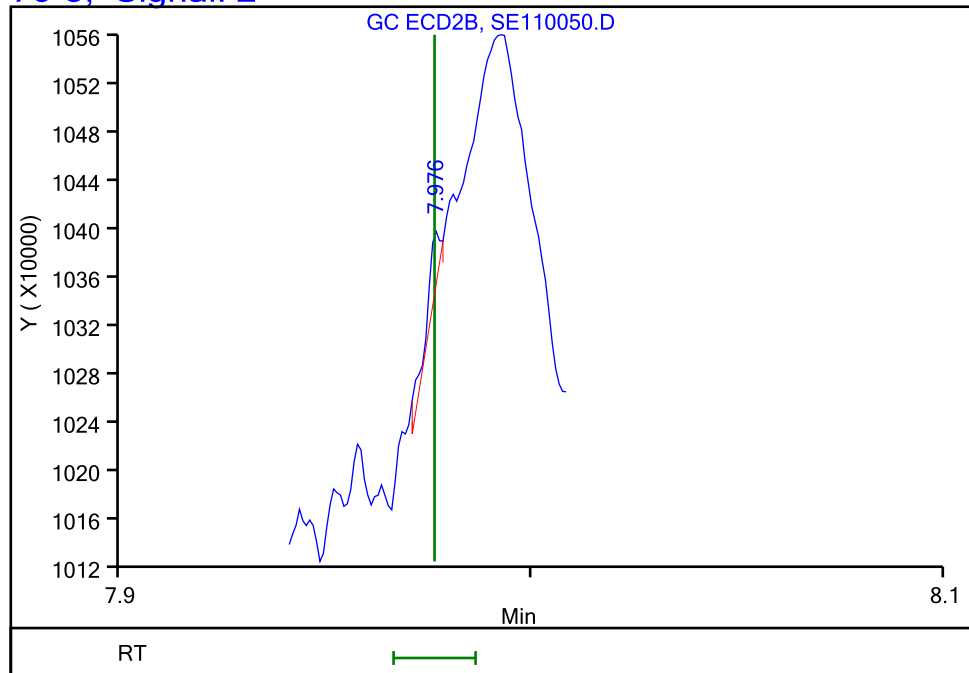
RT: 7.82
Response: 63867
Amount: 0.000041



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 7.98
Response: 10448
Amount: 0.000002



Reviewer: kellarj, 12-May-2018 10:44:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523572/50
 Matrix: Solid Lab File ID: SE110050.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/12/2018 02:49
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U M	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	72		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 12-May-2018 02:49:09 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-050
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	150326217	1.00	0.8744
2	6.721	6.720	0.001	827674081	1.00	0.7245

RPD = 18.74

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D

Injection Date: 12-May-2018 02:49:09

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 50

Client ID:

Injection Vol: 1.0 ul

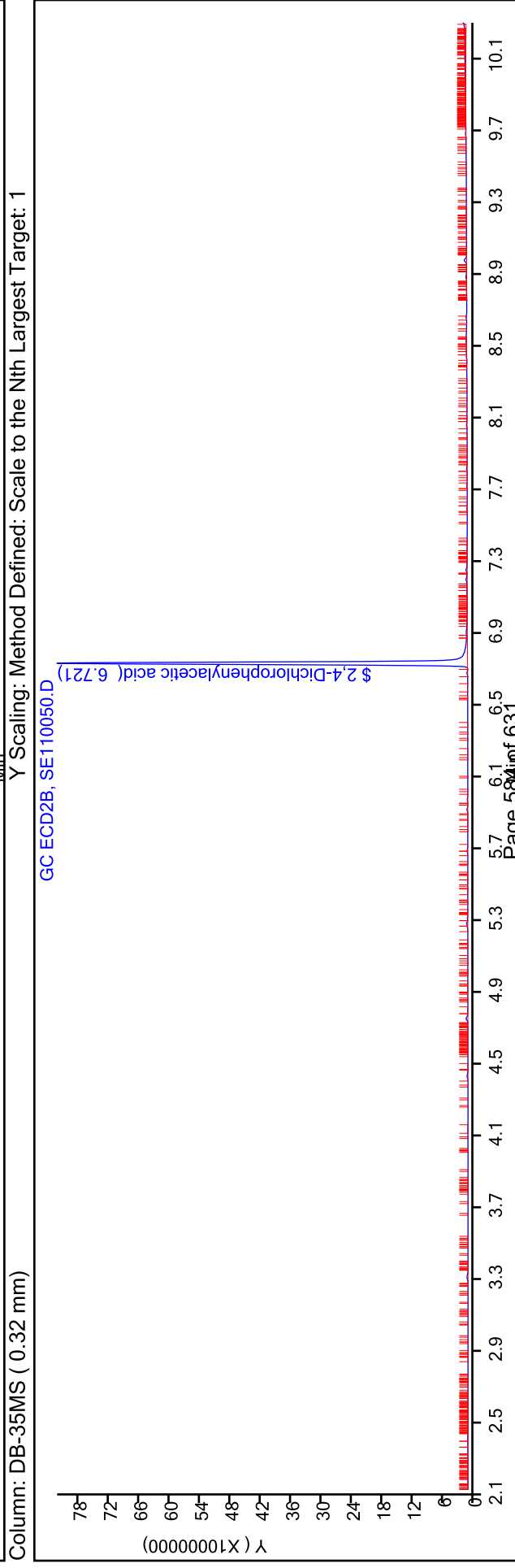
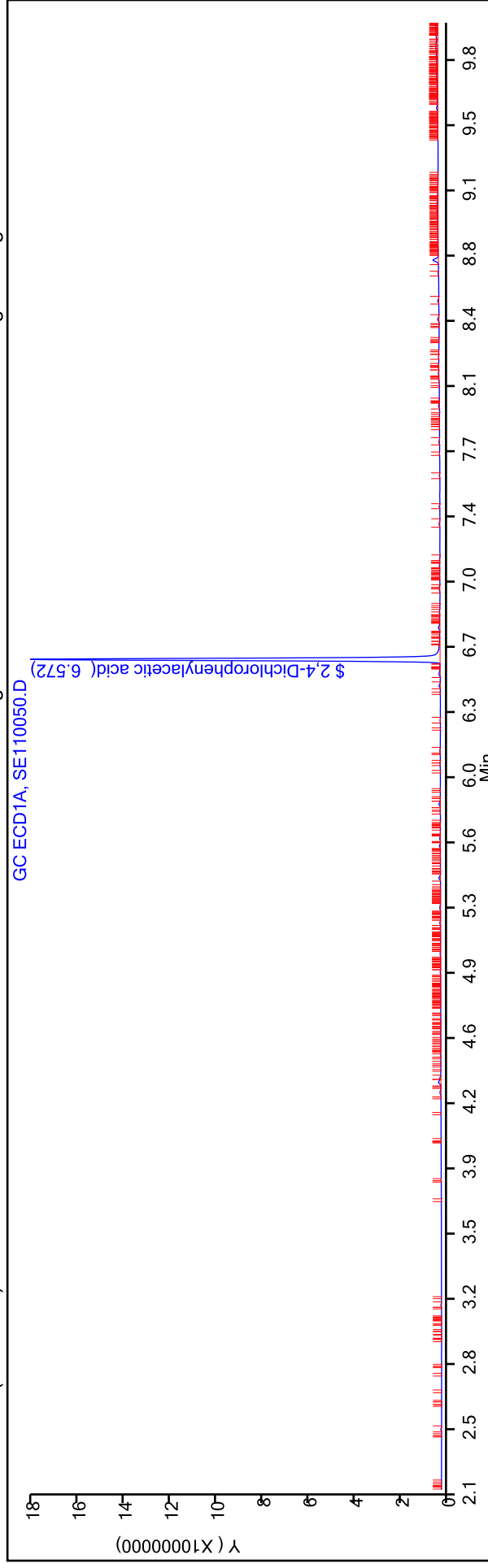
Dil. Factor: 1.0000

ALS Bottle#: 50

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 12-May-2018 02:49:09 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047291-050
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 10:47:32 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 10:44:44

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8744	87.09

Surrogate Recovery, Detector: GC ECD2B

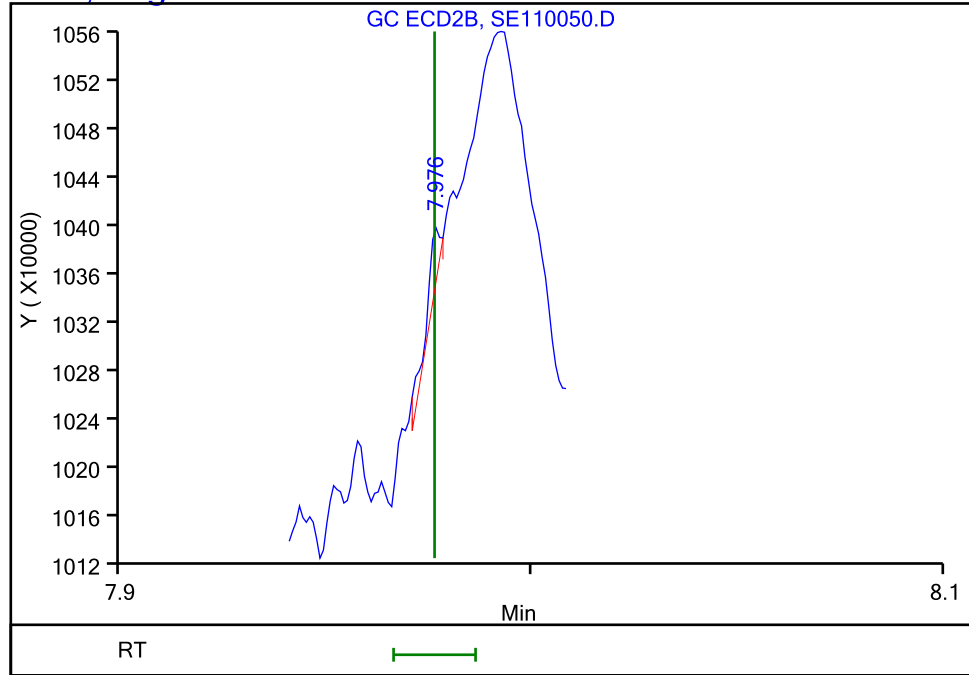
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7245	72.16

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110050.D
Injection Date: 12-May-2018 02:49:09 Instrument ID: CSGS
Lims ID: pibk
Client ID:
Operator ID: GEM ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

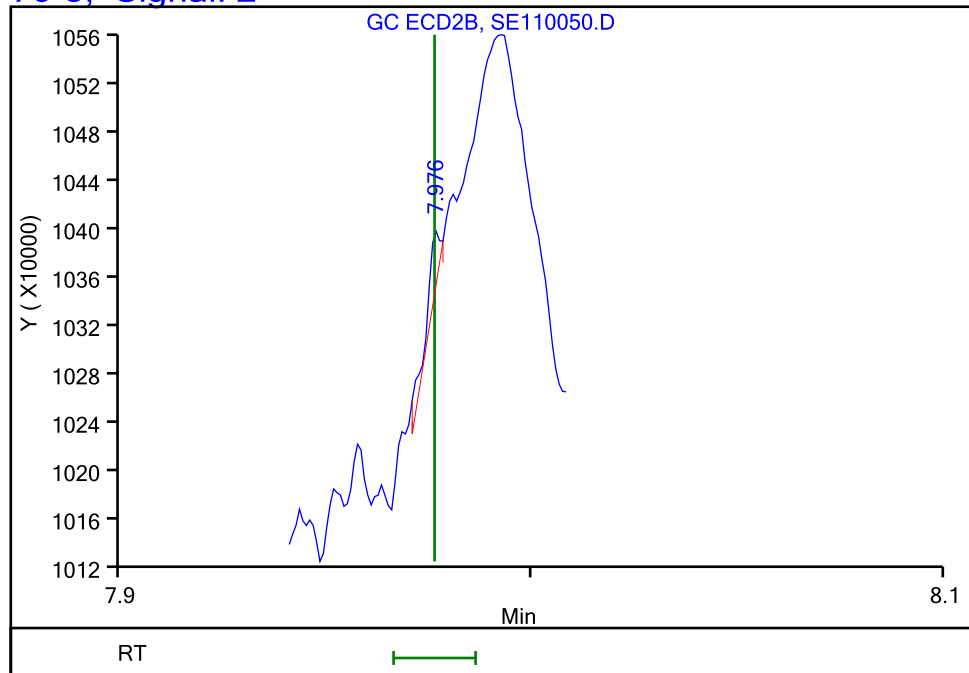
RT: 7.98
Response: 10448
Amount: 0.000002



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 7.98
Response: 10448
Amount: 0.000002



Reviewer: kellarj, 12-May-2018 10:44:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522658/5-A
 Matrix: Solid Lab File ID: SE090035.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.86(g) Date Analyzed: 05/10/2018 04:08
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	9.28		8.1	4.2	2.2
94-75-7	2,4-D	46.3		8.1	8.1	4.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	77		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090035.D
 Lims ID: LCS 680-522658/5-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 10-May-2018 04:08:12 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.489	2.491	-0.002	95195552	0.2000	0.1956	
2	2.543	2.540	0.003	157970796	0.2000	0.1121	
							RPD = 54.29

2 2,6-Dichlorophenol

1	4.943	4.943	0.000	25006380	NC	NC	
2	5.029	5.028	0.001	81458007	NC	NC	
							RPD = 0.00

3 2,4,6-Trichlorophenol

1	5.710	5.710	0.000	154347310	NC	NC	
2	5.701	5.700	0.001	632002193	NC	NC	
							RPD = 0.00

4 3,5-Dichlorobenzoic acid

1	6.046	6.047	-0.001	45533853	0.2000	0.1473	
2	6.040	6.040	0.000	223304763	0.2000	0.1381	
							RPD = 6.45

5 4-Nitrophenol

1	6.172	6.173	-0.001	23052184	0.2000	0.2315	
2	6.424	6.426	-0.002	72127248	0.2000	0.2319	
							RPD = 0.14

\$ 6 2,4-Dichlorophenylacetic acid

1	6.603	6.604	-0.001	29956889	0.2000	0.1517	
2	6.751	6.752	-0.001	190400028	0.2000	0.1530	
							RPD = 0.85

7 Dicamba

1	6.641	6.642	-0.001	67110975	0.1000	0.0681	
2	6.833	6.833	0.000	327953387	0.1000	0.0740	
							RPD = 8.24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.788	6.789	-0.001	4469288	20.0	6.89	
2	6.880	6.880	0.000	39617670	20.0	9.71	
						RPD = 33.97	
9 MCPA							
1	6.915	6.916	-0.001	8452798	20.0	9.85	
2	7.078	7.078	0.000	78319428	20.0	9.52	
						RPD = 3.45	
10 Dichlorprop							
1	7.101	7.102	-0.001	27208279	0.2000	0.1062	
2	7.223	7.223	0.000	130558570	0.2000	0.1067	
						RPD = 0.41	
11 2,4-D							
1	7.244	7.246	-0.002	46348790	0.2000	0.1469	
2	7.442	7.443	-0.001	208771697	0.2000	0.1430	
						RPD = 2.65	
12 Pentachlorophenol							
1	7.593	7.594	-0.001	167756624	0.0500	0.0331	
2	7.638	7.637	0.001	616124080	0.0500	0.0365	
						RPD = 9.85	
13 Silvex (2,4,5-TP)							
1	7.691	7.692	-0.001	52451276	0.0500	0.0280	
2	7.773	7.774	-0.001	183364332	0.0500	0.0273	
						RPD = 2.53	
14 Chloramben							
1	7.770	7.770	0.000	10630870	0.2000	0.006488	
2	8.080	8.081	-0.001	23209912	0.2000	0.004287	
						RPD = 40.85	
15 2,4,5-T							
1	7.845	7.848	-0.003	65563862	0.0500	0.0352	
2	8.006	8.008	-0.002	178449634	0.0500	0.0286	
						RPD = 20.47	
16 2,4-DB							
1	8.090	8.091	-0.001	4415941	0.2000	0.0251	
2	8.221	8.222	-0.001	30000097	0.2000	0.0342	
						RPD = 30.78	
17 Dinoseb							
1	8.143	8.144	-0.001	129091736	0.2000	0.1167	
2	8.173	8.173	0.000	432580055	0.2000	0.1319	
						RPD = 12.24	
18 Bentazon							
1	8.217	8.218	-0.001	37648092	0.2000	0.1463	
2	8.578	8.578	0.000	116415795	0.2000	0.1564	
						RPD = 6.66	
19 Picloram							
1	8.433	8.433	0.000	385881229	0.2000	0.1446	
2	8.913	8.913	0.000	1252057726	0.2000	0.1511	
						RPD = 4.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.537	8.537	0.000	435512011	0.2000	0.1535	
2	8.693	8.692	0.001	1347564897	0.2000	0.1513	
						RPD = 1.45	

21 Acifluorfen

1	9.576	9.577	-0.001	342672562	0.2000	0.1684	
2	9.711	9.710	0.001	1018178386	0.2000	0.1486	
						RPD = 12.50	

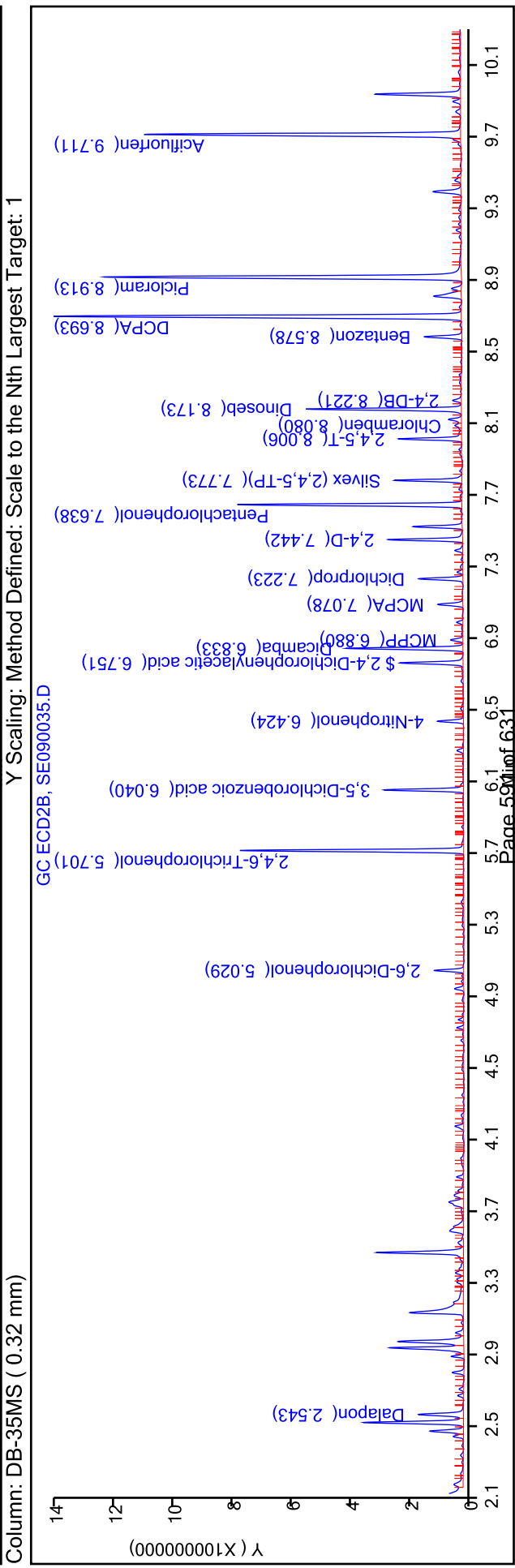
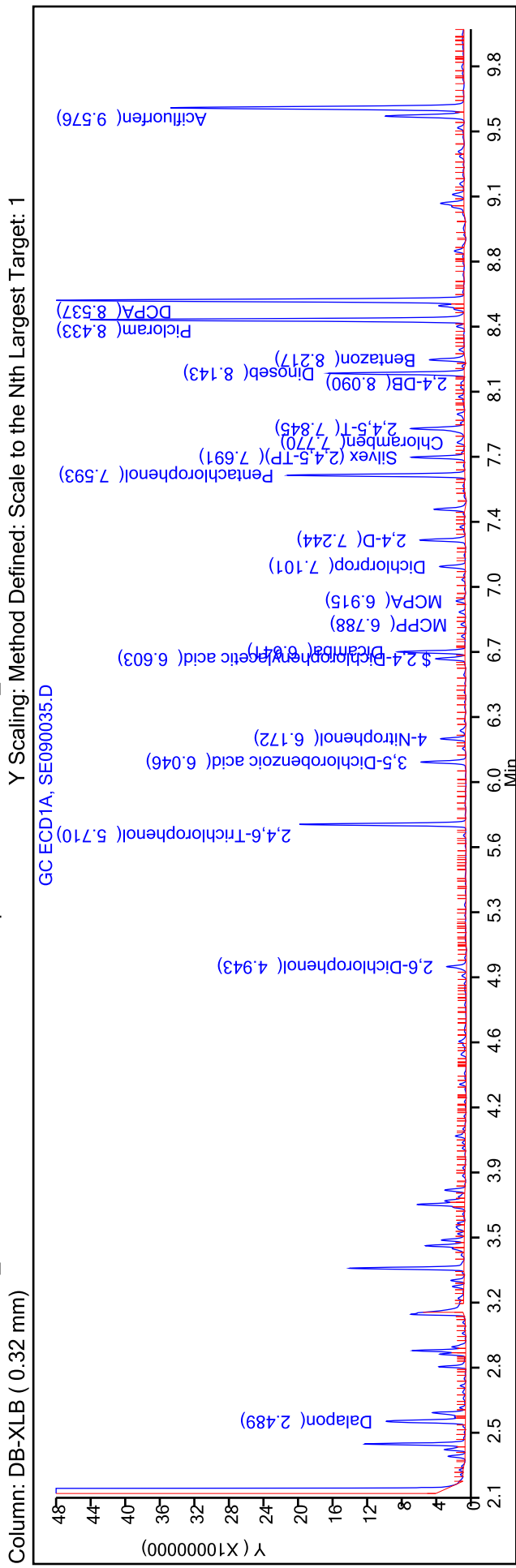
QC Flag Legend

Processing Flags

NC - Not Calibrated

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090035.D
 Injection Date: 10-May-2018 04:08:12 Instrument ID: CSGS
 Lims ID: LCS 680-522658/5-A

Operator ID: GEM
 Worklist Smp#: 35
 Client ID:
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090035.D
 Lims ID: LCS 680-522658/5-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 10-May-2018 04:08:12 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:19:43

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1517	75.86

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1530	76.51

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MS Lab Sample ID: 680-151865-3 MS
 Matrix: Solid Lab File ID: SE090039.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.06(g) Date Analyzed: 05/10/2018 05:26
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	9.26	M J1	8.4	4.3	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	45	M	27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090039.D
 Lims ID: 680-151865-A-3-B MS
 Client ID: GQ003
 Sample Type: MS
 Inject. Date: 10-May-2018 05:26:50 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:21:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6	2,4-Dichlorophenylacetic acid						M
1	6.605	6.604	0.001	14679646	0.2000	0.0744	M
2	6.750	6.752	-0.002	112509248	0.2000	0.0904	M
							RPD = 19.51
11	2,4-D						M
1	7.244	7.246	-0.002	47517155	0.2000	0.1506	M
2	7.440	7.443	-0.003	164708418	0.2000	0.1128	M
							RPD = 28.65
15	2,4,5-T						M
1	7.845	7.848	-0.003	47524263	0.0500	0.0255	M
2	8.005	8.008	-0.003	171468570	0.0500	0.0275	M
							RPD = 7.65

QC Flag Legend

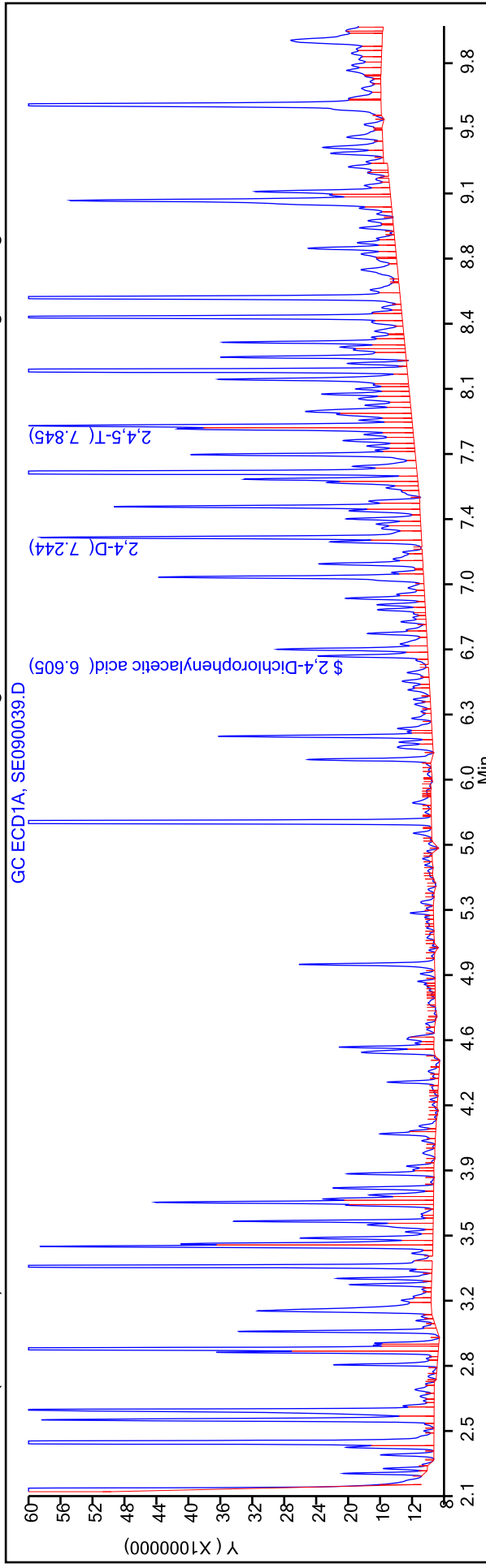
Review Flags

M - Manually Integrated

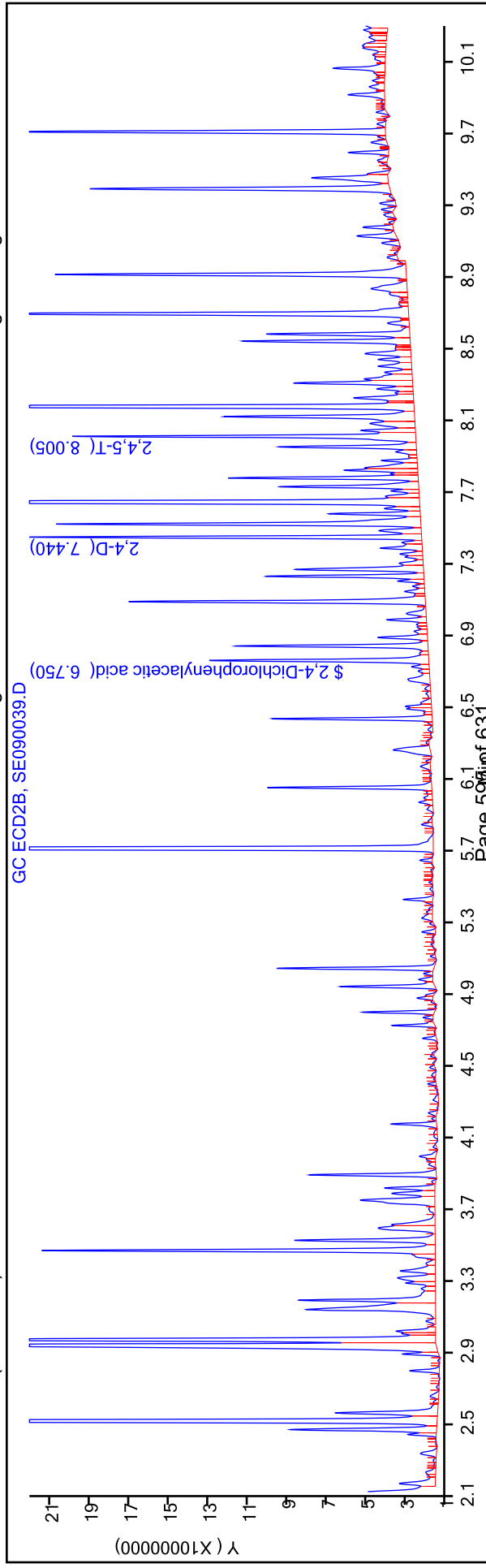
TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090039.D
 Injection Date: 10-May-2018 05:26:50
 Lims ID: 680-151865-A-3-B MS
 Client ID: GQ003
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 39
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 39

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090039.D
 Lims ID: 680-151865-A-3-B MS
 Client ID: GQ003
 Sample Type: MS
 Inject. Date: 10-May-2018 05:26:50 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:21:19

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0744	37.18

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0904	45.21

TestAmerica Savannah

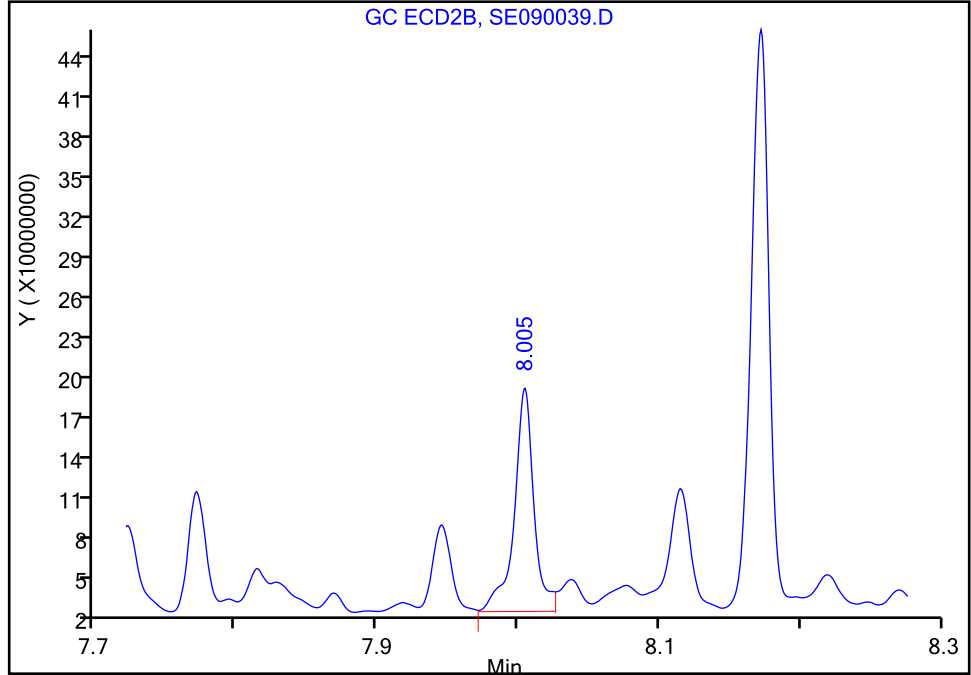
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Injection Date: 10-May-2018 05:26:50 Instrument ID: CSGS
Lims ID: 680-151865-A-3-B MS
Client ID: GQ003
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

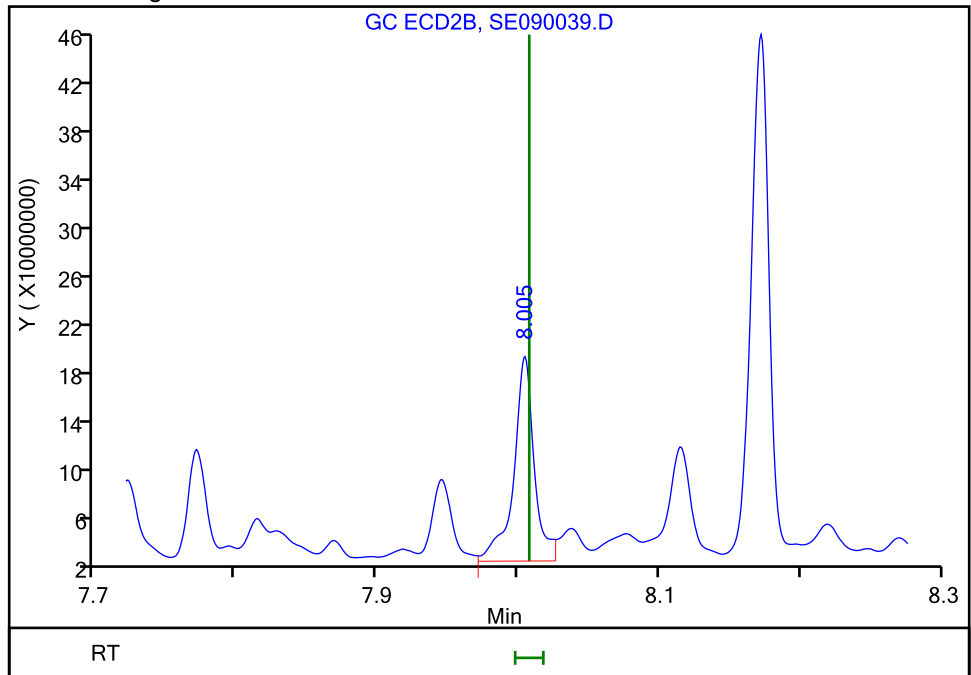
RT: 8.00
Area: 160853777
Amount: 0.025813
Amount Units: ug/ml

Processing Integration Results



RT: 8.00
Area: 171468570
Amount: 0.027516
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:20:52
Audit Action: Assigned New Baseline

TestAmerica Savannah

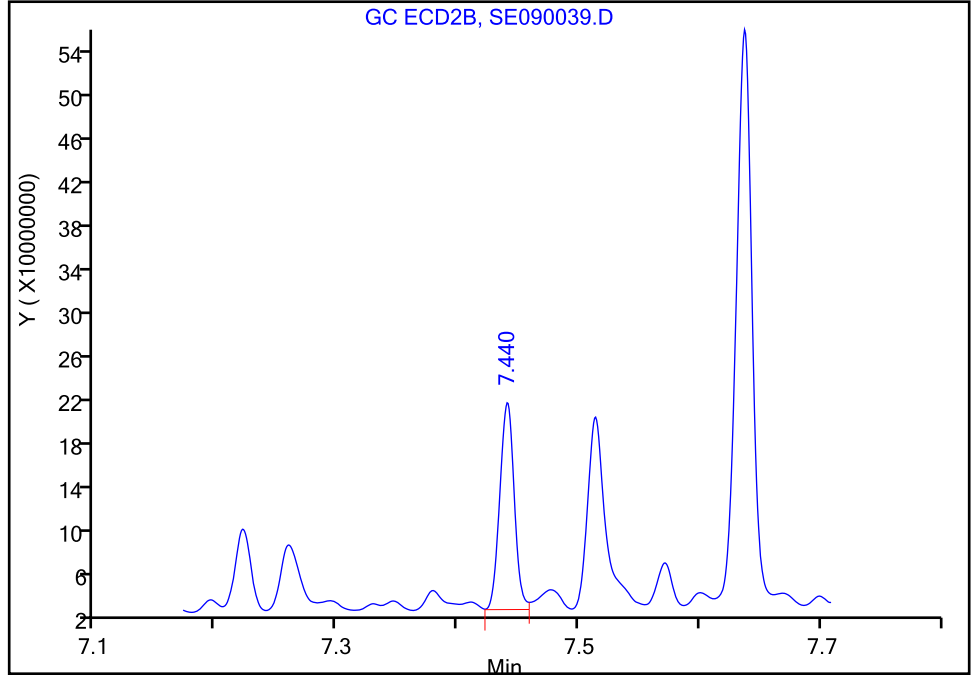
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Injection Date: 10-May-2018 05:26:50 Instrument ID: CSGS
Lims ID: 680-151865-A-3-B MS
Client ID: GQ003
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

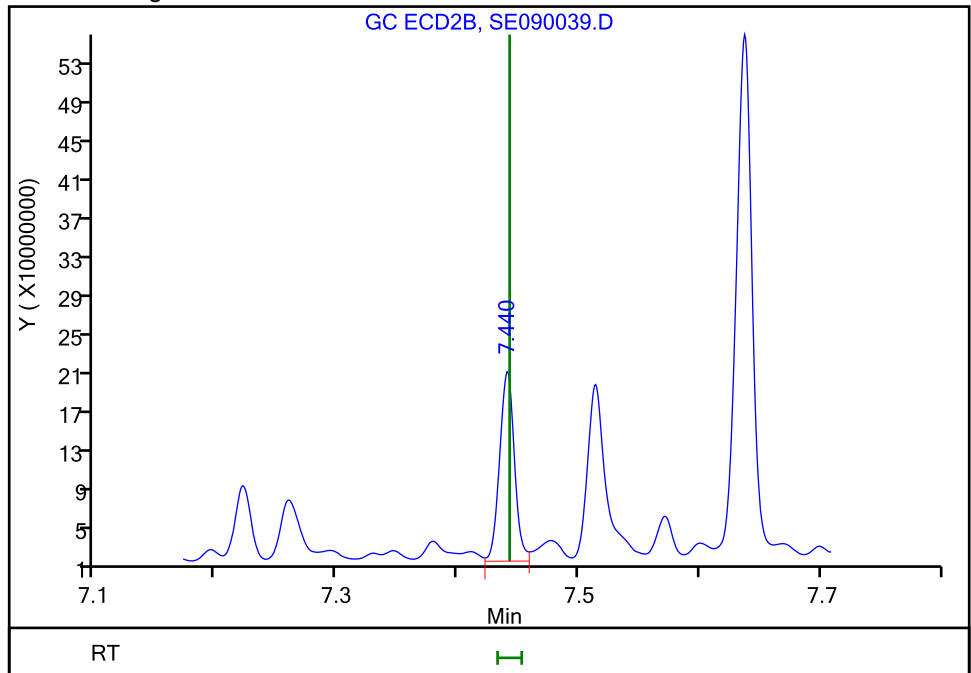
RT: 7.44
Area: 158572581
Amount: 0.108625
Amount Units: ug/ml

Processing Integration Results



RT: 7.44
Area: 164708418
Amount: 0.112828
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:20:52
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

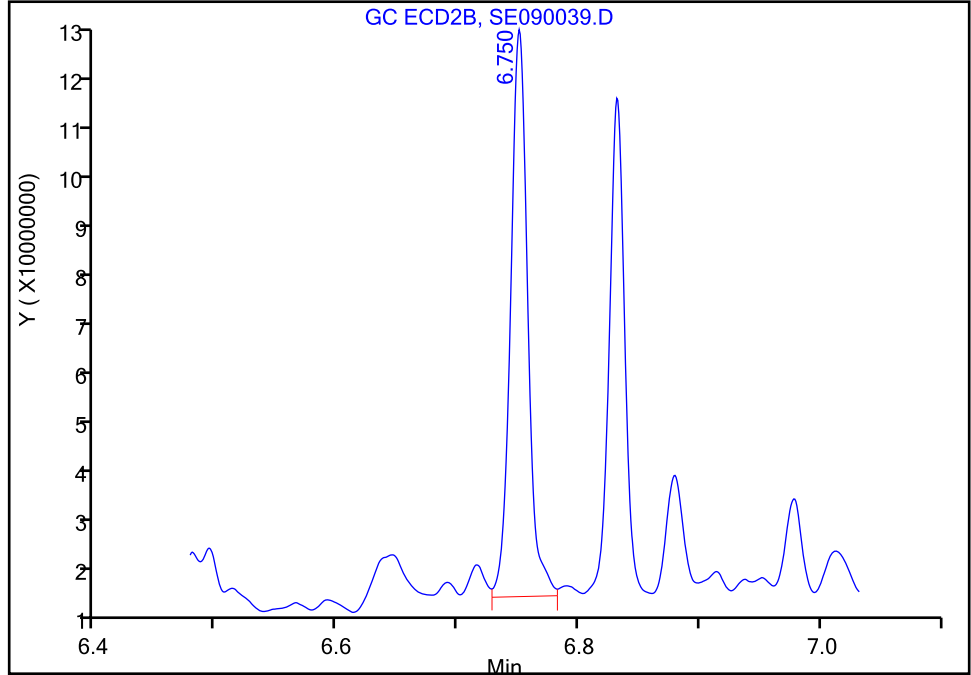
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090039.D
Injection Date: 10-May-2018 05:26:50 Instrument ID: CSGS
Lims ID: 680-151865-A-3-B MS
Client ID: GQ003
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

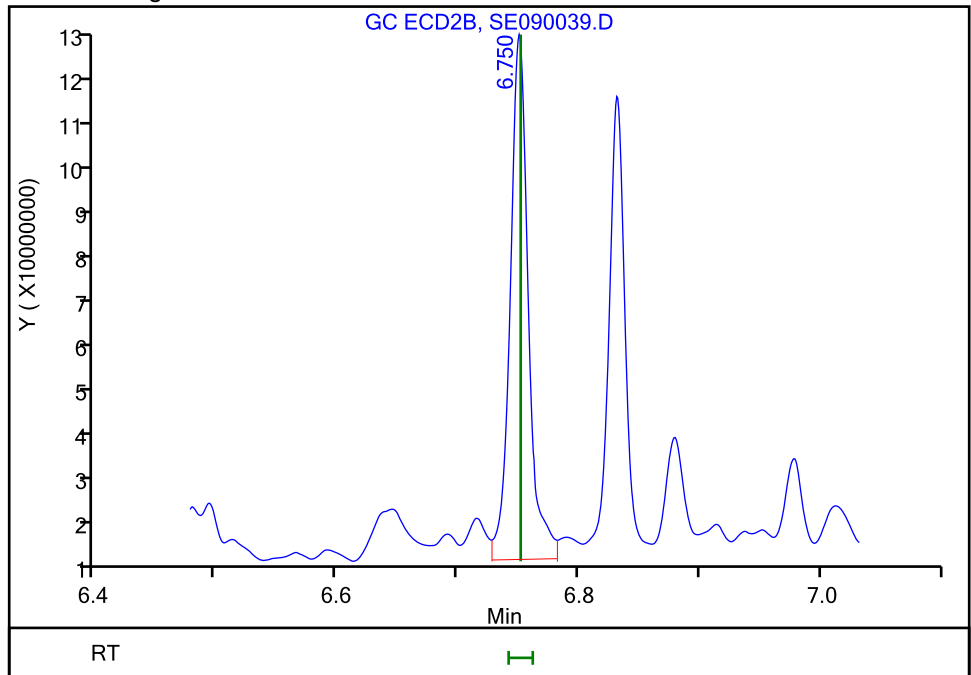
RT: 6.75
Area: 104195385
Amount: 0.083742
Amount Units: ug/ml

Processing Integration Results



RT: 6.75
Area: 112509248
Amount: 0.090423
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 10-May-2018 11:20:52
Audit Action: Assigned New Baseline

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MS Lab Sample ID: 680-151865-3 MS
 Matrix: Solid Lab File ID: SE110036.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.06(g) Date Analyzed: 05/11/2018 22:14
 Con. Extract Vol.: 10(mL) Dilution Factor: 5
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
94-75-7	2,4-D	31.5	J D 4	42	42	25

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110036.D
 Lims ID: 680-151865-A-3-B MS
 Client ID: GQ003
 Sample Type: MS
 Inject. Date: 11-May-2018 22:14:48 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 14-May-2018 09:49:29 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK029

First Level Reviewer: kellarj Date: 12-May-2018 14:57:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.427	2.434	-0.007	67459489	0.0400	0.1563	
2	2.489	2.487	0.002	12183320	0.0400	0.008789	
						RPD = 178.70	
2 2,6-Dichlorophenol							
1	4.910	4.909	0.001	2350702	NC	NC	
2	4.996	4.996	0.000	11597720	NC	NC	
						RPD = 0.00	
3 2,4,6-Trichlorophenol							
1	5.677	5.678	-0.001	22102251	NC	NC	
2	5.666	5.668	-0.002	100993474	NC	NC	
						RPD = 0.00	
4 3,5-Dichlorobenzoic acid							
1	6.014	6.015	-0.001	3991244	0.0400	0.0141	
2	6.009	6.009	0.000	11649973	0.0400	0.007595	
						RPD = 59.67	
5 4-Nitrophenol							
1	6.140	6.141	-0.001	4135570	0.0400	0.0447	
2	6.394	6.394	0.000	10567512	0.0400	0.0414	
						RPD = 7.78	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.572	6.572	0.000	1947587	0.0400	0.0113	
2	6.719	6.720	-0.001	20018021	0.0400	0.0175	
						RPD = 42.95	
7 Dicamba							
1	6.608	6.609	-0.001	2635083	0.0200	0.002919	
2	6.799	6.800	-0.001	15105061	0.0200	0.003559	
						RPD = 19.75	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110036.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.741	6.757	-0.016	3792012	4.00	6.34	
2	6.847	6.848	-0.001	4457616	4.00	0.2523	
						RPD = 184.69	
9 MCPA							
1	6.883	6.883	0.000	2070489	4.00	2.42	
2	7.047	7.046	0.001	26968828	4.00	2.95	
						RPD = 19.75	
10 Dichlorprop							
1	7.069	7.069	0.000	2158206	0.0400	0.009378	
2	7.190	7.191	-0.001	11094450	0.0400	0.009678	
						RPD = 3.14	
11 2,4-D							
1	7.212	7.214	-0.002	5522050	0.0400	0.0202	
2	7.410	7.412	-0.002	23543066	0.0400	0.0187	
						RPD = 7.78	
12 Pentachlorophenol							
1	7.561	7.562	-0.001	19098262	0.0100	0.004369	
2	7.604	7.605	-0.001	77187911	0.0100	0.004923	
						RPD = 11.93	
13 Silvex (2,4,5-TP)							
1	7.660	7.661	-0.001	3470738	0.0100	0.002175	
2	7.742	7.744	-0.002	12376564	0.0100	0.002049	
						RPD = 5.92	
14 Chloramben							
1	7.737	7.739	-0.002	5636772	0.0400	0.004162	
2	8.047	8.049	-0.002	20557105	0.0400	0.004343	
						RPD = 4.27	
15 2,4,5-T							
1	7.815	7.816	-0.001	6851396	0.0100	0.004417	
2	7.974	7.976	-0.002	21269218	0.0100	0.004145	
						RPD = 6.35	
16 2,4-DB							
1	8.065	8.059	0.006	4063070	0.0400	0.0279	
2	8.189	8.190	-0.001	4249884	0.0400	0.005844	
						RPD = 130.69	
17 Dinoseb							
1	8.112	8.113	-0.001	16396540	0.0400	0.0181	
2	8.140	8.141	-0.001	42104128	0.0400	0.0256	
						RPD = 34.47	
18 Bentazon							
1	8.184	8.184	0.000	4018805	0.0400	0.0182	
2	8.542	8.544	-0.002	11787212	0.0400	0.0167	
						RPD = 8.23	
19 Picloram							
1	8.398	8.399	-0.001	8410192	0.0400	0.003717	
2	8.873	8.877	-0.004	22331283	0.0400	0.0117	
						RPD = 103.56	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.502	8.504	-0.002	10211077	0.0400	0.004230	
2	8.654	8.658	-0.004	31240438	0.0400	0.003848	
						RPD = 9.45	

21 Acifluorfen

1	9.540	9.543	-0.003	8460928	0.0400	0.006446	
2	9.674	9.677	-0.003	18148299	0.0400	0.0206	
						RPD = 104.54	

QC Flag Legend

Processing Flags

NC - Not Calibrated

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110036.D

Injection Date: 11-May-2018 22:14:48

Instrument ID: CSGS

Operator ID: GEM

Lims ID: 680-151865-A-3-B MS

CSGS

Worklist Smp#: 36

Client ID: GQ003

Injection Vol: 1.0 ul

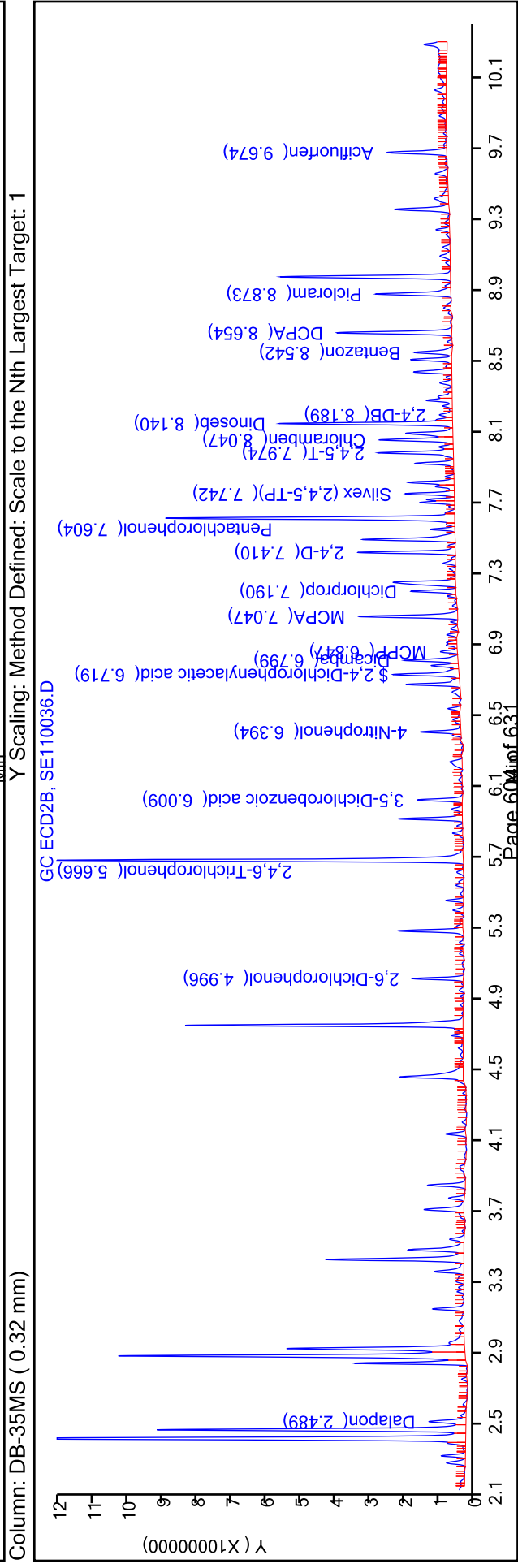
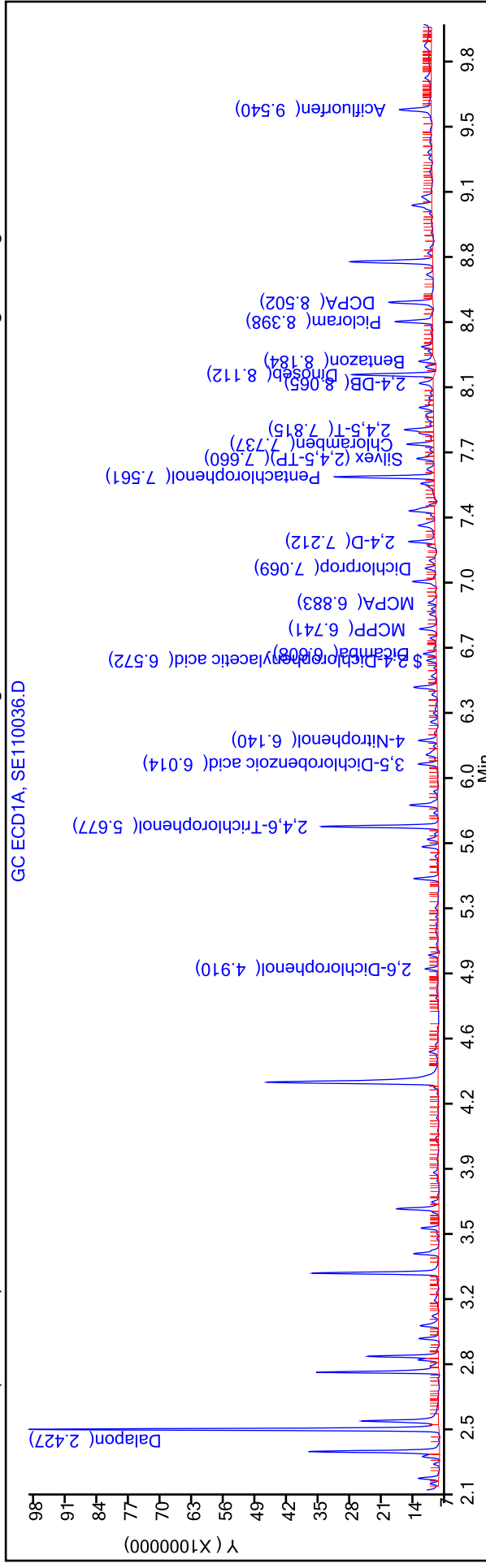
Dil. Factor: 5.0000

ALS Bottle#: 36

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110036.D
 Lims ID: 680-151865-A-3-B MS
 Client ID: GQ003
 Sample Type: MS
 Inject. Date: 11-May-2018 22:14:48 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 14-May-2018 09:49:29 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK029

First Level Reviewer: kellarj Date: 12-May-2018 14:57:37

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0113	28.32

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0175	43.81

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MSD Lab Sample ID: 680-151865-3 MSD
 Matrix: Solid Lab File ID: SE090040.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.07(g) Date Analyzed: 05/10/2018 05:46
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523317 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	25.6	J1	8.4	4.3	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	35		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090040.D
 Lims ID: 680-151865-A-3-C MSD
 Client ID: GQ003
 Sample Type: MSD
 Inject. Date: 10-May-2018 05:46:29 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-040
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:21:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.605	6.604	0.001	8767230	0.2000	0.0444	
2	6.751	6.752	-0.001	87986705	0.2000	0.0707	
							RPD = 45.71

11 2,4-D

1	7.244	7.246	-0.002	150882813	0.2000	0.4781	
2	7.442	7.443	-0.001	703293125	0.2000	0.4818	
							RPD = 0.77

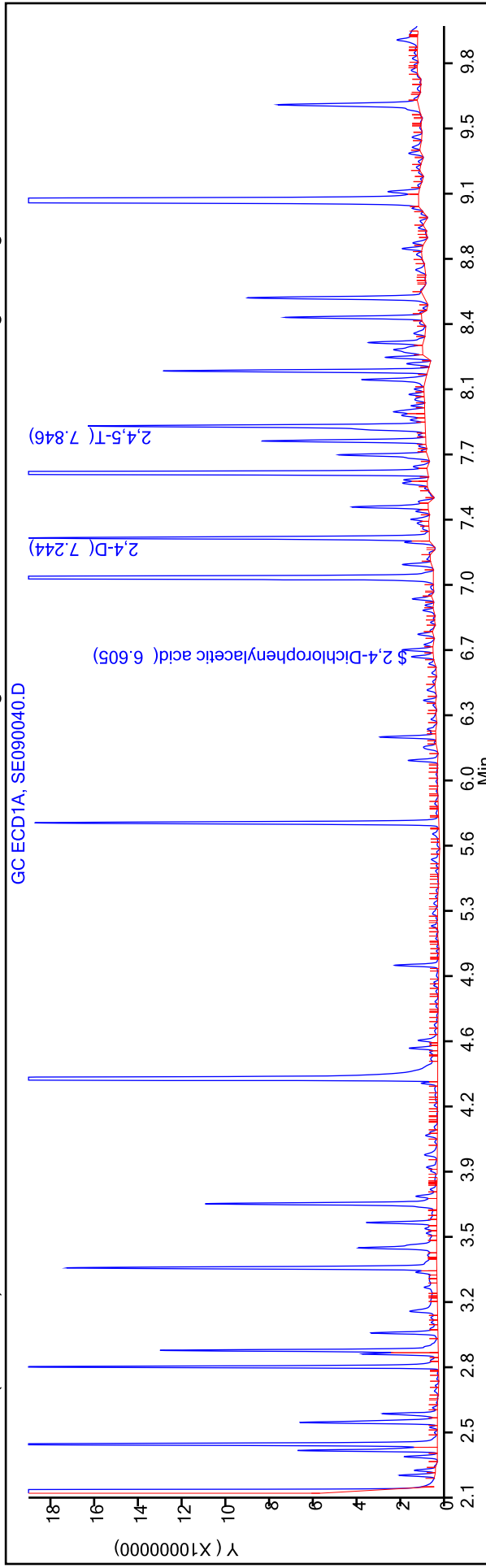
15 2,4,5-T

1	7.846	7.848	-0.002	152234806	0.0500	0.0817	
2	8.005	8.008	-0.003	474405003	0.0500	0.0761	
							RPD = 7.00

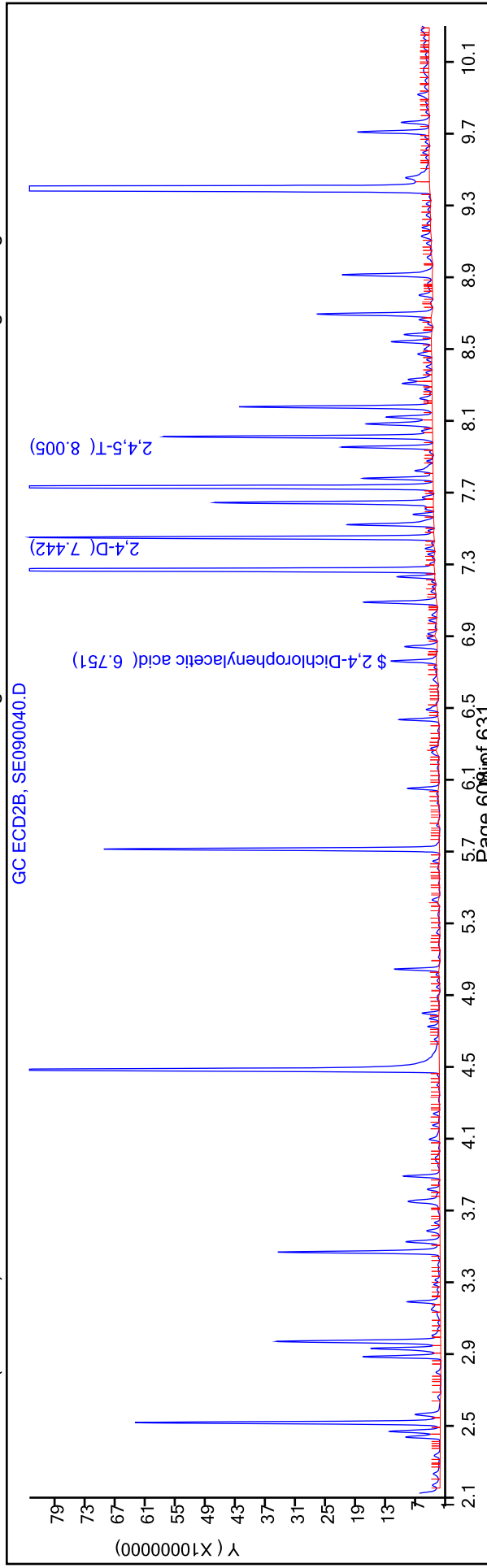
TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090040.D
 Injection Date: 10-May-2018 05:46:29
 Lims ID: 680-151865-A-3-C MSD
 Client ID: GQ003
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 40
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 ALS Bottle#: 40

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090040.D
 Lims ID: 680-151865-A-3-C MSD
 Client ID: GQ003
 Sample Type: MSD
 Inject. Date: 10-May-2018 05:46:29 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047236-040
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 10-May-2018 11:24:14 Calib Date: 09-May-2018 20:17:14
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180509-47236.b\SE090011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 10-May-2018 11:21:36

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0444	22.20

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0707	35.36

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1
 SDG No.: _____
 Client Sample ID: GQ003 MSD Lab Sample ID: 680-151865-3 MSD
 Matrix: Solid Lab File ID: SE110037.D
 Analysis Method: 8151A DOD Date Collected: 04/23/2018 13:30
 Extraction Method: 8151A Date Extracted: 05/04/2018 14:00
 Sample wt/vol: 30.07(g) Date Analyzed: 05/11/2018 22:34
 Con. Extract Vol.: 10(mL) Dilution Factor: 5
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 1.1 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523572 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
94-75-7	2,4-D	139	D 4 J1	42	42	25

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110037.D
 Lims ID: 680-151865-A-3-C MSD
 Client ID: GQ003
 Sample Type: MSD
 Inject. Date: 11-May-2018 22:34:19 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 15:01:10 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 14:57:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.425	2.434	-0.009	65509646	0.0400	0.1518	
2	2.488	2.487	0.001	12519315	0.0400	0.009031	
							RPD = 177.54

2 2,6-Dichlorophenol

1	4.909	4.909	0.000	2830681	NC	NC	
2	4.997	4.996	0.001	13498750	NC	NC	
							RPD = 0.00

3 2,4,6-Trichlorophenol

1	5.677	5.678	-0.001	22997336	NC	NC	
2	5.667	5.668	-0.001	104248596	NC	NC	
							RPD = 0.00

4 3,5-Dichlorobenzoic acid

1	6.014	6.015	-0.001	3090550	0.0400	0.0109	
2	6.008	6.009	-0.001	9551805	0.0400	0.006227	
							RPD = 54.42

5 4-Nitrophenol

1	6.140	6.141	-0.001	4011904	0.0400	0.0434	
2	6.393	6.394	-0.001	10629976	0.0400	0.0416	
							RPD = 4.16

\$ 6 2,4-Dichlorophenylacetic acid

1	6.572	6.572	0.000	1497779	0.0400	0.008712	
2	6.718	6.720	-0.002	18370643	0.0400	0.0161	
							RPD = 59.45

7 Dicamba

1	6.608	6.609	-0.001	1857645	0.0200	0.002058	
2	6.799	6.800	-0.001	12720882	0.0200	0.002997	
							RPD = 37.16

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110037.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.743	6.757	-0.014	2689178	4.00	4.50	
2	6.848	6.848	0.000	4035629	4.00	0.1379	
						RPD = 188.10	
9 MCPA							
1	6.884	6.883	0.001	2330305	4.00	2.81	
2	7.048	7.046	0.002	28088772	4.00	3.11	
						RPD = 10.20	
10 Dichlorprop							
1	7.068	7.069	-0.001	2404270	0.0400	0.0104	
2	7.191	7.191	0.000	12125734	0.0400	0.0106	
						RPD = 1.24	
11 2,4-D							
1	7.212	7.214	-0.002	24496414	0.0400	0.0897	
2	7.410	7.412	-0.002	104195118	0.0400	0.0828	
						RPD = 8.02	
12 Pentachlorophenol							
1	7.563	7.562	0.001	74715981	0.0100	0.0171	
2	7.604	7.605	-0.001	71249425	0.0100	0.004544	
						RPD = 115.99	
13 Silvex (2,4,5-TP)							
1	7.660	7.661	-0.001	6236710	0.0100	0.003908	
2	7.742	7.744	-0.002	20673258	0.0100	0.003423	
						RPD = 13.21	
14 Chloramben							
1	7.736	7.739	-0.003	10982143	0.0400	0.008109	
2	8.046	8.049	-0.003	24122448	0.0400	0.005097	
						RPD = 45.62	
15 2,4,5-T							
1	7.815	7.816	-0.001	26300630	0.0100	0.0170	
2	7.974	7.976	-0.002	66789425	0.0100	0.0130	
						RPD = 26.29	
16 2,4-DB							
1	8.066	8.059	0.007	5575130	0.0400	0.0383	
2	8.188	8.190	-0.002	4330821	0.0400	0.005955	
						RPD = 146.12	
17 Dinoseb							
1	8.112	8.113	-0.001	15475509	0.0400	0.0171	
2	8.140	8.141	-0.001	41409267	0.0400	0.0254	
						RPD = 39.22	
18 Bentazon							
1	8.183	8.184	-0.001	3130624	0.0400	0.0142	
2	8.542	8.544	-0.002	11246057	0.0400	0.0160	
						RPD = 12.02	
19 Picloram							
1	8.398	8.399	-0.001	8757545	0.0400	0.003871	
2	8.873	8.877	-0.004	25264666	0.0400	0.0120	
						RPD = 102.58	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.502	8.504	-0.002	12285666	0.0400	0.005090	
2	8.654	8.658	-0.004	36184743	0.0400	0.004457	
						RPD = 13.24	

21 Acifluorfen

1	9.542	9.543	-0.001	9444642	0.0400	0.007028	
2	9.674	9.677	-0.003	14989215	0.0400	0.0201	
						RPD = 96.25	

QC Flag Legend

Processing Flags

NC - Not Calibrated

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110037.D

Injection Date: 11-May-2018 22:34:19 Instrument ID: CSGS

Lims ID: 680-151865-A-3-C MSD

Client ID: GQ003

Injection Vol: 1.0 ul

Method: Herbicides_CSGS

Dil. Factor: 5.0000

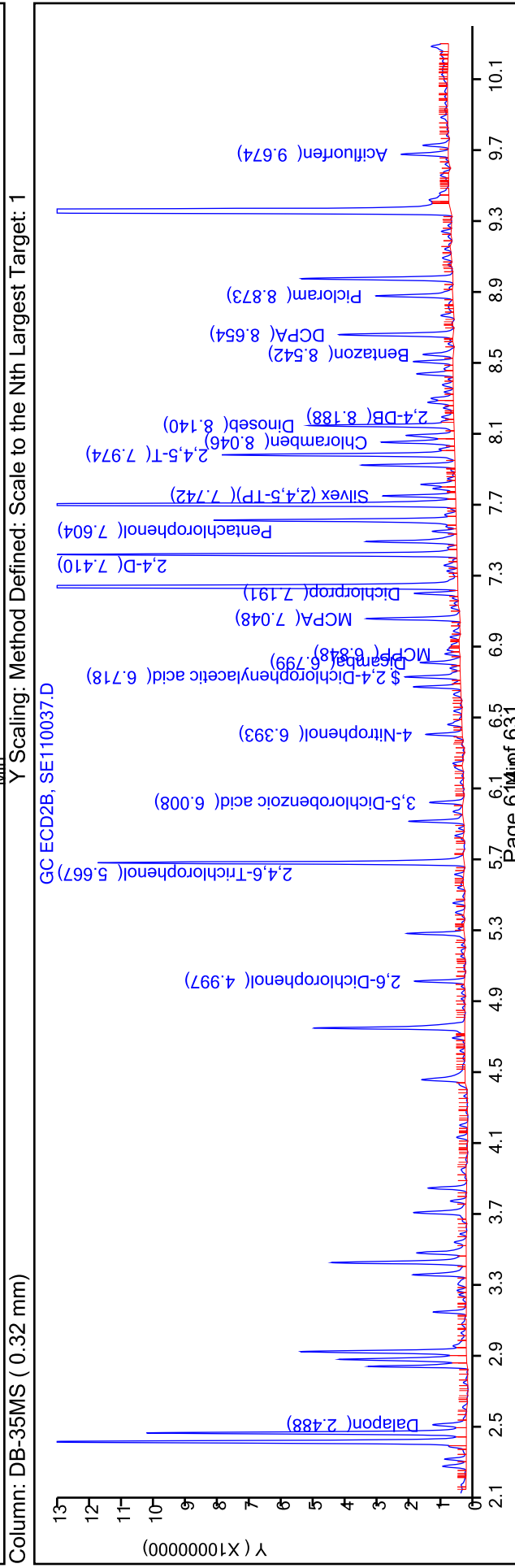
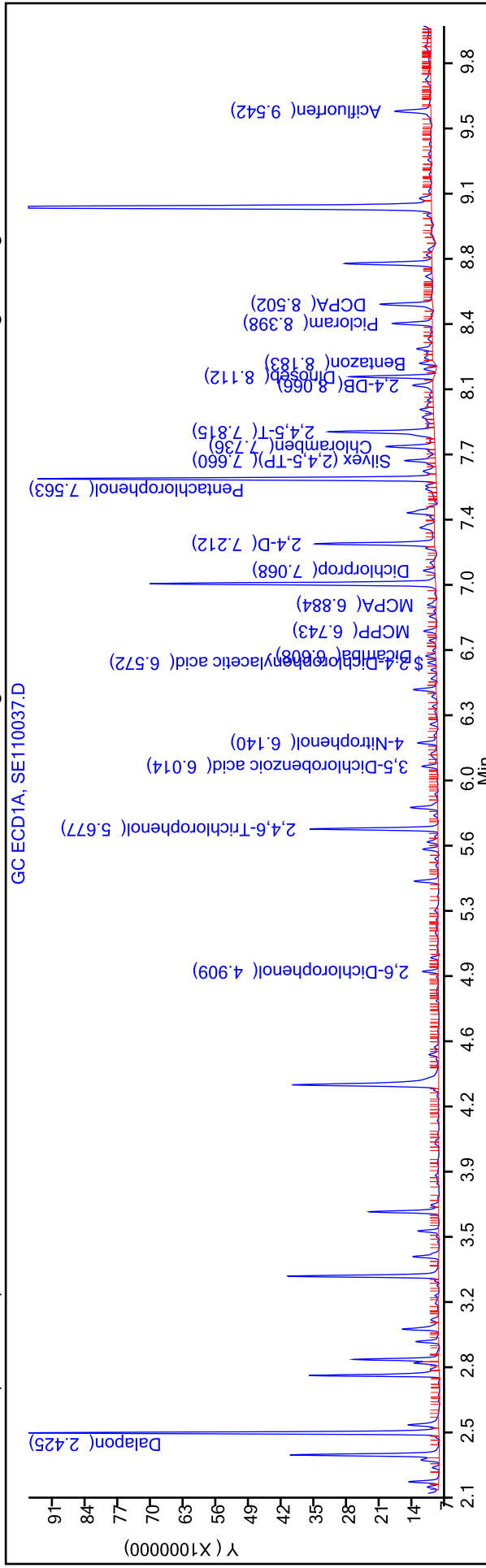
Limit Group: 8151A - DOD_V5

Operator ID: GEM

Worklist Smp#: 37

ALS Bottle#: 37

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110037.D
 Lims ID: 680-151865-A-3-C MSD
 Client ID: GQ003
 Sample Type: MSD
 Inject. Date: 11-May-2018 22:34:19 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 680-0047291-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 12-May-2018 15:01:10 Calib Date: 11-May-2018 14:04:11
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180511-47291.b\SE110011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK052

First Level Reviewer: kellarj Date: 12-May-2018 14:57:47

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.008712	21.78

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0161	40.20

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/09/2018 17:59

Analysis Batch Number: 523317 End Date: 05/10/2018 15:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-523317/4		05/09/2018 17:59	1	SE090004.D	DB-XLB 0.32 (mm)
IC 680-523317/4		05/09/2018 17:59	1	SE090004.D	DB-35MS 0.32 (mm)
IC 680-523317/5		05/09/2018 18:19	1	SE090005.D	DB-XLB 0.32 (mm)
IC 680-523317/5		05/09/2018 18:19	1	SE090005.D	DB-35MS 0.32 (mm)
IC 680-523317/6		05/09/2018 18:39	1	SE090006.D	DB-XLB 0.32 (mm)
IC 680-523317/6		05/09/2018 18:39	1	SE090006.D	DB-35MS 0.32 (mm)
IC 680-523317/7		05/09/2018 18:58	1	SE090007.D	DB-XLB 0.32 (mm)
IC 680-523317/7		05/09/2018 18:58	1	SE090007.D	DB-35MS 0.32 (mm)
IC 680-523317/8		05/09/2018 19:18	1	SE090008.D	DB-XLB 0.32 (mm)
IC 680-523317/8		05/09/2018 19:18	1	SE090008.D	DB-35MS 0.32 (mm)
IC 680-523317/9		05/09/2018 19:37	1	SE090009.D	DB-XLB 0.32 (mm)
IC 680-523317/9		05/09/2018 19:37	1	SE090009.D	DB-35MS 0.32 (mm)
IC 680-523317/10		05/09/2018 19:57	1	SE090010.D	DB-XLB 0.32 (mm)
IC 680-523317/10		05/09/2018 19:57	1	SE090010.D	DB-35MS 0.32 (mm)
IC 680-523317/11		05/09/2018 20:17	1	SE090011.D	DB-XLB 0.32 (mm)
IC 680-523317/11		05/09/2018 20:17	1	SE090011.D	DB-35MS 0.32 (mm)
ICV 680-523317/12 CCV		05/09/2018 20:36	1	SE090012.D	DB-XLB 0.32 (mm)
ICV 680-523317/12 CCV		05/09/2018 20:36	1	SE090012.D	DB-35MS 0.32 (mm)
PIBLK 680-523317/14		05/09/2018 21:16	1		DB-XLB 0.32 (mm)
PIBLK 680-523317/14		05/09/2018 21:16	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 21:35	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 21:35	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 21:55	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 21:55	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 22:15	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 22:15	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 22:34	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 22:34	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 22:54	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 22:54	1		DB-35MS 0.32 (mm)
CCV 680-523317/32		05/10/2018 03:09	1	SE090032.D	DB-XLB 0.32 (mm)
CCV 680-523317/32		05/10/2018 03:09	1	SE090032.D	DB-35MS 0.32 (mm)
PIBLK 680-523317/33		05/10/2018 03:29	1	SE090033.D	DB-XLB 0.32 (mm)
PIBLK 680-523317/33		05/10/2018 03:29	1	SE090033.D	DB-35MS 0.32 (mm)
MB 680-522658/4-A		05/10/2018 03:48	1	SE090034.D	DB-XLB 0.32 (mm)
MB 680-522658/4-A		05/10/2018 03:48	1	SE090034.D	DB-35MS 0.32 (mm)
LCS 680-522658/5-A		05/10/2018 04:08	1	SE090035.D	DB-XLB 0.32 (mm)
LCS 680-522658/5-A		05/10/2018 04:08	1	SE090035.D	DB-35MS 0.32 (mm)
680-151865-1		05/10/2018 04:28	1	SE090036.D	DB-XLB 0.32 (mm)
680-151865-1		05/10/2018 04:28	1	SE090036.D	DB-35MS 0.32 (mm)
680-151865-2		05/10/2018 04:47	1	SE090037.D	DB-XLB 0.32 (mm)
680-151865-2		05/10/2018 04:47	1	SE090037.D	DB-35MS 0.32 (mm)
680-151865-3		05/10/2018 05:07	1	SE090038.D	DB-XLB 0.32 (mm)
680-151865-3		05/10/2018 05:07	1	SE090038.D	DB-35MS 0.32 (mm)

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/09/2018 17:59

Analysis Batch Number: 523317 End Date: 05/10/2018 15:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
680-151865-3 MS		05/10/2018 05:26	1	SE090039.D	DB-XLB 0.32 (mm)
680-151865-3 MS		05/10/2018 05:26	1	SE090039.D	DB-35MS 0.32 (mm)
680-151865-3 MSD		05/10/2018 05:46	1	SE090040.D	DB-XLB 0.32 (mm)
680-151865-3 MSD		05/10/2018 05:46	1	SE090040.D	DB-35MS 0.32 (mm)
CCV 680-523317/47		05/10/2018 08:03	1	SE090047.D	DB-XLB 0.32 (mm)
CCV 680-523317/47		05/10/2018 08:03	1	SE090047.D	DB-35MS 0.32 (mm)
PIBLK 680-523317/48		05/10/2018 08:23	1	SE090048.D	DB-XLB 0.32 (mm)
PIBLK 680-523317/48		05/10/2018 08:23	1	SE090048.D	DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 08:42	1		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 08:42	1		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 10:01	1		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 10:01	1		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 10:20	1		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 10:20	1		DB-35MS 0.32 (mm)
CCV 680-523317/57		05/10/2018 11:19	1		DB-XLB 0.32 (mm)
CCV 680-523317/57		05/10/2018 11:19	1		DB-35MS 0.32 (mm)
PIBLK 680-523317/58		05/10/2018 11:39	1		DB-XLB 0.32 (mm)
PIBLK 680-523317/58		05/10/2018 11:39	1		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 14:16	100		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 14:16	100		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 14:35	1		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 14:35	1		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 14:55	100		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 14:55	100		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 15:15	25		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 15:15	25		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 15:34	25		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 15:34	25		DB-35MS 0.32 (mm)
ZZZZZ		05/10/2018 15:54	25		DB-XLB 0.32 (mm)
ZZZZZ		05/10/2018 15:54	25		DB-35MS 0.32 (mm)

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/11/2018 11:46

Analysis Batch Number: 523572 End Date: 05/12/2018 16:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-523572/4		05/11/2018 11:46	1	SE110004.D	DB-XLB 0.32 (mm)
IC 680-523572/4		05/11/2018 11:46	1	SE110004.D	DB-35MS 0.32 (mm)
IC 680-523572/5		05/11/2018 12:06	1	SE110005.D	DB-XLB 0.32 (mm)
IC 680-523572/5		05/11/2018 12:06	1	SE110005.D	DB-35MS 0.32 (mm)
IC 680-523572/6		05/11/2018 12:25	1	SE110006.D	DB-XLB 0.32 (mm)
IC 680-523572/6		05/11/2018 12:25	1	SE110006.D	DB-35MS 0.32 (mm)
IC 680-523572/7		05/11/2018 12:45	1	SE110007.D	DB-XLB 0.32 (mm)
IC 680-523572/7		05/11/2018 12:45	1	SE110007.D	DB-35MS 0.32 (mm)
IC 680-523572/8		05/11/2018 13:05	1	SE110008.D	DB-XLB 0.32 (mm)
IC 680-523572/8		05/11/2018 13:05	1	SE110008.D	DB-35MS 0.32 (mm)
IC 680-523572/9		05/11/2018 13:24	1	SE110009.D	DB-XLB 0.32 (mm)
IC 680-523572/9		05/11/2018 13:24	1	SE110009.D	DB-35MS 0.32 (mm)
IC 680-523572/10		05/11/2018 13:44	1	SE110010.D	DB-XLB 0.32 (mm)
IC 680-523572/10		05/11/2018 13:44	1	SE110010.D	DB-35MS 0.32 (mm)
IC 680-523572/11		05/11/2018 14:04	1	SE110011.D	DB-XLB 0.32 (mm)
IC 680-523572/11		05/11/2018 14:04	1	SE110011.D	DB-35MS 0.32 (mm)
ICV 680-523572/12 CCV		05/11/2018 14:23	1	SE110012.D	DB-XLB 0.32 (mm)
ICV 680-523572/12 CCV		05/11/2018 14:23	1	SE110012.D	DB-35MS 0.32 (mm)
PIBLK 680-523572/14		05/11/2018 15:03	1		DB-XLB 0.32 (mm)
PIBLK 680-523572/14		05/11/2018 15:03	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 15:23	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 15:23	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 15:42	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 15:42	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 16:02	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 16:02	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 17:40	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 17:40	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 19:37	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 19:37	1		DB-35MS 0.32 (mm)
ZZZZZ		05/11/2018 19:57	1		DB-XLB 0.32 (mm)
ZZZZZ		05/11/2018 19:57	1		DB-35MS 0.32 (mm)
CCV 680-523572/30		05/11/2018 20:17	1	SE110030.D	DB-XLB 0.32 (mm)
CCV 680-523572/30		05/11/2018 20:17	1	SE110030.D	DB-35MS 0.32 (mm)
PIBLK 680-523572/31		05/11/2018 20:36	1	SE110031.D	DB-XLB 0.32 (mm)
PIBLK 680-523572/31		05/11/2018 20:36	1	SE110031.D	DB-35MS 0.32 (mm)
680-151865-3		05/11/2018 21:55	5	SE110035.D	DB-XLB 0.32 (mm)
680-151865-3		05/11/2018 21:55	5	SE110035.D	DB-35MS 0.32 (mm)
680-151865-3 MS		05/11/2018 22:14	5	SE110036.D	DB-XLB 0.32 (mm)
680-151865-3 MS		05/11/2018 22:14	5	SE110036.D	DB-35MS 0.32 (mm)
680-151865-3 MSD		05/11/2018 22:34	5	SE110037.D	DB-XLB 0.32 (mm)
680-151865-3 MSD		05/11/2018 22:34	5	SE110037.D	DB-35MS 0.32 (mm)
CCV 680-523572/49		05/12/2018 02:29	1	SE110049.D	DB-XLB 0.32 (mm)
CCV 680-523572/49		05/12/2018 02:29	1	SE110049.D	DB-35MS 0.32 (mm)

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/11/2018 11:46

Analysis Batch Number: 523572 End Date: 05/12/2018 16:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 680-523572/50		05/12/2018 02:49	1	SE110050.D	DB-XLB 0.32 (mm)
PIBLK 680-523572/50		05/12/2018 02:49	1	SE110050.D	DB-35MS 0.32 (mm)
CCV 680-523572/61		05/12/2018 06:24	1		DB-XLB 0.32 (mm)
CCV 680-523572/61		05/12/2018 06:24	1		DB-35MS 0.32 (mm)
PIBLK 680-523572/62		05/12/2018 06:44	1		DB-XLB 0.32 (mm)
PIBLK 680-523572/62		05/12/2018 06:44	1		DB-35MS 0.32 (mm)
CCV 680-523572/72		05/12/2018 10:00	1		DB-XLB 0.32 (mm)
CCV 680-523572/72		05/12/2018 10:00	1		DB-35MS 0.32 (mm)
PIBLK 680-523572/73		05/12/2018 10:20	1		DB-XLB 0.32 (mm)
PIBLK 680-523572/73		05/12/2018 10:20	1		DB-35MS 0.32 (mm)
CCV 680-523572/90		05/12/2018 15:53	1		DB-XLB 0.32 (mm)
CCV 680-523572/90		05/12/2018 15:53	1		DB-35MS 0.32 (mm)
PIBLK 680-523572/91		05/12/2018 16:12	1		DB-XLB 0.32 (mm)
PIBLK 680-523572/91		05/12/2018 16:12	1		DB-35MS 0.32 (mm)

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Batch Number: 522658 Batch Start Date: 05/04/18 15:15 Batch Analyst: Wilson, Charles E

Batch Method: 8151A Batch End Date: 05/09/18 14:26

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HERBwK LCS 00049	SG HerbwkSurr 00044
680-151865-A-1	GQ001	8151A, 8151A DOD	T	30.03 g	10 mL		1 mL
680-151865-A-2	GQ002	8151A, 8151A DOD	T	30.05 g	10 mL		1 mL
680-151865-A-3	GQ003	8151A, 8151A DOD	T	30.05 g	10 mL		1 mL
MB 680-522658/4		8151A, 8151A DOD		30.63 g	10 mL		1 mL
LCS 680-522658/5		8151A, 8151A DOD		30.86 g	10 mL	1 mL	1 mL
680-151865-A-3 MS	GQ003	8151A, 8151A DOD	T	30.06 g	10 mL	1 mL	1 mL
680-151865-A-3 MSD	GQ003	8151A, 8151A DOD	T	30.07 g	10 mL	1 mL	1 mL

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.

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Batch Number: 522658 Batch Start Date: 05/04/18 15:15 Batch Analyst: Wilson, Charles E

Batch Method: 8151A Batch End Date: 05/09/18 14:26

Batch Notes	
Balance ID	30
Batch Comment	BOX RC
Carbitol ID	5424057
Diazald ID	5424071
Diethyl Ether ID	5389783
Sulfuric Acid Lot Number	5423977
Potassium Hydroxide ID	5370090
MeCL2 ID	5428080
Acidified Methanol ID	5442092
MTBE ID	5424031
N-evap ID	N-EVAP
N-evap Temperature	55 Degrees C
Na2SO4 ID	5222493
NaOH Lot #	5423983
Ottawa Sand ID	5407071
pH Paper ID	5426313
Pipette ID	GE38/CC40G
Analyst ID - Reagent Drop	CEW
Silica Gel ID	4252783
Silicic Acid ID	5183663
Uncorrected Temperature	EXKD2 77.0 EXKD3 77.6 EXKD4 Degrees C
Water Bath ID	EXKD2 EXKD3 EXKD4
Water Bath Temperature	EXKD2 77.0 EXKD3 77.3 EXKD4 Degrees C

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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151865-1

SDG No.: _____

Project: Andersen AFB, Guam - Herbicides

Client Sample ID

Lab Sample ID

GQ001

680-151865-1

GQ002

680-151865-2

GQ003

680-151865-3

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151865-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

LOQ Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151865-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/07/2018 16:07 End Date: 05/07/2018 16:07

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				% S o l t	M o i s t r e																										
680-151865-1	1	T	16:07	X	X																										
680-151865-2	1	T	16:07	X	X																										
680-151865-3	1	T	16:07	X	X																										
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
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ZZZZZZ			16:07																												
ZZZZZZ			16:07																												

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151865-1

SDG No.:

Batch Number: 523856 Batch Start Date: 05/07/18 16:07 Batch Analyst: Chamberlain, Kim A

Batch Method: Moisture Batch End Date: 05/08/18 09:37

Lab Sample ID	Client Sample ID	Method	Chain	Basis	DishWeight	SampleMassWet	SampleMassDry
680-151865-A-1	GQ001	Moisture		T	1.239 g	6.426 g	6.353 g
680-151865-A-2	GQ002	Moisture		T	1.016 g	5.069 g	5.029 g
680-151865-A-3	GQ003	Moisture		T	1.282 g	6.132 g	6.077 g

Batch Notes	
Balance ID	NA- see documents
Oven ID	Na- See documents

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.

Moisture

MOISTURE CONTENT DETERMINATION

Analytical Batch: 18MCE001 Start Date/Time: 05/07/18 16:07 Temp IN (°C): 105
 Instrument ID: 10601202 End Date/Time: 05/08/18 9:37 Temp Out (°C): 105

Sample ID	Weight of Dish (g)	Wet Weight+ Dish (g)	Dry Weight+ Dish (g)	Percent Solids	Percent Moisture	NOTES
680-151865-1						
D194-01	1.239	6.426	6.353	98.6%	1.4%	
D194-02	1.016	5.069	5.029	99.0%	1.0%	
D194-03	1.282	6.132	6.077	98.9%	1.1%	
680-151914-1						
D202-01	1.021	6.433	6.205	95.8%	4.2%	
D202-02	1.234	6.71	6.582	97.7%	2.3%	
D202-03	1.248	6.31	6.129	96.4%	3.6%	
680-151915-1						
D210-01	1.261	6.397	6.003	92.3%	7.7%	
D210-02	1.265	6.535	6.067	91.1%	8.9%	
D210-03	1.29	6.22	5.822	91.9%	8.1%	
E011-01	1.274	8.774	7.713	85.9%	14.1%	
E021-01	1.257	8.331	7.831	92.9%	7.1%	2.5% ✓
E021-01D	1.296	8.334	7.849	93.1%	6.9%	
E021-02	1.295	8.208	7.649	91.9%	8.1%	
E021-03	0.996	8.405	7.918	93.4%	6.6%	
E021-04	1.263	8.151	7.691	93.3%	6.7%	
E021-05	1.413	8.343	7.842	92.8%	7.2%	
E025-01	1.333	8.922	7.876	86.2%	13.8%	
E025-02	1.099	8.255	7.283	86.4%	13.6%	
E025-03	1.269	8.546	7.63	87.4%	12.6%	
E025-04	1.104	8.041	7.146	87.1%	12.9%	
E025-05	1.086	8.271	6.387	73.8%	26.2%	

COMMENT : Comments: Sample D194-02 was limited in amount

Initial Reading by: NCrist


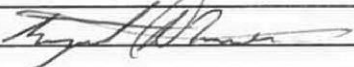
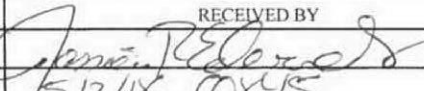
Final Reading by: NCrist

Reviewed by: 

Thermometer ID: 660330

Shipping and Receiving Documents

CHAIN OF CUSTODY

		1835 W. 205th Street, Torrance, CA 90501 Tel #: 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com			PO NUMBER: 18D194			EMAX CONTROL NO. 18D194						
		SAMPLE STORAGE			PROJECT CODE: AEC1801									
CLIENT : AECOM				MATRIX CODE		PRESERVATIVE		ANALYSIS REQUIRED			TAT			
PROJECT : ANDERSEN AFB, JQ13				DW=Drinking Water		IC = Ice		8151A (2,4-D AND 2,4,5-T) LP 4/30/18			<input type="checkbox"/> Rush __24__hrs.			
COORDINATOR				GW=Ground Water		HC = HCl					<input type="checkbox"/> Rush __48__hrs			
TEL		FAX		EMAIL		WW=Waste Water					HN=HNO3		<input type="checkbox"/> Rush __72__hrs	
SEND REPORT TO BRANT LANDERS				SD=Solid Waste SL=Sl		SH=NaO3					<input type="checkbox"/> 7 days			
COMPANY AECOM				SS=Soil/ Sediment		ST=Na2S2O3					<input type="checkbox"/> 14 days			
ADDRESS 1001 BISHOP STREET, SUITE 1600				WP=Wipes PP=Pure P		ZA=Zinc Acetate		<input type="checkbox"/> 21 days		STANDARD				
HONOLULU HI 96813				AR=Air		HS=H2SO4								
EMAX PM				O=										
SAMPLE ID		SAMPLING			CONTAINER			MATR IX		PRESERVATIVE CODE		COMMENTS		
LAB	CLIENT	LOCATION	DATE	TIME	NO.	SIZE	TYPE	CODE	QC	IC				
1	GQ001		4/23/2018	13:20	1	4OZ	JAR	SS		X			EMAX ID 18D194-01 (ISM SAMPLE)	
2	GQ002		4/23/2018	13:25	1	4OZ	JAR	SS		X			EMAX ID 18D194-02 (ISM SAMPLE)	
3	GQ003		4/23/2018	13:30	1	4OZ	JAR	SS		X			EMAX ID 18D194-03 (ISM SAMPLE)	
4	GQ003MS		4/23/2018	13:30	1	4OZ	JAR	SS		X			EMAX ID 18D194-03M (ISM SAMPLE)	
5	GQ003MSD		4/23/2018	13:30	1	4OZ	JAR	SS		X			EMAX ID 18D194-03S (ISM SAMPLE)	
Instructions :										Cooler #	Temp. (°C)	Sample #s		
PLEASE FOLLOW PROJECT DATA REQUIREMENTS FROM AECOM.												Subcontract to:		
Project Number: #60540676												TA Savannah		
												5102 LaRoche Avenue		
SAMPLER										COURIER/AIRBILL			Savannah, GA 31404-6019	
RELINQUISHED BY			Date	Time	RECEIVED BY					Main Phone: 912.354.7858				
			05/01/18	13:59						4.6 (4.0)				
NOTICE: Turn-around-time (TAT) for samples shall not begin until all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be \$5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.														



Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 680-151865-1

Login Number: 151865
List Number: 1
Creator: Edwards, Jessica R

List Source: TestAmerica Savannah

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?	N/A	
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.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 680-151914-1

Job Description: Andersen AFB, Guam - Herbicides

For:

AECOM Technical Services Inc.

1001 Bishop Street

Ste 1600

Honolulu, HI 96813

Attention: Dr. Brant Landers



Approved for release.
Stephanie K Rothmeyer
Project Manager I
5/15/2018 4:11 PM

Designee for
Patrick J McEntee, Manager of Project Management
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0107
patrick.mcentee@testamericainc.com
05/15/2018

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



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Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.

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)

CASE NARRATIVE

Client: AECOM Technical Services Inc.

Project: Andersen AFB, Guam - Herbicides

Report Number: 680-151914-1

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

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

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

RECEIPT

The samples were received on 5/3/2018 at 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Receipt Exceptions

ISM preparation was performed by EMAX laboratories for the requested 8151 Herbicides analyses performed by TestAmerica.

Percent moisture analysis was performed by EMAX laboratories and data was provided to TestAmerica for dry weight correction on analytical results.

CHLORINATED HERBICIDES

Samples GQ007 (680-151914-1), GQ008 (680-151914-2) and GQ009 (680-151914-3) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/03/2018 and analyzed on 05/08/2018 and 05/09/2018.

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

PERCENT SOLIDS

Samples GQ007 (680-151914-1), GQ008 (680-151914-2) and GQ009 (680-151914-3) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 05/07/2018.

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

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Client Sample ID: GQ007

Lab Sample ID: 680-151914-1

No Detections.

Client Sample ID: GQ008

Lab Sample ID: 680-151914-2

No Detections.

Client Sample ID: GQ009

Lab Sample ID: 680-151914-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Client Sample ID: GQ007

Date Collected: 04/25/18 11:00
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-1

Matrix: Solid
 Percent Solids: 95.8

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.5	U	8.7	2.4	ug/Kg	☼	05/03/18 11:22	05/08/18 23:56	1
2,4-D	8.7	U M	8.7	5.2	ug/Kg	☼	05/03/18 11:22	05/08/18 23:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	109		27 - 122				05/03/18 11:22	05/08/18 23:56	1

Client Sample ID: GQ008

Date Collected: 04/25/18 11:05
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-2

Matrix: Solid
 Percent Solids: 97.7

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.4	U	8.5	2.4	ug/Kg	☼	05/03/18 11:22	05/09/18 00:16	1
2,4-D	8.5	U	8.5	5.1	ug/Kg	☼	05/03/18 11:22	05/09/18 00:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	85		27 - 122				05/03/18 11:22	05/09/18 00:16	1

Client Sample ID: GQ009

Date Collected: 04/25/18 11:10
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-3

Matrix: Solid
 Percent Solids: 96.4

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.5	U	8.6	2.4	ug/Kg	☼	05/03/18 11:22	05/09/18 00:35	1
2,4-D	8.6	U M	8.6	5.2	ug/Kg	☼	05/03/18 11:22	05/09/18 00:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	102		27 - 122				05/03/18 11:22	05/09/18 00:35	1

Default Detection Limits

Client: AECOM Technical Services Inc.

Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Method: 8151A DOD - Herbicides (GC)

Prep: 8151A

Analyte	LOD	DL	Units	Method
2,4,5-T	8.3	2.3	ug/Kg	8151A DOD
2,4-D	8.3	5.0	ug/Kg	8151A DOD

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Method: 8151A DOD - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (27-122)
680-151914-1	GQ007	109
680-151914-2	GQ008	85
680-151914-3	GQ009	102
LCS 680-522541/11-A	Lab Control Sample	54
MB 680-522541/10-A	Method Blank	52

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Method: 8151A DOD - Herbicides (GC)

Lab Sample ID: MB 680-522541/10-A
Matrix: Solid
Analysis Batch: 523063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522541

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,5-T	4.3	U M	8.3	2.3	ug/Kg		05/03/18 11:22	05/08/18 22:19	1
2,4-D	8.3	U	8.3	5.0	ug/Kg		05/03/18 11:22	05/08/18 22:19	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
2,4-Dichlorophenylacetic acid (Surr)	52		27 - 122				05/03/18 11:22	05/08/18 22:19	1

Lab Sample ID: LCS 680-522541/11-A
Matrix: Solid
Analysis Batch: 523063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4,5-T	16.3	8.90		ug/Kg		54	31 - 138
2,4-D	65.4	44.5		ug/Kg		68	28 - 144
Surrogate	LCS LCS		Limits			D	Limits
%Recovery	Qualifier						
2,4-Dichlorophenylacetic acid (Surr)	54		27 - 122				

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

GC Semi VOA

Prep Batch: 522541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151914-1	GQ007	Total/NA	Solid	8151A	
680-151914-2	GQ008	Total/NA	Solid	8151A	
680-151914-3	GQ009	Total/NA	Solid	8151A	
MB 680-522541/10-A	Method Blank	Total/NA	Solid	8151A	
LCS 680-522541/11-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 523063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151914-1	GQ007	Total/NA	Solid	8151A DOD	522541
680-151914-2	GQ008	Total/NA	Solid	8151A DOD	522541
680-151914-3	GQ009	Total/NA	Solid	8151A DOD	522541
MB 680-522541/10-A	Method Blank	Total/NA	Solid	8151A DOD	522541
LCS 680-522541/11-A	Lab Control Sample	Total/NA	Solid	8151A DOD	522541

General Chemistry

Analysis Batch: 523856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151914-1	GQ007	Total/NA	Solid	Moisture	
680-151914-2	GQ008	Total/NA	Solid	Moisture	
680-151914-3	GQ009	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Client Sample ID: GQ007

Date Collected: 04/25/18 11:00

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ007

Date Collected: 04/25/18 11:00

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-1

Matrix: Solid

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/08/18 23:56	JCK	TAL SAV

Client Sample ID: GQ008

Date Collected: 04/25/18 11:05

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ008

Date Collected: 04/25/18 11:05

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-2

Matrix: Solid

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/09/18 00:16	JCK	TAL SAV

Client Sample ID: GQ009

Date Collected: 04/25/18 11:10

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ009

Date Collected: 04/25/18 11:10

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151914-3

Matrix: Solid

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/09/18 00:35	JCK	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19
New Jersey	NELAP	2	CO004	06-30-18

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Method	Method Description	Protocol	Laboratory
8151A DOD	Herbicides (GC)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV
8151A	Extraction (Herbicides)	SW846	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151914-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-151914-1	GQ007	Solid	04/25/18 11:00	05/03/18 09:00
680-151914-2	GQ008	Solid	04/25/18 11:05	05/03/18 09:00
680-151914-3	GQ009	Solid	04/25/18 11:10	05/03/18 09:00

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CS GS Analysis Batch Number: 523063
 Lab Sample ID: IC 680-523063/4 Client Sample ID: _____
 Date Analyzed: 05/08/18 11:58 Lab File ID: SE080004.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
Picloram	9.01	Baseline Smoothing	kellarj 05/08/18 16:07
Acifluorfen	9.80	Baseline Smoothing	kellarj 05/08/18 16:07

Lab Sample ID: IC 680-523063/8 Client Sample ID: _____

Date Analyzed: 05/08/18 13:16 Lab File ID: SE080008.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
MCPA	7.16	Baseline Smoothing	kellarj 05/08/18 16:10
Dichlorprop	7.30	Baseline Smoothing	kellarj 05/08/18 16:10
2,4-D	7.52	Baseline Smoothing	kellarj 05/08/18 16:10
Pentachlorophenol	7.71	Baseline Smoothing	kellarj 05/08/18 16:10
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj 05/08/18 16:10
2,4,5-T	8.08	Baseline Smoothing	kellarj 05/08/18 16:10
Chloramben	8.16	Baseline Smoothing	kellarj 05/08/18 16:10
Dinoseb	8.25	Baseline Smoothing	kellarj 05/08/18 16:10
2,4-DB	8.30	Baseline Smoothing	kellarj 05/08/18 16:10
Bentazon	8.66	Baseline Smoothing	kellarj 05/08/18 16:10
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj 05/08/18 16:10
Picloram	9.01	Baseline Smoothing	kellarj 05/08/18 16:10

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CS GS Analysis Batch Number: 523063
 Lab Sample ID: IC 680-523063/11 Client Sample ID: _____
 Date Analyzed: 05/08/18 14:15 Lab File ID: SE080011.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.26	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-D	7.35	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-DB	8.19	Baseline Smoothing	kellarj	05/08/18 16:11
Picloram	8.55	Baseline Smoothing	kellarj	05/08/18 16:11

Lab Sample ID: IC 680-523063/11 Client Sample ID: _____
 Date Analyzed: 05/08/18 14:15 Lab File ID: SE080011.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.52	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-D	7.53	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-DB	8.31	Baseline Smoothing	kellarj	05/08/18 16:11
Picloram	9.01	Baseline Smoothing	kellarj	05/08/18 16:11

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: ICV 680-523063/12 CCV Client Sample ID: _____
 Date Analyzed: 05/08/18 14:35 Lab File ID: SE080012.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.51	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-Dichlorophenylacetic acid (Surr)	6.83	Baseline Smoothing	kellarj	05/08/18 16:12
Dicamba	6.91	Baseline Smoothing	kellarj	05/08/18 16:12
MCPP	6.96	Baseline Smoothing	kellarj	05/08/18 16:12
MCPA	7.16	Baseline Smoothing	kellarj	05/08/18 16:12
Dichlorprop	7.30	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-D	7.52	Baseline Smoothing	kellarj	05/08/18 16:12
Pentachlorophenol	7.72	Baseline Smoothing	kellarj	05/08/18 16:12
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj	05/08/18 16:12
2,4,5-T	8.08	Baseline Smoothing	kellarj	05/08/18 16:12
Chloramben	8.16	Baseline Smoothing	kellarj	05/08/18 16:12
Dinoseb	8.25	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-DB	8.30	Baseline Smoothing	kellarj	05/08/18 16:12
Bentazon	8.66	Baseline Smoothing	kellarj	05/08/18 16:12
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj	05/08/18 16:12
Picloram	9.01	Baseline Smoothing	kellarj	05/08/18 16:12
Acifluorfen	9.80	Baseline Smoothing	kellarj	05/08/18 16:12

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: CCV 680-523063/28 Client Sample ID:
 Date Analyzed: 05/08/18 21:40 Lab File ID: SE080028.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dichlorophenylacetic acid (Surr)	6.68	Baseline Smoothing	kellarj	05/09/18 09:21
Dicamba	6.72	Baseline Smoothing	kellarj	05/09/18 09:21
MCPP	6.87	Baseline Smoothing	kellarj	05/09/18 09:21
MCPA	6.99	Baseline Smoothing	kellarj	05/09/18 09:21
Dichlorprop	7.18	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-D	7.33	Baseline Smoothing	kellarj	05/09/18 09:21
Pentachlorophenol	7.67	Baseline Smoothing	kellarj	05/09/18 09:21
Silvex (2,4,5-TP)	7.77	Baseline Smoothing	kellarj	05/09/18 09:21
Chloramben	7.86	Baseline Smoothing	kellarj	05/09/18 09:21
2,4,5-T	7.93	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-DB	8.18	Baseline Smoothing	kellarj	05/09/18 09:21
Dinoseb	8.22	Baseline Smoothing	kellarj	05/09/18 09:21
Bentazon	8.30	Baseline Smoothing	kellarj	05/09/18 09:21
Picloram	8.53	Baseline Smoothing	kellarj	05/09/18 09:21
Tetrathalic acid, tetrachloro-, dimethyl ester	8.62	Baseline Smoothing	kellarj	05/09/18 09:21
Acifluorfen	9.67	Baseline Smoothing	kellarj	05/09/18 09:21

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: CCV 680-523063/28 Client Sample ID: _____
 Date Analyzed: 05/08/18 21:40 Lab File ID: SE080028.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.83	Baseline Smoothing	kellarj 05/09/18 09:21
Dicamba	6.91	Baseline Smoothing	kellarj 05/09/18 09:21
MCPFP	6.96	Baseline Smoothing	kellarj 05/09/18 09:21
MCPA	7.15	Baseline Smoothing	kellarj 05/09/18 09:21
Dichlorprop	7.30	Baseline Smoothing	kellarj 05/09/18 09:21
2,4-D	7.52	Baseline Smoothing	kellarj 05/09/18 09:21
Pentachlorophenol	7.71	Baseline Smoothing	kellarj 05/09/18 09:21
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj 05/09/18 09:21
2,4,5-T	8.08	Baseline Smoothing	kellarj 05/09/18 09:21
Chloramben	8.16	Baseline Smoothing	kellarj 05/09/18 09:21
Dinoseb	8.25	Baseline Smoothing	kellarj 05/09/18 09:21
2,4-DB	8.30	Baseline Smoothing	kellarj 05/09/18 09:21
Bentazon	8.66	Baseline Smoothing	kellarj 05/09/18 09:21
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj 05/09/18 09:21
Picloram	9.01	Baseline Smoothing	kellarj 05/09/18 09:21

Lab Sample ID: PIBLK 680-523063/29 Client Sample ID: _____
 Date Analyzed: 05/08/18 21:59 Lab File ID: SE080029.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:21

Lab Sample ID: PIBLK 680-523063/29 Client Sample ID: _____
 Date Analyzed: 05/08/18 21:59 Lab File ID: SE080029.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: MB 680-522541/10-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:19 Lab File ID: SE080030.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/09/18 09:29

Lab Sample ID: MB 680-522541/10-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:19 Lab File ID: SE080030.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

Lab Sample ID: LCS 680-522541/11-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:38 Lab File ID: SE080031.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.68	Baseline Smoothing	kellarj 05/09/18 09:29
2,4-D	7.32	Baseline Smoothing	kellarj 05/09/18 09:29
2,4,5-T	7.92	Baseline Smoothing	kellarj 05/09/18 09:29

Lab Sample ID: 680-151914-1 Client Sample ID: GQ007
 Date Analyzed: 05/08/18 23:56 Lab File ID: SE080035.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:30

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: 680-151914-1 Client Sample ID: GQ007
 Date Analyzed: 05/08/18 23:56 Lab File ID: SE080035.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

Lab Sample ID: 680-151914-3 Client Sample ID: GQ009
 Date Analyzed: 05/09/18 00:35 Lab File ID: SE080037.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:30

Lab Sample ID: 680-151914-3 Client Sample ID: GQ009
 Date Analyzed: 05/09/18 00:35 Lab File ID: SE080037.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

Lab Sample ID: PIBLK 680-523063/39 Client Sample ID: _____
 Date Analyzed: 05/09/18 01:14 Lab File ID: SE080039.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:22

Lab Sample ID: PIBLK 680-523063/39 Client Sample ID: _____
 Date Analyzed: 05/09/18 01:14 Lab File ID: SE080039.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HERBKLCS_00049	05/05/18	04/25/18	meoh, Lot SG_meOH_00004	200 mL	HERBICVMMASTER_00013	20 mL	2,4,6-Trichlorophenol	1 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							3,5-Dichlorobenzoic acid	2 ug/mL
							4-Nitrophenol	2 ug/mL
							Acifluorfen	2 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,5-T	0.5 ug/mL
							2,4-D	2 ug/mL
							2,4-DB	2 ug/mL
							Dalapon	2 ug/mL
							Dicamba	1 ug/mL
							Dichlorprop	2 ug/mL
							Dinoseb	2 ug/mL
							MCPA	200 ug/mL
							MCPP	200 ug/mL
							Pentachlorophenol	0.5 ug/mL
							Picloram	2 ug/mL
							Silvex (2,4,5-TP)	0.5 ug/mL
.HERBICVMMASTER_00013	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							2,4,5-T	0.5 ug/mL
							2,4-D	2 ug/mL
							2,4-DB	2 ug/mL
							Dalapon	2 ug/mL
							Dicamba	1 ug/mL
Dichlorprop	2 ug/mL							
Dinoseb	2 ug/mL							
MCPA	200 ug/mL							
MCPP	200 ug/mL							
Pentachlorophenol	0.5 ug/mL							
Picloram	2 ug/mL							
Silvex (2,4,5-TP)	0.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		1.3 mL	SGHerbICV1_00005	DCPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HERBMASTER_00032	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHerbList1_00006	1.3 mL	Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,6-Trichlorophenol	5 ug/mL							
2,6-Dichlorophenol	10 ug/mL							
3,5-Dichlorobenzoic acid	10 ug/mL							
4-Nitrophenol	10 ug/mL							
Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							
DCPA	10 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
..SGHerbList1_00006	07/31/18		Restek, Lot A0120183		(Purchased Reagent)			

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHerbList1_00008	07/31/18		Restek, Lot A0120183			MCPA	20000 ug/mL	20000 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
						Pentachlorophenol	50 ug/mL	50 ug/mL
						Picloram	200 ug/mL	200 ug/mL
						Silvex (2,4,5-TP)	50 ug/mL	50 ug/mL
						2,4,5-T	50 ug/mL	50 ug/mL
						2,4-D	200 ug/mL	200 ug/mL
						2,4-DB	200 ug/mL	200 ug/mL
						Dalapon	200 ug/mL	200 ug/mL
						Dicamba	100 ug/mL	100 ug/mL
						Dichlorprop	200 ug/mL	200 ug/mL
						Dinoseb	200 ug/mL	200 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
						MCPA	20000 ug/mL	20000 ug/mL
Pentachlorophenol	50 ug/mL	50 ug/mL						
Picloram	200 ug/mL	200 ug/mL						
Silvex (2,4,5-TP)	50 ug/mL	50 ug/mL						
2,4,6-Trichlorophenol	100 ug/mL	100 ug/mL						
2,6-Dichlorophenol	200 ug/mL	200 ug/mL						
3,5-Dichlorobenzoic acid	200 ug/mL	200 ug/mL						
4-Nitrophenol	200 ug/mL	200 ug/mL						
Acifluorfen	200 ug/mL	200 ug/mL						
Bentazon	200 ug/mL	200 ug/mL						
Chloramben	200 ug/mL	200 ug/mL						
DCPA	200 ug/mL	200 ug/mL						
2,4-Dichlorophenylacetic acid (Surr)	1 mL	SGDCAAF_A_00054		500 mL		1 mL	2,4-Dichlorophenylacetic acid (Surr)	2 ug/mL
.SGDCAAF_A_00054	10/16/18		Restek, Lot A0128506				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SG HIBLK_Surr_00044	07/16/18	04/16/18	Methanol, Lot 5248086				2,4-Dichlorophenylacetic acid (Surr)	2 ug/mL
SG HIBLK_00063	11/08/18	05/08/18	MTBE, Lot A0380840				2,4-Dichlorophenylacetic acid (Surr)	1.004 ug/mL
.DCAAME_00011	11/08/18		Ultra Scientific, Lot CP-4762				2,4-Dichlorophenylacetic acid (Surr)	100.4 ug/mL
SGHERB-1_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073				3,5-Dichlorobenzoic acid	0.01 ug/mL
				10 mL	SGHERBCALINT_00030	0.04 mL	4-Nitrophenol	0.01 ug/mL
							Acifluorfen	0.01 ug/mL
							Bentazon	0.01 ug/mL
							Chloramben	0.01 ug/mL
							DCPA	0.01 ug/mL
							2,4,5-T	0.0025 ug/mL
							2,4-D	0.01 ug/mL
							2,4-DB	0.01 ug/mL
							Dalapon	0.01 ug/mL
							Dicamba	0.005 ug/mL
							Dichlorprop	0.01 ug/mL
							Dinoseb	0.01 ug/mL
							MCPA	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	MCP	1 ug/mL	
						Pentachlorophenol	0.0025 ug/mL	
						Picloram	0.01 ug/mL	
						Silvex (2,4,5-TP)	0.0025 ug/mL	
						2,4-Dichlorophenylacetic acid (Surr)	0.01 ug/mL	
						3,5-Dichlorobenzoic acid	2.5 ug/mL	
						4-Nitrophenol	2.5 ug/mL	
						Acifluorfen	2.5 ug/mL	
						Bentazon	2.5 ug/mL	
						Chloramben	2.5 ug/mL	
						DCEA	2.5 ug/mL	
						2,4,5-T	0.625 ug/mL	
						2,4-D	2.5 ug/mL	
						2,4-DB	2.5 ug/mL	
						Dalapon	2.5 ug/mL	
						Dicamba	1.25 ug/mL	
						Dichlorprop	2.5 ug/mL	
						Dinoseb	2.5 ug/mL	
						MCPA	250 ug/mL	
						MCP	250 ug/mL	
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	3,5-Dichlorobenzoic acid	2.5 ug/mL	
						4-Nitrophenol	2.5 ug/mL	
						Acifluorfen	2.5 ug/mL	
						Bentazon	2.5 ug/mL	
						Chloramben	2.5 ug/mL	
						DCEA	2.5 ug/mL	
						2,4,5-T	0.625 ug/mL	
						2,4-D	2.5 ug/mL	
						2,4-DB	2.5 ug/mL	
						Dalapon	2.5 ug/mL	
						Dicamba	1.25 ug/mL	
						Dichlorprop	2.5 ug/mL	
						Dinoseb	2.5 ug/mL	
						MCPA	250 ug/mL	
						MCP	250 ug/mL	
						Pentachlorophenol	0.625 ug/mL	
						Picloram	2.5 ug/mL	
						Silvex (2,4,5-TP)	0.625 ug/mL	
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL	
						3,5-Dichlorobenzoic acid	2.5 ug/mL	
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006		3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
2,4-D	200 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
Dichlorprop	100 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)			
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...							3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCFA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCFA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL 10 ug/mL
...					SGHerbICV1_00006	0.2 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL 10 ug/mL
...					SGHerbICV1_00007	1.4 mL	2,4,5-T 2,4-D	2.5 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
.....SGHerbICV1_00006	07/31/18		RESTEK, Lot A0123922				3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175				2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175				2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
SGHERB-2_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEPA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEPA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEPA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		(Purchased Reagent)		3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
Acifluorfen	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration						
					Reagent ID	Volume Added							
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	2,4-DB	2.5 ug/mL						
						Dalapon	2.5 ug/mL						
						Dicamba	1.25 ug/mL						
						Dichlorprop	2.5 ug/mL						
						Dinoseb	2.5 ug/mL						
						MCPA	250 ug/mL						
						MCPP	250 ug/mL						
						Pentachlorophenol	0.625 ug/mL						
						Picloram	2.5 ug/mL						
						Silvex (2,4,5-TP)	0.625 ug/mL						
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL						
						3,5-Dichlorobenzoic acid	10 ug/mL						
						4-Nitrophenol	10 ug/mL						
						Acifluorfen	10 ug/mL						
Bentazon	10 ug/mL												
Chloramben	10 ug/mL												
DCPA	10 ug/mL												
SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006	2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
						2,4-DB	10 ug/mL						
						Dalapon	10 ug/mL						
						Dicamba	5 ug/mL						
						Dichlorprop	10 ug/mL						
						Dinoseb	10 ug/mL						
						MCPA	1000 ug/mL						
						MCPP	1000 ug/mL						
						Pentachlorophenol	2.5 ug/mL						
						Picloram	10 ug/mL						
						Silvex (2,4,5-TP)	2.5 ug/mL						
						2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007	2,4-DB	10 ug/mL						
						Dalapon	10 ug/mL						
						Dicamba	5 ug/mL						
						Dichlorprop	10 ug/mL						
						Dinoseb	10 ug/mL						
						MCPA	1000 ug/mL						
						MCPP	1000 ug/mL						
						Pentachlorophenol	2.5 ug/mL						
						Picloram	10 ug/mL						
						Silvex (2,4,5-TP)	2.5 ug/mL						
						2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
						SGHerbICV1_00009	0.9 mL				SGHerbICV1_00009	2,4,5-T	2.5 ug/mL
												2,4-D	10 ug/mL
2,4-DB	10 ug/mL												
Dalapon	10 ug/mL												
Dicamba	5 ug/mL												
Dichlorprop	10 ug/mL												
Dinoseb	10 ug/mL												
MCPA	1000 ug/mL												
MCPP	1000 ug/mL												
Pentachlorophenol	2.5 ug/mL												
Picloram	10 ug/mL												
Silvex (2,4,5-TP)	2.5 ug/mL												
2,4,5-T	2.5 ug/mL												
2,4-D	10 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
						SGHerbICV1_00009	07/31/18
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	0.2 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-3_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.2 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.025 ug/mL 0.05 ug/mL 0.05 ug/mL 5 ug/mL 5 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHERBCALINT_00029	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEP	2.5 ug/mL
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEP	10 ug/mL
SGHERBICV1_00006	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00007	1.4 mL	MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006					SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00007					(Purchased Reagent)		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007					(Purchased Reagent)		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)								3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-4_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	25 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	0.1 ug/mL 0.1 ug/mL 0.1 ug/mL 0.1 ug/mL 0.1 ug/mL 0.025 ug/mL 0.1 ug/mL 0.1 ug/mL 0.1 ug/mL 0.05 ug/mL 0.1 ug/mL 0.1 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCP	10 ug/mL
							Pentachlorophenol	0.025 ug/mL
							Picloram	0.1 ug/mL
							Silvex (2,4,5-TP)	0.025 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.1 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006		3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SGHerbICV1_00009	0.9 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram	2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Silvex (2,4,5-TP) 3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL 10 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18				SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.04375 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.0875 ug/mL 0.175 ug/mL 0.175 ug/mL 17.5 ug/mL 17.5 ug/mL 0.04375 ug/mL 0.175 ug/mL 0.04375 ug/mL 0.175 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
SGHERB-5_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBCALINT_00030	3.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.04375 ug/mL 0.175 ug/mL 0.175 ug/mL 0.175 ug/mL 0.0875 ug/mL 0.175 ug/mL 0.175 ug/mL 17.5 ug/mL 17.5 ug/mL 0.04375 ug/mL 0.175 ug/mL 0.04375 ug/mL 0.175 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration	
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							
DCEA	10 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			Dinoseb	Dinoseb	10 ug/mL
						MCPA	MCPA	1000 ug/mL
						MCPP	MCPP	1000 ug/mL
						Pentachlorophenol	Pentachlorophenol	2.5 ug/mL
						Picloram	Picloram	10 ug/mL
						Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	2.5 ug/mL
						3,5-Dichlorobenzoic acid	3,5-Dichlorobenzoic acid	200 ug/mL
						4-Nitrophenol	4-Nitrophenol	200 ug/mL
						Acifluorfen	Acifluorfen	200 ug/mL
						Bentazon	Bentazon	200 ug/mL
						Chloramben	Chloramben	200 ug/mL
						DCPA	DCPA	200 ug/mL
					SGHerbICV1_00006	07/31/18	
2,4-D	2,4-D	200 ug/mL						
2,4-DB	2,4-DB	200 ug/mL						
Dalapon	Dalapon	200 ug/mL						
Dicamba	Dicamba	100 ug/mL						
Dichlorprop	Dichlorprop	200 ug/mL						
Dinoseb	Dinoseb	200 ug/mL						
MCPA	MCPA	20000 ug/mL						
MCPP	MCPP	20000 ug/mL						
Pentachlorophenol	Pentachlorophenol	50 ug/mL						
Picloram	Picloram	200 ug/mL						
Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	50 ug/mL						
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175					
						2,4-D	2,4-D	200 ug/mL
						2,4-DB	2,4-DB	200 ug/mL
						Dalapon	Dalapon	200 ug/mL
						Dicamba	Dicamba	100 ug/mL
						Dichlorprop	Dichlorprop	200 ug/mL
						Dinoseb	Dinoseb	200 ug/mL
						MCPA	MCPA	20000 ug/mL
						MCPP	MCPP	20000 ug/mL
						Pentachlorophenol	Pentachlorophenol	50 ug/mL
						Picloram	Picloram	200 ug/mL
						Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	50 ug/mL
					SGHerbICV1_00009	07/31/18	
2,4-D	2,4-D	200 ug/mL						
2,4-DB	2,4-DB	200 ug/mL						
Dalapon	Dalapon	200 ug/mL						
Dicamba	Dicamba	100 ug/mL						
Dichlorprop	Dichlorprop	200 ug/mL						
Dinoseb	Dinoseb	200 ug/mL						
MCPA	MCPA	20000 ug/mL						
MCPP	MCPP	20000 ug/mL						
Pentachlorophenol	Pentachlorophenol	50 ug/mL						
Picloram	Picloram	200 ug/mL						
Silvex (2,4,5-TP)	Silvex (2,4,5-TP)	50 ug/mL						

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	1 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-6_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.125 ug/mL 0.25 ug/mL 0.25 ug/mL 25 ug/mL 25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL
SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHERBCALINT_00029	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064 SGHERBADDICV_00013	25 uL 2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 10 ug/mL 1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00007	1.4 mL	MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		SGHerbICV1_00007		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		SGHerbICV1_00007		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)								3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-7_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	2 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.125 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 0.25 ug/mL 0.5 ug/mL 0.5 ug/mL 0.5 ug/mL 50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCP	50 ug/mL
							Pentachlorophenol	0.125 ug/mL
							Picloram	0.5 ug/mL
							Silvex (2,4,5-TP)	0.125 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006	0.2 mL						3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007	1.4 mL						Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013			RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							Dicamba	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBDDICV_00013	07/31/18				SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175				Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175				3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.5 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 100 ug/mL 100 ug/mL 0.25 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL
SGHERB-8_00011	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	4 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.5 ug/mL 1 ug/mL 1 ug/mL 100 ug/mL 100 ug/mL 0.25 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration								
					Reagent ID	Volume Added									
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							3,5-Dichlorobenzoic acid	10 ug/mL							
							4-Nitrophenol	10 ug/mL							
							Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
SGHerbICV1_00006	0.2 mL						2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL						2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							SGHerbICV1_00009	0.9 mL						2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
						SGHerbICV1_00007	07/31/18
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175			(Purchased Reagent)		
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAAF_00064	11/07/18		Restek, Lot A0132641				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERBICV_00014								
	06/30/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBICVINT_00037	700 uL	2,4,5-T	0.04375 ug/mL
							2,4-D	0.175 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL
.SGHERBICVINT_00037	06/30/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBICVINT_00035	10 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
..SGHERBICVINT_00035	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		SGHerbList1_00008	0.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		SGHerbList1_00011	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGDCAAF_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
..SGHERBICVINT_00036	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		SGHerbList1_00008	0.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		SGHerbList1_00011	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAAPA_00064	11/07/18		Restek, Lot A0132641				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL

Reagent

DCAAME_00011

DCAA Methyl Ester Solution

Product Number: PPS-161

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Lot Number: CP-4762

Lot Issue Date: 20-Sep-2016

Expiration Date: 31-Oct-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
DCAA methyl ester	055954-23-9	RM03071	100.0 ± 0.5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Reagent

SGDCAAF_A_00054



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0128506

Description : DCAA Standard
DCAA Standard 1,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : June 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 53.5730	µg/mL	Unstressed
			+/- 53.6627	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

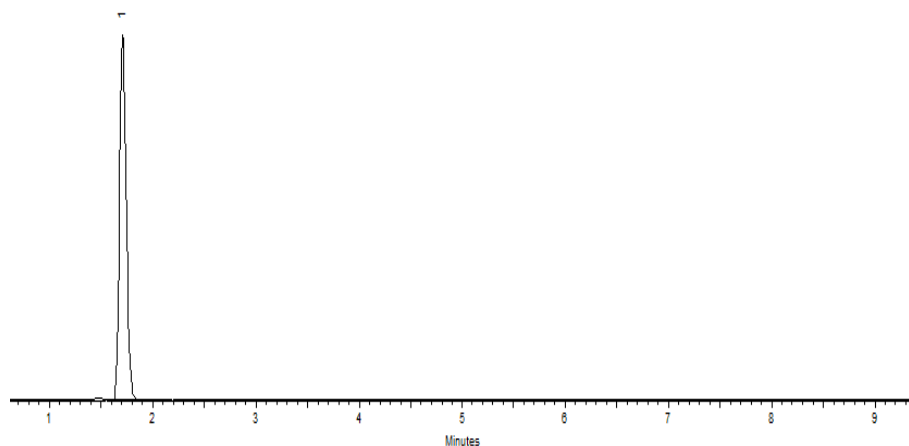
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

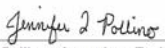


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Joseph Jaglowski - Mix Technician

Date Mixed: 15-Jun-2017

Balance: B251644995


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jun-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGDCAAF_A_00064



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0132641

Description : DCAA Standard
DCAA Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : November 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,000.8 µg/mL	+/- 5.8733	µg/mL	Gravimetric
			+/- 53.2353	µg/mL	Unstressed
			+/- 53.3244	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

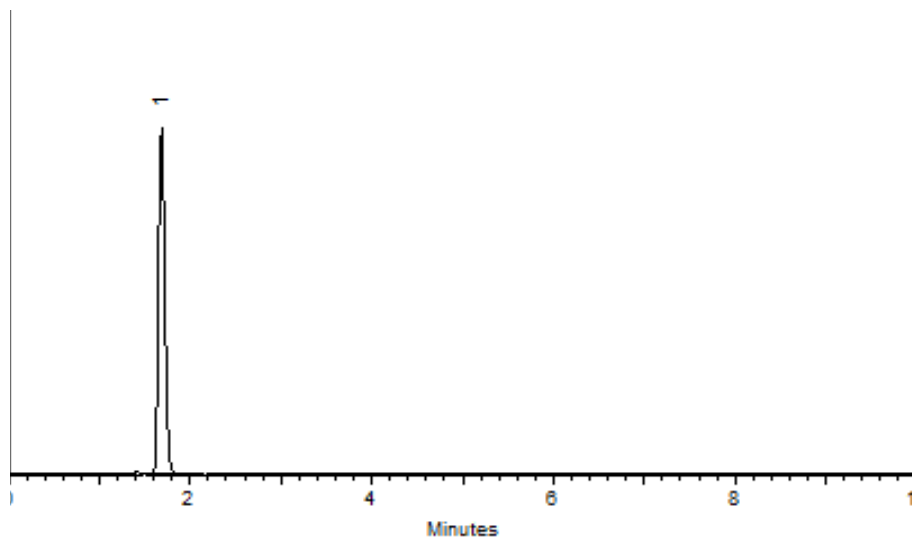
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 21-Nov-2017 **Balance:** B442140311

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Nov-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHERBADDICV_00013



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473.SEC **Lot No.:** A0123922

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,6-Trichlorophenol	100.0 µg/mL	+/- 0.7088	µg/mL Gravimetric
	CAS # 88-06-2.SEC (Lot UUMYM)			+/- 5.3320 µg/mL Unstressed
	Purity 98%			+/- 5.3409 µg/mL Stressed
2	2,6-Dichlorophenol	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 87-65-0.SEC (Lot SIDBB)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
3	3,5-Dichlorobenzoic acid	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 51-36-5.SEC (Lot 00823)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
4	4-Nitrophenol	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 100-02-7.SEC (Lot 2J5LB)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
5	Acifluorfen (blazer)	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 50594-66-6.SEC (Lot 30619)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	Bentazon	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 25057-89-0.SEC (Lot 90723)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Chloramben	199.9 µg/mL	+/- 1.4176	µg/mL Gravimetric
	CAS # 133-90-4.SEC (Lot PSJUA)			+/- 10.6640 µg/mL Unstressed
	Purity 98%			+/- 10.6818 µg/mL Stressed

8	DCPA diacid (tetrachloroterephthalic acid)	201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 2136-79-0.SEC (Lot 3931400)			+/-	10.7216	µg/mL	Unstressed
	Purity ----%			+/-	10.7395	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%



Brandon Reish - Mix Technician

Date Mixed: 04-Jan-2017

Balance: B345965662

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00005



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

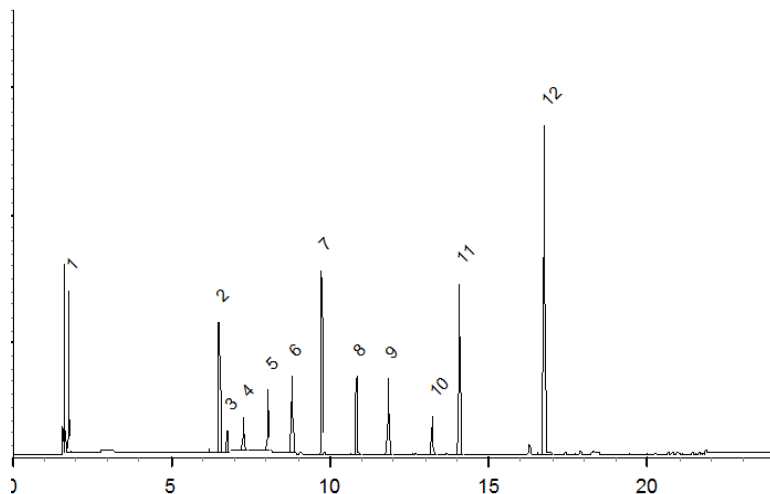
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

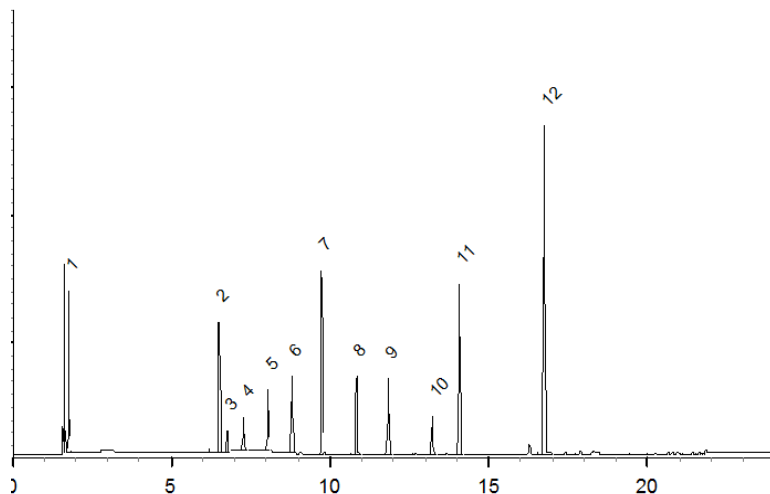
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB		201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric	
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

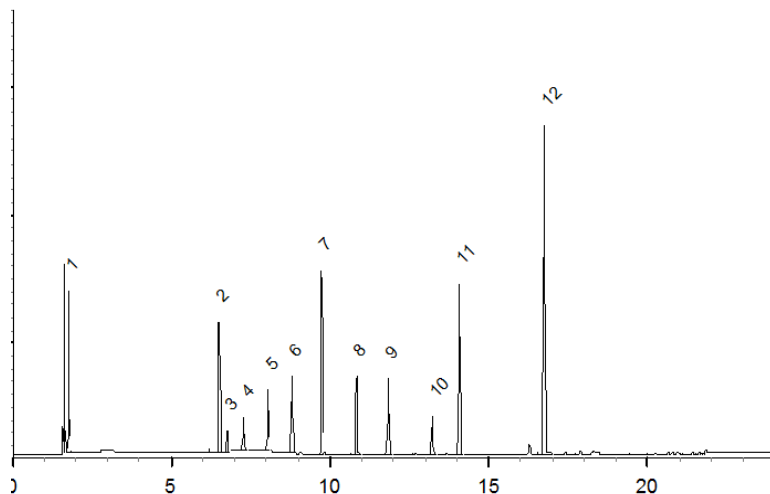
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00009



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

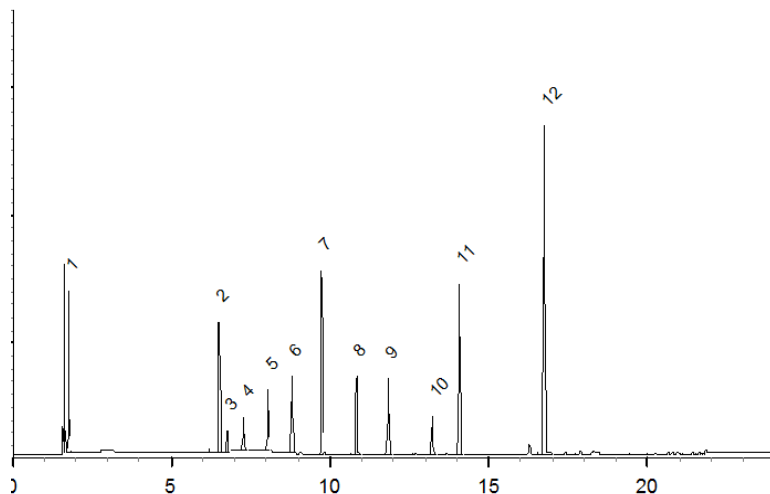
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex) CAS # 93-72-1 Purity 99%	(Lot 4185600)	50.2	µg/mL	+/- 0.3556 +/- 2.6751 +/- 2.6795	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	2,4,5-T CAS # 93-76-5 Purity 99%	(Lot 4236800)	50.5	µg/mL	+/- 0.3581 +/- 2.6937 +/- 2.6982	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2,4-DB CAS # 94-82-6 Purity 99%	(Lot 4174600)	201.5	µg/mL	+/- 1.4288 +/- 10.7483 +/- 10.7662	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Dinoseb CAS # 88-85-7 Purity 99%	(Lot 50001)	202.0	µg/mL	+/- 1.4323 +/- 10.7750 +/- 10.7929	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Picloram CAS # 1918-02-1 Purity 99%	(Lot 863400)	200.5	µg/mL	+/- 1.4217 +/- 10.6949 +/- 10.7128	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methanol CAS # 67-56-1 Purity 99%						

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

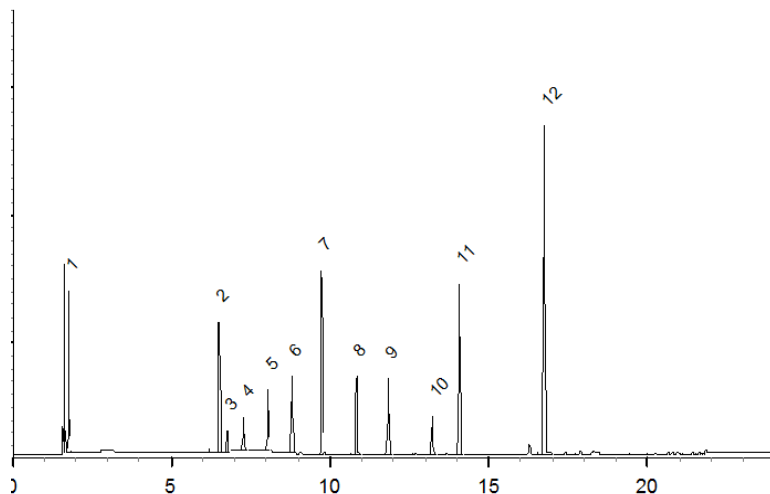
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

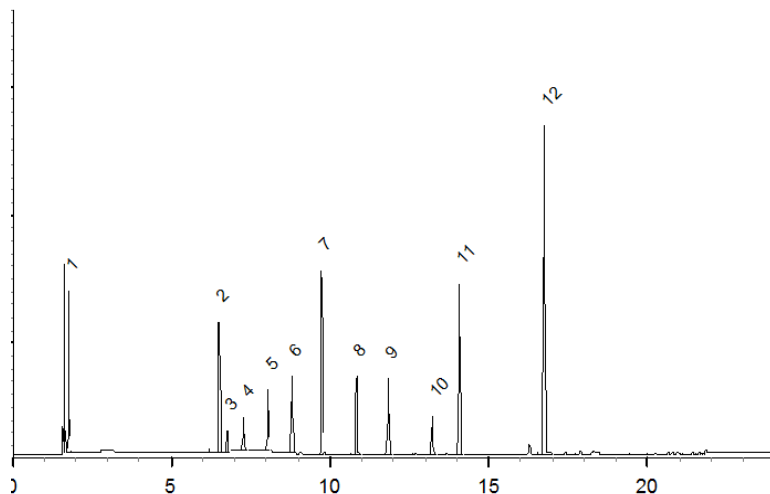
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00008



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

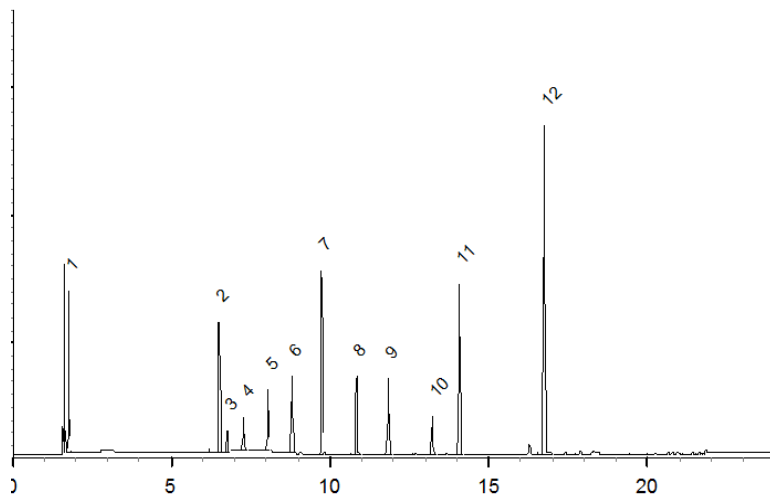
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Manufacturing Notes:

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Handling Notes:

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Reagent

SGHerbList1_00011



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
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3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
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9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

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30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

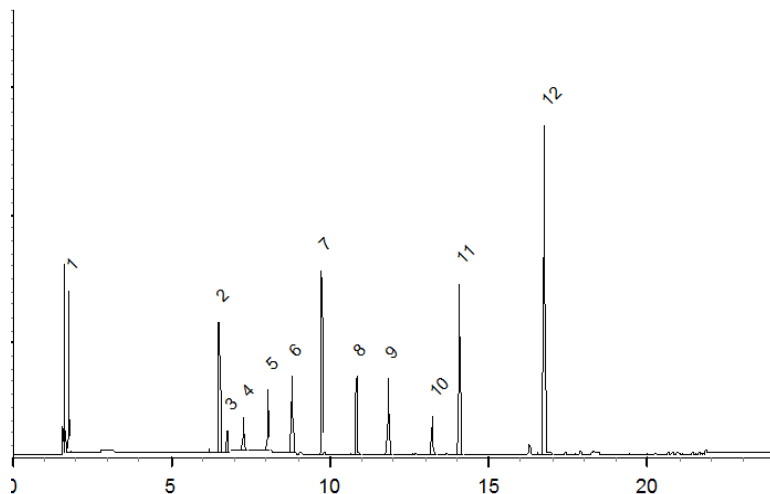
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
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Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHMCCALFA_00040



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473 **Lot No.:** A0123630

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2,4,6-Trichlorophenol	100.0 µg/mL (Lot MKBL4698V)	+/-	0.7091	µg/mL	Gravimetric
	CAS # 88-06-2		+/-	5.3341	µg/mL	Unstressed
	Purity 99%		+/-	5.3430	µg/mL	Stressed
2	2,6-Dichlorophenol	200.0 µg/mL (Lot MKBP8620V)	+/-	1.4182	µg/mL	Gravimetric
	CAS # 87-65-0		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
3	3,5-Dichlorobenzoic acid	201.0 µg/mL (Lot 08004EH)	+/-	1.4253	µg/mL	Gravimetric
	CAS # 51-36-5		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
4	4-Nitrophenol	201.0 µg/mL (Lot MKBV0501V)	+/-	1.4253	µg/mL	Gravimetric
	CAS # 100-02-7		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
5	Acifluorfen (blazer)	200.0 µg/mL (Lot 83-46A)	+/-	1.4182	µg/mL	Gravimetric
	CAS # 50594-66-6		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
6	Bentazon	199.9 µg/mL (Lot 2735000)	+/-	1.4176	µg/mL	Gravimetric
	CAS # 25057-89-0		+/-	10.6640	µg/mL	Unstressed
	Purity 98%		+/-	10.6818	µg/mL	Stressed
7	Chloramben	202.0 µg/mL (Lot 83-49A)	+/-	1.4323	µg/mL	Gravimetric
	CAS # 133-90-4		+/-	10.7750	µg/mL	Unstressed
	Purity 99%		+/-	10.7929	µg/mL	Stressed

8 DCPA diacid (tetrachloroterephthalic acid)
CAS # 2136-79-0 (Lot DWL0462)
Purity 99%

201.0 µg/mL

+/- 1.4253
+/- 10.7216
+/- 10.7395

µg/mL
µg/mL
µg/mL

Gravimetric
Unstressed
Stressed

Solvent:

Acetonitrile

CAS # 75-05-8

Purity 99%



Date Mixed: 20-Dec-2016 Balance: 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8151 DOD

Herbicides (GC) by Method 8151A DOD

FORM II
HERBICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-151914-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (1): DB-35MS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	DCPAA1 #
GQ007	680-151914-1	109
GQ008	680-151914-2	85
GQ009	680-151914-3	102
	MB 680-522541/10-A	52
	LCS 680-522541/11-A	54

DCPAA = 2,4-Dichlorophenylacetic acid (Surr) $\frac{\text{QC LIMITS}}{27-122}$

Column to be used to flag recovery values

FORM II 8151A DOD

FORM III
HERBICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: SE080031.D

Lab ID: LCS 680-522541/11-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4,5-T	16.3	8.90	54	31-138	
2,4-D	65.4	44.5	68	28-144	

Column to be used to flag recovery and RPD values

FORM IV
HERBICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: MB 680-522541/10-A
 Matrix: Solid Date Extracted: 05/03/2018 11:22
 Lab File ID: (1) SE080030.D Lab File ID: (2) SE080030.D
 Date Analyzed: (1) 05/08/2018 22:19 Date Analyzed: (2) 05/08/2018 22:19
 Instrument ID: (1) CSGS Instrument ID: (2) CSGS
 GC Column: (1) DB-35MS ID: 0.32 (mm) GC Column: (2) DB-XLB ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1		DATE ANALYZED 2	
	LCS 680-522541/11-A	05/08/2018	22:38	05/08/2018	22:38
GQ007	680-151914-1	05/08/2018	23:56	05/08/2018	23:56
GQ008	680-151914-2	05/09/2018	00:16	05/09/2018	00:16
GQ009	680-151914-3	05/09/2018	00:35	05/09/2018	00:35

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522541/11-A
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/08/2018 22:38 Date Analyzed (2): 05/08/2018 22:38
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.52	7.51	7.53	44.5		20.5
	2		7.32	7.32	7.34	54.7		
2,4,5-T	1		8.08	8.07	8.09	8.90		5.2
	2		7.92	7.92	7.94	9.37		

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: GQ007 Lab Sample ID: 680-151914-1
 Matrix: Solid Lab File ID: SE080035.D
 Analysis Method: 8151A DOD Date Collected: 04/25/2018 11:00
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.01(g) Date Analyzed: 05/08/2018 23:56
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 4.2 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.5	U	8.7	4.5	2.4
94-75-7	2,4-D	8.7	U M	8.7	8.7	5.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	109		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080035.D
 Lims ID: 680-151914-A-1-A
 Client ID: GQ007
 Sample Type: Client
 Inject. Date: 08-May-2018 23:56:31 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.682	6.683	-0.001	35058942	0.1658
2	6.830	6.829	0.001	306474967	0.2177

RPD = 27.08

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080035.D

Injection Date: 08-May-2018 23:56:31

Operator ID: GEM

Lims ID: 680-151914-A-1-A

Worklist Smp#: 35

Client ID: GQ007

Injection Vol: 1.0 ul

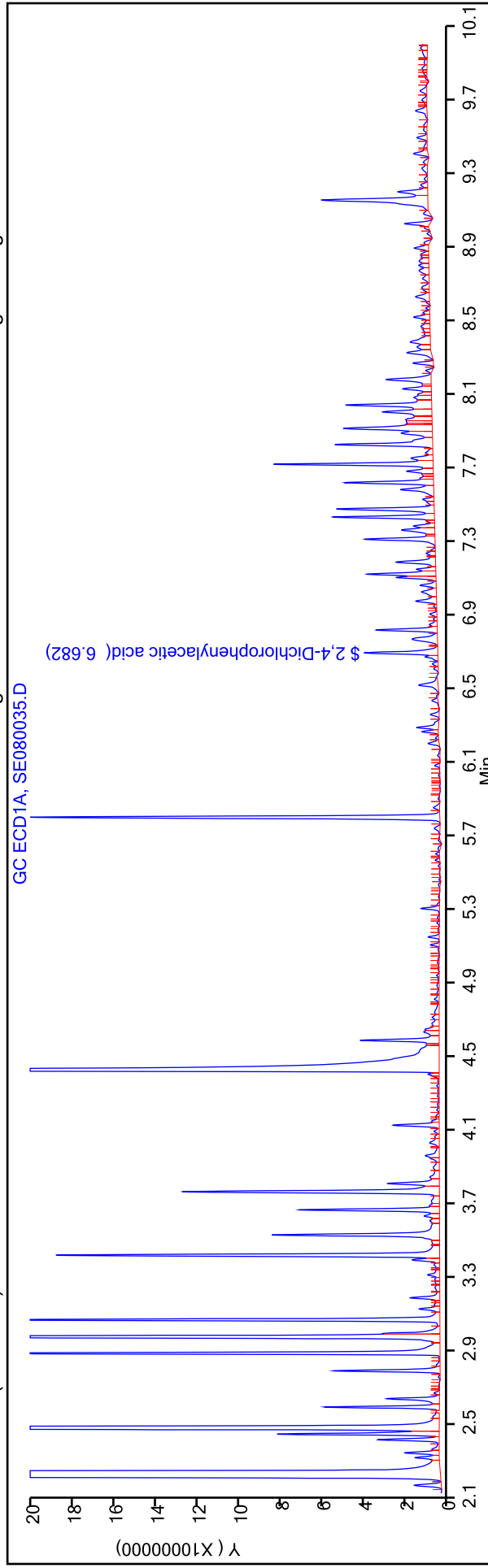
Dil. Factor: 1.0000

ALS Bottle#: 35

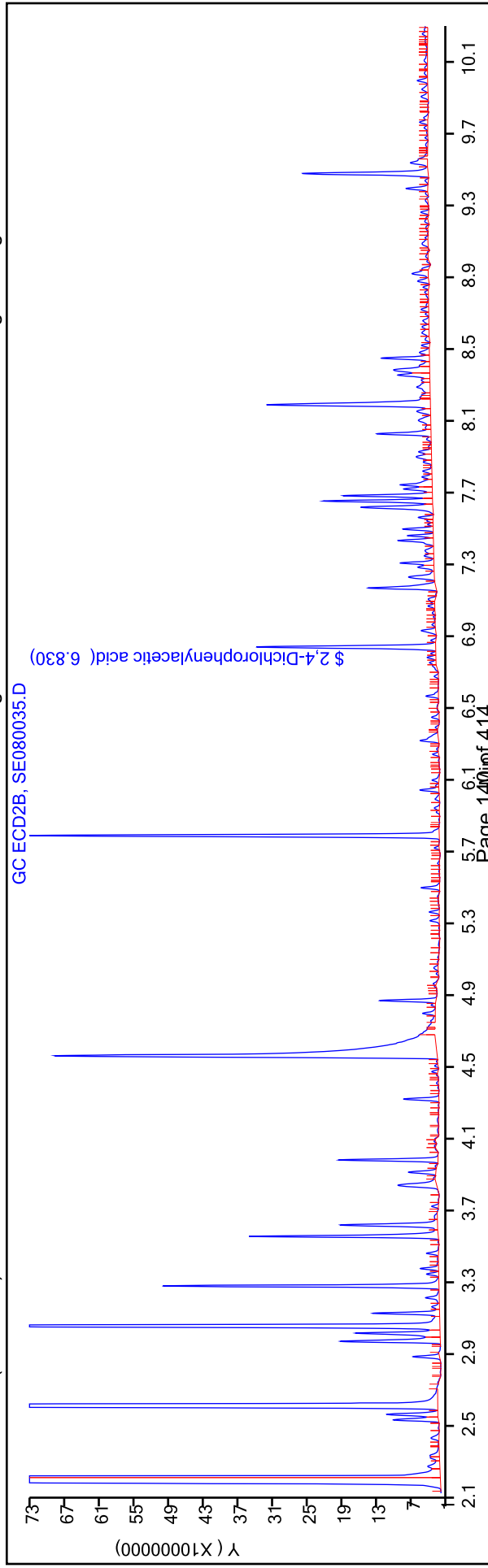
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080035.D
 Lims ID: 680-151914-A-1-A
 Client ID: GQ007
 Sample Type: Client
 Inject. Date: 08-May-2018 23:56:31 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-035
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:27

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1658	82.89

Surrogate Recovery, Detector: GC ECD2B

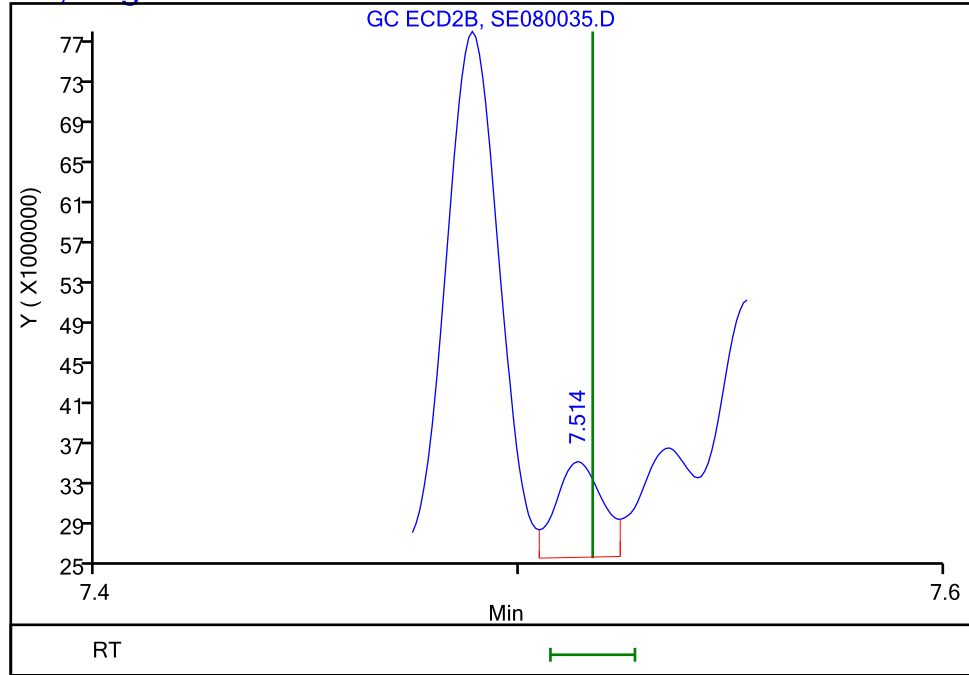
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.2177	108.85

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080035.D
Injection Date: 08-May-2018 23:56:31 Instrument ID: CSGS
Lims ID: 680-151914-A-1-A Lab Sample ID: 680-151914-1
Client ID: GQ007
Operator ID: GEM ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

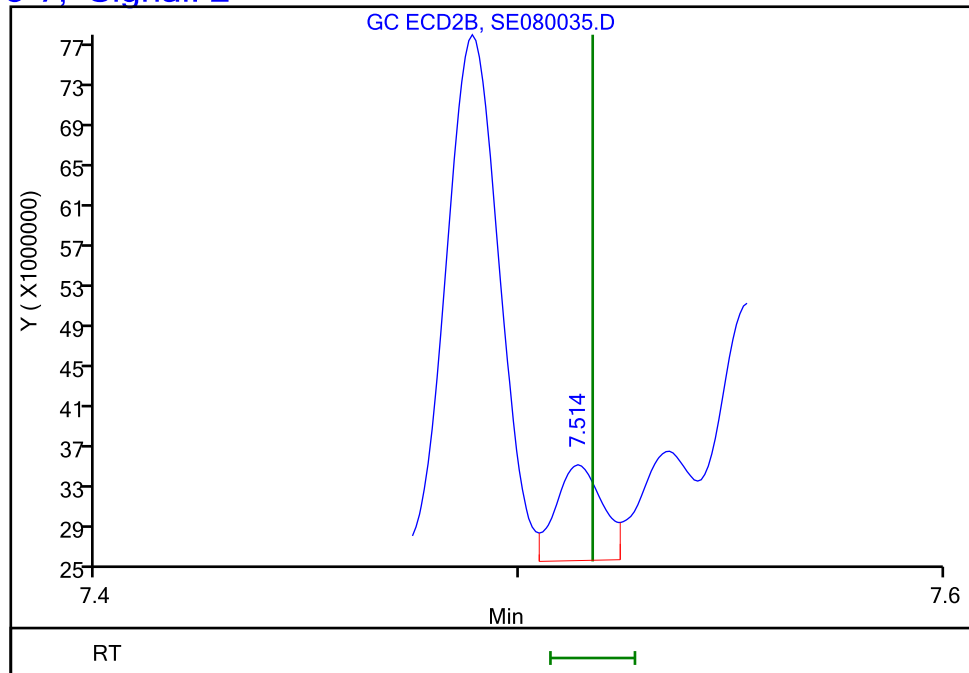
RT: 7.51
Response: 7245205
Amount: 0.004547



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.51
Response: 7245205
Amount: 0.004547



Reviewer: kellarj, 09-May-2018 09:30:27
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: GQ008 Lab Sample ID: 680-151914-2
 Matrix: Solid Lab File ID: SE080036.D
 Analysis Method: 8151A DOD Date Collected: 04/25/2018 11:05
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.03(g) Date Analyzed: 05/09/2018 00:16
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 2.3 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.4	U	8.5	4.4	2.4
94-75-7	2,4-D	8.5	U	8.5	8.5	5.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	85		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080036.D
 Lims ID: 680-151914-A-2-A
 Client ID: GQ008
 Sample Type: Client
 Inject. Date: 09-May-2018 00:16:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.683	6.683	0.000	20905478	0.0989
2	6.831	6.829	0.002	238538873	0.1694

RPD = 52.62

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080036.D

Injection Date: 09-May-2018 00:16:08

Operator ID: GEM

Lims ID: 680-151914-A-2-A

Instrument ID: CSGS

Worklist Smp#: 36

Client ID: GQ008

Lab Sample ID: 680-151914-2

Injection Vol: 1.0 ul

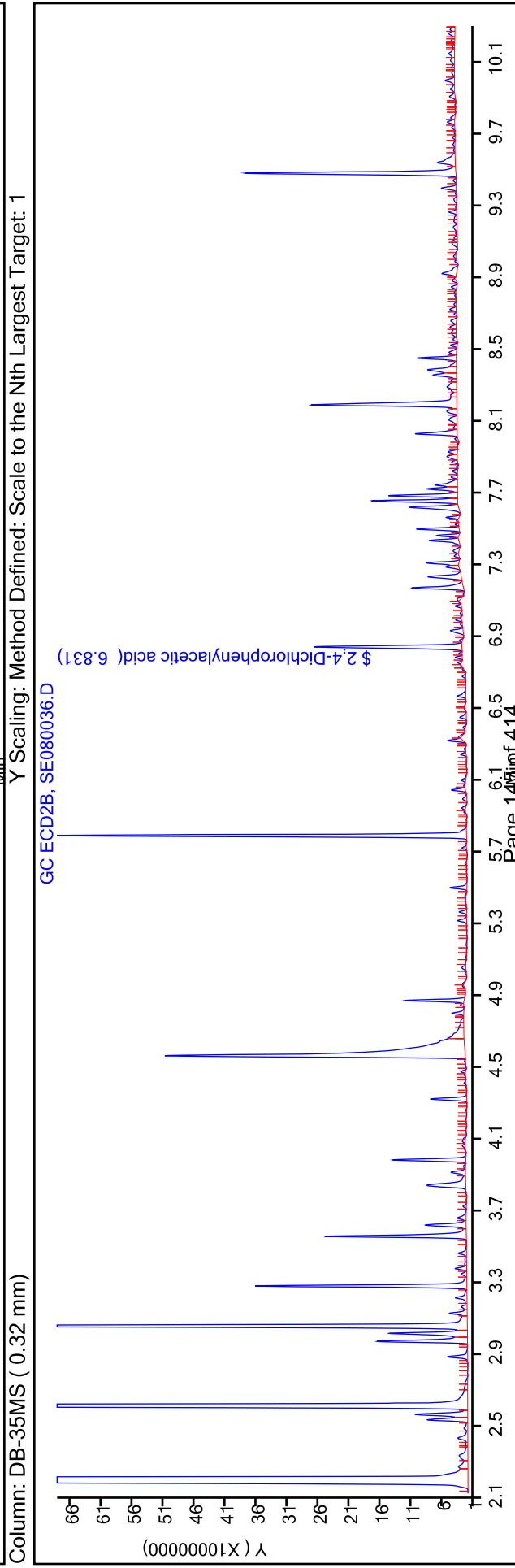
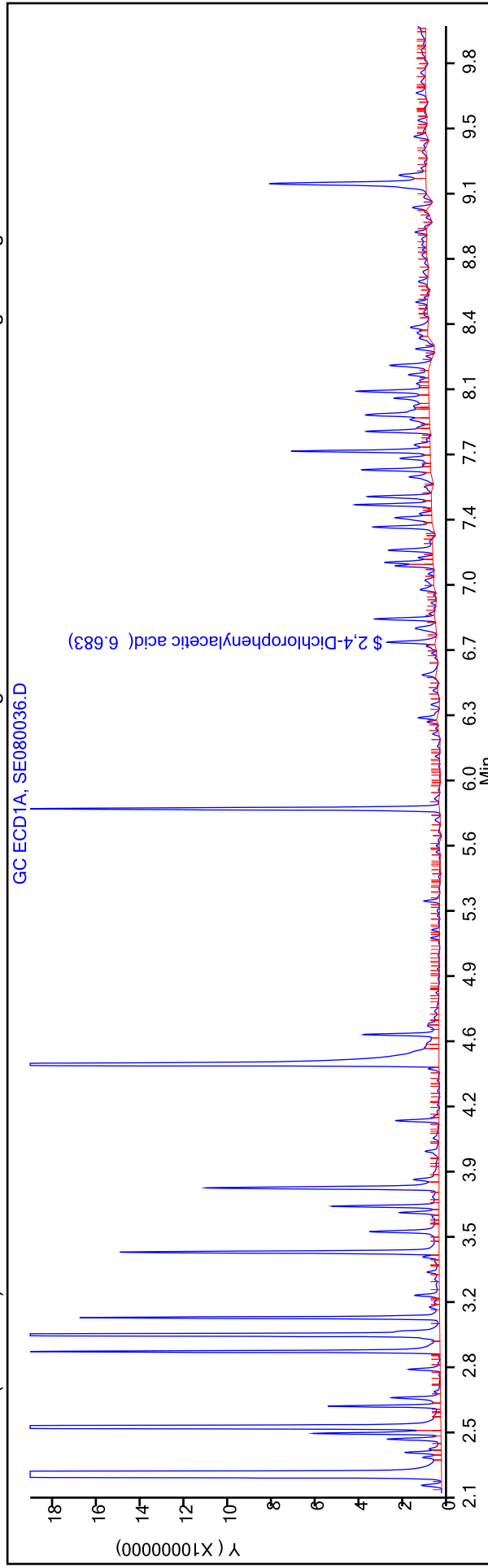
Dil. Factor: 1.0000

ALS Bottle#: 36

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080036.D
 Lims ID: 680-151914-A-2-A
 Client ID: GQ008
 Sample Type: Client
 Inject. Date: 09-May-2018 00:16:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-036
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:35

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0989	49.43

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1694	84.72

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: GQ009 Lab Sample ID: 680-151914-3
 Matrix: Solid Lab File ID: SE080037.D
 Analysis Method: 8151A DOD Date Collected: 04/25/2018 11:10
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.03(g) Date Analyzed: 05/09/2018 00:35
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 3.6 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.5	U	8.6	4.5	2.4
94-75-7	2,4-D	8.6	U M	8.6	8.6	5.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	102		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080037.D
 Lims ID: 680-151914-A-3-A
 Client ID: GQ009
 Sample Type: Client
 Inject. Date: 09-May-2018 00:35:33 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	-----------------	-------

\$ 6 2,4-Dichlorophenylacetic acid

1	6.683	6.683	0.000	26796852	0.1267
2	6.831	6.829	0.002	288023153	0.2046

RPD = 47.02

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080037.D

Injection Date: 09-May-2018 00:35:33

Operator ID: GEM

Lims ID: 680-151914-A-3-A

Instrument ID: CSGS

Worklist Smp#: 37

Client ID: GQ009

Injection Vol: 1.0 ul

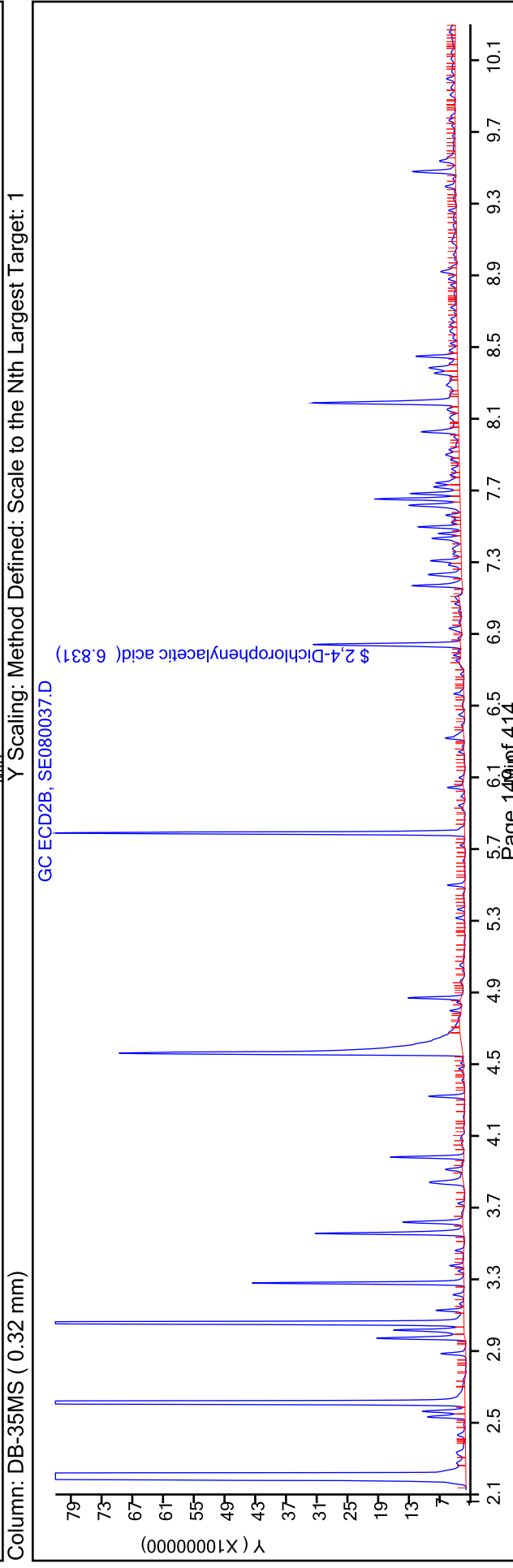
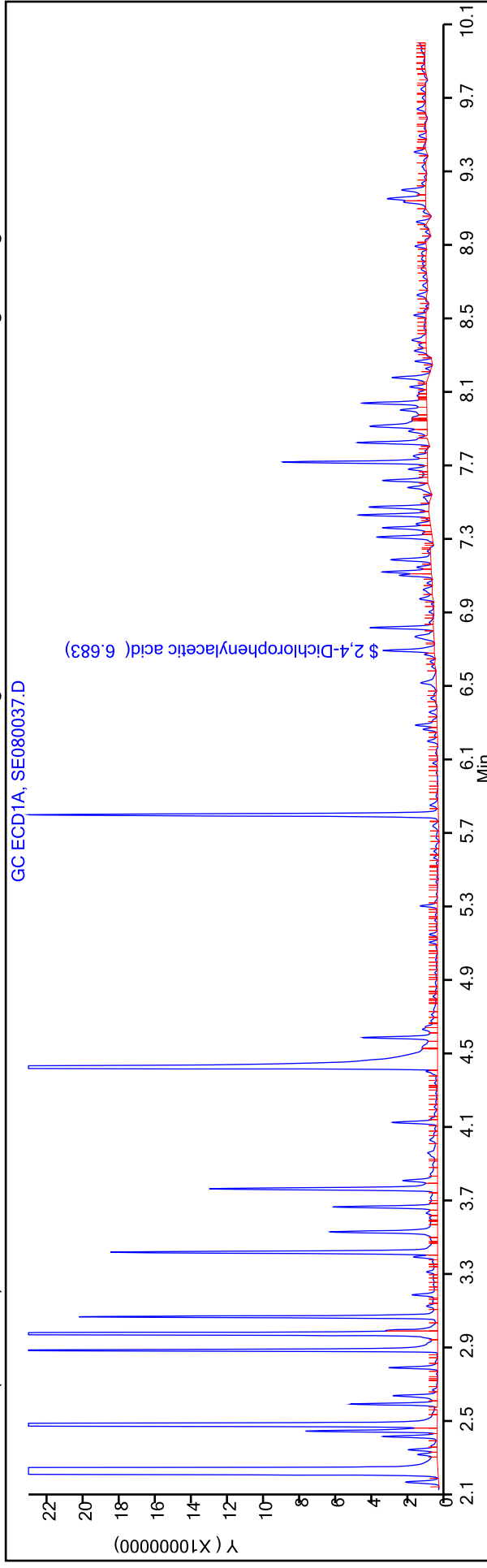
Dil. Factor: 1.0000

ALS Bottle#: 37

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080037.D
 Lims ID: 680-151914-A-3-A
 Client ID: GQ009
 Sample Type: Client
 Inject. Date: 09-May-2018 00:35:33 ALS Bottle#: 37 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-037
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:44

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1267	63.36

Surrogate Recovery, Detector: GC ECD2B

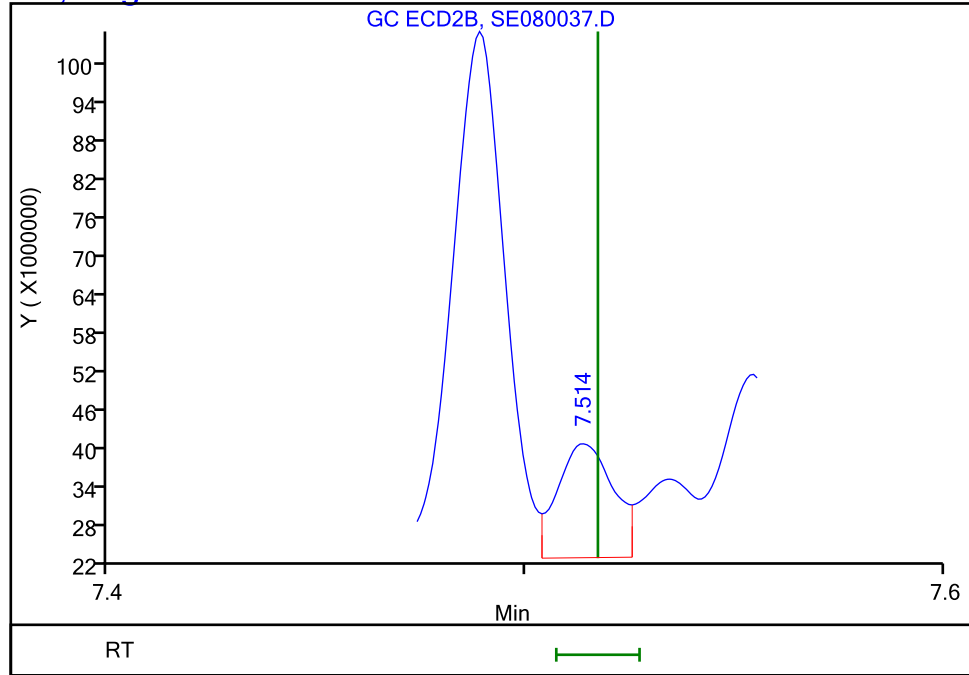
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.2046	102.30

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080037.D
Injection Date: 09-May-2018 00:35:33 Instrument ID: CSGS
Lims ID: 680-151914-A-3-A Lab Sample ID: 680-151914-3
Client ID: GQ009
Operator ID: GEM ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

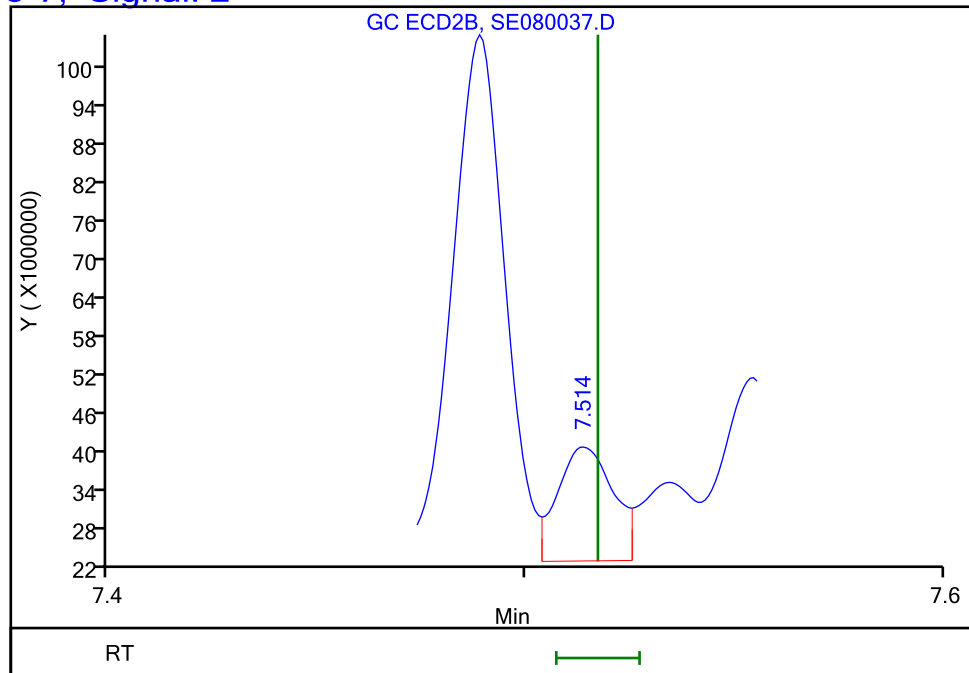
RT: 7.51
Response: 16504213
Amount: 0.010357



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.51
Response: 16504213
Amount: 0.010357



Reviewer: kellarj, 09-May-2018 09:30:44
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.580	2.580	2.579	++++	2.579	2.580	2.580	2.580	2.559 - 2.599	2.580
3,5-Dichlorobenzoic acid	6.126	6.125	6.124	++++	6.123	6.123	6.123	6.123	6.114 - 6.134	6.124
4-Nitrophenol	6.263	6.258	6.254	++++	6.251	6.251	6.250	6.250	6.243 - 6.263	6.254
Dicamba	6.721	6.720	6.721	++++	6.721	6.721	6.720	6.721	6.710 - 6.730	6.721
MCPP	6.868	6.867	6.866	++++	6.868	6.868	6.870	6.872	6.857 - 6.877	6.868
MCPA	6.996	6.995	6.994	++++	6.994	6.995	6.996	7.000	6.984 - 7.004	6.996
Dichlorprop	7.182	7.182	7.181	++++	7.181	7.181	7.180	7.181	7.170 - 7.190	7.181
2,4-D	7.346	7.337	7.331	++++	7.324	7.323	7.322	7.323	7.316 - 7.336	7.329
Pentachlorophenol	7.674	7.673	7.674	++++	7.673	7.674	7.674	7.675	7.664 - 7.684	7.674
Silvex (2,4,5-TP)	7.776	7.771	7.771	++++	7.767	7.768	7.767	7.768	7.759 - 7.779	7.770
Chloramben	7.868	7.864	7.860	++++	7.852	7.850	7.849	7.848	7.845 - 7.865	7.856
2,4,5-T	7.937	7.935	7.933	++++	7.925	7.924	7.922	7.923	7.919 - 7.939	7.928
2,4-DB	8.185	8.182	8.178	++++	8.171	8.169	8.167	8.167	8.165 - 8.185	8.174
Dinoseb	8.227	8.225	8.225	++++	8.222	8.223	8.223	8.224	8.214 - 8.234	8.224
Bentazon	8.306	8.304	8.301	++++	8.299	8.299	8.299	8.299	8.290 - 8.310	8.301
Picloram	8.546	8.538	8.533	++++	8.526	8.525	8.523	8.523	8.519 - 8.539	8.531
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.626	8.625	8.624	++++	8.623	8.623	8.625	8.626	8.613 - 8.633	8.625
Acifluorfen	9.670	9.668	9.667	++++	9.665	9.665	9.665	9.667	9.656 - 9.676	9.667
2,4-Dichlorophenylacetic acid (Surr)	6.685	6.684	6.683	++++	6.683	6.683	6.683	6.683	6.673 - 6.693	6.683

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.:

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	590623000 501343863	548749400 505359752	505816280 505630140	++++ 511012321				Ave		524076394			6.4	20.0				
3,5-Dichlorobenzoic acid	320222900 310170354	325925160 330009804	302358360 330009804	++++ 337068861				Ave		321415612			3.7	20.0				
4-Nitrophenol	71198600 97415017	92280320 107969032	84618080 96163496	++++ 97562965				Ave		92458215.7			12.6	20.0				
Dicamba	106926900 1046294606	1056001840 1085307760	981963600 1129742140	++++ 1170487746				Ave		1077009527			5.6	20.0				
MCPP	383358 493718	515556 507506	513185 781805	++++ 1043440				Qua		-375682.35	5947.60489			0.9990			0.9900	
MCPA	684536 1015244	855075 1035632	874696 1031921	++++ 984673				Ave		925968.148			14.0	20.0				
Dichlorprop	269946200 274910263	274874480 282466000	261287600 288126840	++++ 290874356				Ave		277497963			3.8	20.0				
2,4-D	240093400 309104989	269609520 325959236	270573020 344276094	++++ 357181097				Ave		302399622			14.4	20.0				
Pentachlorophenol	4403400800 5421816411	4723432800 5716695024	4804851680 6102875736	++++ 6514196396				Ave		5383895550			14.5	20.0				
Silvex (2,4,5-TP)	1412480800 1934512549	1589272800 2084549792	1624198880 2215309200	++++ 2290775776				Ave		1878728542			18.1	20.0				
Chloramben	1014630400 1540114857	1125919240 1683249404	1201713680 1896110694	++++ 2124800109				Qua		1661493099	484746839			1.0000			0.9900	
2,4,5-T	2273542000 2137927269	2222943840 2194574216	2125359040 2188067564	++++ 2188067564				Ave		2193840481			2.3	20.0				
2,4-DB	95715600 148913017	1066596600 167659108	115257020 191517264	++++ 208315295				Qua		-2436902.3	172002569	39193472.8		0.9990			0.9900	
Dinoseb	1080237600 1186151777	1085648760 1272822120	1065912980 1373798070	++++ 1502700567				Ave		1223895982			13.7	20.0				

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2						
Bentazon	316467700 271492754	279450640 287045072	274389100 288476476	274389100 295542031	Ave	287551968			5.3	20.0				
Picloram	1624991300 2449319440	1765360320 2701195528	1895185740 3103274140	1895185740 3668133130	Qua	-26505316	2539444890	1158759739			1.0000			0.9900
Tetraphthalic acid, tetrachloro-, dimethyl	2893947000 3231119337	3086549440 3370780948	3028981420 3593631444	3028981420 3847093339	Ave		3293157561		10.2	20.0				
Acifluorfen	1819999100 2329574200	1959295600 2532153916	1944516240 2764112324	1944516240 3202033523	Qua	-14470608	2348239053	869421475			1.0000			0.9900
2,4-Dichlorophenylacetic acid (Surr)	232590900 200079320	221537720 204599376	196434220 210440590	196434220 214663766	Ave		211477985		6.0	20.0				

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)							
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Dalapon	Ave	5906230 126339938	13718735 252815070	25290814 511012321	+++++	87735176	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.0175						
3,5-Dichlorobenzoic acid	Ave	3202229 81038461	8148129 165004902	15117918 337068861	+++++	54279812	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
4-Nitrophenol	Ave	711986 26992258	2307008 48081748	4230904 97562965	+++++	17047628	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Dicamba	Ave	5346345 135663470	13200023 282435535	24549090 585243873	+++++	91550778	0.00500 0.125	0.0125 0.250	0.0250 0.500	+++++	0.0875						
MCP	Qua	383358 12687646	1288891 39090261	2565927 104343971	+++++	8640069	1.00 25.0	2.50 50.0	5.00 100	+++++	17.5						
MCPA	Ave	684536 25890792	2137688 51596040	4373482 98467290	+++++	17766771	1.00 25.0	2.50 50.0	5.00 100	+++++	17.5						
Dichlorprop	Ave	2699462 70616500	6871862 144063420	13064380 290874356	+++++	48109296	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
2,4-D	Ave	2400934 81489809	6740238 172138047	13528651 357181097	+++++	54093373	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Pentachlorophenol	Ave	11008502 357293439	29521455 762859467	60060646 1628549099	+++++	237204468	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
Silvex (2,4,5-TP)	Ave	3531202 130284362	9932955 276913650	20302486 572693944	+++++	84634924	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
Chloramben	Qua	10146304 420812351	28147981 948055347	60085684 2124806109	+++++	269520100	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
2,4,5-T	Ave	5683855 138404340	13893399 274321777	26566988 547016891	+++++	93534318	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
2,4-DB	Qua	957156 41914777	2666490 95758632	5762851 208315295	+++++	26059778	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Dinoseb	Ave	10802376 318205530	27141219 686899035	53295649 1502700567	+++++	207576561	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Bentazon	Ave	3164677 71761268	6986266 144238238	13719455 295542031	+++++	47511232	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Picloram	Qua	16249913 675298882	44134008 1551637070	94759287 3668133130	+++++	428630902	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	28939470 842695237	77163736 1796815722	151449071 3847093339	+++++	565445884	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
Acifluorfen	Qua	18199991 633038479	48982390 1382056162	97225812 3202033523	+++++	407675485	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	2325909 51149844	5538443 105220295	9821711 214663766	+++++	35013881	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			

Curve Type Legend:
 Ave = Average
 Qua = Quadratic

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-May-2018 11:58:00 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:24:59 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:07:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	511012321	1.00	0.9751	
2	2.635	2.632	0.003	1725206867	1.00	1.07	
						RPD = 9.32	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	95938059	NC	NC	
2	5.103	5.102	0.001	555849594	NC	NC	
						RPD = 4.71	
3 2,4,6-Trichlorophenol							
1	5.788	5.786	0.002	1387562807	NC	NC	
2	5.780	5.776	0.004	5355785086	NC	NC	
						RPD = 10.60	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	337068861	1.00	1.05	
2	6.118	6.116	0.002	1954171685	1.00	1.09	
						RPD = 3.63	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	97562965	1.00	1.06	
2	6.503	6.505	-0.002	334991246	1.00	1.12	
						RPD = 5.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	214663766	1.00	1.02	
2	6.831	6.829	0.002	1537345376	1.00	1.09	
						RPD = 7.31	
7 Dicamba							
1	6.721	6.720	0.001	585243873	0.5000	0.5434	
2	6.914	6.910	0.004	2806366329	0.5000	0.5603	
						RPD = 3.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.872	6.867	0.005	104343971	100.0	99.8	
2	6.960	6.955	0.005	444937631	100.0	101.1	
						RPD = 1.25	
9 MCPA							
1	7.000	6.994	0.006	98467290	100.0	106.3	
2	7.161	7.155	0.006	1151515629	100.0	100.2	
						RPD = 5.90	
10 Dichlorprop							
1	7.181	7.180	0.001	290874356	1.00	1.05	
2	7.300	7.297	0.003	1571966456	1.00	1.12	
						RPD = 6.18	
11 2,4-D							
1	7.323	7.326	-0.003	357181097	1.00	1.18	
2	7.517	7.517	0.000	1888747044	1.00	1.19	
						RPD = 0.35	
12 Pentachlorophenol							
1	7.675	7.674	0.001	1628549099	0.2500	0.3025	
2	7.718	7.714	0.004	5004401348	0.2500	0.2661	
						RPD = 12.81	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	572693944	0.2500	0.3048	
2	7.848	7.846	0.002	2191601950	0.2500	0.2965	
						RPD = 2.77	
14 Chloramben							
1	7.848	7.855	-0.007	2124806109	1.00	1.00	
2	8.161	8.162	-0.001	6392220091	1.00	1.14	
						RPD = 12.86	
15 2,4,5-T							
1	7.923	7.929	-0.006	547016891	0.2500	0.2493	
2	8.082	8.083	-0.001	2066383005	0.2500	0.3109	
						RPD = 21.97	
16 2,4-DB							
1	8.167	8.175	-0.008	208315295	1.00	1.00	
2	8.298	8.302	-0.004	1002259721	1.00	1.02	
						RPD = 1.78	
17 Dinoseb							
1	8.224	8.224	0.000	1502700567	1.00	1.23	
2	8.252	8.248	0.004	4922703086	1.00	1.07	
						RPD = 13.86	
18 Bentazon							
1	8.299	8.300	-0.001	295542031	1.00	1.03	
2	8.664	8.662	0.002	907942100	1.00	1.13	
						RPD = 9.41	
19 Picloram							
1	8.523	8.529	-0.006	3668133130	1.00	1.00	M
2	9.011	9.005	0.006	11467491007	1.00	1.03	M
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	3847093339	1.00	1.17	
2	8.784	8.775	0.009	9887348056	1.00	1.01	
							RPD = 14.85

21 Acifluorfen

1	9.667	9.666	0.001	3202033523	1.00	1.00	M
2	9.799	9.792	0.007	9631196972	1.00	0.8404	M
							RPD = 17.32

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-8_00011

Amount Added: 1.00

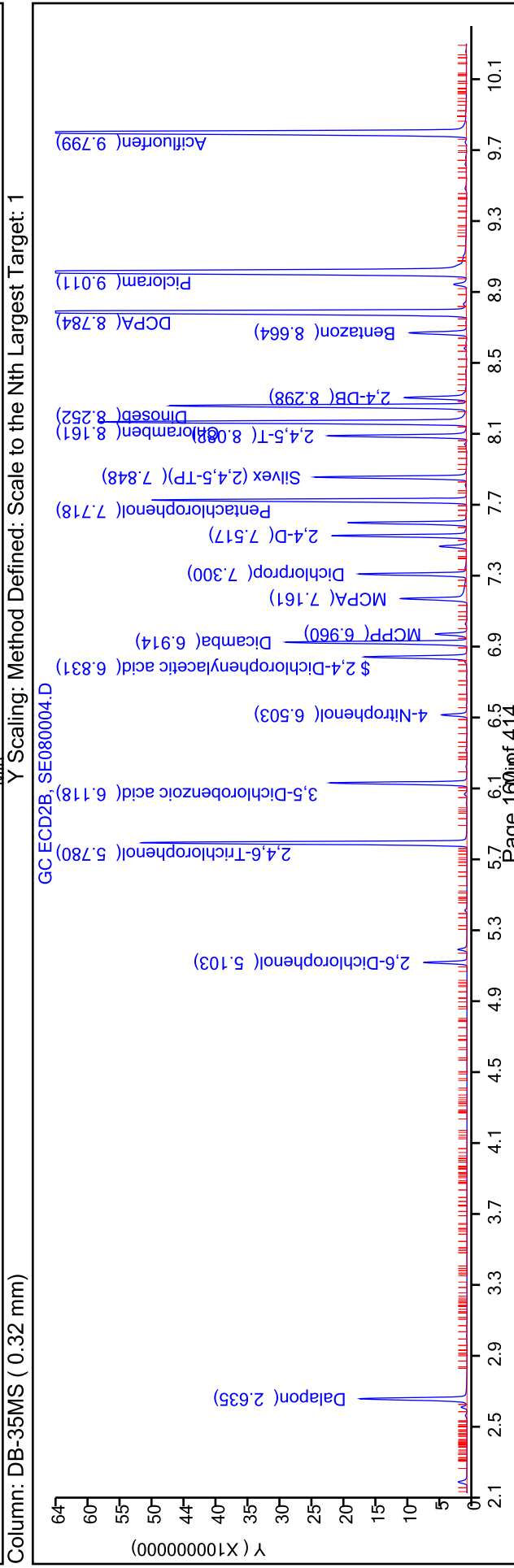
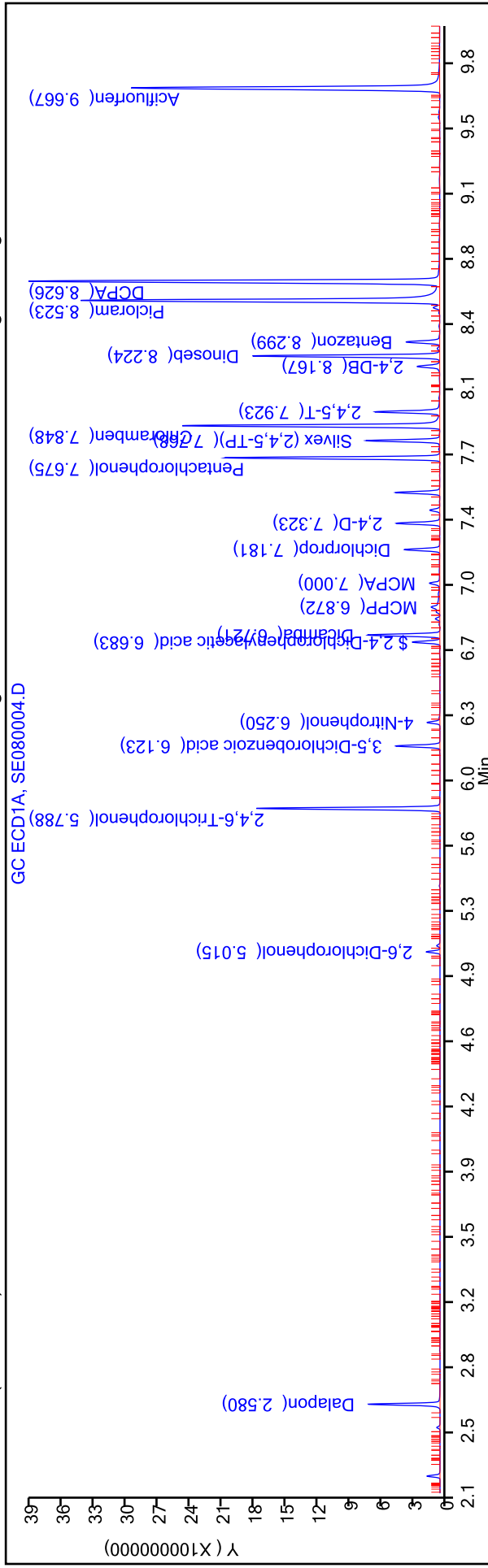
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Injection Date: 08-May-2018 11:58:00
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 4
 ALS Bottle#: 4

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-May-2018 12:17:37 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:07 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	252815070	0.5000	0.4824	
2	2.634	2.632	0.002	817578391	0.5000	0.5073	
						RPD = 5.02	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	47948482	NC	NC	
2	5.102	5.102	0.000	271150549	NC	NC	
						RPD = 2.29	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	660797633	NC	NC	
2	5.779	5.776	0.003	2813586787	NC	NC	
						RPD = 0.79	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	165004902	0.5000	0.5134	
2	6.116	6.116	0.000	930526789	0.5000	0.5178	
						RPD = 0.87	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	48081748	0.5000	0.5200	
2	6.503	6.505	-0.002	158696116	0.5000	0.5307	
						RPD = 2.03	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	105220295	0.5000	0.4975	
2	6.830	6.829	0.001	717491043	0.5000	0.5097	
						RPD = 2.41	
7 Dicamba							
1	6.720	6.720	0.000	282435535	0.2500	0.2622	
2	6.911	6.910	0.001	1347001642	0.2500	0.2689	
						RPD = 2.51	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.870	6.867	0.003	39090261	50.0	51.7	
2	6.957	6.955	0.002	205635557	50.0	46.2	
						RPD = 11.18	
9 MCPA							
1	6.996	6.994	0.002	51596040	50.0	55.7	
2	7.157	7.155	0.002	386345329	50.0	47.9	
						RPD = 14.99	
10 Dichlorprop							
1	7.180	7.180	0.000	144063420	0.5000	0.5192	
2	7.298	7.297	0.001	719800477	0.5000	0.5106	
						RPD = 1.67	
11 2,4-D							
1	7.322	7.326	-0.004	172138047	0.5000	0.5692	
2	7.515	7.517	-0.002	885627489	0.5000	0.5558	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	762859467	0.1250	0.1417	
2	7.716	7.714	0.002	2634537256	0.1250	0.1401	
						RPD = 1.15	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	276913650	0.1250	0.1474	
2	7.846	7.846	0.000	1061020220	0.1250	0.1435	
						RPD = 2.64	
14 Chloramben							
1	7.849	7.855	-0.006	948055347	0.5000	0.5069	
2	8.160	8.162	-0.002	3398296359	0.5000	0.6041	
						RPD = 17.50	
15 2,4,5-T							
1	7.922	7.929	-0.007	274321777	0.1250	0.1250	
2	8.080	8.083	-0.003	974569507	0.1250	0.1466	
						RPD = 15.89	
16 2,4-DB							
1	8.167	8.175	-0.008	95758632	0.5000	0.5113	
2	8.297	8.302	-0.005	474832365	0.5000	0.4814	
						RPD = 6.02	
17 Dinoseb							
1	8.223	8.224	-0.001	686899035	0.5000	0.5612	
2	8.250	8.248	0.002	2438912841	0.5000	0.5329	
						RPD = 5.19	
18 Bentazon							
1	8.299	8.300	-0.001	144238238	0.5000	0.5016	
2	8.663	8.662	0.001	439887803	0.5000	0.5471	
						RPD = 8.68	
19 Picloram							
1	8.523	8.529	-0.006	1551637070	0.5000	0.5051	
2	9.005	9.005	0.000	5780160796	0.5000	0.5230	
						RPD = 3.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	1796815722	0.5000	0.5456	
2	8.779	8.775	0.004	5536696155	0.5000	0.5638	
						RPD = 3.27	

21 Acifluorfen

1	9.665	9.666	-0.001	1382056162	0.5000	0.5016	
2	9.794	9.792	0.002	4770908516	0.5000	0.4992	
						RPD = 0.48	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
Injection Date: 08-May-2018 12:17:37
Lims ID: ic h7
Instrument ID: CSGS

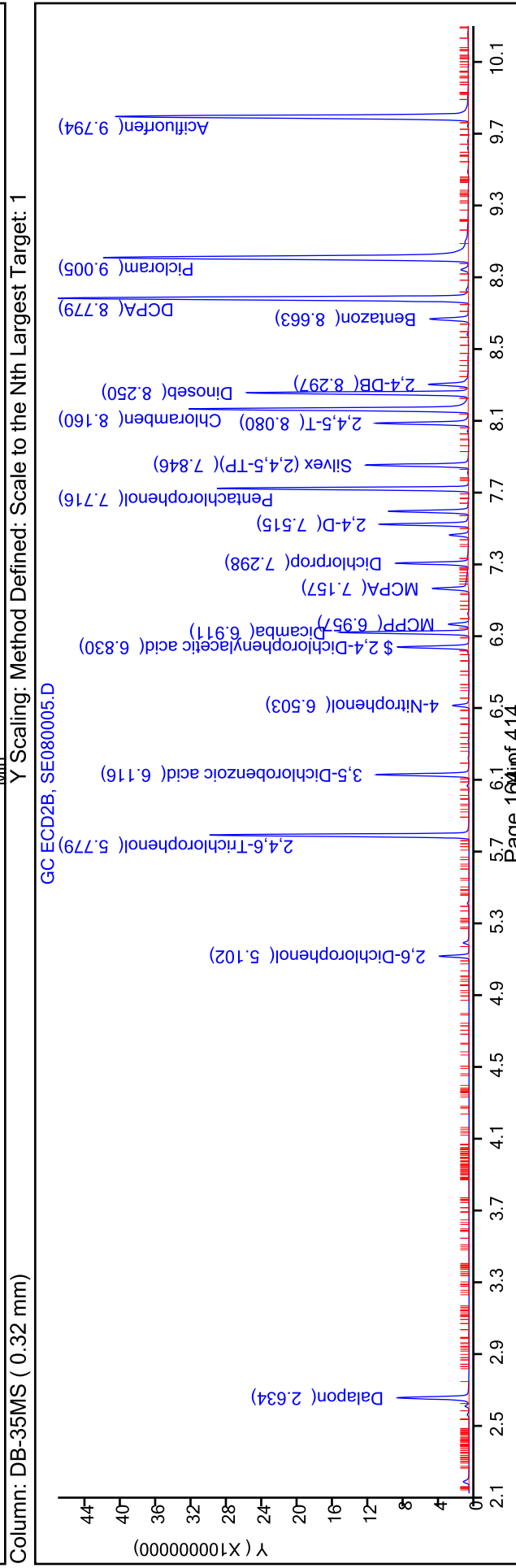
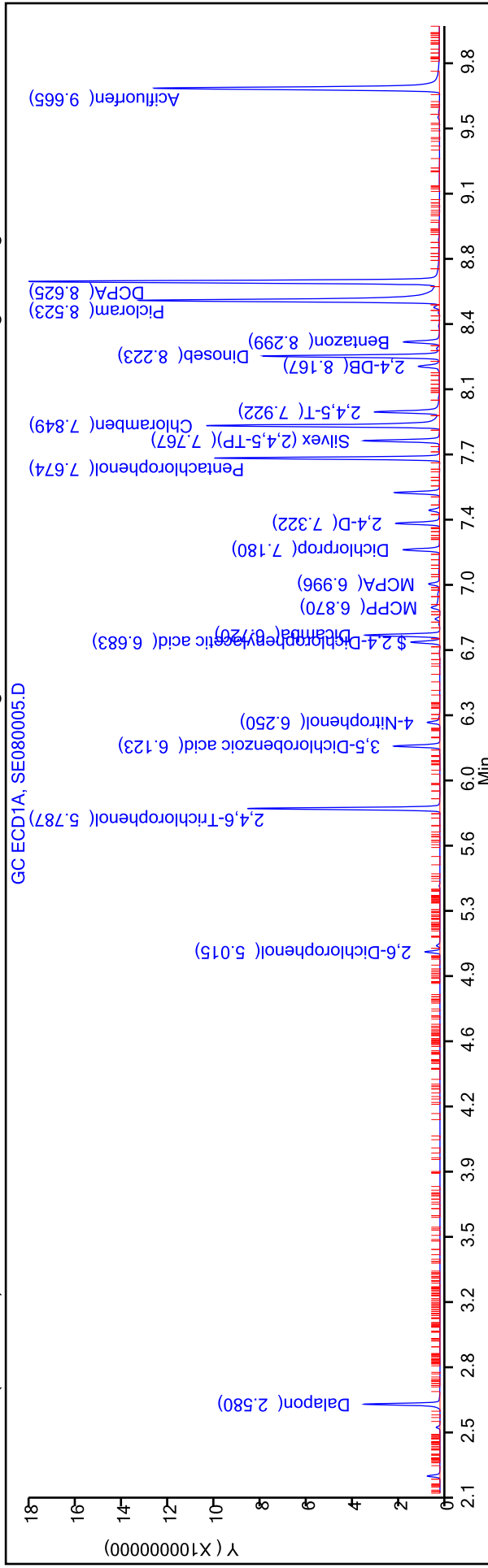
Operator ID: GEM
Worklist Smp#: 5

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-May-2018 12:37:18 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:13 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.580	2.579	0.001	126339938	0.2500	0.2411	
2	2.633	2.632	0.001	395304302	0.2500	0.2453	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	24075005	NC	NC	
2	5.102	5.102	0.000	134909465	NC	NC	
						RPD = 1.37	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	317115758	NC	NC	
2	5.778	5.776	0.002	1376798630	NC	NC	
						RPD = 1.15	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	81038461	0.2500	0.2521	
2	6.117	6.116	0.001	448811682	0.2500	0.2498	
						RPD = 0.94	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	26992258	0.2500	0.2919	
2	6.503	6.505	-0.002	77606749	0.2500	0.2595	
						RPD = 11.76	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	51149844	0.2500	0.2419	
2	6.829	6.829	0.000	353488120	0.2500	0.2511	
						RPD = 3.75	
7 Dicamba							
1	6.721	6.720	0.001	135663470	0.1250	0.1260	
2	6.911	6.910	0.001	650915415	0.1250	0.1299	
						RPD = 3.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	12687646	25.0	22.2	
2	6.956	6.955	0.001	111381364	25.0	24.6	
						RPD = 10.33	
9 MCPA							
1	6.995	6.994	0.001	25890792	25.0	28.0	
2	7.155	7.155	0.000	177192173	25.0	26.6	
						RPD = 4.94	
10 Dichlorprop							
1	7.181	7.180	0.001	70616500	0.2500	0.2545	
2	7.298	7.297	0.001	352257271	0.2500	0.2499	
						RPD = 1.83	
11 2,4-D							
1	7.323	7.326	-0.003	81489809	0.2500	0.2695	
2	7.516	7.517	-0.001	419247494	0.2500	0.2631	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	357293439	0.0625	0.0664	
2	7.715	7.714	0.001	1280290405	0.0625	0.0681	
						RPD = 2.54	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	130284362	0.0625	0.0693	
2	7.846	7.846	0.000	500698059	0.0625	0.0677	
						RPD = 2.34	
14 Chloramben							
1	7.850	7.855	-0.005	420812351	0.2500	0.2467	
2	8.159	8.162	-0.003	1585218711	0.2500	0.2818	
						RPD = 13.26	
15 2,4,5-T							
1	7.924	7.929	-0.005	138404340	0.0625	0.0631	
2	8.079	8.083	-0.004	450029272	0.0625	0.0677	
						RPD = 7.07	
16 2,4-DB							
1	8.169	8.175	-0.006	41914777	0.2500	0.2443	
2	8.298	8.302	-0.004	234527590	0.2500	0.2378	
						RPD = 2.69	
17 Dinoseb							
1	8.223	8.224	-0.001	318205530	0.2500	0.2600	
2	8.248	8.248	0.000	1104528845	0.2500	0.2450	
						RPD = 5.93	
18 Bentazon							
1	8.299	8.300	-0.001	71761268	0.2500	0.2496	
2	8.661	8.662	-0.001	209189101	0.2500	0.2602	
						RPD = 4.17	
19 Picloram							
1	8.525	8.529	-0.004	675298882	0.2500	0.2482	
2	9.005	9.005	0.000	2545447676	0.2500	0.2355	
						RPD = 5.25	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	842695237	0.2500	0.2559	
2	8.778	8.775	0.003	2733977251	0.2500	0.2784	
						RPD = 8.42	

21 Acifluorfen

1	9.665	9.666	-0.001	633038479	0.2500	0.2522	
2	9.793	9.792	0.001	2098074459	0.2500	0.2582	
						RPD = 2.37	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

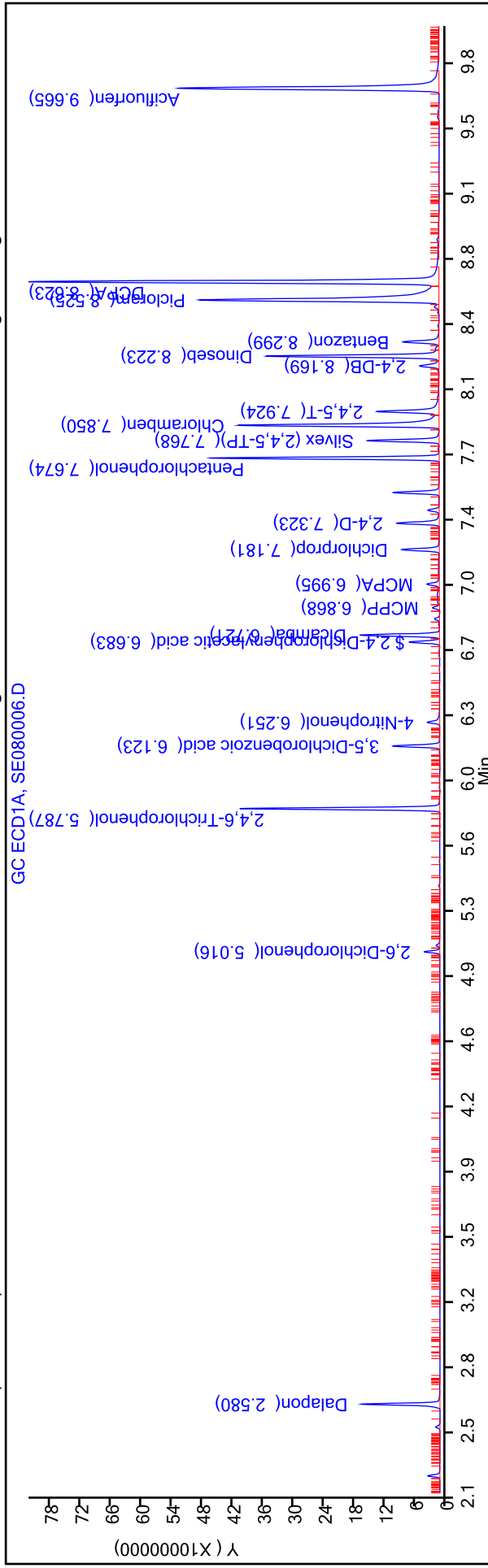
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Injection Date: 08-May-2018 12:37:18
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

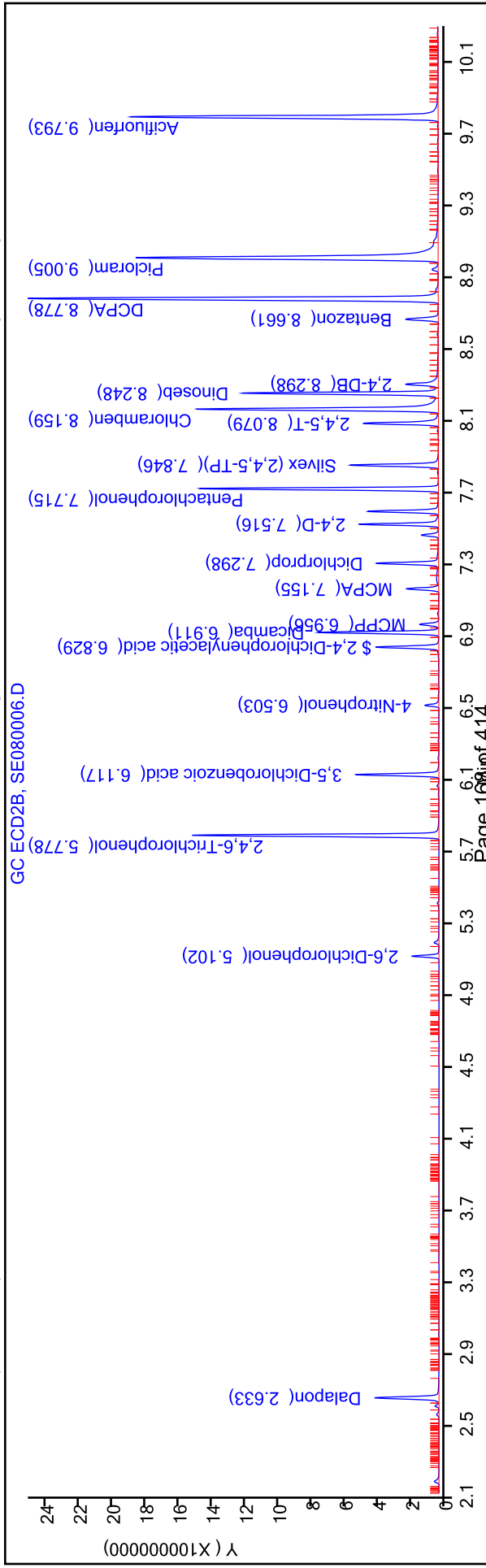
Operator ID: GEM
 Worklist Smp#: 6
 ALS Bottle#: 6

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-May-2018 12:56:54 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:18 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: meinckeg Date: 08-May-2018 13:25:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	87735176	0.1750	0.1674	
2	2.633	2.632	0.001	265586882	0.1750	0.1648	
						RPD = 1.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16721808	NC	NC	
2	5.101	5.102	-0.001	91409134	NC	NC	
						RPD = 1.11	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	212201404	NC	NC	
2	5.776	5.776	0.000	921748528	NC	NC	
						RPD = 1.20	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	54279812	0.1750	0.1689	
2	6.116	6.116	0.000	300893318	0.1750	0.1674	
						RPD = 0.85	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17047628	0.1750	0.1844	
2	6.504	6.505	-0.001	52193224	0.1750	0.1745	
						RPD = 5.49	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35013881	0.1750	0.1656	
2	6.829	6.829	0.000	235040238	0.1750	0.1670	
						RPD = 0.84	
7 Dicamba							
1	6.721	6.720	0.001	91550778	0.0875	0.0850	
2	6.911	6.910	0.001	429620976	0.0875	0.0858	
						RPD = 0.89	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	8640069	17.5	16.3	
2	6.955	6.955	0.000	77011106	17.5	16.8	
						RPD = 2.77	
9 MCPA							
1	6.994	6.994	0.000	17766771	17.5	19.2	
2	7.153	7.155	-0.002	121752778	17.5	19.6	
						RPD = 2.31	
10 Dichlorprop							
1	7.181	7.180	0.001	48109296	0.1750	0.1734	
2	7.296	7.297	-0.001	231436814	0.1750	0.1642	
						RPD = 5.46	
11 2,4-D							
1	7.324	7.326	-0.002	54093373	0.1750	0.1789	
2	7.515	7.517	-0.002	272374787	0.1750	0.1709	
						RPD = 4.55	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	237204468	0.0438	0.0441	
2	7.713	7.714	-0.001	840761037	0.0438	0.0447	
						RPD = 1.45	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	84634924	0.0438	0.0450	
2	7.845	7.846	-0.001	324244276	0.0438	0.0439	
						RPD = 2.66	
14 Chloramben							
1	7.852	7.855	-0.003	269520100	0.1750	0.1655	
2	8.159	8.162	-0.003	1019151525	0.1750	0.1812	
						RPD = 9.06	
15 2,4,5-T							
1	7.925	7.929	-0.004	93534318	0.0438	0.0426	
2	8.080	8.083	-0.003	287476934	0.0438	0.0433	
						RPD = 1.44	
16 2,4-DB							
1	8.171	8.175	-0.004	26059778	0.1750	0.1599	
2	8.298	8.302	-0.004	166644052	0.1750	0.1690	
						RPD = 5.54	
17 Dinoseb							
1	8.222	8.224	-0.002	207576561	0.1750	0.1696	
2	8.246	8.248	-0.002	688241161	0.1750	0.1552	
						RPD = 8.85	
18 Bentazon							
1	8.299	8.300	-0.001	47511232	0.1750	0.1652	
2	8.661	8.662	-0.001	137471207	0.1750	0.1710	
						RPD = 3.43	
19 Picloram							
1	8.526	8.529	-0.003	428630902	0.1750	0.1666	
2	9.005	9.005	0.000	1548770490	0.1750	0.1470	
						RPD = 12.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	565445884	0.1750	0.1717	
2	8.776	8.775	0.001	1775677219	0.1750	0.1808	
						RPD = 5.16	

21 Acifluorfen

1	9.665	9.666	-0.001	407675485	0.1750	0.1692	
2	9.791	9.792	-0.001	1244184045	0.1750	0.1664	
						RPD = 1.67	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
Injection Date: 08-May-2018 12:56:54
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 7

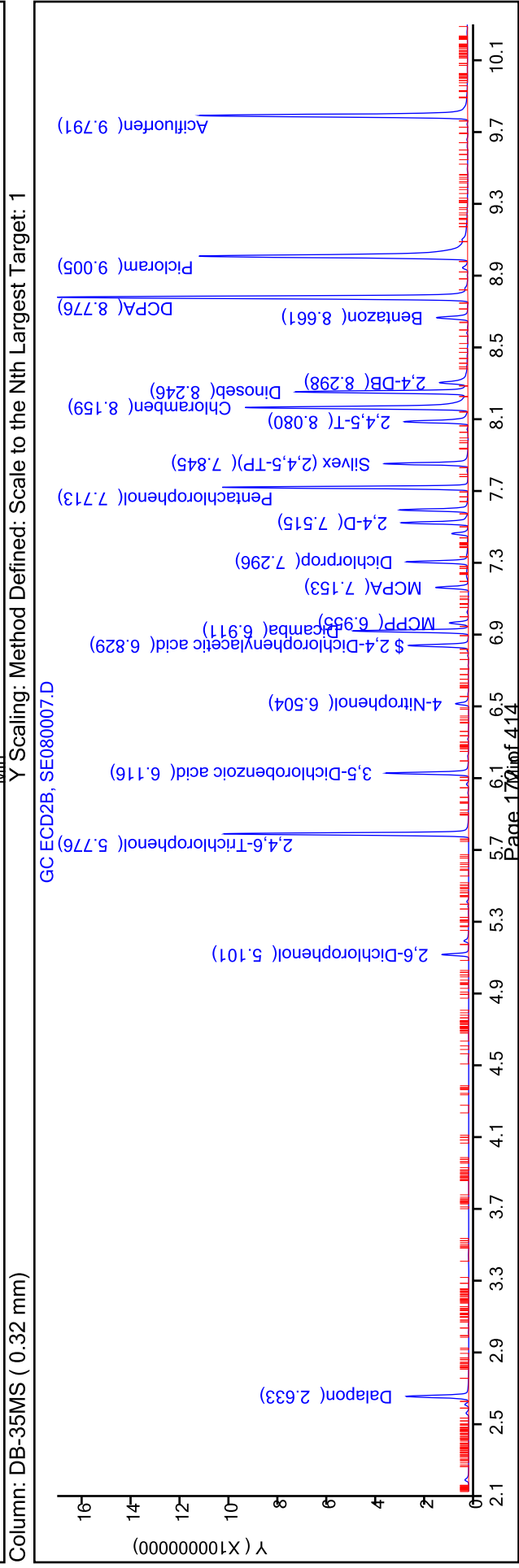
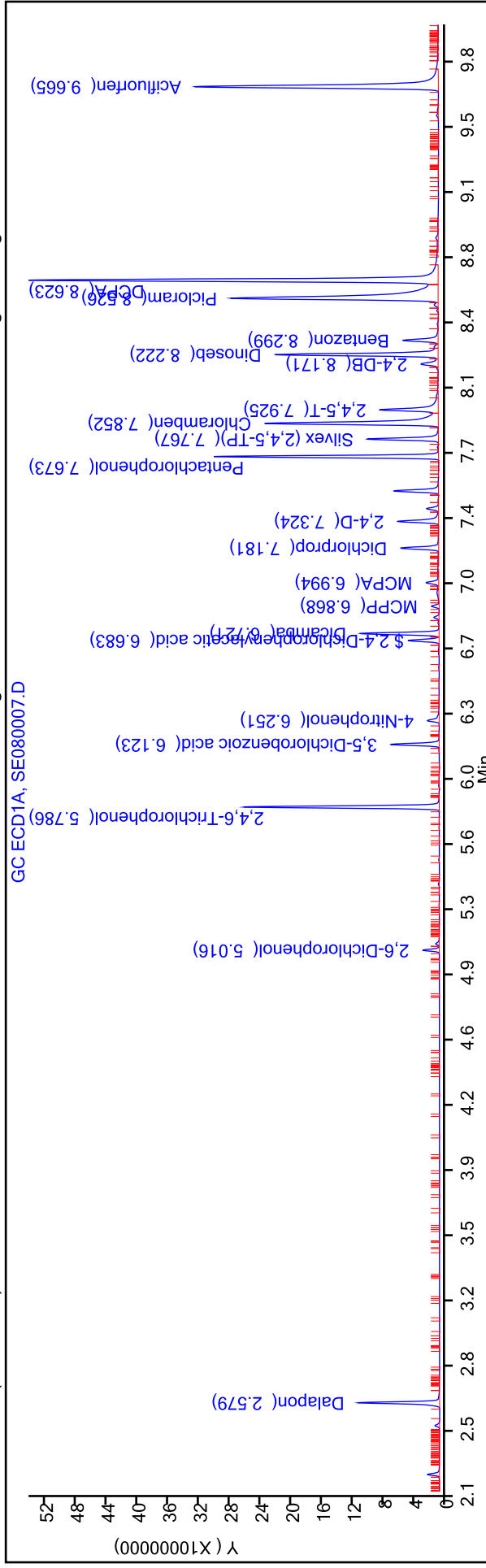
Lims ID: ic h5

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-May-2018 13:16:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:24 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	49026258	0.1000	0.0935	
2	2.632	2.632	0.000	144107629	0.1000	0.0894	
						RPD = 4.52	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	9648349	NC	NC	
2	5.102	5.102	0.000	51409780	NC	NC	
						RPD = 3.66	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	115367190	NC	NC	
2	5.776	5.776	0.000	492889358	NC	NC	
						RPD = 0.46	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	30442227	0.1000	0.0947	
2	6.116	6.116	0.000	163818500	0.1000	0.0912	
						RPD = 3.82	
5 4-Nitrophenol							
1	6.253	6.253	0.000	9830837	0.1000	0.1063	
2	6.505	6.505	0.000	28145758	0.1000	0.0941	
						RPD = 12.18	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	19553071	0.1000	0.0925	
2	6.829	6.829	0.000	126698158	0.1000	0.0900	
						RPD = 2.70	
7 Dicamba							
1	6.720	6.720	0.000	50221281	0.0500	0.0466	
2	6.910	6.910	0.000	229111440	0.0500	0.0457	
						RPD = 1.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	5032337	10.0	10.4	
2	6.955	6.955	0.000	44613118	10.0	9.35	
						RPD = 11.06	
9 MCPA							
1	6.994	6.994	0.000	10021981	10.0	10.8	M
2	7.155	7.155	0.000	72306759	10.0	12.6	M
						RPD = 15.16	
10 Dichlorprop							
1	7.180	7.180	0.000	27204673	0.1000	0.0980	
2	7.297	7.297	0.000	128102012	0.1000	0.0909	M
						RPD = 7.59	
11 2,4-D							
1	7.326	7.326	0.000	29475053	0.1000	0.0975	M
2	7.517	7.517	0.000	145386532	0.1000	0.0912	M
						RPD = 6.61	
12 Pentachlorophenol							
1	7.674	7.674	0.000	126808590	0.0250	0.0236	
2	7.714	7.714	0.000	448807878	0.0250	0.0239	M
						RPD = 1.30	
13 Silvex (2,4,5-TP)							
1	7.769	7.769	0.000	44774730	0.0250	0.0238	M
2	7.846	7.846	0.000	170517091	0.0250	0.0231	M
						RPD = 3.25	
14 Chloramben							
1	7.855	7.855	0.000	136550994	0.1000	0.0910	
2	8.162	8.162	0.000	528388568	0.1000	0.0939	M
						RPD = 3.16	
15 2,4,5-T							
1	7.929	7.929	0.000	56867356	0.0250	0.0259	M
2	8.083	8.083	0.000	149160522	0.0250	0.0224	M
						RPD = 14.39	
16 2,4-DB							
1	8.175	8.175	0.000	13655211	0.1000	0.0916	
2	8.302	8.302	0.000	97285447	0.1000	0.0986	M
						RPD = 7.35	
17 Dinoseb							
1	8.224	8.224	0.000	110631354	0.1000	0.0904	M
2	8.248	8.248	0.000	344721192	0.1000	0.0811	M
						RPD = 10.80	
18 Bentazon							
1	8.300	8.300	0.000	27567147	0.1000	0.0959	M
2	8.662	8.662	0.000	74902105	0.1000	0.0932	M
						RPD = 2.86	
19 Picloram							
1	8.529	8.529	0.000	216808821	0.1000	0.0920	
2	9.005	9.005	0.000	759779337	0.1000	0.0769	M
						RPD = 17.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	315619469	0.1000	0.0958	M
2	8.775	8.775	0.000	947740711	0.1000	0.0965	M

RPD = 0.69

21 Acifluorfen

1	9.666	9.666	0.000	217026310	0.1000	0.0952	
2	9.792	9.792	0.000	596281084	0.1000	0.0890	

RPD = 6.71

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38
Lims ID: ic h4
Instrument ID: CSGS

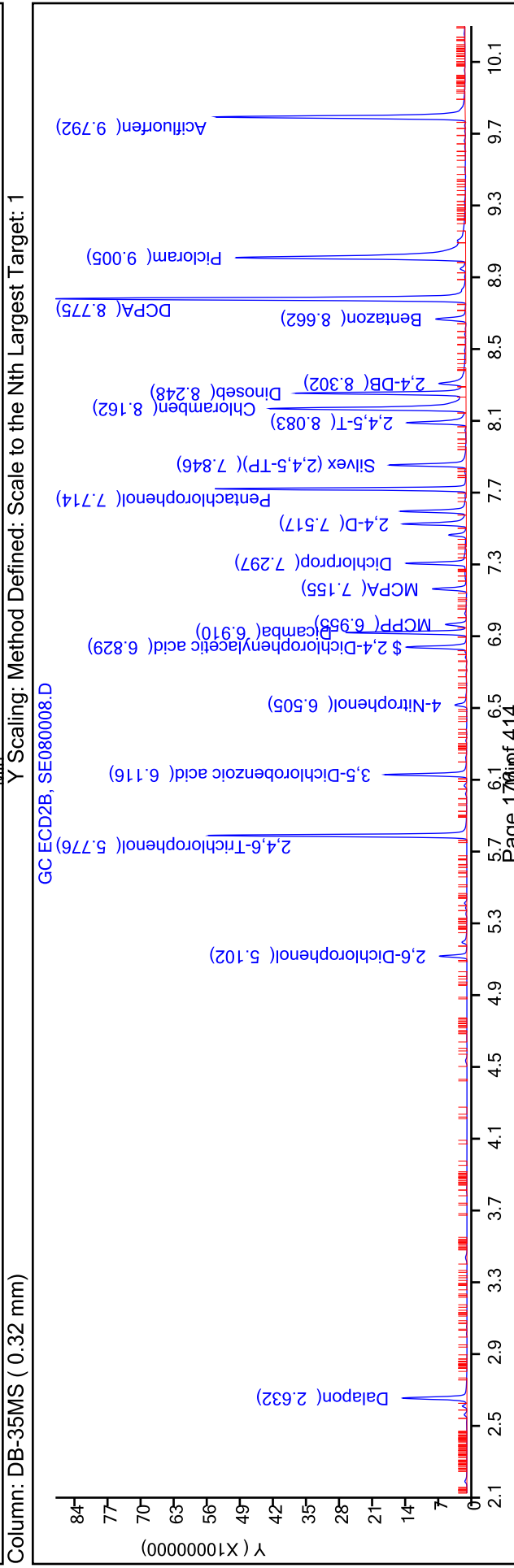
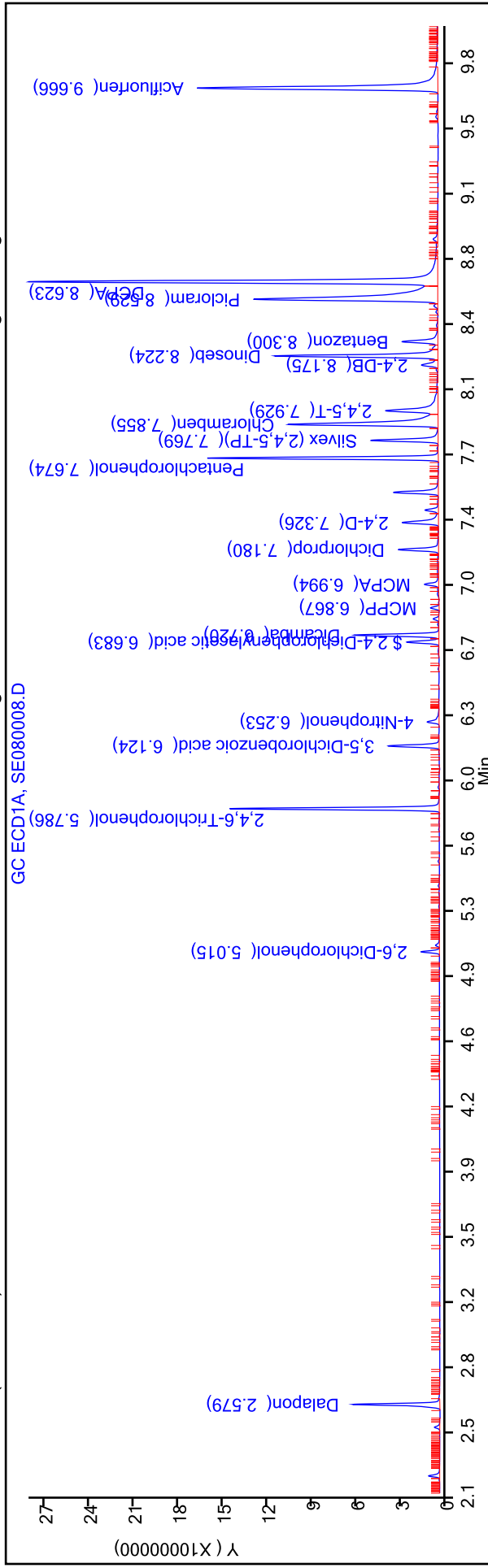
Operator ID: GEM
Worklist Smp#: 8

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-May-2018 13:36:16 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:32 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:19:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.579	2.579	0.000	25290814	0.0500	0.0483	
2	2.632	2.632	0.000	71378402	0.0500	0.0443	
							RPD = 8.58

2 2,6-Dichlorophenol

1	5.016	5.015	0.001	5120223	NC	NC	
2	5.101	5.102	-0.001	27211487	NC	NC	
							RPD = 3.92

3 2,4,6-Trichlorophenol

1	5.786	5.786	0.000	55102499	NC	NC	
2	5.776	5.776	0.000	240010788	NC	NC	
							RPD = 1.48

4 3,5-Dichlorobenzoic acid

1	6.124	6.124	0.000	15117918	0.0500	0.0470	
2	6.116	6.116	0.000	82525138	0.0500	0.0459	
							RPD = 2.39

5 4-Nitrophenol

1	6.254	6.253	0.001	4230904	0.0500	0.0458	
2	6.506	6.505	0.001	14245923	0.0500	0.0476	
							RPD = 4.02

\$ 6 2,4-Dichlorophenylacetic acid

1	6.683	6.683	0.000	9821711	0.0500	0.0464	
2	6.829	6.829	0.000	65002540	0.0500	0.0462	
							RPD = 0.58

7 Dicamba

1	6.721	6.720	0.001	24549090	0.0250	0.0228	
2	6.909	6.910	-0.001	113374207	0.0250	0.0226	
							RPD = 0.70

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.866	6.867	-0.001	2565927	5.00	5.99	
2	6.955	6.955	0.000	26339273	5.00	5.17	
						RPD = 14.76	
9 MCPA							
1	6.994	6.994	0.000	4373482	5.00	4.72	
2	7.154	7.155	-0.001	40478712	5.00	7.49	
						RPD = 45.31	
10 Dichlorprop							
1	7.181	7.180	0.001	13064380	0.0500	0.0471	
2	7.297	7.297	0.000	62424883	0.0500	0.0443	
						RPD = 6.13	
11 2,4-D							
1	7.331	7.326	0.005	13528651	0.0500	0.0447	
2	7.520	7.517	0.003	68918972	0.0500	0.0432	
						RPD = 3.38	
12 Pentachlorophenol							
1	7.674	7.674	0.000	60060646	0.0125	0.0112	
2	7.713	7.714	-0.001	214964113	0.0125	0.0114	
						RPD = 2.42	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	20302486	0.0125	0.0108	
2	7.846	7.846	0.000	78639731	0.0125	0.0106	
						RPD = 1.56	
14 Chloramben							
1	7.860	7.855	0.005	60085684	0.0500	0.0468	
2	8.164	8.162	0.002	240336393	0.0500	0.0427	
						RPD = 9.03	
15 2,4,5-T							
1	7.933	7.929	0.004	26566988	0.0125	0.0121	
2	8.086	8.083	0.003	68256754	0.0125	0.0103	
						RPD = 16.45	
16 2,4-DB							
1	8.178	8.175	0.003	5762851	0.0500	0.0472	
2	8.305	8.302	0.003	46624287	0.0500	0.0473	
						RPD = 0.23	
17 Dinoseb							
1	8.225	8.224	0.001	53295649	0.0500	0.0435	
2	8.248	8.248	0.000	154960345	0.0500	0.0402	
						RPD = 8.01	
18 Bentazon							
1	8.301	8.300	0.001	13719455	0.0500	0.0477	
2	8.663	8.662	0.001	35565067	0.0500	0.0442	
						RPD = 7.56	
19 Picloram							
1	8.533	8.529	0.004	94759287	0.0500	0.0468	
2	9.009	9.005	0.004	328532437	0.0500	0.0386	
						RPD = 19.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.624	8.623	0.001	151449071	0.0500	0.0460	
2	8.775	8.775	0.000	451881325	0.0500	0.0460	
						RPD = 0.05	

21 Acifluorfen

1	9.667	9.666	0.001	97225812	0.0500	0.0468	
2	9.791	9.792	-0.001	248586919	0.0500	0.0440	
						RPD = 6.11	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
Injection Date: 08-May-2018 13:36:16
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 9

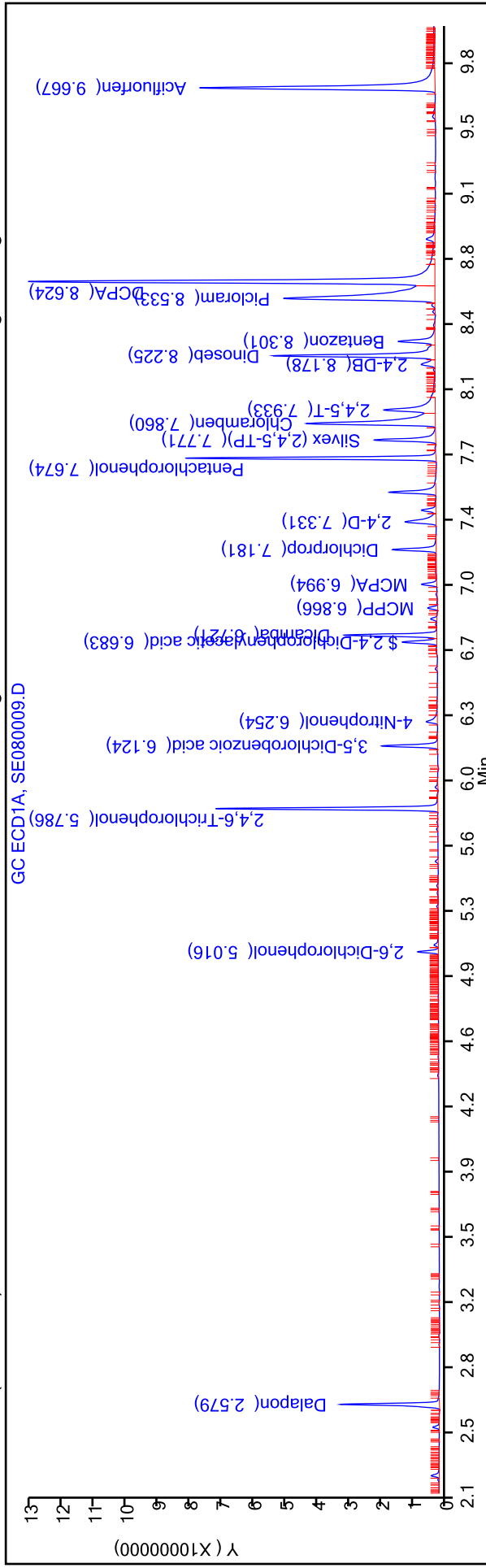
Lims ID: ic h3
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

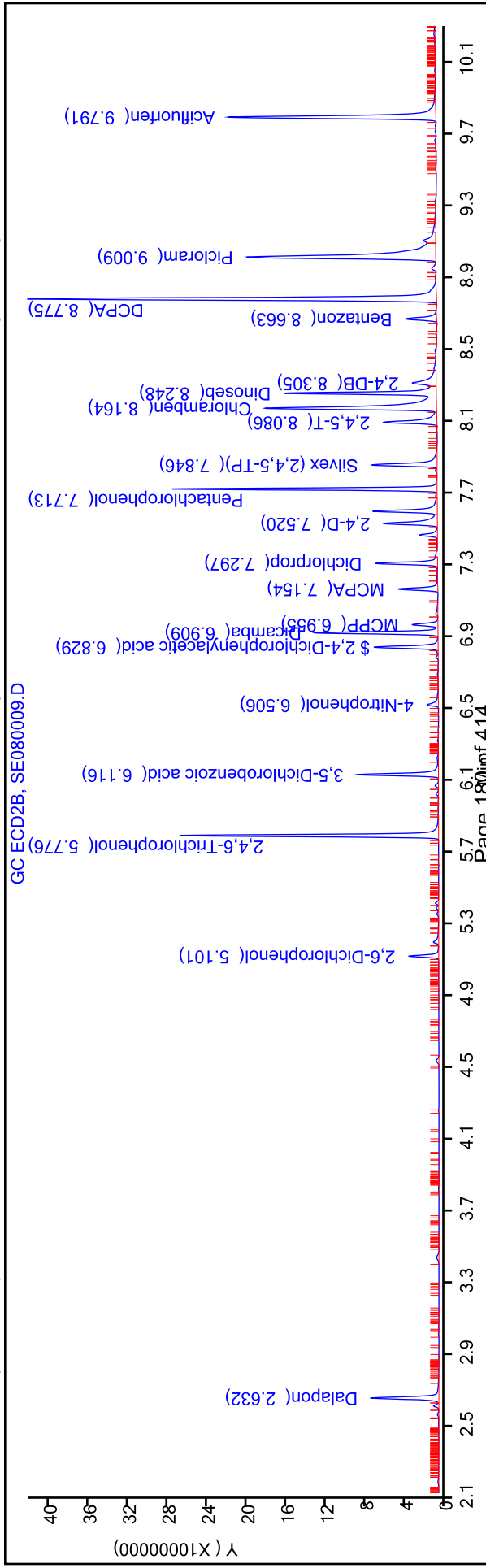
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 9

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-May-2018 13:55:52 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:38 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	13718735	0.0250	0.0262	
2	2.632	2.632	0.000	39932951	0.0250	0.0248	
						RPD = 5.50	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	2779258	NC	NC	
2	5.102	5.102	0.000	15274619	NC	NC	
						RPD = 0.57	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	27400593	NC	NC	
2	5.776	5.776	0.000	122077658	NC	NC	
						RPD = 3.74	
4 3,5-Dichlorobenzoic acid							
1	6.125	6.124	0.001	8148129	0.0250	0.0254	
2	6.118	6.116	0.002	44015926	0.0250	0.0245	
						RPD = 3.44	
5 4-Nitrophenol							
1	6.258	6.253	0.005	2307008	0.0250	0.0250	
2	6.511	6.505	0.006	7416225	0.0250	0.0248	
						RPD = 0.61	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.684	6.683	0.001	5538443	0.0250	0.0262	
2	6.830	6.829	0.001	34723127	0.0250	0.0247	
						RPD = 5.99	
7 Dicamba							
1	6.720	6.720	0.000	13200023	0.0125	0.0123	
2	6.910	6.910	0.000	58578625	0.0125	0.0117	
						RPD = 4.69	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	1288891	2.50	3.49	
2	6.955	6.955	0.000	16319936	2.50	2.87	
						RPD = 19.60	
9 MCPA							
1	6.995	6.994	0.001	2137688	2.50	2.31	
2	7.155	7.155	0.000	24668652	2.50	4.72	
						RPD = 68.67	
10 Dichlorprop							
1	7.182	7.180	0.002	6871862	0.0250	0.0248	
2	7.298	7.297	0.001	33672808	0.0250	0.0239	
						RPD = 3.61	
11 2,4-D							
1	7.337	7.326	0.011	6740238	0.0250	0.0223	
2	7.524	7.517	0.007	35695833	0.0250	0.0224	
						RPD = 0.50	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	29521455	0.006250	0.005483	
2	7.713	7.714	-0.001	107509203	0.006250	0.005716	
						RPD = 4.15	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	9932955	0.006250	0.005287	
2	7.850	7.846	0.004	39284572	0.006250	0.005315	
						RPD = 0.53	
14 Chloramben							
1	7.864	7.855	0.009	28147981	0.0250	0.0279	
2	8.167	8.162	0.005	117512235	0.0250	0.0209	
						RPD = 28.91	
15 2,4,5-T							
1	7.935	7.929	0.006	13893399	0.006250	0.006333	
2	8.090	8.083	0.007	34680183	0.006250	0.005218	
						RPD = 19.31	
16 2,4-DB							
1	8.182	8.175	0.007	2666490	0.0250	0.0295	
2	8.308	8.302	0.006	26051520	0.0250	0.0264	
						RPD = 10.95	
17 Dinoseb							
1	8.225	8.224	0.001	27141219	0.0250	0.0222	
2	8.250	8.248	0.002	77307007	0.0250	0.0234	
						RPD = 5.56	
18 Bentazon							
1	8.304	8.300	0.004	6986266	0.0250	0.0243	
2	8.665	8.662	0.003	18151512	0.0250	0.0226	
						RPD = 7.33	
19 Picloram							
1	8.538	8.529	0.009	44134008	0.0250	0.0275	
2	9.011	9.005	0.006	155603121	0.0250	0.0232	
						RPD = 16.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.625	8.623	0.002	77163736	0.0250	0.0234	
2	8.776	8.775	0.001	226645361	0.0250	0.0231	
						RPD = 1.52	

21 Acifluorfen

1	9.668	9.666	0.002	48982390	0.0250	0.0268	
2	9.795	9.792	0.003	120359495	0.0250	0.0266	
						RPD = 0.57	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
Injection Date: 08-May-2018 13:55:52
Lims ID: ic h2
Instrument ID: CSGS

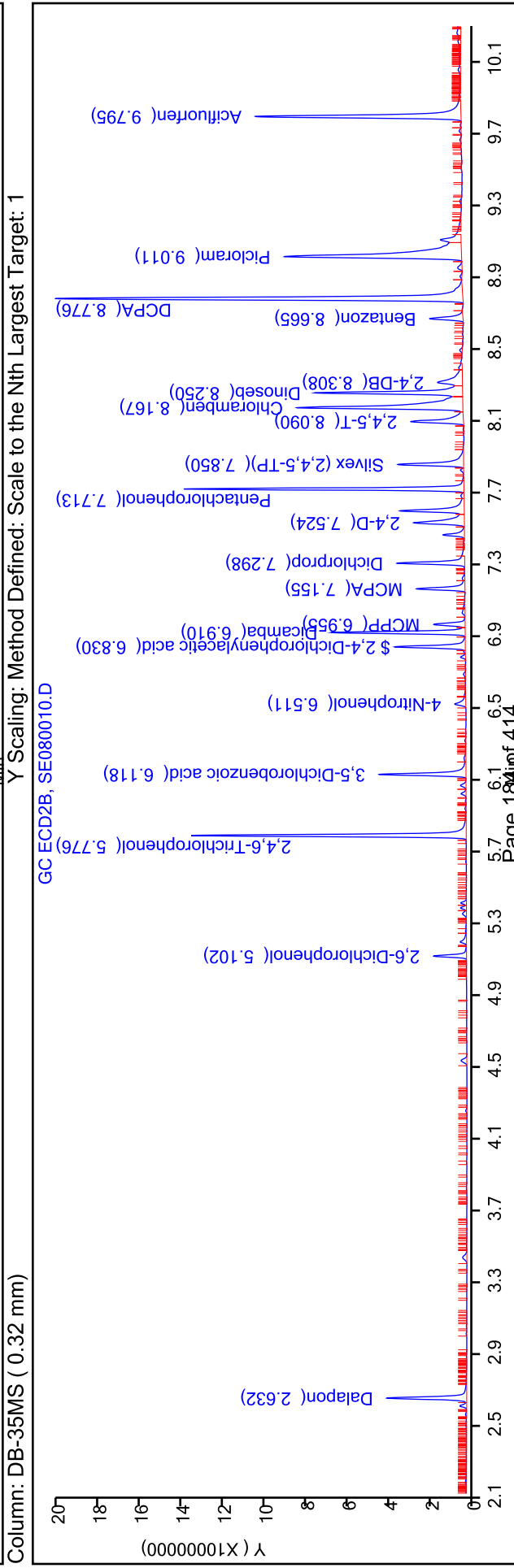
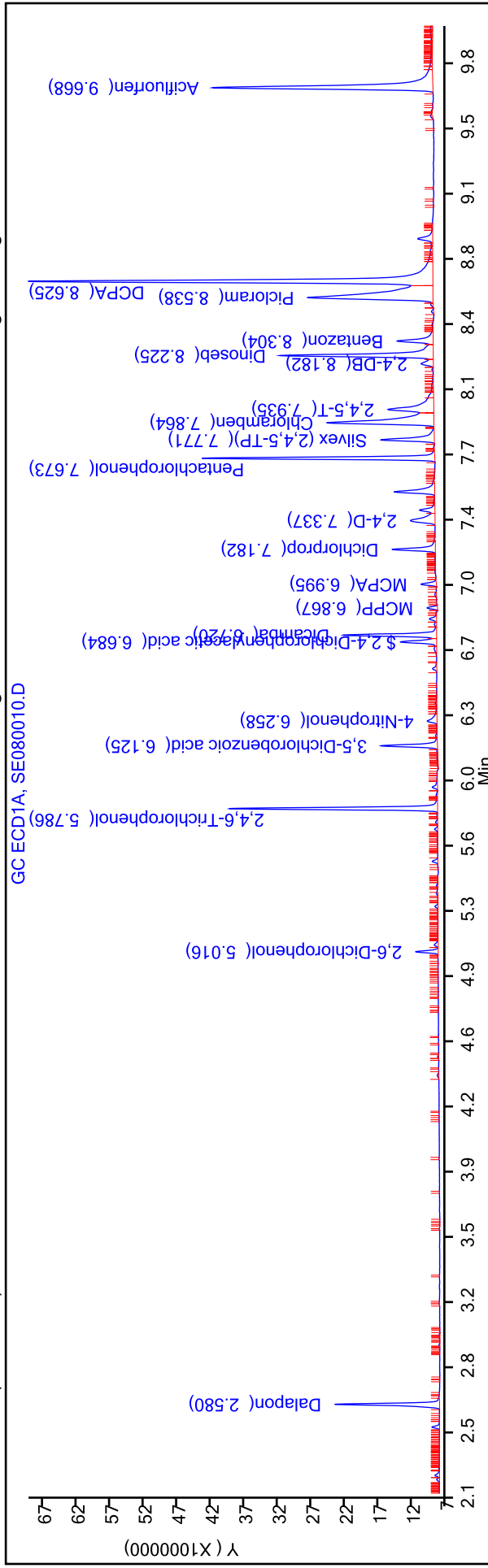
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-May-2018 14:15:28 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:44 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	5906230	0.0100	0.0113	
2	2.633	2.632	0.001	17983150	0.0100	0.0112	
						RPD = 1.00	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	1242849	NC	NC	
2	5.103	5.102	0.001	6728448	NC	NC	
						RPD = 2.08	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	10511883	NC	NC	
2	5.776	5.776	0.000	47802186	NC	NC	
						RPD = 5.78	
4 3,5-Dichlorobenzoic acid							
1	6.126	6.124	0.002	3202229	0.0100	0.0100	
2	6.119	6.116	0.003	18377513	0.0100	0.0102	
						RPD = 2.62	
5 4-Nitrophenol							
1	6.263	6.253	0.010	711986	0.0100	0.007701	a
2	6.516	6.505	0.011	2506531	0.0100	0.008382	M
						RPD = 8.47	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.685	6.683	0.002	2325909	0.0100	0.0110	
2	6.831	6.829	0.002	14359475	0.0100	0.0102	
						RPD = 7.53	
7 Dicamba							
1	6.721	6.720	0.001	5346345	0.005000	0.004964	
2	6.911	6.910	0.001	23620770	0.005000	0.004716	
						RPD = 5.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	383358	1.00	1.63	
2	6.956	6.955	0.001	7884133	1.00	0.9383	
						RPD = 53.96	
9 MCPA							
1	6.996	6.994	0.002	684536	1.00	0.7393	
2	7.156	7.155	0.001	12132999	1.00	2.39	
						RPD = 105.59	
10 Dichlorprop							
1	7.182	7.180	0.002	2699462	0.0100	0.009728	
2	7.299	7.297	0.002	15301912	0.0100	0.0109	
						RPD = 10.94	
11 2,4-D							
1	7.346	7.326	0.020	2400934	0.0100	0.007940	a
2	7.531	7.517	0.014	14551198	0.0100	0.009131	a
						RPD = 13.96	
12 Pentachlorophenol							
1	7.674	7.674	0.000	11008502	0.002500	0.002045	
2	7.713	7.714	-0.001	41165516	0.002500	0.002189	
						RPD = 6.80	
13 Silvex (2,4,5-TP)							
1	7.776	7.769	0.007	3531202	0.002500	0.001880	
2	7.851	7.846	0.005	16213772	0.002500	0.002194	
						RPD = 15.42	
14 Chloramben							
1	7.868	7.855	0.013	10146304	0.0100	0.0173	
2	8.171	8.162	0.009	45179417	0.0100	0.008031	
						RPD = 72.95	
15 2,4,5-T							
1	7.937	7.929	0.008	5683855	0.002500	0.002591	
2	8.089	8.083	0.006	14207297	0.002500	0.002138	
						RPD = 19.17	
16 2,4-DB							
1	8.185	8.175	0.010	957156	0.0100	0.0196	Ma
2	8.312	8.302	0.010	10871976	0.0100	0.0110	a
						RPD = 56.23	
17 Dinoseb							
1	8.227	8.224	0.003	10802376	0.0100	0.008826	
2	8.251	8.248	0.003	30077804	0.0100	0.0133	
						RPD = 40.12	
18 Bentazon							
1	8.306	8.300	0.006	3164677	0.0100	0.0110	
2	8.665	8.662	0.003	7803979	0.0100	0.009707	
						RPD = 12.54	
19 Picloram							
1	8.546	8.529	0.017	16249913	0.0100	0.0167	a
2	9.014	9.005	0.009	57128370	0.0100	0.0144	a
						RPD = 14.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	28939470	0.0100	0.008788	
2	8.777	8.775	0.002	86672796	0.0100	0.008825	
						RPD = 0.42	

21 Acifluorfen

1	9.670	9.666	0.004	18199991	0.0100	0.0138	
2	9.794	9.792	0.002	40645245	0.0100	0.0156	
						RPD = 11.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

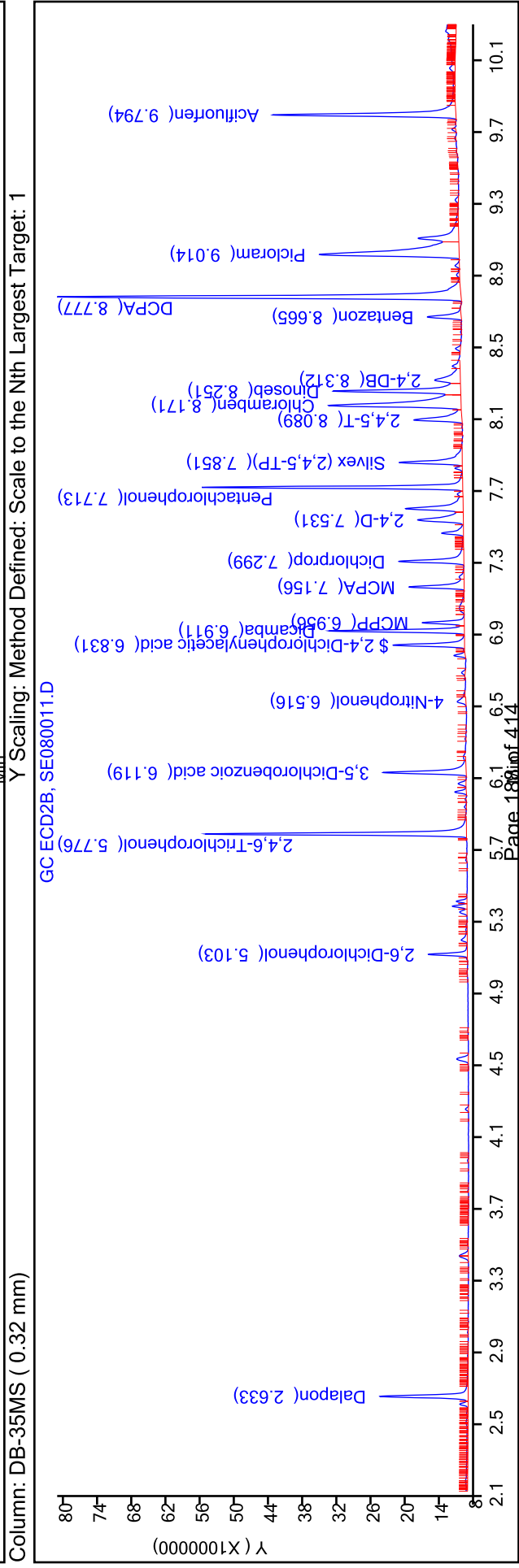
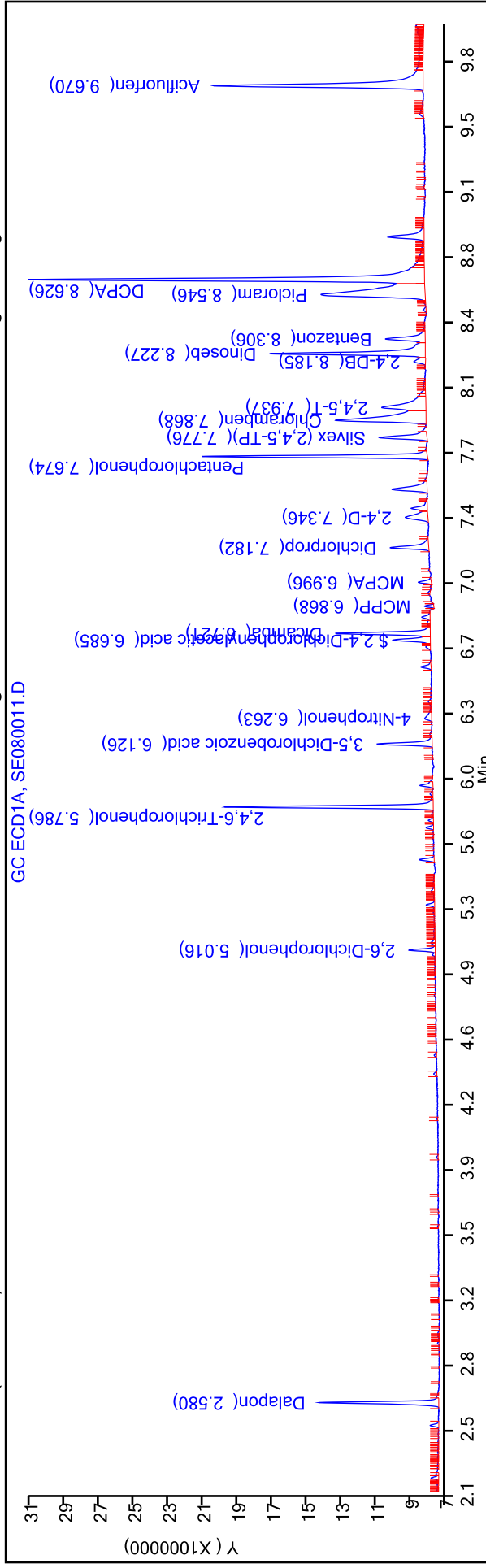
SGHERB-1_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Injection Date: 08-May-2018 14:15:28
 Lims ID: ic h1
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 11
 ALS Bottle#: 11



TestAmerica Savannah

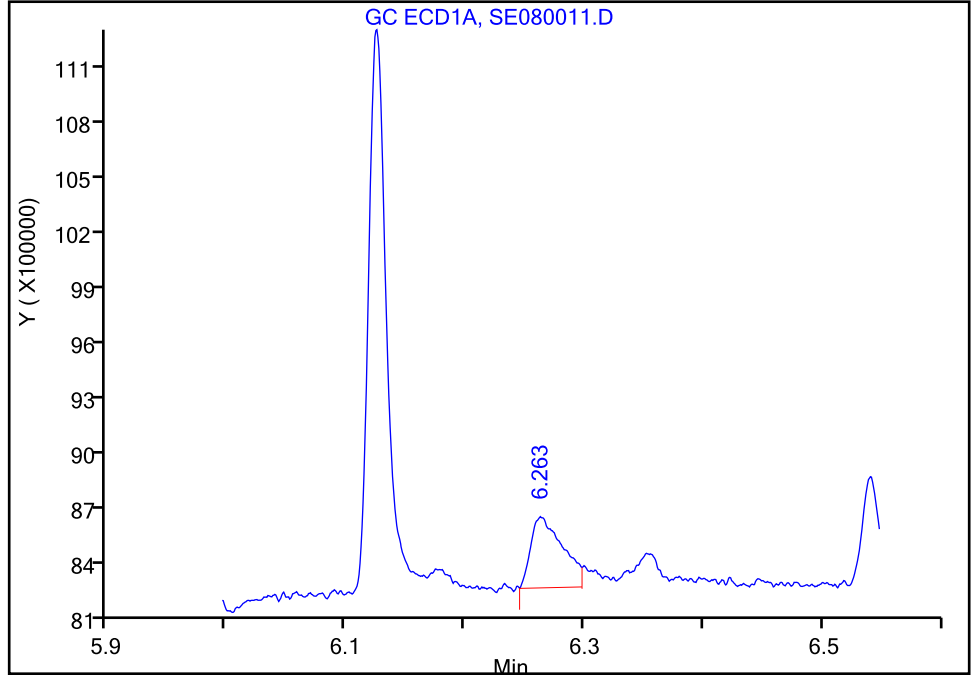
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

5 4-Nitrophenol, CAS: 100-02-7

Signal: 1

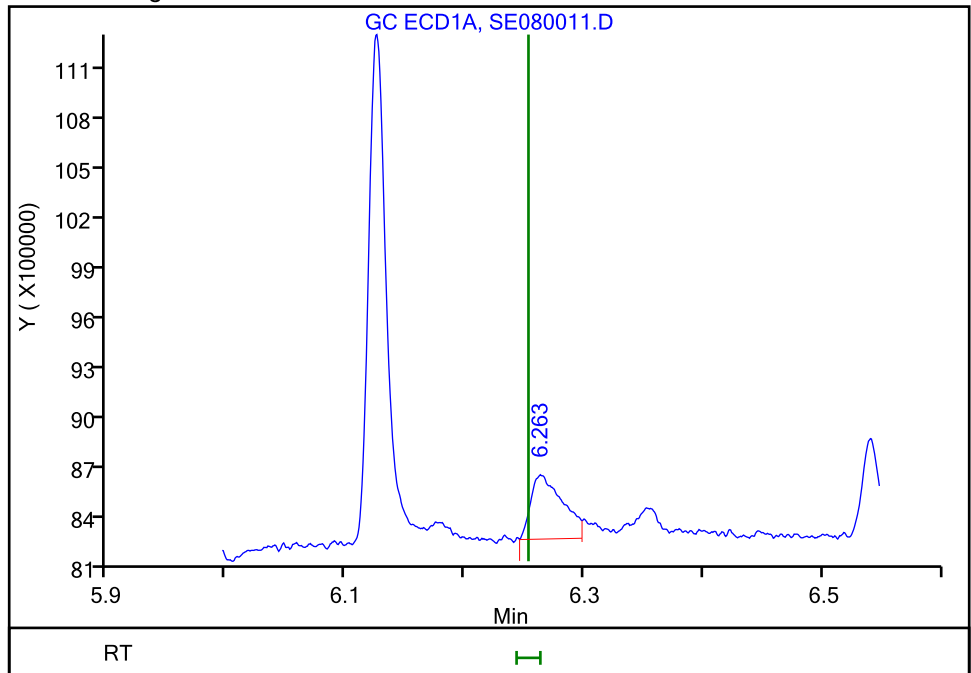
RT: 6.26
Area: 711986
Amount: 0.007640
Amount Units: ug/ml

Processing Integration Results



RT: 6.26
Area: 711986
Amount: 0.007701
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:18
Audit Action: Assigned Compound ID

TestAmerica Savannah

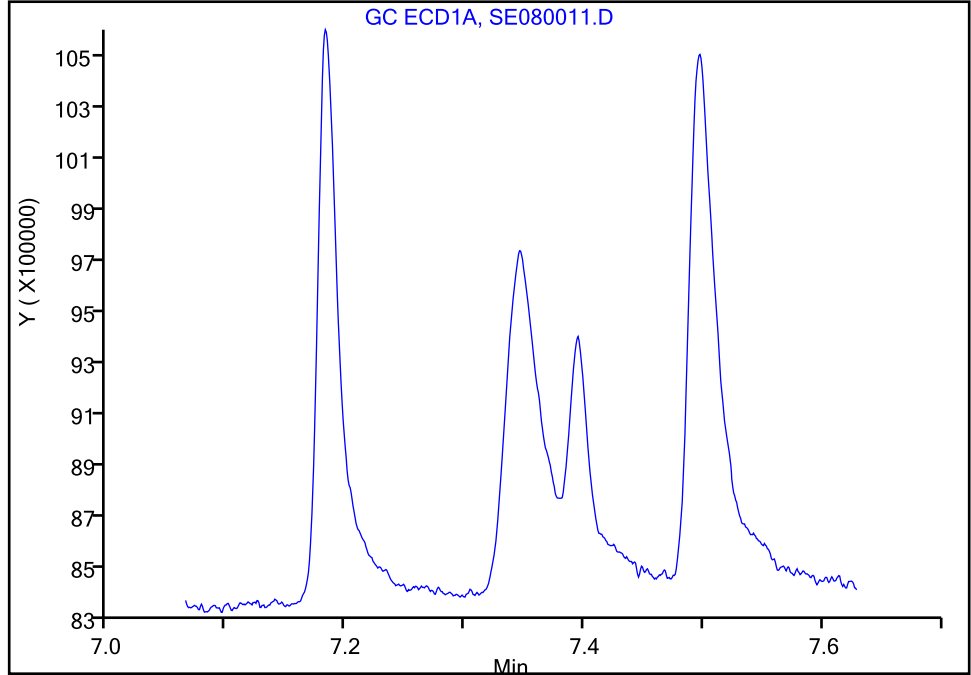
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

11 2,4-D, CAS: 94-75-7

Signal: 1

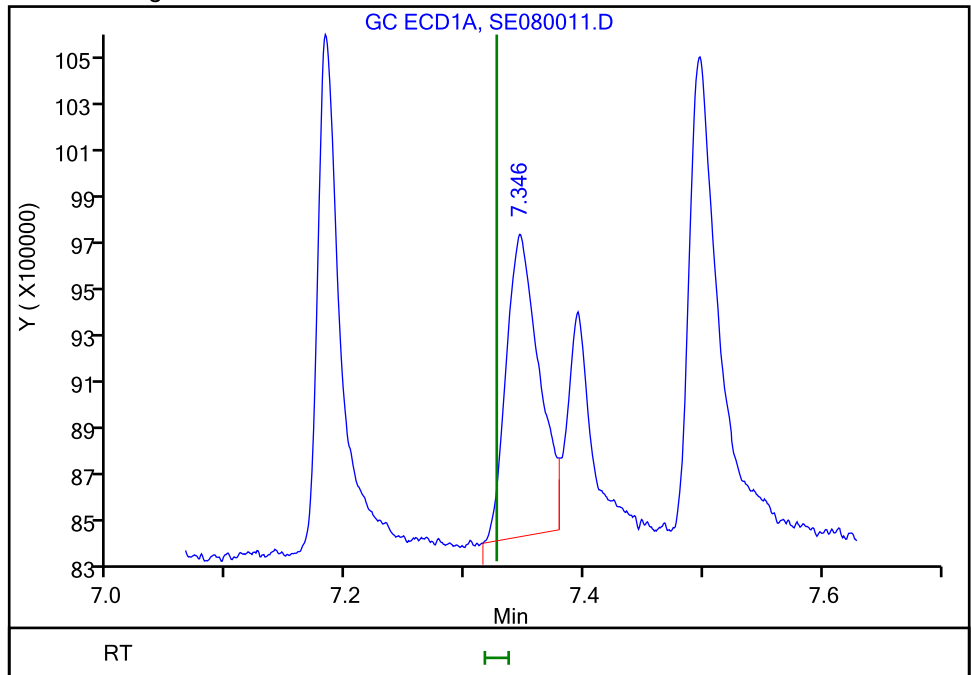
Not Detected
Expected RT: 7.33

Processing Integration Results



Manual Integration Results

RT: 7.35
Area: 2400934
Amount: 0.007940
Amount Units: ug/ml



Reviewer: kellarj, 08-May-2018 16:11:12
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
Page 190 of 414

TestAmerica Savannah

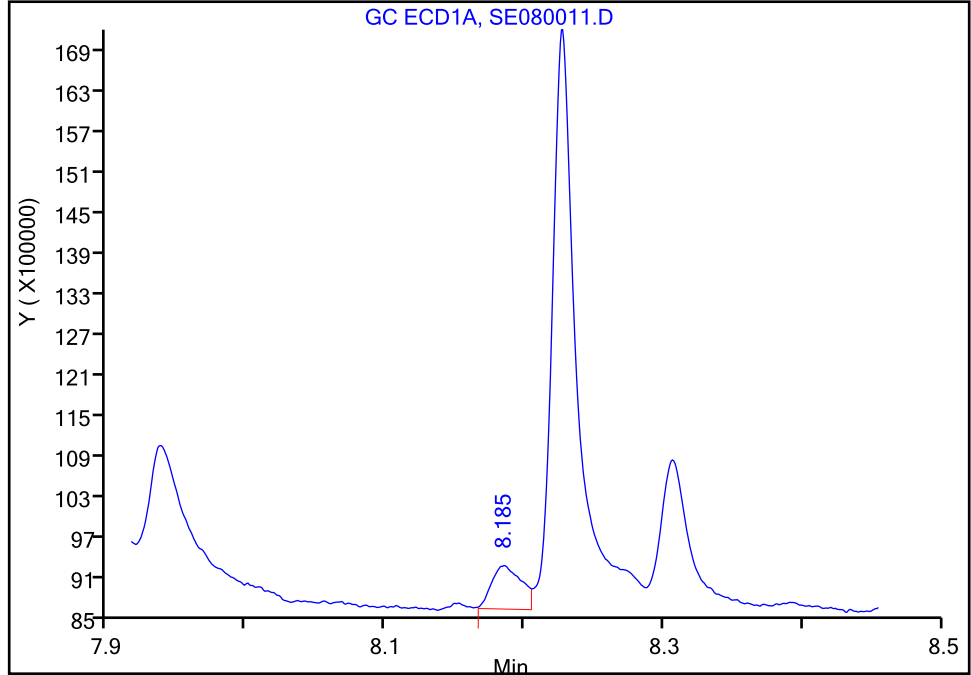
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

16 2,4-DB, CAS: 94-82-6

Signal: 1

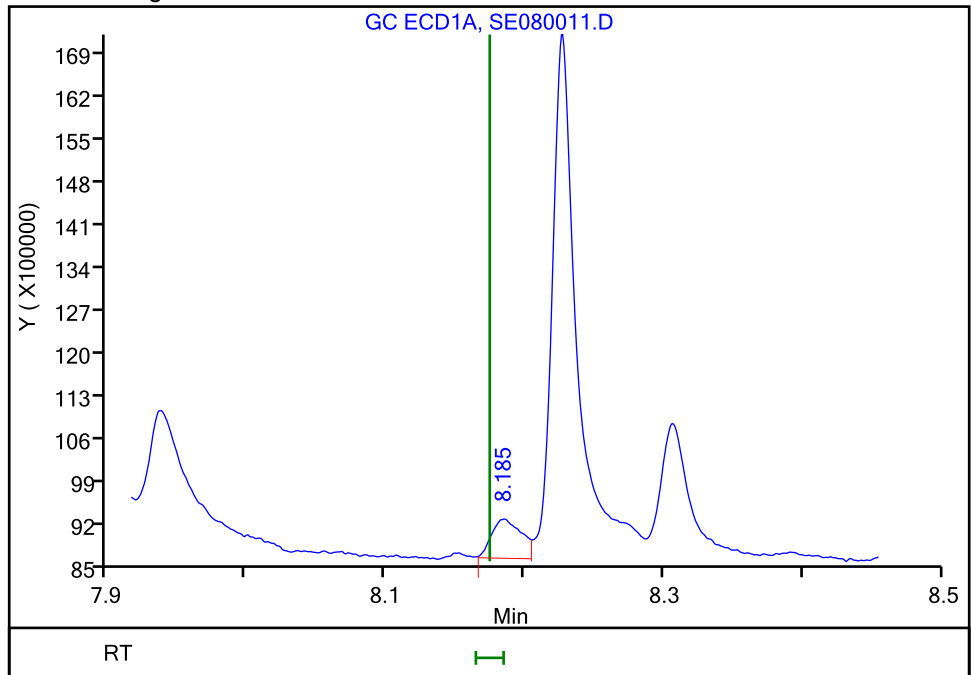
RT: 8.18
Area: 957156
Amount: 0.021175
Amount Units: ug/ml

Processing Integration Results



RT: 8.18
Area: 957156
Amount: 0.019645
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:32

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

TestAmerica Savannah

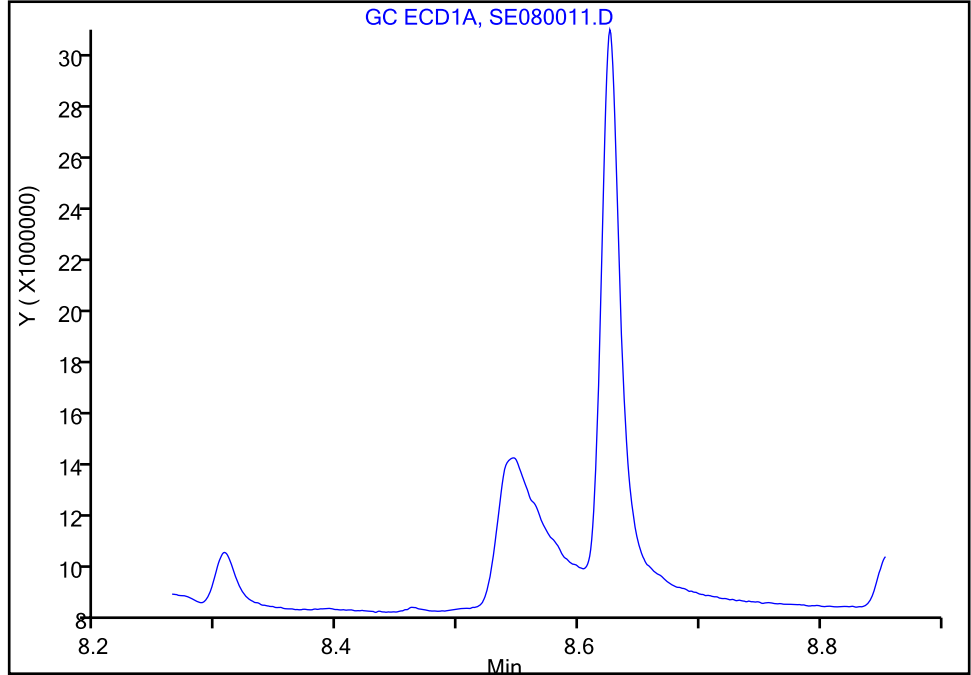
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

19 Picloram, CAS: 1918-02-1

Signal: 1

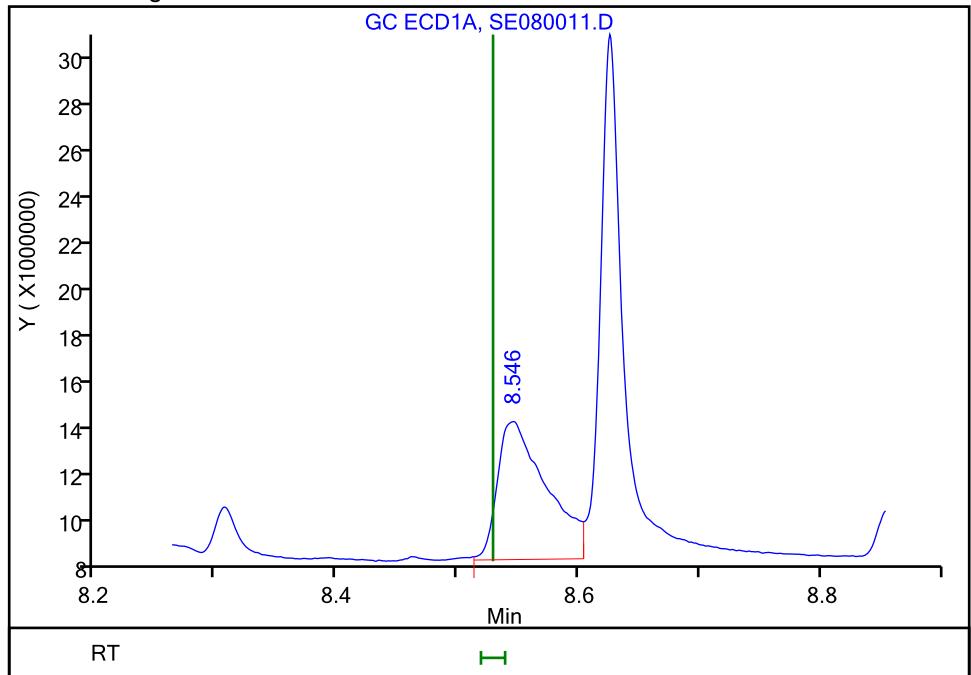
Not Detected
Expected RT: 8.53

Processing Integration Results



Manual Integration Results

RT: 8.55
Area: 16249913
Amount: 0.016709
Amount Units: ug/ml



Calibration

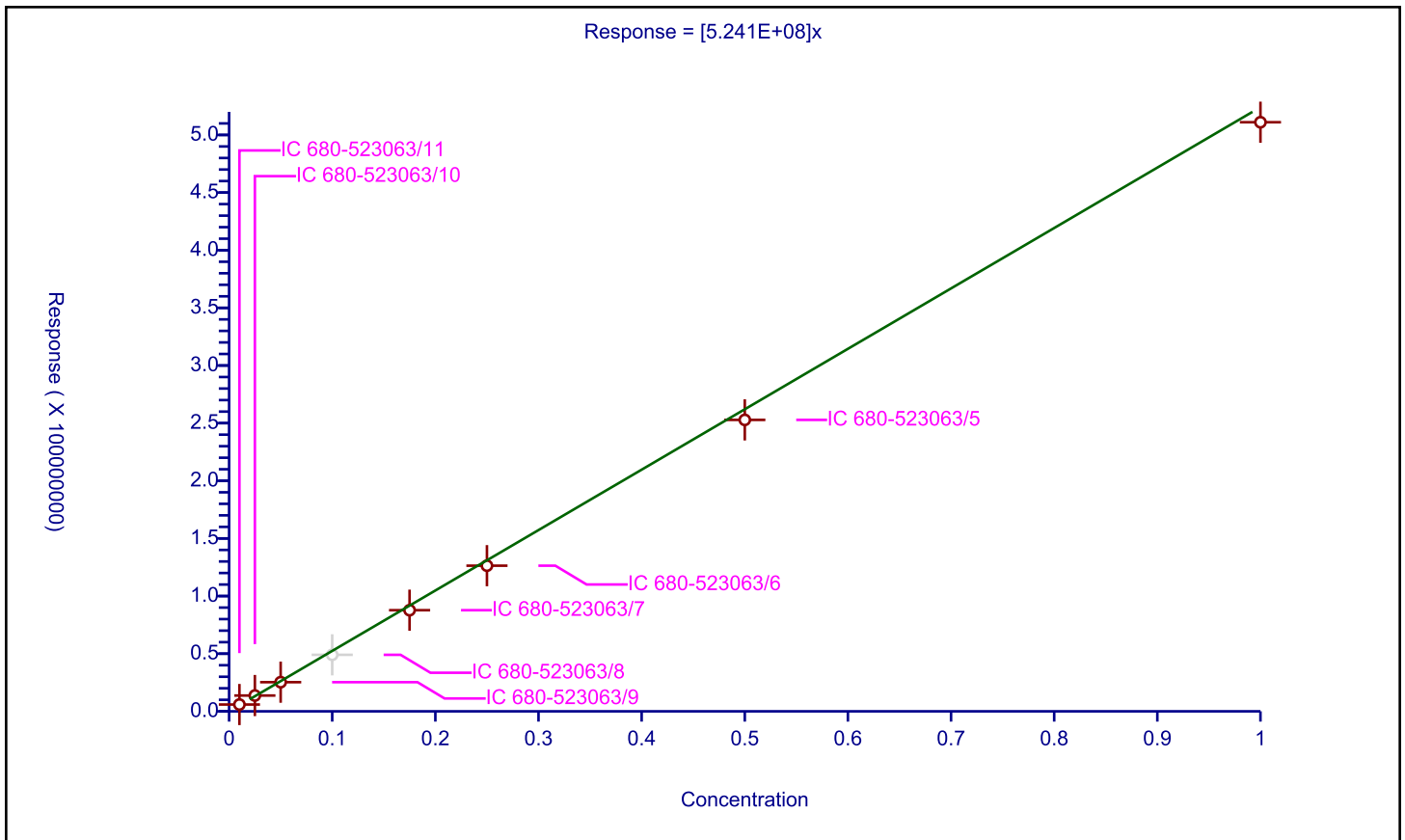
/ Dalapon

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

Curve Coefficients	
Intercept:	0
Slope:	5.241E+08

Error Coefficients	
Standard Error:	7010000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	5906230.0			590623000.0	Y
2	IC 680-523063/10	0.025	13718735.0			548749400.0	Y
3	IC 680-523063/9	0.05	25290814.0			505816280.0	Y
4	IC 680-523063/8	0.1	49026258.0			490262580.0	N
5	IC 680-523063/7	0.175	87735176.0			501343862.857143	Y
6	IC 680-523063/6	0.25	126339938.0			505359752.0	Y
7	IC 680-523063/5	0.5	252815070.0			505630140.0	Y
8	IC 680-523063/4	1.0	511012321.0			511012321.0	Y



Calibration

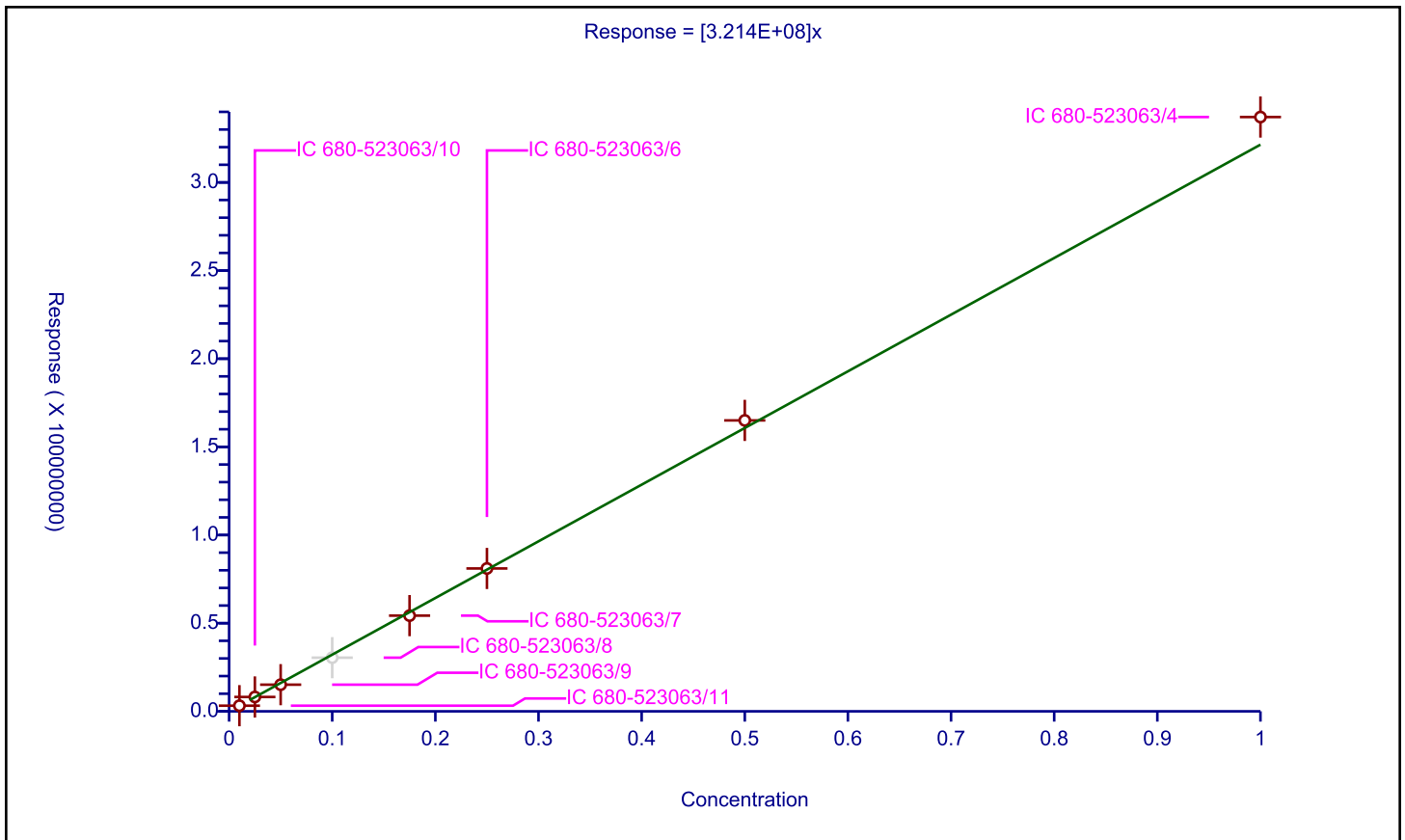
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	3.214E+08

Error Coefficients	
Standard Error:	6690000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	3202229.0			320222900.0	Y
2	IC 680-523063/10	0.025	8148129.0			325925160.0	Y
3	IC 680-523063/9	0.05	15117918.0			302358360.0	Y
4	IC 680-523063/8	0.1	30442227.0			304422270.0	N
5	IC 680-523063/7	0.175	54279812.0			310170354.285714	Y
6	IC 680-523063/6	0.25	81038461.0			324153844.0	Y
7	IC 680-523063/5	0.5	165004902.0			330009804.0	Y
8	IC 680-523063/4	1.0	337068861.0			337068861.0	Y



Calibration

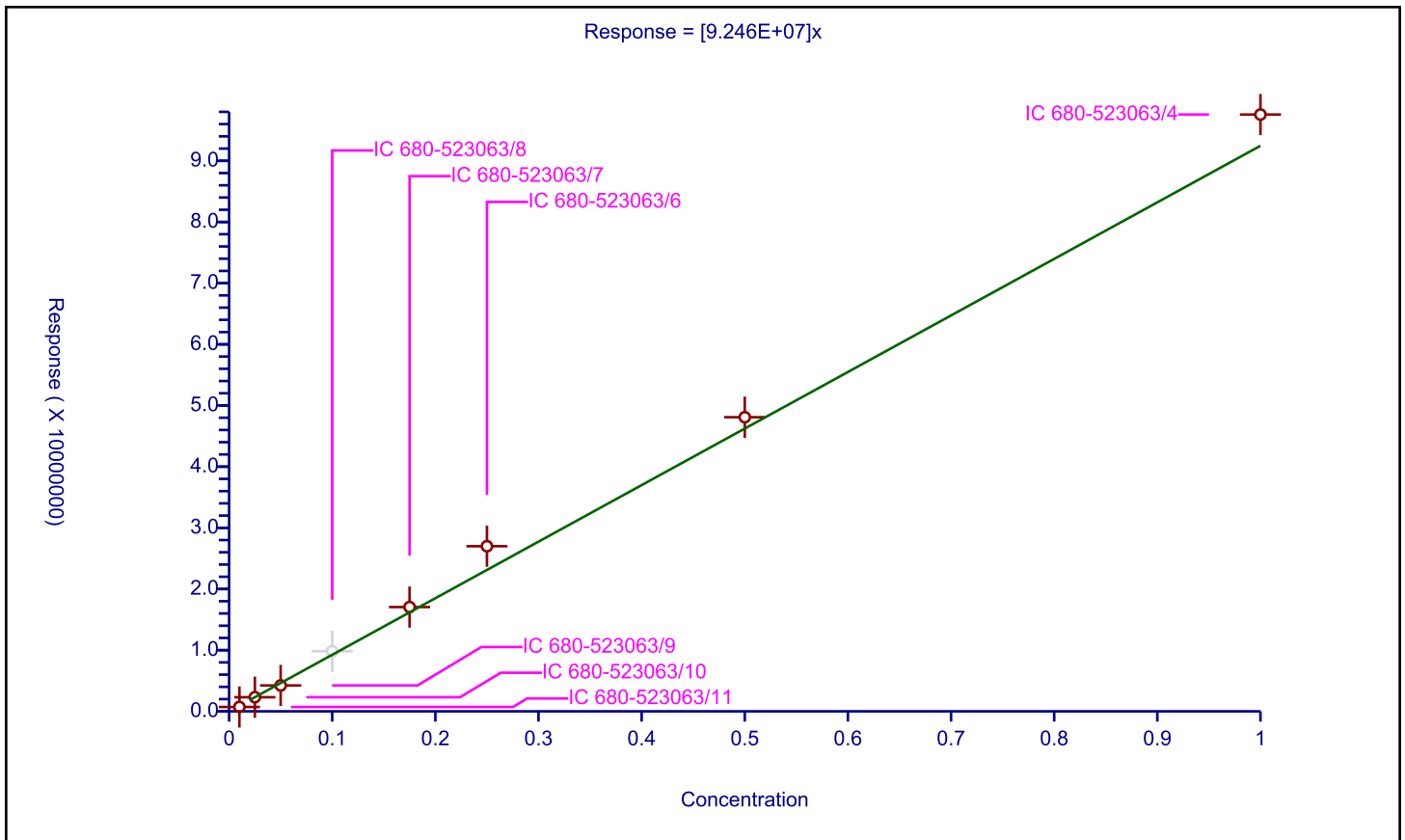
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	9.246E+07

Error Coefficients	
Standard Error:	2750000
Relative Standard Error:	12.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	711986.0			71198600.0	Y
2	IC 680-523063/10	0.025	2307008.0			92280320.0	Y
3	IC 680-523063/9	0.05	4230904.0			84618080.0	Y
4	IC 680-523063/8	0.1	9830837.0			98308370.0	N
5	IC 680-523063/7	0.175	17047628.0			97415017.142857	Y
6	IC 680-523063/6	0.25	26992258.0			107969032.0	Y
7	IC 680-523063/5	0.5	48081748.0			96163496.0	Y
8	IC 680-523063/4	1.0	97562965.0			97562965.0	Y



Calibration

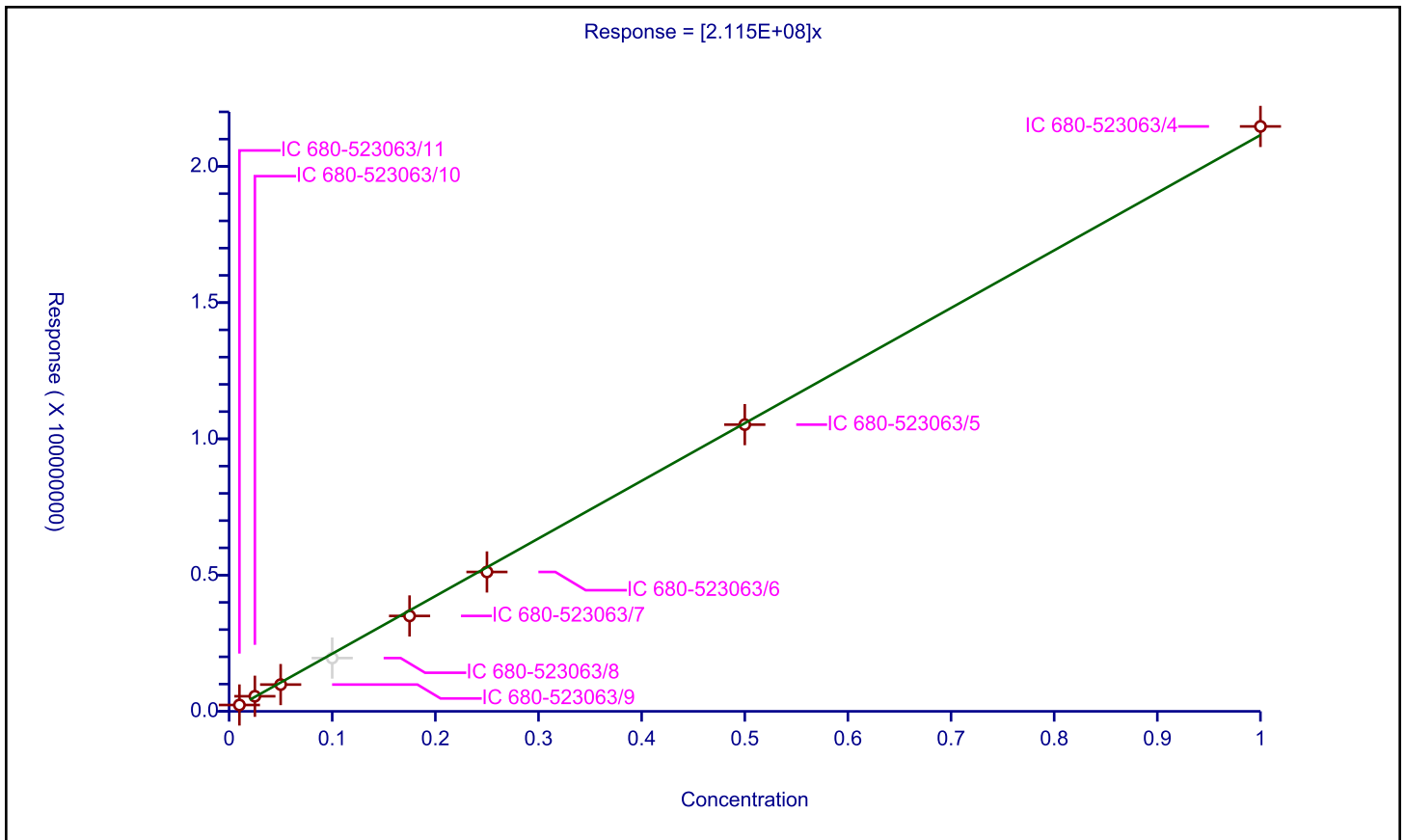
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	2.115E+08

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2325909.0			232590900.0	Y
2	IC 680-523063/10	0.025	5538443.0			221537720.0	Y
3	IC 680-523063/9	0.05	9821711.0			196434220.0	Y
4	IC 680-523063/8	0.1	19553071.0			195530710.0	N
5	IC 680-523063/7	0.175	35013881.0			200079320.0	Y
6	IC 680-523063/6	0.25	51149844.0			204599376.0	Y
7	IC 680-523063/5	0.5	105220295.0			210440590.0	Y
8	IC 680-523063/4	1.0	214663766.0			214663766.0	Y



Calibration

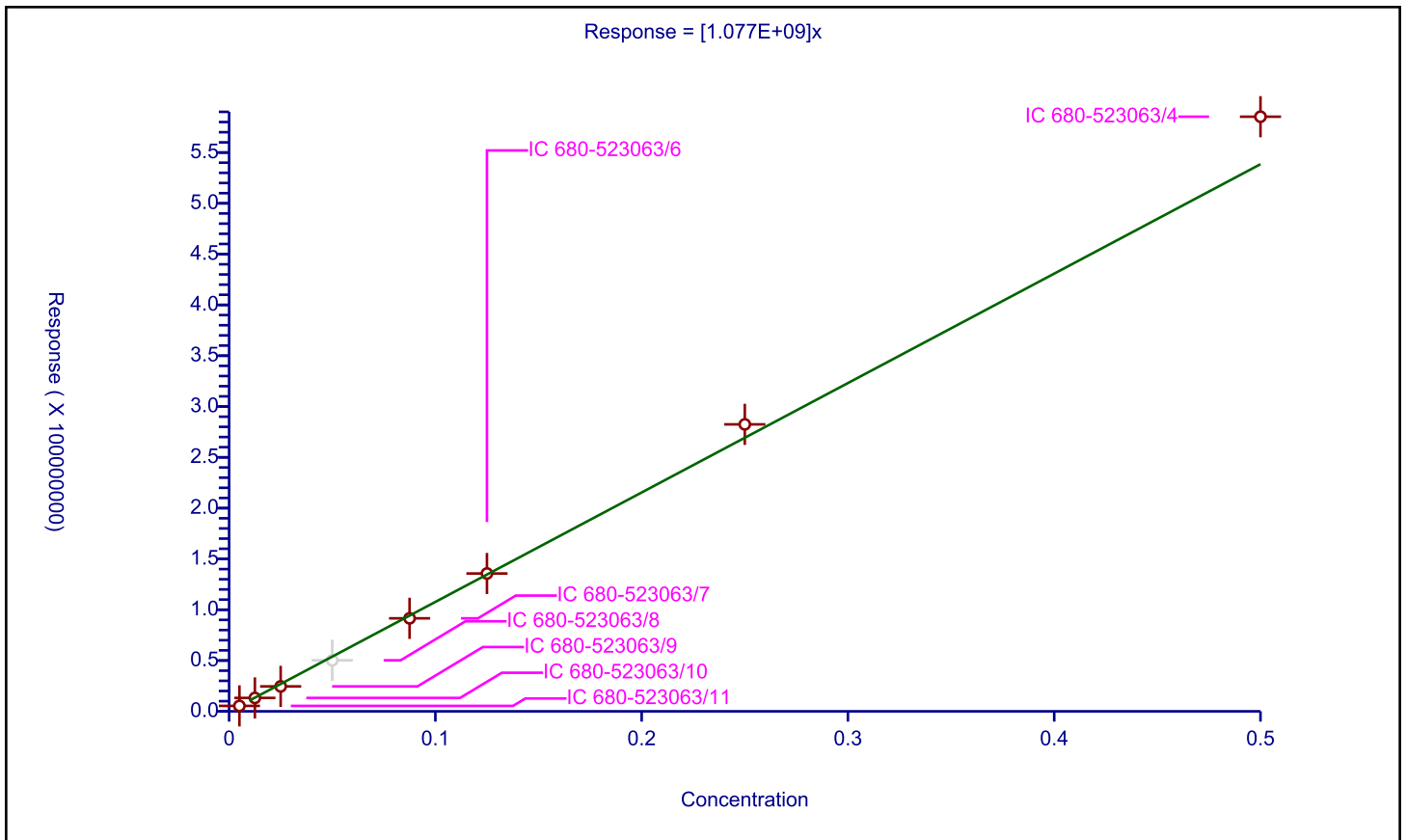
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	1.077E+09

Error Coefficients	
Standard Error:	19900000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.005	5346345.0			1069269000.0	Y
2	IC 680-523063/10	0.0125	13200023.0			1056001840.0	Y
3	IC 680-523063/9	0.025	24549090.0			981963600.0	Y
4	IC 680-523063/8	0.05	50221281.0			1004425620.0	N
5	IC 680-523063/7	0.0875	91550778.0			1046294605.71429	Y
6	IC 680-523063/6	0.125	135663470.0			1085307760.0	Y
7	IC 680-523063/5	0.25	282435535.0			1129742140.0	Y
8	IC 680-523063/4	0.5	585243873.0			1170487746.0	Y



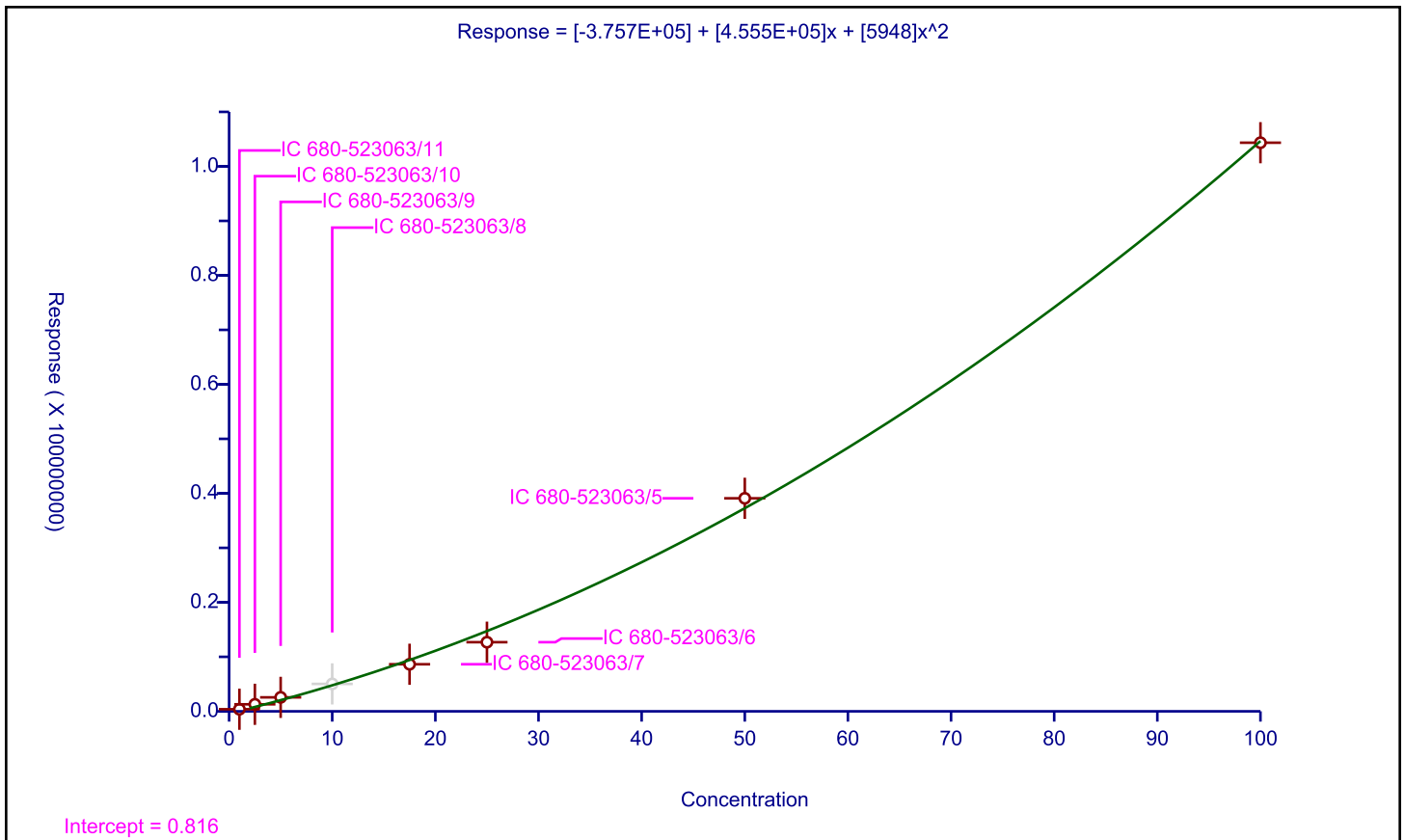
Calibration

Curve Type: Quadratic
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base:
RF Rounding: 0

Curve Coefficients	
Intercept:	-3.757E+05
Slope:	4.555E+05
Second Order:	5948

Error Coefficients	
Standard Error:	1480000
Relative Standard Error:	39.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	383358.0			383358.0	Y
2	IC 680-523063/10	2.5	1288891.0			515556.4	Y
3	IC 680-523063/9	5.0	2565927.0			513185.4	Y
4	IC 680-523063/8	10.0	5032337.0			503233.7	N
5	IC 680-523063/7	17.5	8640069.0			493718.228571	Y
6	IC 680-523063/6	25.0	12687646.0			507505.84	Y
7	IC 680-523063/5	50.0	39090261.0			781805.22	Y
8	IC 680-523063/4	100.0	104343971.0			1043439.71	Y



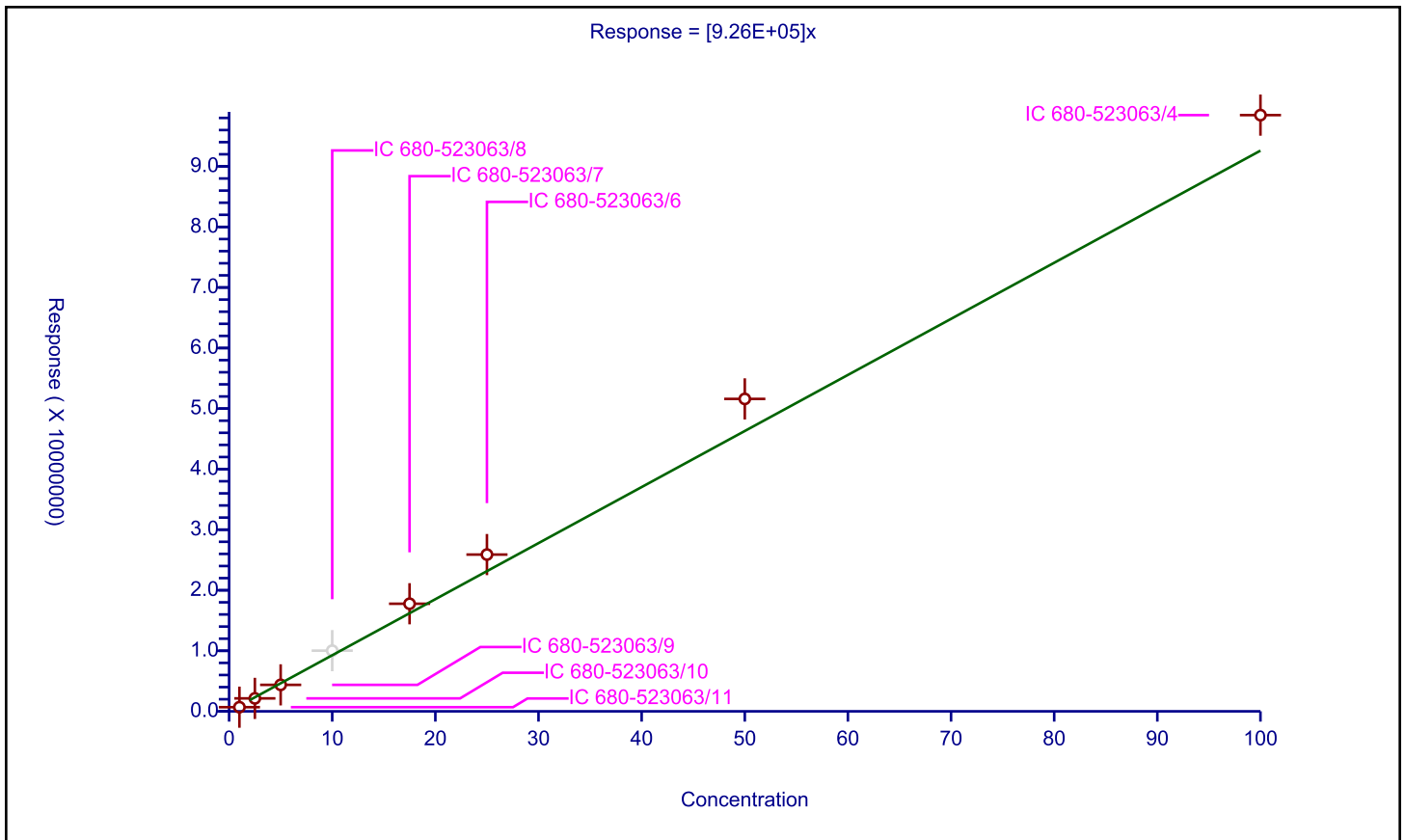
Calibration

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

Curve Coefficients	
Intercept:	0
Slope:	9.26E+05

Error Coefficients	
Standard Error:	3480000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	684536.0			684536.0	Y
2	IC 680-523063/10	2.5	2137688.0			855075.2	Y
3	IC 680-523063/9	5.0	4373482.0			874696.4	Y
4	IC 680-523063/8	10.0	10021981.0			1002198.1	N
5	IC 680-523063/7	17.5	17766771.0			1015244.057143	Y
6	IC 680-523063/6	25.0	25890792.0			1035631.68	Y
7	IC 680-523063/5	50.0	51596040.0			1031920.8	Y
8	IC 680-523063/4	100.0	98467290.0			984672.9	Y



Calibration

/ Dichlorprop

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

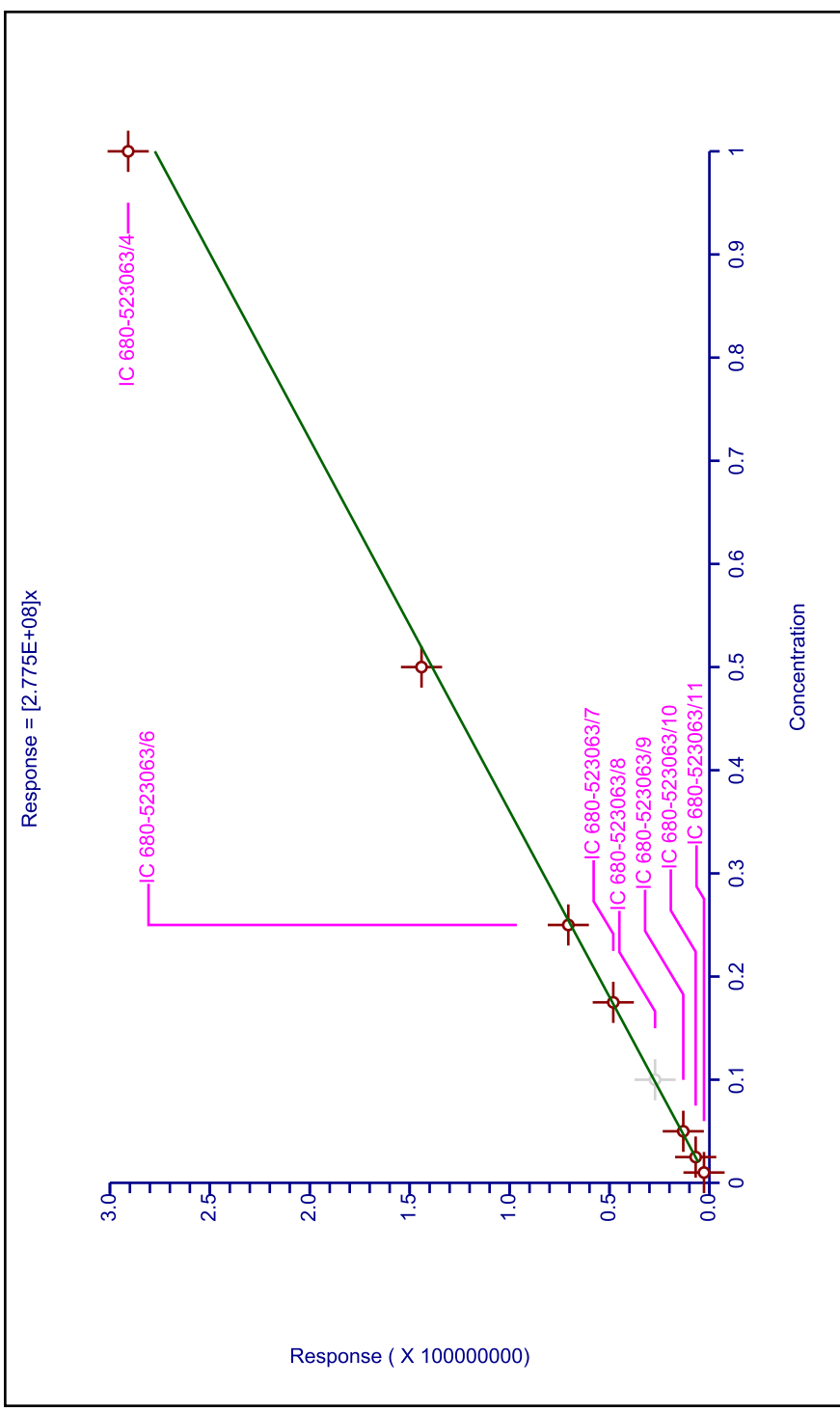
Curve Coefficients

Intercept: 0
 Slope: 2.775E+08

Error Coefficients

Standard Error: 5910000
 Relative Standard Error: 3.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2699462.0			269946200.0	Y
2	IC 680-523063/10	0.025	6871862.0			274874480.0	Y
3	IC 680-523063/9	0.05	13064380.0			261287600.0	Y
4	IC 680-523063/8	0.1	27204673.0			272046730.0	N
5	IC 680-523063/7	0.175	48109296.0			274910262.857143	Y
6	IC 680-523063/6	0.25	70616500.0			282466000.0	Y
7	IC 680-523063/5	0.5	144063420.0			288126840.0	Y
8	IC 680-523063/4	1.0	290874356.0			290874356.0	Y



Calibration

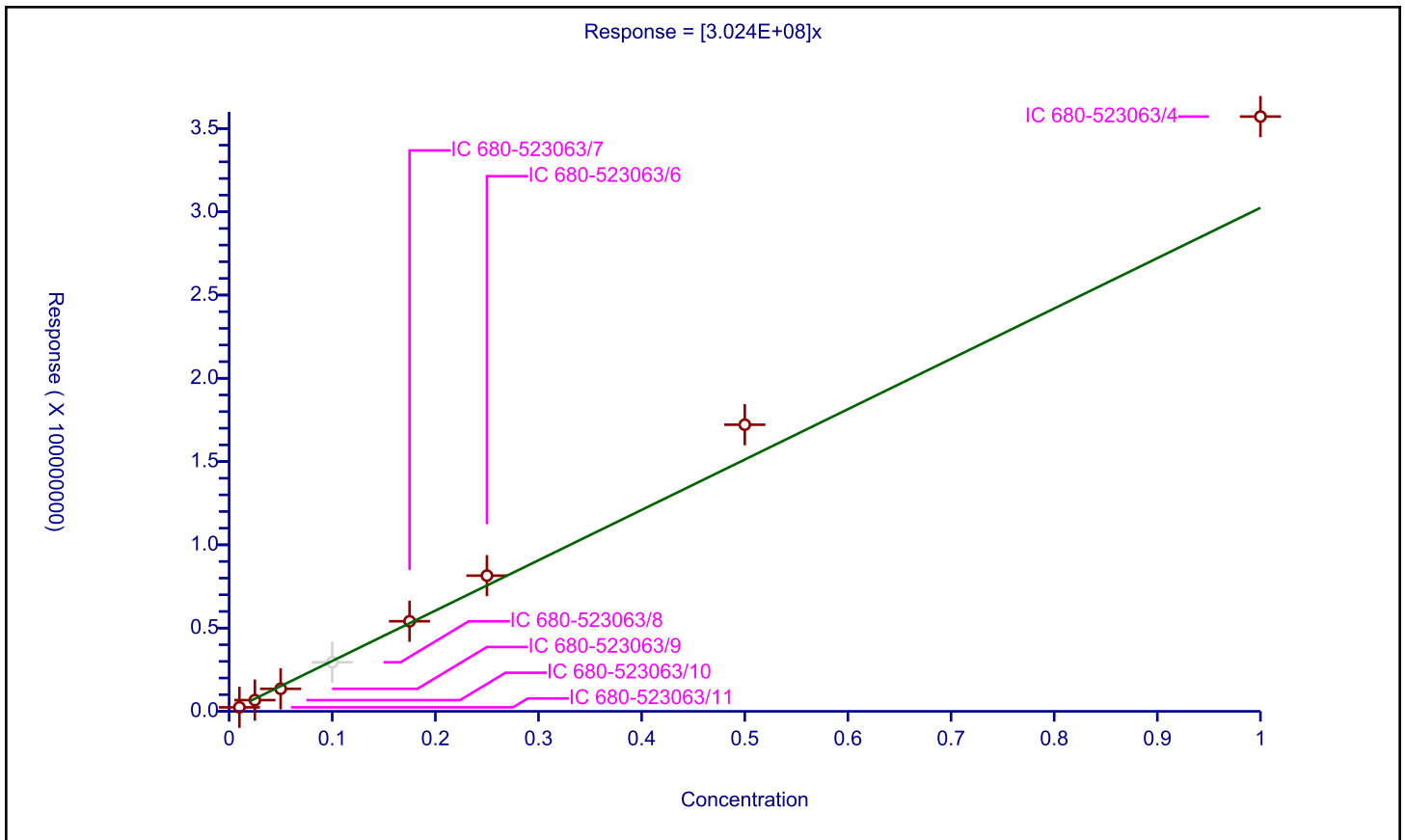
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	3.024E+08

Error Coefficients	
Standard Error:	24100000
Relative Standard Error:	14.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2400934.0			240093400.0	Y
2	IC 680-523063/10	0.025	6740238.0			269609520.0	Y
3	IC 680-523063/9	0.05	13528651.0			270573020.0	Y
4	IC 680-523063/8	0.1	29475053.0			294750530.0	N
5	IC 680-523063/7	0.175	54093373.0			309104988.571429	Y
6	IC 680-523063/6	0.25	81489809.0			325959236.0	Y
7	IC 680-523063/5	0.5	172138047.0			344276094.0	Y
8	IC 680-523063/4	1.0	357181097.0			357181097.0	Y



Calibration

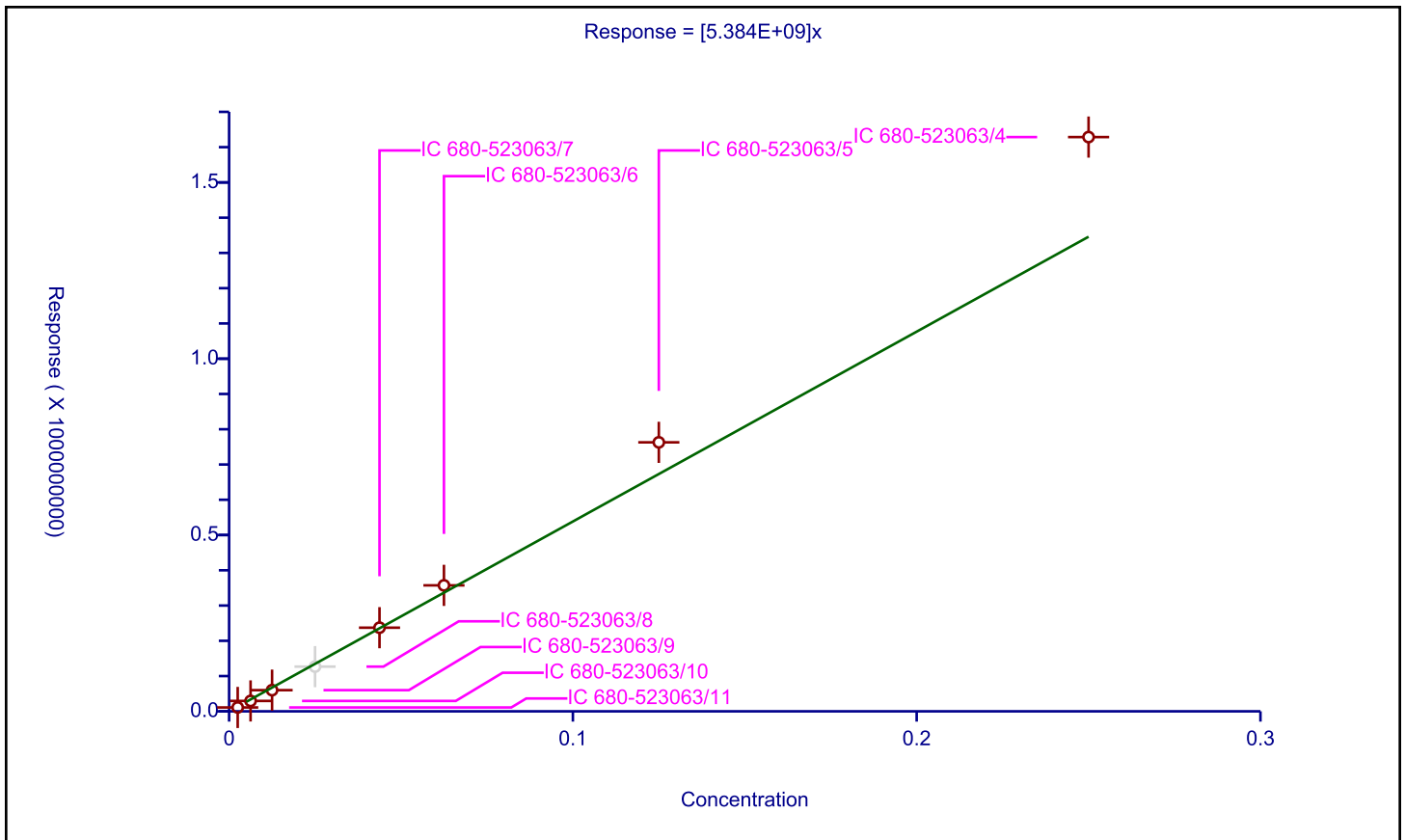
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	5.384E+09

Error Coefficients	
Standard Error:	121000000
Relative Standard Error:	14.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	11008502.0			4403400800.0	Y
2	IC 680-523063/10	0.00625	29521455.0			4723432800.0	Y
3	IC 680-523063/9	0.0125	60060646.0			4804851680.0	Y
4	IC 680-523063/8	0.025	126808590.0			5072343600.0	N
5	IC 680-523063/7	0.04375	237204468.0			5421816411.42857	Y
6	IC 680-523063/6	0.0625	357293439.0			5716695024.0	Y
7	IC 680-523063/5	0.125	762859467.0			6102875736.0	Y
8	IC 680-523063/4	0.25	1628549099.0			6514196396.0	Y



Calibration

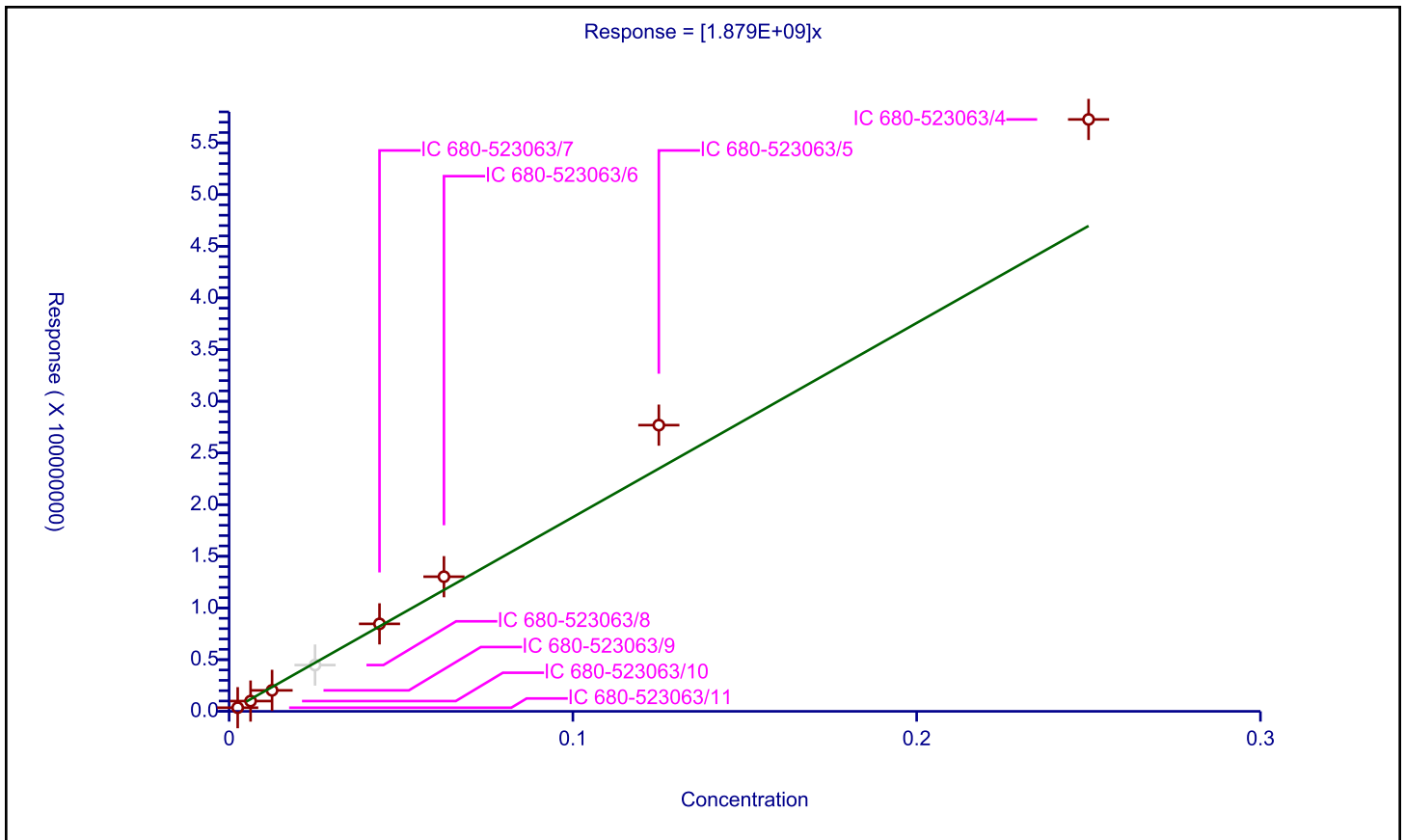
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	1.879E+09

Error Coefficients	
Standard Error:	45800000
Relative Standard Error:	18.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	3531202.0			1412480800.0	Y
2	IC 680-523063/10	0.00625	9932955.0			1589272800.0	Y
3	IC 680-523063/9	0.0125	20302486.0			1624198880.0	Y
4	IC 680-523063/8	0.025	44774730.0			1790989200.0	N
5	IC 680-523063/7	0.04375	84634924.0			1934512548.57143	Y
6	IC 680-523063/6	0.0625	130284362.0			2084549792.0	Y
7	IC 680-523063/5	0.125	276913650.0			2215309200.0	Y
8	IC 680-523063/4	0.25	572693944.0			2290775776.0	Y



Calibration

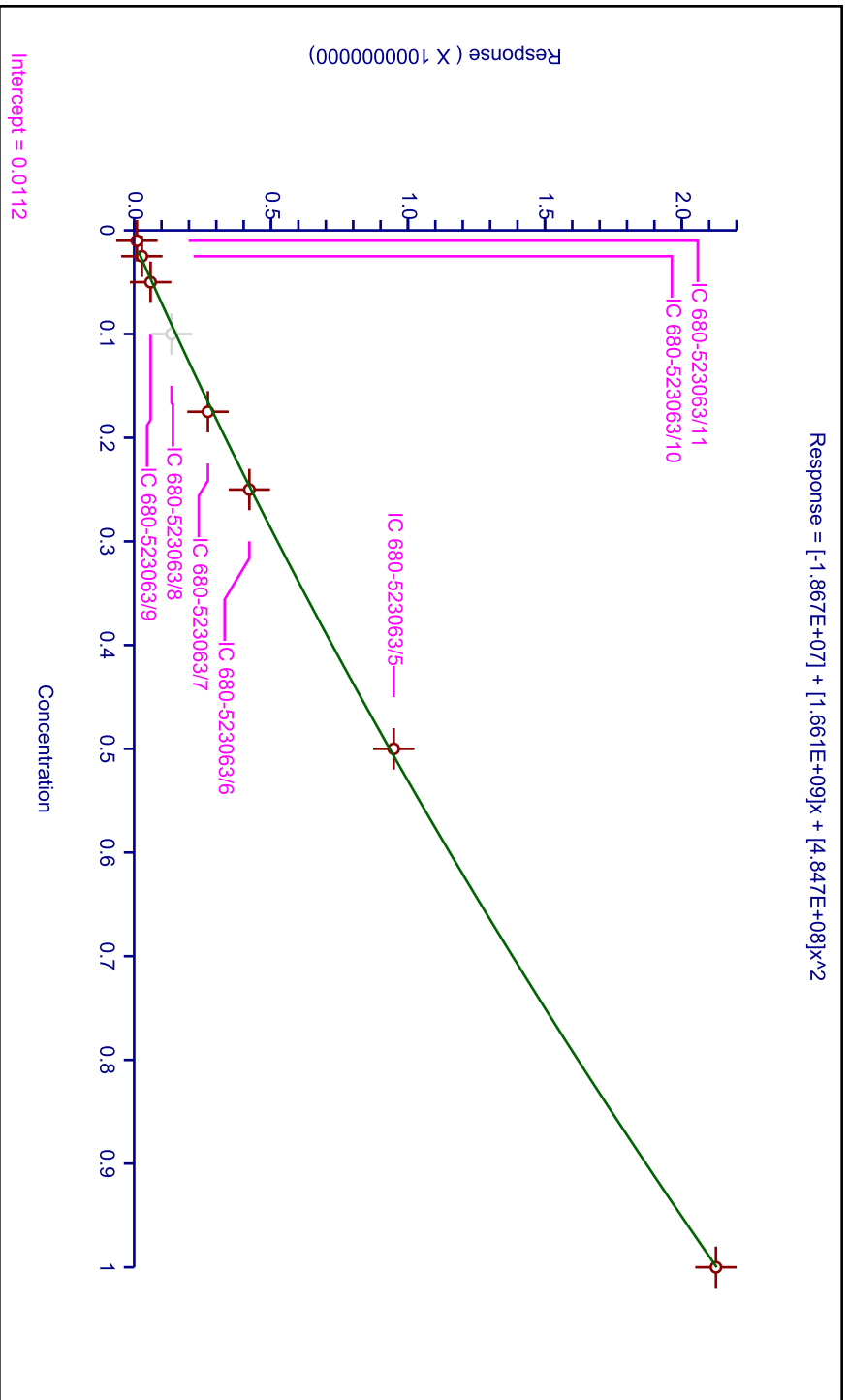
/ Chloramben

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients
 Intercept: -1.867E+07
 Slope: 1.661E+09
 Second Order: 4.847E+08

Error Coefficients
 Standard Error: 139000000
 Relative Standard Error: 37.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10146304.0	1014630400.0	Y	
2	IC 680-523063/10	0.025	28147981.0	1125919240.0	Y	
3	IC 680-523063/9	0.05	60085684.0	1201713680.0	Y	
4	IC 680-523063/8	0.1	136550994.0	1365509940.0	N	
5	IC 680-523063/7	0.175	269520100.0	1540114857.14286	Y	
6	IC 680-523063/6	0.25	420812351.0	1683249404.0	Y	
7	IC 680-523063/5	0.5	948055347.0	1896110694.0	Y	
8	IC 680-523063/4	1.0	2124806109.0	2124806109.0	Y	



Calibration

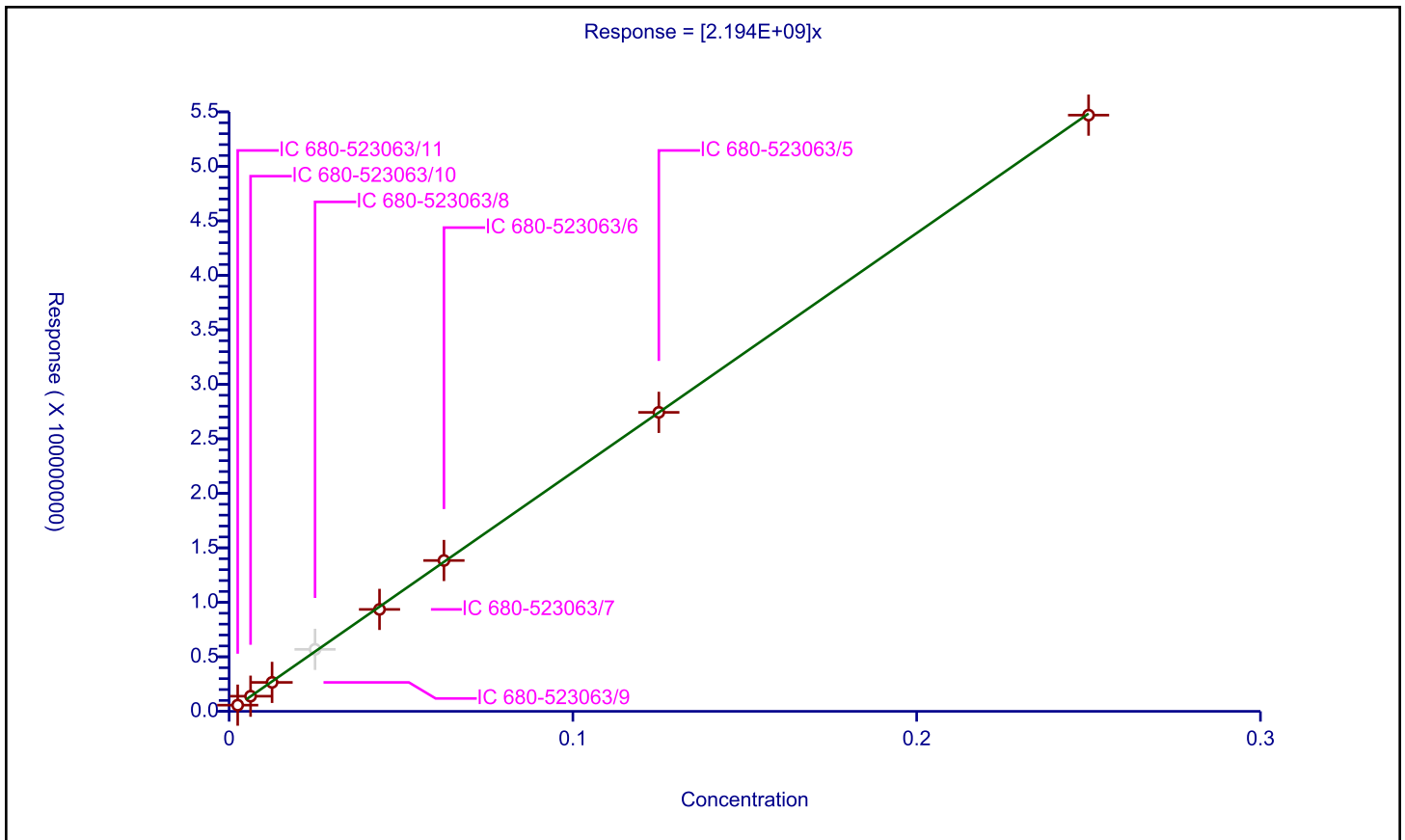
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	2.194E+09

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	5683855.0			2273542000.0	Y
2	IC 680-523063/10	0.00625	13893399.0			2222943840.0	Y
3	IC 680-523063/9	0.0125	26566988.0			2125359040.0	Y
4	IC 680-523063/8	0.025	56867356.0			2274694240.0	N
5	IC 680-523063/7	0.04375	93534318.0			2137927268.57143	Y
6	IC 680-523063/6	0.0625	138404340.0			2214469440.0	Y
7	IC 680-523063/5	0.125	274321777.0			2194574216.0	Y
8	IC 680-523063/4	0.25	547016891.0			2188067564.0	Y



Calibration

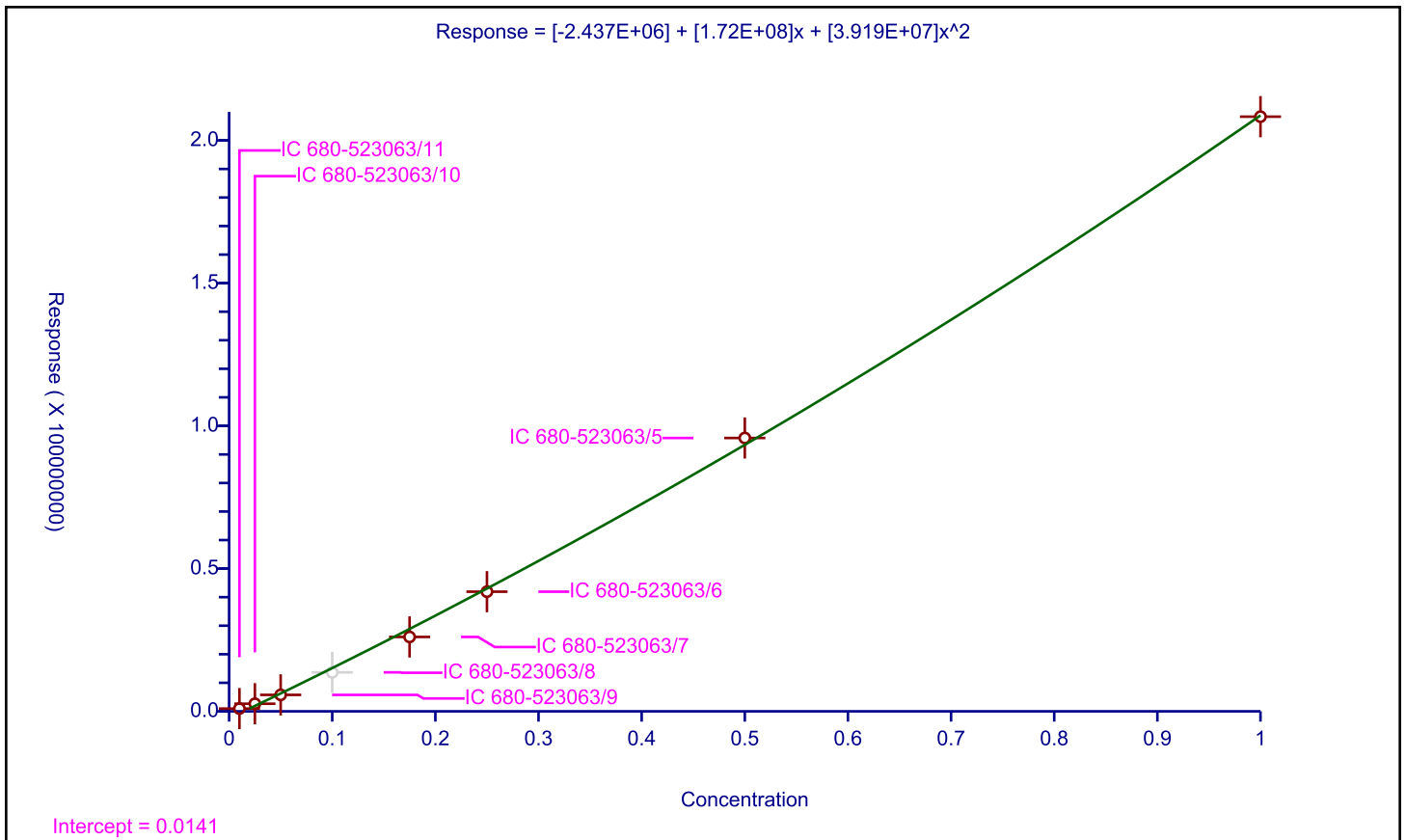
/ 2,4-DB

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.437E+06
Slope:	1.72E+08
Second Order:	3.919E+07

Error Coefficients	
Standard Error:	2160000
Relative Standard Error:	49.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	957156.0			95715600.0	Y
2	IC 680-523063/10	0.025	2666490.0			106659600.0	Y
3	IC 680-523063/9	0.05	5762851.0			115257020.0	Y
4	IC 680-523063/8	0.1	13655211.0			136552110.0	N
5	IC 680-523063/7	0.175	26059778.0			148913017.142857	Y
6	IC 680-523063/6	0.25	41914777.0			167659108.0	Y
7	IC 680-523063/5	0.5	95758632.0			191517264.0	Y
8	IC 680-523063/4	1.0	208315295.0			208315295.0	Y



Calibration

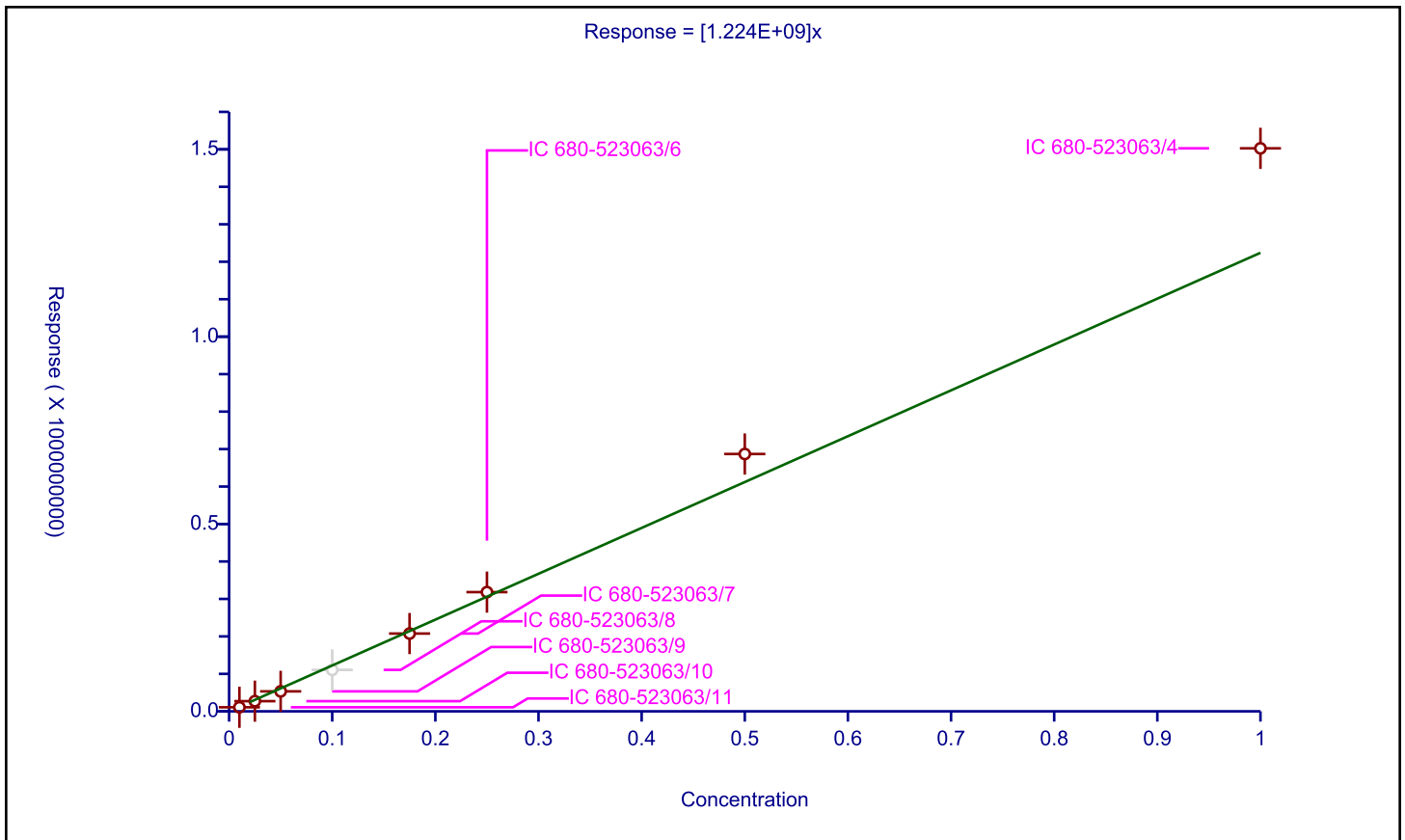
/ Dinoseb

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

Curve Coefficients	
Intercept:	0
Slope:	1.224E+09

Error Coefficients	
Standard Error:	118000000
Relative Standard Error:	13.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10802376.0			1080237600.0	Y
2	IC 680-523063/10	0.025	27141219.0			1085648760.0	Y
3	IC 680-523063/9	0.05	53295649.0			1065912980.0	Y
4	IC 680-523063/8	0.1	110631354.0			1106313540.0	N
5	IC 680-523063/7	0.175	207576561.0			1186151777.14286	Y
6	IC 680-523063/6	0.25	318205530.0			1272822120.0	Y
7	IC 680-523063/5	0.5	686899035.0			1373798070.0	Y
8	IC 680-523063/4	1.0	1502700567.0			1502700567.0	Y



Calibration

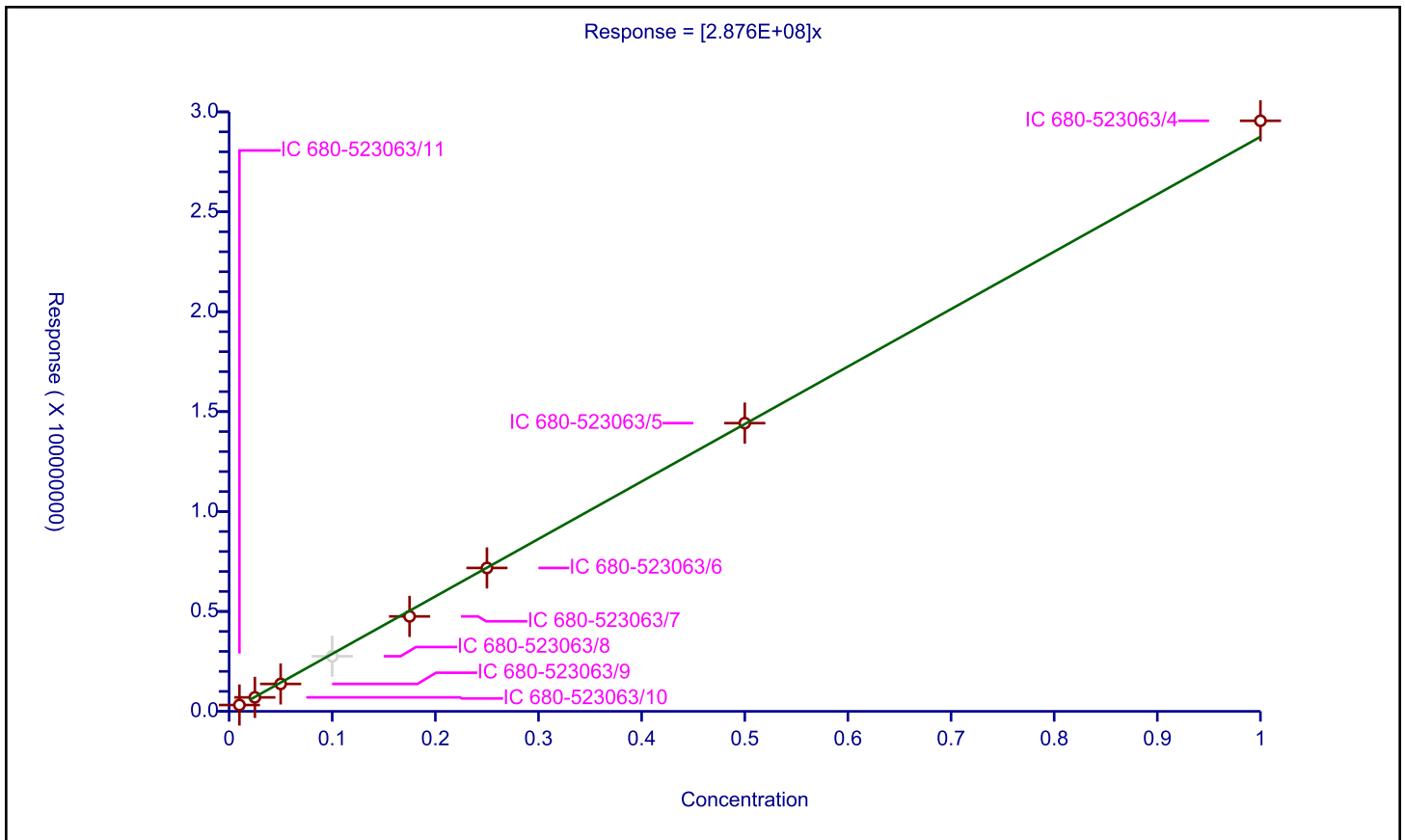
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	2.876E+08

Error Coefficients	
Standard Error:	3480000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	3164677.0			316467700.0	Y
2	IC 680-523063/10	0.025	6986266.0			279450640.0	Y
3	IC 680-523063/9	0.05	13719455.0			274389100.0	Y
4	IC 680-523063/8	0.1	27567147.0			275671470.0	N
5	IC 680-523063/7	0.175	47511232.0			271492754.285714	Y
6	IC 680-523063/6	0.25	71761268.0			287045072.0	Y
7	IC 680-523063/5	0.5	144238238.0			288476476.0	Y
8	IC 680-523063/4	1.0	295542031.0			295542031.0	Y



Calibration

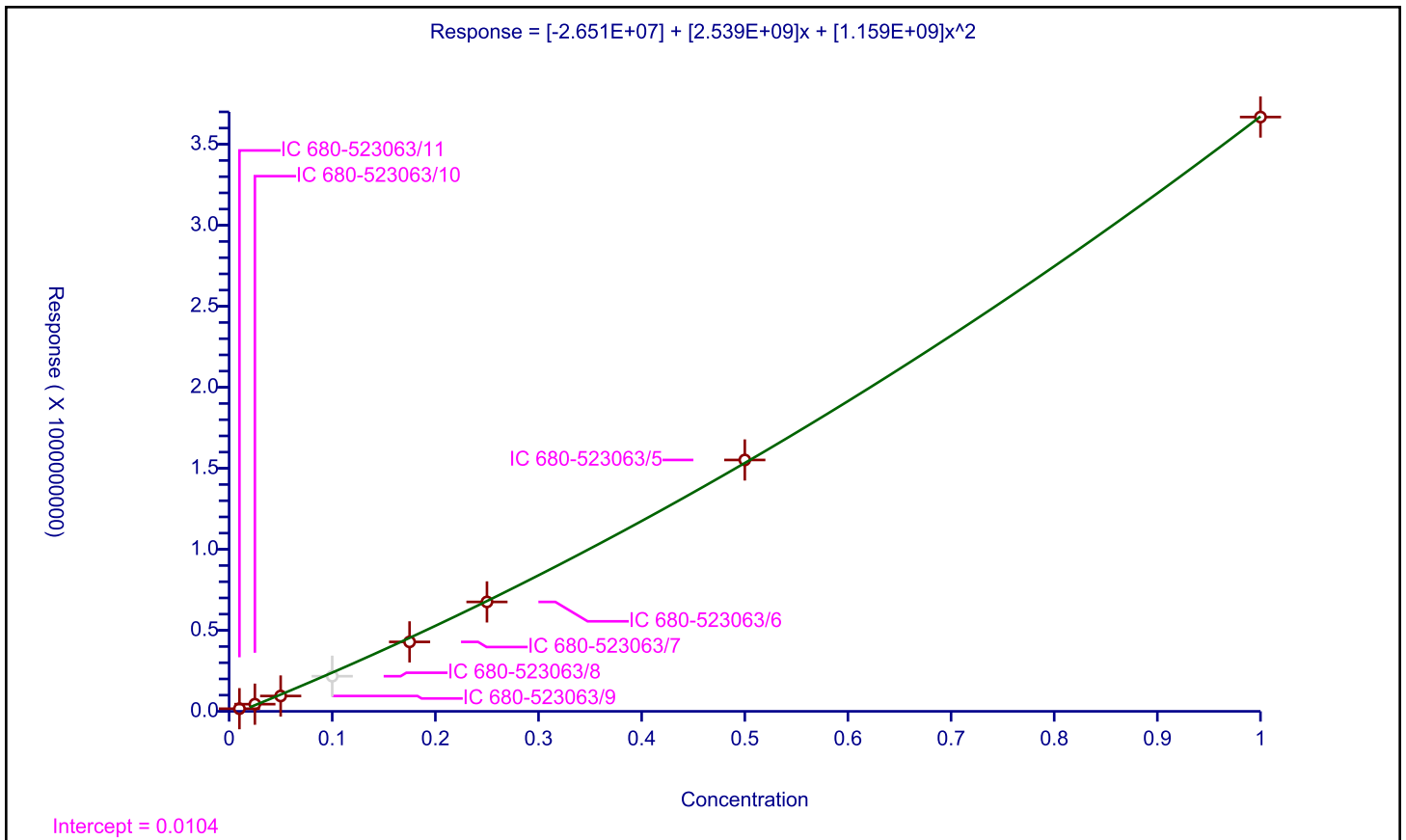
/ Picloram

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.651E+07
Slope:	2.539E+09
Second Order:	1.159E+09

Error Coefficients	
Standard Error:	18800000
Relative Standard Error:	34.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	16249913.0			1624991300.0	Y
2	IC 680-523063/10	0.025	44134008.0			1765360320.0	Y
3	IC 680-523063/9	0.05	94759287.0			1895185740.0	Y
4	IC 680-523063/8	0.1	216808821.0			2168088210.0	N
5	IC 680-523063/7	0.175	428630902.0			2449319440.0	Y
6	IC 680-523063/6	0.25	675298882.0			2701195528.0	Y
7	IC 680-523063/5	0.5	1551637070.0			3103274140.0	Y
8	IC 680-523063/4	1.0	3668133130.0			3668133130.0	Y



Calibration

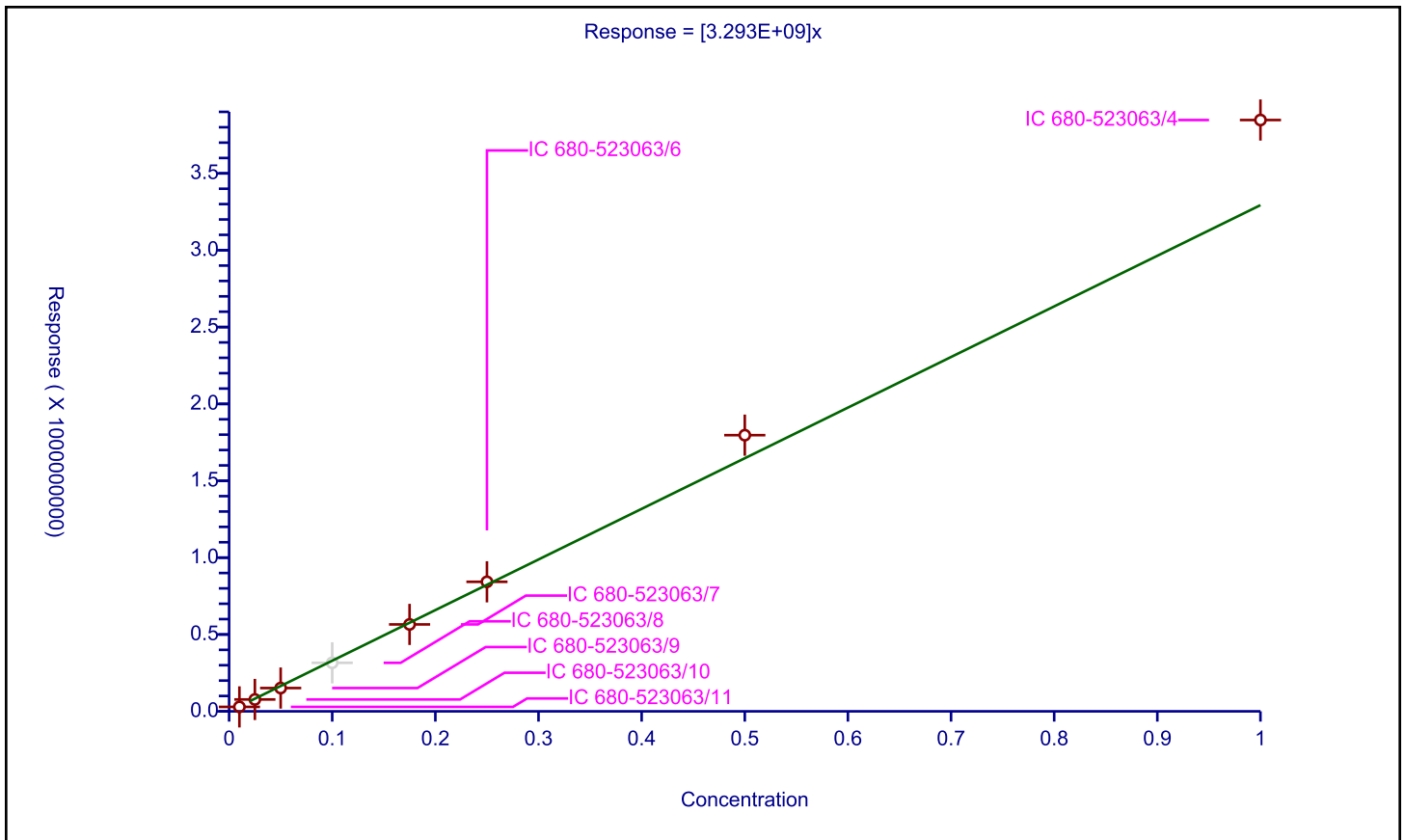
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	3.293E+09

Error Coefficients	
Standard Error:	235000000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	28939470.0			2893947000.0	Y
2	IC 680-523063/10	0.025	77163736.0			3086549440.0	Y
3	IC 680-523063/9	0.05	151449071.0			3028981420.0	Y
4	IC 680-523063/8	0.1	315619469.0			3156194690.0	N
5	IC 680-523063/7	0.175	565445884.0			3231119337.14286	Y
6	IC 680-523063/6	0.25	842695237.0			3370780948.0	Y
7	IC 680-523063/5	0.5	1796815722.0			3593631444.0	Y
8	IC 680-523063/4	1.0	3847093339.0			3847093339.0	Y



Calibration

/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

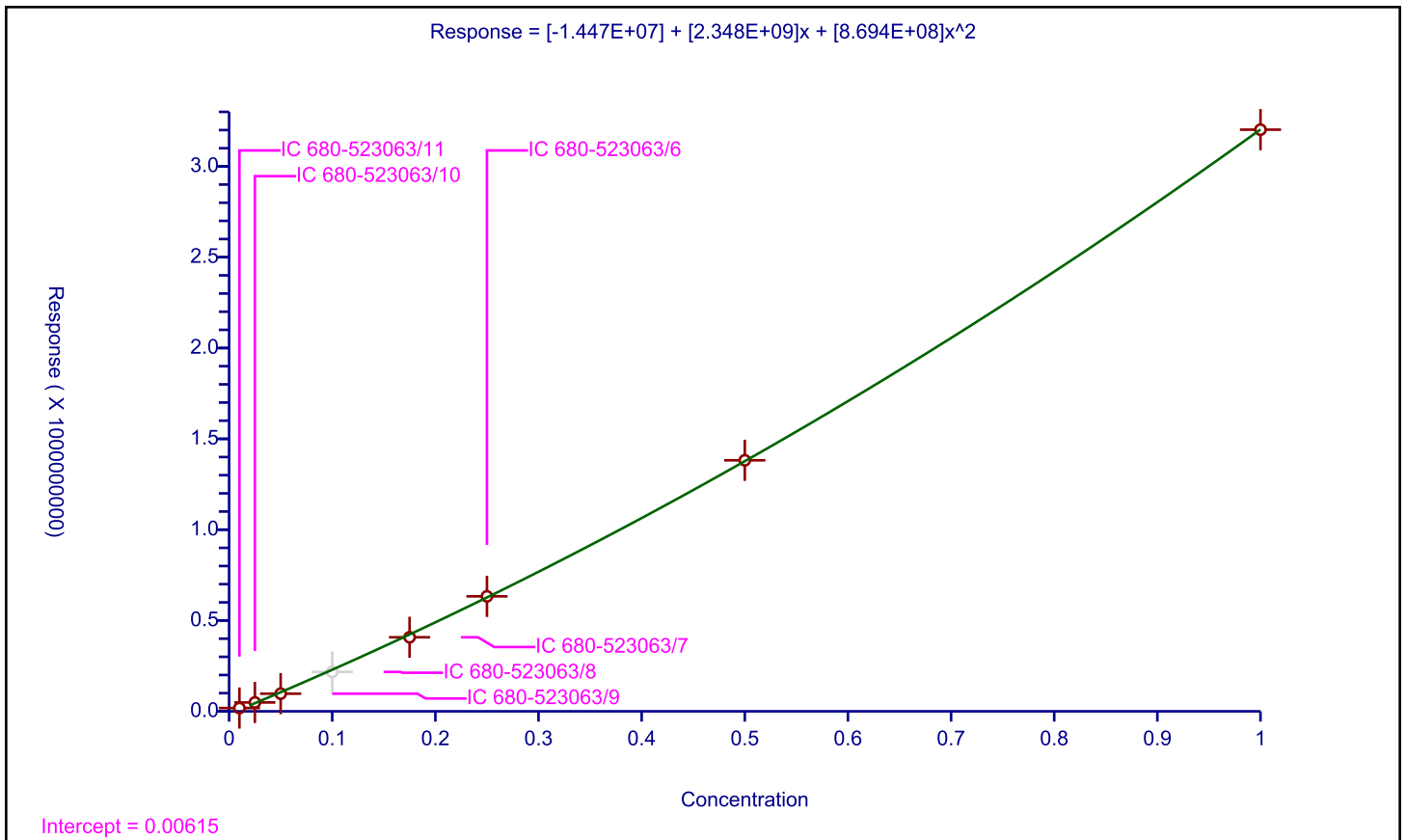
Curve Coefficients

Intercept: -1.447E+07
 Slope: 2.348E+09
 Second Order: 8.694E+08

Error Coefficients

Standard Error: 10800000
 Relative Standard Error: 19.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	18199991.0			1819999100.0	Y
2	IC 680-523063/10	0.025	48982390.0			1959295600.0	Y
3	IC 680-523063/9	0.05	97225812.0			1944516240.0	Y
4	IC 680-523063/8	0.1	217026310.0			2170263100.0	N
5	IC 680-523063/7	0.175	407675485.0			2329574200.0	Y
6	IC 680-523063/6	0.25	633038479.0			2532153916.0	Y
7	IC 680-523063/5	0.5	1382056162.0			2764112324.0	Y
8	IC 680-523063/4	1.0	3202033523.0			3202033523.0	Y



FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____
 Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.633	2.632	2.632	++++	2.633	2.633	2.634	2.635	2.612 - 2.652	2.633
3,5-Dichlorobenzoic acid	6.119	6.118	6.116	++++	6.116	6.117	6.116	6.118	6.106 - 6.126	6.117
4-Nitrophenol	6.516	6.511	6.506	++++	6.504	6.503	6.503	6.503	6.495 - 6.515	6.507
Dicamba	6.911	6.910	6.909	++++	6.911	6.911	6.911	6.914	6.900 - 6.920	6.911
MCPP	6.956	6.955	6.955	++++	6.955	6.956	6.957	6.960	6.945 - 6.965	6.956
MCPA	7.156	7.155	7.154	++++	7.153	7.155	7.157	7.161	7.145 - 7.165	7.156
Dichlorprop	7.299	7.298	7.297	++++	7.296	7.298	7.298	7.300	7.287 - 7.307	7.298
2,4-D	7.531	7.524	7.520	++++	7.515	7.516	7.515	7.517	7.507 - 7.527	7.520
Pentachlorophenol	7.713	7.713	7.713	++++	7.713	7.715	7.716	7.718	7.704 - 7.724	7.714
Silvex (2,4,5-TP)	7.851	7.850	7.846	++++	7.845	7.846	7.846	7.848	7.836 - 7.856	7.847
2,4,5-T	8.089	8.090	8.086	++++	8.080	8.079	8.080	8.082	8.073 - 8.093	8.084
Chloramben	8.171	8.167	8.164	++++	8.159	8.159	8.160	8.161	8.152 - 8.172	8.163
Dinoseb	8.251	8.250	8.248	++++	8.246	8.248	8.250	++++	8.238 - 8.258	8.249
2,4-DB	8.312	8.308	8.305	++++	8.298	8.298	8.297	8.298	8.292 - 8.312	8.302
Bentazon	8.665	8.665	8.663	++++	8.661	8.661	8.663	8.664	8.652 - 8.672	8.663
Tetrathalic acid, tetrachloro-, dimethyl ester	8.777	8.776	8.775	++++	8.776	8.778	8.779	++++	8.765 - 8.785	8.777
Picloram	9.014	9.011	9.009	++++	9.005	9.005	9.005	9.011	8.995 - 9.015	9.009
Acifluorfen	9.794	9.795	9.791	++++	9.791	9.793	9.794	++++	9.782 - 9.802	9.793
2,4-Dichlorophenylacetic acid (Surr)	6.831	6.830	6.829	++++	6.829	6.829	6.830	6.831	6.819 - 6.839	6.830

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT		MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2										
Dalapon	1798315000 1517639326	1597318040 1635156782	1427568040 1725206867	++++ 1725206867				Ave	1611774466		7.7	20.0					
3,5-Dichlorobenzoic acid	1837751300 1719390389	1760637040 1795246728	1650502760 1861053578	++++ 1954171685				Ave	1796964783		5.5	20.0					
4-Nitrophenol	250653100 298246994	296649000 310426996	284918460 317392232	++++ 334991246				Ave	299039718		9.0	20.0					
Dicamba	4724154000 4909954011	4686290000 5207323320	4534968280 5388006568	++++ 5612732658				Ave	5009061262		8.0	20.0					
MCPP	7884133 4400635	6527974 4455255	5267855 4112711	++++ 4449376				Lin2	3788366.60				0.9920				0.9900
MCPA	12132999 6957302	9867461 7087687	8095742 7726907	++++ 11515156				QuaF	4913346.02	65572.7829			0.9990				0.9900
Dichlorprop	1530191200 1322496080	1346912320 1409029084	1248497660 1439600954	++++ 15719666456				Ave	1409813393		8.2	20.0					
2,4-D	1455119800 1556427354	1427833320 1676989976	1378379440 1771254978	++++ 1888747044				Ave	1593535987		12.0	20.0					
Pentachlorophenol	1646620640 1921739510	1720147248 2048464640	1719712904 2107629800	++++ 2001760539				Ave	1.88087 E+010		9.8	20.0					
Silvex (2,4,5-TP)	6485508800 7411297737	6285531520 8011168944	6291178480 8488161760	++++ 8766407800				Ave	7391322149		14.3	20.0					
2,4,5-T	5682918800 6570901349	5548829280 7200468352	5460540320 7796556056	++++ 8265532020				Ave	6646535168		17.2	20.0					
Chloramben	4517941700 5823723000	4700489400 6340874844	4806727860 6796592718	++++ 6392220091				Ave	5625509945		16.6	20.0					
Dinoseb	3007780400 3932806634	3092280280 4418115380	3099206900 4877825682	++++ 4877825682				Lin1	-31374720	4635917151			0.9910				0.9900

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

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Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

ANALYTE	CF				CURVE TYPE	B	COEFFICIENT		MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8			M1	M2							
2,4-DB	1087197600 952251726	1042060800 938110360	932485740 949664730	1002259721 1002259721	Ave		986290097		6.0		20.0				
Bentazon	780397900 785549754	726060480 836756404	711301340 879775606	907942100 907942100	Ave		803969083		9.3		20.0				
Tetraphthalic acid, tetrachloro-, dimethyl	8667279600 1014672696	9065814440 1093590900	9037626500 1107339231	++++ ++++	Ave		9821124803		10.6		20.0				
Picloram	5712837000 8850117086	6224124840 1018179070	6570648740 1156032159	++++ 1146749100 7	Lin1		1.12544 E+010				0.9930			0.9900	
Acifluorfen	4064524500 7109623114	4814379800 8392297836	4971738380 9541817032	++++ ++++	Qua		-69625687				0.9990			0.9900	
2,4-Dichlorophenylacetic acid (Surr)	1435947500 1343087074	1388925080 1413952480	1300050800 1434982086	++++ 1537345376	Ave		1407755771		5.4		20.0				

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

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LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Dalapon	Ave	17983150 395304302	39932951 817578391	71378402 1725206867	++++	265586882	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
3,5-Dichlorobenzoic acid	Ave	18377513 448811682	44015926 930526789	82525138 1954171685	++++	300893318	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
4-Nitrophenol	Ave	2506531 77606749	7416225 158696116	14245923 334991246	++++	52193224	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
Dicamba	Ave	23620770 650915415	58578625 1347001642	113374207 2806366329	++++	429620976	0.00500 0.125	0.0125 0.250	0.0250 0.500	++++	0.0875			
MCP	Lin2	7884133 111381364	16319936 205635557	26339273 444937631	++++	77011106	1.00 25.0	2.50 50.0	5.00 100	++++	17.5			
MCPA	QuaF	12132999 177192173	24668652 386345329	40478712 1151515629	++++	121752778	1.00 25.0	2.50 50.0	5.00 100	++++	17.5			
Dichlorprop	Ave	15301912 352257271	33672808 719800477	62424883 1571966456	++++	231436814	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
2,4-D	Ave	14551198 419247494	35695833 885627489	68918972 1888747044	++++	272374787	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
Pentachlorophenol	Ave	41165516 1280290405	107509203 2634537256	214964113 5004401348	++++	840761037	0.00250 0.0625	0.00625 0.125	0.0125 0.250	++++	0.0438			
Silvex (2,4,5-TP)	Ave	16213772 500698059	39284572 1061020220	78639731 2191601950	++++	324244276	0.00250 0.0625	0.00625 0.125	0.0125 0.250	++++	0.0438			
2,4,5-T	Ave	14207297 450029272	34680183 974569507	68256754 2066383005	++++	287476934	0.00250 0.0625	0.00625 0.125	0.0125 0.250	++++	0.0438			
Chloramben	Ave	45179417 1585218711	117512235 3398296359	240336393 6392220091	++++	1019151525	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
Dinoseb	Lin1	30077804 1104528845	77307007 2438912841	154960345 ++++	++++	688241161	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
2,4-DB	Ave	10871976 234527590	26051520 474832365	46624287 1002259721	++++	166644052	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			
Bentazon	Ave	7803979 209189101	18151512 439887803	35565067 907942100	++++	137471207	0.0100 0.250	0.0250 0.500	0.0500 1.00	++++	0.175			

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 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151914-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)					
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5				
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	86672796	226645361	451881325	+++++	1775677219	0.0100	0.0250	0.0500	+++++	0.0100	0.0250	0.0500	+++++	0.175
Picloram	Lin1	2733977251	5536696155	328532437	+++++	1548770490	0.0100	0.0250	0.0500	+++++	0.0100	0.0250	0.0500	+++++	0.175
Acifluorfen	Qua	2545447676	5780160796	1467491007	+++++	1244184045	0.0100	0.0250	0.0500	+++++	0.0100	0.0250	0.0500	+++++	0.175
2,4-Dichlorophenylacetic acid (Surr)	Ave	2098074459	4770908516	65002540	+++++	235040238	0.0100	0.0250	0.0500	+++++	0.0100	0.0250	0.0500	+++++	0.175
		353488120	717491043	1537345376											

Curve Type Legend:
 Ave = Average
 Lin1 = Linear 1/conc
 Lin2 = Linear 1/conc^2
 Qua = Quadratic
 QuaF = Quadratic forced zero

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-May-2018 11:58:00 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:24:59 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:07:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	511012321	1.00	0.9751	
2	2.635	2.632	0.003	1725206867	1.00	1.07	
						RPD = 9.32	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	95938059	NC	NC	
2	5.103	5.102	0.001	555849594	NC	NC	
						RPD = 4.71	
3 2,4,6-Trichlorophenol							
1	5.788	5.786	0.002	1387562807	NC	NC	
2	5.780	5.776	0.004	5355785086	NC	NC	
						RPD = 10.60	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	337068861	1.00	1.05	
2	6.118	6.116	0.002	1954171685	1.00	1.09	
						RPD = 3.63	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	97562965	1.00	1.06	
2	6.503	6.505	-0.002	334991246	1.00	1.12	
						RPD = 5.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	214663766	1.00	1.02	
2	6.831	6.829	0.002	1537345376	1.00	1.09	
						RPD = 7.31	
7 Dicamba							
1	6.721	6.720	0.001	585243873	0.5000	0.5434	
2	6.914	6.910	0.004	2806366329	0.5000	0.5603	
						RPD = 3.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.872	6.867	0.005	104343971	100.0	99.8	
2	6.960	6.955	0.005	444937631	100.0	101.1	
						RPD = 1.25	
9 MCPA							
1	7.000	6.994	0.006	98467290	100.0	106.3	
2	7.161	7.155	0.006	1151515629	100.0	100.2	
						RPD = 5.90	
10 Dichlorprop							
1	7.181	7.180	0.001	290874356	1.00	1.05	
2	7.300	7.297	0.003	1571966456	1.00	1.12	
						RPD = 6.18	
11 2,4-D							
1	7.323	7.326	-0.003	357181097	1.00	1.18	
2	7.517	7.517	0.000	1888747044	1.00	1.19	
						RPD = 0.35	
12 Pentachlorophenol							
1	7.675	7.674	0.001	1628549099	0.2500	0.3025	
2	7.718	7.714	0.004	5004401348	0.2500	0.2661	
						RPD = 12.81	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	572693944	0.2500	0.3048	
2	7.848	7.846	0.002	2191601950	0.2500	0.2965	
						RPD = 2.77	
14 Chloramben							
1	7.848	7.855	-0.007	2124806109	1.00	1.00	
2	8.161	8.162	-0.001	6392220091	1.00	1.14	
						RPD = 12.86	
15 2,4,5-T							
1	7.923	7.929	-0.006	547016891	0.2500	0.2493	
2	8.082	8.083	-0.001	2066383005	0.2500	0.3109	
						RPD = 21.97	
16 2,4-DB							
1	8.167	8.175	-0.008	208315295	1.00	1.00	
2	8.298	8.302	-0.004	1002259721	1.00	1.02	
						RPD = 1.78	
17 Dinoseb							
1	8.224	8.224	0.000	1502700567	1.00	1.23	
2	8.252	8.248	0.004	4922703086	1.00	1.07	
						RPD = 13.86	
18 Bentazon							
1	8.299	8.300	-0.001	295542031	1.00	1.03	
2	8.664	8.662	0.002	907942100	1.00	1.13	
						RPD = 9.41	
19 Picloram							
1	8.523	8.529	-0.006	3668133130	1.00	1.00	M
2	9.011	9.005	0.006	11467491007	1.00	1.03	M
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	3847093339	1.00	1.17	
2	8.784	8.775	0.009	9887348056	1.00	1.01	
							RPD = 14.85

21 Acifluorfen

1	9.667	9.666	0.001	3202033523	1.00	1.00	M
2	9.799	9.792	0.007	9631196972	1.00	0.8404	M
							RPD = 17.32

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-8_00011

Amount Added: 1.00

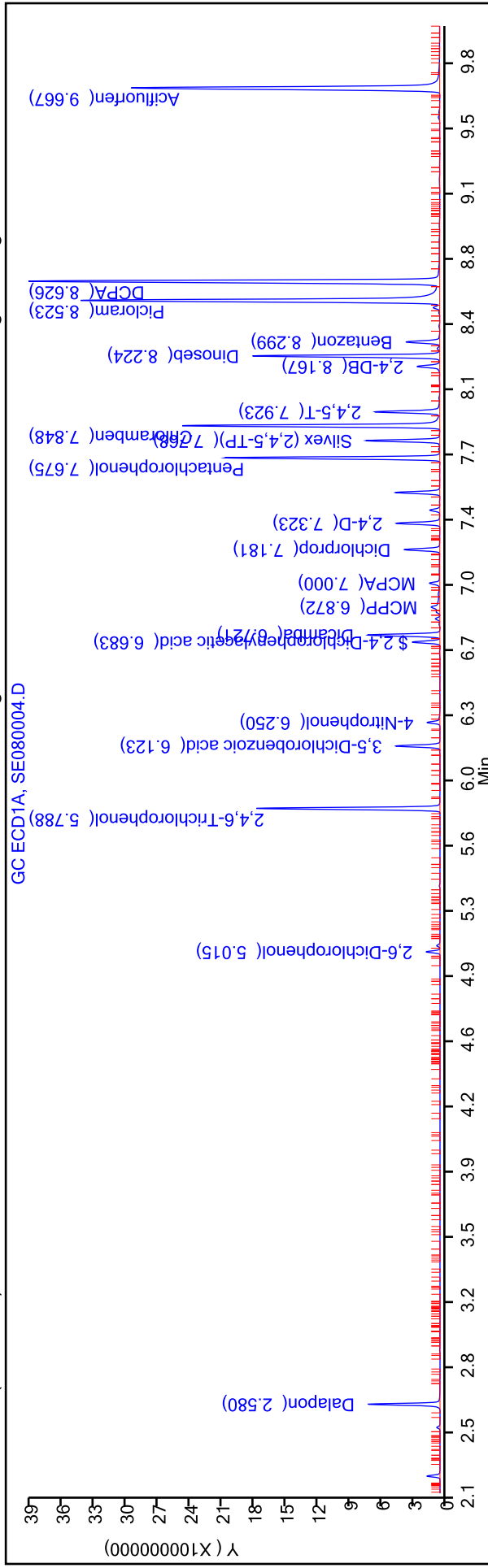
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Injection Date: 08-May-2018 11:58:00
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

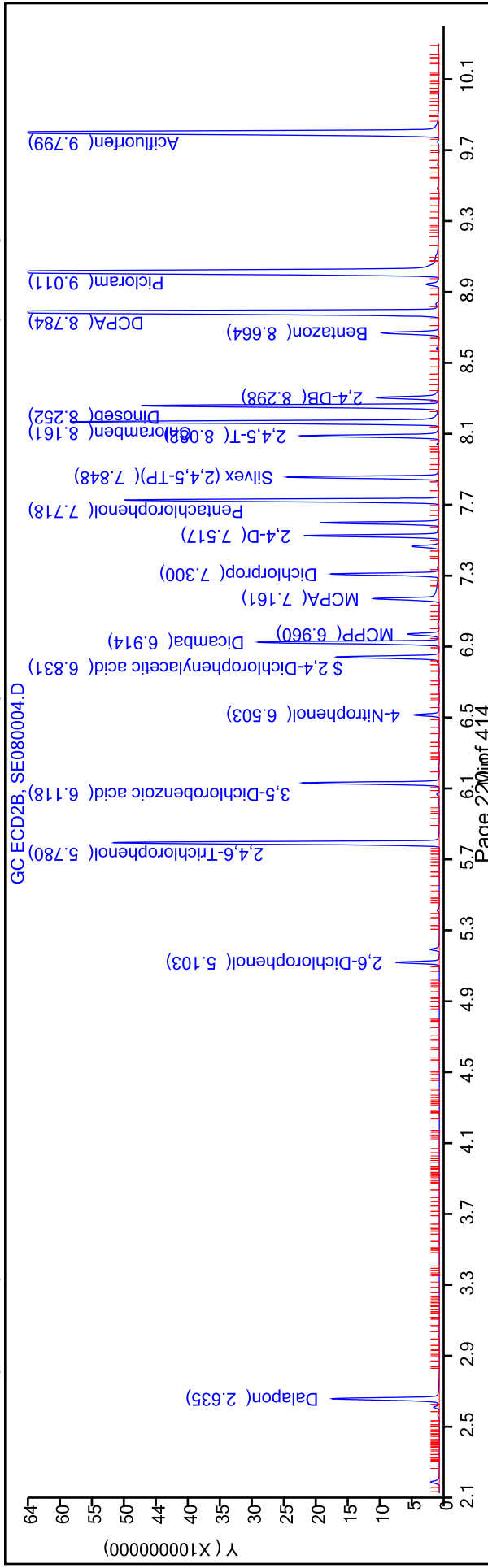
Operator ID: GEM
 Worklist Smp#: 4
 ALS Bottle#: 4

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

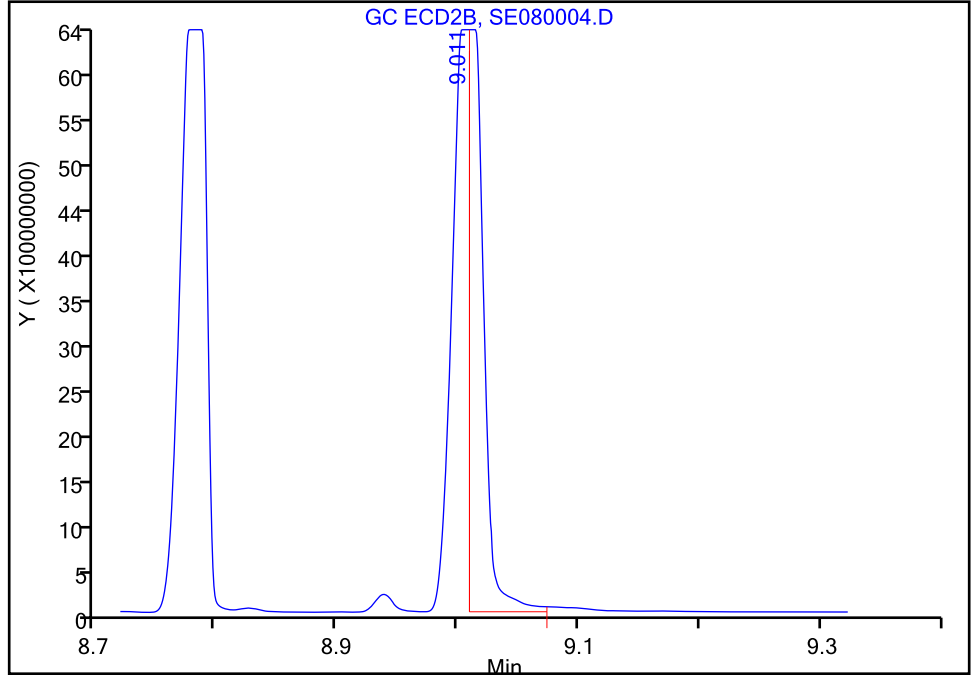
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
Injection Date: 08-May-2018 11:58:00 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

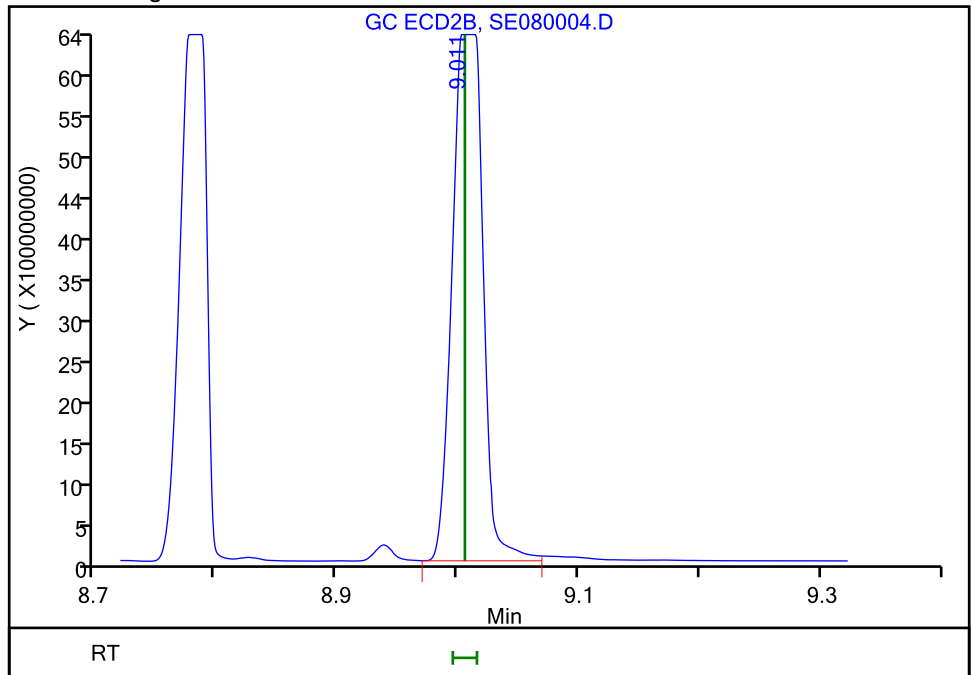
RT: 9.01
Area: 5287226212
Amount: 0.658684
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 11467491007
Amount: 1.028306
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:07:43
Audit Action: Manually Integrated

TestAmerica Savannah

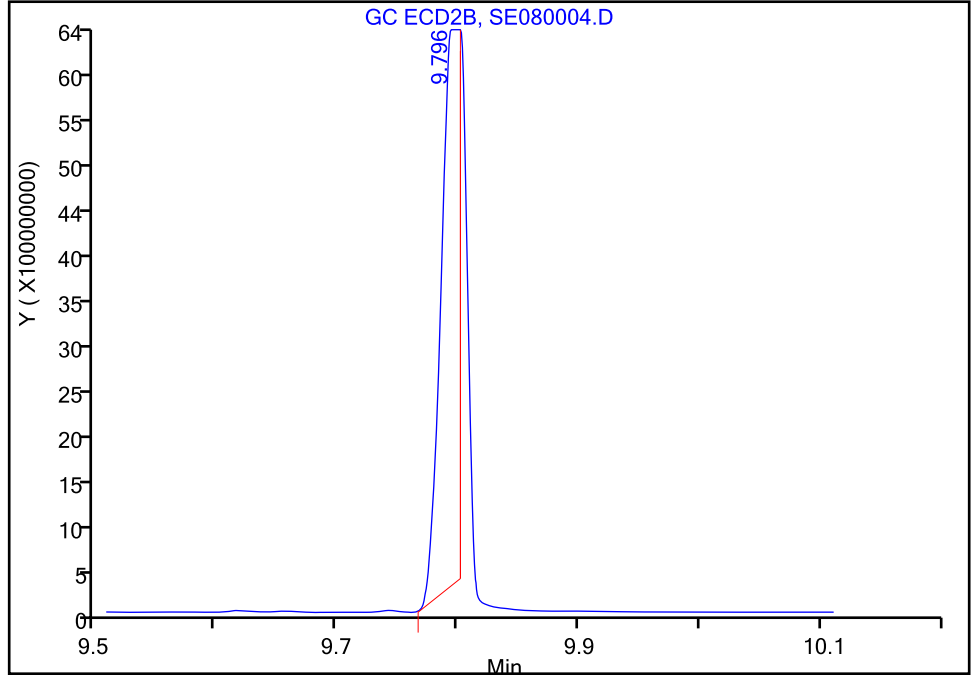
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
Injection Date: 08-May-2018 11:58:00 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

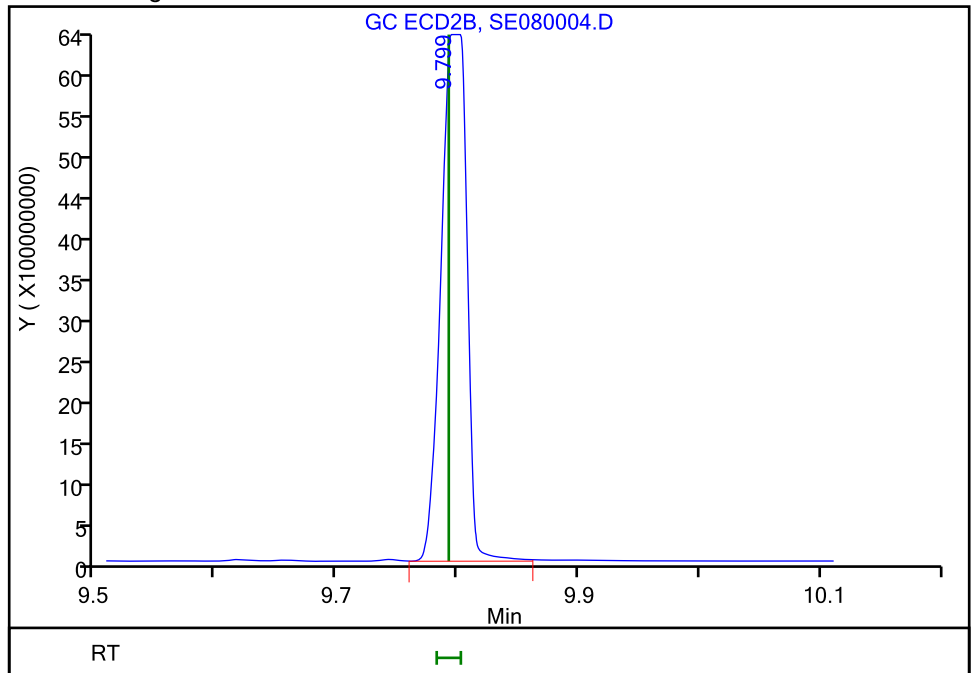
RT: 9.80
Area: 6439853161
Amount: 1.004323
Amount Units: ug/ml

Processing Integration Results



RT: 9.80
Area: 9631196972
Amount: 0.840395
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:07:45
Audit Action: Manually Integrated

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-May-2018 12:17:37 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:07 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	252815070	0.5000	0.4824	
2	2.634	2.632	0.002	817578391	0.5000	0.5073	
						RPD = 5.02	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	47948482	NC	NC	
2	5.102	5.102	0.000	271150549	NC	NC	
						RPD = 2.29	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	660797633	NC	NC	
2	5.779	5.776	0.003	2813586787	NC	NC	
						RPD = 0.79	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	165004902	0.5000	0.5134	
2	6.116	6.116	0.000	930526789	0.5000	0.5178	
						RPD = 0.87	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	48081748	0.5000	0.5200	
2	6.503	6.505	-0.002	158696116	0.5000	0.5307	
						RPD = 2.03	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	105220295	0.5000	0.4975	
2	6.830	6.829	0.001	717491043	0.5000	0.5097	
						RPD = 2.41	
7 Dicamba							
1	6.720	6.720	0.000	282435535	0.2500	0.2622	
2	6.911	6.910	0.001	1347001642	0.2500	0.2689	
						RPD = 2.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.870	6.867	0.003	39090261	50.0	51.7	
2	6.957	6.955	0.002	205635557	50.0	46.2	
						RPD = 11.18	
9 MCPA							
1	6.996	6.994	0.002	51596040	50.0	55.7	
2	7.157	7.155	0.002	386345329	50.0	47.9	
						RPD = 14.99	
10 Dichlorprop							
1	7.180	7.180	0.000	144063420	0.5000	0.5192	
2	7.298	7.297	0.001	719800477	0.5000	0.5106	
						RPD = 1.67	
11 2,4-D							
1	7.322	7.326	-0.004	172138047	0.5000	0.5692	
2	7.515	7.517	-0.002	885627489	0.5000	0.5558	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	762859467	0.1250	0.1417	
2	7.716	7.714	0.002	2634537256	0.1250	0.1401	
						RPD = 1.15	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	276913650	0.1250	0.1474	
2	7.846	7.846	0.000	1061020220	0.1250	0.1435	
						RPD = 2.64	
14 Chloramben							
1	7.849	7.855	-0.006	948055347	0.5000	0.5069	
2	8.160	8.162	-0.002	3398296359	0.5000	0.6041	
						RPD = 17.50	
15 2,4,5-T							
1	7.922	7.929	-0.007	274321777	0.1250	0.1250	
2	8.080	8.083	-0.003	974569507	0.1250	0.1466	
						RPD = 15.89	
16 2,4-DB							
1	8.167	8.175	-0.008	95758632	0.5000	0.5113	
2	8.297	8.302	-0.005	474832365	0.5000	0.4814	
						RPD = 6.02	
17 Dinoseb							
1	8.223	8.224	-0.001	686899035	0.5000	0.5612	
2	8.250	8.248	0.002	2438912841	0.5000	0.5329	
						RPD = 5.19	
18 Bentazon							
1	8.299	8.300	-0.001	144238238	0.5000	0.5016	
2	8.663	8.662	0.001	439887803	0.5000	0.5471	
						RPD = 8.68	
19 Picloram							
1	8.523	8.529	-0.006	1551637070	0.5000	0.5051	
2	9.005	9.005	0.000	5780160796	0.5000	0.5230	
						RPD = 3.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	1796815722	0.5000	0.5456	
2	8.779	8.775	0.004	5536696155	0.5000	0.5638	
						RPD = 3.27	

21 Acifluorfen

1	9.665	9.666	-0.001	1382056162	0.5000	0.5016	
2	9.794	9.792	0.002	4770908516	0.5000	0.4992	
						RPD = 0.48	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
Injection Date: 08-May-2018 12:17:37
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 5

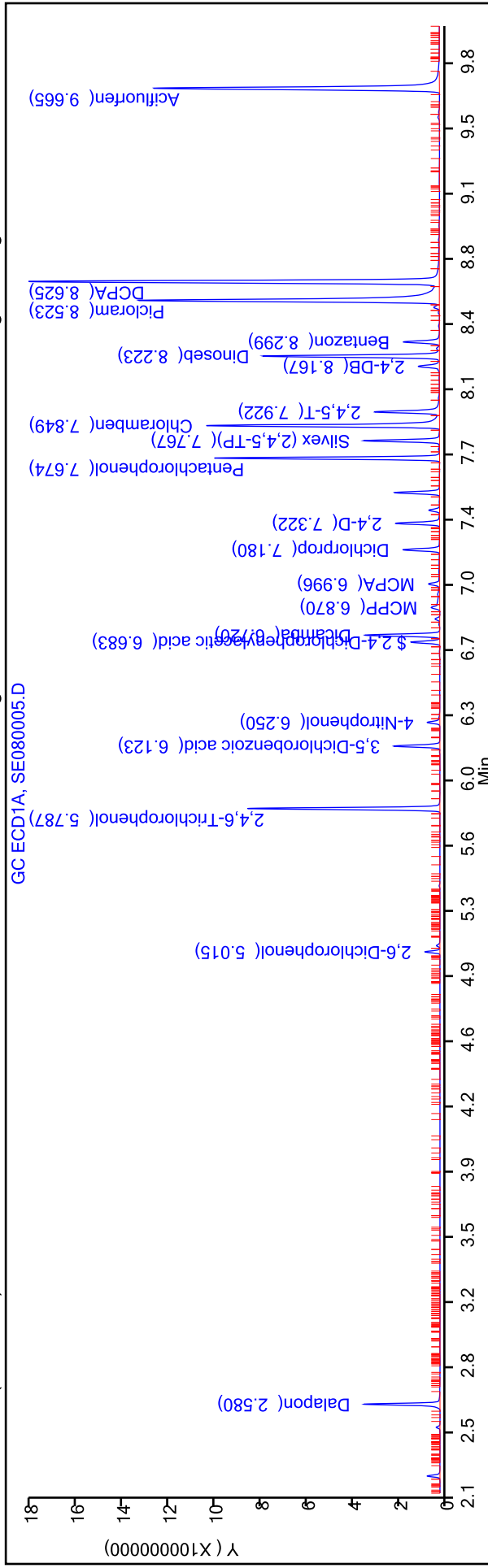
Lims ID: ic h7
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

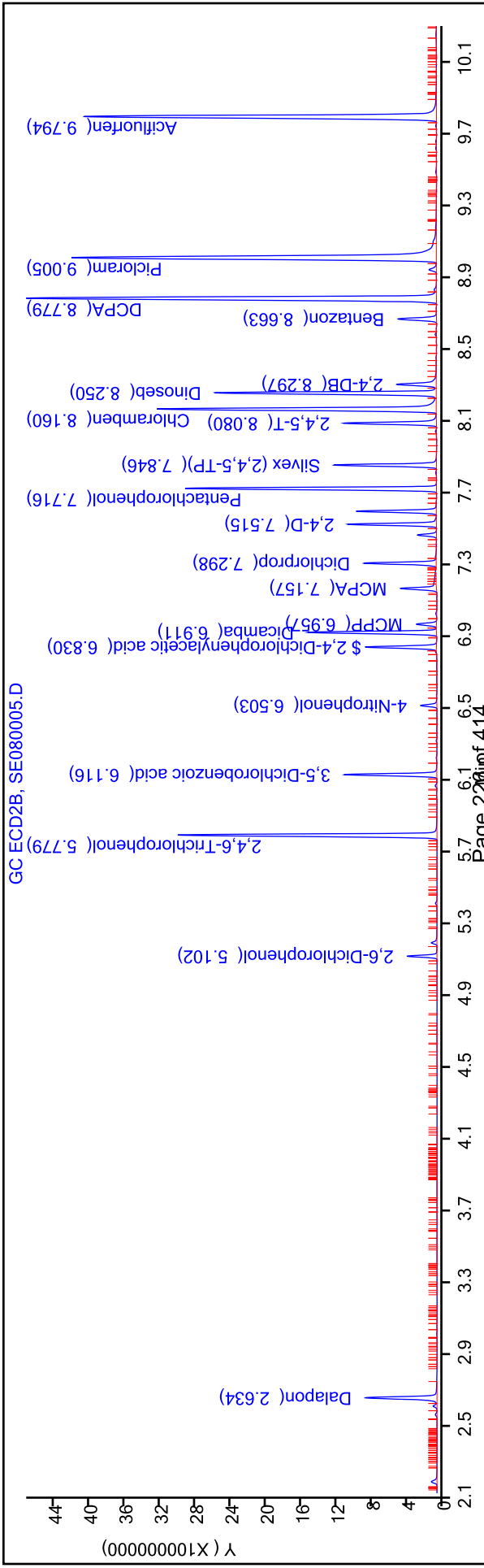
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-May-2018 12:37:18 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:13 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	126339938	0.2500	0.2411	
2	2.633	2.632	0.001	395304302	0.2500	0.2453	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	24075005	NC	NC	
2	5.102	5.102	0.000	134909465	NC	NC	
						RPD = 1.37	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	317115758	NC	NC	
2	5.778	5.776	0.002	1376798630	NC	NC	
						RPD = 1.15	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	81038461	0.2500	0.2521	
2	6.117	6.116	0.001	448811682	0.2500	0.2498	
						RPD = 0.94	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	26992258	0.2500	0.2919	
2	6.503	6.505	-0.002	77606749	0.2500	0.2595	
						RPD = 11.76	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	51149844	0.2500	0.2419	
2	6.829	6.829	0.000	353488120	0.2500	0.2511	
						RPD = 3.75	
7 Dicamba							
1	6.721	6.720	0.001	135663470	0.1250	0.1260	
2	6.911	6.910	0.001	650915415	0.1250	0.1299	
						RPD = 3.11	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	12687646	25.0	22.2	
2	6.956	6.955	0.001	111381364	25.0	24.6	
						RPD = 10.33	
9 MCPA							
1	6.995	6.994	0.001	25890792	25.0	28.0	
2	7.155	7.155	0.000	177192173	25.0	26.6	
						RPD = 4.94	
10 Dichlorprop							
1	7.181	7.180	0.001	70616500	0.2500	0.2545	
2	7.298	7.297	0.001	352257271	0.2500	0.2499	
						RPD = 1.83	
11 2,4-D							
1	7.323	7.326	-0.003	81489809	0.2500	0.2695	
2	7.516	7.517	-0.001	419247494	0.2500	0.2631	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	357293439	0.0625	0.0664	
2	7.715	7.714	0.001	1280290405	0.0625	0.0681	
						RPD = 2.54	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	130284362	0.0625	0.0693	
2	7.846	7.846	0.000	500698059	0.0625	0.0677	
						RPD = 2.34	
14 Chloramben							
1	7.850	7.855	-0.005	420812351	0.2500	0.2467	
2	8.159	8.162	-0.003	1585218711	0.2500	0.2818	
						RPD = 13.26	
15 2,4,5-T							
1	7.924	7.929	-0.005	138404340	0.0625	0.0631	
2	8.079	8.083	-0.004	450029272	0.0625	0.0677	
						RPD = 7.07	
16 2,4-DB							
1	8.169	8.175	-0.006	41914777	0.2500	0.2443	
2	8.298	8.302	-0.004	234527590	0.2500	0.2378	
						RPD = 2.69	
17 Dinoseb							
1	8.223	8.224	-0.001	318205530	0.2500	0.2600	
2	8.248	8.248	0.000	1104528845	0.2500	0.2450	
						RPD = 5.93	
18 Bentazon							
1	8.299	8.300	-0.001	71761268	0.2500	0.2496	
2	8.661	8.662	-0.001	209189101	0.2500	0.2602	
						RPD = 4.17	
19 Picloram							
1	8.525	8.529	-0.004	675298882	0.2500	0.2482	
2	9.005	9.005	0.000	2545447676	0.2500	0.2355	
						RPD = 5.25	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	842695237	0.2500	0.2559	
2	8.778	8.775	0.003	2733977251	0.2500	0.2784	
						RPD = 8.42	

21 Acifluorfen

1	9.665	9.666	-0.001	633038479	0.2500	0.2522	
2	9.793	9.792	0.001	2098074459	0.2500	0.2582	
						RPD = 2.37	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-6_00015

Amount Added: 1.00

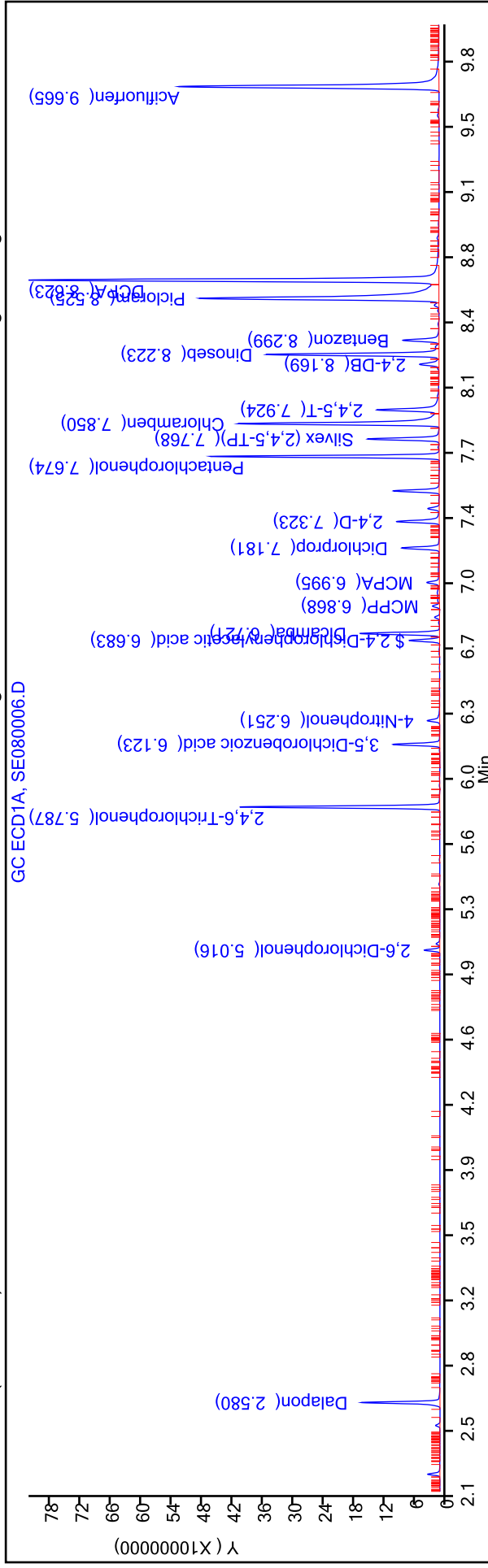
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Injection Date: 08-May-2018 12:37:18
 Instrument ID: CSGS
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

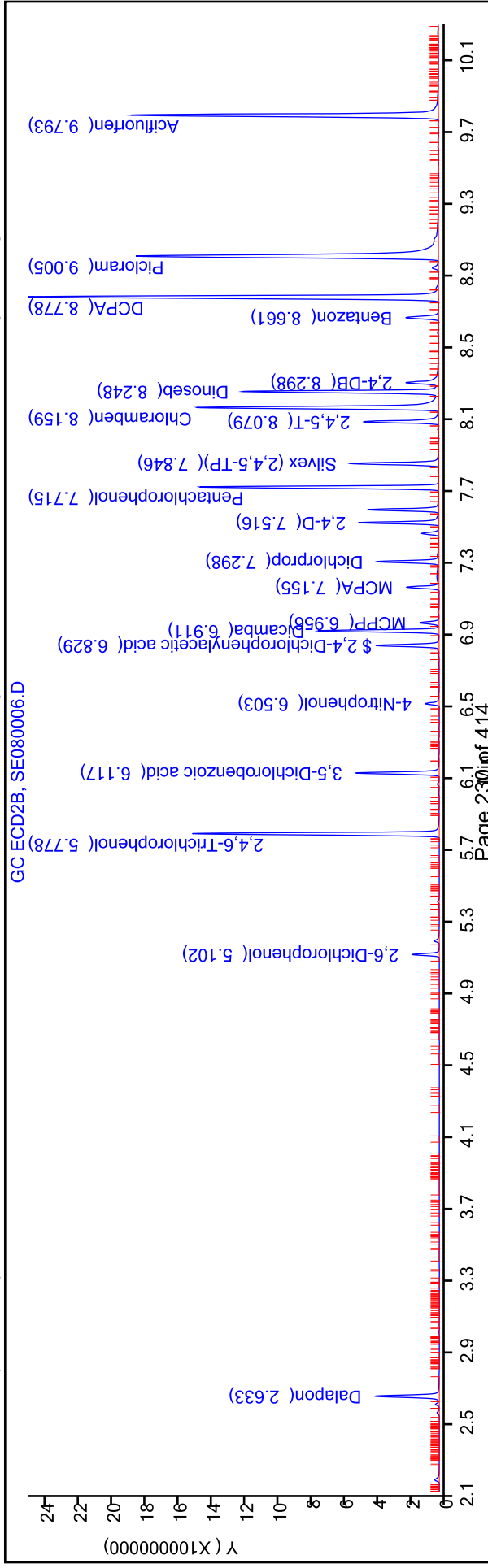
Operator ID: GEM
 Worklist Smp#: 6
 ALS Bottle#: 6

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-May-2018 12:56:54 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:18 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: meinckeg Date: 08-May-2018 13:25:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	87735176	0.1750	0.1674	
2	2.633	2.632	0.001	265586882	0.1750	0.1648	
						RPD = 1.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16721808	NC	NC	
2	5.101	5.102	-0.001	91409134	NC	NC	
						RPD = 1.11	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	212201404	NC	NC	
2	5.776	5.776	0.000	921748528	NC	NC	
						RPD = 1.20	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	54279812	0.1750	0.1689	
2	6.116	6.116	0.000	300893318	0.1750	0.1674	
						RPD = 0.85	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17047628	0.1750	0.1844	
2	6.504	6.505	-0.001	52193224	0.1750	0.1745	
						RPD = 5.49	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35013881	0.1750	0.1656	
2	6.829	6.829	0.000	235040238	0.1750	0.1670	
						RPD = 0.84	
7 Dicamba							
1	6.721	6.720	0.001	91550778	0.0875	0.0850	
2	6.911	6.910	0.001	429620976	0.0875	0.0858	
						RPD = 0.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	8640069	17.5	16.3	
2	6.955	6.955	0.000	77011106	17.5	16.8	
						RPD = 2.77	
9 MCPA							
1	6.994	6.994	0.000	17766771	17.5	19.2	
2	7.153	7.155	-0.002	121752778	17.5	19.6	
						RPD = 2.31	
10 Dichlorprop							
1	7.181	7.180	0.001	48109296	0.1750	0.1734	
2	7.296	7.297	-0.001	231436814	0.1750	0.1642	
						RPD = 5.46	
11 2,4-D							
1	7.324	7.326	-0.002	54093373	0.1750	0.1789	
2	7.515	7.517	-0.002	272374787	0.1750	0.1709	
						RPD = 4.55	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	237204468	0.0438	0.0441	
2	7.713	7.714	-0.001	840761037	0.0438	0.0447	
						RPD = 1.45	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	84634924	0.0438	0.0450	
2	7.845	7.846	-0.001	324244276	0.0438	0.0439	
						RPD = 2.66	
14 Chloramben							
1	7.852	7.855	-0.003	269520100	0.1750	0.1655	
2	8.159	8.162	-0.003	1019151525	0.1750	0.1812	
						RPD = 9.06	
15 2,4,5-T							
1	7.925	7.929	-0.004	93534318	0.0438	0.0426	
2	8.080	8.083	-0.003	287476934	0.0438	0.0433	
						RPD = 1.44	
16 2,4-DB							
1	8.171	8.175	-0.004	26059778	0.1750	0.1599	
2	8.298	8.302	-0.004	166644052	0.1750	0.1690	
						RPD = 5.54	
17 Dinoseb							
1	8.222	8.224	-0.002	207576561	0.1750	0.1696	
2	8.246	8.248	-0.002	688241161	0.1750	0.1552	
						RPD = 8.85	
18 Bentazon							
1	8.299	8.300	-0.001	47511232	0.1750	0.1652	
2	8.661	8.662	-0.001	137471207	0.1750	0.1710	
						RPD = 3.43	
19 Picloram							
1	8.526	8.529	-0.003	428630902	0.1750	0.1666	
2	9.005	9.005	0.000	1548770490	0.1750	0.1470	
						RPD = 12.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	565445884	0.1750	0.1717	
2	8.776	8.775	0.001	1775677219	0.1750	0.1808	
						RPD = 5.16	

21 Acifluorfen

1	9.665	9.666	-0.001	407675485	0.1750	0.1692	
2	9.791	9.792	-0.001	1244184045	0.1750	0.1664	
						RPD = 1.67	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
Injection Date: 08-May-2018 12:56:54
Lims ID: ic h5
Instrument ID: CSGS

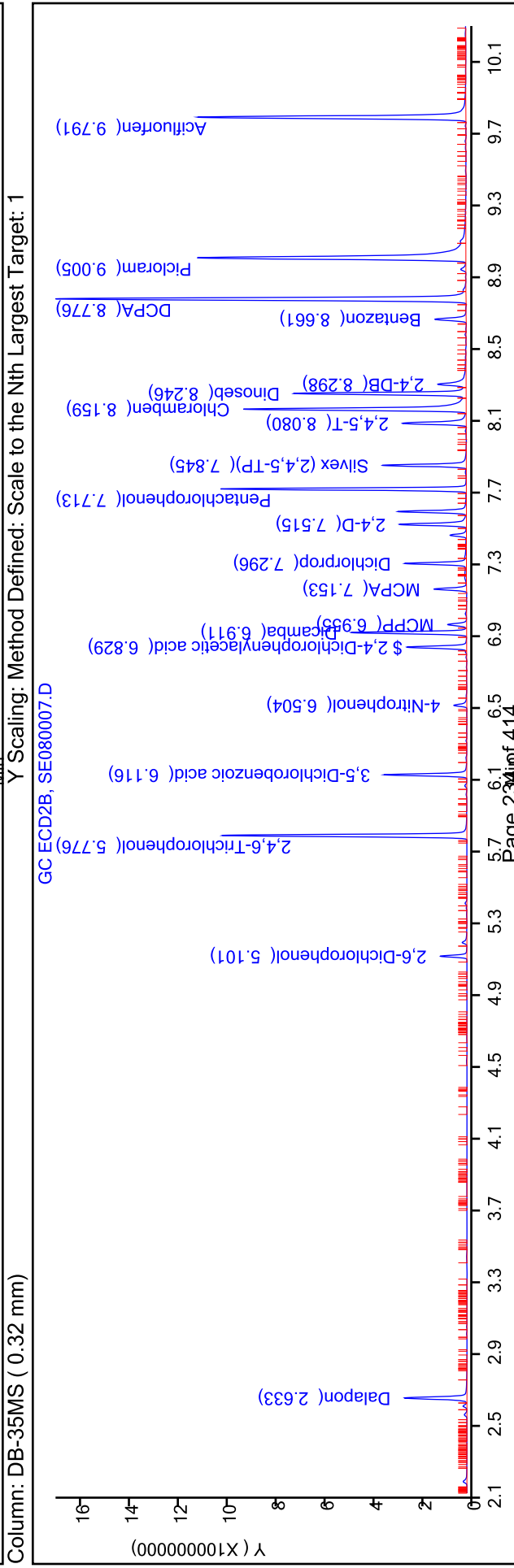
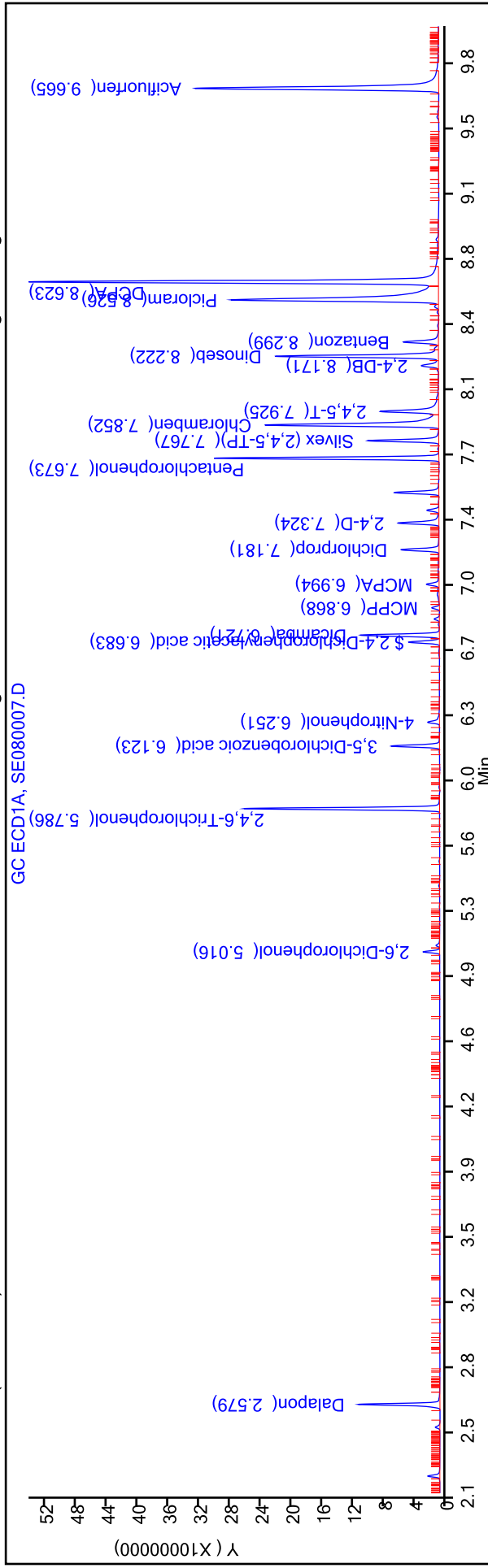
Operator ID: GEM
Worklist Smp#: 7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-May-2018 13:16:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:24 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	49026258	0.1000	0.0935	
2	2.632	2.632	0.000	144107629	0.1000	0.0894	
						RPD = 4.52	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	9648349	NC	NC	
2	5.102	5.102	0.000	51409780	NC	NC	
						RPD = 3.66	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	115367190	NC	NC	
2	5.776	5.776	0.000	492889358	NC	NC	
						RPD = 0.46	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	30442227	0.1000	0.0947	
2	6.116	6.116	0.000	163818500	0.1000	0.0912	
						RPD = 3.82	
5 4-Nitrophenol							
1	6.253	6.253	0.000	9830837	0.1000	0.1063	
2	6.505	6.505	0.000	28145758	0.1000	0.0941	
						RPD = 12.18	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	19553071	0.1000	0.0925	
2	6.829	6.829	0.000	126698158	0.1000	0.0900	
						RPD = 2.70	
7 Dicamba							
1	6.720	6.720	0.000	50221281	0.0500	0.0466	
2	6.910	6.910	0.000	229111440	0.0500	0.0457	
						RPD = 1.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	5032337	10.0	10.4	
2	6.955	6.955	0.000	44613118	10.0	9.35	
						RPD = 11.06	
9 MCPA							
1	6.994	6.994	0.000	10021981	10.0	10.8	M
2	7.155	7.155	0.000	72306759	10.0	12.6	M
						RPD = 15.16	
10 Dichlorprop							
1	7.180	7.180	0.000	27204673	0.1000	0.0980	
2	7.297	7.297	0.000	128102012	0.1000	0.0909	M
						RPD = 7.59	
11 2,4-D							
1	7.326	7.326	0.000	29475053	0.1000	0.0975	M
2	7.517	7.517	0.000	145386532	0.1000	0.0912	M
						RPD = 6.61	
12 Pentachlorophenol							
1	7.674	7.674	0.000	126808590	0.0250	0.0236	
2	7.714	7.714	0.000	448807878	0.0250	0.0239	M
						RPD = 1.30	
13 Silvex (2,4,5-TP)							
1	7.769	7.769	0.000	44774730	0.0250	0.0238	M
2	7.846	7.846	0.000	170517091	0.0250	0.0231	M
						RPD = 3.25	
14 Chloramben							
1	7.855	7.855	0.000	136550994	0.1000	0.0910	
2	8.162	8.162	0.000	528388568	0.1000	0.0939	M
						RPD = 3.16	
15 2,4,5-T							
1	7.929	7.929	0.000	56867356	0.0250	0.0259	M
2	8.083	8.083	0.000	149160522	0.0250	0.0224	M
						RPD = 14.39	
16 2,4-DB							
1	8.175	8.175	0.000	13655211	0.1000	0.0916	
2	8.302	8.302	0.000	97285447	0.1000	0.0986	M
						RPD = 7.35	
17 Dinoseb							
1	8.224	8.224	0.000	110631354	0.1000	0.0904	
2	8.248	8.248	0.000	344721192	0.1000	0.0811	M
						RPD = 10.80	
18 Bentazon							
1	8.300	8.300	0.000	27567147	0.1000	0.0959	
2	8.662	8.662	0.000	74902105	0.1000	0.0932	M
						RPD = 2.86	
19 Picloram							
1	8.529	8.529	0.000	216808821	0.1000	0.0920	
2	9.005	9.005	0.000	759779337	0.1000	0.0769	M
						RPD = 17.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.623	8.623	0.000	315619469	0.1000	0.0958	
2	8.775	8.775	0.000	947740711	0.1000	0.0965	M
						RPD = 0.69	

21 Acifluorfen							
1	9.666	9.666	0.000	217026310	0.1000	0.0952	
2	9.792	9.792	0.000	596281084	0.1000	0.0890	
						RPD = 6.71	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38
Lims ID: ic h4
Instrument ID: CSGS

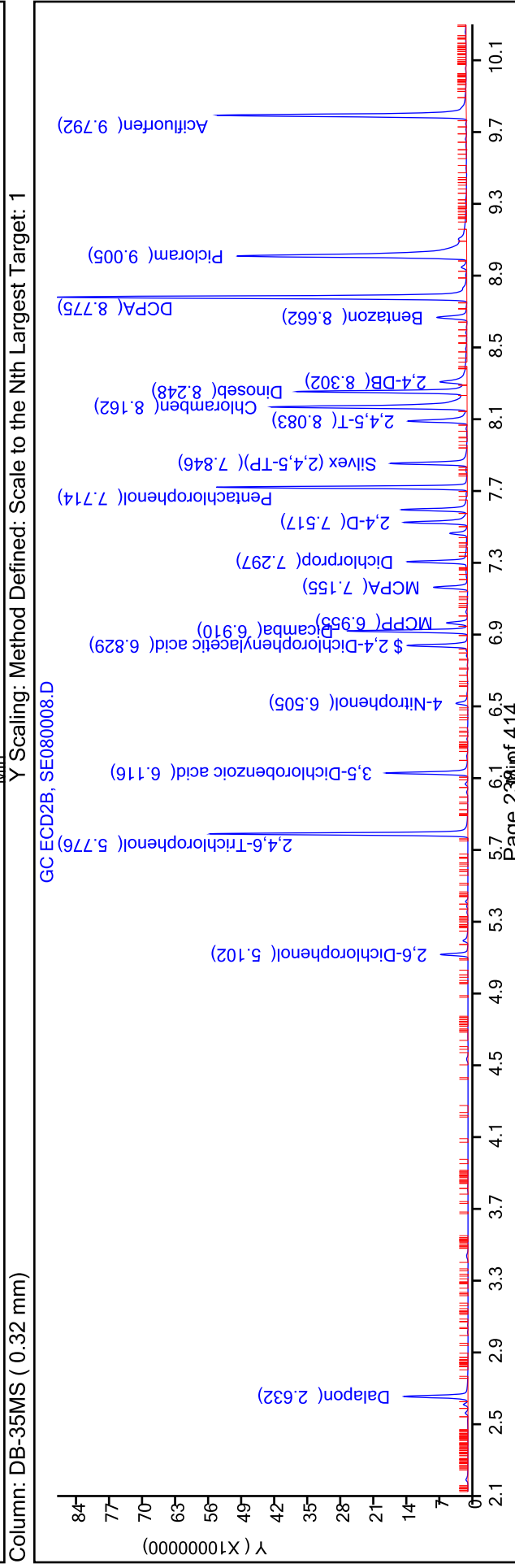
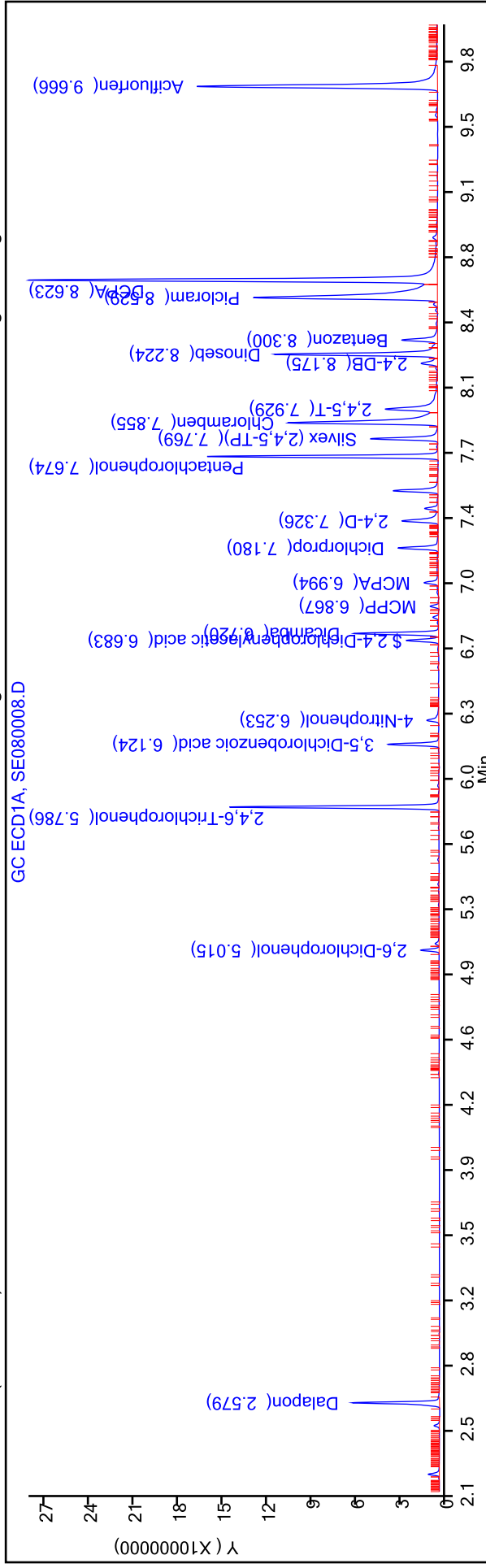
Operator ID: GEM
Worklist Smp#: 8

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

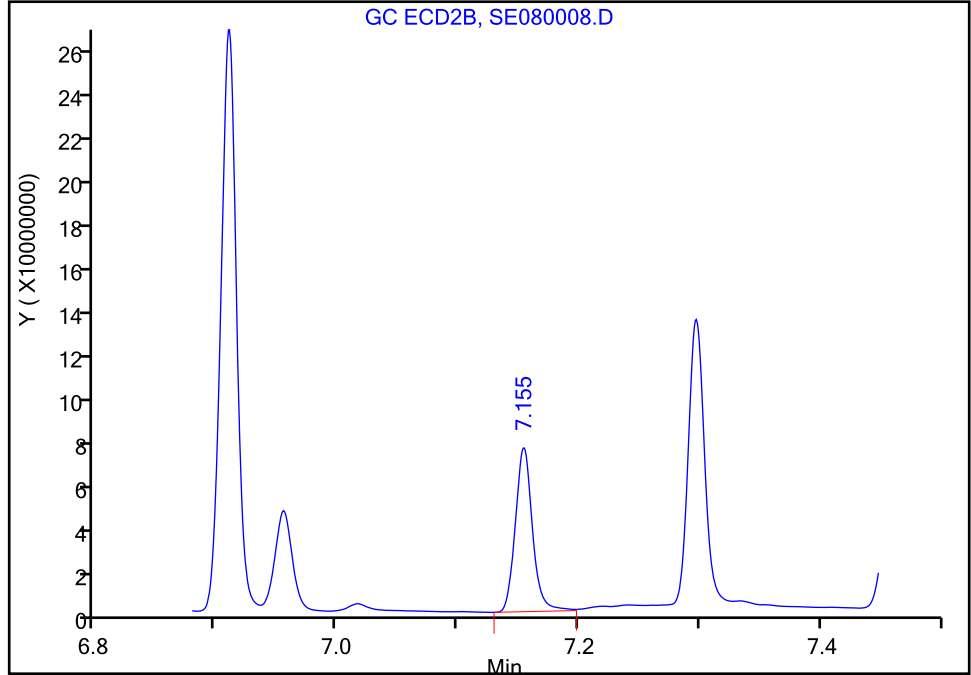
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

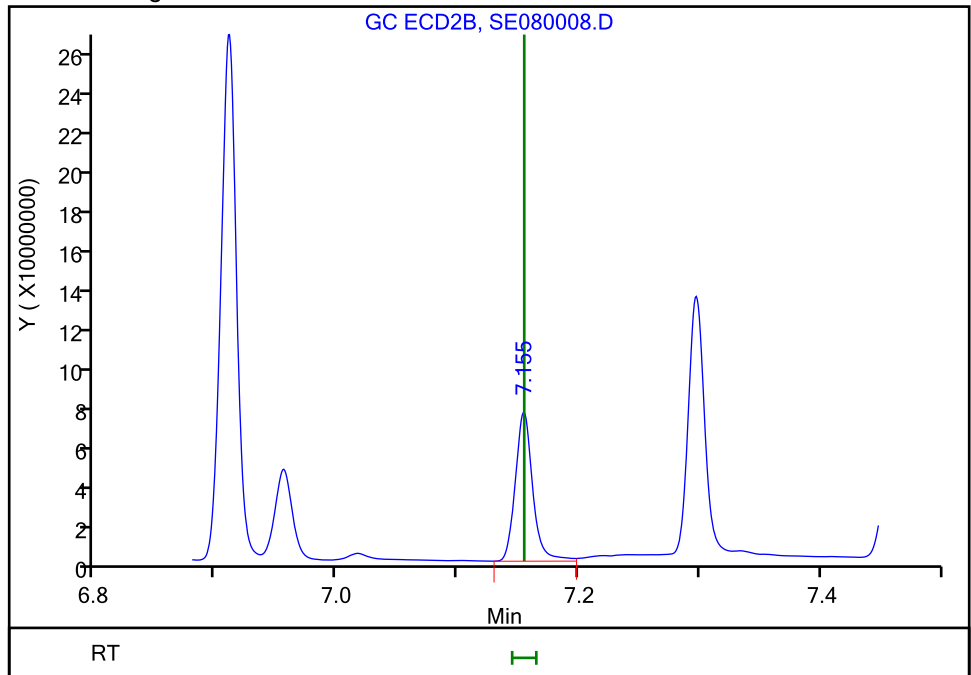
RT: 7.15
Area: 70638307
Amount: 12.168042
Amount Units: ug/ml

Processing Integration Results



RT: 7.15
Area: 72306759
Amount: 12.598213
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

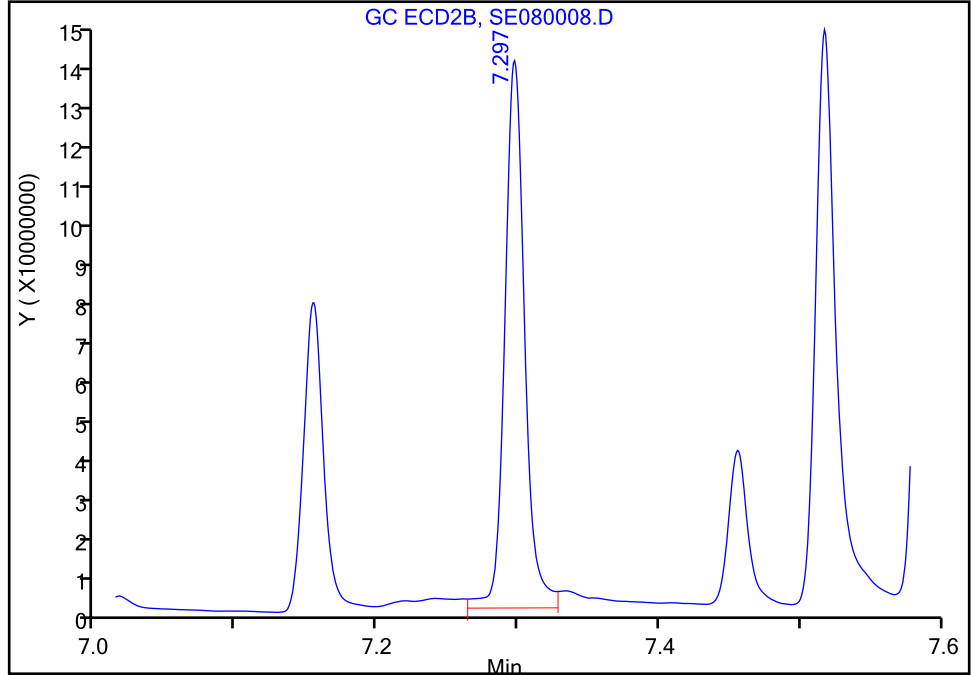
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

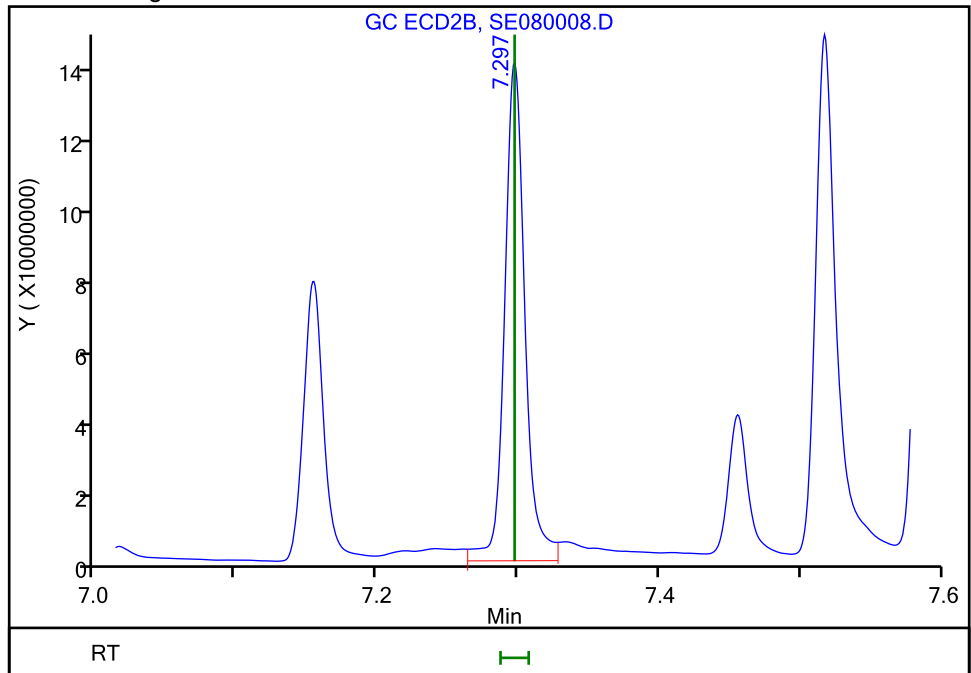
RT: 7.30
Area: 124658322
Amount: 0.089720
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 128102012
Amount: 0.090865
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

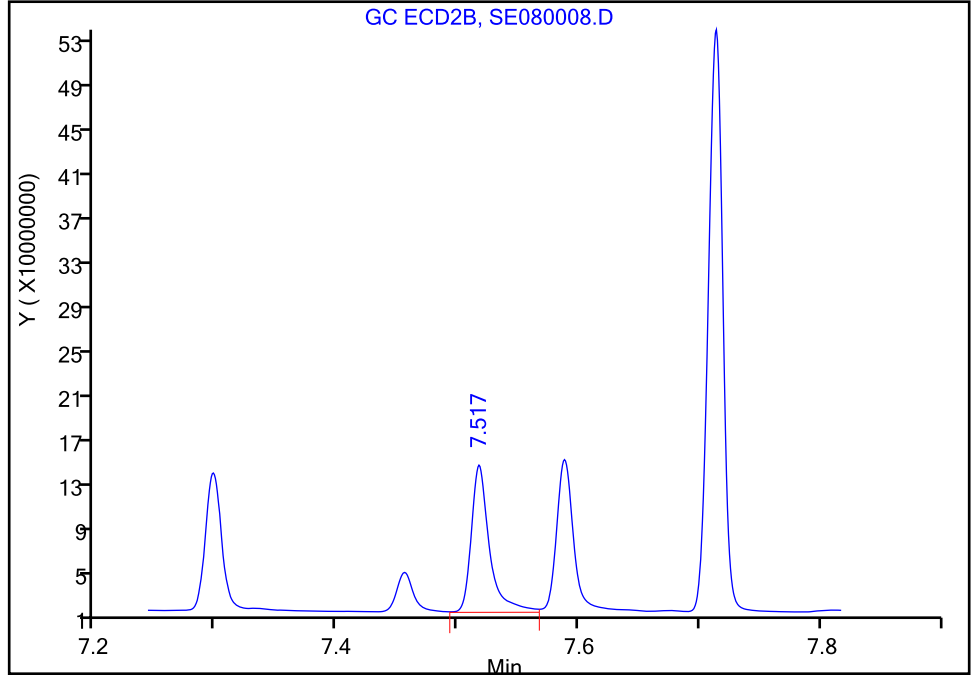
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

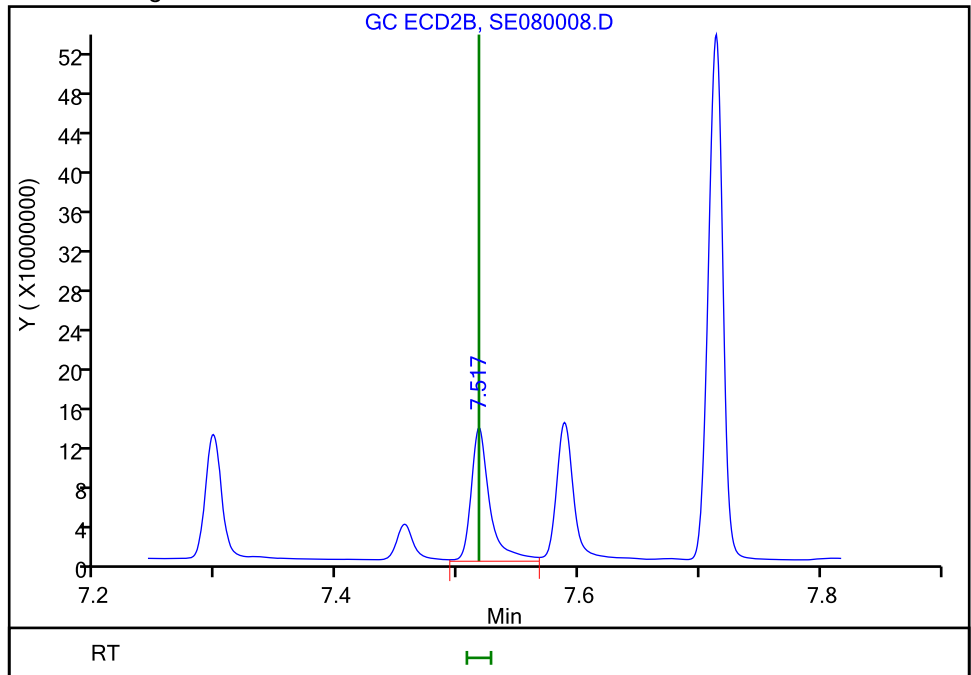
RT: 7.52
Area: 140860308
Amount: 0.087306
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 145386532
Amount: 0.091235
Amount Units: ug/ml

Manual Integration Results



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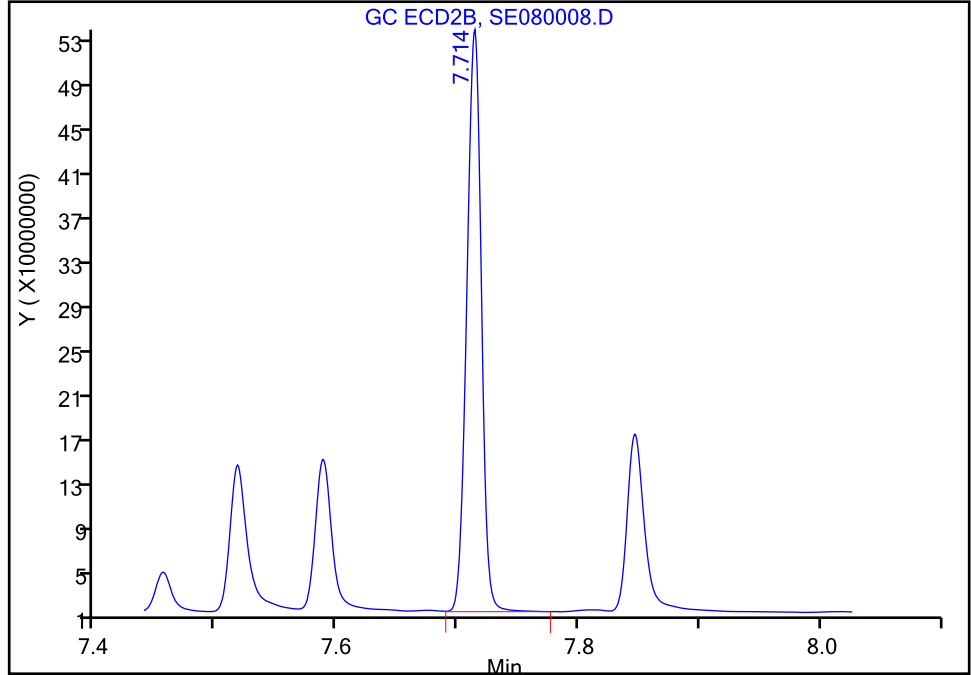
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

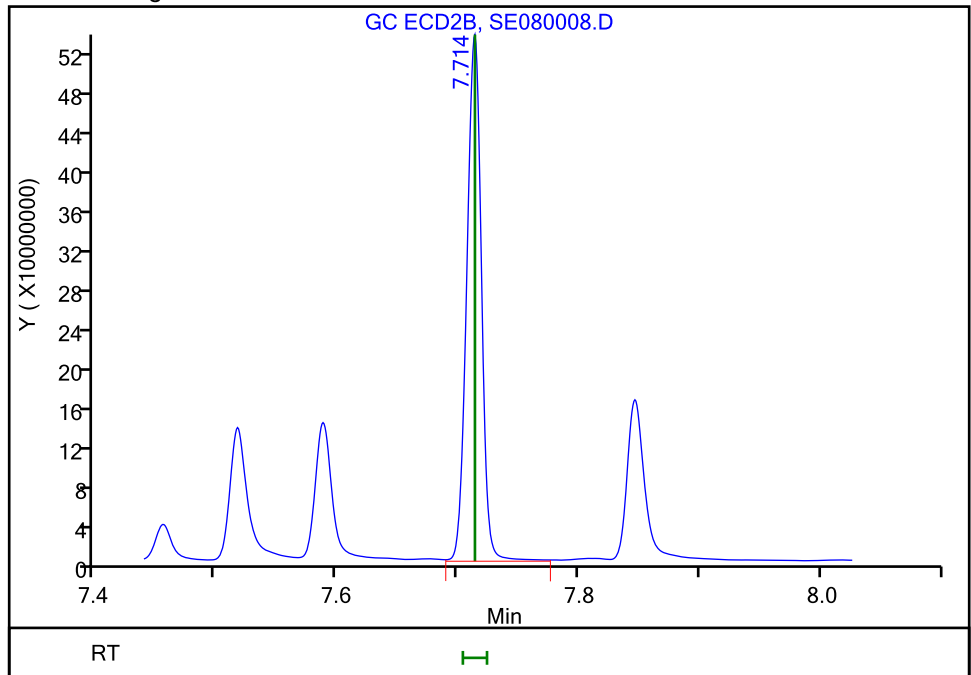
RT: 7.71
Area: 442694800
Amount: 0.023710
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 448807878
Amount: 0.023862
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

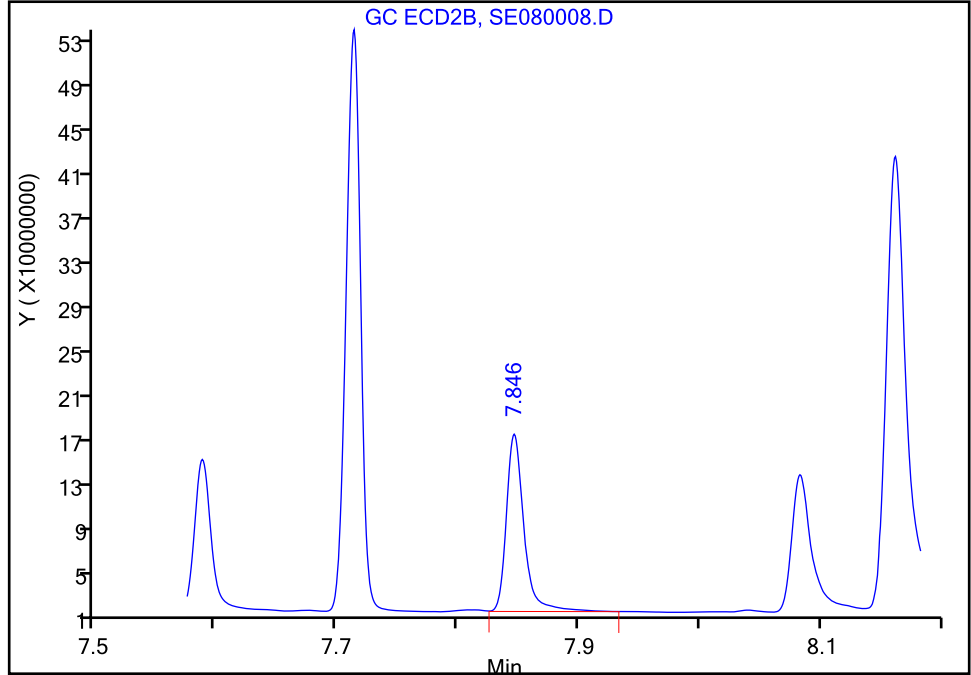
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

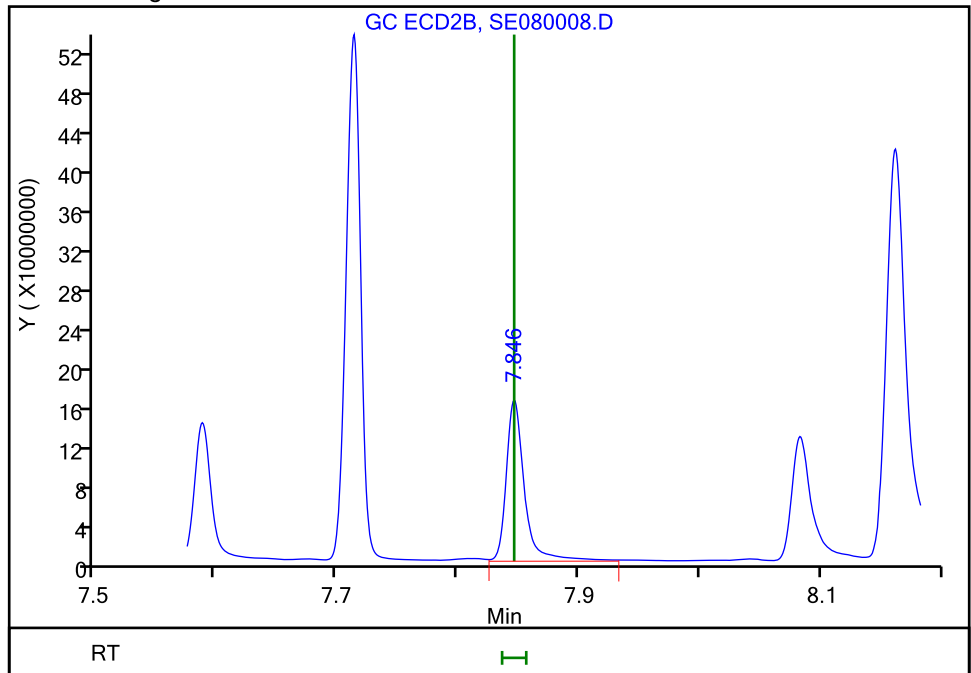
RT: 7.85
Area: 163005295
Amount: 0.022383
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 170517091
Amount: 0.023070
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

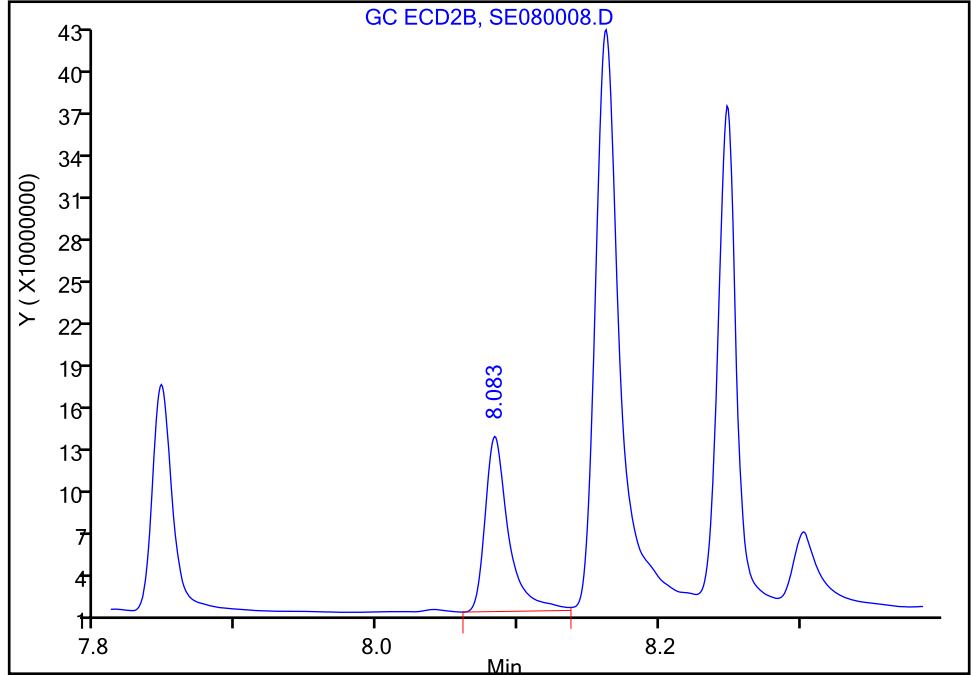
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

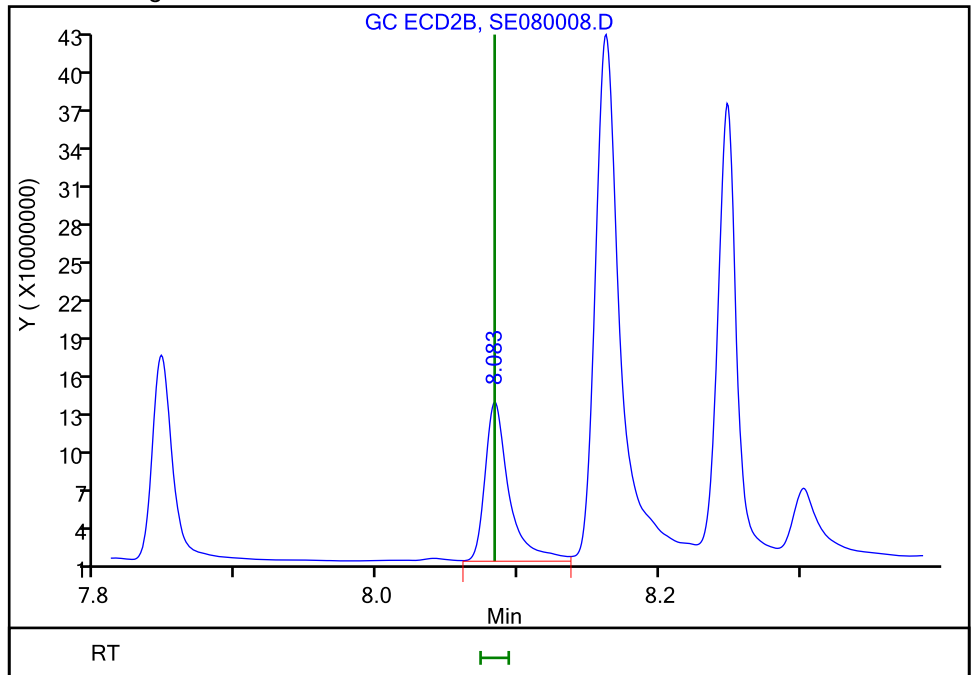
RT: 8.08
Area: 144622118
Amount: 0.022117
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 149160522
Amount: 0.022442
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

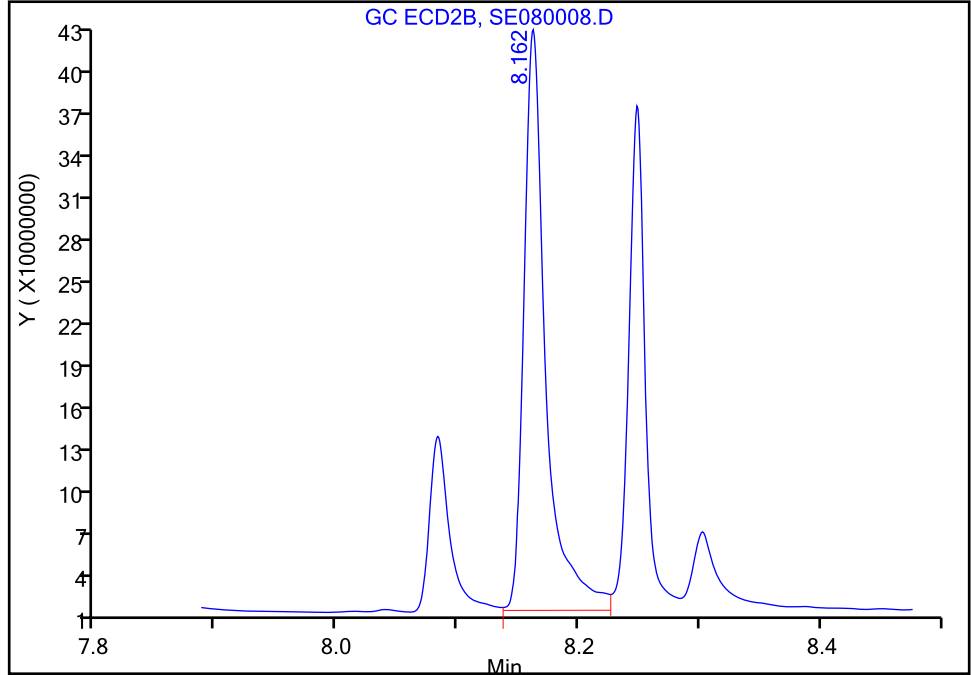
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

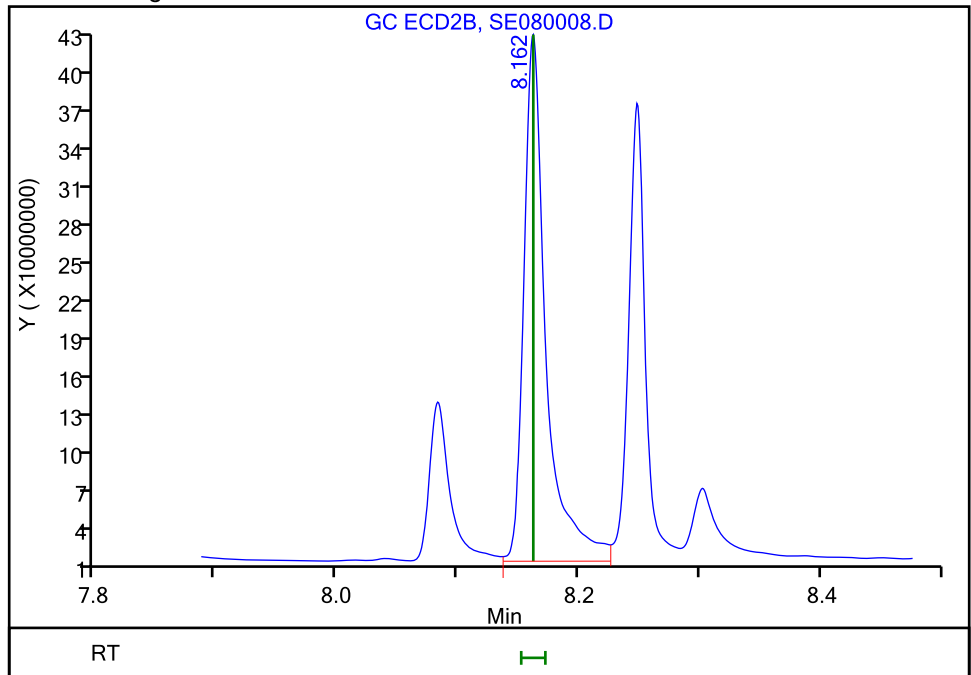
RT: 8.16
Area: 520020336
Amount: 0.090865
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 528388568
Amount: 0.093927
Amount Units: ug/ml

Manual Integration Results



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Audit Reason: Baseline Smoothing
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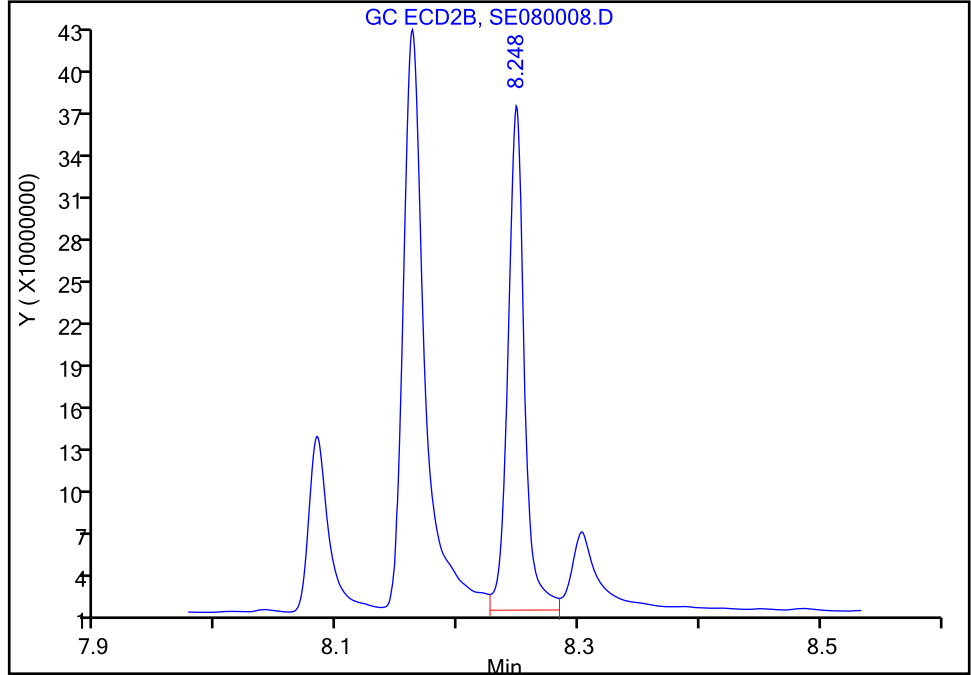
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

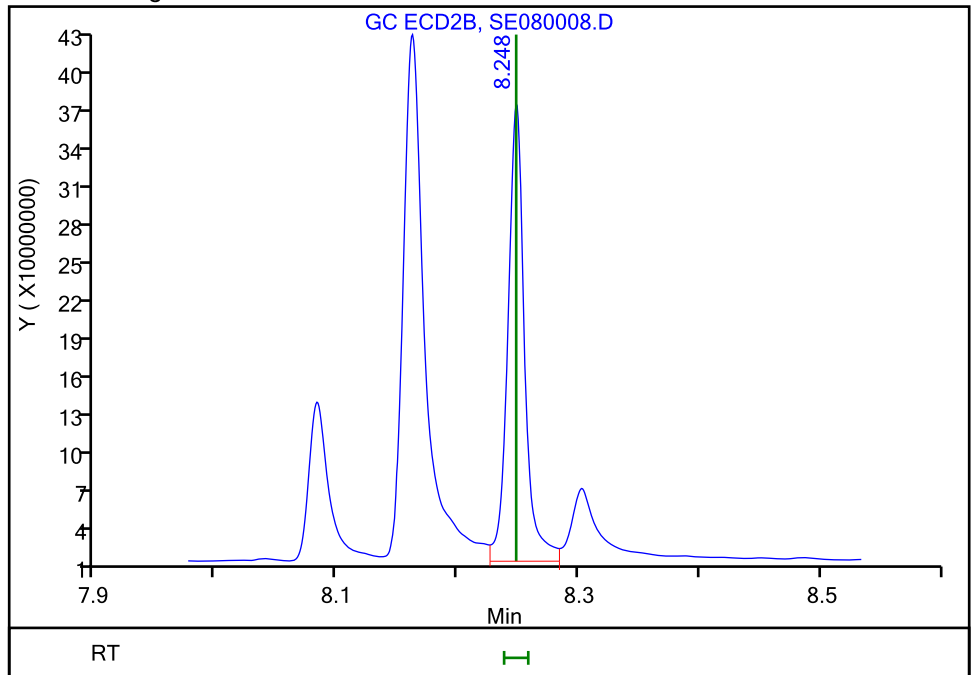
RT: 8.25
Area: 339033784
Amount: 0.079521
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 344721192
Amount: 0.081127
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

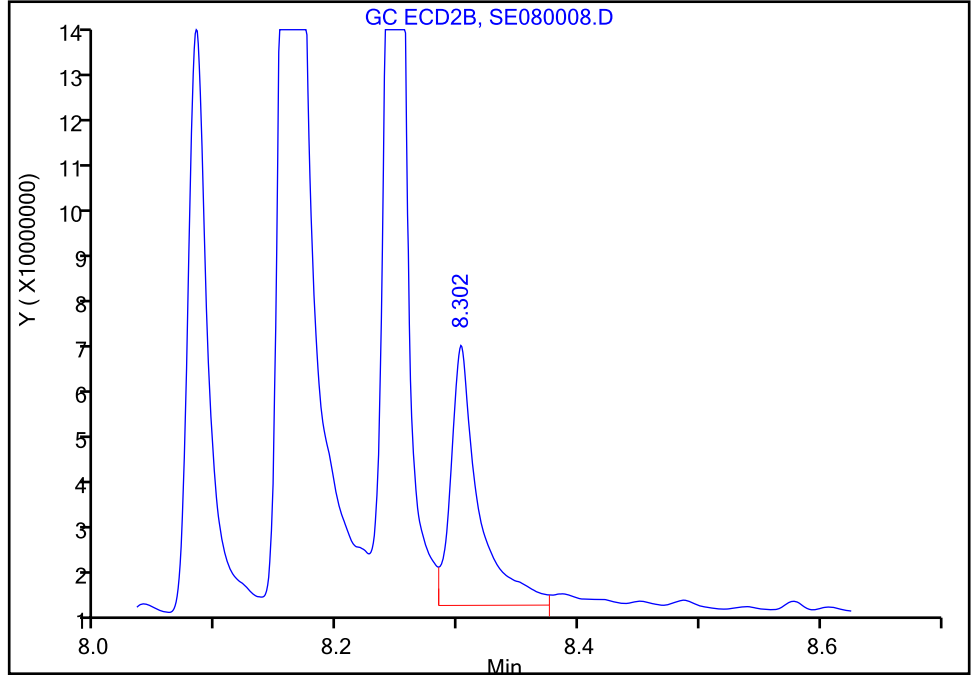
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

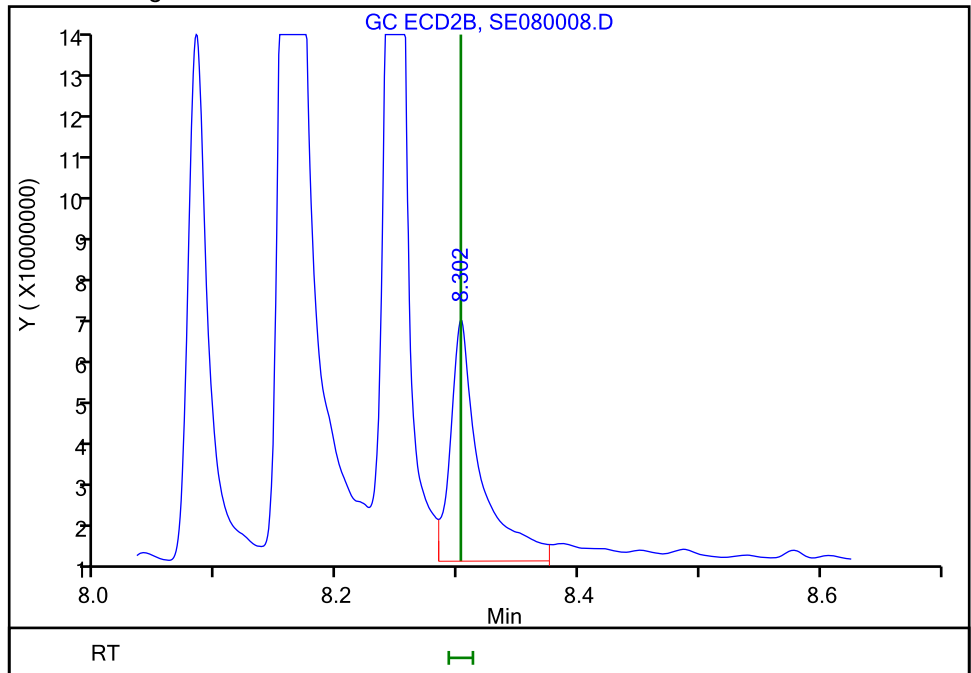
RT: 8.30
Area: 87960984
Amount: 0.091948
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 97285447
Amount: 0.098638
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

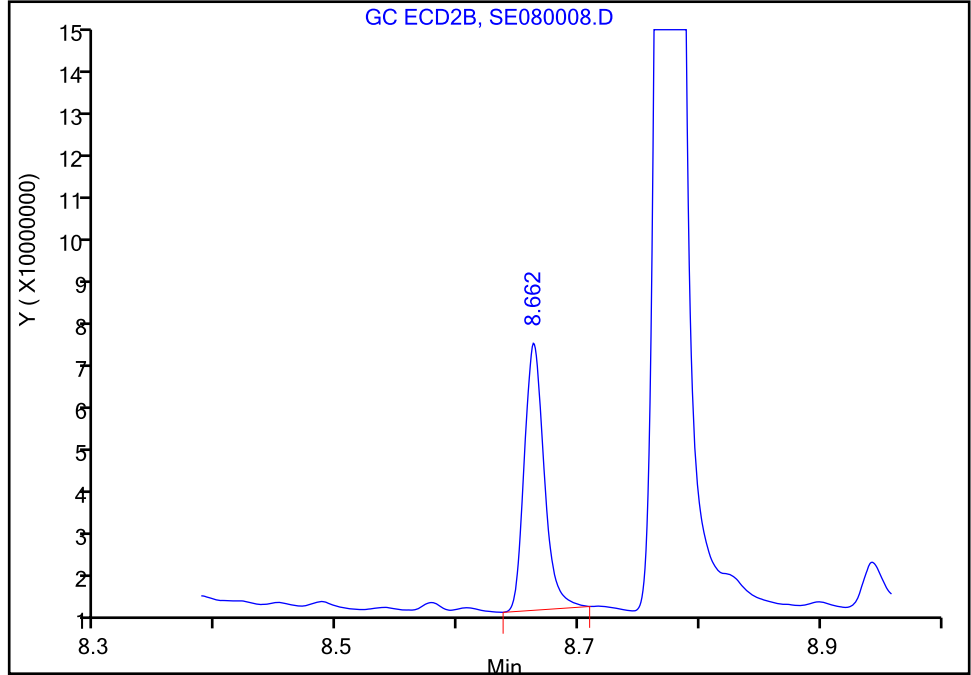
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

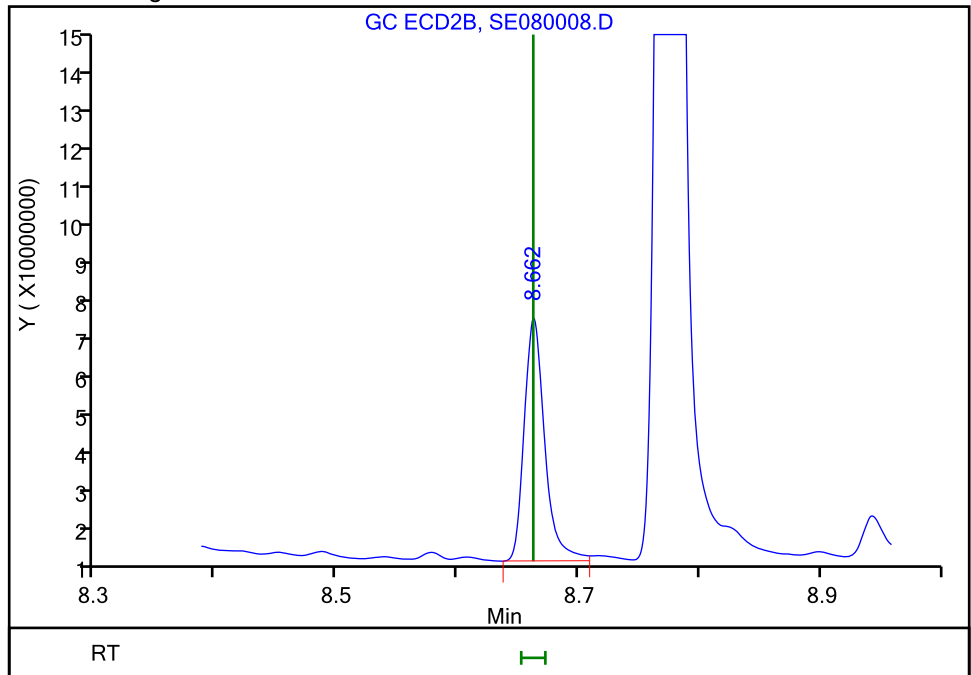
RT: 8.66
Area: 72376111
Amount: 0.091160
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 74902105
Amount: 0.093165
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

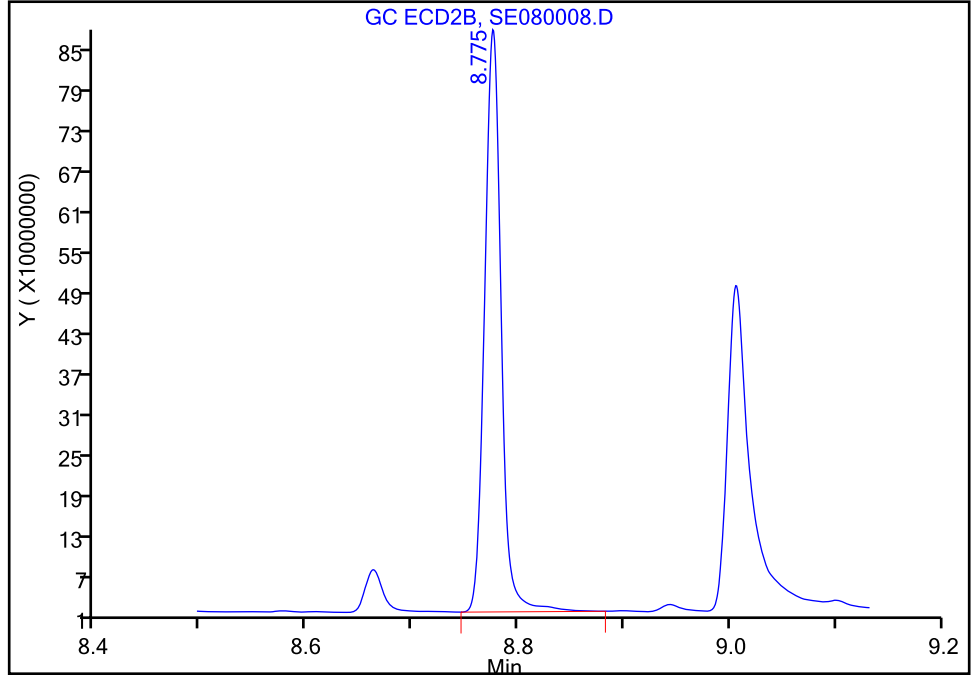
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

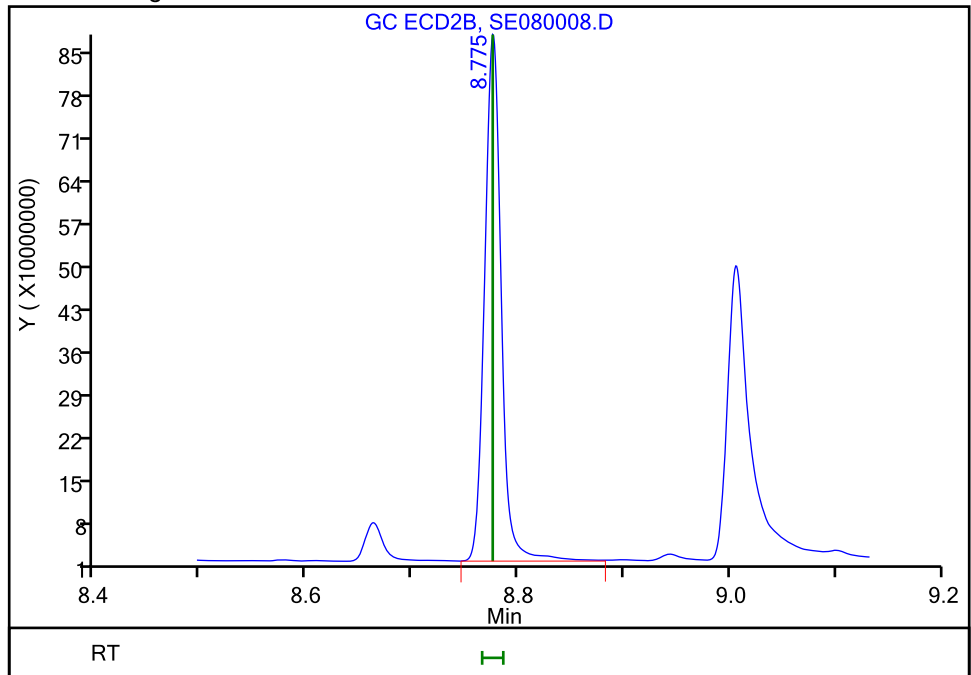
RT: 8.78
Area: 941669698
Amount: 0.096297
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 947740711
Amount: 0.096500
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

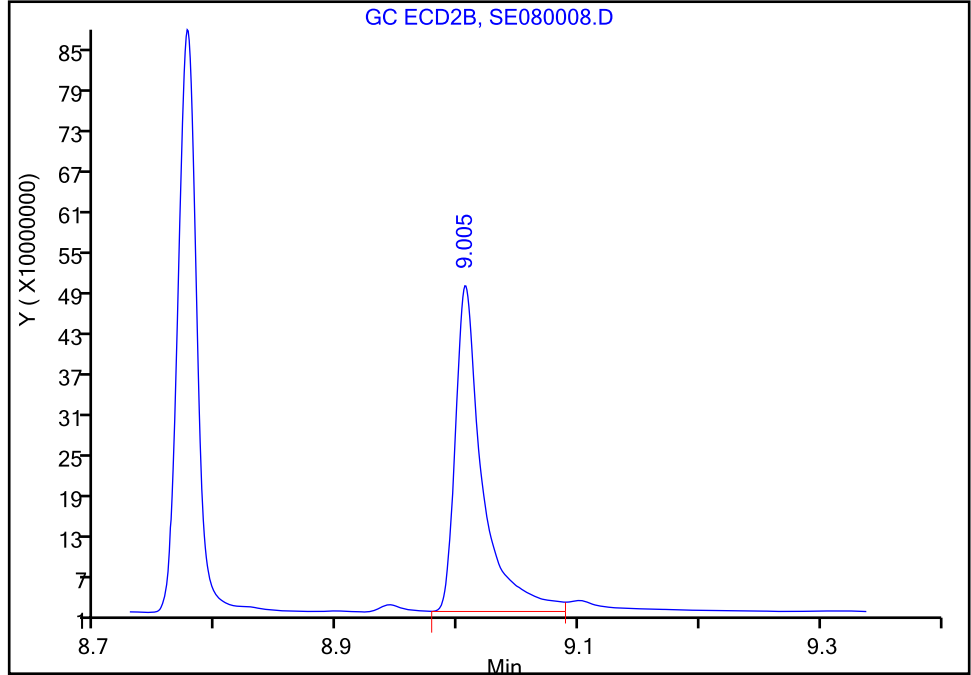
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

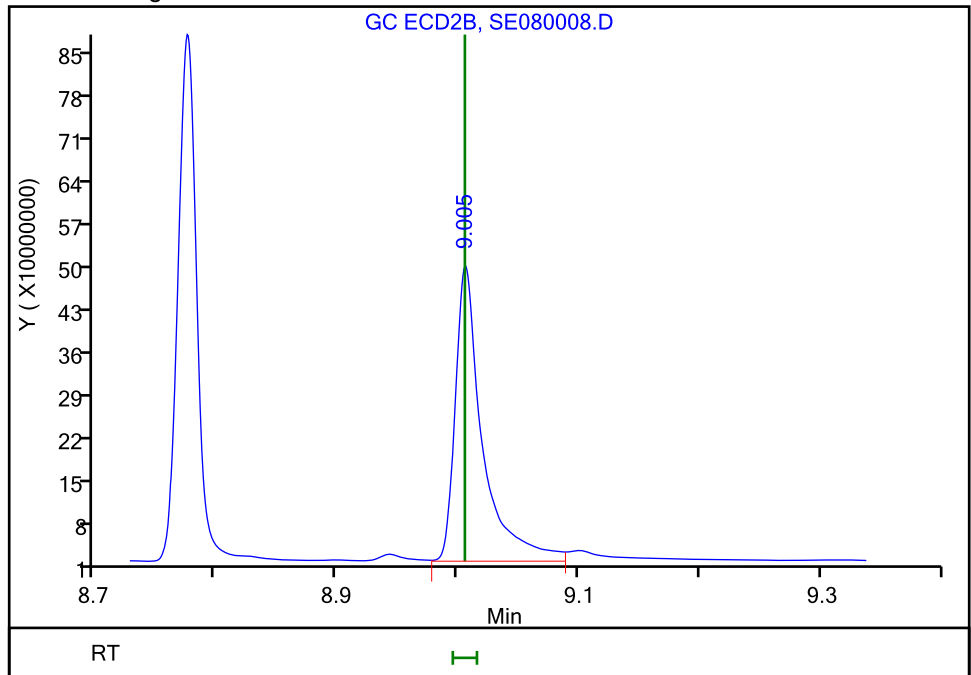
RT: 9.01
Area: 751443253
Amount: 0.084403
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 759779337
Amount: 0.076880
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-May-2018 13:36:16 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:32 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:19:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	25290814	0.0500	0.0483	
2	2.632	2.632	0.000	71378402	0.0500	0.0443	
						RPD = 8.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	5120223	NC	NC	
2	5.101	5.102	-0.001	27211487	NC	NC	
						RPD = 3.92	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	55102499	NC	NC	
2	5.776	5.776	0.000	240010788	NC	NC	
						RPD = 1.48	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	15117918	0.0500	0.0470	
2	6.116	6.116	0.000	82525138	0.0500	0.0459	
						RPD = 2.39	
5 4-Nitrophenol							
1	6.254	6.253	0.001	4230904	0.0500	0.0458	
2	6.506	6.505	0.001	14245923	0.0500	0.0476	
						RPD = 4.02	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	9821711	0.0500	0.0464	
2	6.829	6.829	0.000	65002540	0.0500	0.0462	
						RPD = 0.58	
7 Dicamba							
1	6.721	6.720	0.001	24549090	0.0250	0.0228	
2	6.909	6.910	-0.001	113374207	0.0250	0.0226	
						RPD = 0.70	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.866	6.867	-0.001	2565927	5.00	5.99	
2	6.955	6.955	0.000	26339273	5.00	5.17	
						RPD = 14.76	
9 MCPA							
1	6.994	6.994	0.000	4373482	5.00	4.72	
2	7.154	7.155	-0.001	40478712	5.00	7.49	
						RPD = 45.31	
10 Dichlorprop							
1	7.181	7.180	0.001	13064380	0.0500	0.0471	
2	7.297	7.297	0.000	62424883	0.0500	0.0443	
						RPD = 6.13	
11 2,4-D							
1	7.331	7.326	0.005	13528651	0.0500	0.0447	
2	7.520	7.517	0.003	68918972	0.0500	0.0432	
						RPD = 3.38	
12 Pentachlorophenol							
1	7.674	7.674	0.000	60060646	0.0125	0.0112	
2	7.713	7.714	-0.001	214964113	0.0125	0.0114	
						RPD = 2.42	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	20302486	0.0125	0.0108	
2	7.846	7.846	0.000	78639731	0.0125	0.0106	
						RPD = 1.56	
14 Chloramben							
1	7.860	7.855	0.005	60085684	0.0500	0.0468	
2	8.164	8.162	0.002	240336393	0.0500	0.0427	
						RPD = 9.03	
15 2,4,5-T							
1	7.933	7.929	0.004	26566988	0.0125	0.0121	
2	8.086	8.083	0.003	68256754	0.0125	0.0103	
						RPD = 16.45	
16 2,4-DB							
1	8.178	8.175	0.003	5762851	0.0500	0.0472	
2	8.305	8.302	0.003	46624287	0.0500	0.0473	
						RPD = 0.23	
17 Dinoseb							
1	8.225	8.224	0.001	53295649	0.0500	0.0435	
2	8.248	8.248	0.000	154960345	0.0500	0.0402	
						RPD = 8.01	
18 Bentazon							
1	8.301	8.300	0.001	13719455	0.0500	0.0477	
2	8.663	8.662	0.001	35565067	0.0500	0.0442	
						RPD = 7.56	
19 Picloram							
1	8.533	8.529	0.004	94759287	0.0500	0.0468	
2	9.009	9.005	0.004	328532437	0.0500	0.0386	
						RPD = 19.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.624	8.623	0.001	151449071	0.0500	0.0460	
2	8.775	8.775	0.000	451881325	0.0500	0.0460	
						RPD = 0.05	

21 Acifluorfen

1	9.667	9.666	0.001	97225812	0.0500	0.0468	
2	9.791	9.792	-0.001	248586919	0.0500	0.0440	
						RPD = 6.11	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
Injection Date: 08-May-2018 13:36:16
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 9

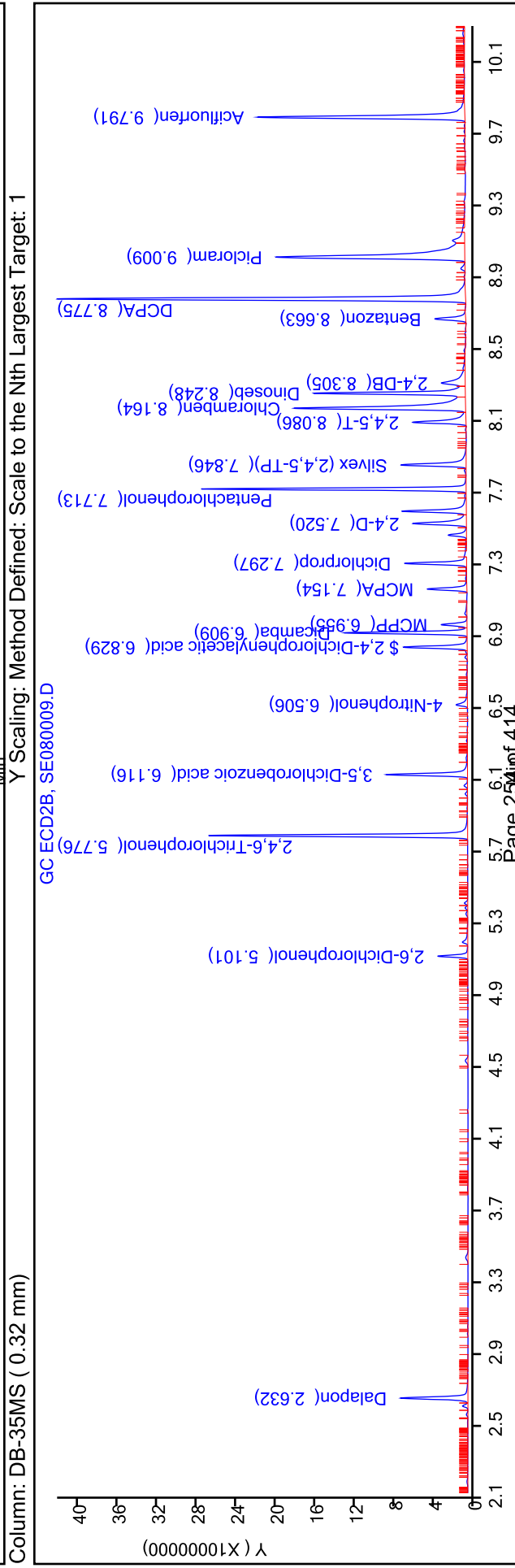
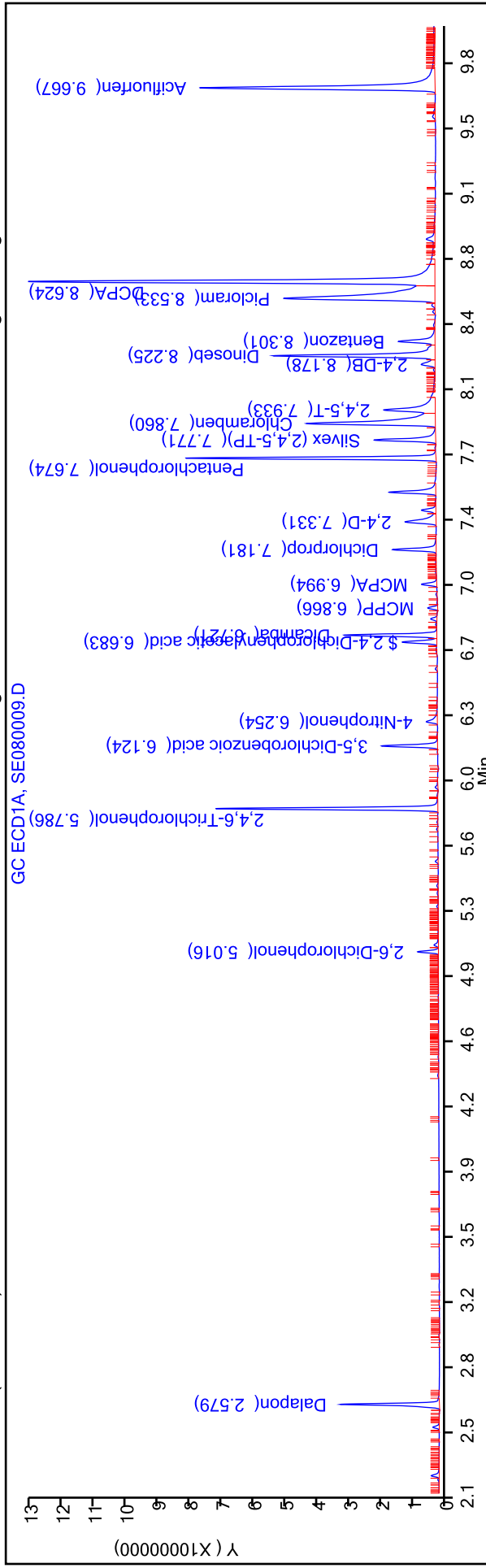
Lims ID: ic h3
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 9

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-May-2018 13:55:52 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:38 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.580	2.579	0.001	13718735	0.0250	0.0262	
2	2.632	2.632	0.000	39932951	0.0250	0.0248	
							RPD = 5.50

2 2,6-Dichlorophenol

1	5.016	5.015	0.001	2779258	NC	NC	
2	5.102	5.102	0.000	15274619	NC	NC	
							RPD = 0.57

3 2,4,6-Trichlorophenol

1	5.786	5.786	0.000	27400593	NC	NC	
2	5.776	5.776	0.000	122077658	NC	NC	
							RPD = 3.74

4 3,5-Dichlorobenzoic acid

1	6.125	6.124	0.001	8148129	0.0250	0.0254	
2	6.118	6.116	0.002	44015926	0.0250	0.0245	
							RPD = 3.44

5 4-Nitrophenol

1	6.258	6.253	0.005	2307008	0.0250	0.0250	
2	6.511	6.505	0.006	7416225	0.0250	0.0248	
							RPD = 0.61

\$ 6 2,4-Dichlorophenylacetic acid

1	6.684	6.683	0.001	5538443	0.0250	0.0262	
2	6.830	6.829	0.001	34723127	0.0250	0.0247	
							RPD = 5.99

7 Dicamba

1	6.720	6.720	0.000	13200023	0.0125	0.0123	
2	6.910	6.910	0.000	58578625	0.0125	0.0117	
							RPD = 4.69

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	1288891	2.50	3.49	
2	6.955	6.955	0.000	16319936	2.50	2.87	
						RPD = 19.60	
9 MCPA							
1	6.995	6.994	0.001	2137688	2.50	2.31	
2	7.155	7.155	0.000	24668652	2.50	4.72	
						RPD = 68.67	
10 Dichlorprop							
1	7.182	7.180	0.002	6871862	0.0250	0.0248	
2	7.298	7.297	0.001	33672808	0.0250	0.0239	
						RPD = 3.61	
11 2,4-D							
1	7.337	7.326	0.011	6740238	0.0250	0.0223	
2	7.524	7.517	0.007	35695833	0.0250	0.0224	
						RPD = 0.50	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	29521455	0.006250	0.005483	
2	7.713	7.714	-0.001	107509203	0.006250	0.005716	
						RPD = 4.15	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	9932955	0.006250	0.005287	
2	7.850	7.846	0.004	39284572	0.006250	0.005315	
						RPD = 0.53	
14 Chloramben							
1	7.864	7.855	0.009	28147981	0.0250	0.0279	
2	8.167	8.162	0.005	117512235	0.0250	0.0209	
						RPD = 28.91	
15 2,4,5-T							
1	7.935	7.929	0.006	13893399	0.006250	0.006333	
2	8.090	8.083	0.007	34680183	0.006250	0.005218	
						RPD = 19.31	
16 2,4-DB							
1	8.182	8.175	0.007	2666490	0.0250	0.0295	
2	8.308	8.302	0.006	26051520	0.0250	0.0264	
						RPD = 10.95	
17 Dinoseb							
1	8.225	8.224	0.001	27141219	0.0250	0.0222	
2	8.250	8.248	0.002	77307007	0.0250	0.0234	
						RPD = 5.56	
18 Bentazon							
1	8.304	8.300	0.004	6986266	0.0250	0.0243	
2	8.665	8.662	0.003	18151512	0.0250	0.0226	
						RPD = 7.33	
19 Picloram							
1	8.538	8.529	0.009	44134008	0.0250	0.0275	
2	9.011	9.005	0.006	155603121	0.0250	0.0232	
						RPD = 16.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	77163736	0.0250	0.0234	
2	8.776	8.775	0.001	226645361	0.0250	0.0231	
						RPD = 1.52	

21 Acifluorfen

1	9.668	9.666	0.002	48982390	0.0250	0.0268	
2	9.795	9.792	0.003	120359495	0.0250	0.0266	
						RPD = 0.57	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
Injection Date: 08-May-2018 13:55:52
Lims ID: ic h2
Instrument ID: CSGS

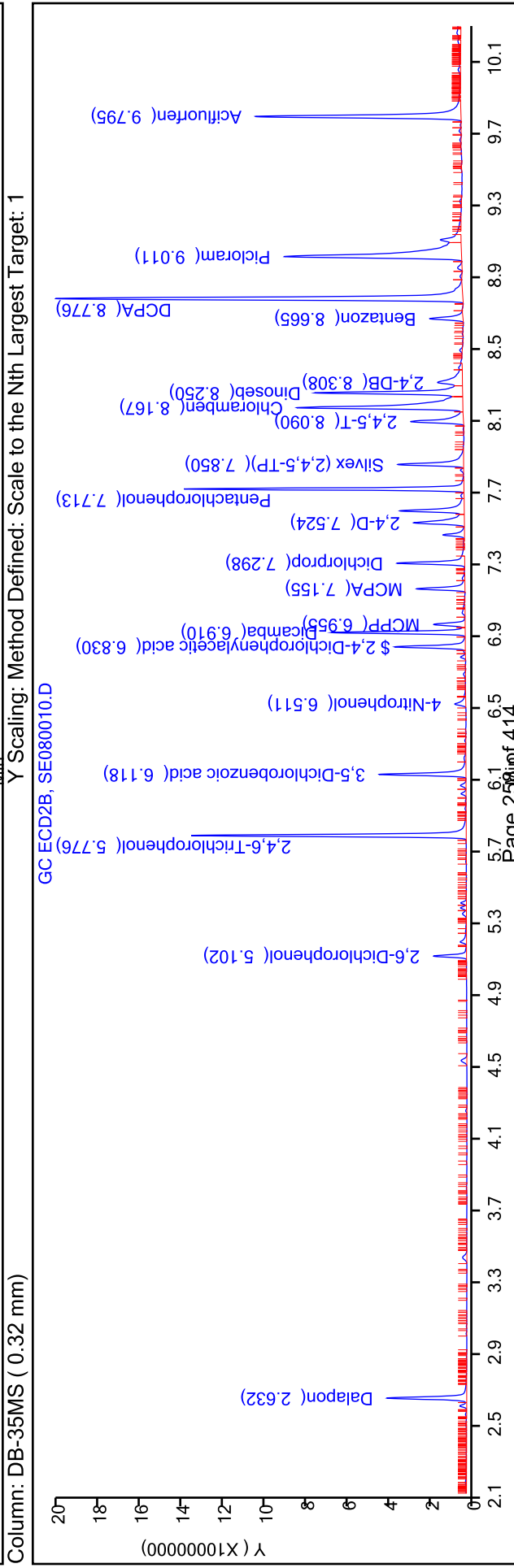
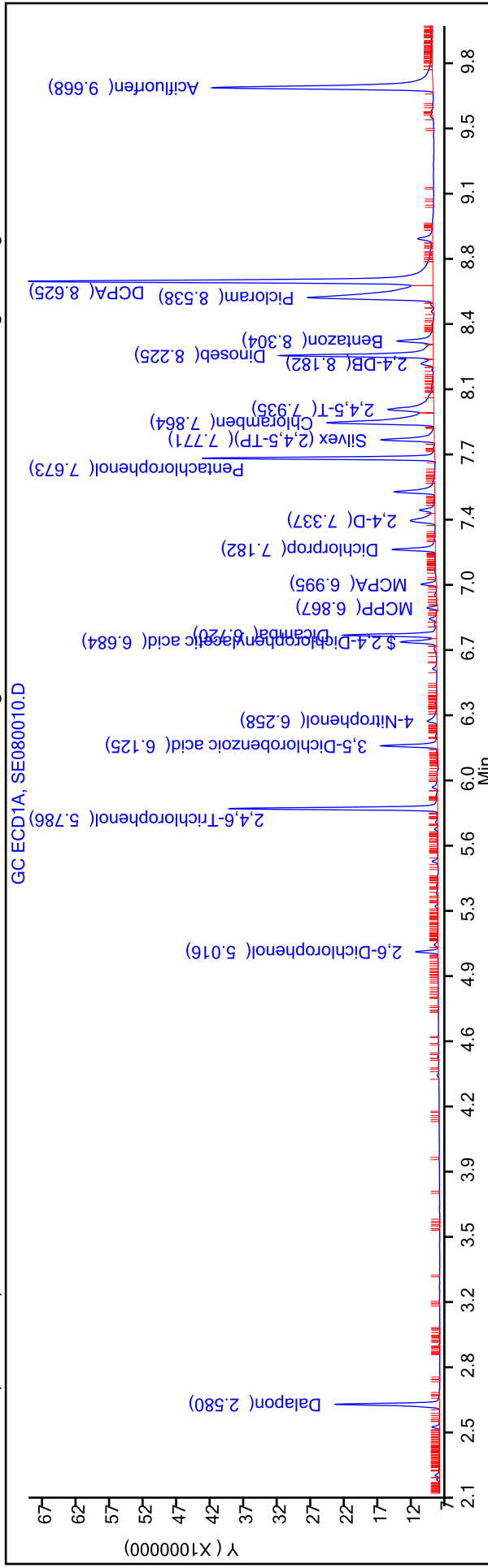
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-May-2018 14:15:28 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:44 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon

1	2.580	2.579	0.001	5906230	0.0100	0.0113	
2	2.633	2.632	0.001	17983150	0.0100	0.0112	
							RPD = 1.00

2 2,6-Dichlorophenol

1	5.016	5.015	0.001	1242849	NC	NC	
2	5.103	5.102	0.001	6728448	NC	NC	
							RPD = 2.08

3 2,4,6-Trichlorophenol

1	5.786	5.786	0.000	10511883	NC	NC	
2	5.776	5.776	0.000	47802186	NC	NC	
							RPD = 5.78

4 3,5-Dichlorobenzoic acid

1	6.126	6.124	0.002	3202229	0.0100	0.0100	
2	6.119	6.116	0.003	18377513	0.0100	0.0102	
							RPD = 2.62

5 4-Nitrophenol

1	6.263	6.253	0.010	711986	0.0100	0.007701	a
2	6.516	6.505	0.011	2506531	0.0100	0.008382	M
							RPD = 8.47

\$ 6 2,4-Dichlorophenylacetic acid

1	6.685	6.683	0.002	2325909	0.0100	0.0110	
2	6.831	6.829	0.002	14359475	0.0100	0.0102	
							RPD = 7.53

7 Dicamba

1	6.721	6.720	0.001	5346345	0.005000	0.004964	
2	6.911	6.910	0.001	23620770	0.005000	0.004716	
							RPD = 5.13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	383358	1.00	1.63	
2	6.956	6.955	0.001	7884133	1.00	0.9383	
						RPD = 53.96	
9 MCPA							
1	6.996	6.994	0.002	684536	1.00	0.7393	
2	7.156	7.155	0.001	12132999	1.00	2.39	
						RPD = 105.59	
10 Dichlorprop							
1	7.182	7.180	0.002	2699462	0.0100	0.009728	
2	7.299	7.297	0.002	15301912	0.0100	0.0109	
						RPD = 10.94	
11 2,4-D							
1	7.346	7.326	0.020	2400934	0.0100	0.007940	a
2	7.531	7.517	0.014	14551198	0.0100	0.009131	a
						RPD = 13.96	
12 Pentachlorophenol							
1	7.674	7.674	0.000	11008502	0.002500	0.002045	
2	7.713	7.714	-0.001	41165516	0.002500	0.002189	
						RPD = 6.80	
13 Silvex (2,4,5-TP)							
1	7.776	7.769	0.007	3531202	0.002500	0.001880	
2	7.851	7.846	0.005	16213772	0.002500	0.002194	
						RPD = 15.42	
14 Chloramben							
1	7.868	7.855	0.013	10146304	0.0100	0.0173	
2	8.171	8.162	0.009	45179417	0.0100	0.008031	
						RPD = 72.95	
15 2,4,5-T							
1	7.937	7.929	0.008	5683855	0.002500	0.002591	
2	8.089	8.083	0.006	14207297	0.002500	0.002138	
						RPD = 19.17	
16 2,4-DB							
1	8.185	8.175	0.010	957156	0.0100	0.0196	Ma
2	8.312	8.302	0.010	10871976	0.0100	0.0110	a
						RPD = 56.23	
17 Dinoseb							
1	8.227	8.224	0.003	10802376	0.0100	0.008826	
2	8.251	8.248	0.003	30077804	0.0100	0.0133	
						RPD = 40.12	
18 Bentazon							
1	8.306	8.300	0.006	3164677	0.0100	0.0110	
2	8.665	8.662	0.003	7803979	0.0100	0.009707	
						RPD = 12.54	
19 Picloram							
1	8.546	8.529	0.017	16249913	0.0100	0.0167	a
2	9.014	9.005	0.009	57128370	0.0100	0.0144	a
						RPD = 14.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	28939470	0.0100	0.008788	
2	8.777	8.775	0.002	86672796	0.0100	0.008825	
						RPD = 0.42	

21 Acifluorfen

1	9.670	9.666	0.004	18199991	0.0100	0.0138	
2	9.794	9.792	0.002	40645245	0.0100	0.0156	
						RPD = 11.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SGHERB-1_00016

Amount Added: 1.00

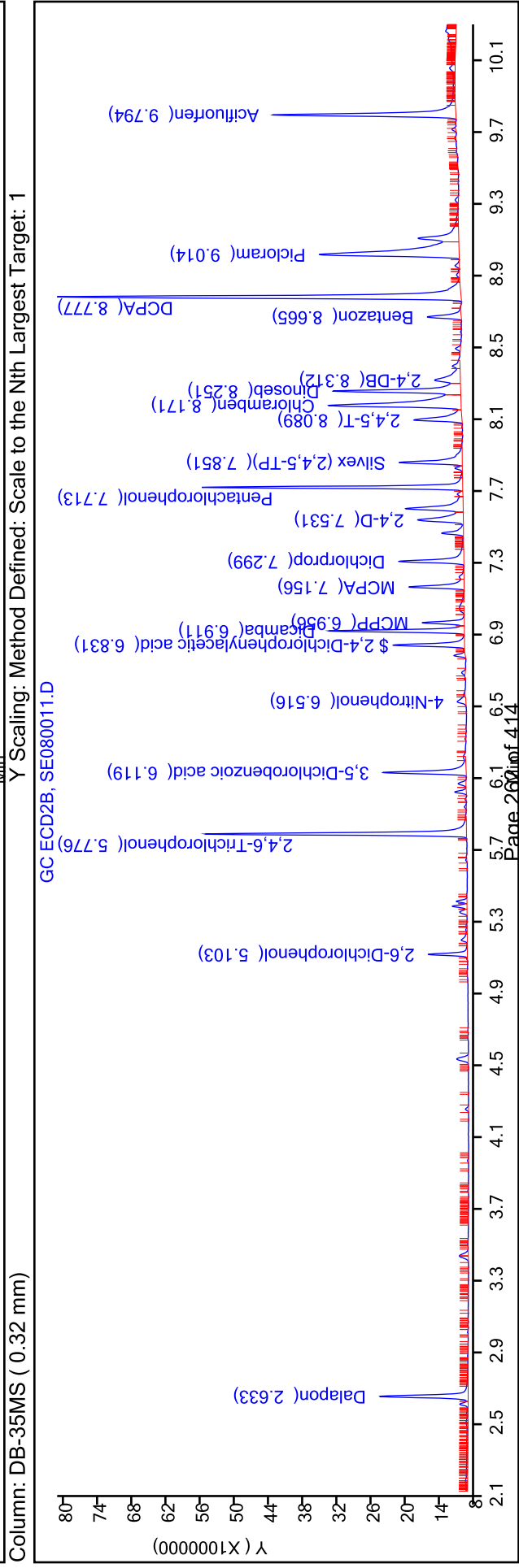
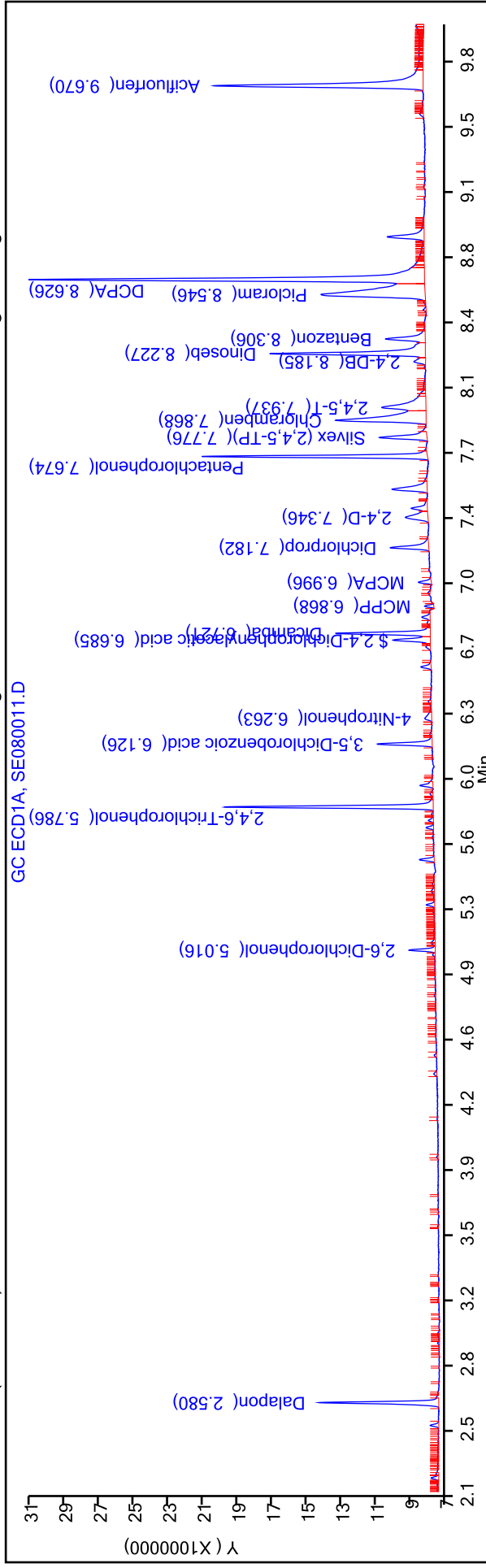
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Injection Date: 08-May-2018 14:15:28
 Lims ID: ic h1
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 11
 ALS Bottle#: 11

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

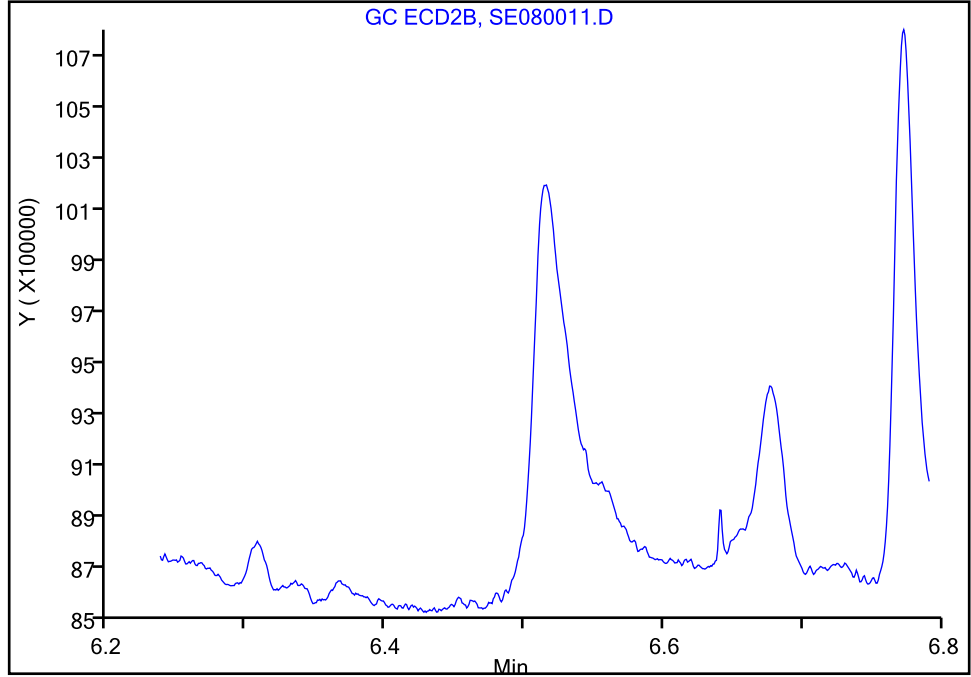
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Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

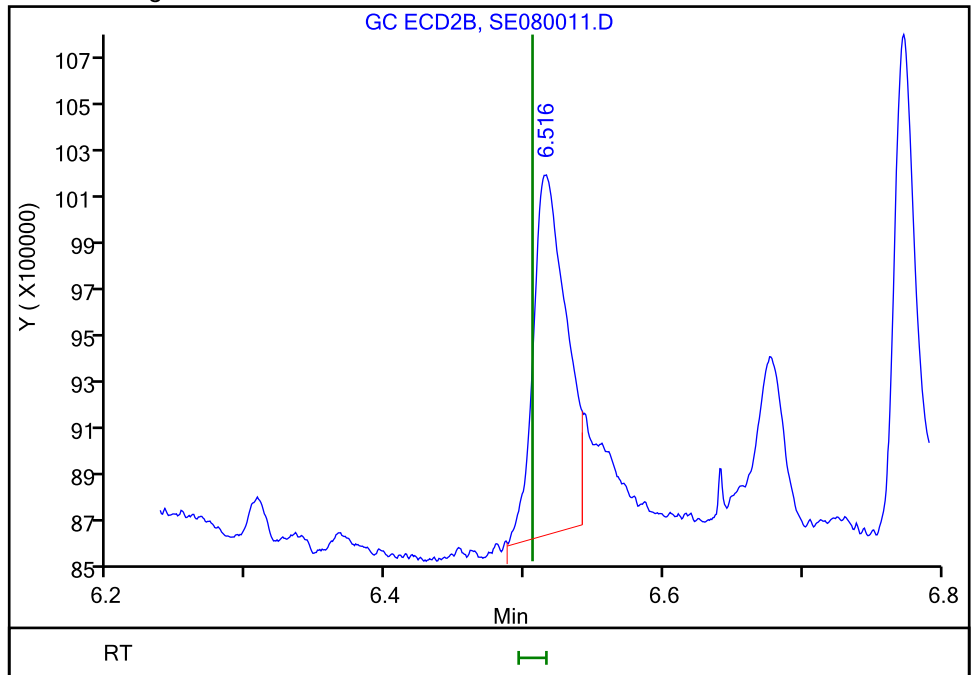
RT: 6.51
Area: 0
Amount: 0.007640
Amount Units: ug/ml

Processing Integration Results



RT: 6.52
Area: 2506531
Amount: 0.008382
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:20

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

TestAmerica Savannah

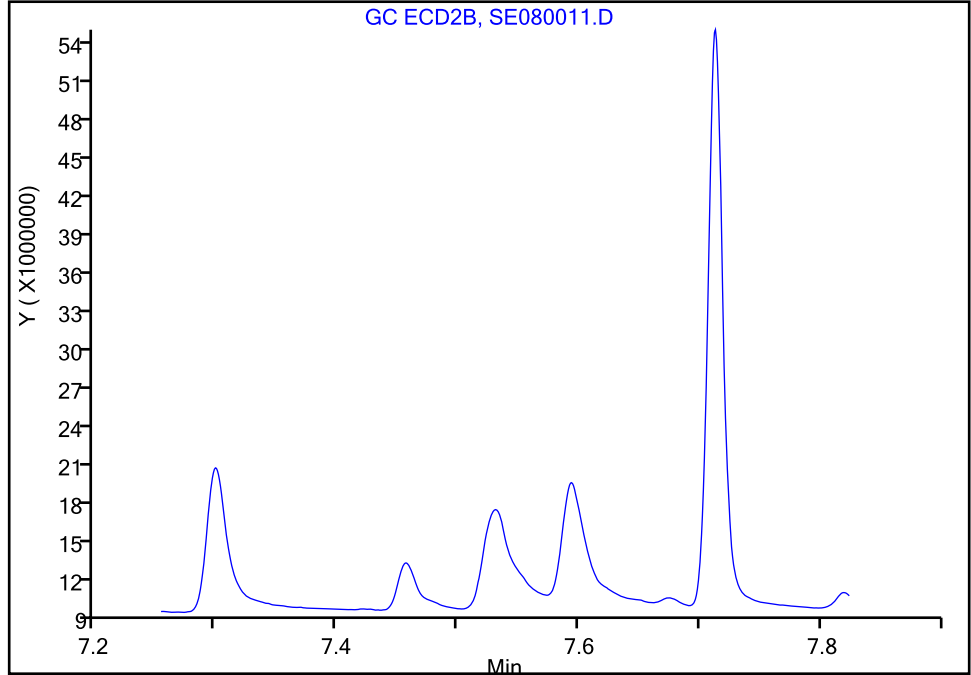
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

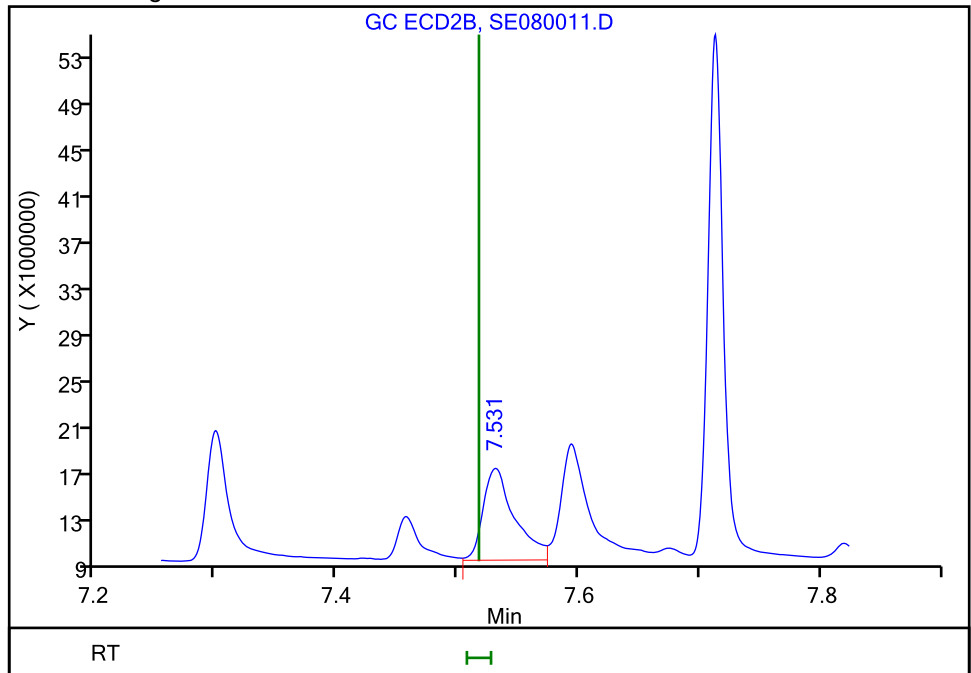
Not Detected
Expected RT: 7.52

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 14551198
Amount: 0.009131
Amount Units: ug/ml



Reviewer: kellarj, 08-May-2018 16:11:16
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

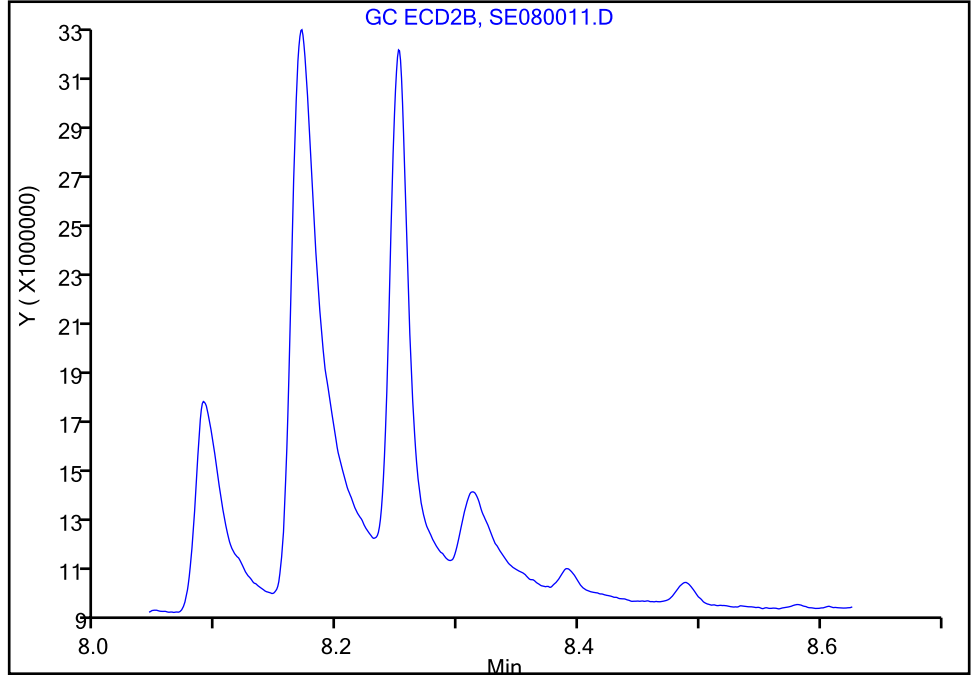
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Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

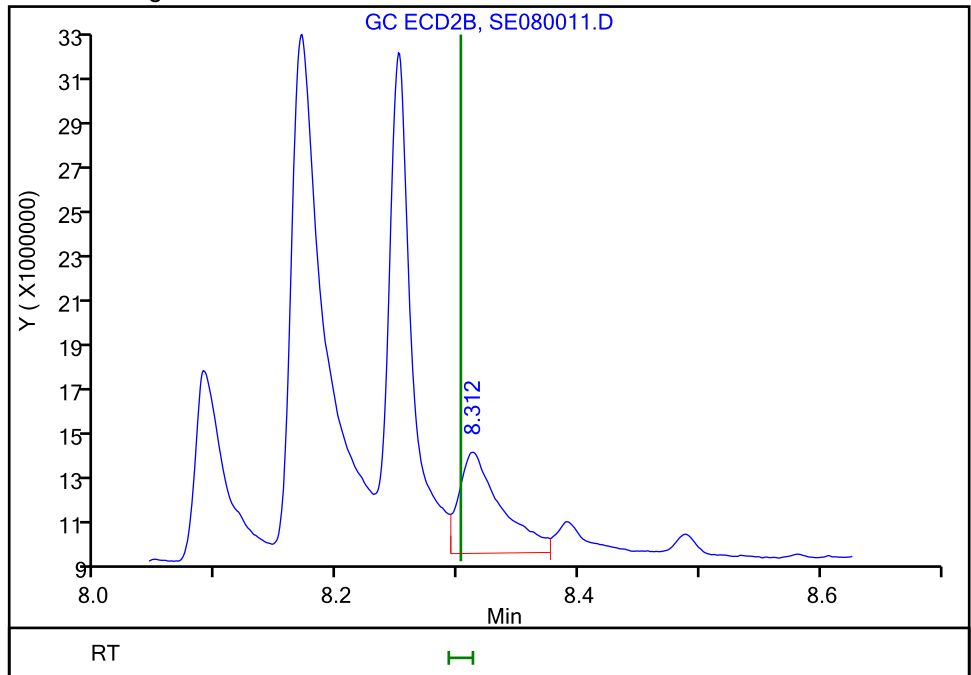
RT: 8.30
Area: 0
Amount: 0.021175
Amount Units: ug/ml

Processing Integration Results



RT: 8.31
Area: 10871976
Amount: 0.011023
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:35
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

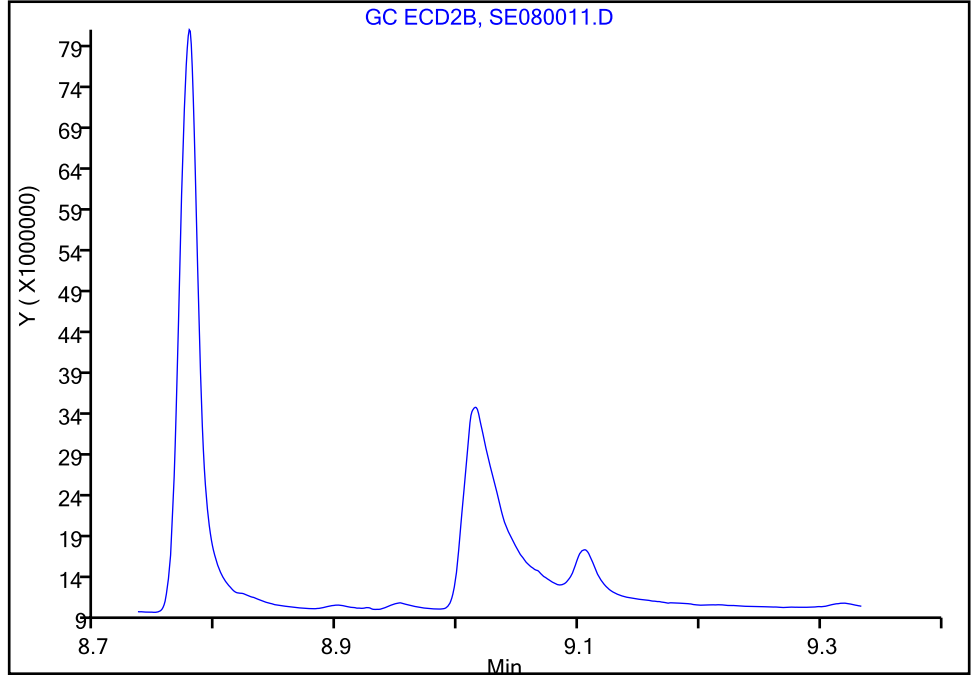
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

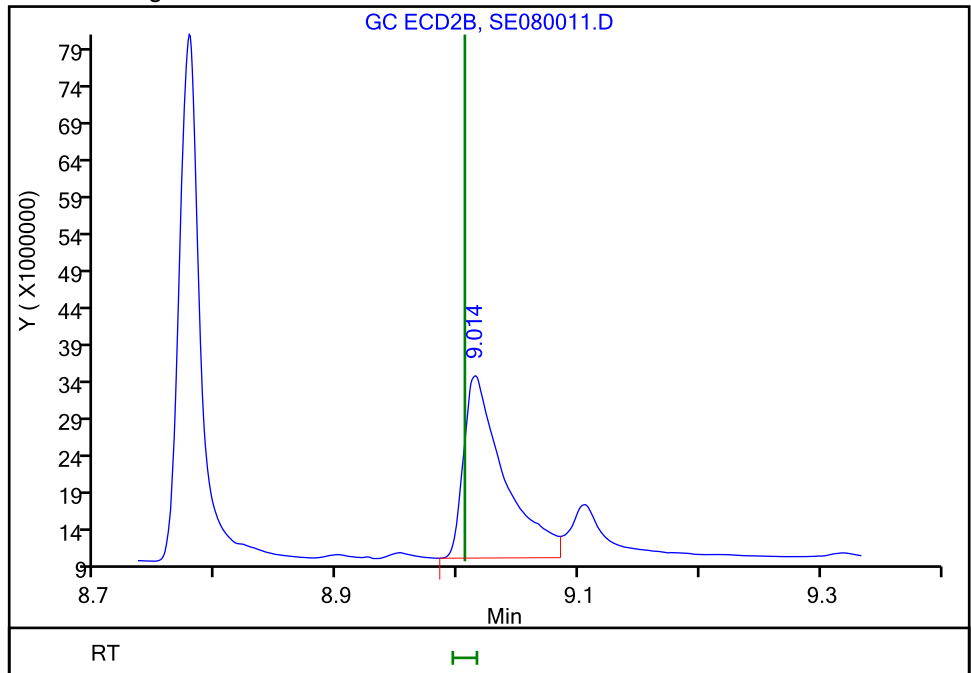
Not Detected
Expected RT: 9.01

Processing Integration Results



RT: 9.01
Area: 57128370
Amount: 0.014446
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:45
Audit Action: Assigned Compound ID

Calibration

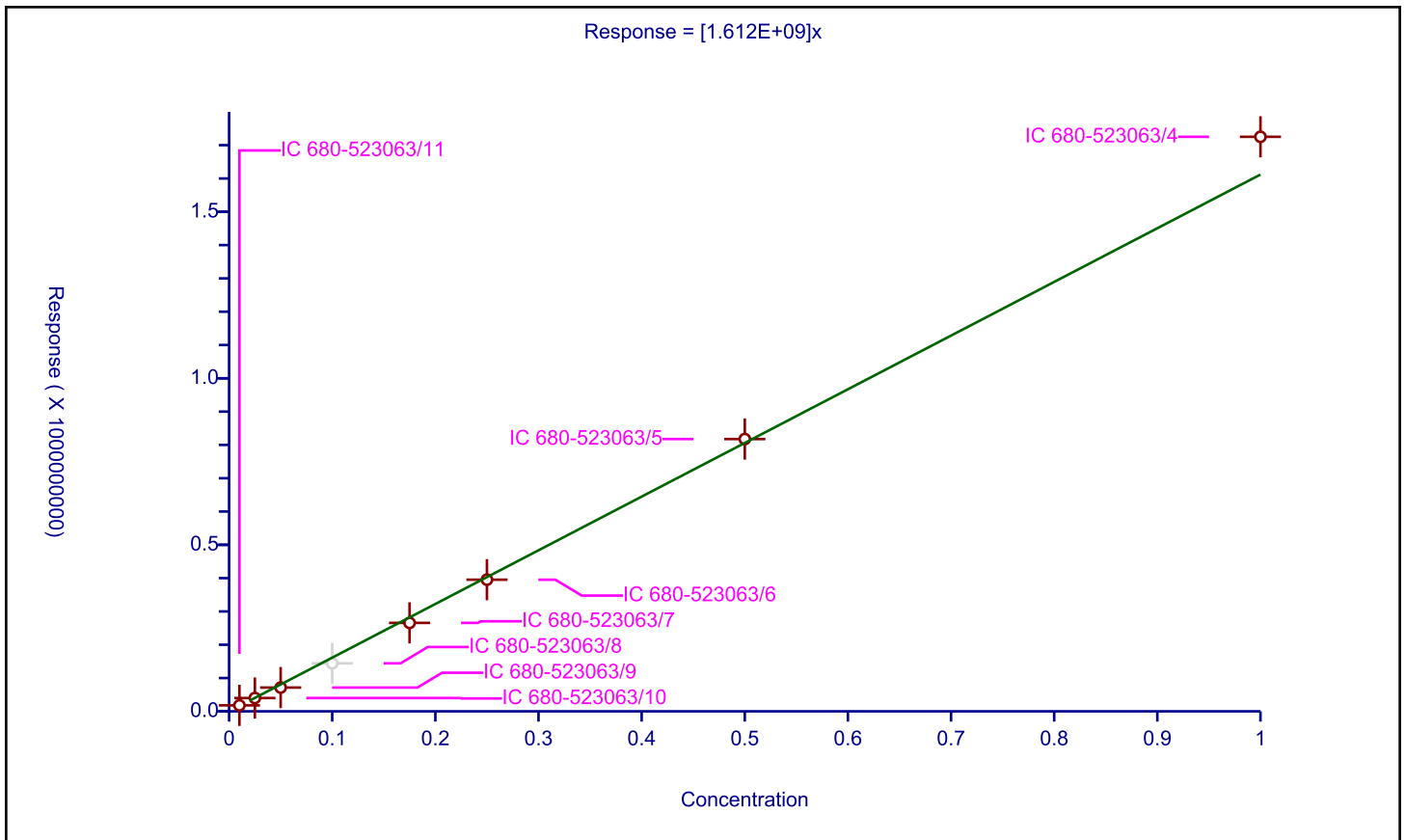
/ Dalapon

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

Curve Coefficients	
Intercept:	0
Slope:	1.612E+09

Error Coefficients	
Standard Error:	47300000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	17983150.0			1798315000.0	Y
2	IC 680-523063/10	0.025	39932951.0			1597318040.0	Y
3	IC 680-523063/9	0.05	71378402.0			1427568040.0	Y
4	IC 680-523063/8	0.1	144107629.0			1441076290.0	N
5	IC 680-523063/7	0.175	265586882.0			1517639325.71429	Y
6	IC 680-523063/6	0.25	395304302.0			1581217208.0	Y
7	IC 680-523063/5	0.5	817578391.0			1635156782.0	Y
8	IC 680-523063/4	1.0	1725206867.0			1725206867.0	Y



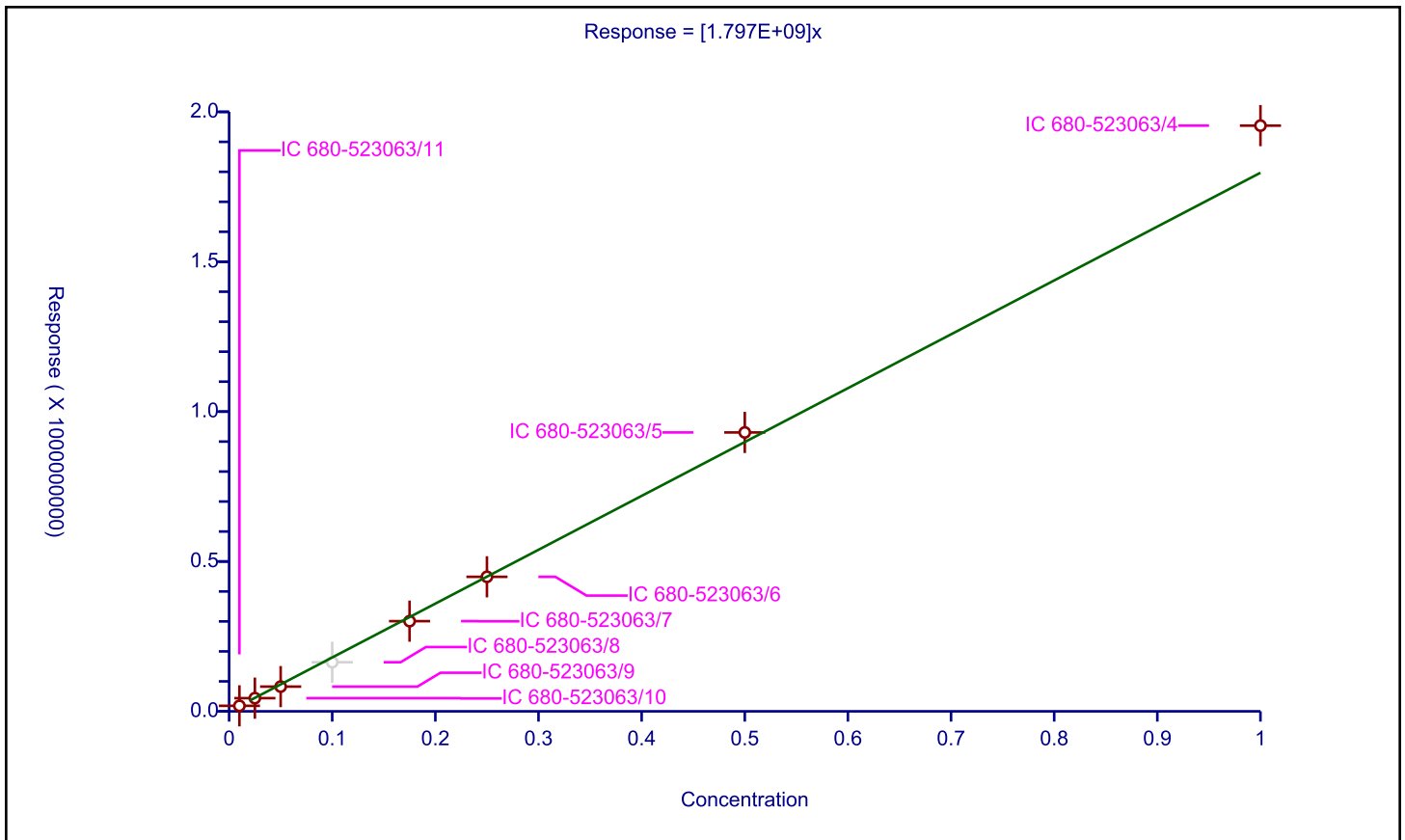
Calibration

/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.797E+09
Error Coefficients	
Standard Error:	65800000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	18377513.0			1837751300.0	Y
2	IC 680-523063/10	0.025	44015926.0			1760637040.0	Y
3	IC 680-523063/9	0.05	82525138.0			1650502760.0	Y
4	IC 680-523063/8	0.1	163818500.0			1638185000.0	N
5	IC 680-523063/7	0.175	300893318.0			1719390388.57143	Y
6	IC 680-523063/6	0.25	448811682.0			1795246728.0	Y
7	IC 680-523063/5	0.5	930526789.0			1861053578.0	Y
8	IC 680-523063/4	1.0	1954171685.0			1954171685.0	Y



Calibration

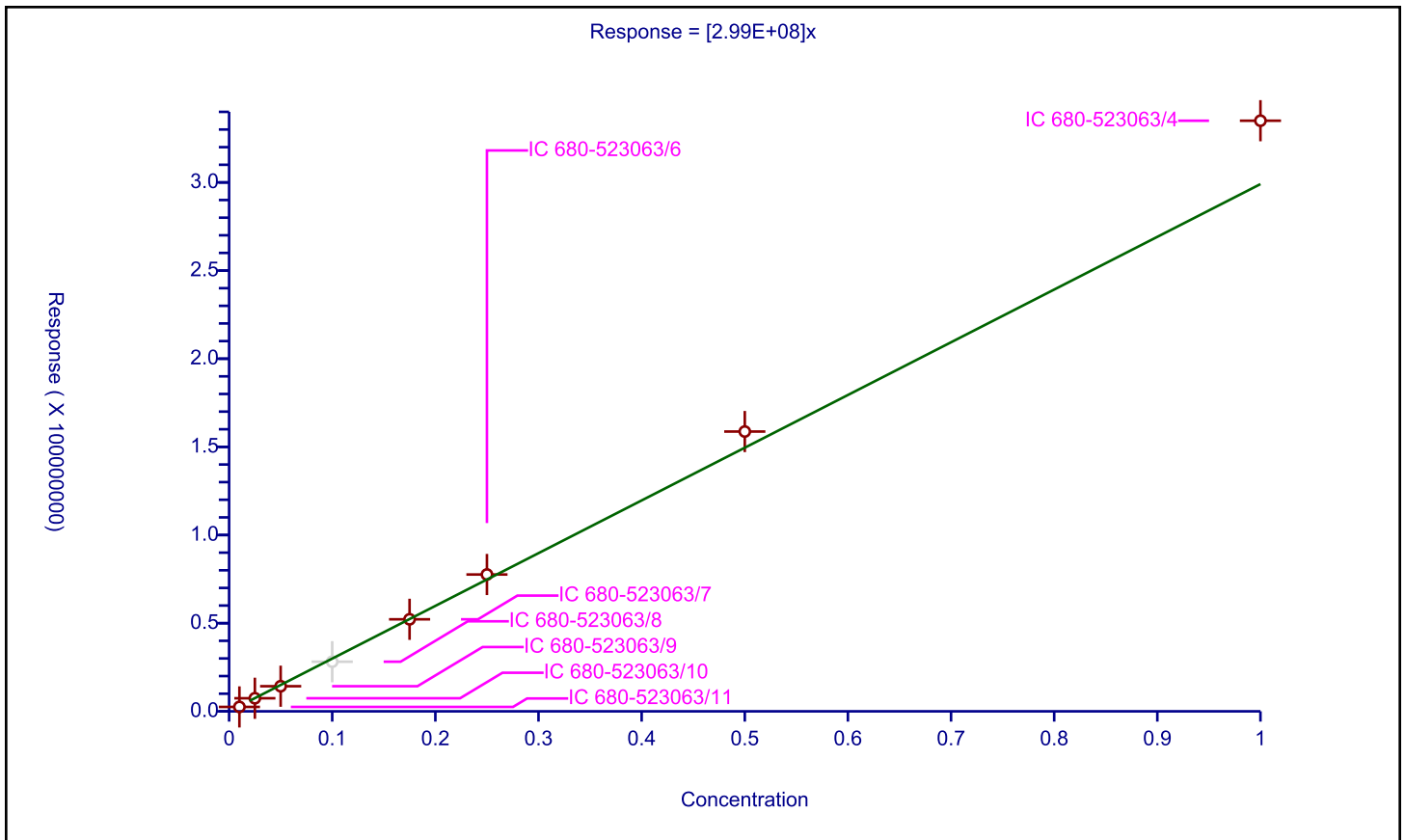
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	2.99E+08

Error Coefficients	
Standard Error:	15200000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2506531.0			250653100.0	Y
2	IC 680-523063/10	0.025	7416225.0			296649000.0	Y
3	IC 680-523063/9	0.05	14245923.0			284918460.0	Y
4	IC 680-523063/8	0.1	28145758.0			281457580.0	N
5	IC 680-523063/7	0.175	52193224.0			298246994.285714	Y
6	IC 680-523063/6	0.25	77606749.0			310426996.0	Y
7	IC 680-523063/5	0.5	158696116.0			317392232.0	Y
8	IC 680-523063/4	1.0	334991246.0			334991246.0	Y



Calibration

/ 2,4-Dichlorophenylacetic acid

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

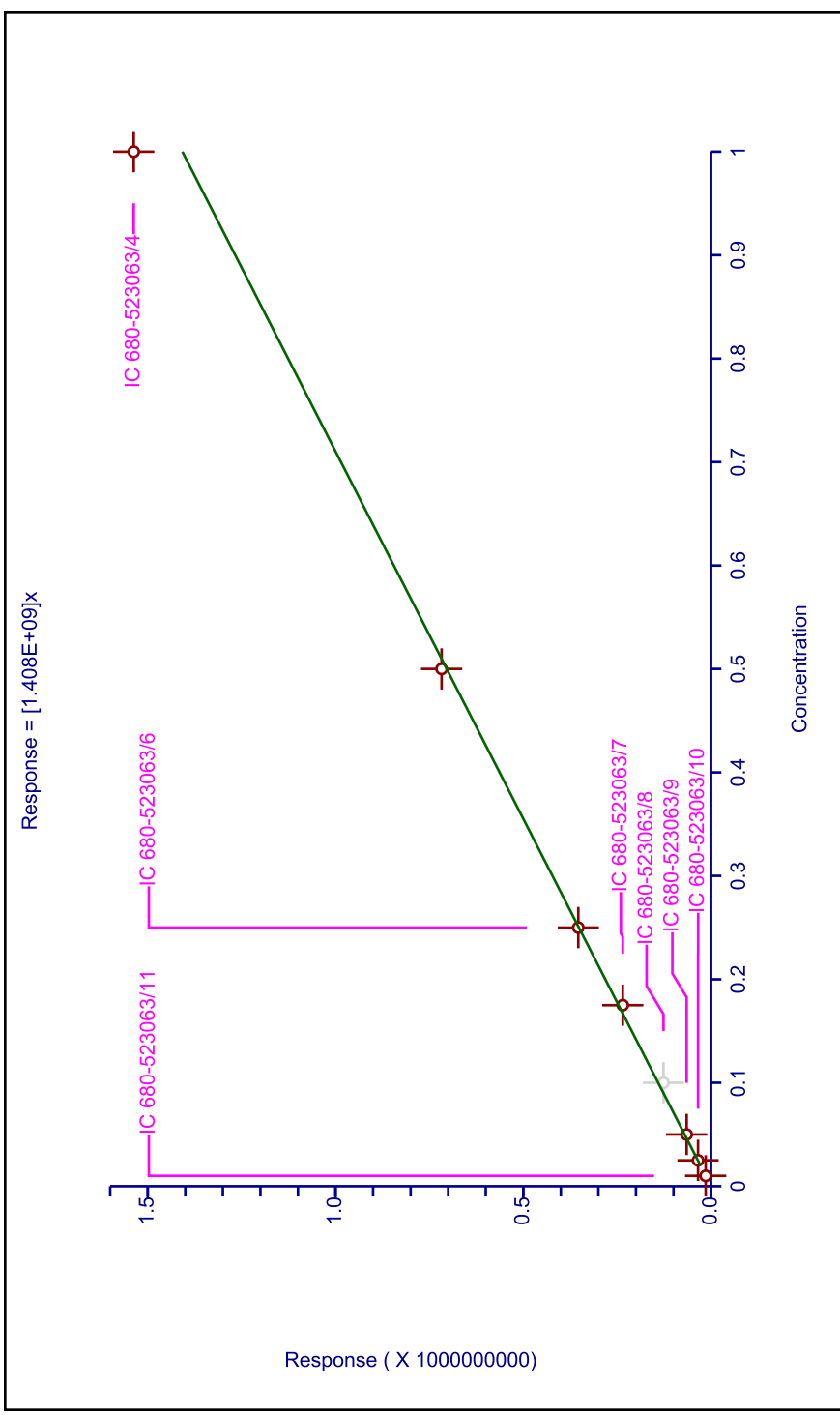
Curve Coefficients

Intercept: 0
Slope: 1.408E+09

Error Coefficients

Standard Error: 53400000
Relative Standard Error: 5.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	14359475.0			1435947500.0	Y
2	IC 680-523063/10	0.025	34723127.0			1388925080.0	Y
3	IC 680-523063/9	0.05	65002540.0			1300050800.0	Y
4	IC 680-523063/8	0.1	126698158.0			1266981580.0	N
5	IC 680-523063/7	0.175	235040238.0			1343087074.28571	Y
6	IC 680-523063/6	0.25	353488120.0			1413952480.0	Y
7	IC 680-523063/5	0.5	717491043.0			1434982086.0	Y
8	IC 680-523063/4	1.0	1537345376.0			1537345376.0	Y



Calibration

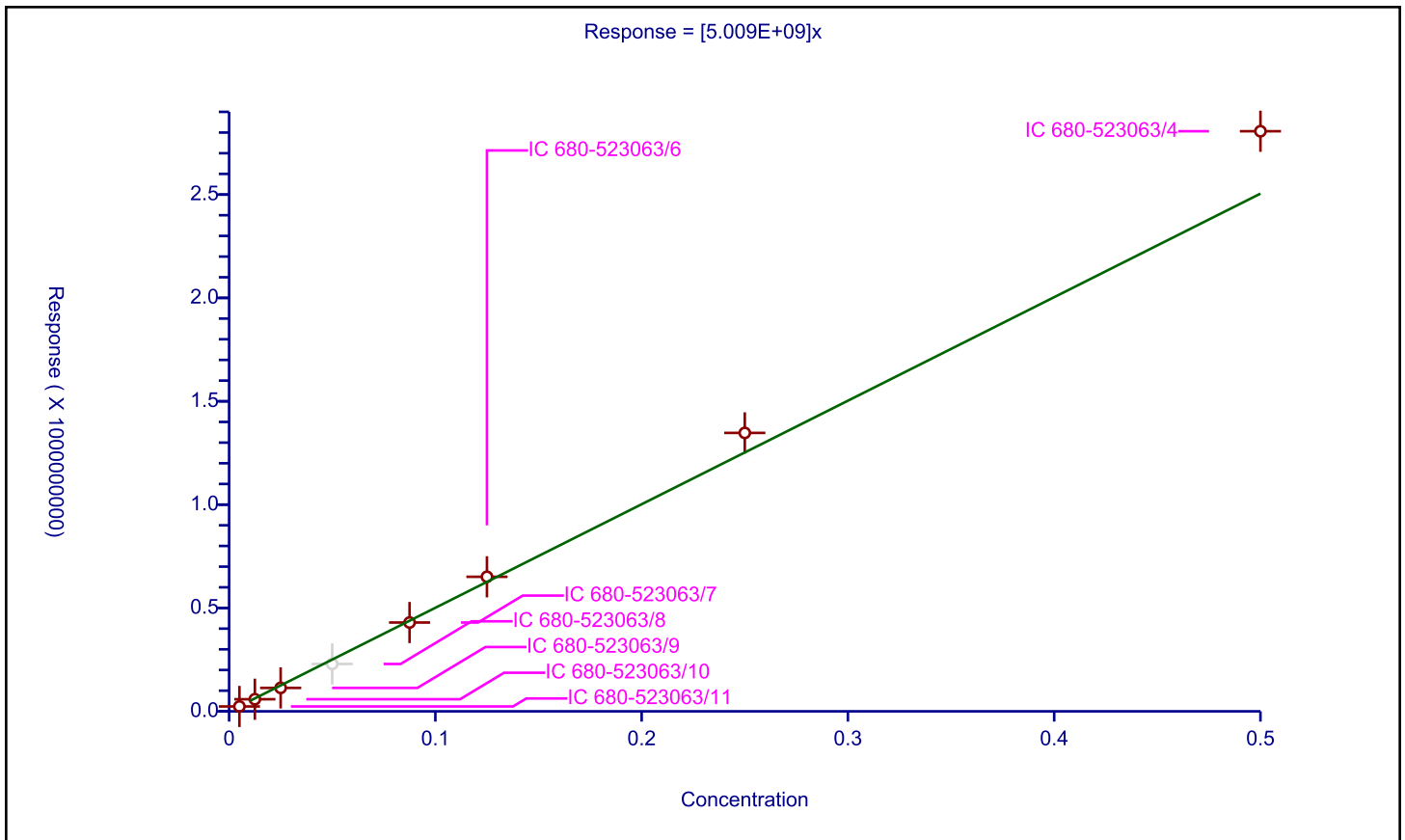
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	5.009E+09

Error Coefficients	
Standard Error:	130000000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.005	23620770.0			4724154000.0	Y
2	IC 680-523063/10	0.0125	58578625.0			4686290000.0	Y
3	IC 680-523063/9	0.025	113374207.0			4534968280.0	Y
4	IC 680-523063/8	0.05	229111440.0			4582228800.0	N
5	IC 680-523063/7	0.0875	429620976.0			4909954011.42857	Y
6	IC 680-523063/6	0.125	650915415.0			5207323320.0	Y
7	IC 680-523063/5	0.25	1347001642.0			5388006568.0	Y
8	IC 680-523063/4	0.5	2806366329.0			5612732658.0	Y



Calibration

/ MCPP

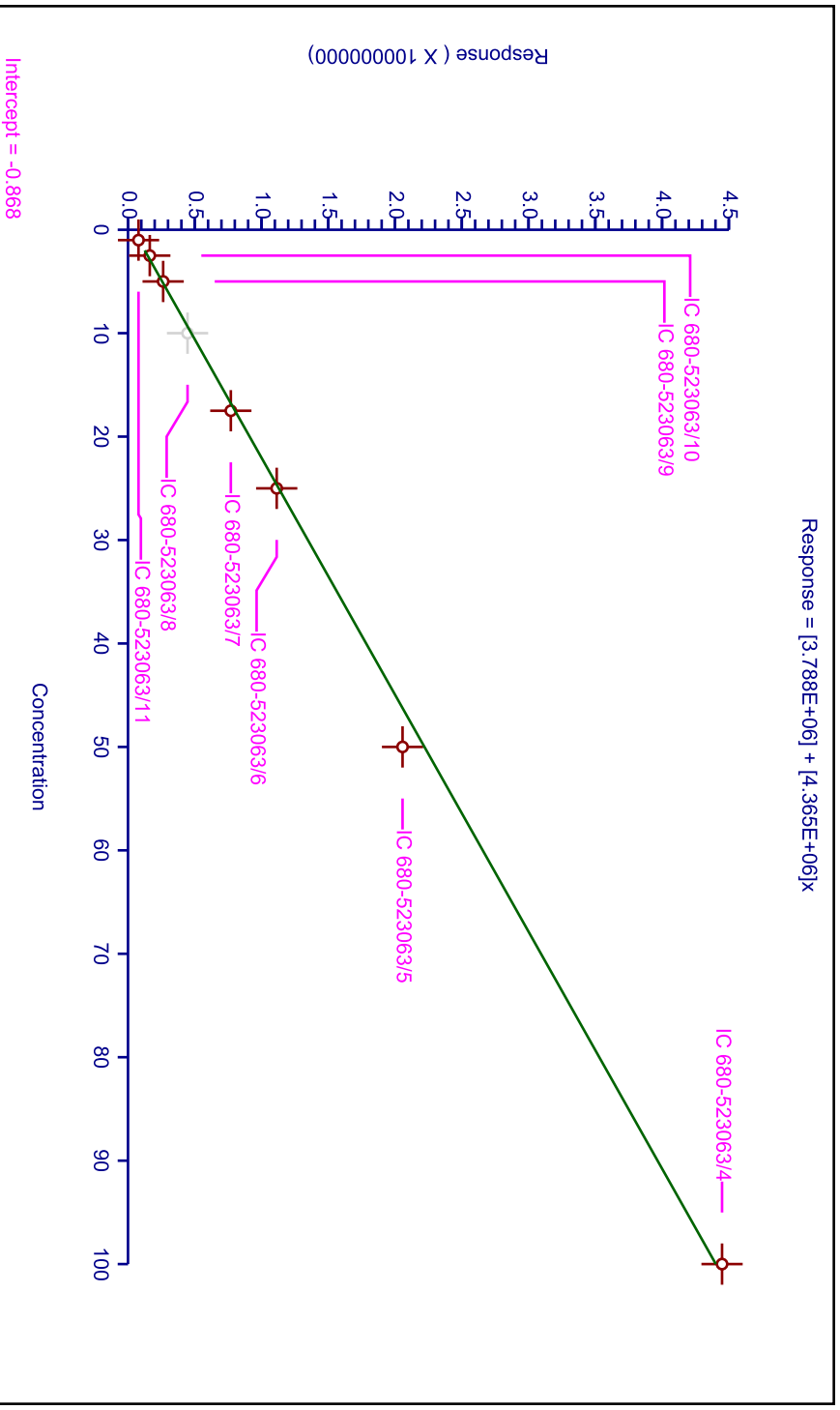
Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients
 Intercept: 3.788E+06
 Slope: 4.365E+06

Error Coefficients

Standard Error: 7830000
 Relative Standard Error: 8.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.992

ID Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	7884133.0	7884133.0	7884133.0	Y
2	IC 680-523063/10	2.5	16319936.0	6527974.4	6527974.4	Y
3	IC 680-523063/9	5.0	26339273.0	5267854.6	5267854.6	Y
4	IC 680-523063/8	10.0	44613118.0	4461311.8	4461311.8	N
5	IC 680-523063/7	17.5	77011106.0	4400634.628571	4400634.628571	Y
6	IC 680-523063/6	25.0	111381364.0	4455254.56	4455254.56	Y
7	IC 680-523063/5	50.0	205635557.0	4112711.14	4112711.14	Y
8	IC 680-523063/4	100.0	444937631.0	4449376.31	4449376.31	Y



Calibration

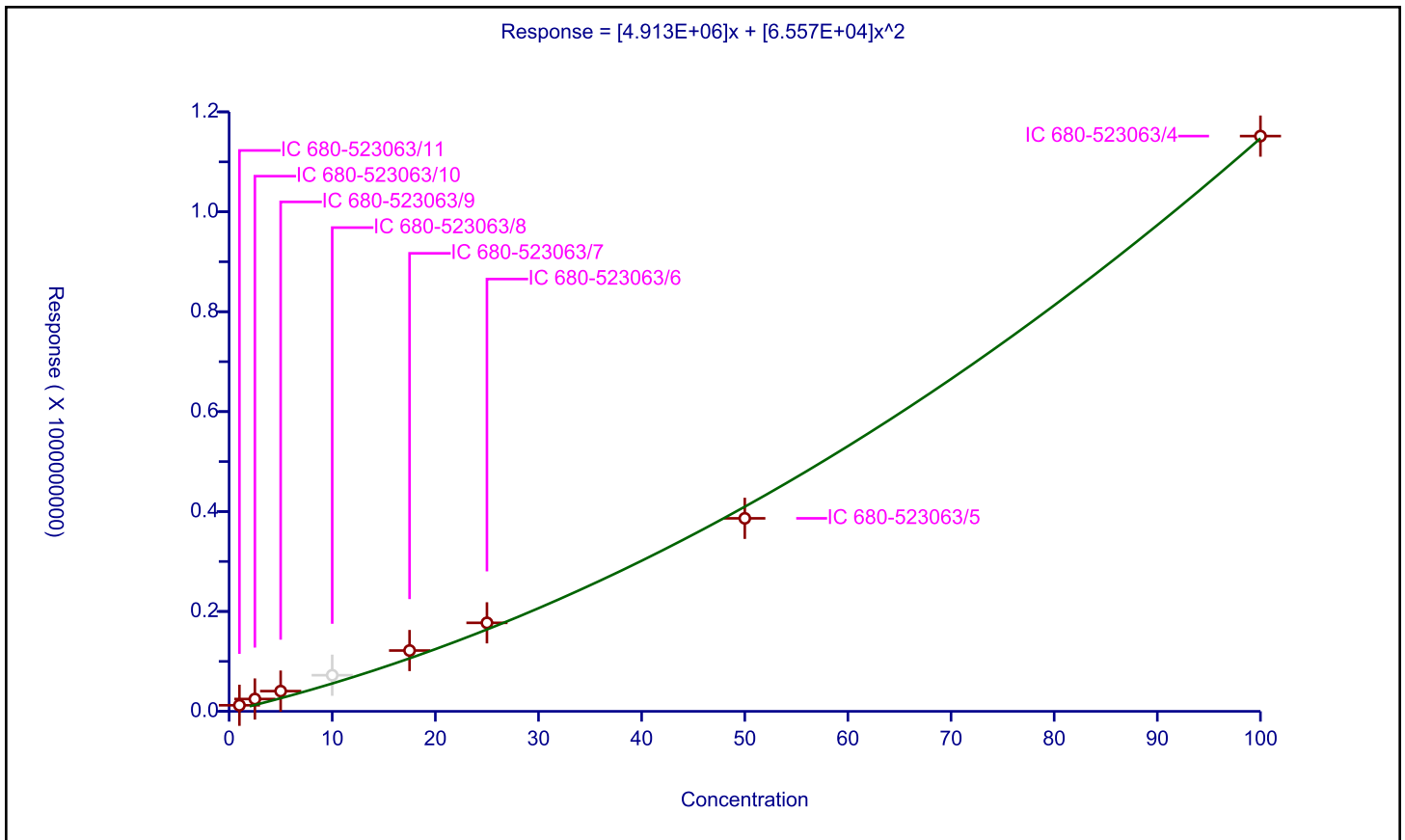
/ MCPA

Curve Type: Quadratic
 Weighting: None
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.913E+06
Second Order:	6.557E+04

Error Coefficients	
Standard Error:	16600000
Relative Standard Error:	77.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	12132999.0			12132999.0	Y
2	IC 680-523063/10	2.5	24668652.0			9867460.8	Y
3	IC 680-523063/9	5.0	40478712.0			8095742.4	Y
4	IC 680-523063/8	10.0	72306759.0			7230675.9	N
5	IC 680-523063/7	17.5	121752778.0			6957301.6	Y
6	IC 680-523063/6	25.0	177192173.0			7087686.92	Y
7	IC 680-523063/5	50.0	386345329.0			7726906.58	Y
8	IC 680-523063/4	100.0	1151515629.0			11515156.29	Y



Calibration

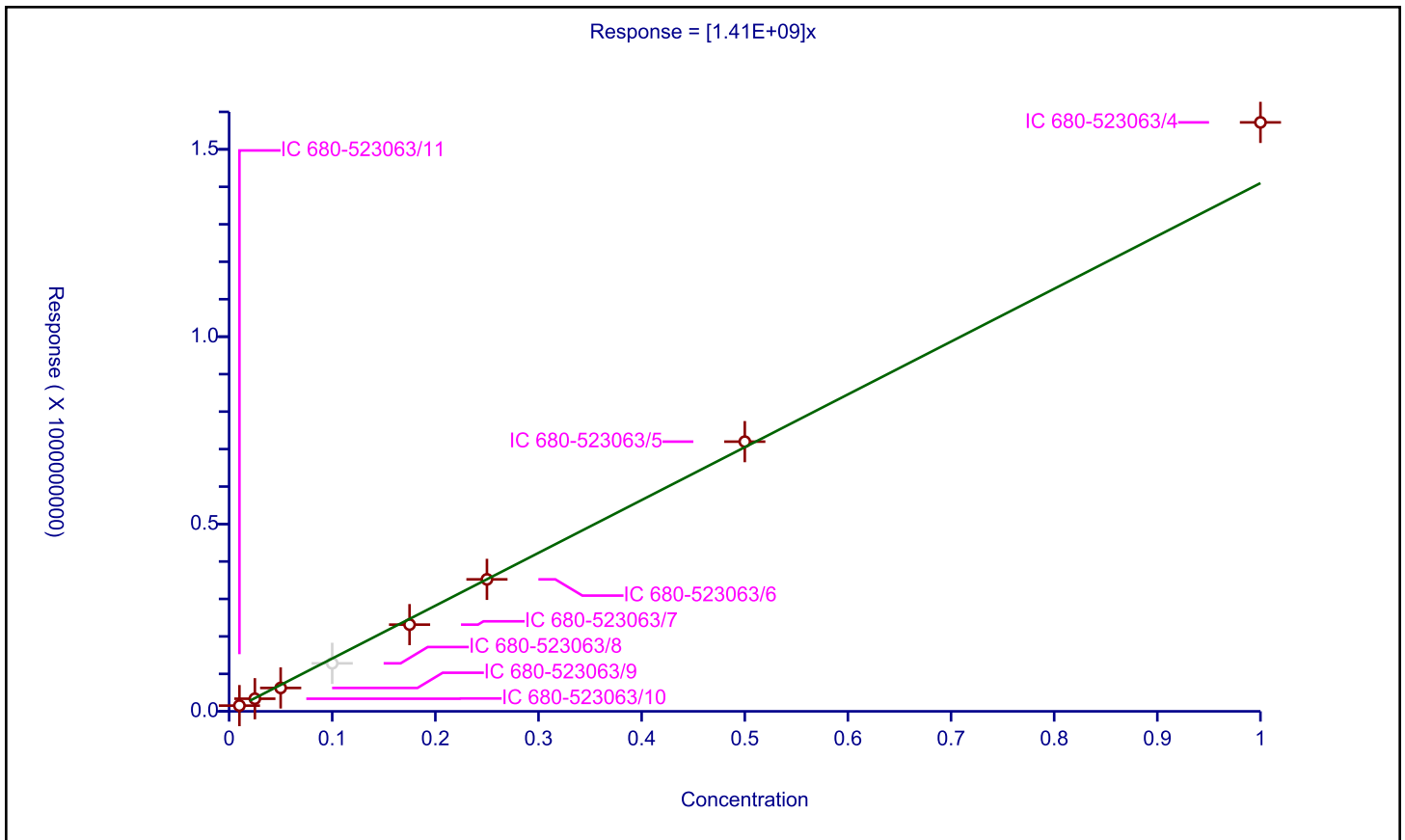
/ Dichlorprop

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

Curve Coefficients	
Intercept:	0
Slope:	1.41E+09

Error Coefficients	
Standard Error:	66900000
Relative Standard Error:	8.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	15301912.0			1530191200.0	Y
2	IC 680-523063/10	0.025	33672808.0			1346912320.0	Y
3	IC 680-523063/9	0.05	62424883.0			1248497660.0	Y
4	IC 680-523063/8	0.1	128102012.0			1281020120.0	N
5	IC 680-523063/7	0.175	231436814.0			1322496080.0	Y
6	IC 680-523063/6	0.25	352257271.0			1409029084.0	Y
7	IC 680-523063/5	0.5	719800477.0			1439600954.0	Y
8	IC 680-523063/4	1.0	1571966456.0			1571966456.0	Y



Calibration

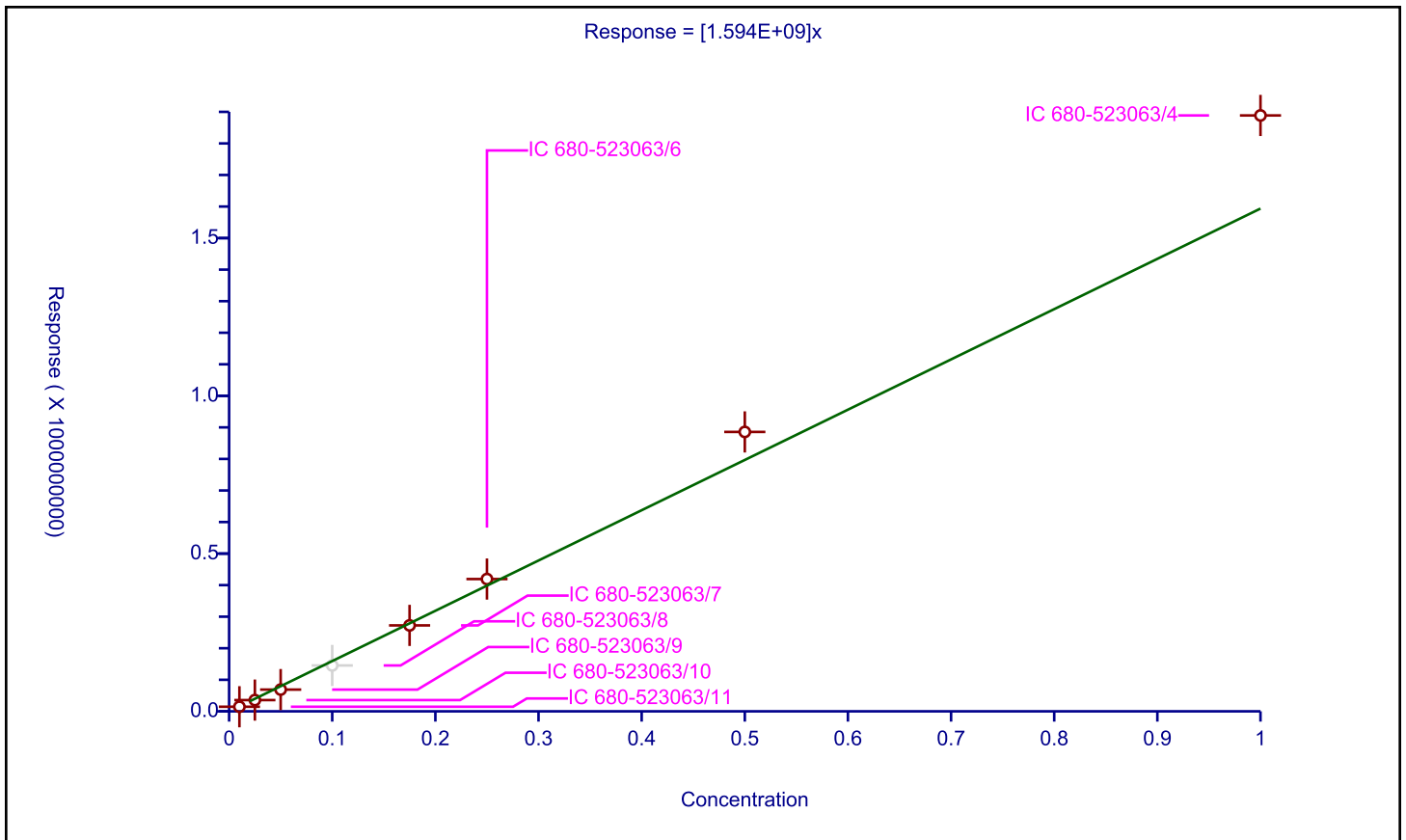
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	1.594E+09

Error Coefficients	
Standard Error:	126000000
Relative Standard Error:	12.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	14551198.0			1455119800.0	Y
2	IC 680-523063/10	0.025	35695833.0			1427833320.0	Y
3	IC 680-523063/9	0.05	68918972.0			1378379440.0	Y
4	IC 680-523063/8	0.1	145386532.0			1453865320.0	N
5	IC 680-523063/7	0.175	272374787.0			1556427354.28571	Y
6	IC 680-523063/6	0.25	419247494.0			1676989976.0	Y
7	IC 680-523063/5	0.5	885627489.0			1771254978.0	Y
8	IC 680-523063/4	1.0	1888747044.0			1888747044.0	Y



Calibration

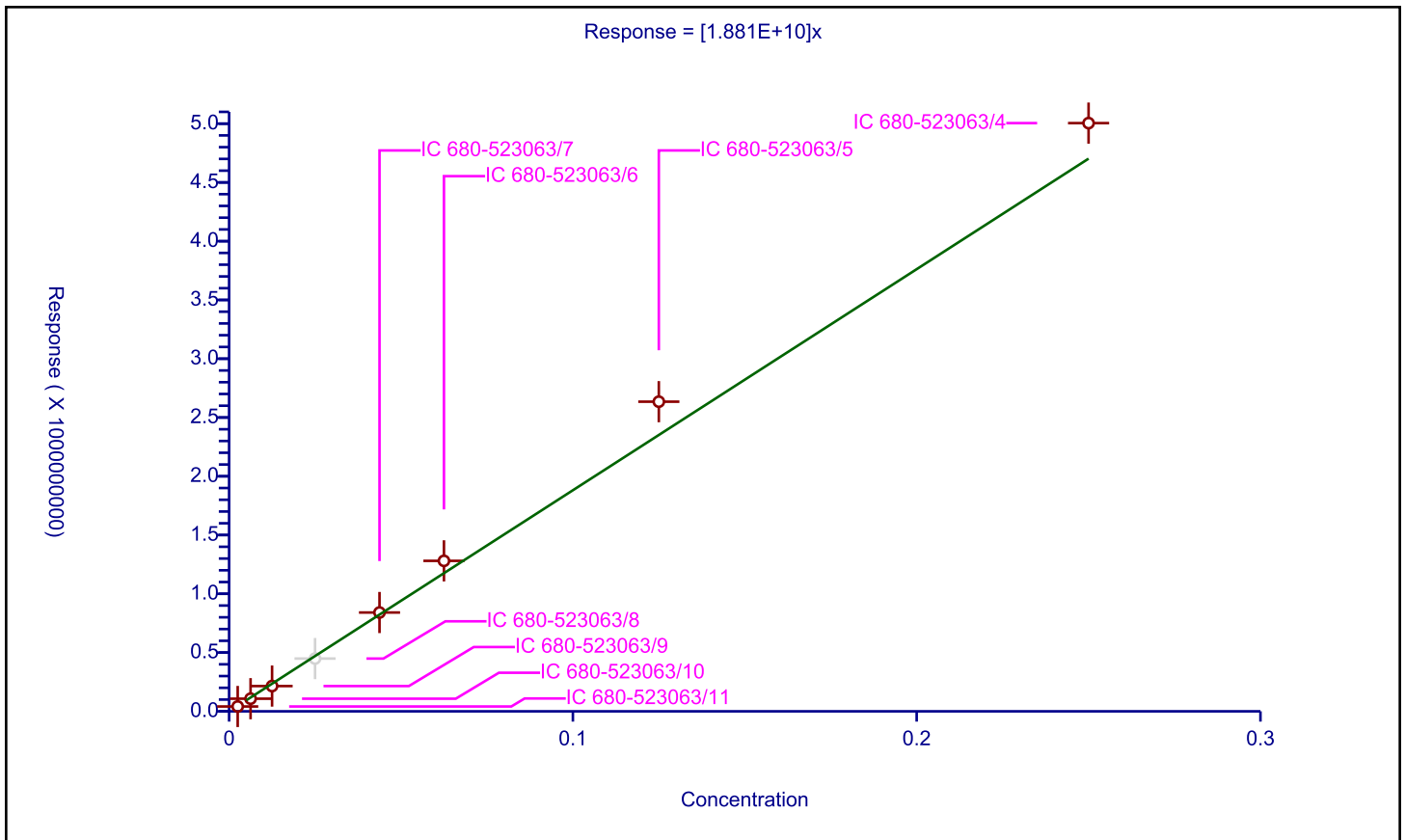
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	1.881E+10

Error Coefficients	
Standard Error:	175000000
Relative Standard Error:	9.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	41165516.0			16466206400.0	Y
2	IC 680-523063/10	0.00625	107509203.0			17201472480.0	Y
3	IC 680-523063/9	0.0125	214964113.0			17197129040.0	Y
4	IC 680-523063/8	0.025	448807878.0			17952315120.0	N
5	IC 680-523063/7	0.04375	840761037.0			19217395131.4286	Y
6	IC 680-523063/6	0.0625	1280290405.0			20484646480.0	Y
7	IC 680-523063/5	0.125	2634537256.0			21076298048.0	Y
8	IC 680-523063/4	0.25	5004401348.0			20017605392.0	Y



Calibration

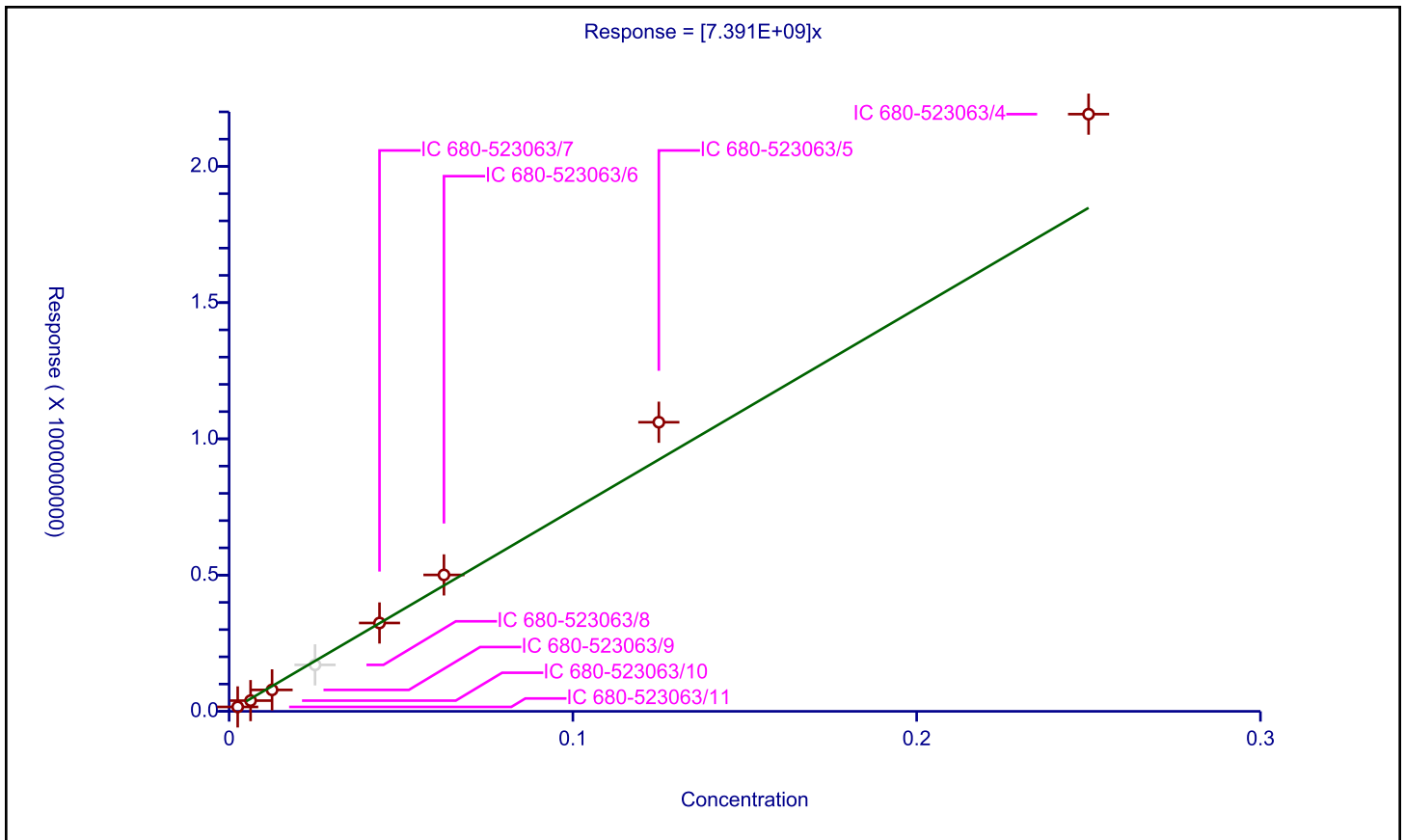
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	7.391E+09

Error Coefficients	
Standard Error:	152000000
Relative Standard Error:	14.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	16213772.0			6485508800.0	Y
2	IC 680-523063/10	0.00625	39284572.0			6285531520.0	Y
3	IC 680-523063/9	0.0125	78639731.0			6291178480.0	Y
4	IC 680-523063/8	0.025	170517091.0			6820683640.0	N
5	IC 680-523063/7	0.04375	324244276.0			7411297737.14286	Y
6	IC 680-523063/6	0.0625	500698059.0			8011168944.0	Y
7	IC 680-523063/5	0.125	1061020220.0			8488161760.0	Y
8	IC 680-523063/4	0.25	2191601950.0			8766407800.0	Y



Calibration

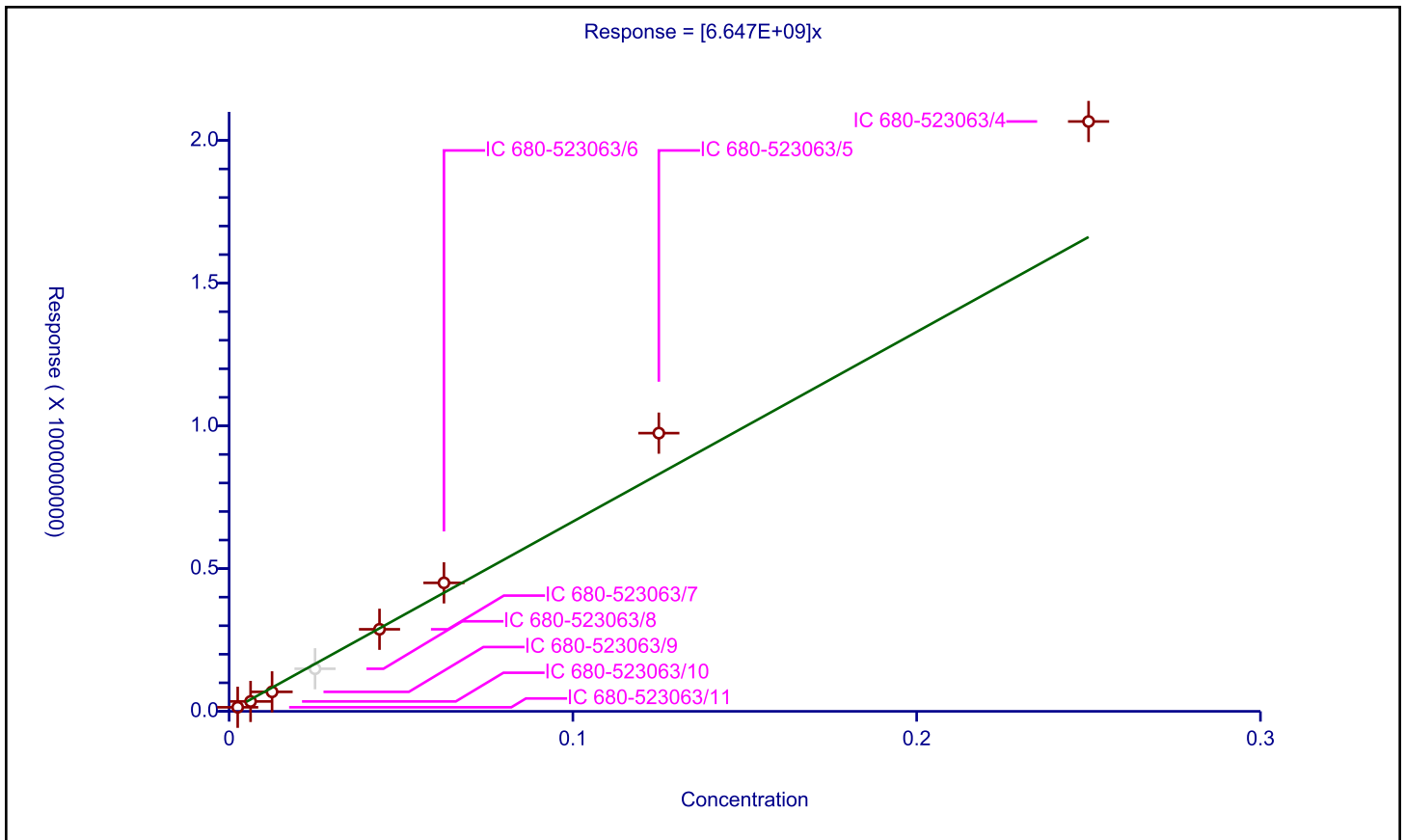
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	6.647E+09

Error Coefficients	
Standard Error:	176000000
Relative Standard Error:	17.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	14207297.0			5682918800.0	Y
2	IC 680-523063/10	0.00625	34680183.0			5548829280.0	Y
3	IC 680-523063/9	0.0125	68256754.0			5460540320.0	Y
4	IC 680-523063/8	0.025	149160522.0			5966420880.0	N
5	IC 680-523063/7	0.04375	287476934.0			6570901348.57143	Y
6	IC 680-523063/6	0.0625	450029272.0			7200468352.0	Y
7	IC 680-523063/5	0.125	974569507.0			7796556056.0	Y
8	IC 680-523063/4	0.25	2066383005.0			8265532020.0	Y



Calibration

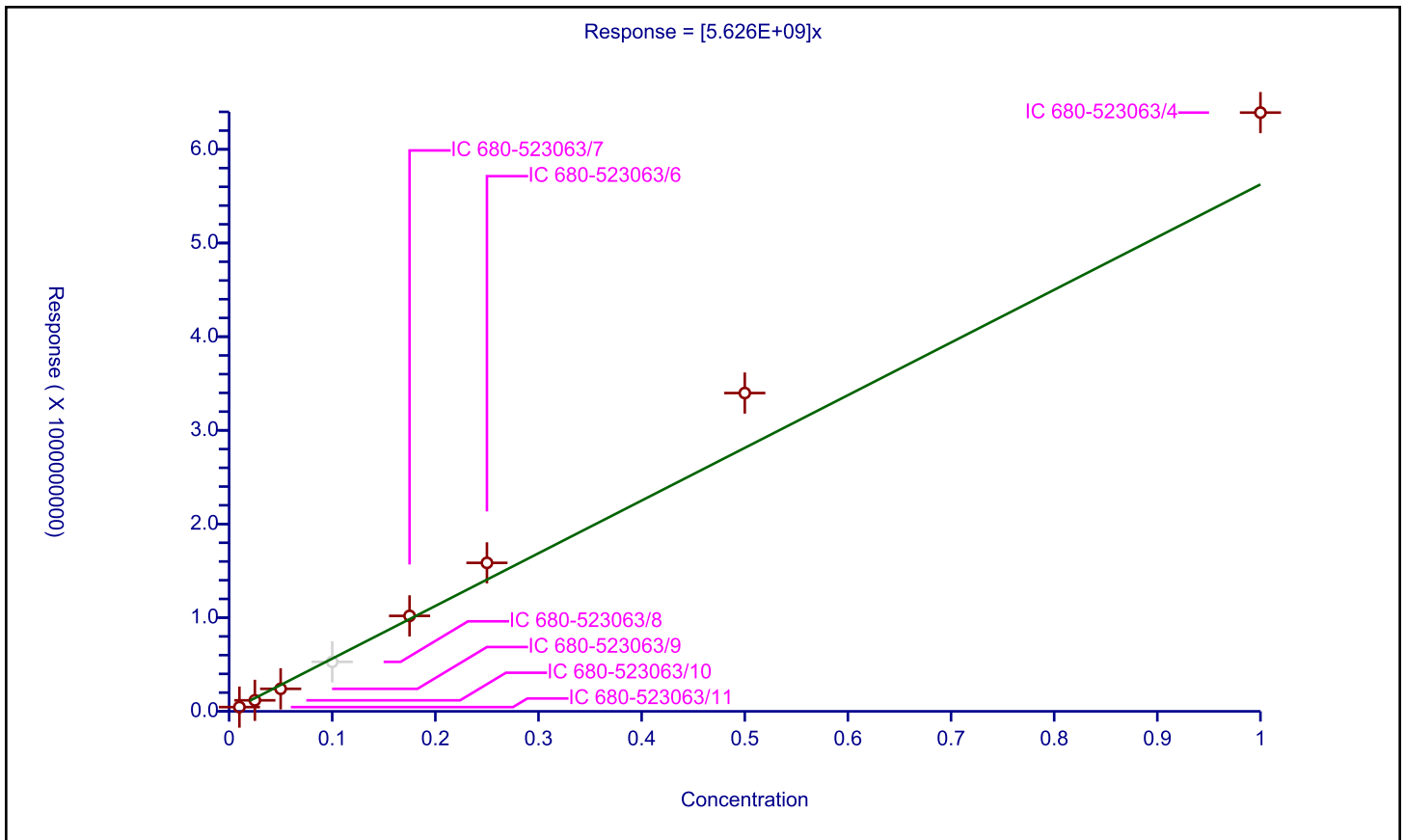
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	5.626E+09

Error Coefficients	
Standard Error:	401000000
Relative Standard Error:	16.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	45179417.0			4517941700.0	Y
2	IC 680-523063/10	0.025	117512235.0			4700489400.0	Y
3	IC 680-523063/9	0.05	240336393.0			4806727860.0	Y
4	IC 680-523063/8	0.1	528388568.0			5283885680.0	N
5	IC 680-523063/7	0.175	1019151525.0			5823723000.0	Y
6	IC 680-523063/6	0.25	1585218711.0			6340874844.0	Y
7	IC 680-523063/5	0.5	3398296359.0			6796592718.0	Y
8	IC 680-523063/4	1.0	6392220091.0			6392220091.0	Y



Calibration

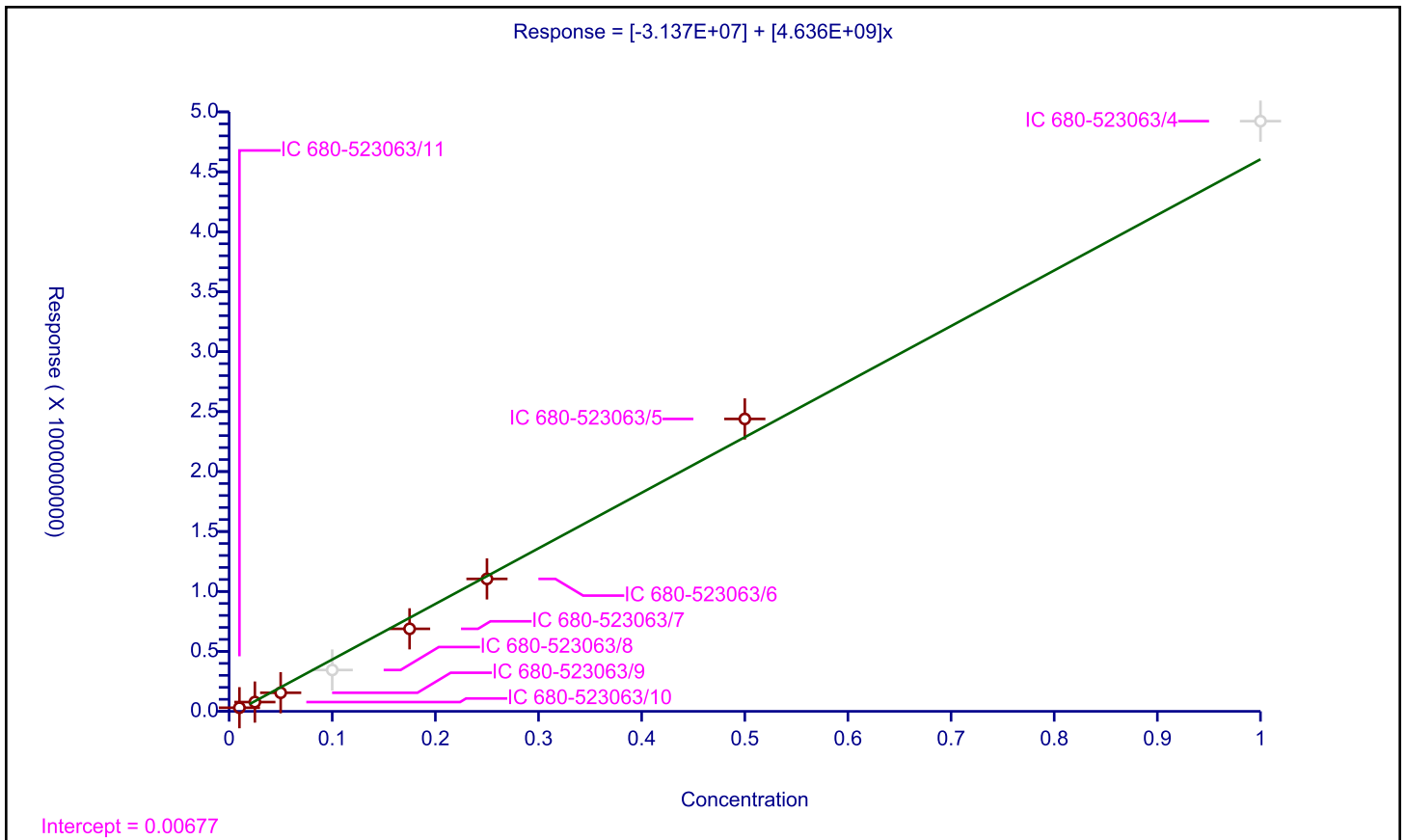
/ Dinoseb

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

Curve Coefficients	
Intercept:	-3.137E+07
Slope:	4.636E+09

Error Coefficients	
Standard Error:	92900000
Relative Standard Error:	20.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	30077804.0			3007780400.0	Y
2	IC 680-523063/10	0.025	77307007.0			3092280280.0	Y
3	IC 680-523063/9	0.05	154960345.0			3099206900.0	Y
4	IC 680-523063/8	0.1	344721192.0			3447211920.0	N
5	IC 680-523063/7	0.175	688241161.0			3932806634.28571	Y
6	IC 680-523063/6	0.25	1104528845.0			4418115380.0	Y
7	IC 680-523063/5	0.5	2438912841.0			4877825682.0	Y
8	IC 680-523063/4	1.0	4922703086.0			4922703086.0	N



Calibration

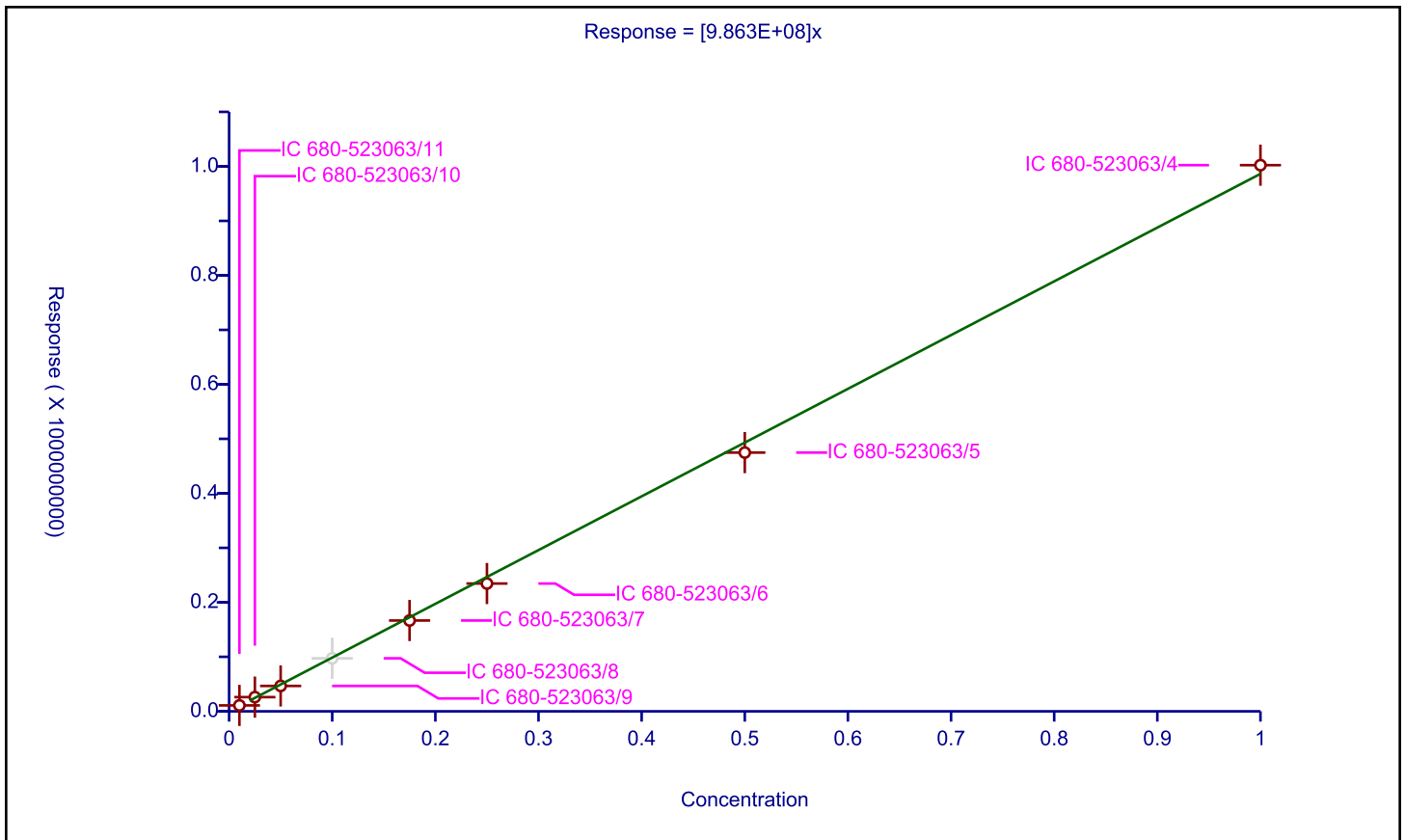
/ 2,4-DB

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

Curve Coefficients	
Intercept:	0
Slope:	9.863E+08

Error Coefficients	
Standard Error:	11400000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10871976.0			1087197600.0	Y
2	IC 680-523063/10	0.025	26051520.0			1042060800.0	Y
3	IC 680-523063/9	0.05	46624287.0			932485740.0	Y
4	IC 680-523063/8	0.1	97285447.0			972854470.0	N
5	IC 680-523063/7	0.175	166644052.0			952251725.714286	Y
6	IC 680-523063/6	0.25	234527590.0			938110360.0	Y
7	IC 680-523063/5	0.5	474832365.0			949664730.0	Y
8	IC 680-523063/4	1.0	1002259721.0			1002259721.0	Y



Calibration

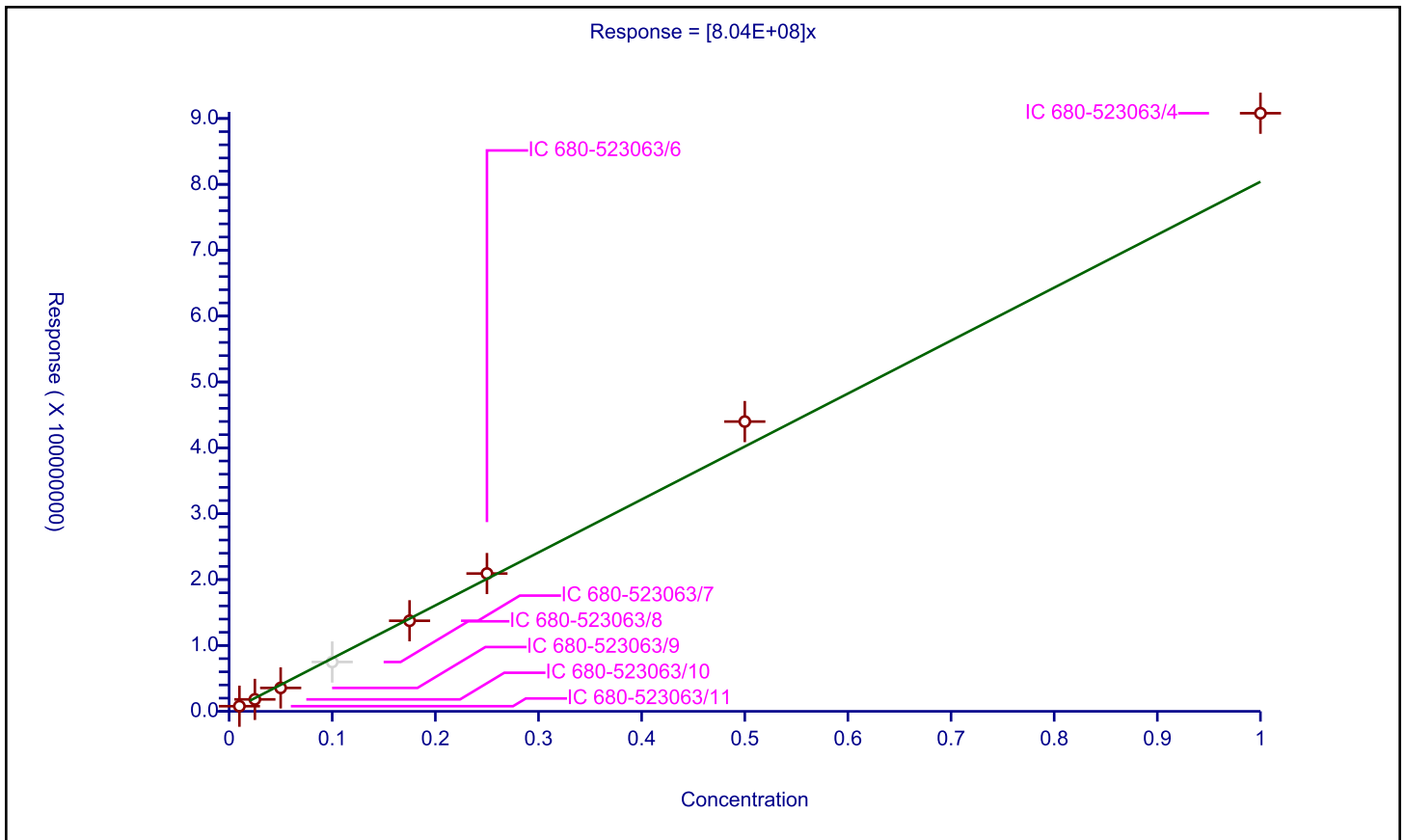
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	8.04E+08

Error Coefficients	
Standard Error:	45400000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	7803979.0			780397900.0	Y
2	IC 680-523063/10	0.025	18151512.0			726060480.0	Y
3	IC 680-523063/9	0.05	35565067.0			711301340.0	Y
4	IC 680-523063/8	0.1	74902105.0			749021050.0	N
5	IC 680-523063/7	0.175	137471207.0			785549754.285714	Y
6	IC 680-523063/6	0.25	209189101.0			836756404.0	Y
7	IC 680-523063/5	0.5	439887803.0			879775606.0	Y
8	IC 680-523063/4	1.0	907942100.0			907942100.0	Y



Calibration

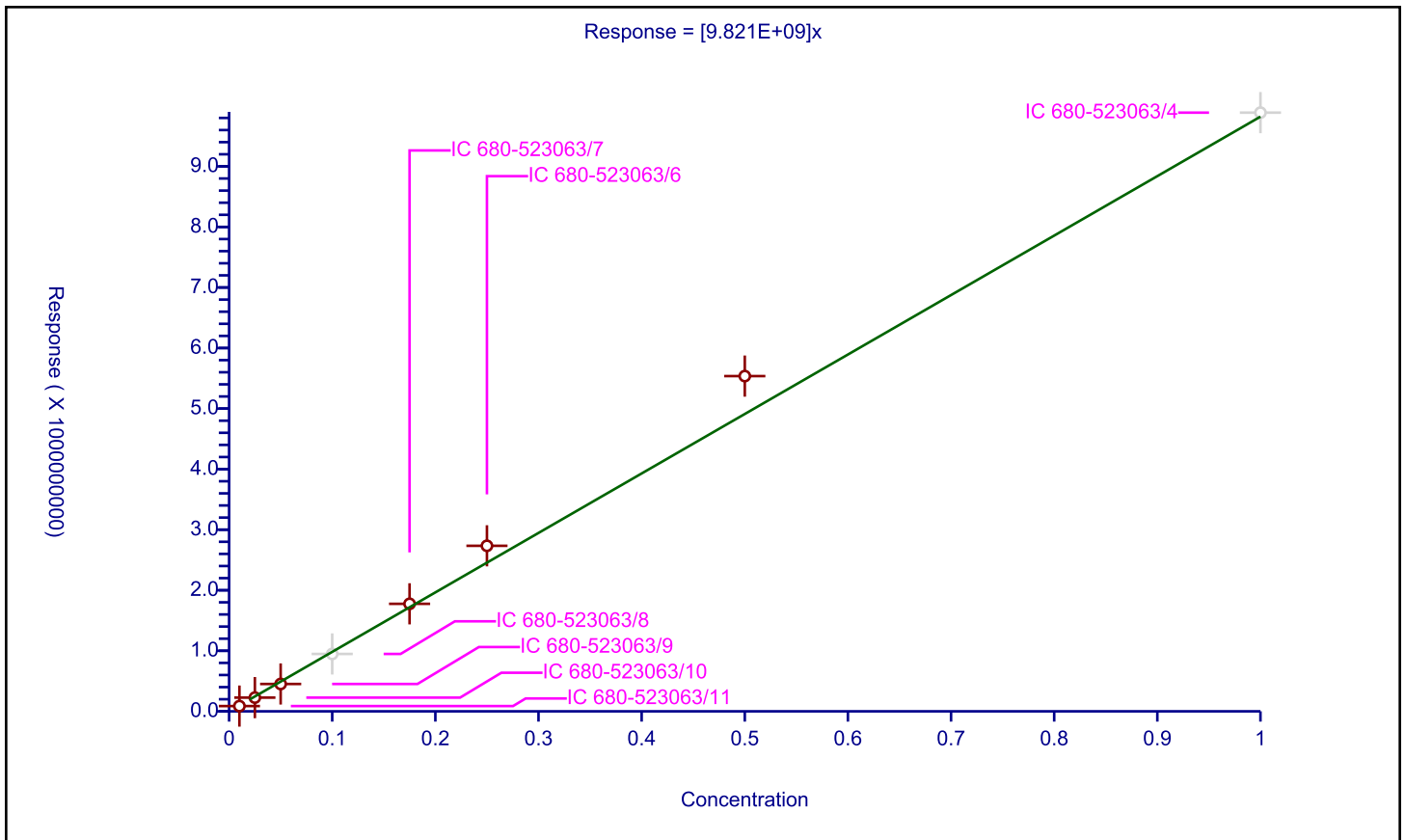
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	9.821E+09

Error Coefficients	
Standard Error:	308000000
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	86672796.0			8667279600.0	Y
2	IC 680-523063/10	0.025	226645361.0			9065814440.0	Y
3	IC 680-523063/9	0.05	451881325.0			9037626500.0	Y
4	IC 680-523063/8	0.1	947740711.0			9477407110.0	N
5	IC 680-523063/7	0.175	1775677219.0			10146726965.7143	Y
6	IC 680-523063/6	0.25	2733977251.0			10935909004.0	Y
7	IC 680-523063/5	0.5	5536696155.0			11073392310.0	Y
8	IC 680-523063/4	1.0	9887348056.0			9887348056.0	N



Calibration

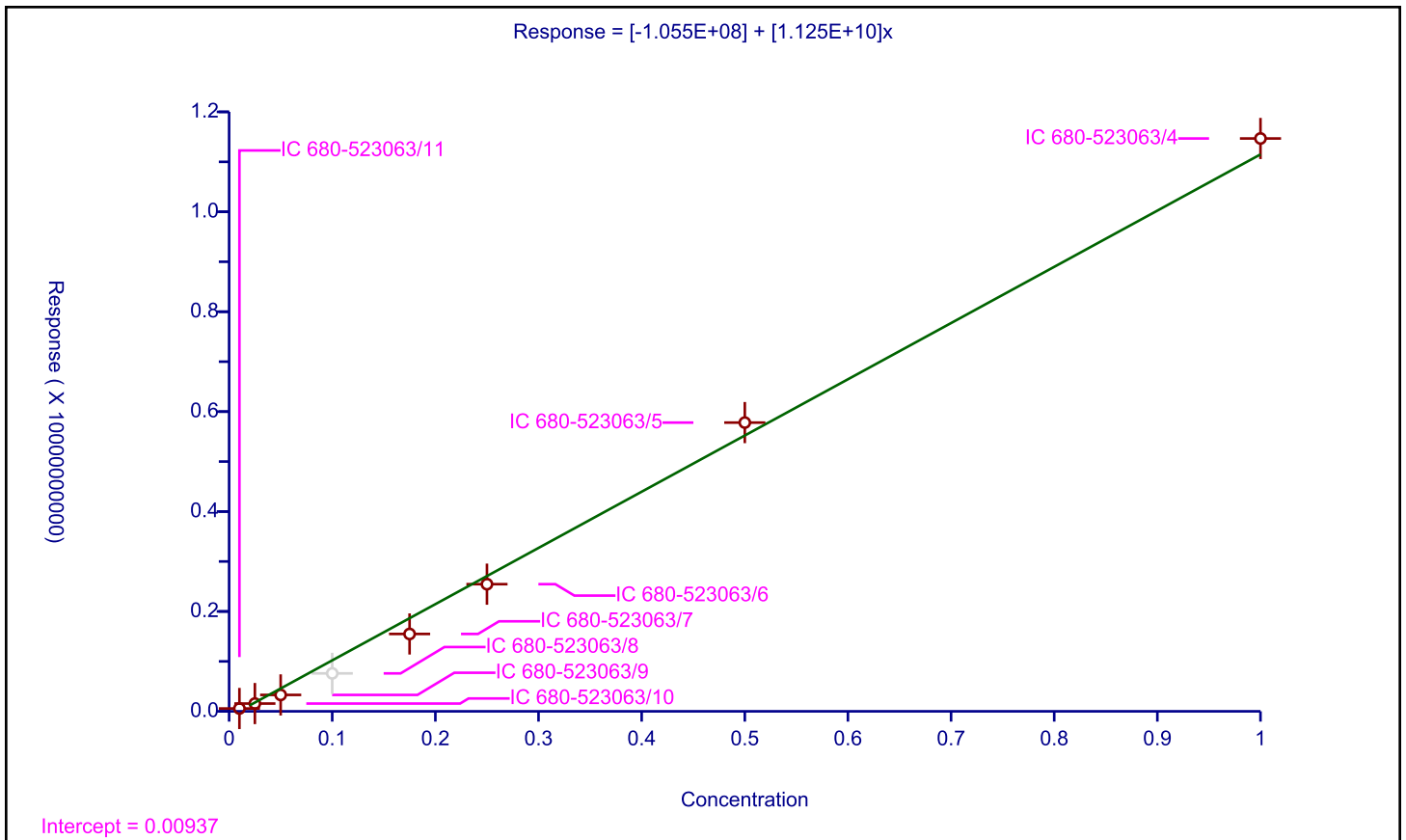
/ Picloram

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

Curve Coefficients	
Intercept:	-1.055E+08
Slope:	1.125E+10

Error Coefficients	
Standard Error:	250000000
Relative Standard Error:	24.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	57128370.0			5712837000.0	Y
2	IC 680-523063/10	0.025	155603121.0			6224124840.0	Y
3	IC 680-523063/9	0.05	328532437.0			6570648740.0	Y
4	IC 680-523063/8	0.1	759779337.0			7597793370.0	N
5	IC 680-523063/7	0.175	1548770490.0			8850117085.71429	Y
6	IC 680-523063/6	0.25	2545447676.0			10181790704.0	Y
7	IC 680-523063/5	0.5	5780160796.0			11560321592.0	Y
8	IC 680-523063/4	1.0	11467491007.0			11467491007.0	Y



Calibration

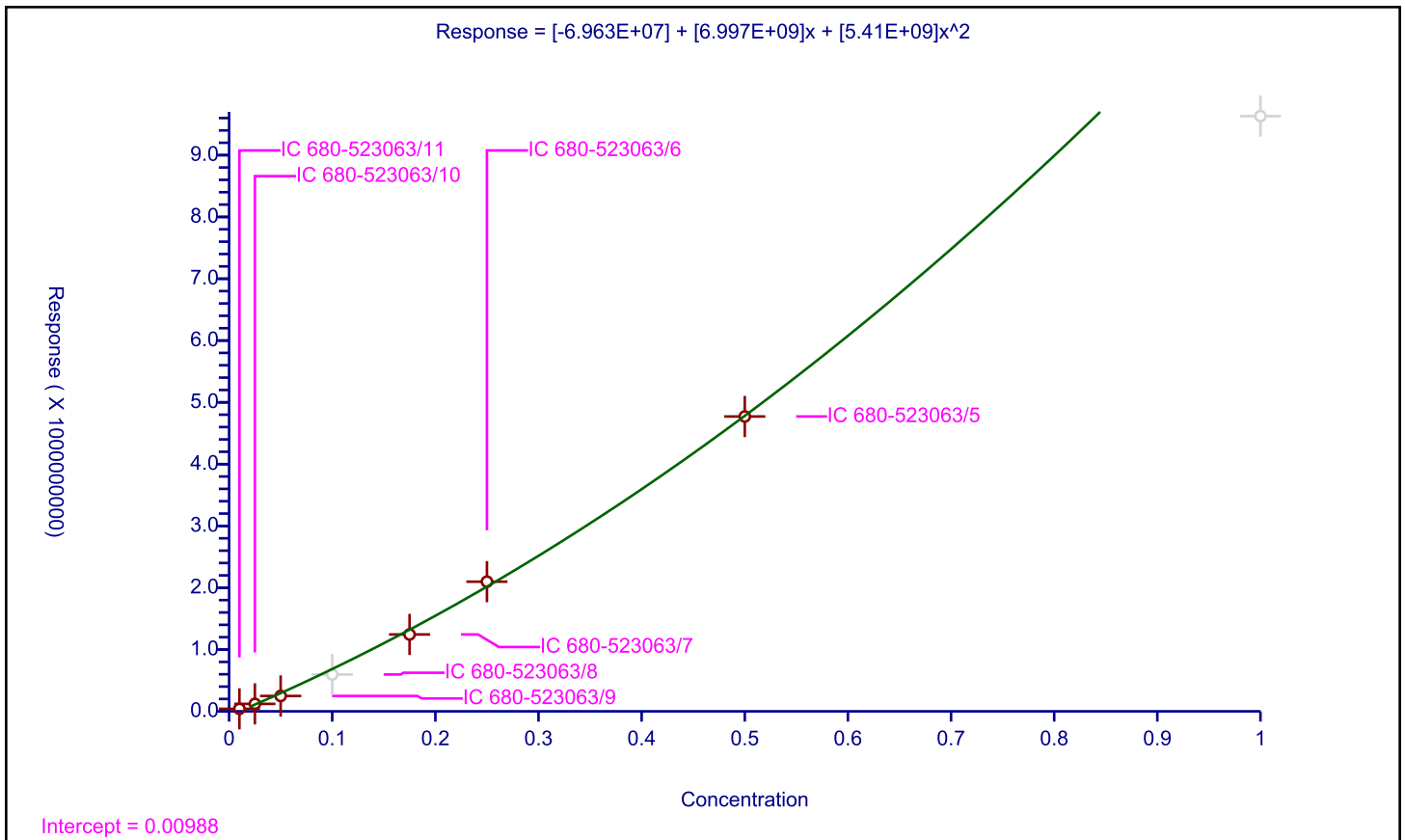
/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-6.963E+07
Slope:	6.997E+09
Second Order:	5.41E+09

Error Coefficients	
Standard Error:	73400000
Relative Standard Error:	33.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	40645245.0			4064524500.0	Y
2	IC 680-523063/10	0.025	120359495.0			4814379800.0	Y
3	IC 680-523063/9	0.05	248586919.0			4971738380.0	Y
4	IC 680-523063/8	0.1	596281084.0			5962810840.0	N
5	IC 680-523063/7	0.175	1244184045.0			7109623114.28572	Y
6	IC 680-523063/6	0.25	2098074459.0			8392297836.0	Y
7	IC 680-523063/5	0.5	4770908516.0			9541817032.0	Y
8	IC 680-523063/4	1.0	9631196972.0			9631196972.0	N



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	501665051		0.168	0.175	-4.3	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	314763497		0.171	0.175	-2.1	20.0
4-Nitrophenol	Ave	92458216	102031594		0.193	0.175	10.4	20.0
Dicamba	Ave	1077009527	1054404651		0.0857	0.0875	-2.1	20.0
MCPP	Qua		498721		16.5	17.5	-6.0	20.0
MCPA	Ave	925968	1023116		19.3	17.5	10.5	20.0
Dichlorprop	Ave	277497963	279363520		0.176	0.175	0.7	20.0
2,4-D	Ave	302399622	313230406		0.181	0.175	3.6	20.0
Pentachlorophenol	Ave	5383895550	5465498149		0.0444	0.0438	1.5	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1967042629		0.0458	0.0438	4.7	20.0
Chloramben	Qua		1552941966		0.167	0.175	-4.7	20.0
2,4,5-T	Ave	2193840481	2185537531		0.0436	0.0438	-0.4	20.0
2,4-DB	Qua		156523029		0.167	0.175	-4.5	20.0
Dinoseb	Ave	1223895982	1139844429		0.163	0.175	-6.9	20.0
Bentazon	Ave	287551968	283273971		0.172	0.175	-1.5	20.0
Picloram	Qua		2479981994		0.168	0.175	-3.8	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	3248557994		0.173	0.175	-1.4	20.0
Acifluorfen	Qua		2226762514		0.162	0.175	-7.2	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	202049760		0.167	0.175	-4.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	7.00	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.32	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.85	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.17	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 14:35:04 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:27:14 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:12:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.580	2.579	0.001	87791384	0.1750	0.1675	
2	2.634	2.632	0.002	268322043	0.1750	0.1665	
						RPD = 0.62	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16860262	NC	NC	
2	5.102	5.102	0.000	93176385	NC	NC	
						RPD = 0.02	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	215525699	NC	NC	
2	5.777	5.776	0.001	930949918	NC	NC	
						RPD = 0.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	55083612	0.1750	0.1714	
2	6.116	6.116	0.000	304054087	0.1750	0.1692	
						RPD = 1.28	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17855529	0.1750	0.1931	M
2	6.505	6.505	0.000	52975624	0.1750	0.1772	M
						RPD = 8.62	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35358708	0.1750	0.1672	M
2	6.830	6.829	0.001	240517141	0.1750	0.1709	M
						RPD = 2.16	
7 Dicamba							
1	6.721	6.720	0.001	92260407	0.0875	0.0857	M
2	6.912	6.910	0.002	438385412	0.0875	0.0875	M
						RPD = 2.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	8727611	17.5	16.5	
2	6.956	6.955	0.001	79838277	17.5	17.4	M
							RPD = 5.73
9 MCPA							M
1	6.995	6.994	0.001	17904527	17.5	19.3	
2	7.156	7.155	0.001	125917297	17.5	20.2	M
							RPD = 4.31
10 Dichlorprop							M
1	7.181	7.180	0.001	48888616	0.1750	0.1762	
2	7.298	7.297	0.001	236765319	0.1750	0.1679	M
							RPD = 4.79
11 2,4-D							M
1	7.324	7.326	-0.002	54815321	0.1750	0.1813	
2	7.516	7.517	-0.001	280829565	0.1750	0.1762	M
							RPD = 2.82
12 Pentachlorophenol							M
1	7.674	7.674	0.000	239115544	0.0438	0.0444	
2	7.715	7.714	0.001	861630277	0.0438	0.0458	M
							RPD = 3.10
13 Silvex (2,4,5-TP)							M
1	7.768	7.769	-0.001	86058115	0.0438	0.0458	
2	7.847	7.846	0.001	335327121	0.0438	0.0454	M
							RPD = 0.96
14 Chloramben							M
1	7.852	7.855	-0.003	271764844	0.1750	0.1667	
2	8.161	8.162	-0.001	1043446048	0.1750	0.1855	M
							RPD = 10.67
15 2,4,5-T							M
1	7.926	7.929	-0.003	95617267	0.0438	0.0436	
2	8.082	8.083	-0.001	298977240	0.0438	0.0450	M
							RPD = 3.16
16 2,4-DB							M
1	8.172	8.175	-0.003	27391530	0.1750	0.1671	
2	8.301	8.302	-0.001	175272842	0.1750	0.1777	M
							RPD = 6.18
17 Dinoseb							M
1	8.223	8.224	-0.001	199472775	0.1750	0.1630	
2	8.249	8.248	0.001	670832472	0.1750	0.1515	M
							RPD = 7.32
18 Bentazon							M
1	8.300	8.300	0.000	49572945	0.1750	0.1724	
2	8.664	8.662	0.002	149493508	0.1750	0.1859	M
							RPD = 7.56
19 Picloram							M
1	8.526	8.529	-0.003	433996849	0.1750	0.1684	
2	9.008	9.005	0.003	1596868377	0.1750	0.1513	M
							RPD = 10.72

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA							M
1	8.624	8.623	0.001	568497649	0.1750	0.1726	
2	8.779	8.775	0.004	1822835497	0.1750	0.1856	M
						RPD = 7.24	

21 Acifluorfen							M
1	9.666	9.666	0.000	389683440	0.1750	0.1624	
2	9.796	9.792	0.004	1189239771	0.1750	0.1601	M
						RPD = 1.40	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04
Lims ID: icv herb
Client ID:

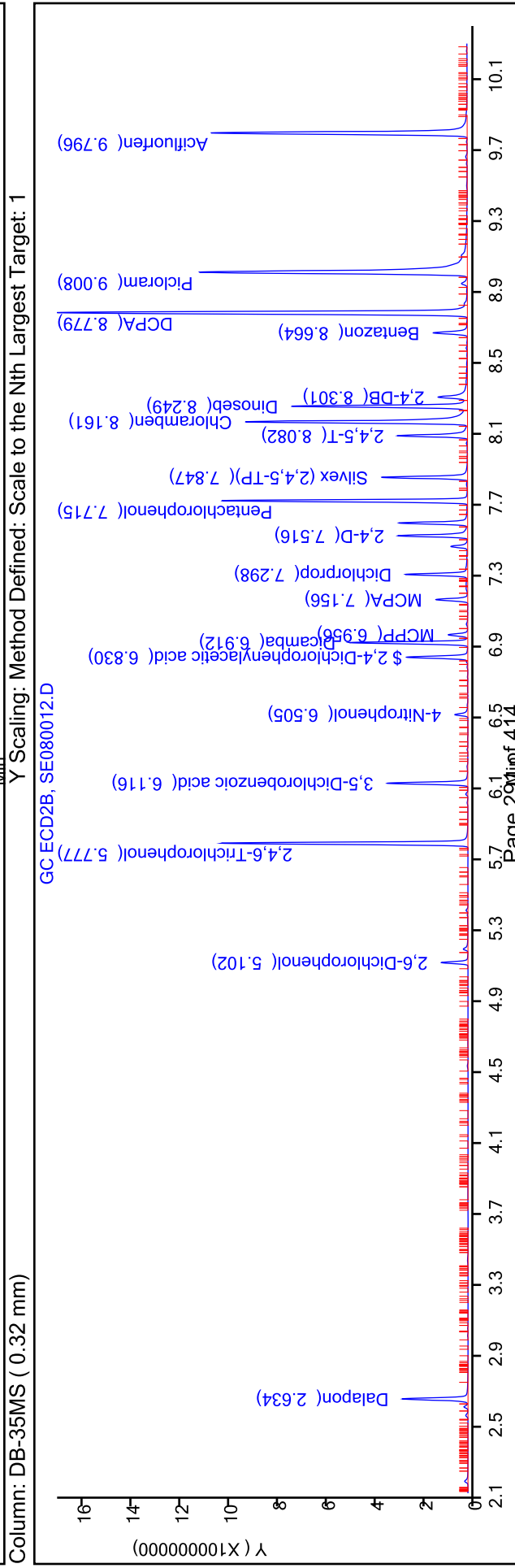
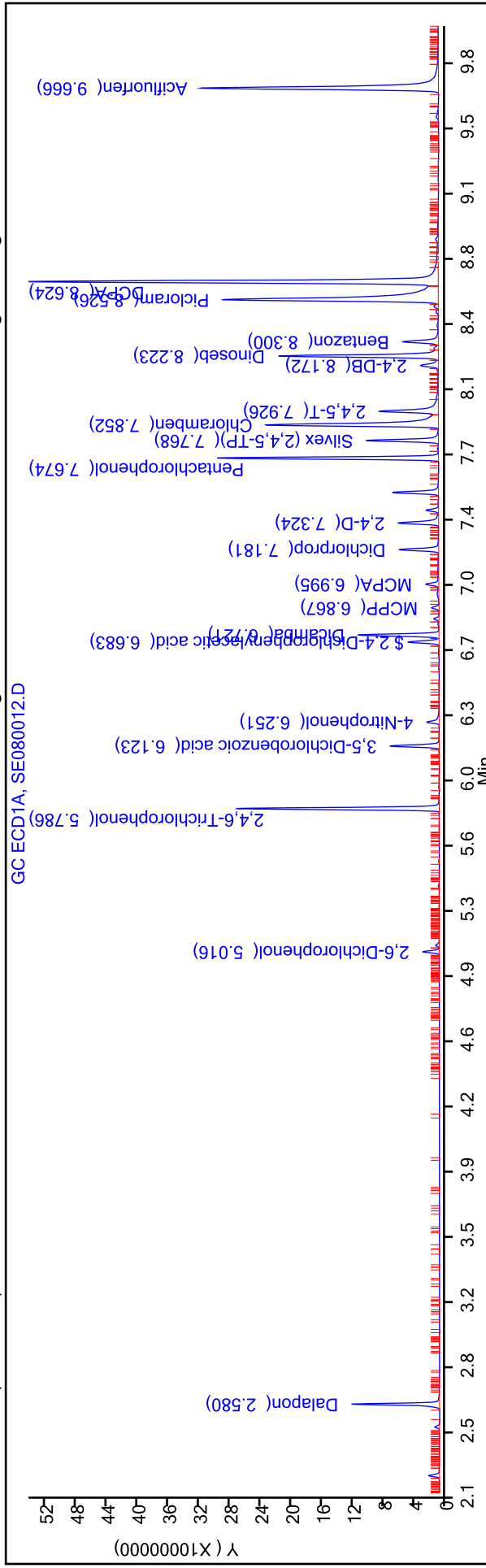
Operator ID: GEM
Worklist Smp#: 12

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1533268817		0.166	0.175	-4.9	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1737451926		0.169	0.175	-3.3	20.0
4-Nitrophenol	Ave	299039718	302717851		0.177	0.175	1.2	20.0
Dicamba	Ave	5009061262	5010118994		0.0875	0.0875	0.0	20.0
MCPP	Lin2		4562187		17.4	17.5	-0.4	20.0
MCPA	QuaF		7195274		20.2	17.5	15.4	20.0
Dichlorprop	Ave	1409813393	1352944680		0.168	0.175	-4.0	20.0
2,4-D	Ave	1593535987	1604740371		0.176	0.175	0.7	20.0
Pentachlorophenol	Ave	18808678996	19694406331		0.0458	0.0438	4.7	20.0
Silvex (2,4,5-TP)	Ave	7391322149	7664619909		0.0454	0.0438	3.7	20.0
2,4,5-T	Ave	6646535168	6833765486		0.0450	0.0438	2.8	20.0
Chloramben	Ave	5625509945	5962548846		0.185	0.175	6.0	20.0
Dinoseb	Lin1		3833328411		0.151	0.175	-13.4	20.0
2,4-DB	Ave	986290097	1001559097		0.178	0.175	1.5	20.0
Bentazon	Ave	803969083	854248617		0.186	0.175	6.3	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	10416202840		0.186	0.175	6.1	20.0
Picloram	Lin1		9124962154		0.151	0.175	-13.6	20.0
Acifluorfen	Qua		6795655834		0.160	0.175	-8.5	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1374383663		0.171	0.175	-2.4	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.51	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.16	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.72	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.80	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 14:35:04 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:27:14 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:12:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	87791384	0.1750	0.1675	
2	2.634	2.632	0.002	268322043	0.1750	0.1665	
						RPD = 0.62	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16860262	NC	NC	
2	5.102	5.102	0.000	93176385	NC	NC	
						RPD = 0.02	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	215525699	NC	NC	
2	5.777	5.776	0.001	930949918	NC	NC	
						RPD = 0.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	55083612	0.1750	0.1714	
2	6.116	6.116	0.000	304054087	0.1750	0.1692	
						RPD = 1.28	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17855529	0.1750	0.1931	M
2	6.505	6.505	0.000	52975624	0.1750	0.1772	M
						RPD = 8.62	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35358708	0.1750	0.1672	M
2	6.830	6.829	0.001	240517141	0.1750	0.1709	M
						RPD = 2.16	
7 Dicamba							
1	6.721	6.720	0.001	92260407	0.0875	0.0857	M
2	6.912	6.910	0.002	438385412	0.0875	0.0875	M
						RPD = 2.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	8727611	17.5	16.5	
2	6.956	6.955	0.001	79838277	17.5	17.4	M
							RPD = 5.73
9 MCPA							M
1	6.995	6.994	0.001	17904527	17.5	19.3	
2	7.156	7.155	0.001	125917297	17.5	20.2	M
							RPD = 4.31
10 Dichlorprop							M
1	7.181	7.180	0.001	48888616	0.1750	0.1762	
2	7.298	7.297	0.001	236765319	0.1750	0.1679	M
							RPD = 4.79
11 2,4-D							M
1	7.324	7.326	-0.002	54815321	0.1750	0.1813	
2	7.516	7.517	-0.001	280829565	0.1750	0.1762	M
							RPD = 2.82
12 Pentachlorophenol							M
1	7.674	7.674	0.000	239115544	0.0438	0.0444	
2	7.715	7.714	0.001	861630277	0.0438	0.0458	M
							RPD = 3.10
13 Silvex (2,4,5-TP)							M
1	7.768	7.769	-0.001	86058115	0.0438	0.0458	
2	7.847	7.846	0.001	335327121	0.0438	0.0454	M
							RPD = 0.96
14 Chloramben							M
1	7.852	7.855	-0.003	271764844	0.1750	0.1667	
2	8.161	8.162	-0.001	1043446048	0.1750	0.1855	M
							RPD = 10.67
15 2,4,5-T							M
1	7.926	7.929	-0.003	95617267	0.0438	0.0436	
2	8.082	8.083	-0.001	298977240	0.0438	0.0450	M
							RPD = 3.16
16 2,4-DB							M
1	8.172	8.175	-0.003	27391530	0.1750	0.1671	
2	8.301	8.302	-0.001	175272842	0.1750	0.1777	M
							RPD = 6.18
17 Dinoseb							M
1	8.223	8.224	-0.001	199472775	0.1750	0.1630	
2	8.249	8.248	0.001	670832472	0.1750	0.1515	M
							RPD = 7.32
18 Bentazon							M
1	8.300	8.300	0.000	49572945	0.1750	0.1724	
2	8.664	8.662	0.002	149493508	0.1750	0.1859	M
							RPD = 7.56
19 Picloram							M
1	8.526	8.529	-0.003	433996849	0.1750	0.1684	
2	9.008	9.005	0.003	1596868377	0.1750	0.1513	M
							RPD = 10.72

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA M

1	8.624	8.623	0.001	568497649	0.1750	0.1726	
2	8.779	8.775	0.004	1822835497	0.1750	0.1856	M

RPD = 7.24

21 Acifluorfen M

1	9.666	9.666	0.000	389683440	0.1750	0.1624	
2	9.796	9.792	0.004	1189239771	0.1750	0.1601	M

RPD = 1.40

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 12

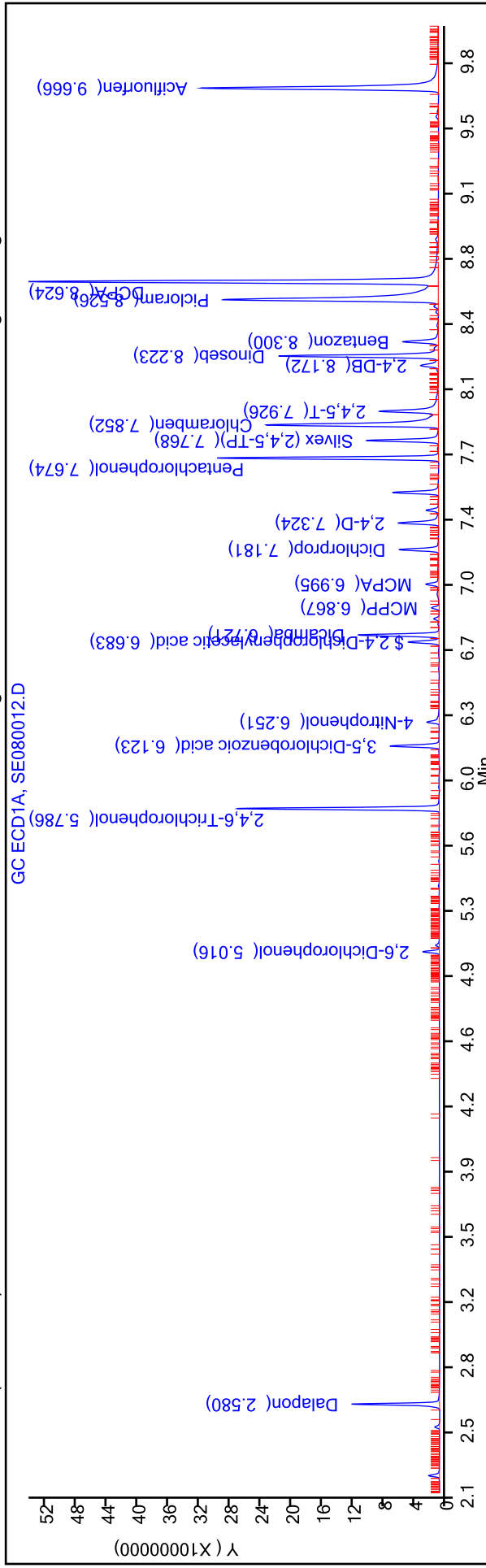
Lims ID: icv herb
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

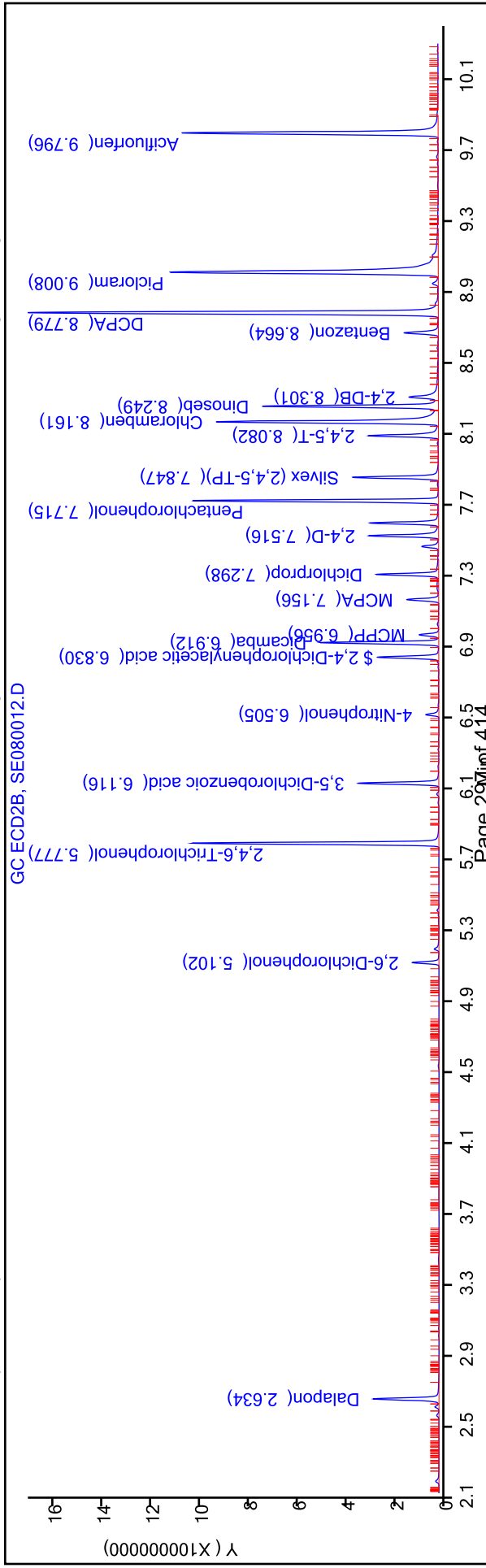
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

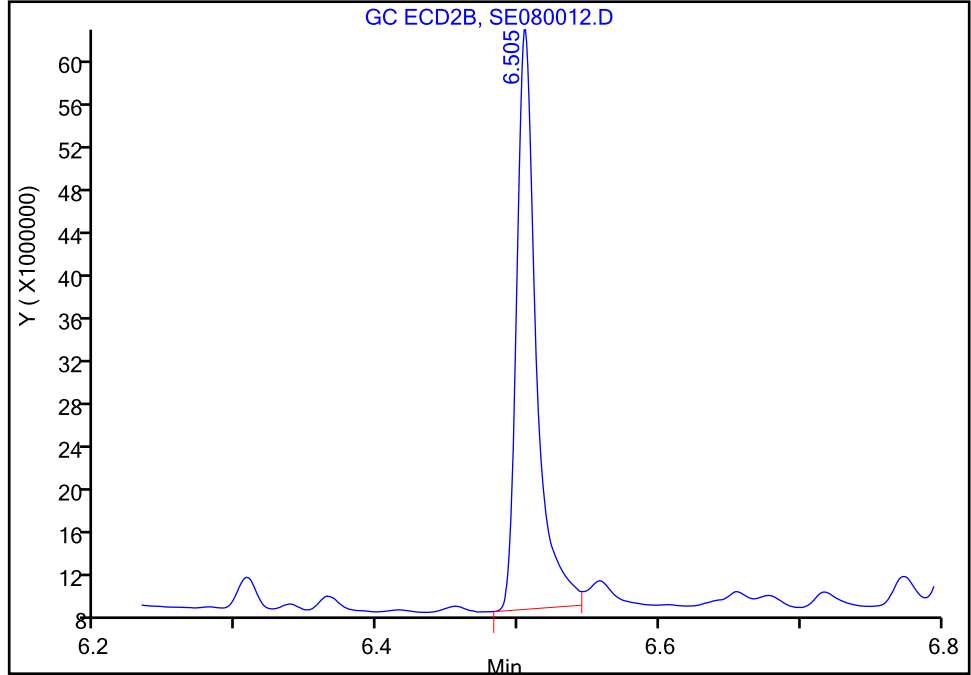
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

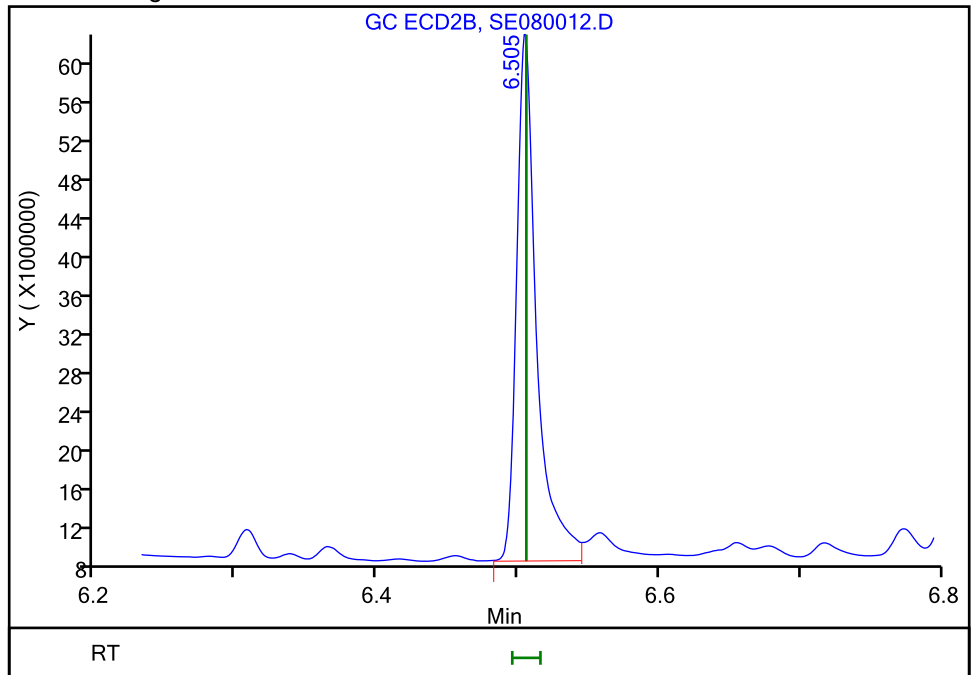
RT: 6.50
Area: 51736440
Amount: 0.174290
Amount Units: ug/ml

Processing Integration Results



RT: 6.50
Area: 52975624
Amount: 0.177152
Amount Units: ug/ml

Manual Integration Results



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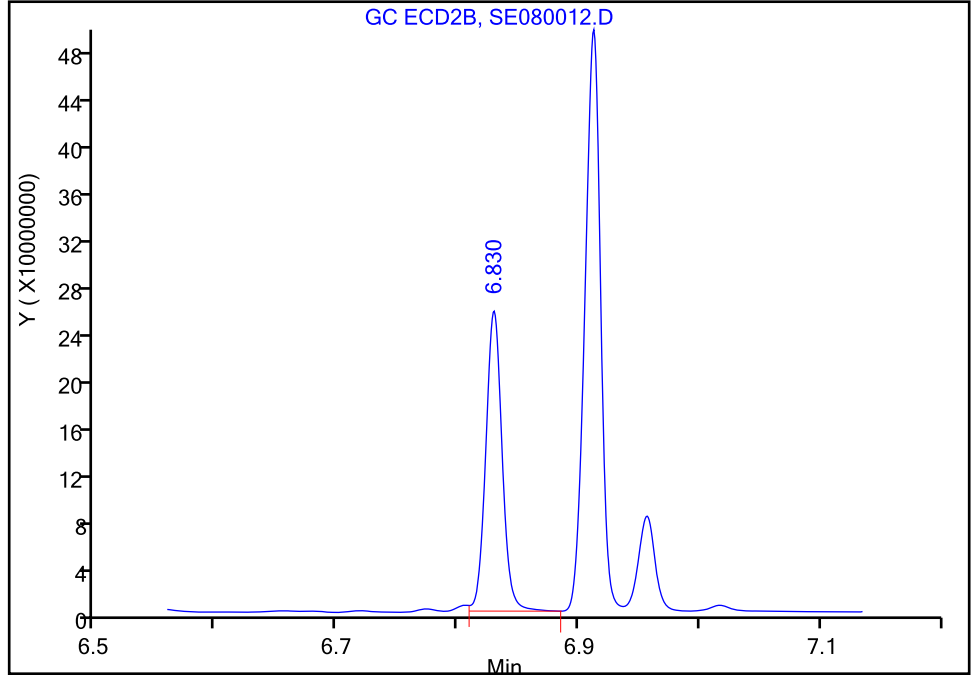
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

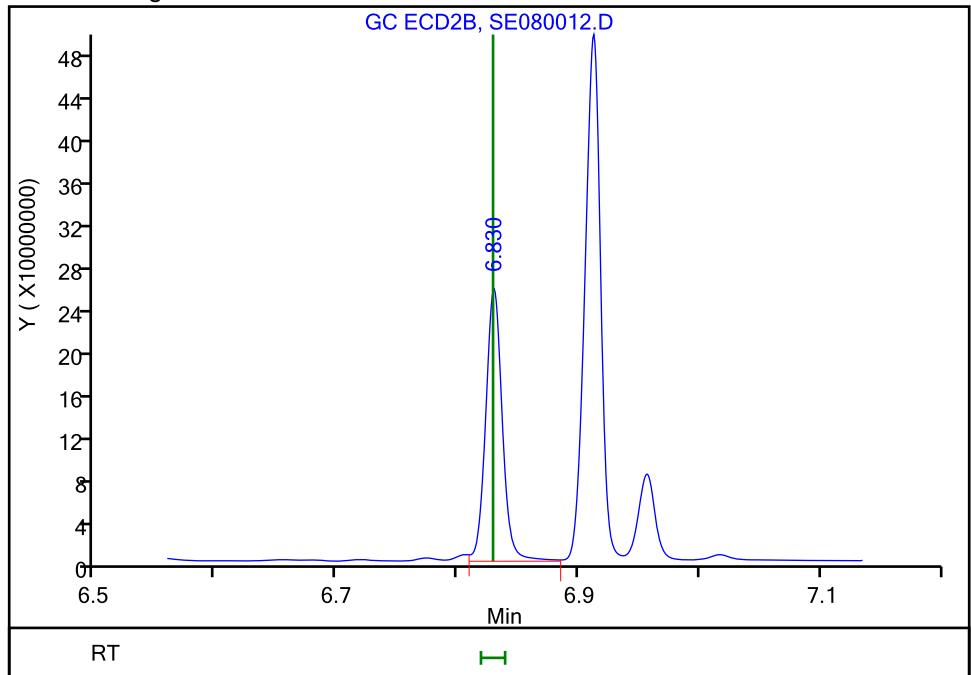
RT: 6.83
Area: 235256676
Amount: 0.169230
Amount Units: ug/ml

Processing Integration Results



RT: 6.83
Area: 240517141
Amount: 0.170851
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

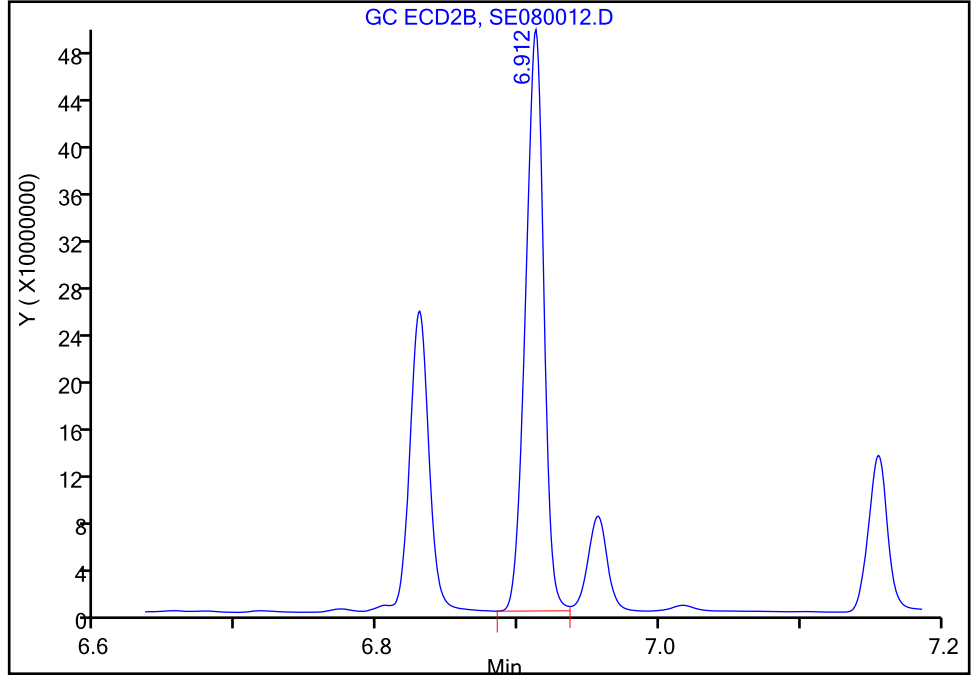
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

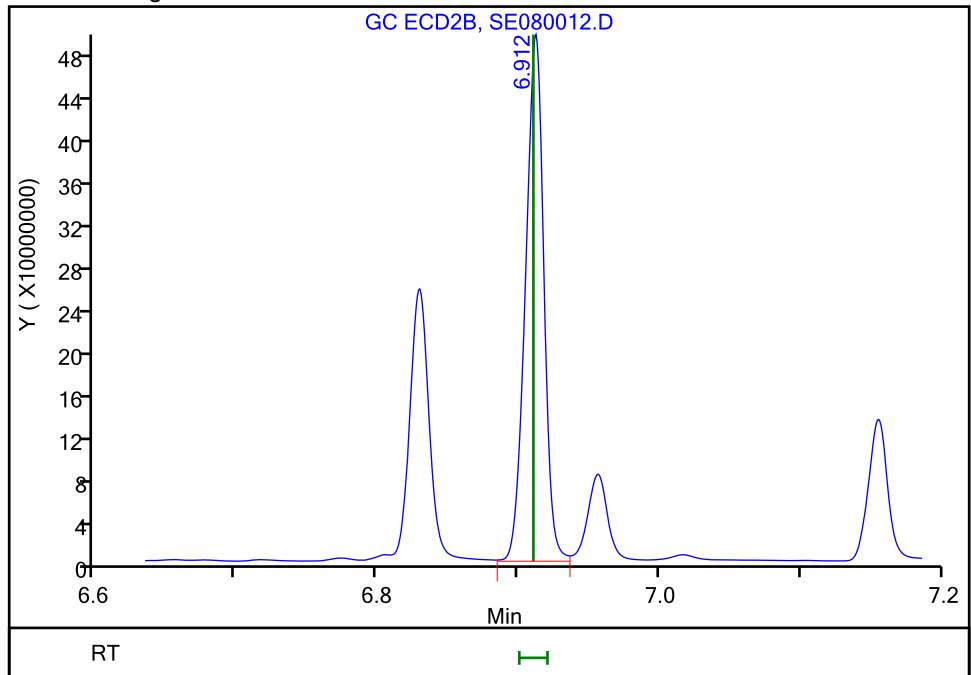
RT: 6.91
Area: 434653021
Amount: 0.087708
Amount Units: ug/ml

Processing Integration Results



RT: 6.91
Area: 438385412
Amount: 0.087518
Amount Units: ug/ml

Manual Integration Results



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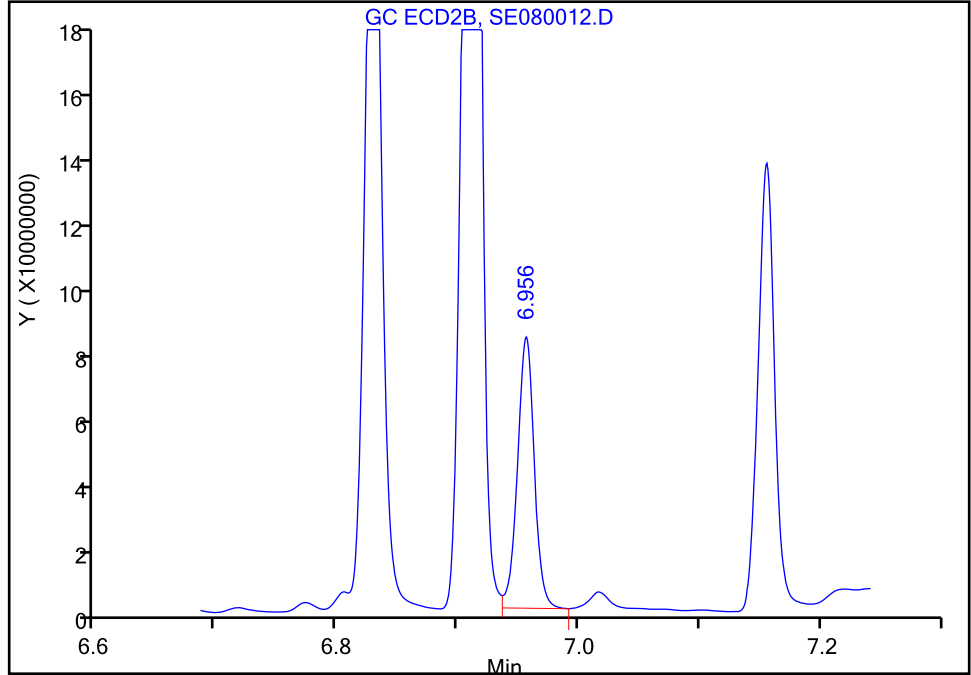
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

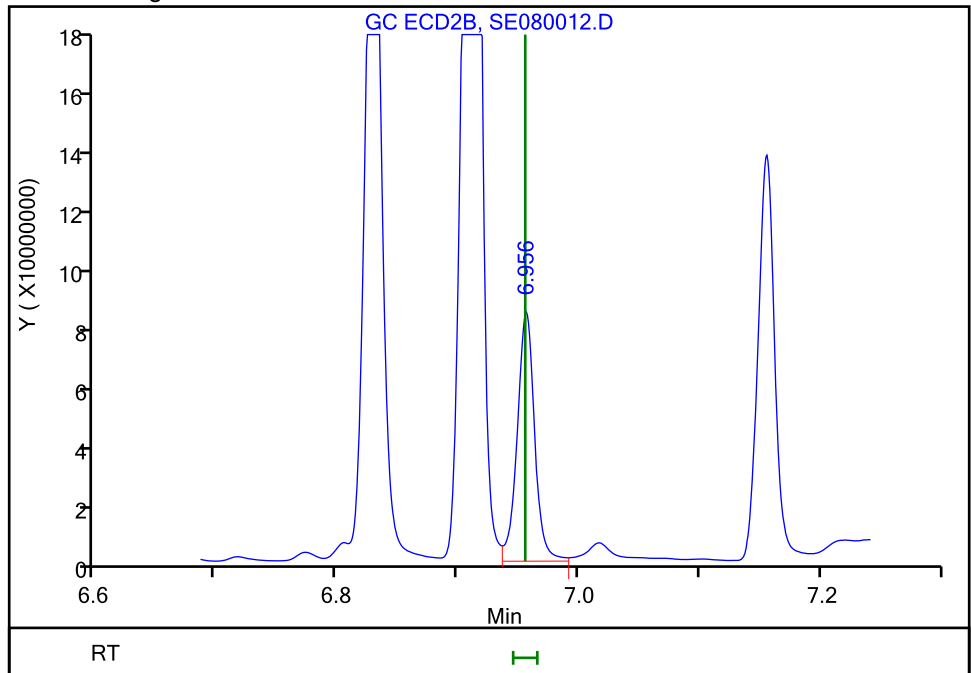
RT: 6.96
Area: 75934344
Amount: 16.692681
Amount Units: ug/ml

Processing Integration Results



RT: 6.96
Area: 79838277
Amount: 17.422724
Amount Units: ug/ml

Manual Integration Results



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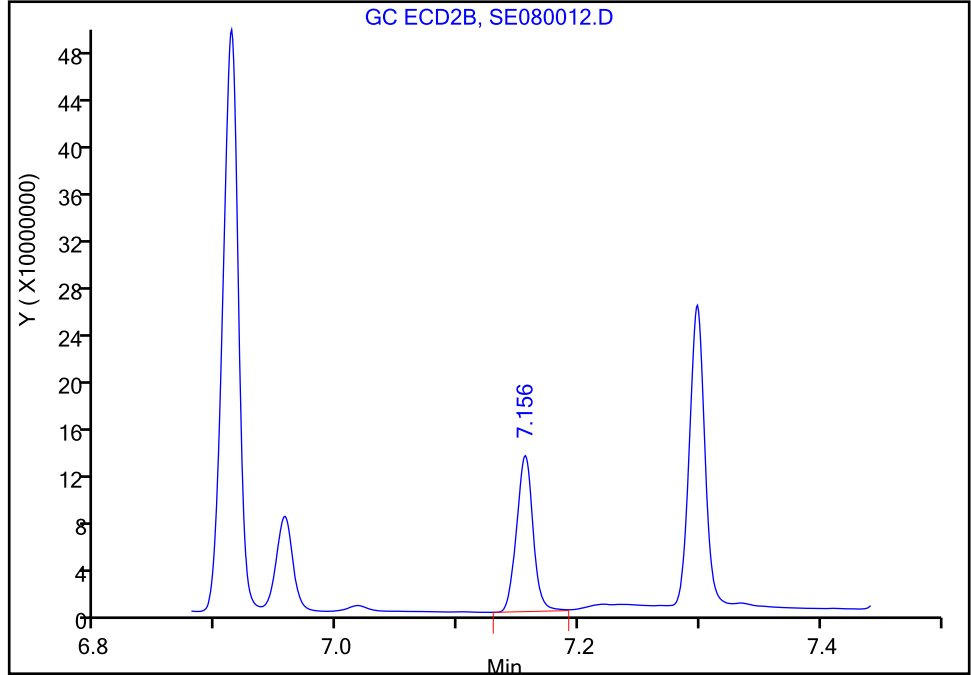
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

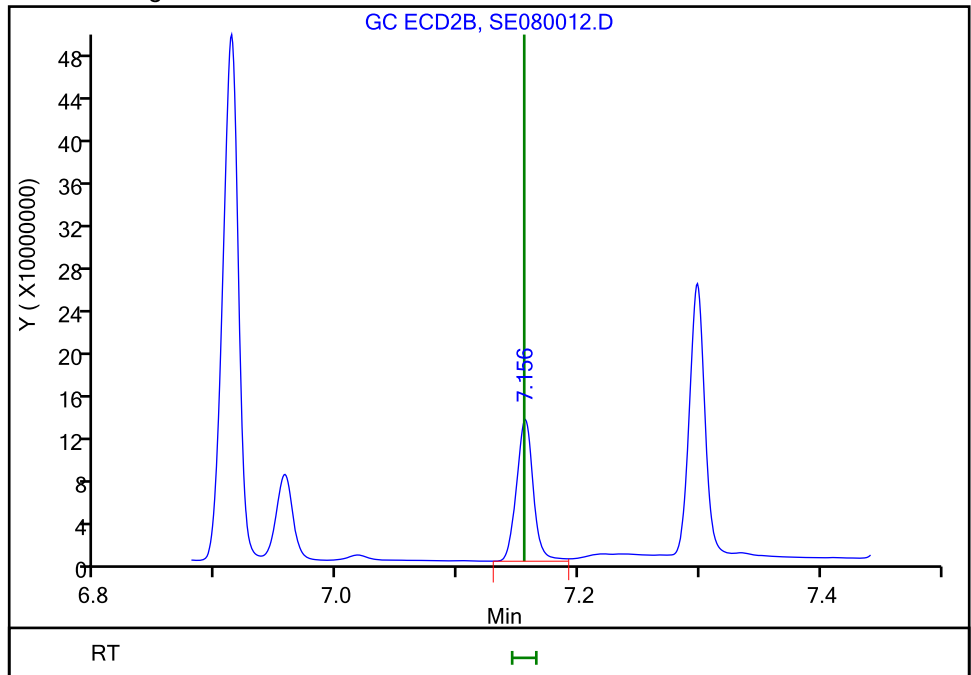
RT: 7.16
Area: 123031336
Amount: 19.557220
Amount Units: ug/ml

Processing Integration Results



RT: 7.16
Area: 125917297
Amount: 20.188282
Amount Units: ug/ml

Manual Integration Results



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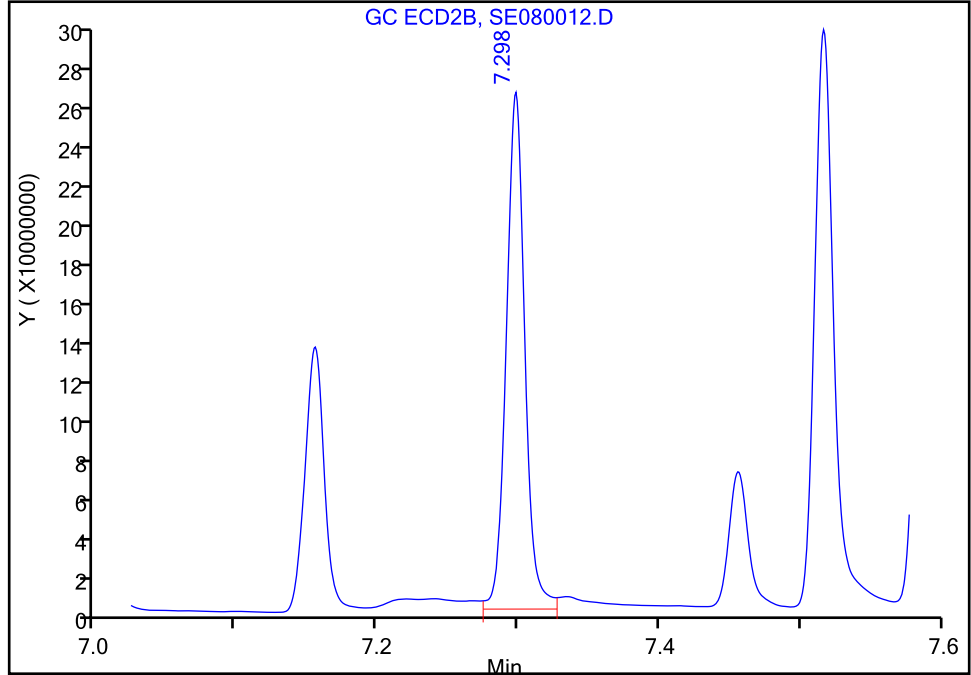
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

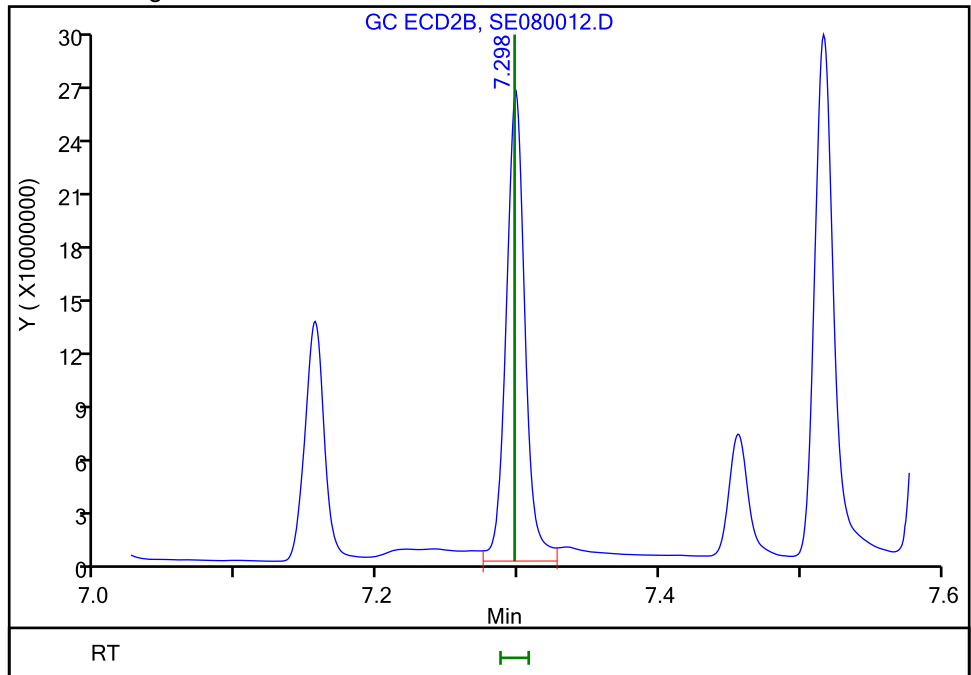
RT: 7.30
Area: 232007263
Amount: 0.166467
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 236765319
Amount: 0.167941
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

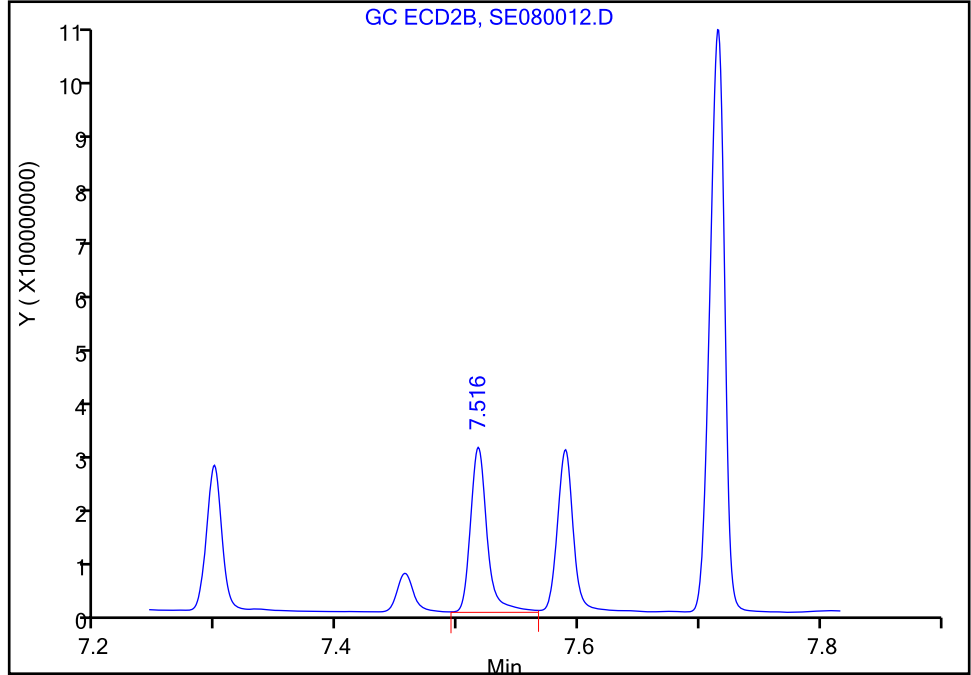
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

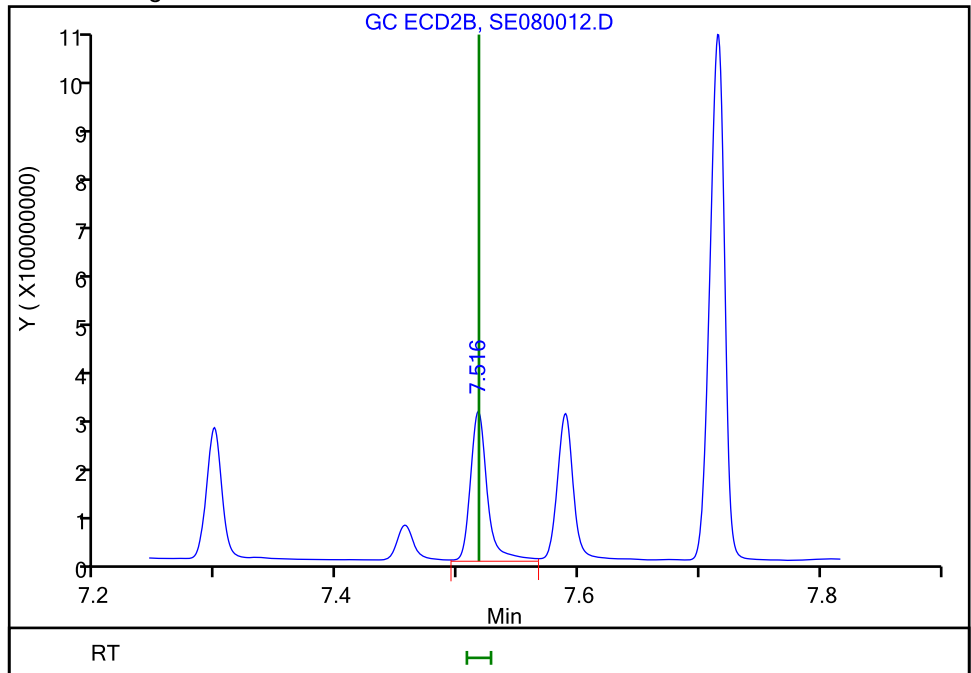
RT: 7.52
Area: 273831818
Amount: 0.173743
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 280829565
Amount: 0.176230
Amount Units: ug/ml

Manual Integration Results



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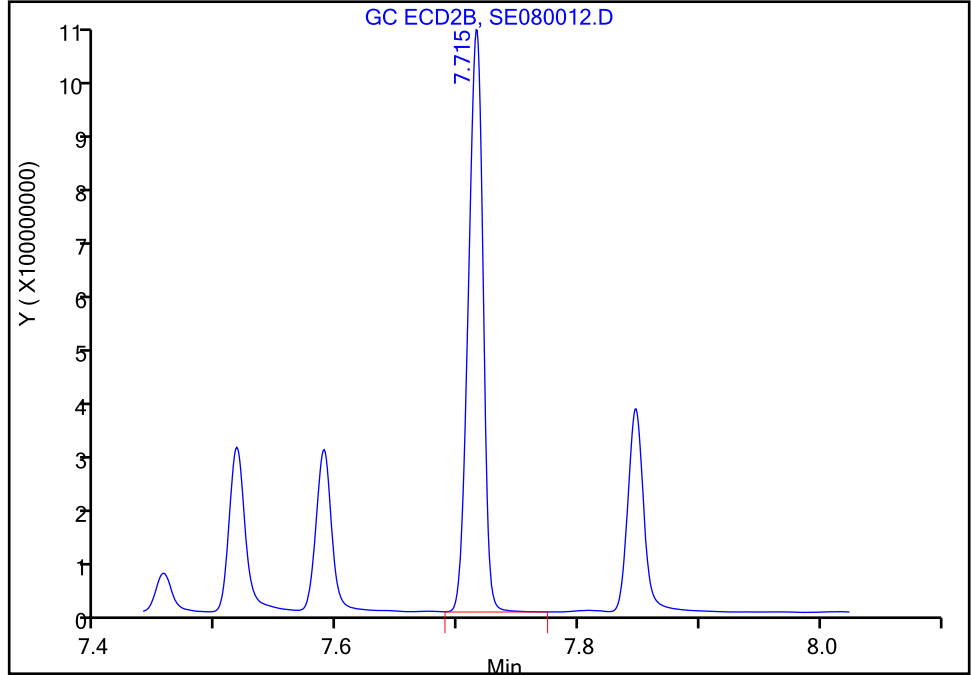
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

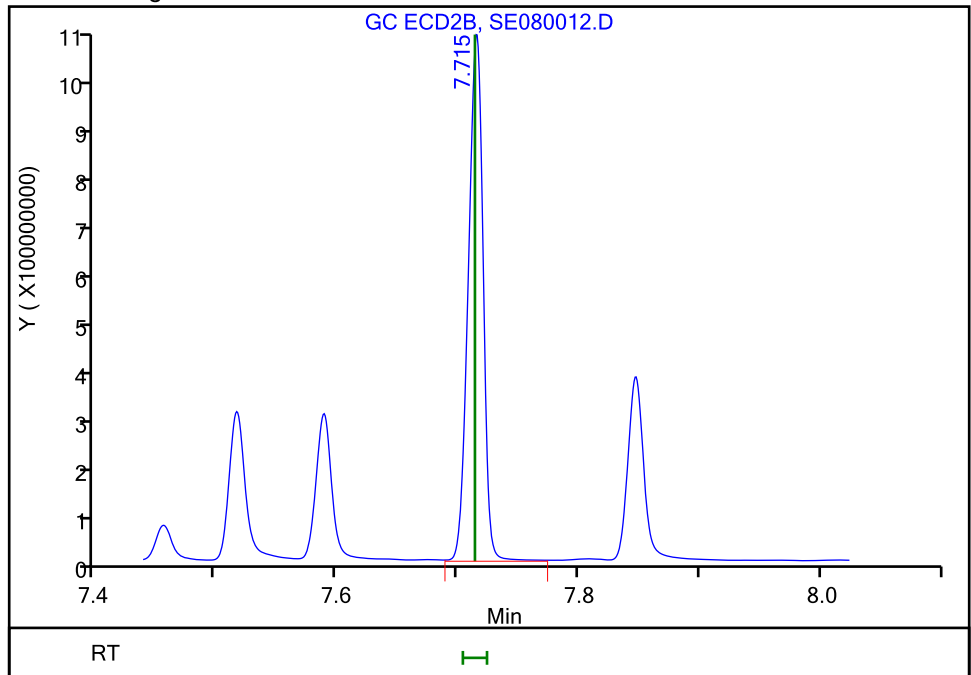
RT: 7.71
Area: 852692667
Amount: 0.045595
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 861630277
Amount: 0.045810
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

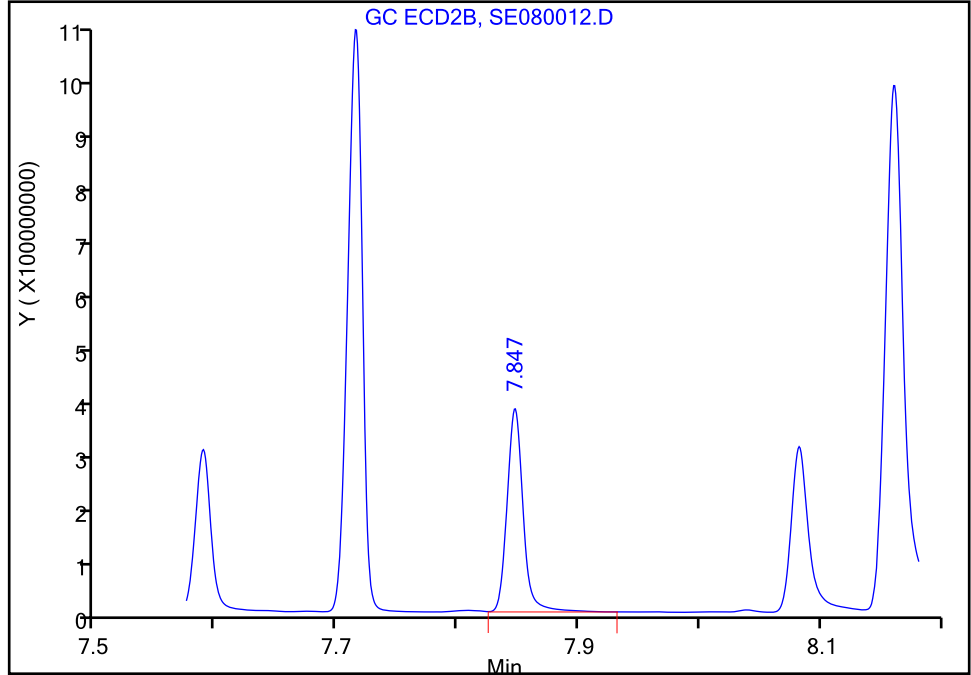
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

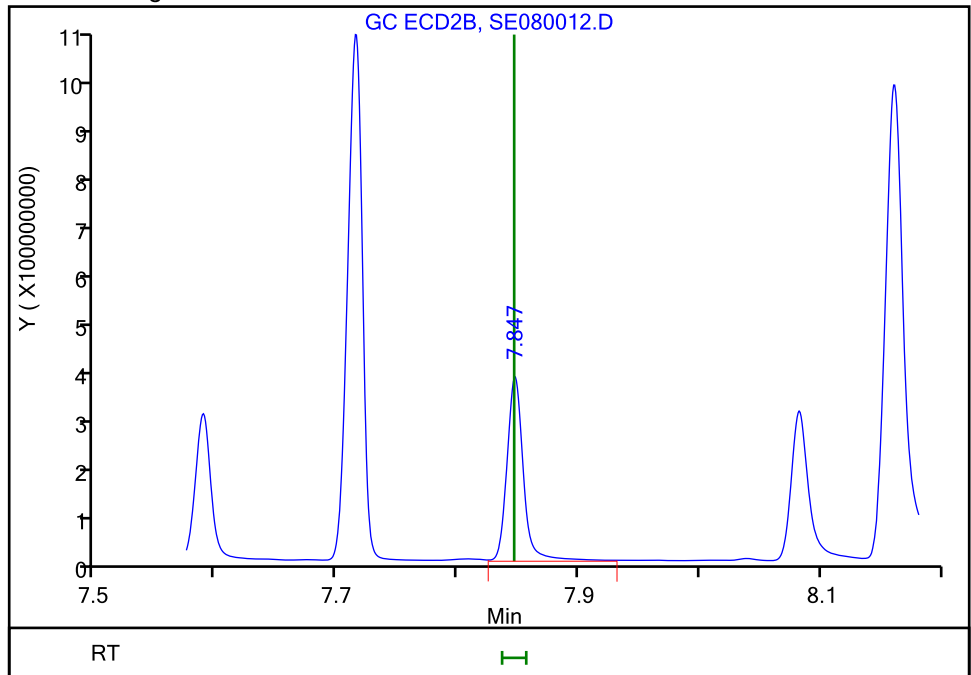
RT: 7.85
Area: 324462017
Amount: 0.044325
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 335327121
Amount: 0.045368
Amount Units: ug/ml

Manual Integration Results



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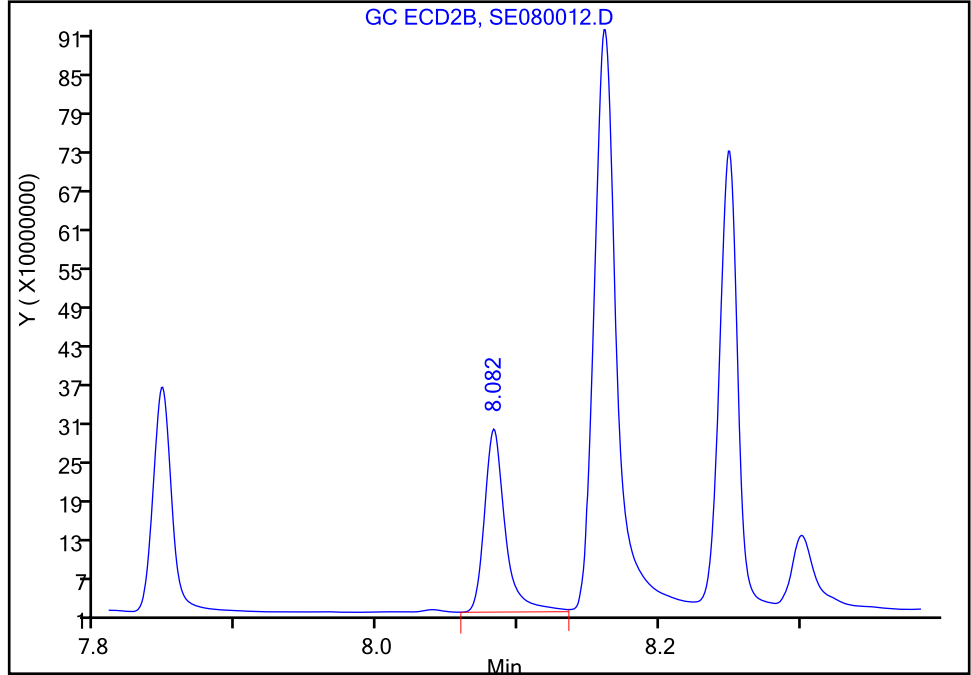
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

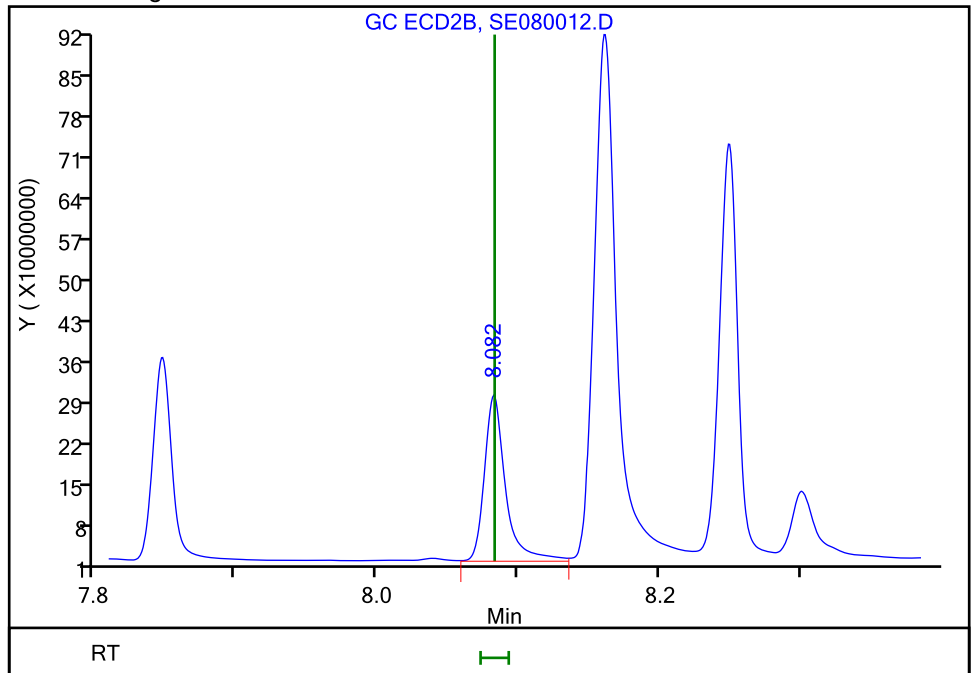
RT: 8.08
Area: 292476486
Amount: 0.044574
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 298977240
Amount: 0.044982
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

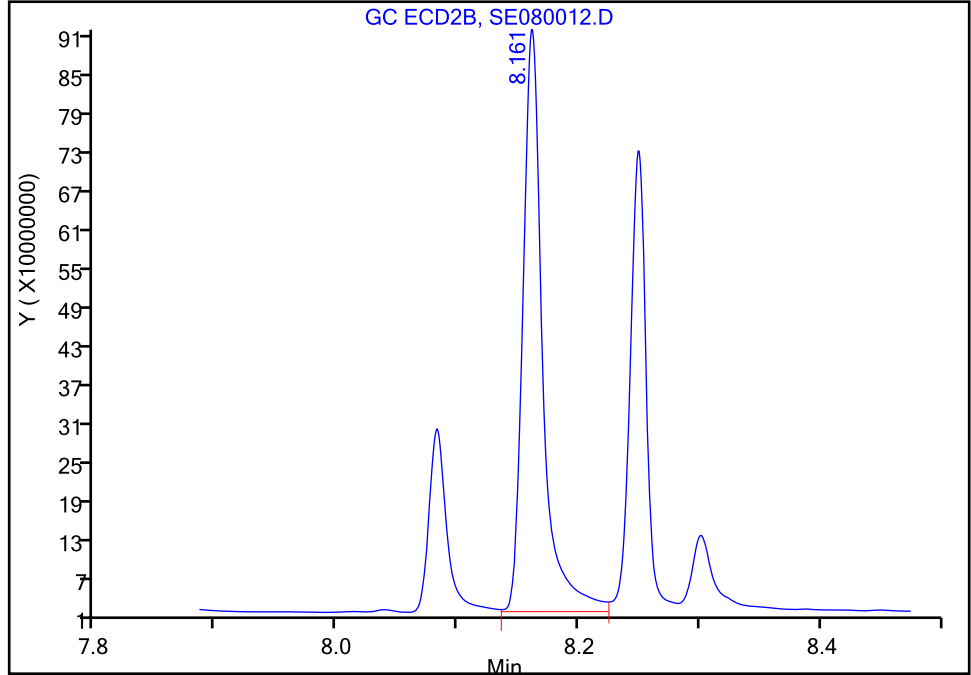
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

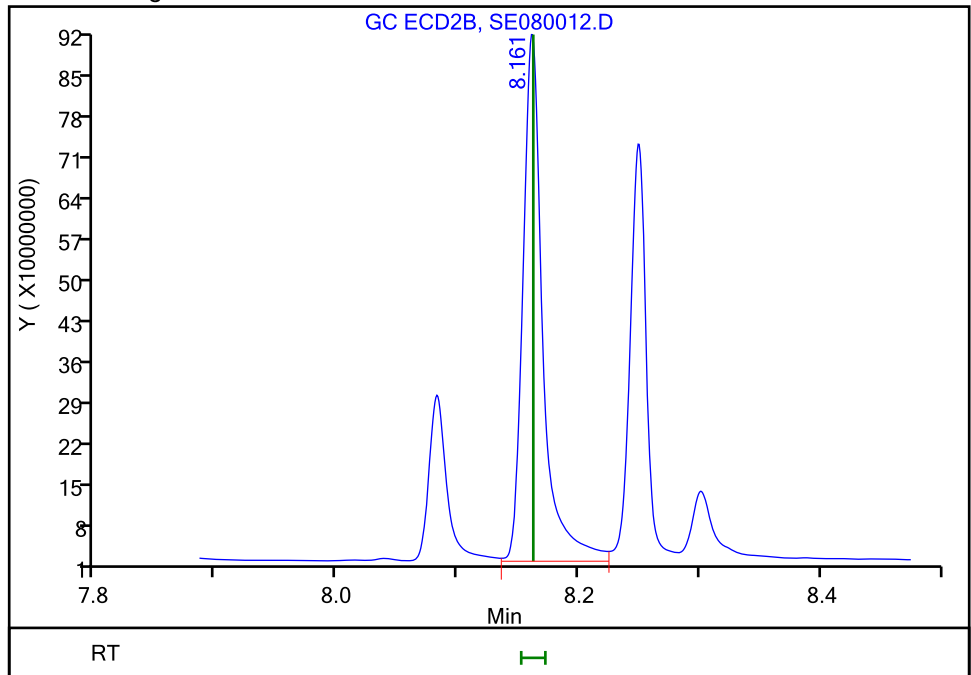
RT: 8.16
Area: 1033507912
Amount: 0.185123
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 1043446048
Amount: 0.185485
Amount Units: ug/ml

Manual Integration Results



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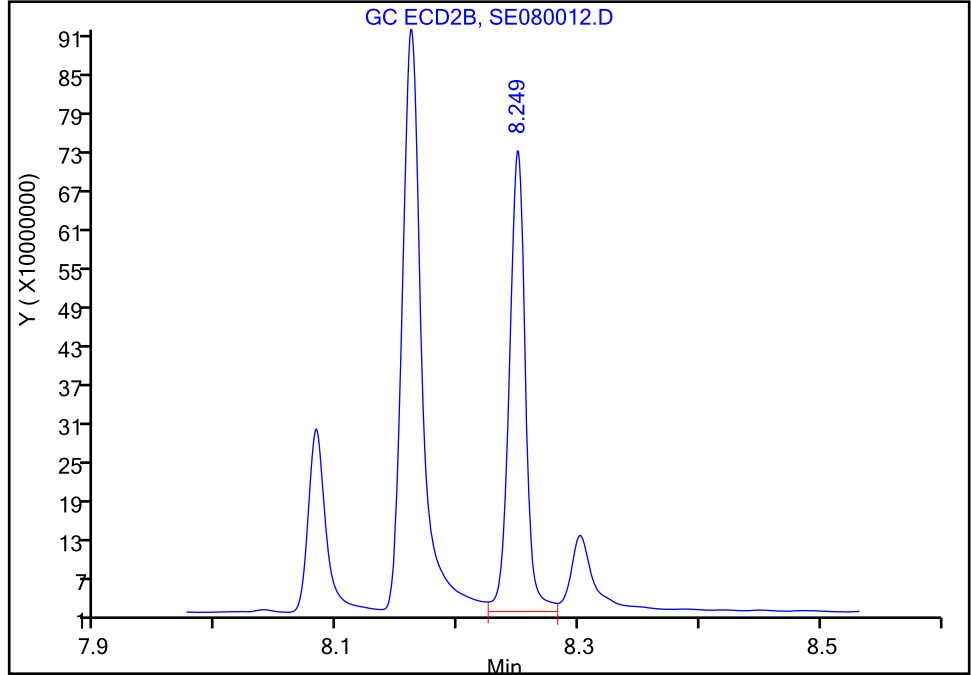
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

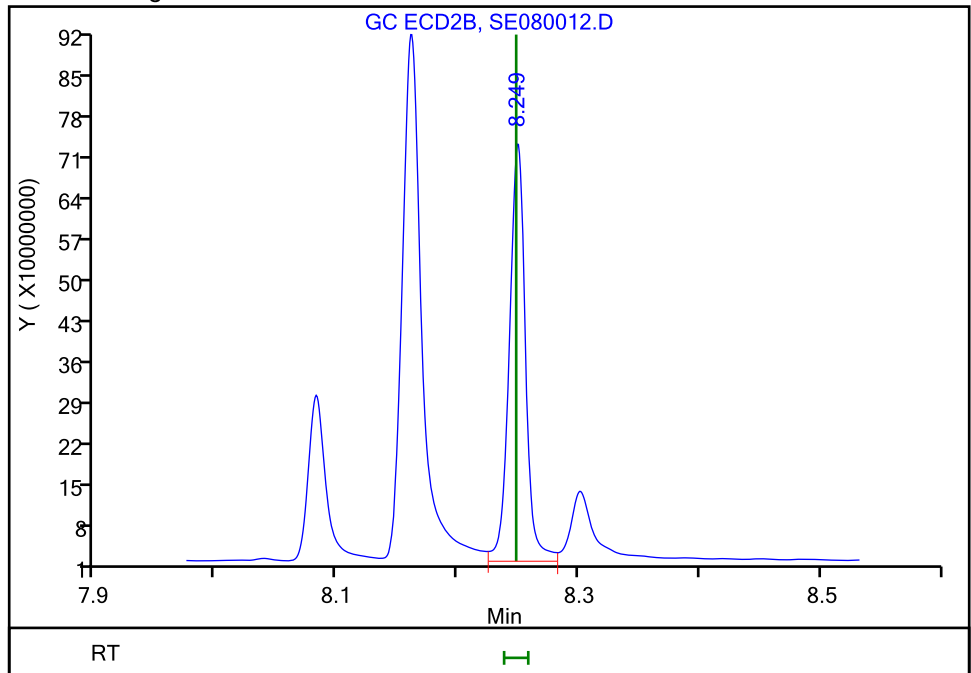
RT: 8.25
Area: 664185314
Amount: 0.147454
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 670832472
Amount: 0.151471
Amount Units: ug/ml

Manual Integration Results



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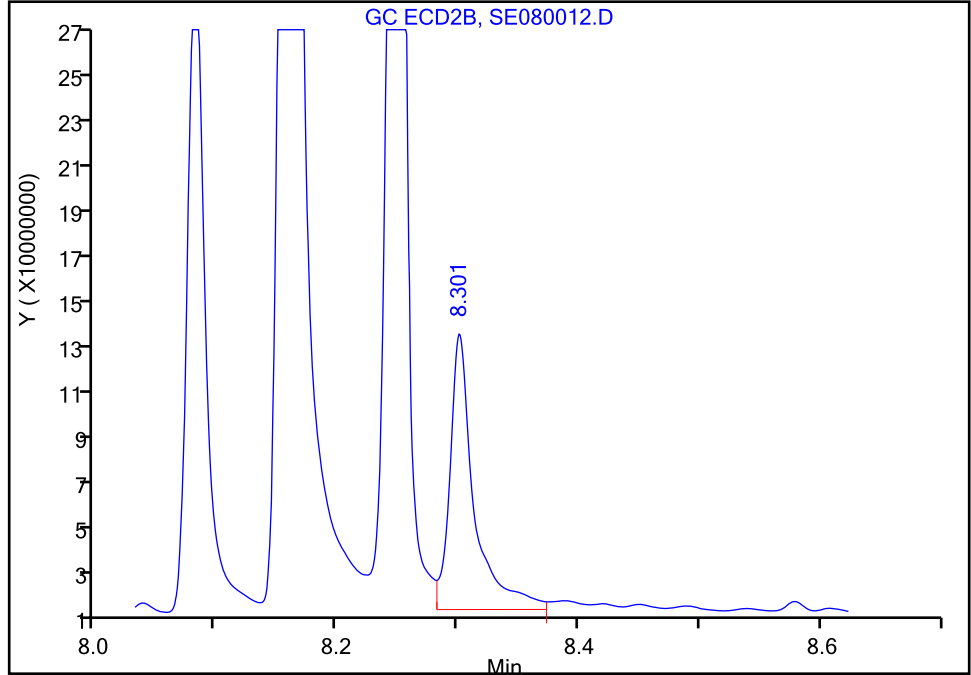
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

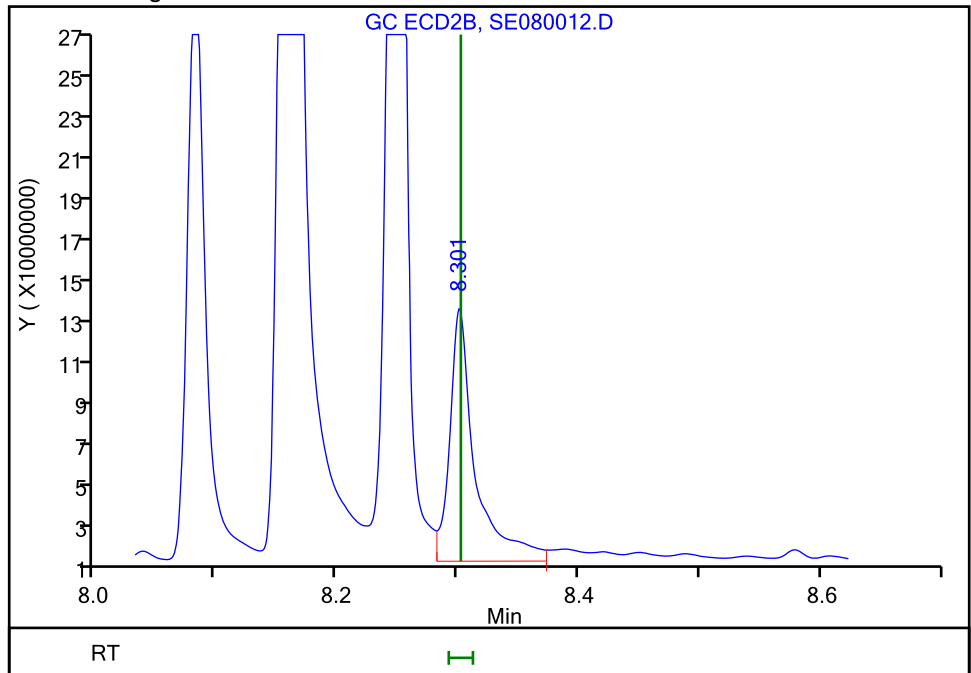
RT: 8.30
Area: 164528949
Amount: 0.167101
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 175272842
Amount: 0.177709
Amount Units: ug/ml

Manual Integration Results



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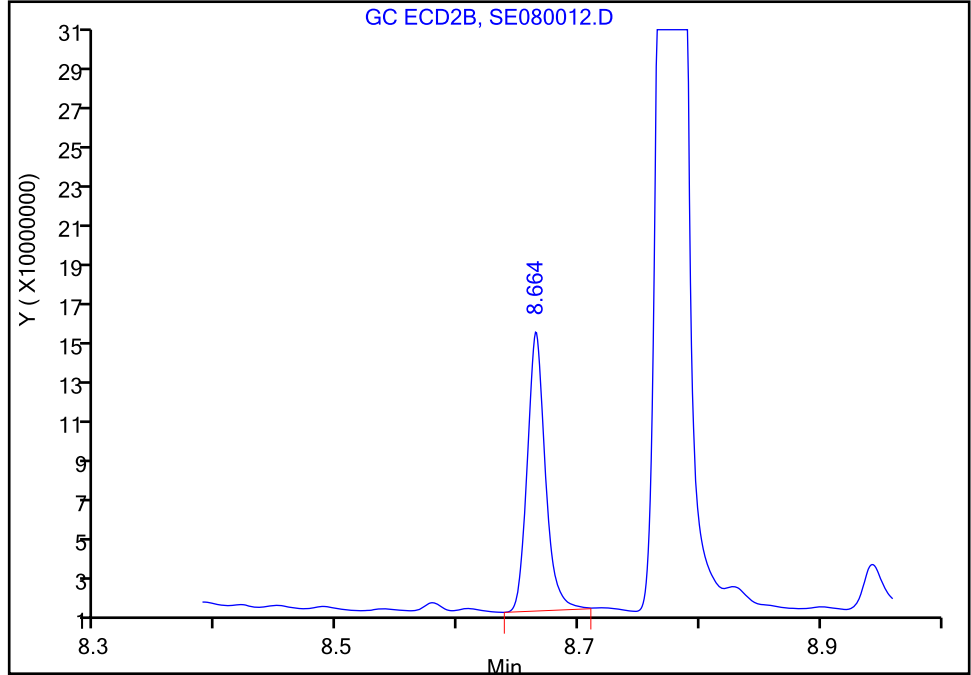
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

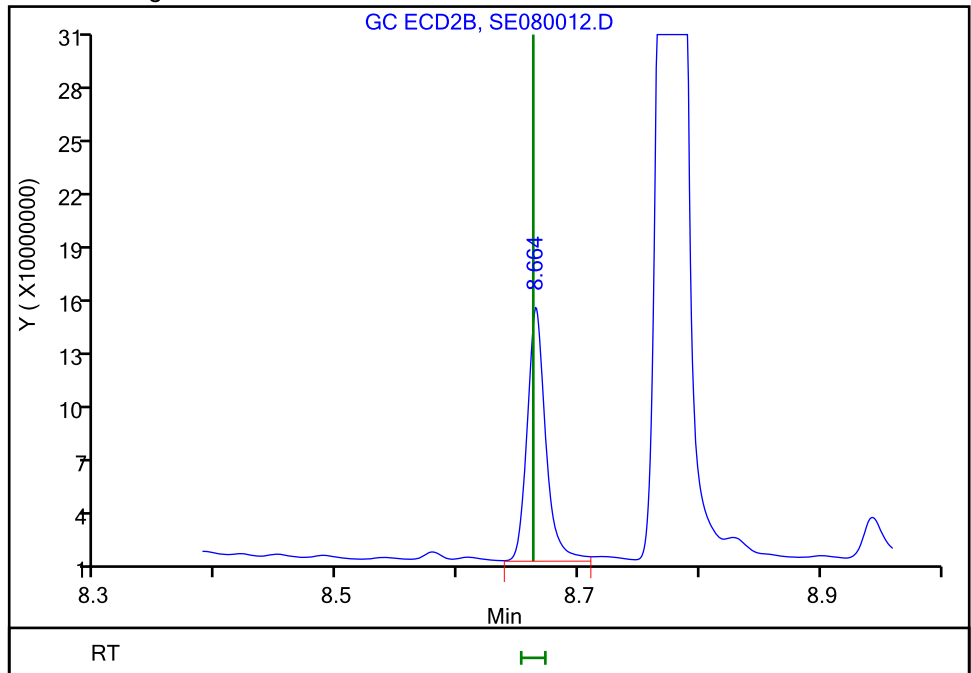
RT: 8.66
Area: 144381017
Amount: 0.181133
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 149493508
Amount: 0.185944
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

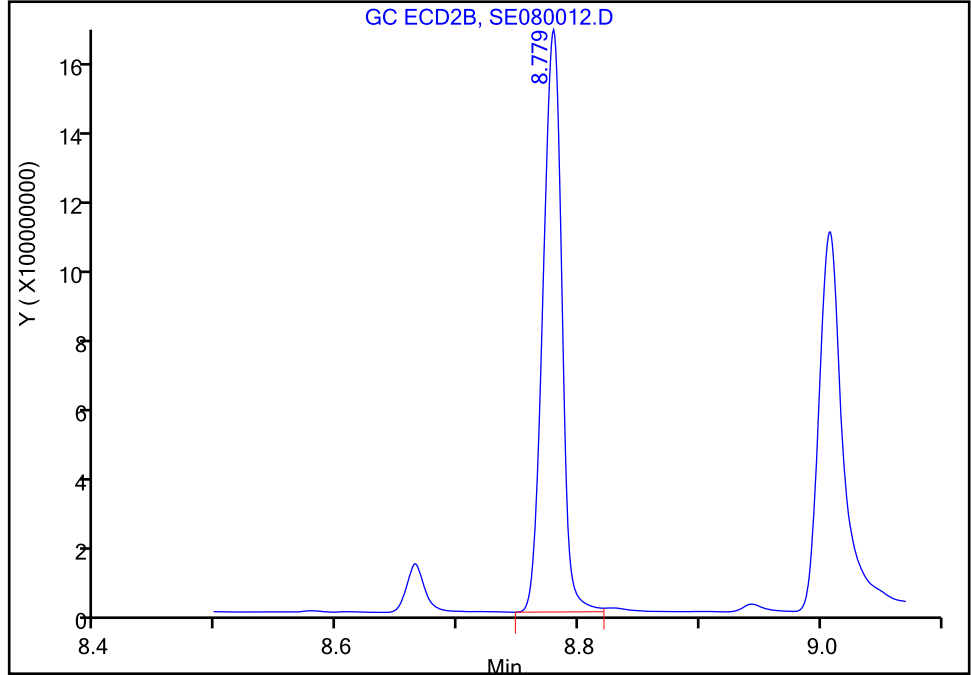
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

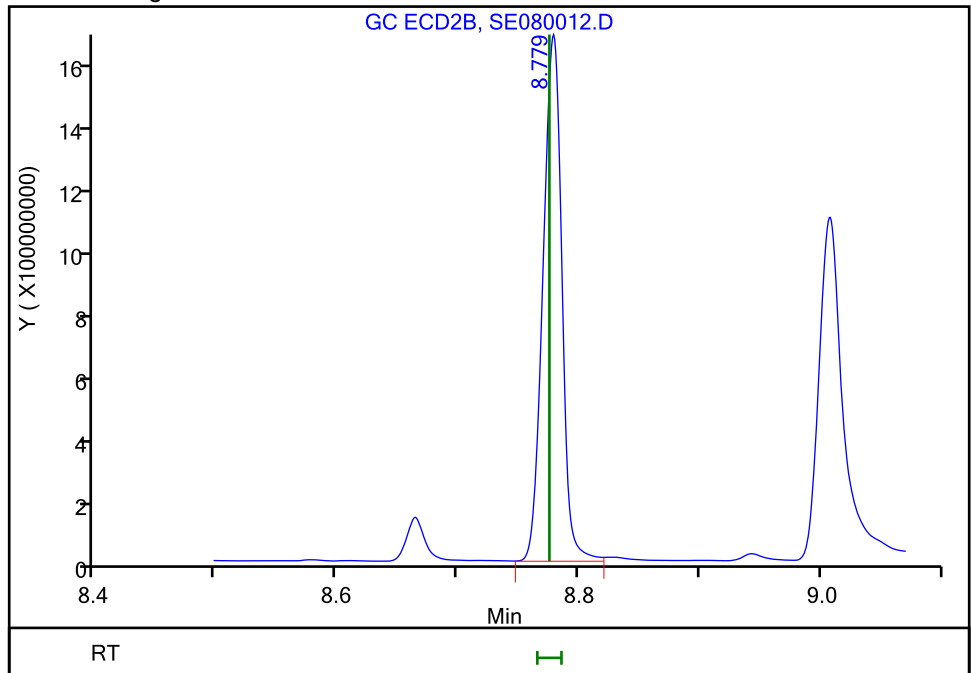
RT: 8.78
Area: 1816748627
Amount: 0.185639
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 1822835497
Amount: 0.185604
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

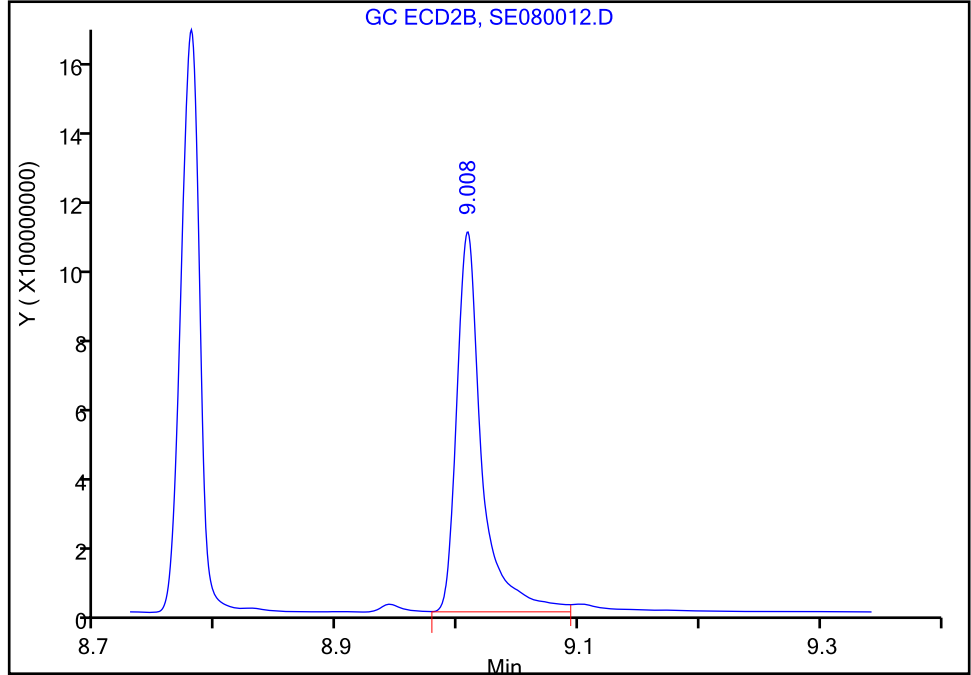
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

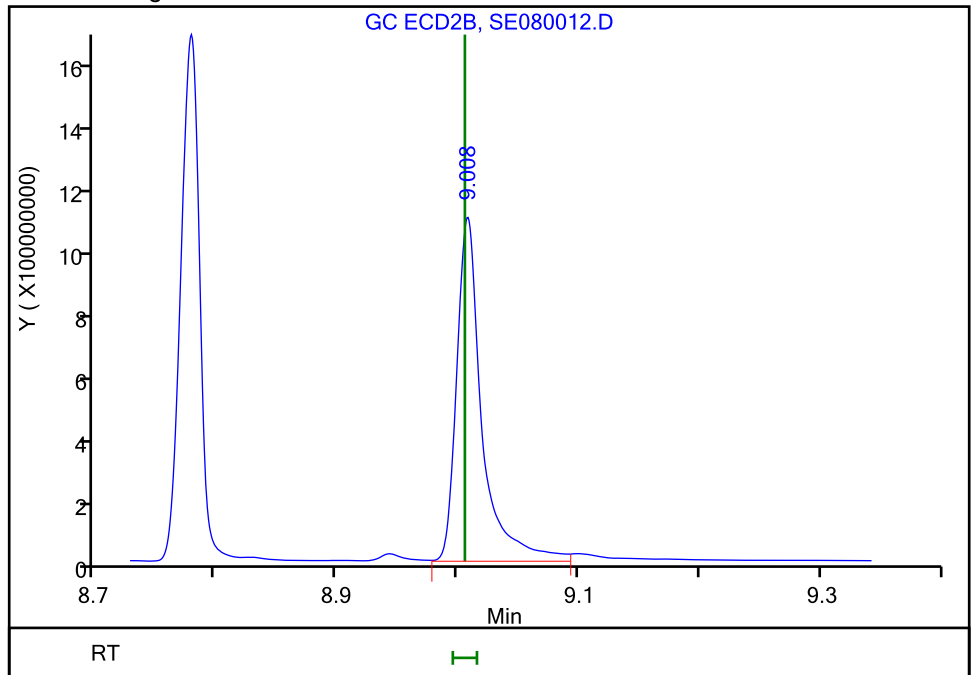
RT: 9.01
Area: 1583160054
Amount: 0.152106
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 1596868377
Amount: 0.151259
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

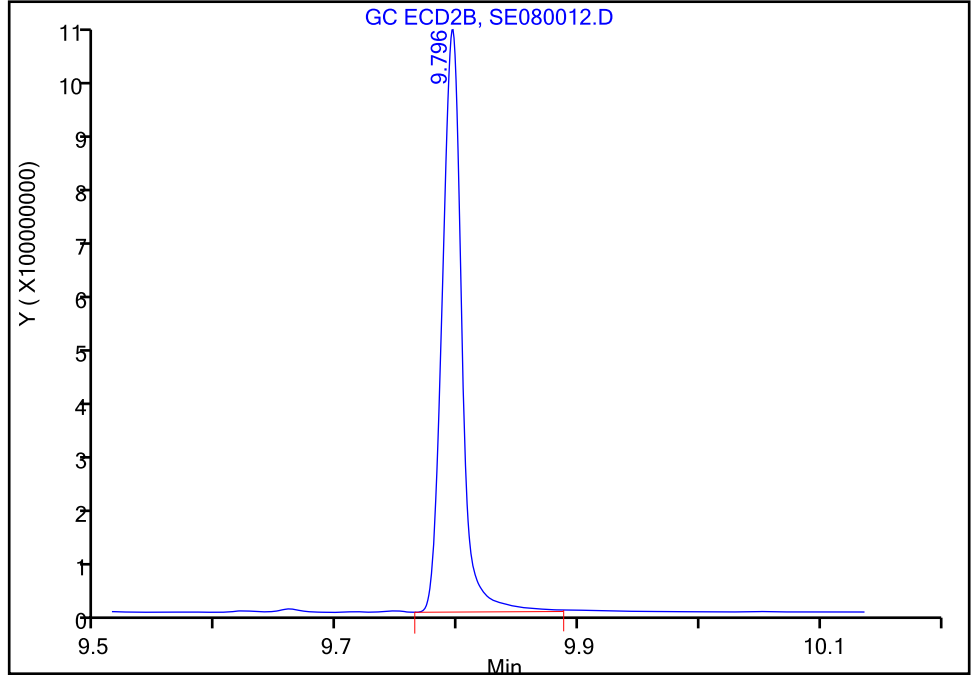
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

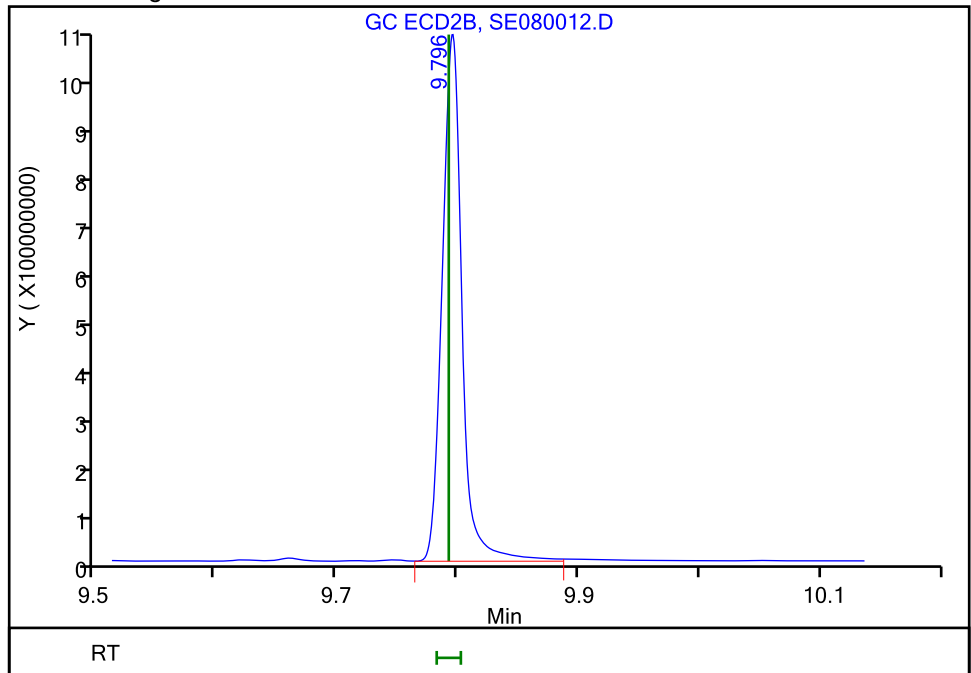
RT: 9.80
Area: 1182788136
Amount: 0.148067
Amount Units: ug/ml

Processing Integration Results



RT: 9.80
Area: 1189239771
Amount: 0.160100
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	407346190		0.0777	0.100	-22.3*	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	283173340		0.0881	0.100	-11.9	20.0
4-Nitrophenol	Ave	92458216	91901530		0.0994	0.100	-0.6	20.0
Dicamba	Ave	1077009527	922446760		0.0428	0.0500	-14.4	20.0
MCPP	Qua		469003		9.85	10.0	-1.5	20.0
MCPA	Ave	925968	935489		10.1	10.0	1.0	20.0
Dichlorprop	Ave	277497963	258402050		0.0931	0.100	-6.9	20.0
2,4-D	Ave	302399622	279399860		0.0924	0.100	-7.6	20.0
Pentachlorophenol	Ave	5383895550	4633460080		0.0215	0.0250	-13.9	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1676673120		0.0223	0.0250	-10.8	20.0
Chloramben	Qua		1205892700		0.0819	0.100	-18.1	20.0
2,4,5-T	Ave	2193840481	2024242400		0.0231	0.0250	-7.7	20.0
2,4-DB	Qua		131484440		0.0888	0.100	-11.2	20.0
Dinoseb	Ave	1223895982	1063035430		0.0869	0.100	-13.1	20.0
Bentazon	Ave	287551968	263316600		0.0916	0.100	-8.4	20.0
Picloram	Qua		1934015400		0.0834	0.100	-16.6	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	2909428780		0.0883	0.100	-11.7	20.0
Acifluorfen	Qua		1962049570		0.0869	0.100	-13.1	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	183772960		0.0869	0.100	-13.1	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	6.99	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.33	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.86	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.18	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 21:40:11 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-028
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:37:48 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.578	2.579	-0.001	40734619	0.1000	0.0777	
2	2.632	2.632	0.000	124683071	0.1000	0.0774	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	8885882	NC	NC	
2	5.102	5.102	0.000	45742372	NC	NC	
						RPD = 7.11	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	104333704	NC	NC	
2	5.776	5.776	0.000	435611631	NC	NC	
						RPD = 2.76	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	28317334	0.1000	0.0881	
2	6.116	6.116	0.000	146847224	0.1000	0.0817	
						RPD = 7.52	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	9190153	0.1000	0.0994	
2	6.505	6.505	0.000	26148392	0.1000	0.0874	
						RPD = 12.80	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.683	6.683	0.000	18377296	0.1000	0.0869	M
2	6.828	6.829	-0.001	116117949	0.1000	0.0825	M
						RPD = 5.21	
7 Dicamba M							
1	6.720	6.720	0.000	46122338	0.0500	0.0428	M
2	6.911	6.910	0.001	205108302	0.0500	0.0409	M
						RPD = 4.48	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4690034	10.0	9.85	M
2	6.956	6.955	0.001	42581663	10.0	8.89	M
							RPD = 10.31
9 MCPA							M
1	6.994	6.994	0.000	9354886	10.0	10.1	M
2	7.153	7.155	-0.002	65630302	10.0	11.6	M
							RPD = 13.55
10 Dichlorprop							M
1	7.180	7.180	0.000	25840205	0.1000	0.0931	M
2	7.297	7.297	0.000	117222842	0.1000	0.0831	M
							RPD = 11.31
11 2,4-D							M
1	7.327	7.326	0.001	27939986	0.1000	0.0924	M
2	7.517	7.517	0.000	133627356	0.1000	0.0839	M
							RPD = 9.69
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	115836502	0.0250	0.0215	M
2	7.713	7.714	-0.001	399815476	0.0250	0.0213	M
							RPD = 1.21
13 Silvex (2,4,5-TP)							M
1	7.769	7.769	0.000	41916828	0.0250	0.0223	M
2	7.847	7.846	0.001	155993801	0.0250	0.0211	M
							RPD = 5.56
14 Chloramben							M
1	7.857	7.855	0.002	120589270	0.1000	0.0819	M
2	8.162	8.162	0.000	457969533	0.1000	0.0814	M
							RPD = 0.55
15 2,4,5-T							M
1	7.929	7.929	0.000	50606060	0.0250	0.0231	M
2	8.083	8.083	0.000	135127386	0.0250	0.0203	M
							RPD = 12.61
16 2,4-DB							M
1	8.176	8.175	0.001	13148444	0.1000	0.0888	M
2	8.302	8.302	0.000	91637209	0.1000	0.0929	M
							RPD = 4.51
17 Dinoseb							M
1	8.222	8.224	-0.002	106303543	0.1000	0.0869	M
2	8.248	8.248	0.000	310276845	0.1000	0.0737	M
							RPD = 16.39
18 Bentazon							M
1	8.301	8.300	0.001	26331660	0.1000	0.0916	M
2	8.663	8.662	0.001	67492156	0.1000	0.0839	M
							RPD = 8.69
19 Picloram							M
1	8.530	8.529	0.001	193401540	0.1000	0.0834	M
2	9.007	9.005	0.002	686881952	0.1000	0.0704	M
							RPD = 16.93

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.624	8.623	0.001	290942878	0.1000	0.0883	M
2	8.777	8.775	0.002	842841434	0.1000	0.0858	M
						RPD = 2.90	

21 Acifluorfen							M
1	9.667	9.666	0.001	196204957	0.1000	0.0869	M
2	9.793	9.792	0.001	538041096	0.1000	0.0817	
						RPD = 6.20	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D

Injection Date: 08-May-2018 21:40:11

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h4

Worklist Smp#: 28

Client ID:

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

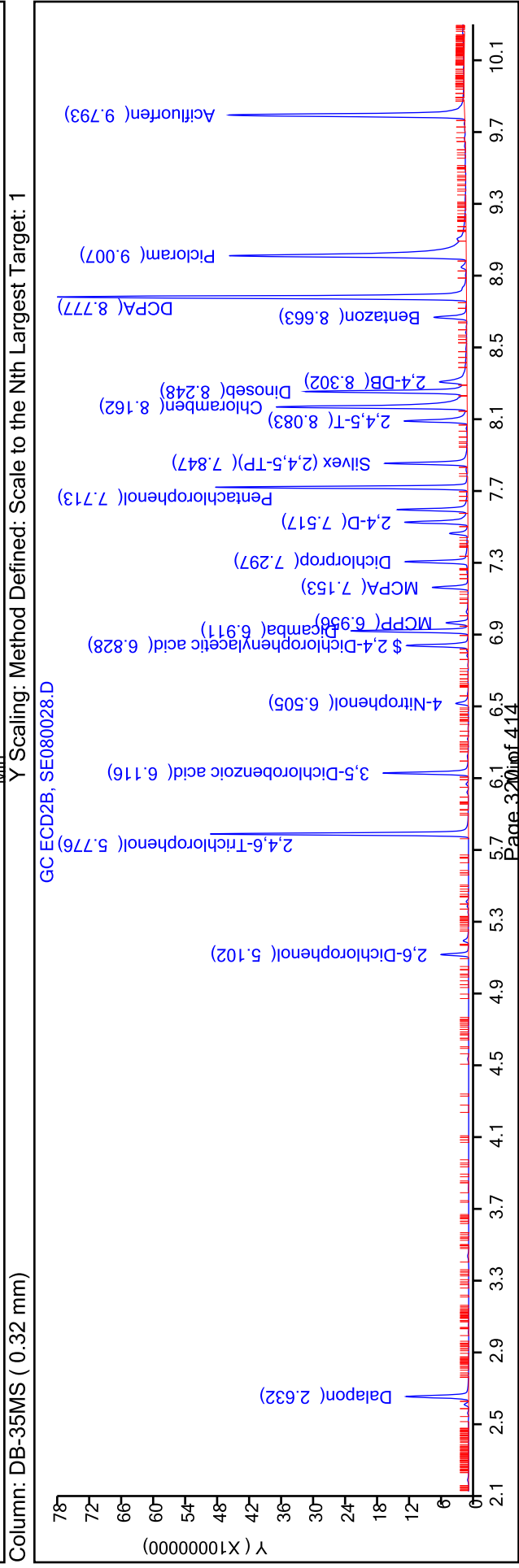
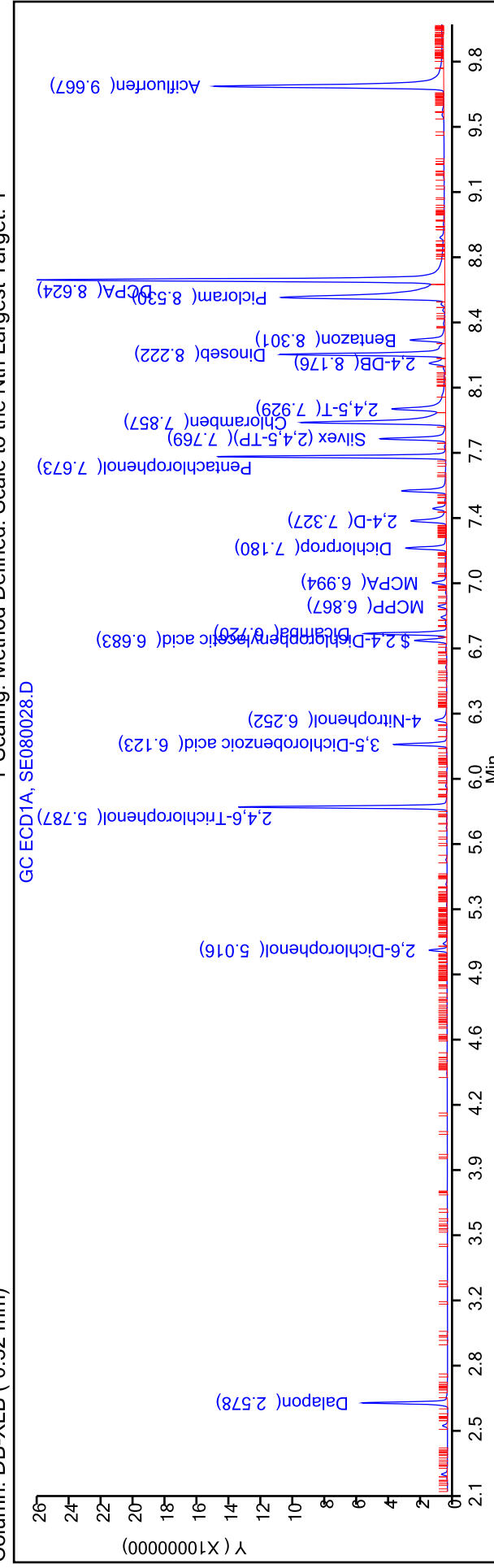
ALS Bottle#: 28

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

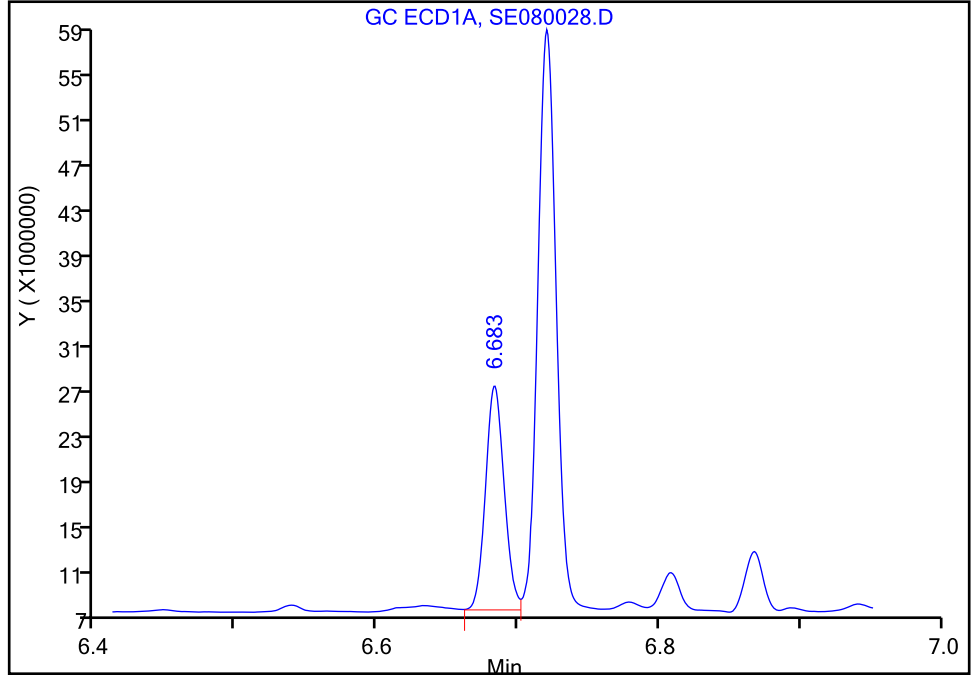
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 1

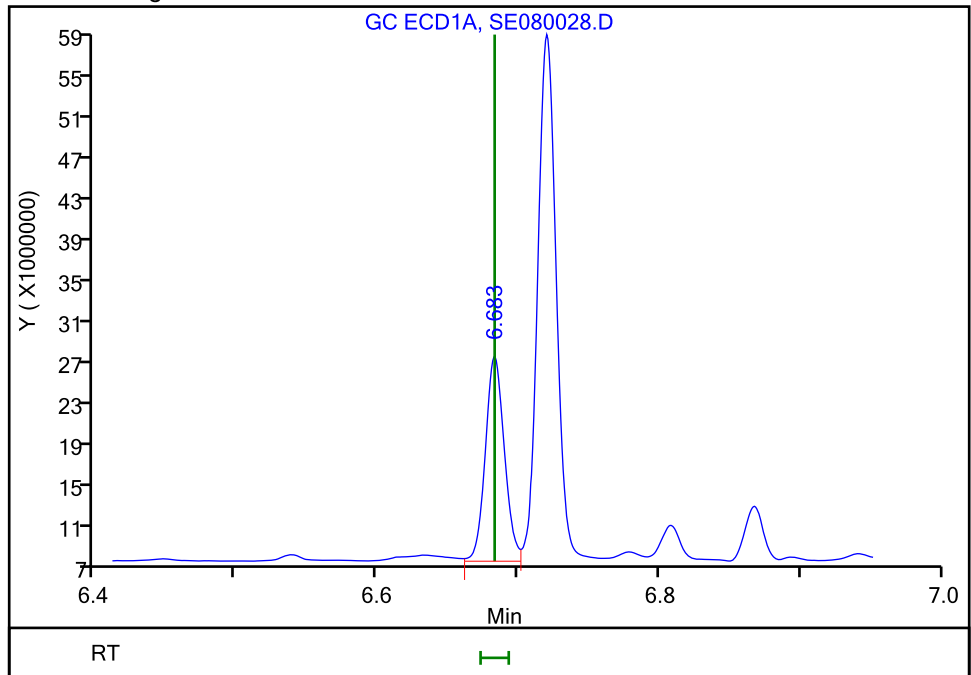
RT: 6.68
Area: 17876221
Amount: 0.084530
Amount Units: ug/ml

Processing Integration Results



RT: 6.68
Area: 18377296
Amount: 0.086899
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

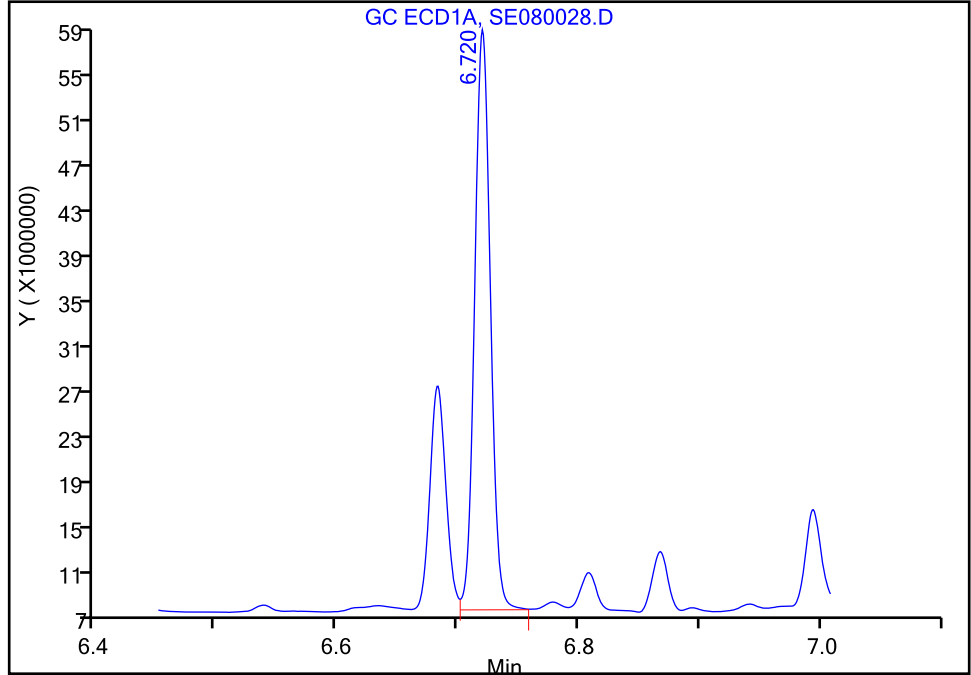
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

7 Dicamba, CAS: 1918-00-9

Signal: 1

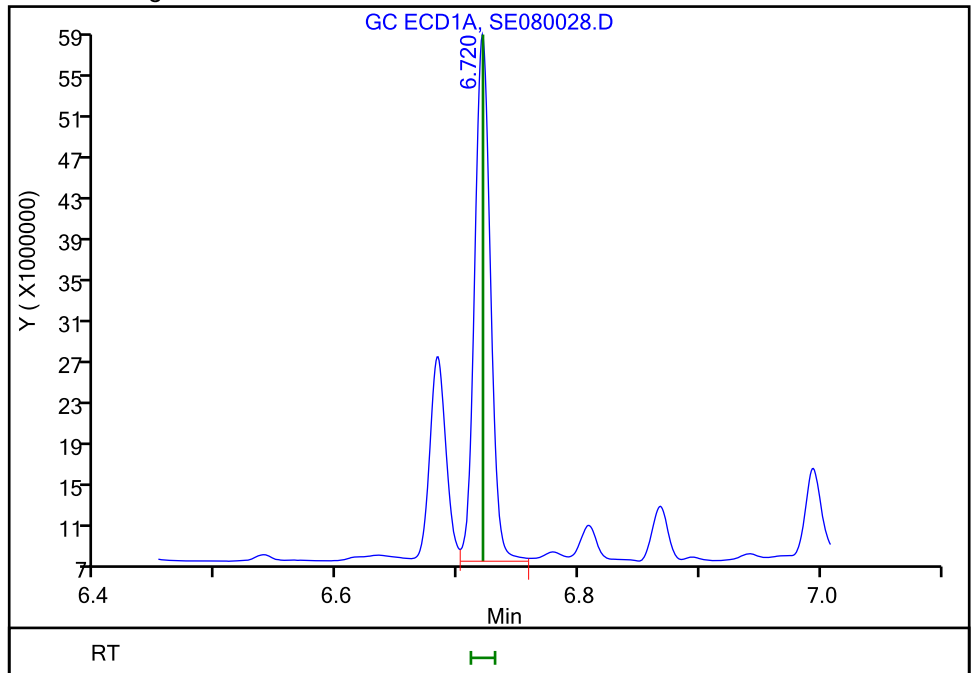
RT: 6.72
Area: 45383724
Amount: 0.042139
Amount Units: ug/ml

Processing Integration Results



RT: 6.72
Area: 46122338
Amount: 0.042824
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

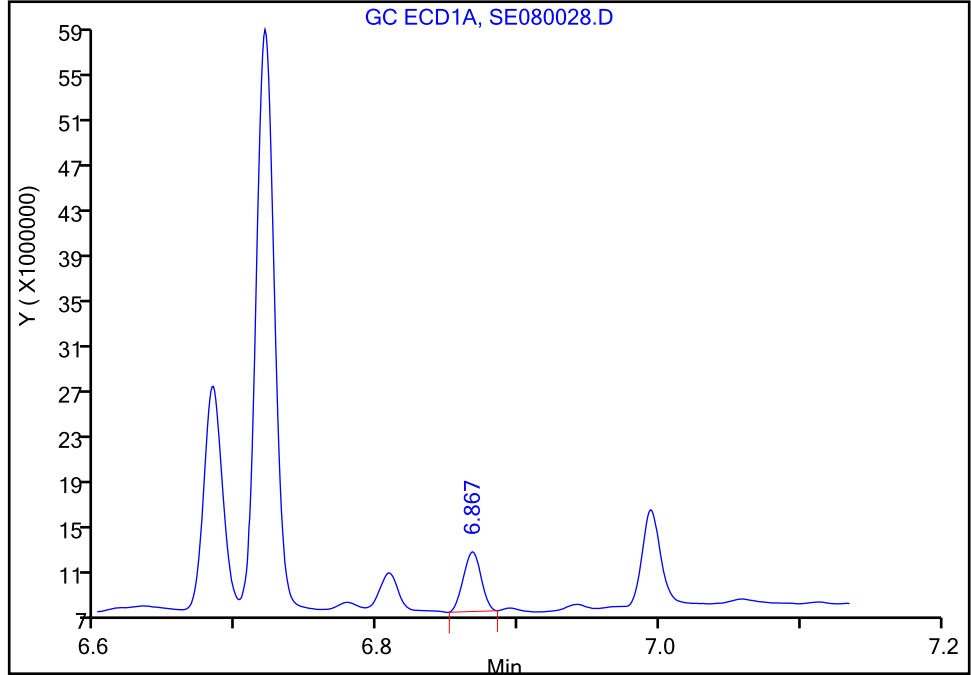
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

8 MCPP, CAS: 93-65-2

Signal: 1

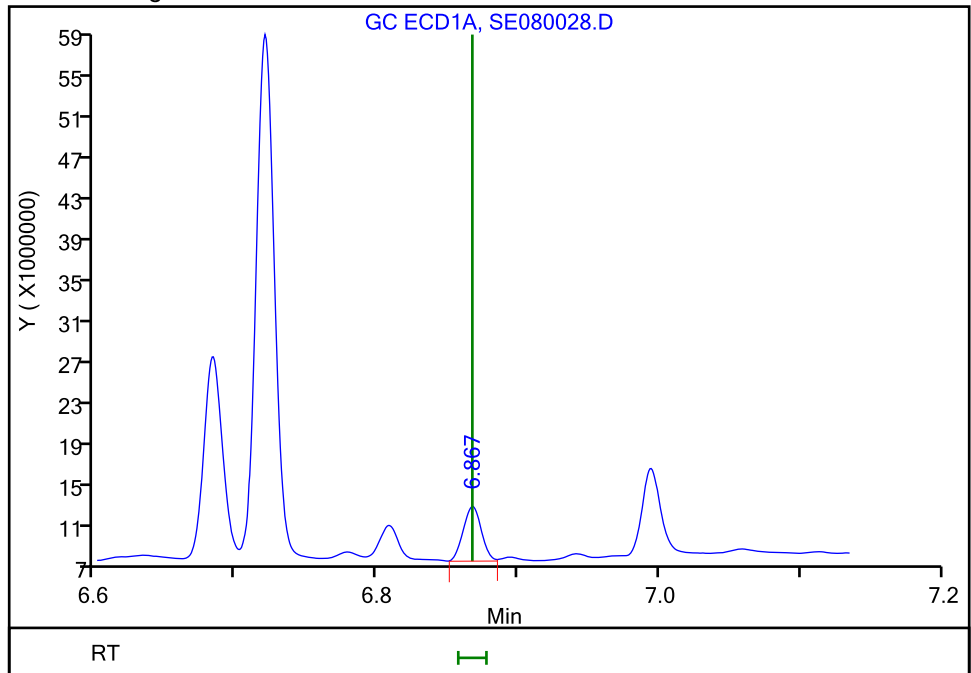
RT: 6.87
Area: 4516934
Amount: 9.550371
Amount Units: ug/ml

Processing Integration Results



RT: 6.87
Area: 4690034
Amount: 9.853576
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:14
Audit Action: Assigned New Baseline

TestAmerica Savannah

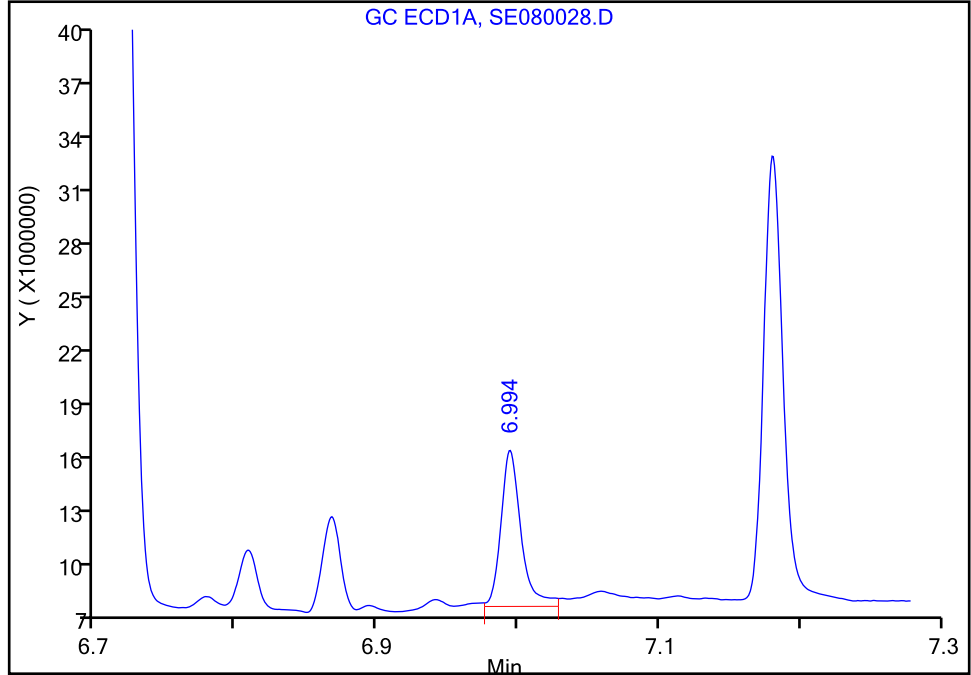
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

9 MCPA, CAS: 94-74-6

Signal: 1

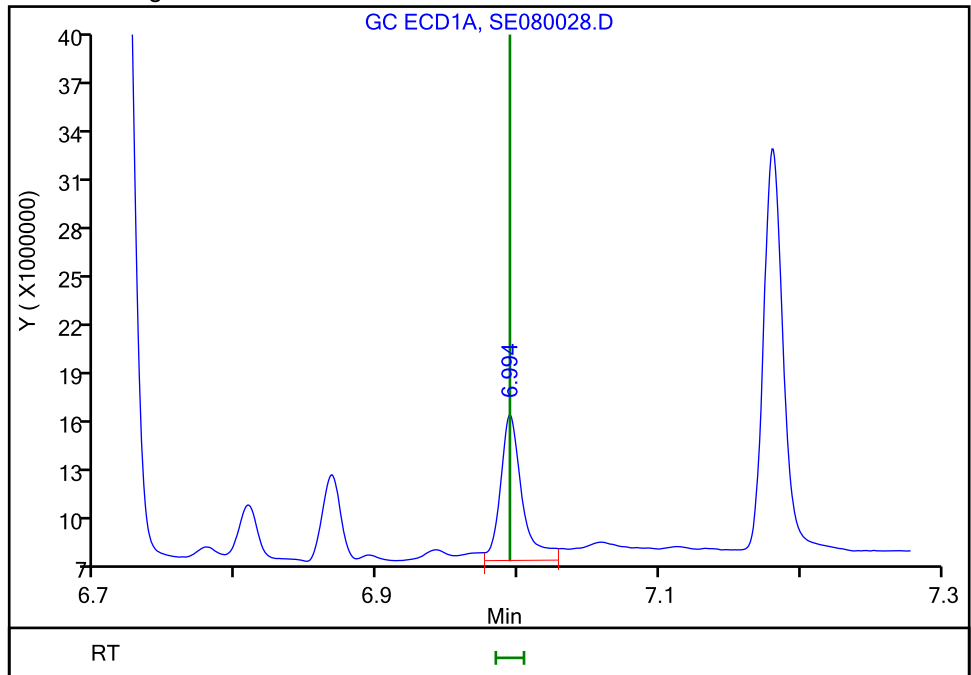
RT: 6.99
Area: 8493762
Amount: 9.172845
Amount Units: ug/ml

Processing Integration Results



RT: 6.99
Area: 9354886
Amount: 10.102816
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

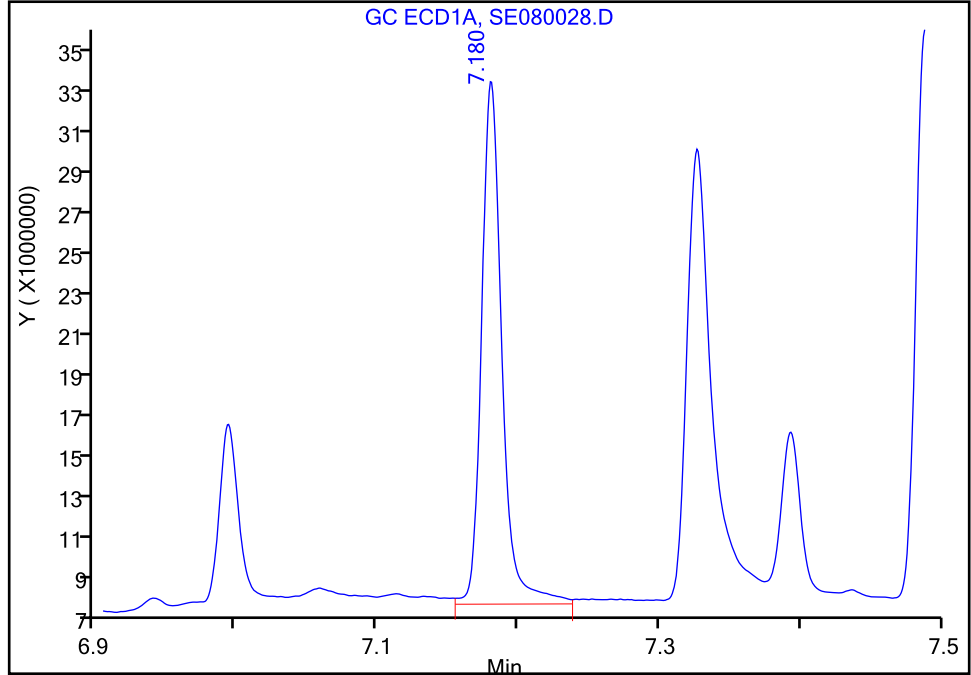
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

10 Dichlorprop, CAS: 120-36-5

Signal: 1

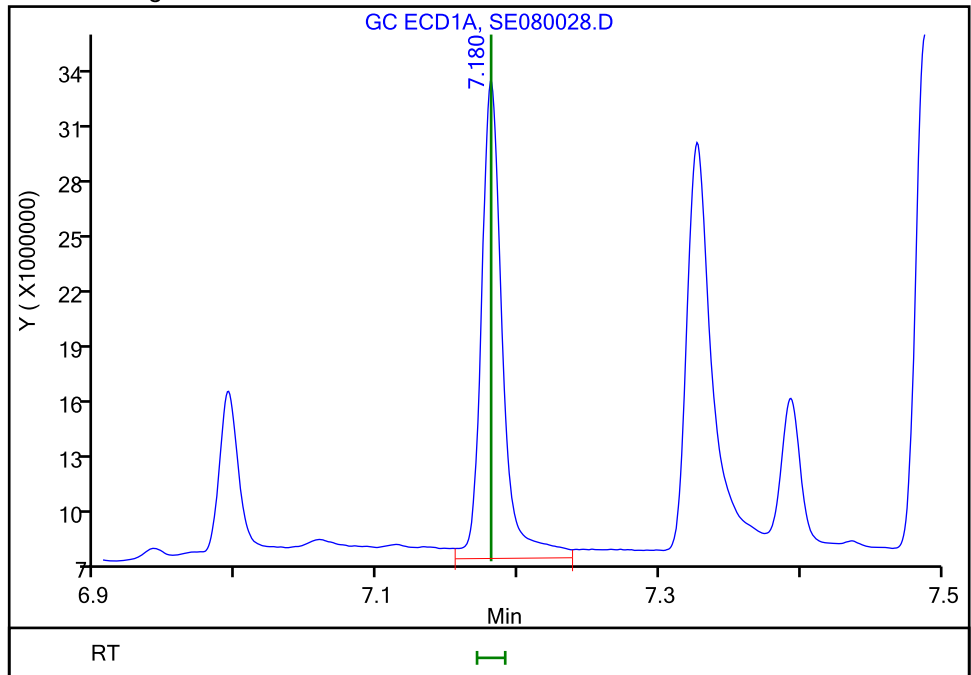
RT: 7.18
Area: 24664605
Amount: 0.088882
Amount Units: ug/ml

Processing Integration Results



RT: 7.18
Area: 25840205
Amount: 0.093119
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

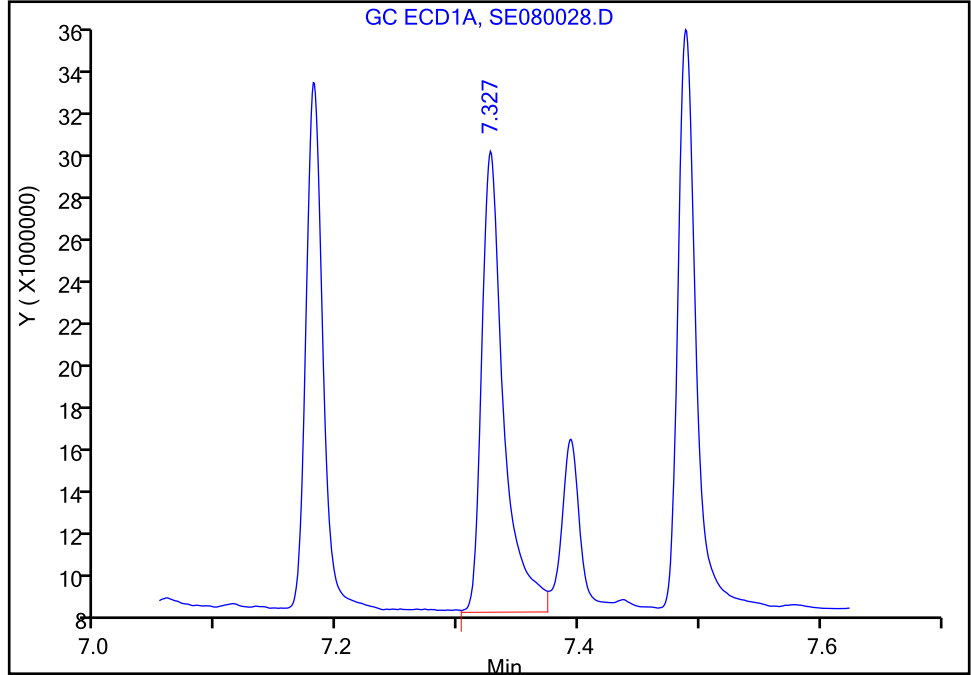
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

11 2,4-D, CAS: 94-75-7

Signal: 1

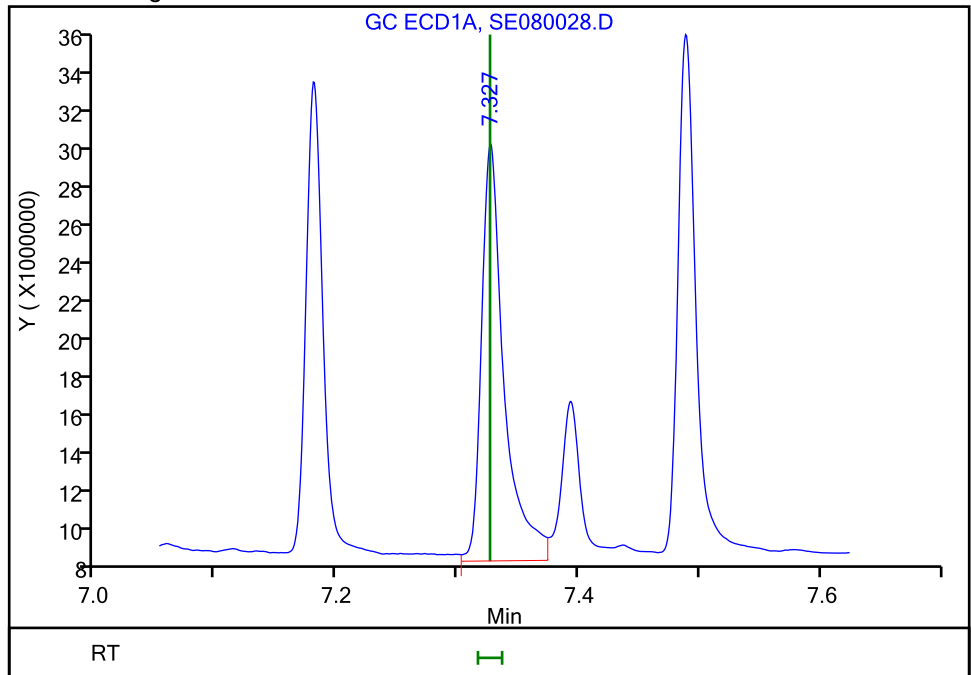
RT: 7.33
Area: 26942730
Amount: 0.089096
Amount Units: ug/ml

Processing Integration Results



RT: 7.33
Area: 27939986
Amount: 0.092394
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

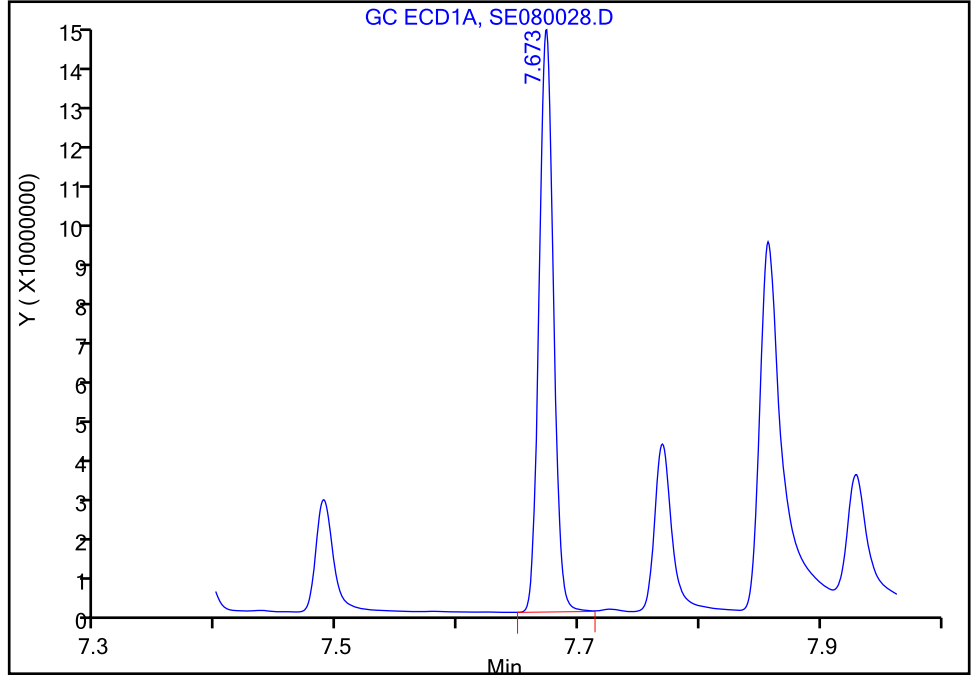
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

12 Pentachlorophenol, CAS: 87-86-5

Signal: 1

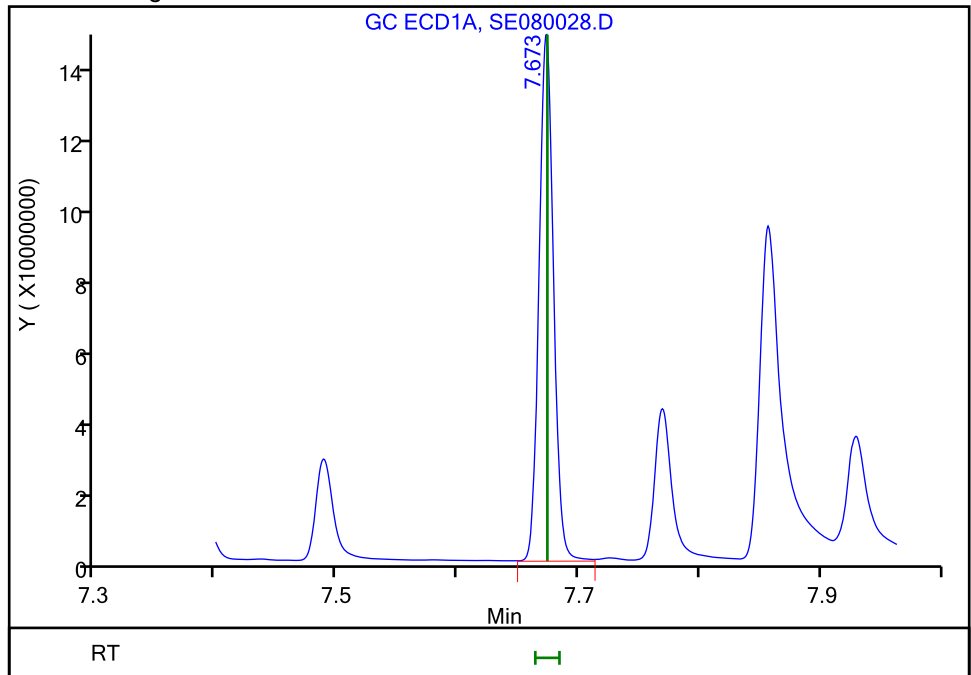
RT: 7.67
Area: 115029769
Amount: 0.021366
Amount Units: ug/ml

Processing Integration Results



RT: 7.67
Area: 115836502
Amount: 0.021515
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

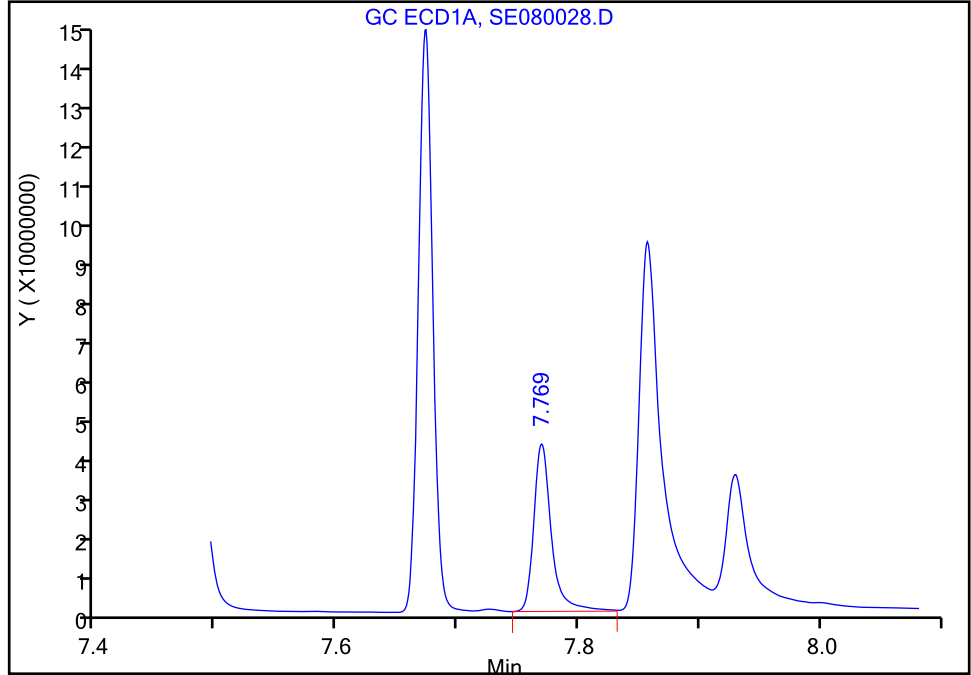
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 1

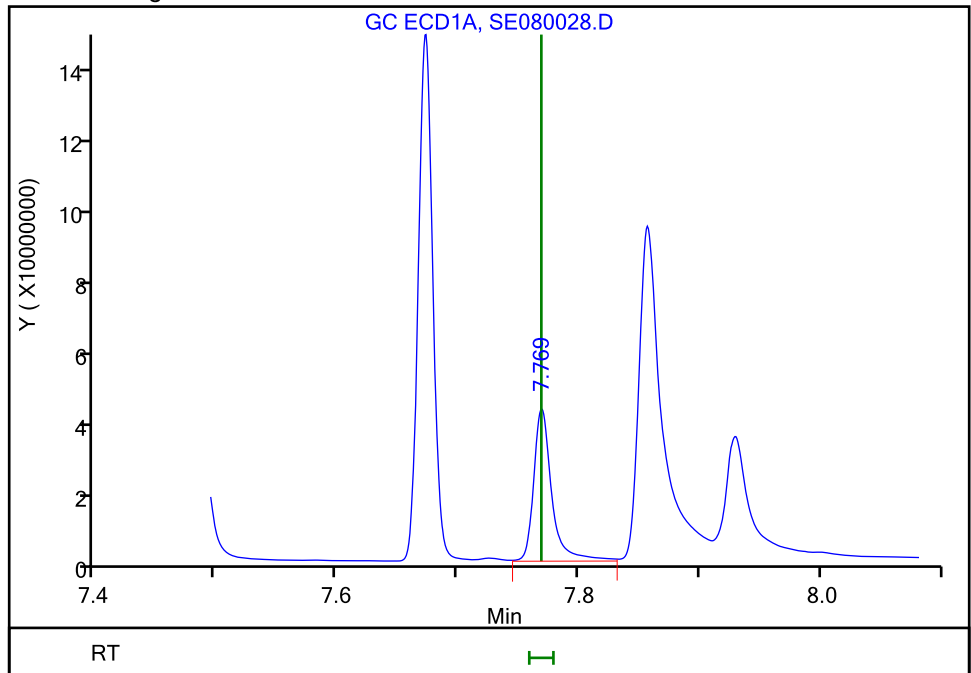
RT: 7.77
Area: 40488427
Amount: 0.021551
Amount Units: ug/ml

Processing Integration Results



RT: 7.77
Area: 41916828
Amount: 0.022311
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

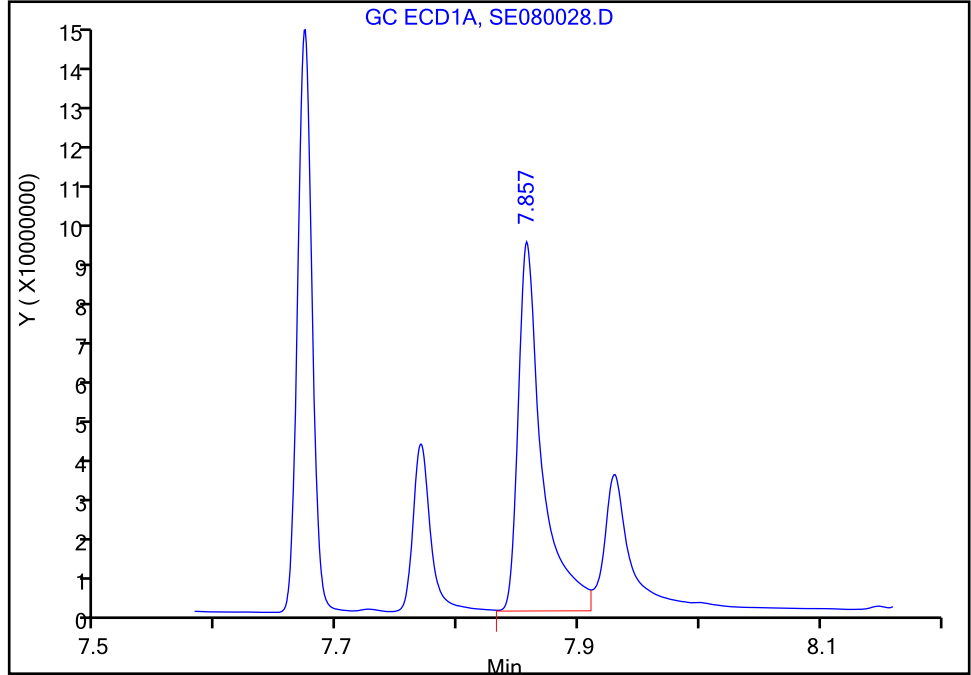
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

14 Chloramben, CAS: 133-90-4

Signal: 1

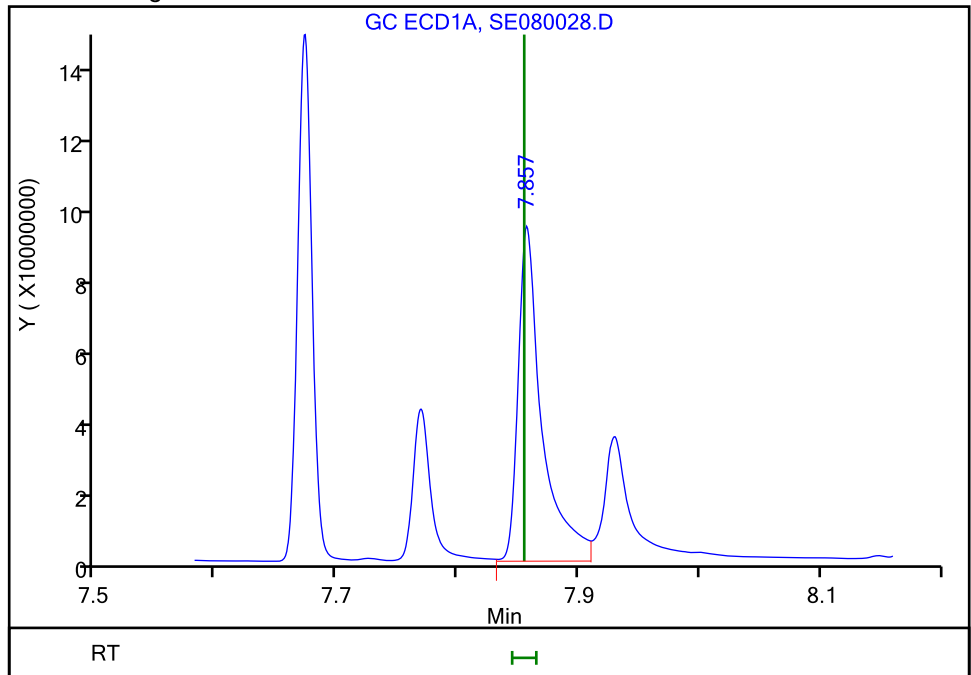
RT: 7.86
Area: 119097819
Amount: 0.081002
Amount Units: ug/ml

Processing Integration Results



RT: 7.86
Area: 120589270
Amount: 0.081859
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

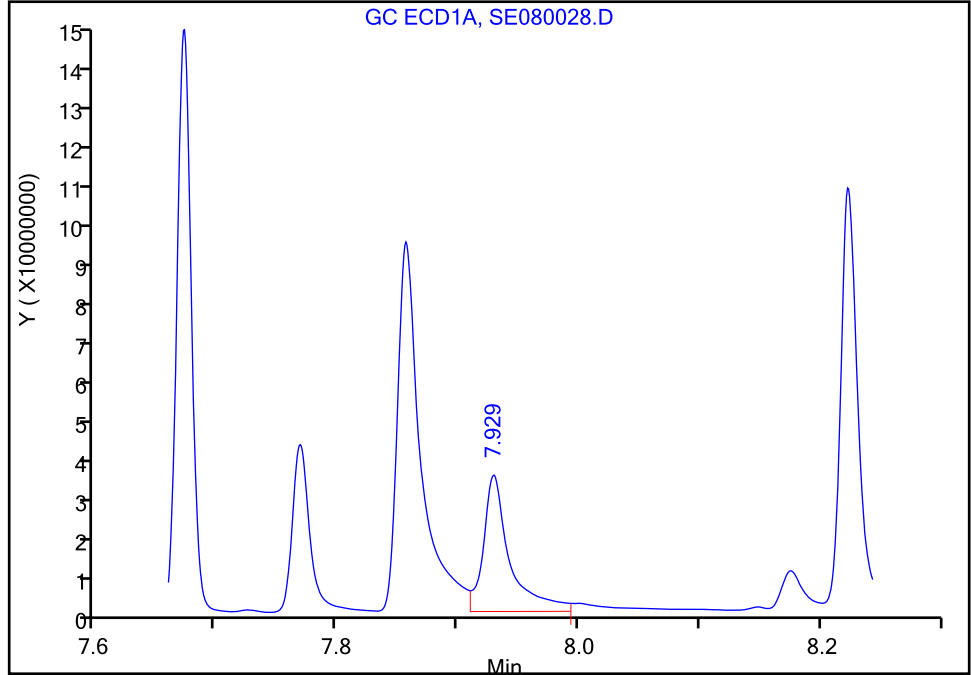
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

15 2,4,5-T, CAS: 93-76-5

Signal: 1

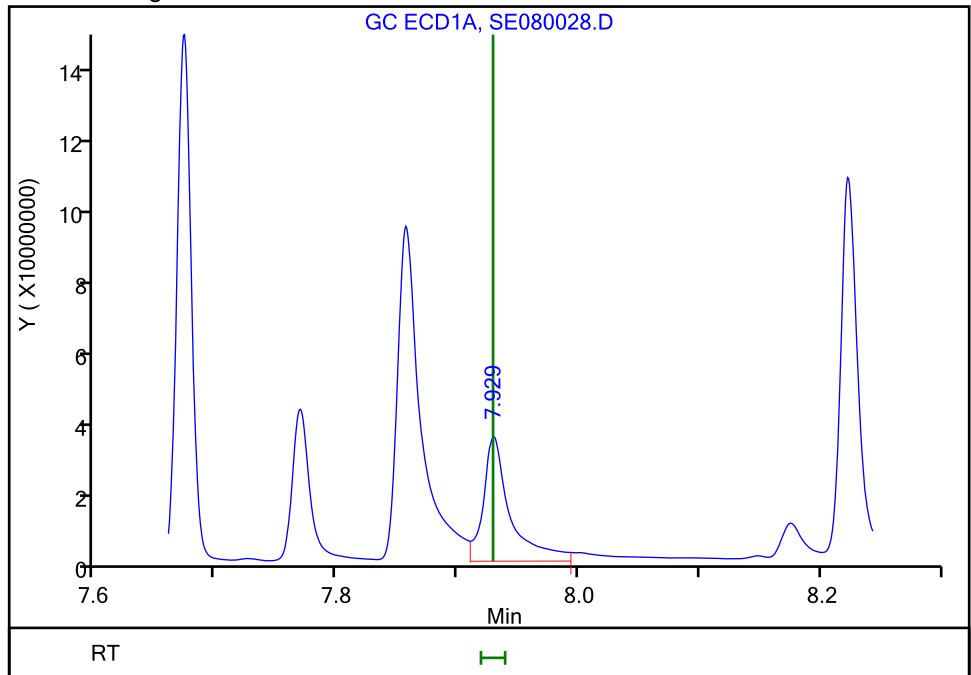
RT: 7.93
Area: 48927313
Amount: 0.022302
Amount Units: ug/ml

Processing Integration Results



RT: 7.93
Area: 50606060
Amount: 0.023067
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

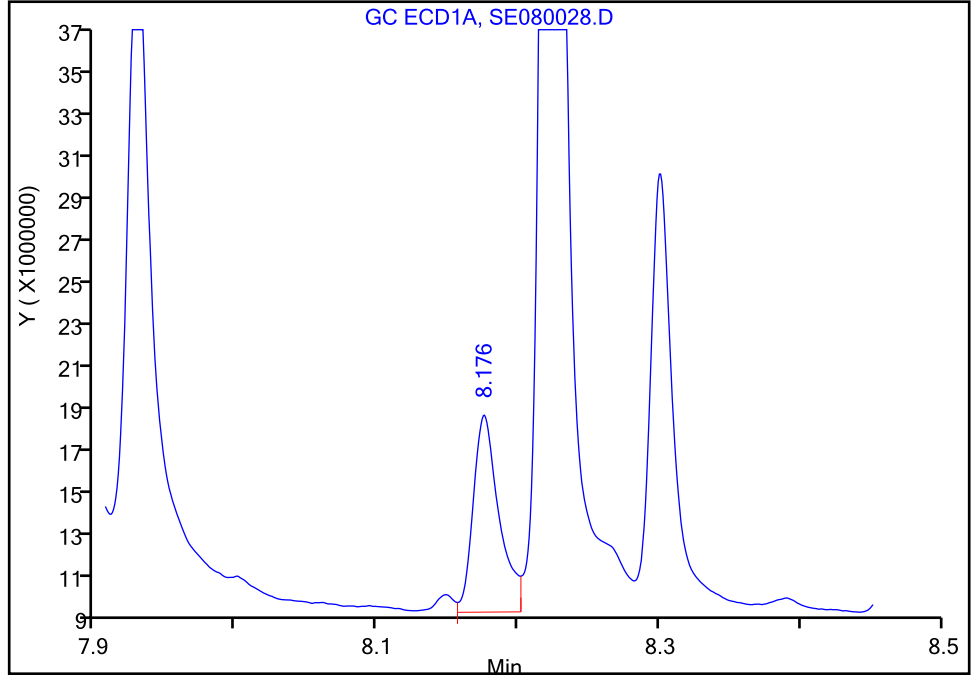
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

16 2,4-DB, CAS: 94-82-6

Signal: 1

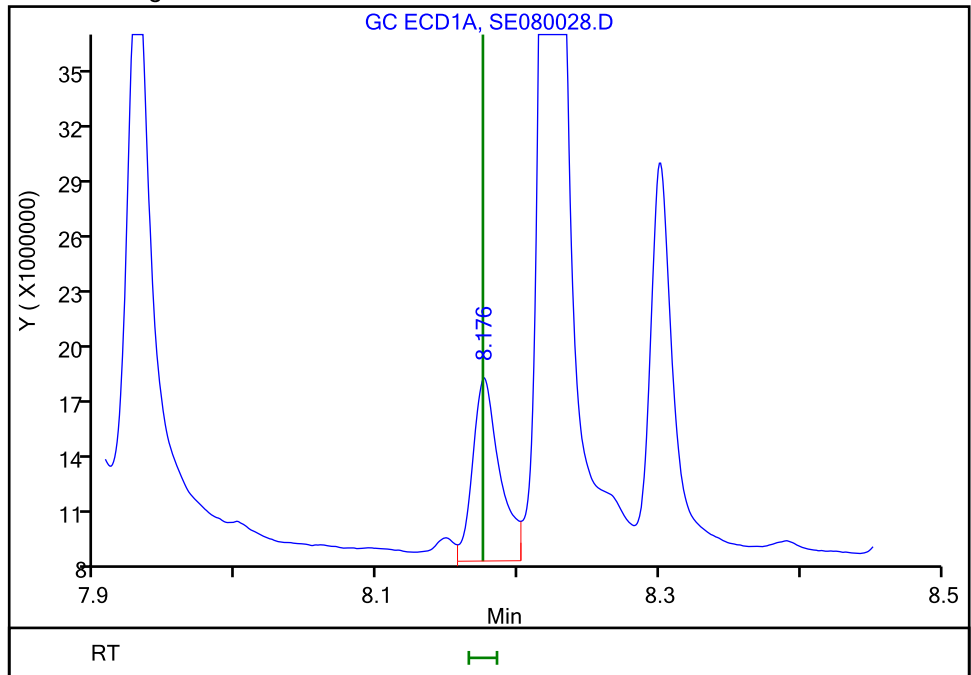
RT: 8.18
Area: 12042105
Amount: 0.082623
Amount Units: ug/ml

Processing Integration Results



RT: 8.18
Area: 13148444
Amount: 0.088814
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

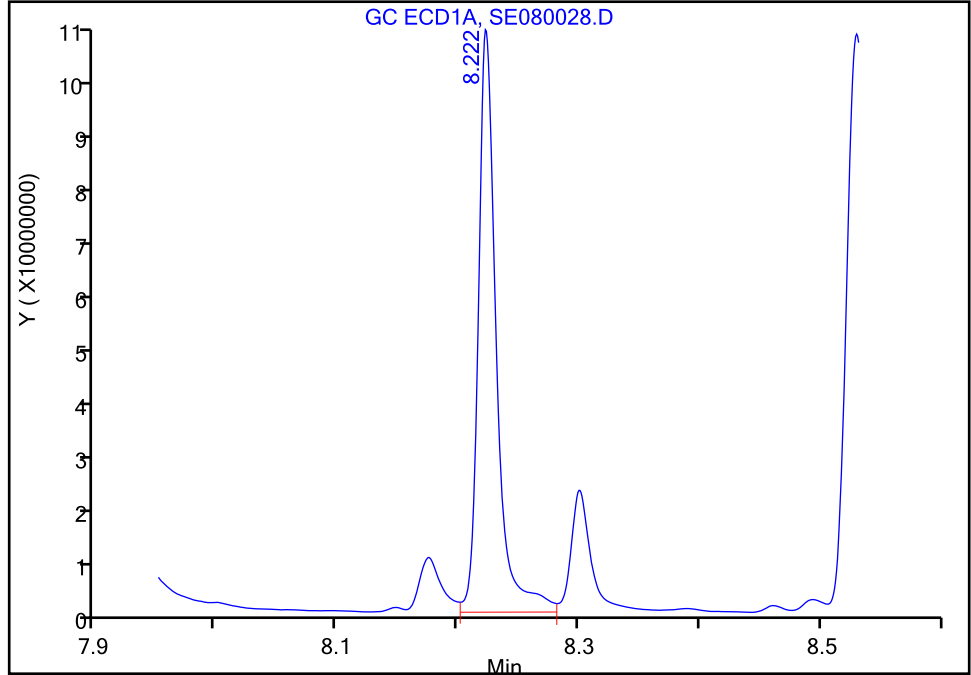
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

17 Dinoseb, CAS: 88-85-7

Signal: 1

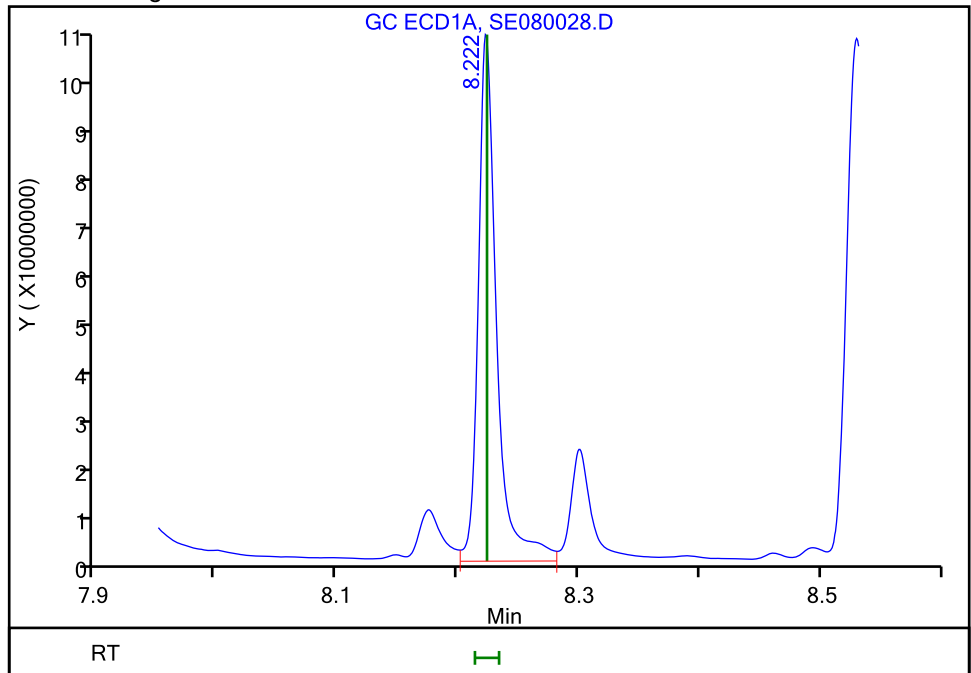
RT: 8.22
Area: 104391134
Amount: 0.085294
Amount Units: ug/ml

Processing Integration Results



RT: 8.22
Area: 106303543
Amount: 0.086857
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

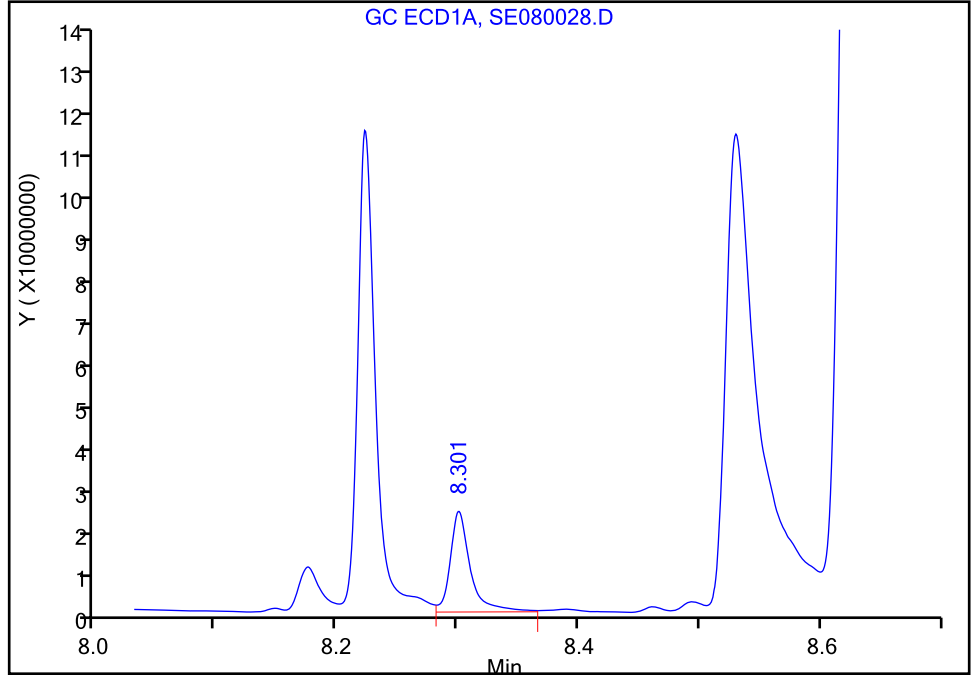
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

18 Bentazon, CAS: 25057-89-0

Signal: 1

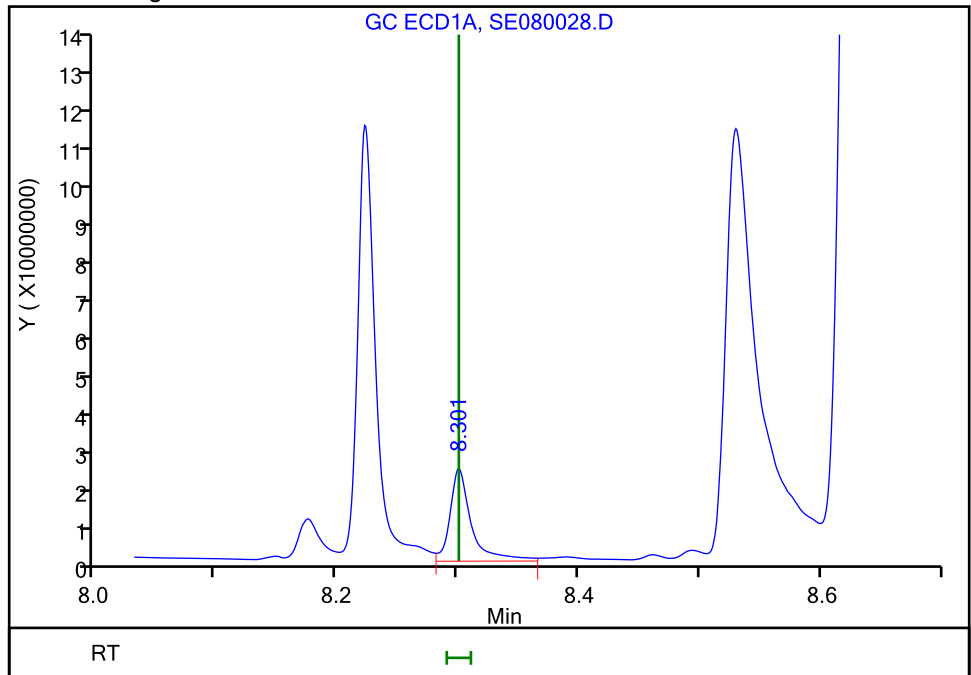
RT: 8.30
Area: 24343283
Amount: 0.084657
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 26331660
Amount: 0.091572
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

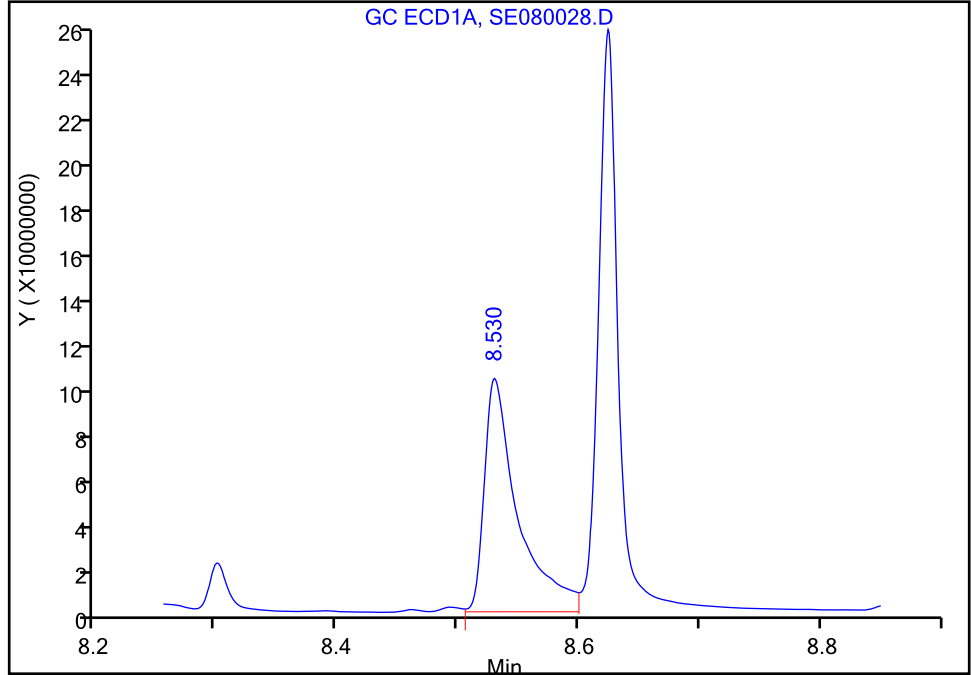
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

19 Picloram, CAS: 1918-02-1

Signal: 1

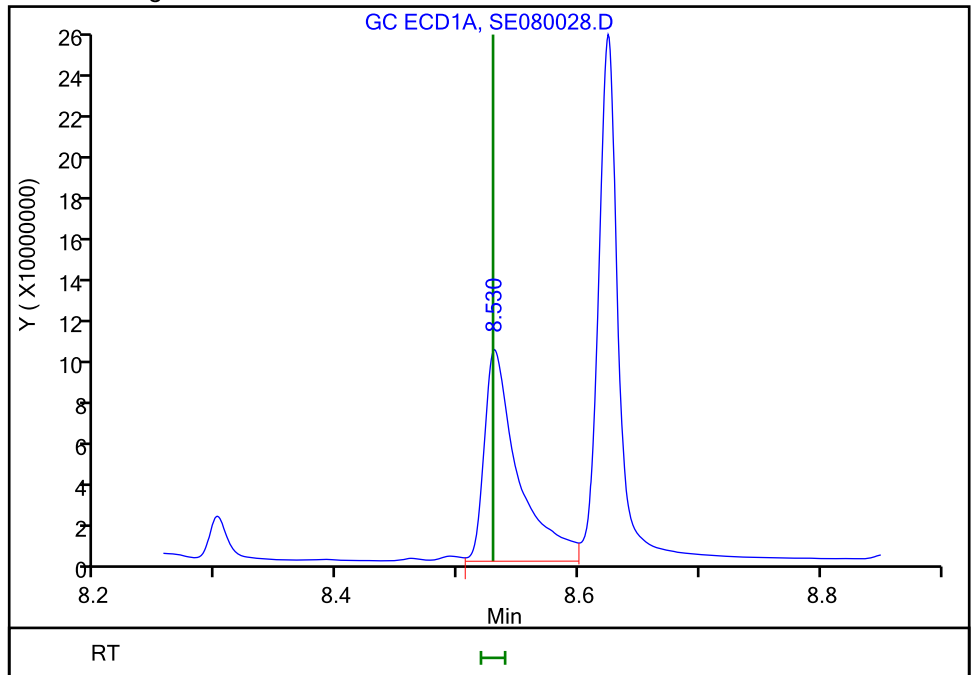
RT: 8.53
Area: 191152812
Amount: 0.082598
Amount Units: ug/ml

Processing Integration Results



RT: 8.53
Area: 193401540
Amount: 0.083421
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

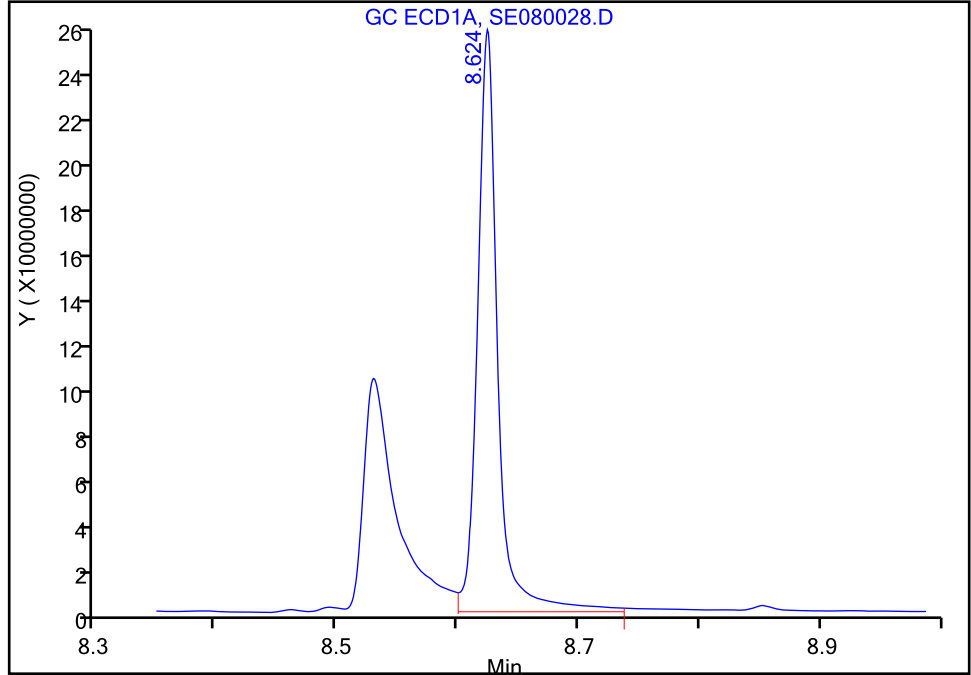
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

20 DCPA, CAS: 1861-32-1

Signal: 1

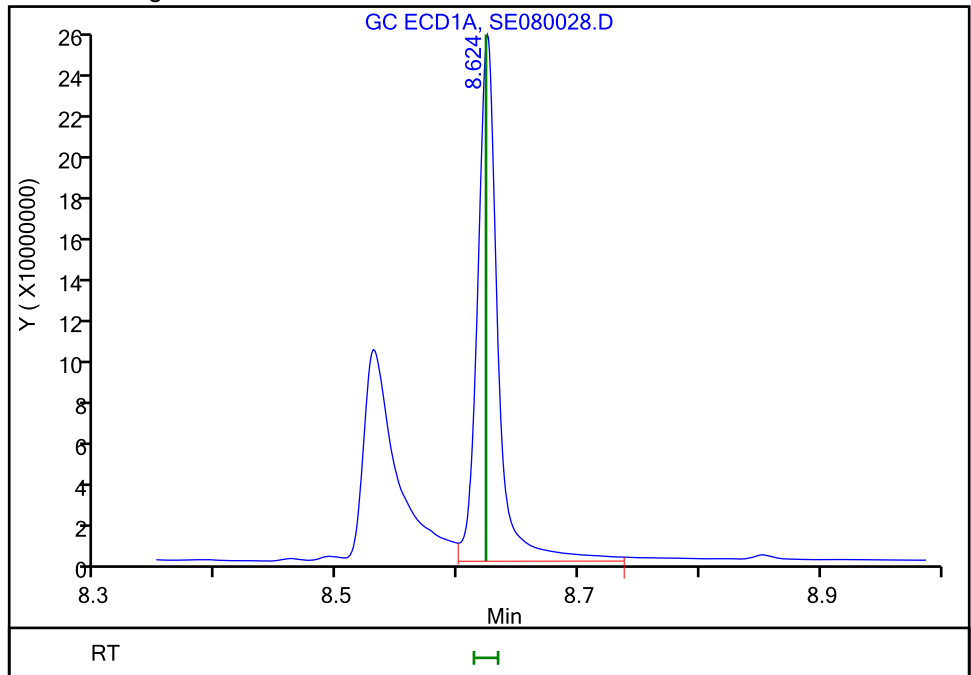
RT: 8.62
Area: 288144985
Amount: 0.087498
Amount Units: ug/ml

Processing Integration Results



RT: 8.62
Area: 290942878
Amount: 0.088348
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

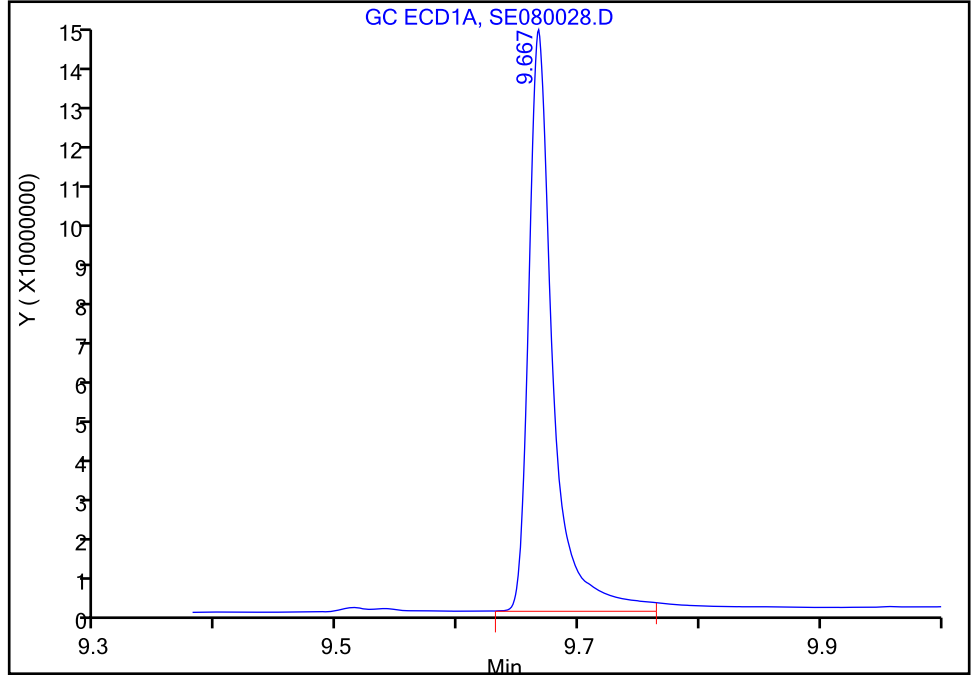
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

21 Acifluorfen, CAS: 50594-66-6

Signal: 1

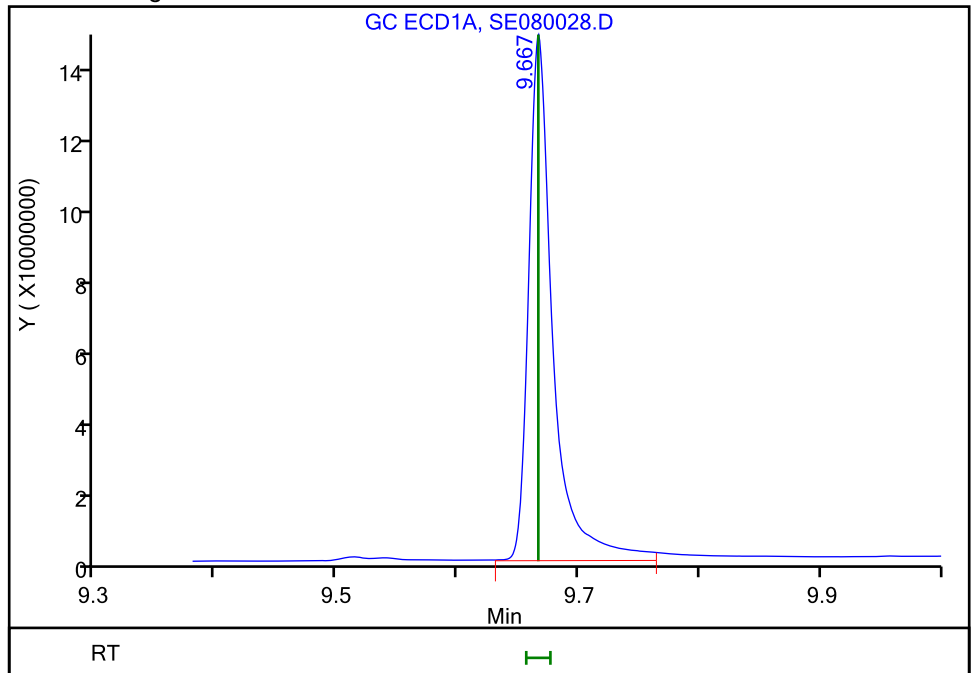
RT: 9.67
Area: 195467381
Amount: 0.086624
Amount Units: ug/ml

Processing Integration Results



RT: 9.67
Area: 196204957
Amount: 0.086919
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1246830710		0.0774	0.100	-22.6*	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1468472240		0.0817	0.100	-18.3	20.0
4-Nitrophenol	Ave	299039718	261483920		0.0874	0.100	-12.6	20.0
Dicamba	Ave	5009061262	4102166040		0.0409	0.0500	-18.1	20.0
MCPP	Lin2		4258166		8.89	10.0	-11.1	20.0
MCPA	QuaF		6563030		11.6	10.0	15.7	20.0
Dichlorprop	Ave	1409813393	1172228420		0.0831	0.100	-16.9	20.0
2,4-D	Ave	1593535987	1336273560		0.0839	0.100	-16.1	20.0
Pentachlorophenol	Ave	18808678996	15992619040		0.0213	0.0250	-15.0	20.0
Silvex (2,4,5-TP)	Ave	7391322149	6239752040		0.0211	0.0250	-15.6	20.0
2,4,5-T	Ave	6646535168	5405095440		0.0203	0.0250	-18.7	20.0
Chloramben	Ave	5625509945	4579695330		0.0814	0.100	-18.6	20.0
Dinoseb	Lin1		3102768450		0.0737	0.100	-26.3*	20.0
2,4-DB	Ave	986290097	916372090		0.0929	0.100	-7.1	20.0
Bentazon	Ave	803969083	674921560		0.0839	0.100	-16.1	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	8428414340		0.0858	0.100	-14.2	20.0
Picloram	Lin1		6868819520		0.0704	0.100	-29.6*	20.0
Acifluorfen	Qua		5380410960		0.0817	0.100	-18.3	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1161179490		0.0825	0.100	-17.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.51	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.15	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.71	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.79	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 21:40:11 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-028
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:37:48 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.578	2.579	-0.001	40734619	0.1000	0.0777	
2	2.632	2.632	0.000	124683071	0.1000	0.0774	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	8885882	NC	NC	
2	5.102	5.102	0.000	45742372	NC	NC	
						RPD = 7.11	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	104333704	NC	NC	
2	5.776	5.776	0.000	435611631	NC	NC	
						RPD = 2.76	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	28317334	0.1000	0.0881	
2	6.116	6.116	0.000	146847224	0.1000	0.0817	
						RPD = 7.52	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	9190153	0.1000	0.0994	
2	6.505	6.505	0.000	26148392	0.1000	0.0874	
						RPD = 12.80	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.683	6.683	0.000	18377296	0.1000	0.0869	M
2	6.828	6.829	-0.001	116117949	0.1000	0.0825	M
						RPD = 5.21	
7 Dicamba M							
1	6.720	6.720	0.000	46122338	0.0500	0.0428	M
2	6.911	6.910	0.001	205108302	0.0500	0.0409	M
						RPD = 4.48	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4690034	10.0	9.85	M
2	6.956	6.955	0.001	42581663	10.0	8.89	M
							RPD = 10.31
9 MCPA							M
1	6.994	6.994	0.000	9354886	10.0	10.1	M
2	7.153	7.155	-0.002	65630302	10.0	11.6	M
							RPD = 13.55
10 Dichlorprop							M
1	7.180	7.180	0.000	25840205	0.1000	0.0931	M
2	7.297	7.297	0.000	117222842	0.1000	0.0831	M
							RPD = 11.31
11 2,4-D							M
1	7.327	7.326	0.001	27939986	0.1000	0.0924	M
2	7.517	7.517	0.000	133627356	0.1000	0.0839	M
							RPD = 9.69
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	115836502	0.0250	0.0215	M
2	7.713	7.714	-0.001	399815476	0.0250	0.0213	M
							RPD = 1.21
13 Silvex (2,4,5-TP)							M
1	7.769	7.769	0.000	41916828	0.0250	0.0223	M
2	7.847	7.846	0.001	155993801	0.0250	0.0211	M
							RPD = 5.56
14 Chloramben							M
1	7.857	7.855	0.002	120589270	0.1000	0.0819	M
2	8.162	8.162	0.000	457969533	0.1000	0.0814	M
							RPD = 0.55
15 2,4,5-T							M
1	7.929	7.929	0.000	50606060	0.0250	0.0231	M
2	8.083	8.083	0.000	135127386	0.0250	0.0203	M
							RPD = 12.61
16 2,4-DB							M
1	8.176	8.175	0.001	13148444	0.1000	0.0888	M
2	8.302	8.302	0.000	91637209	0.1000	0.0929	M
							RPD = 4.51
17 Dinoseb							M
1	8.222	8.224	-0.002	106303543	0.1000	0.0869	M
2	8.248	8.248	0.000	310276845	0.1000	0.0737	M
							RPD = 16.39
18 Bentazon							M
1	8.301	8.300	0.001	26331660	0.1000	0.0916	M
2	8.663	8.662	0.001	67492156	0.1000	0.0839	M
							RPD = 8.69
19 Picloram							M
1	8.530	8.529	0.001	193401540	0.1000	0.0834	M
2	9.007	9.005	0.002	686881952	0.1000	0.0704	M
							RPD = 16.93

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA							M
1	8.624	8.623	0.001	290942878	0.1000	0.0883	M
2	8.777	8.775	0.002	842841434	0.1000	0.0858	M
						RPD = 2.90	

21 Acifluorfen							M
1	9.667	9.666	0.001	196204957	0.1000	0.0869	M
2	9.793	9.792	0.001	538041096	0.1000	0.0817	
						RPD = 6.20	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D

Injection Date: 08-May-2018 21:40:11

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h4

Worklist Smp#: 28

Client ID:

Injection Vol: 1.0 ul

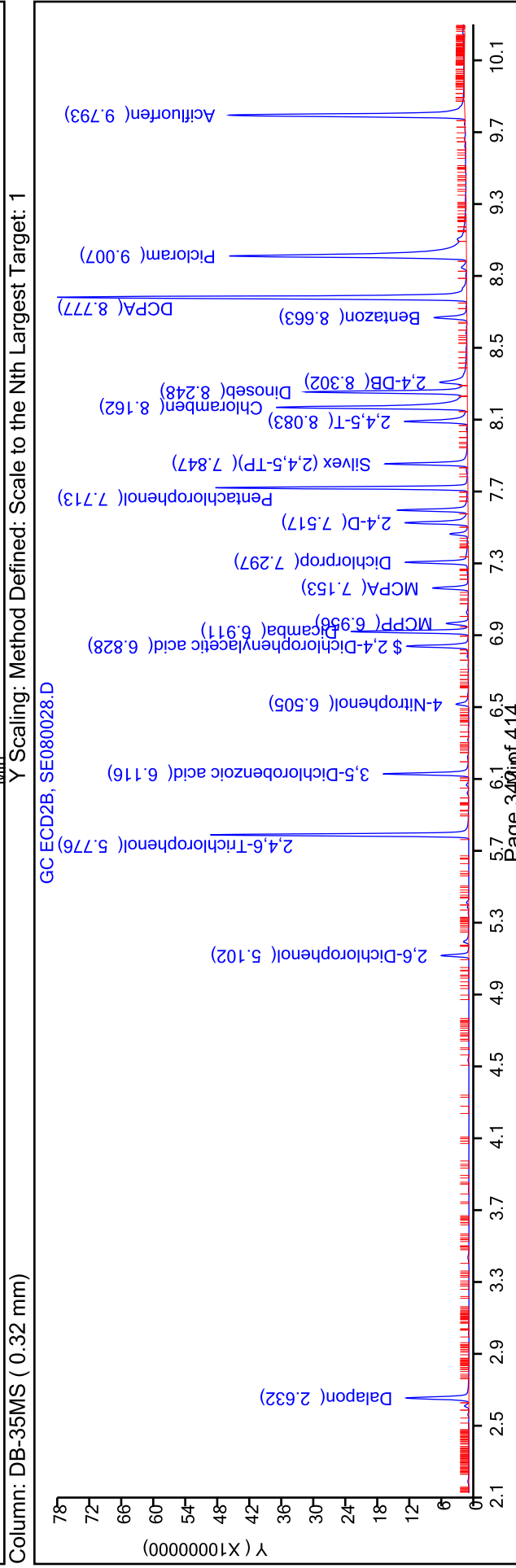
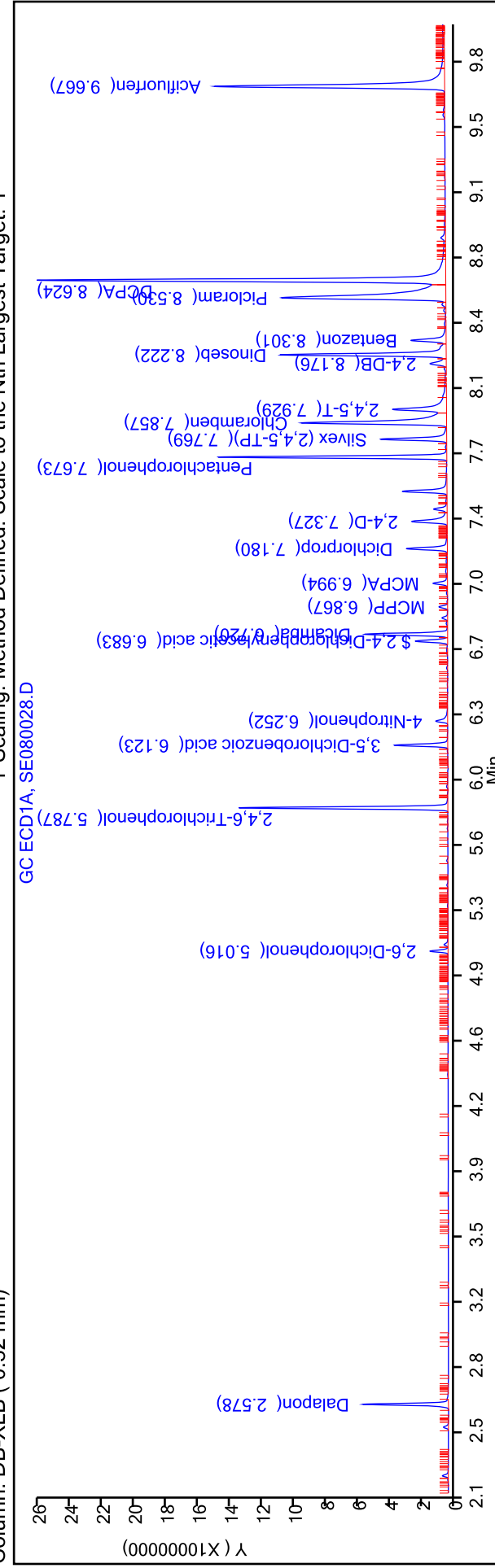
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

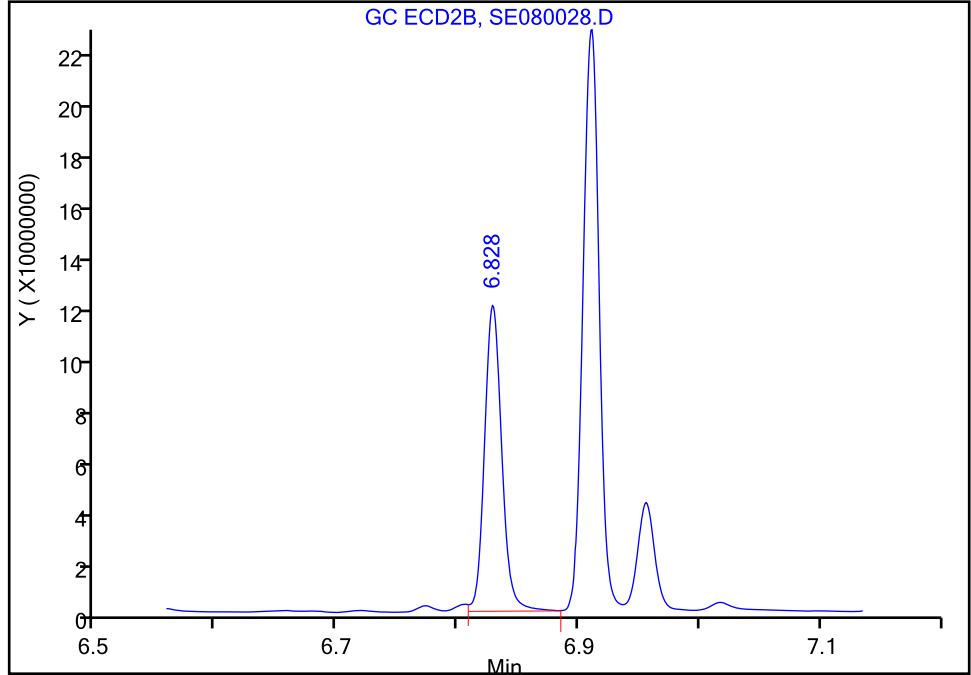
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

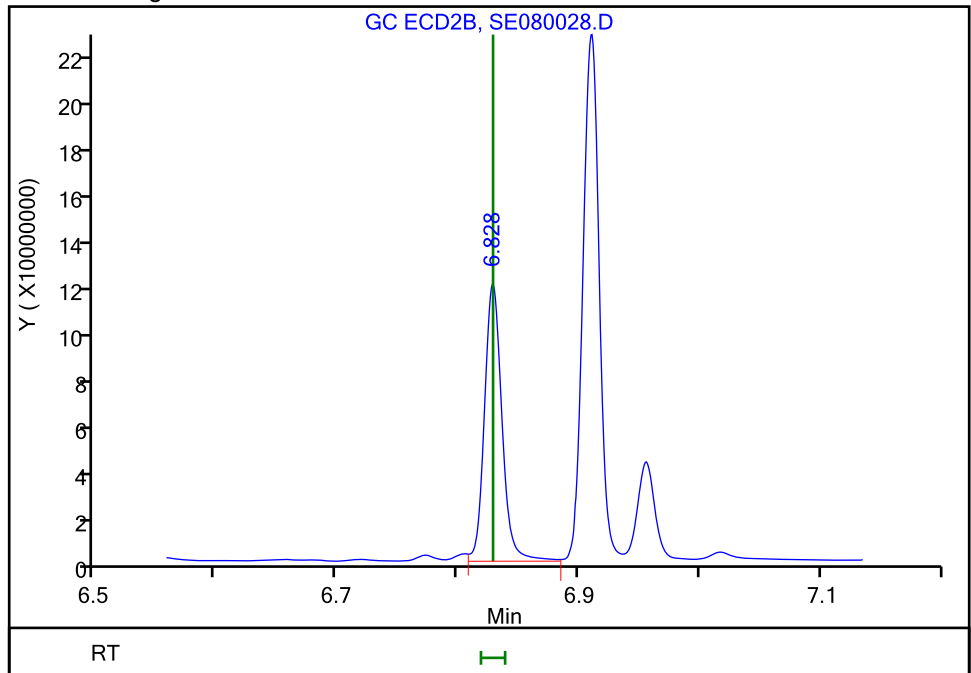
RT: 6.83
Area: 113880445
Amount: 0.080895
Amount Units: ug/ml

Processing Integration Results



RT: 6.83
Area: 116117949
Amount: 0.082484
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

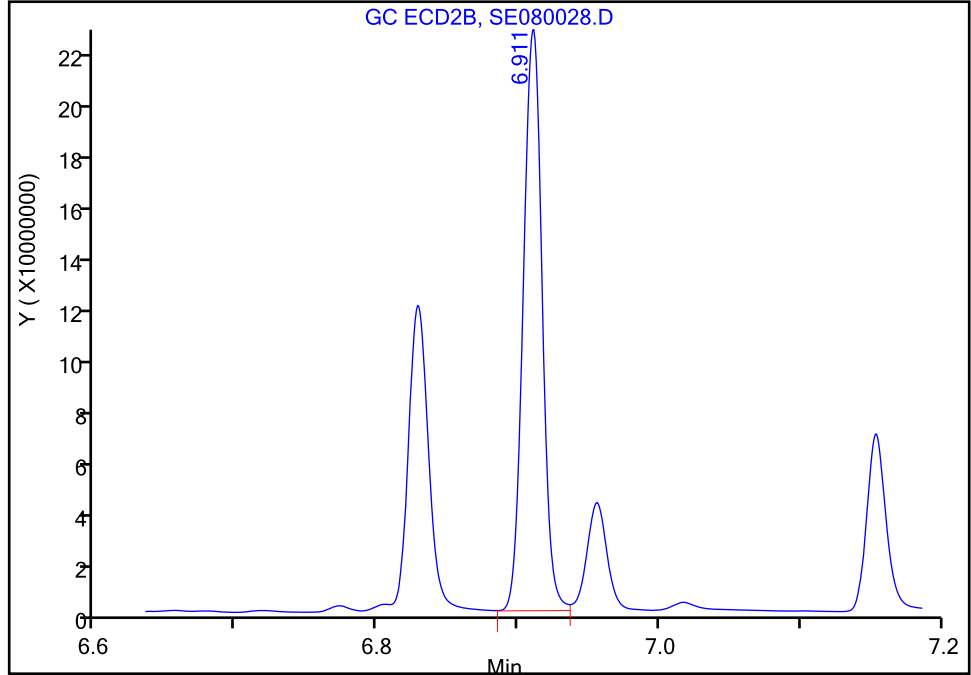
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

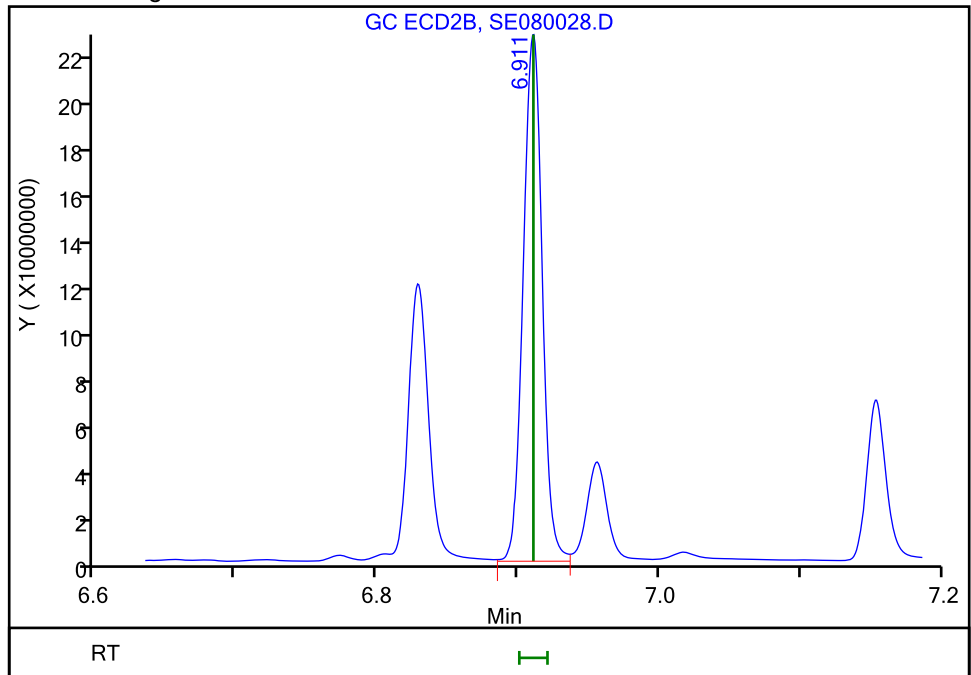
RT: 6.91
Area: 203232530
Amount: 0.040573
Amount Units: ug/ml

Processing Integration Results



RT: 6.91
Area: 205108302
Amount: 0.040947
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

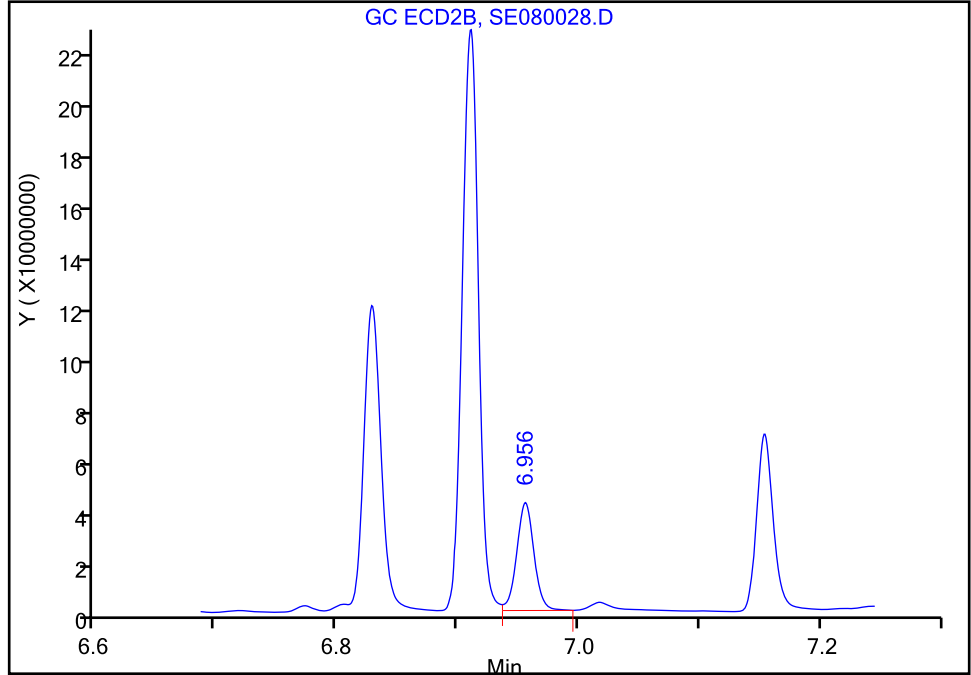
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

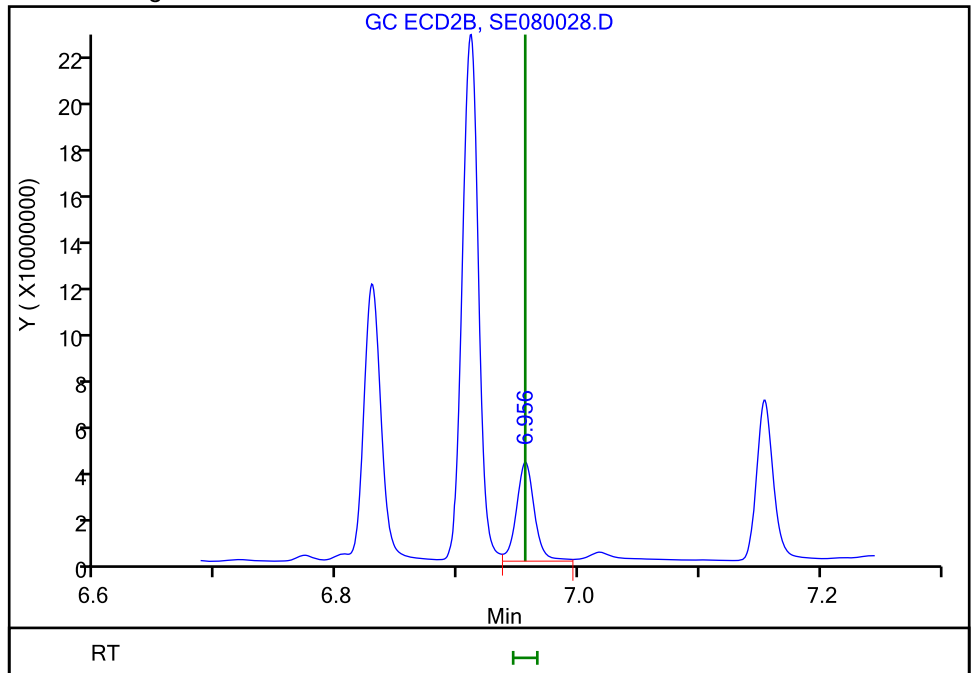
RT: 6.96
Area: 40241793
Amount: 8.351331
Amount Units: ug/ml

Processing Integration Results



RT: 6.96
Area: 42581663
Amount: 8.887386
Amount Units: ug/ml

Manual Integration Results



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Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

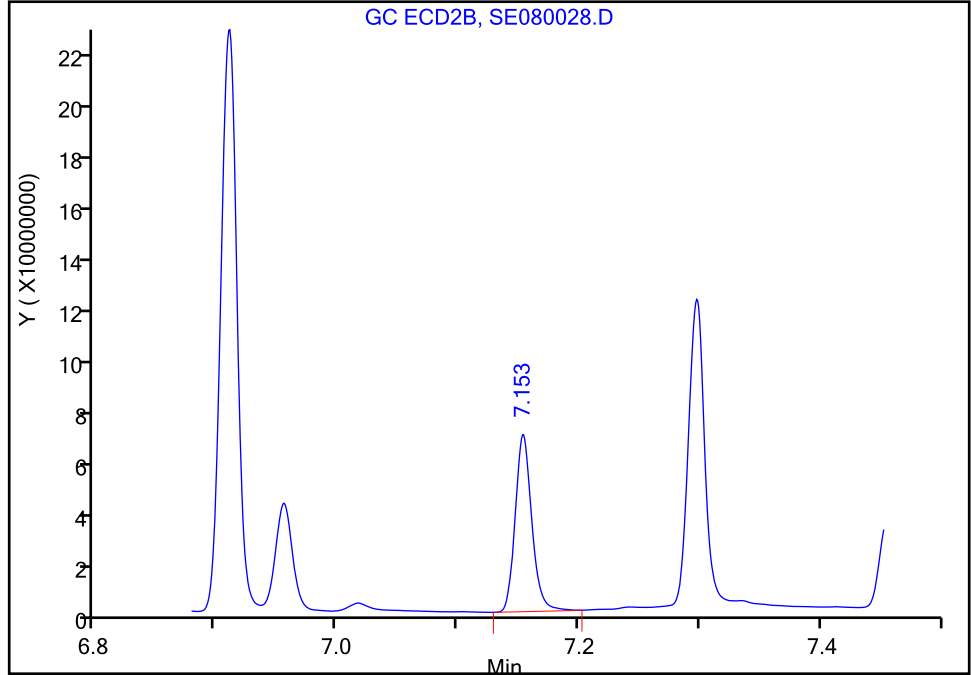
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

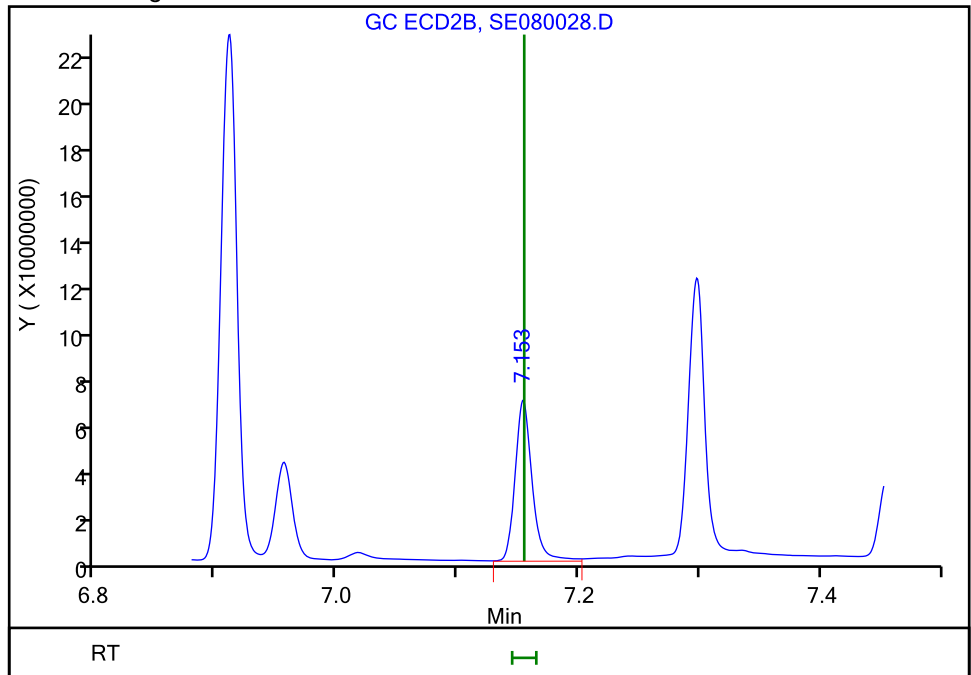
RT: 7.15
Area: 63346761
Amount: 11.214387
Amount Units: ug/ml

Processing Integration Results



RT: 7.15
Area: 65630302
Amount: 11.570777
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:24
Audit Action: Assigned New Baseline

TestAmerica Savannah

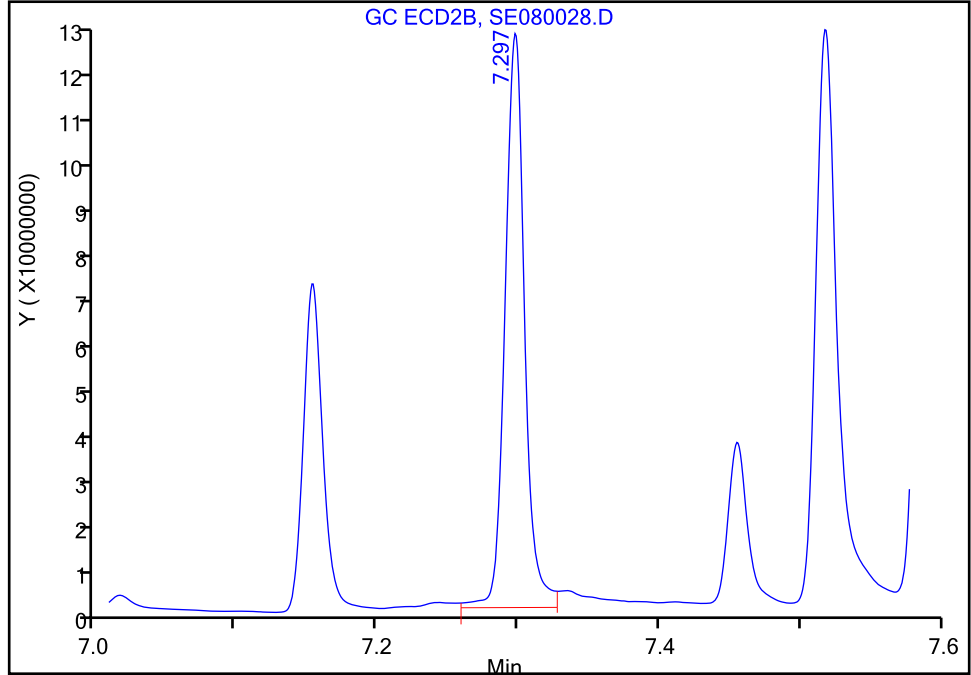
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

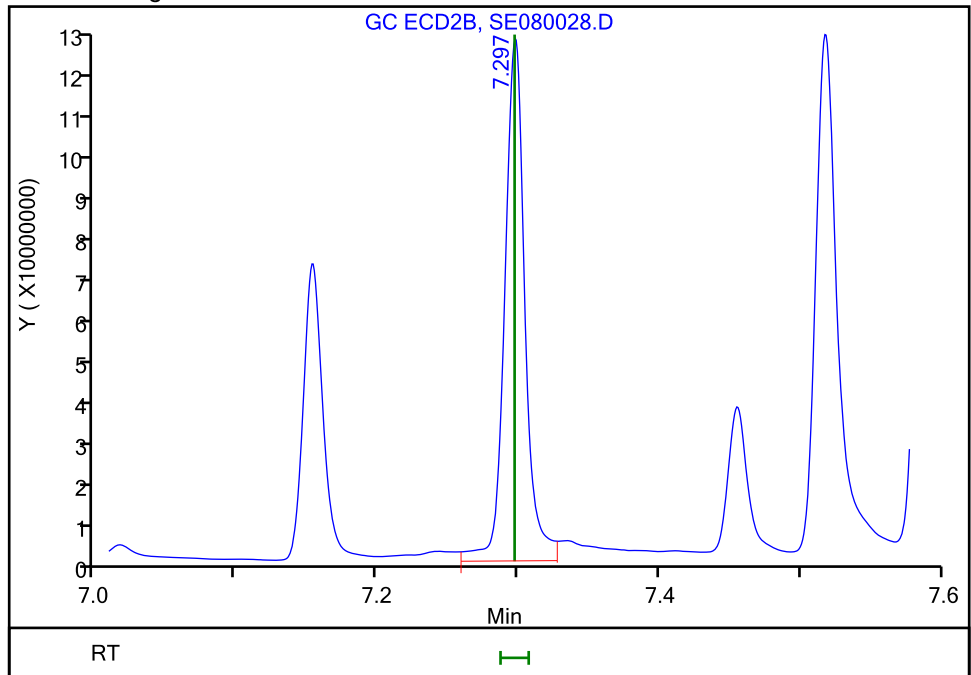
RT: 7.30
Area: 112626711
Amount: 0.079888
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 117222842
Amount: 0.083148
Amount Units: ug/ml

Manual Integration Results



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Audit Action: Assigned New Baseline

TestAmerica Savannah

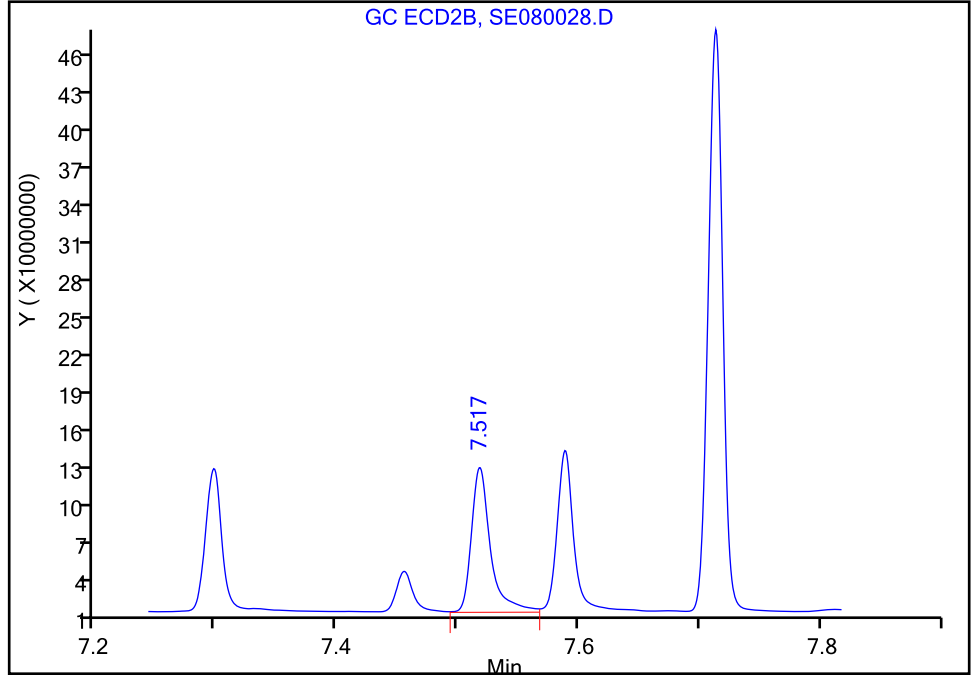
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

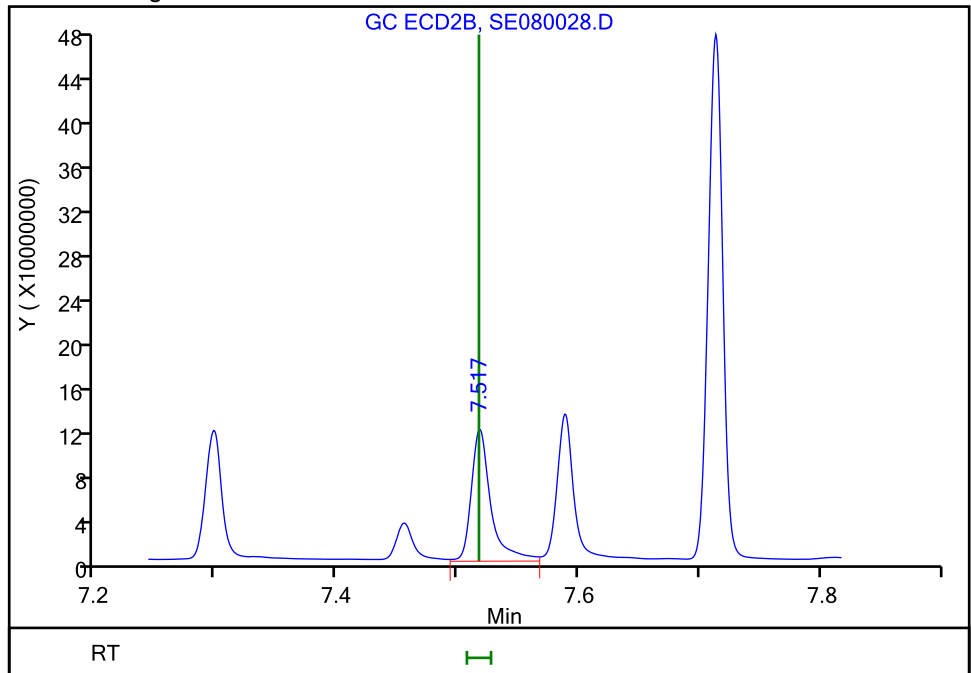
RT: 7.52
Area: 128784842
Amount: 0.080817
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 133627356
Amount: 0.083856
Amount Units: ug/ml

Manual Integration Results



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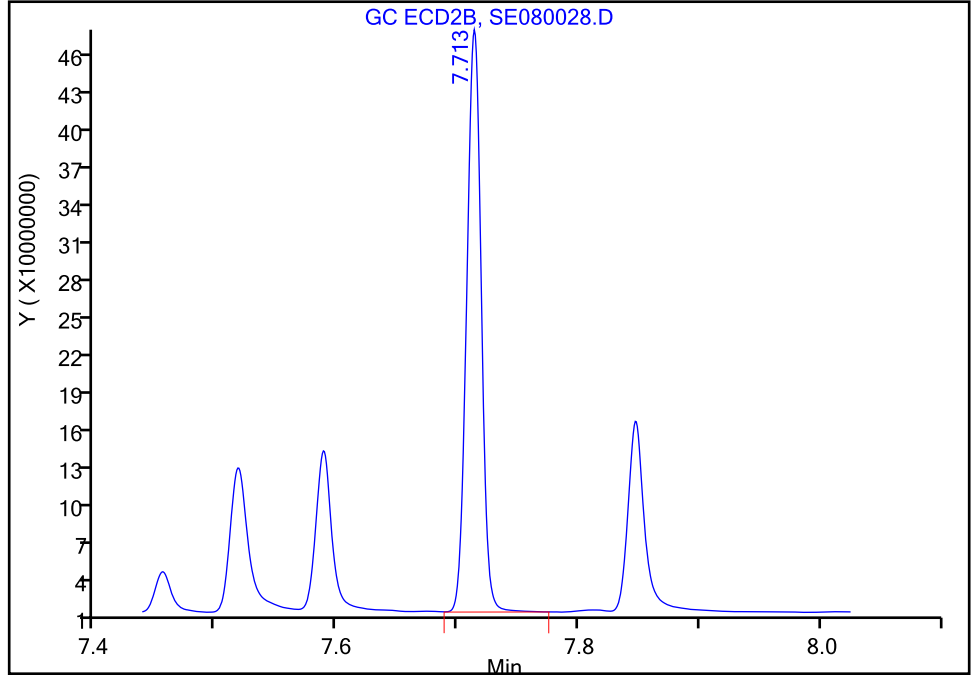
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

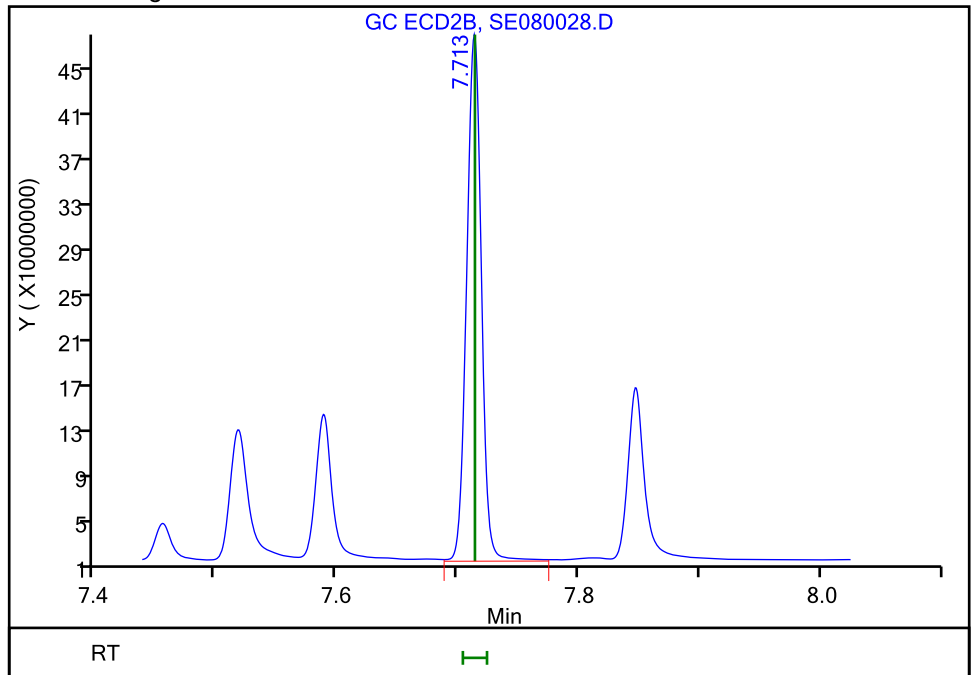
RT: 7.71
Area: 393349149
Amount: 0.020913
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 399815476
Amount: 0.021257
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

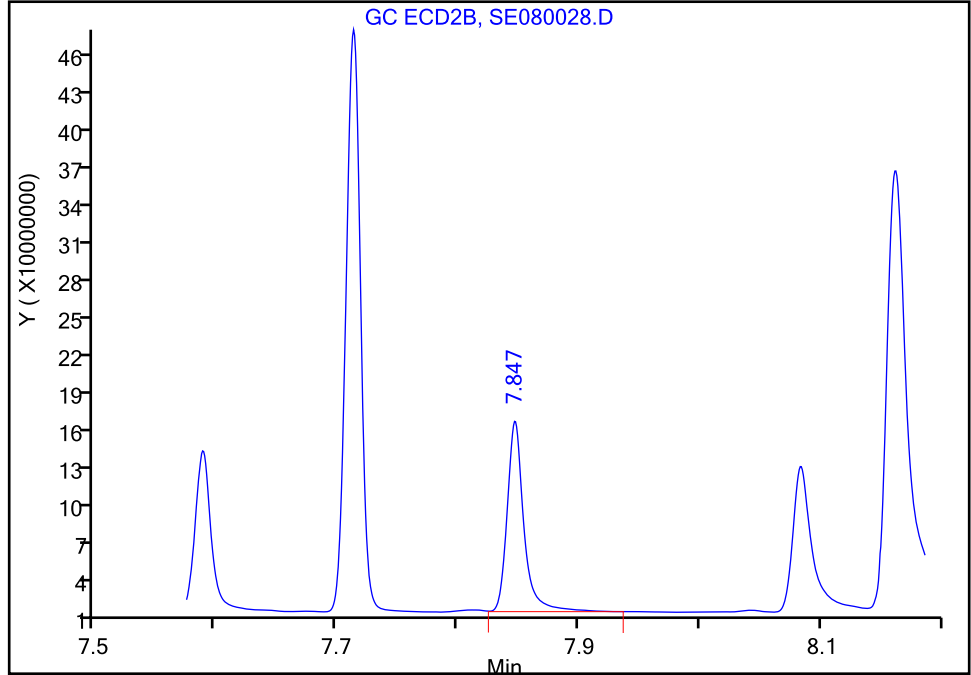
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

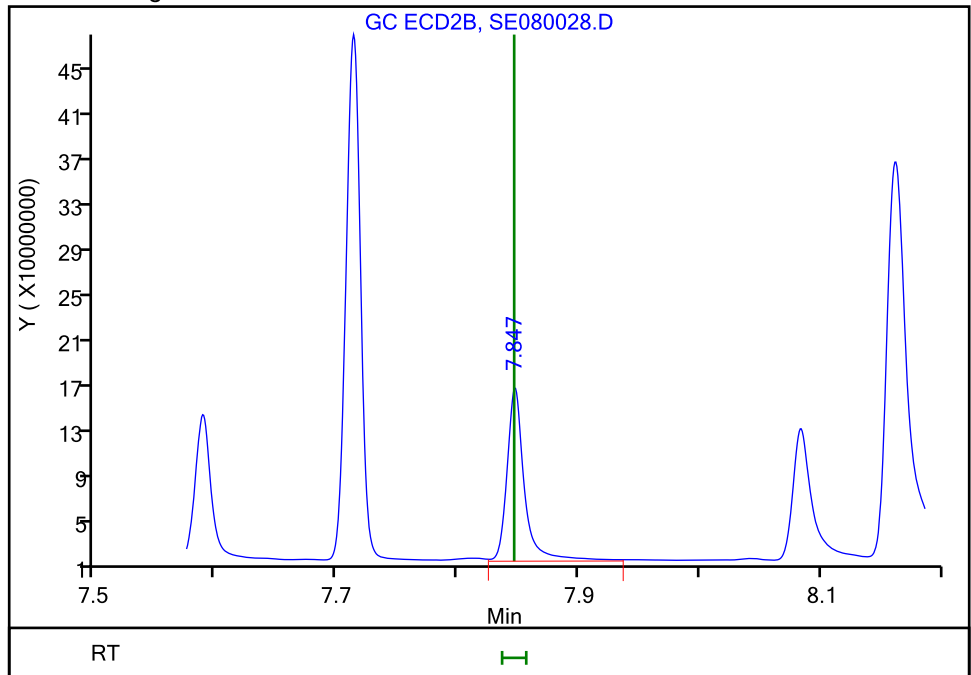
RT: 7.85
Area: 147739565
Amount: 0.019988
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 155993801
Amount: 0.021105
Amount Units: ug/ml

Manual Integration Results



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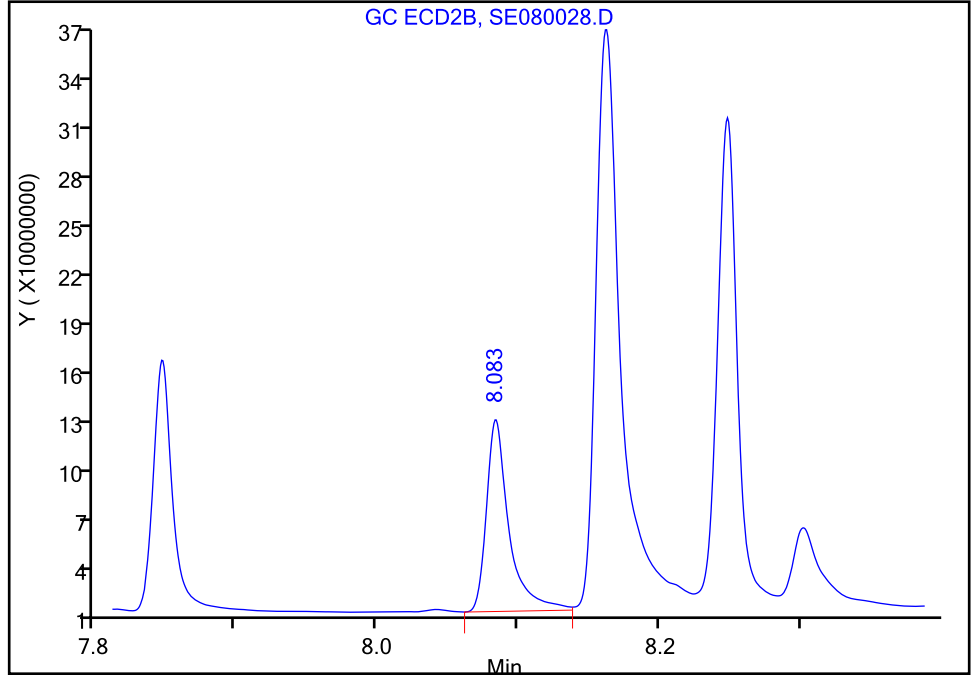
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

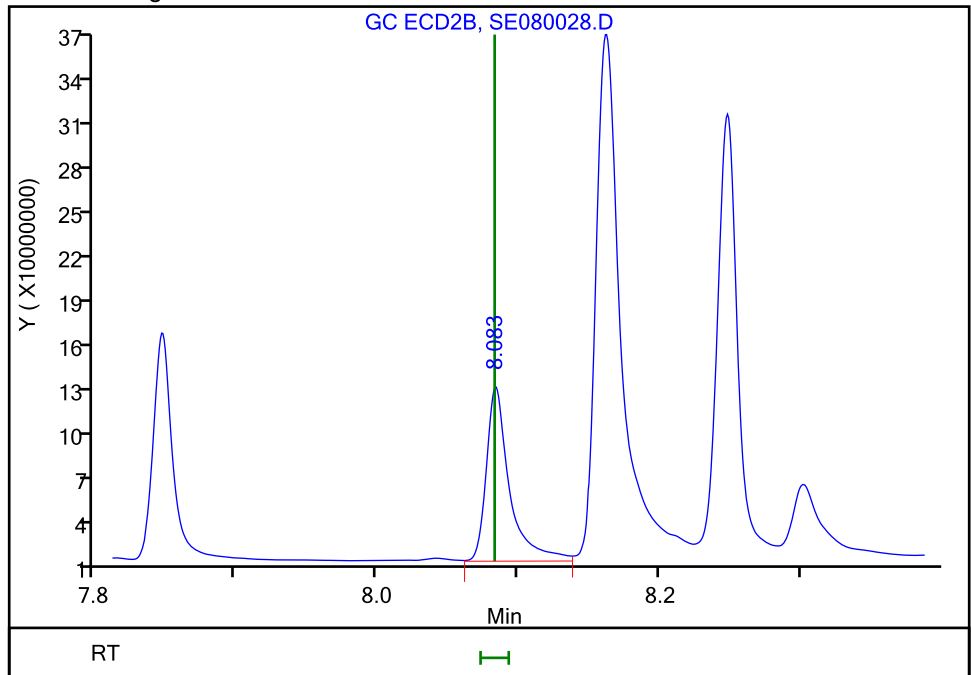
RT: 8.08
Area: 130590316
Amount: 0.019648
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 135127386
Amount: 0.020331
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

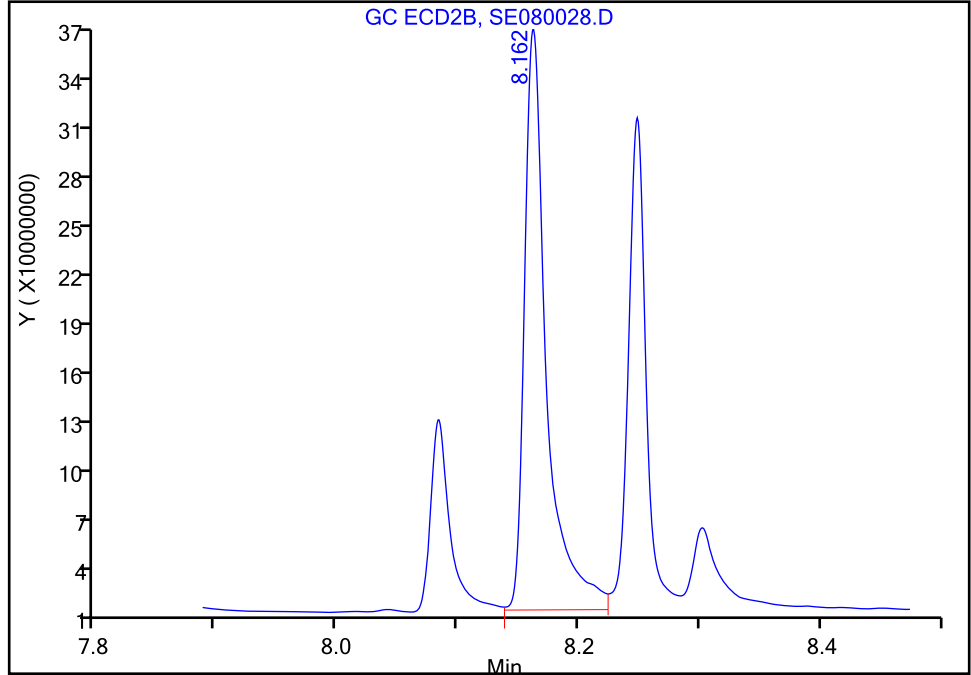
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

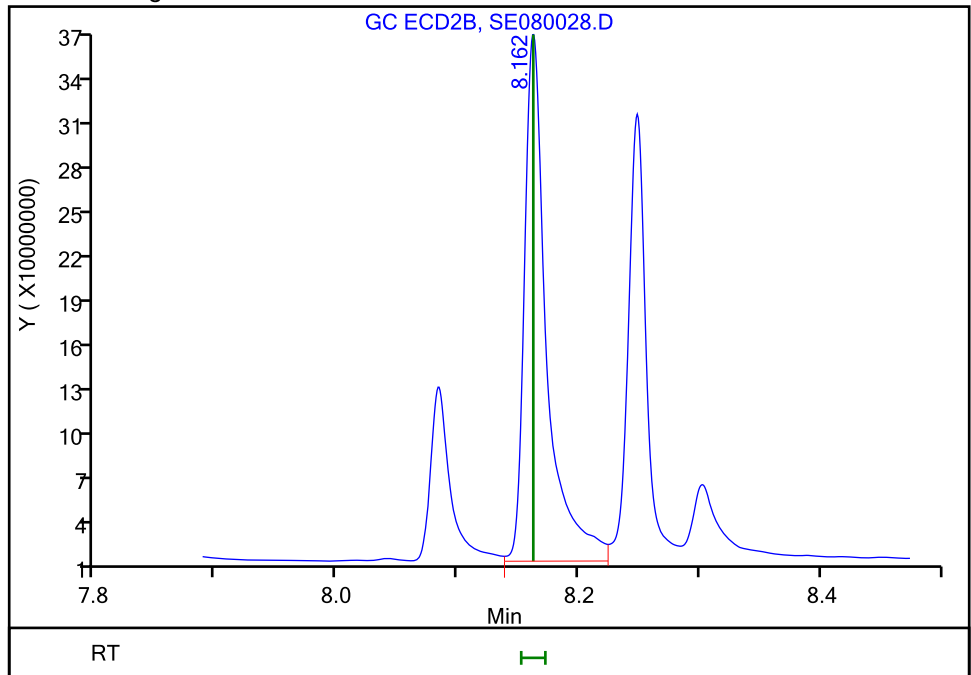
RT: 8.16
Area: 449929024
Amount: 0.079980
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 457969533
Amount: 0.081409
Amount Units: ug/ml

Manual Integration Results



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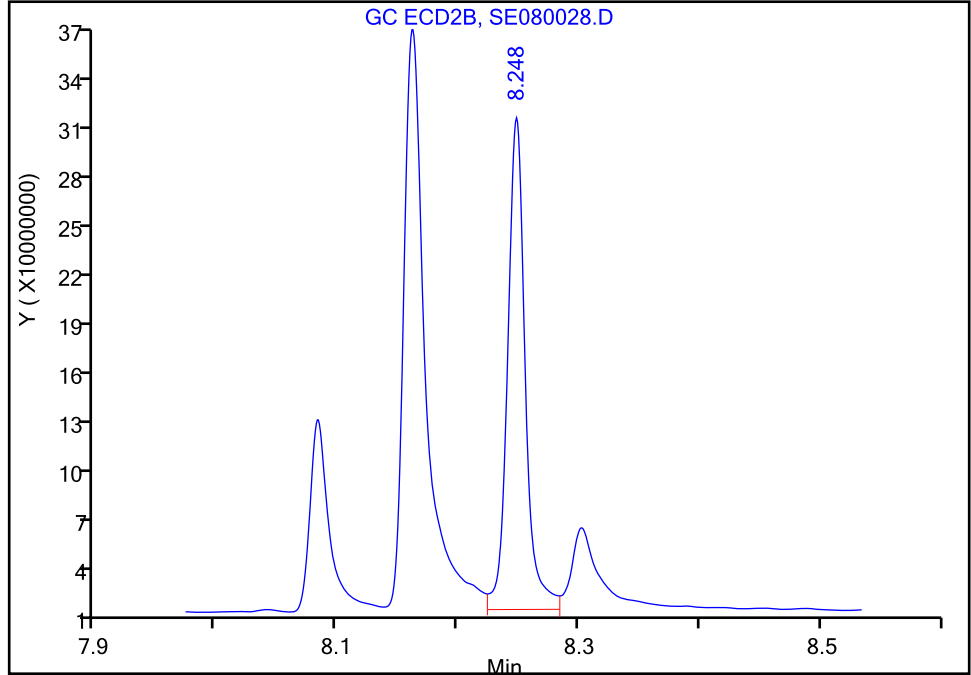
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

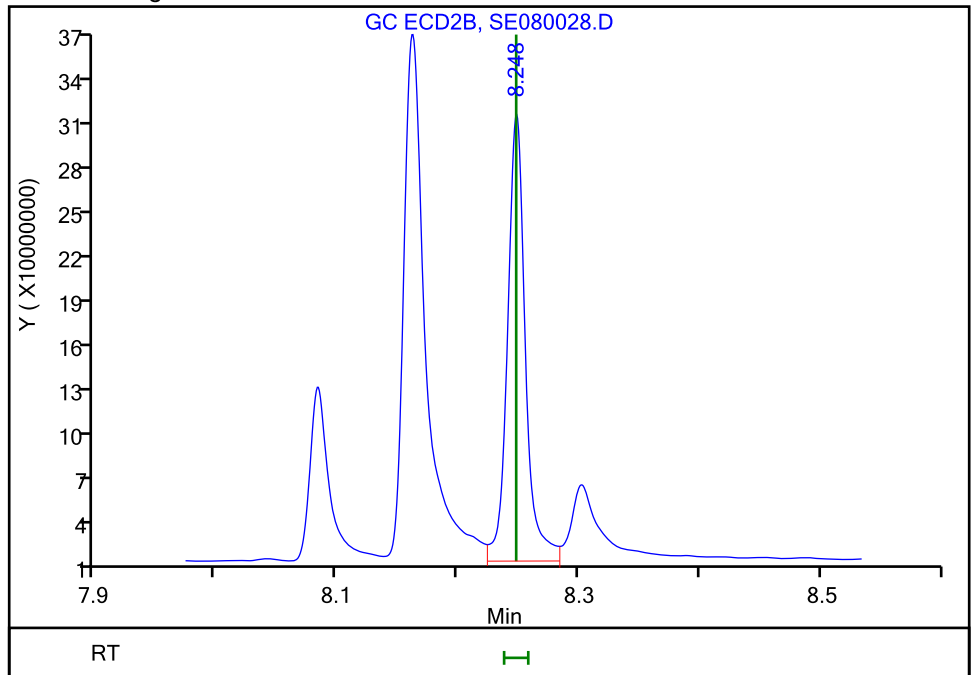
RT: 8.25
Area: 304317252
Amount: 0.072411
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 310276845
Amount: 0.073697
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

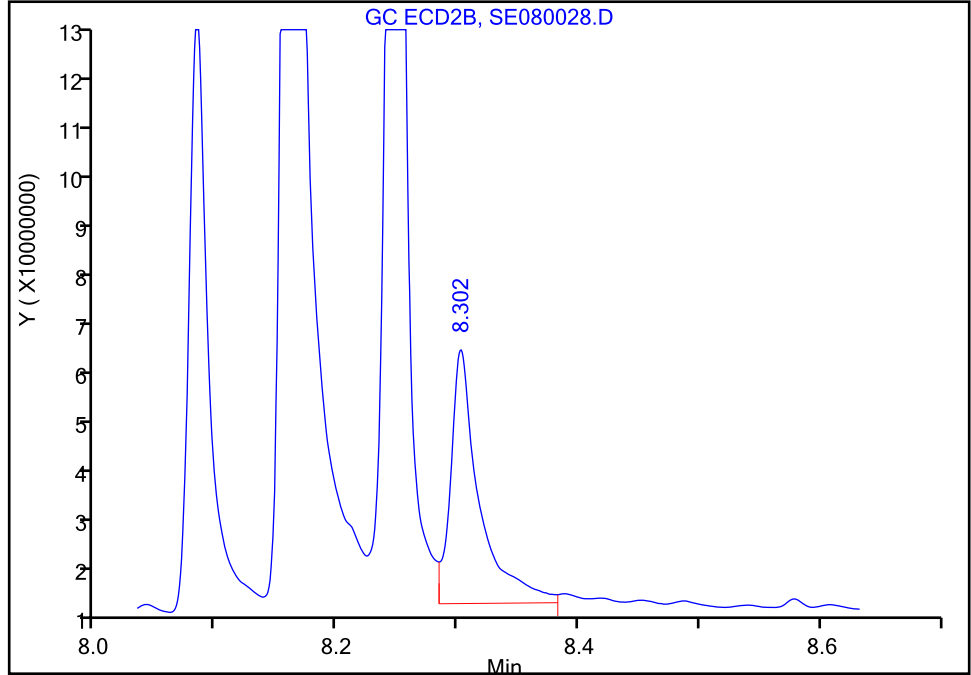
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

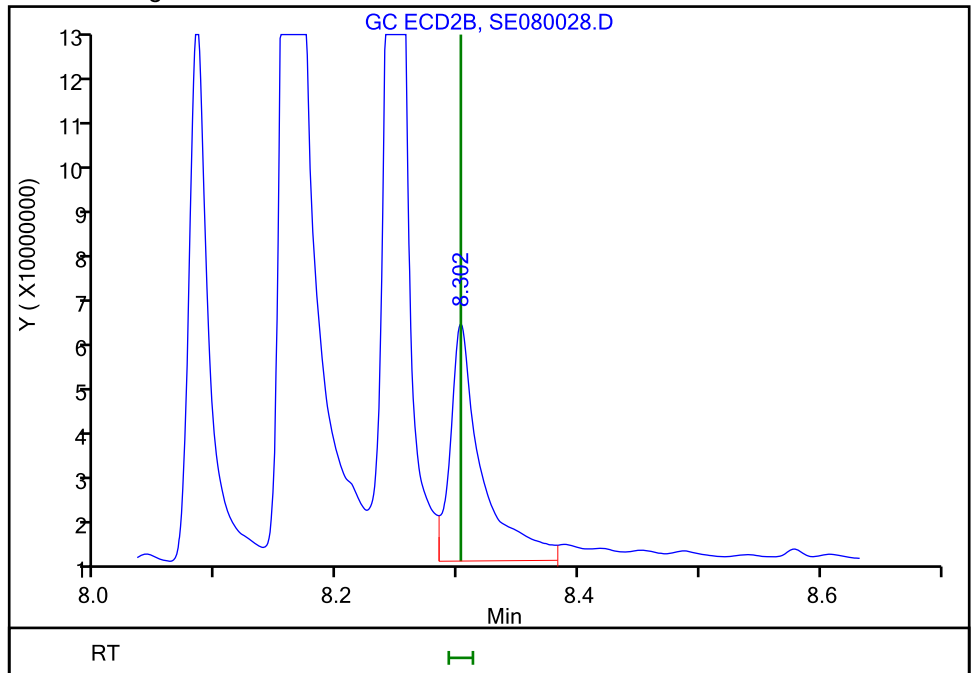
RT: 8.30
Area: 81650887
Amount: 0.082786
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 91637209
Amount: 0.092911
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

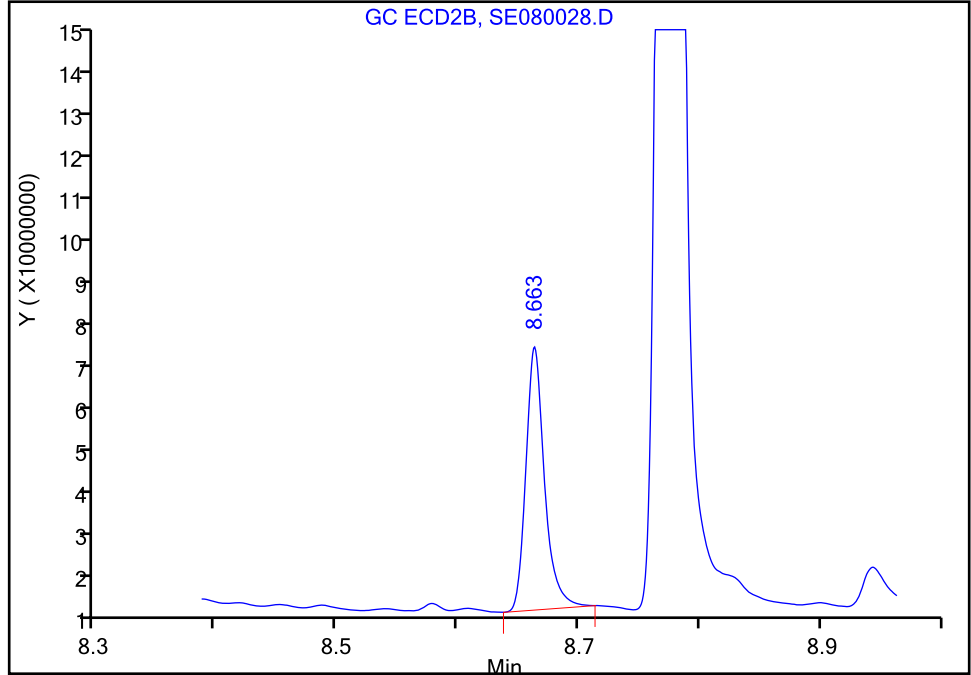
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

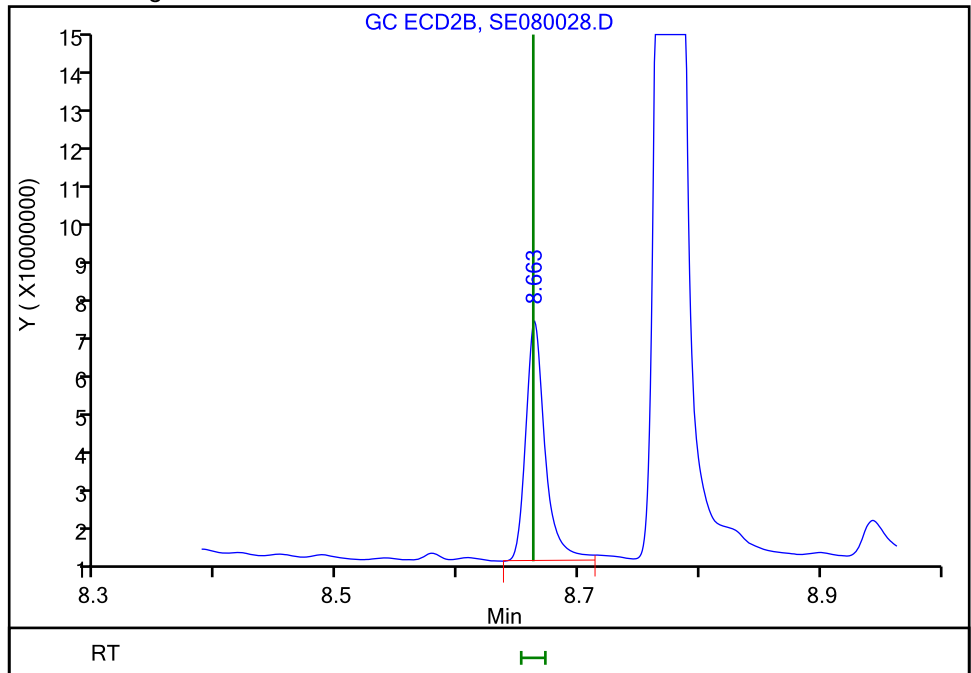
RT: 8.66
Area: 64993171
Amount: 0.080840
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 67492156
Amount: 0.083949
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

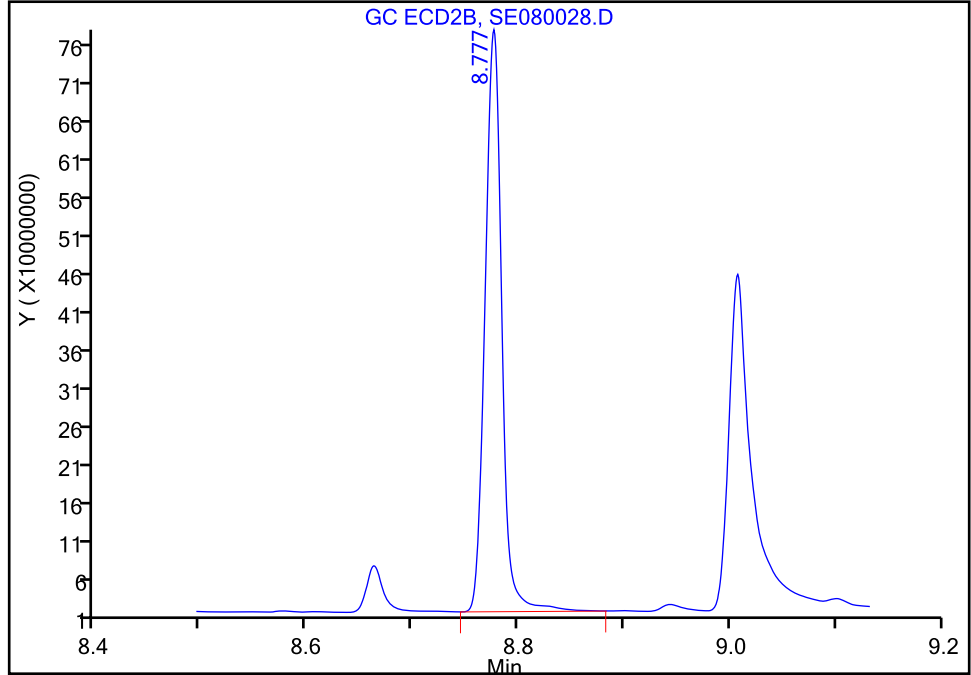
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

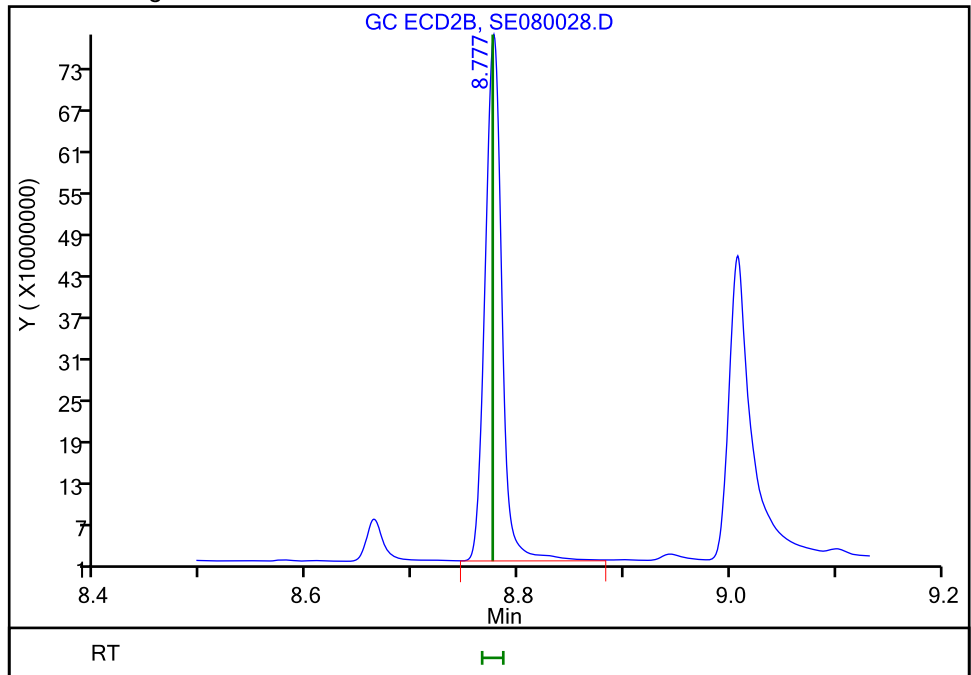
RT: 8.78
Area: 837751076
Amount: 0.085301
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 842841434
Amount: 0.085819
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

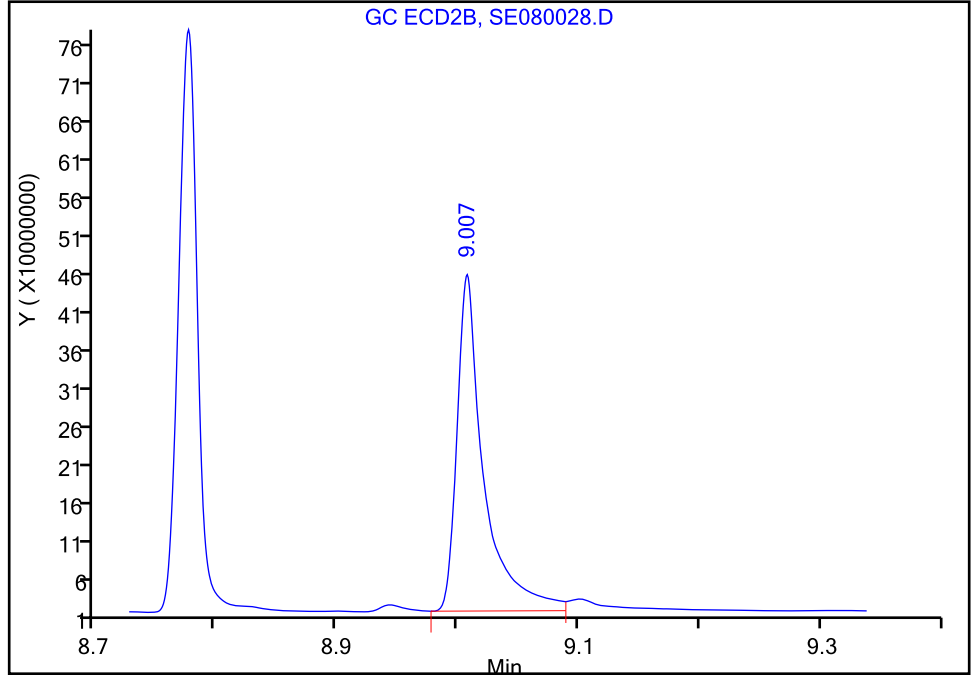
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

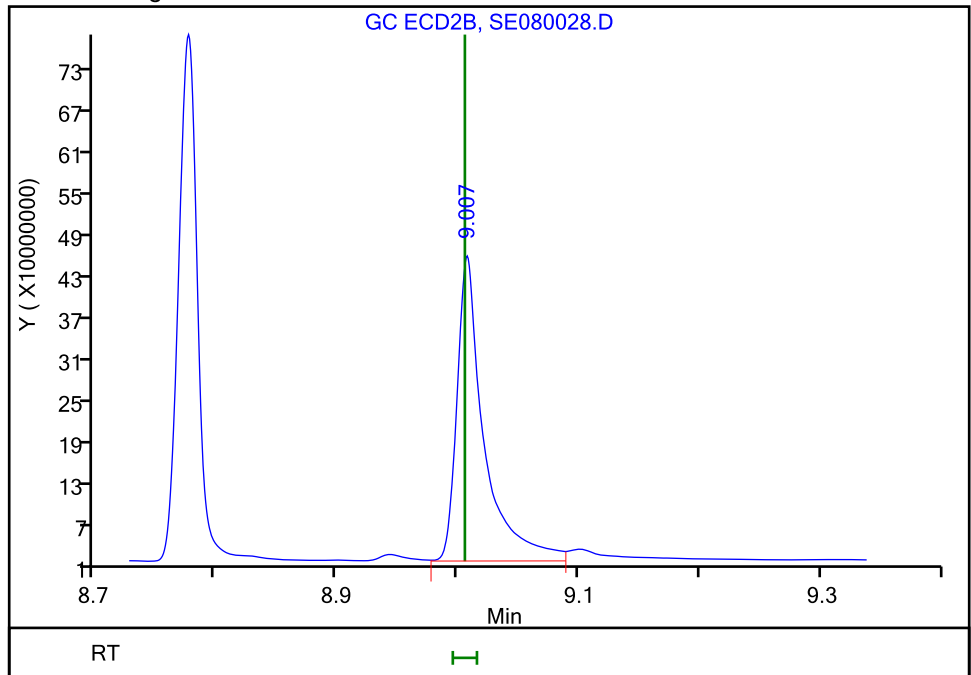
RT: 9.01
Area: 676921306
Amount: 0.069517
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 686881952
Amount: 0.070402
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	427820811		0.143	0.175	-18.4	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	296583189		0.161	0.175	-7.7	20.0
4-Nitrophenol	Ave	92458216	91577274		0.173	0.175	-1.0	20.0
Dicamba	Ave	1077009527	967765931		0.0786	0.0875	-10.1	20.0
MCPP	Qua		463186		15.5	17.5	-11.5	20.0
MCPA	Ave	925968	928421		17.5	17.5	0.3	20.0
Dichlorprop	Ave	277497963	251504674		0.159	0.175	-9.4	20.0
2,4-D	Ave	302399622	288193971		0.167	0.175	-4.7	20.0
Pentachlorophenol	Ave	5383895550	4999942514		0.0406	0.0438	-7.1	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1784749486		0.0416	0.0438	-5.0	20.0
Chloramben	Qua		1362967709		0.148	0.175	-15.2	20.0
2,4,5-T	Ave	2193840481	1981877189		0.0395	0.0438	-9.7	20.0
2,4-DB	Qua		140018897		0.151	0.175	-13.5	20.0
Dinoseb	Ave	1223895982	1102965480		0.158	0.175	-9.9	20.0
Bentazon	Ave	287551968	248107274		0.151	0.175	-13.7	20.0
Picloram	Qua		2203813377		0.152	0.175	-13.3	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	3005082234		0.160	0.175	-8.7	20.0
Acifluorfen	Qua		2133379526		0.156	0.175	-10.8	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	187262200		0.155	0.175	-11.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	6.99	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.32	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.85	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.17	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 00:55:01 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-038
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	74868642	0.1750	0.1429	
2	2.633	2.632	0.001	228091005	0.1750	0.1415	
						RPD = 0.94	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	15709201	NC	NC	
2	5.102	5.102	0.000	81447701	NC	NC	
						RPD = 6.40	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	197792324	NC	NC	
2	5.777	5.776	0.001	814623419	NC	NC	
						RPD = 4.12	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51902058	0.1750	0.1615	
2	6.116	6.116	0.000	269503235	0.1750	0.1500	
						RPD = 7.39	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	16026023	0.1750	0.1733	
2	6.504	6.505	-0.001	47684379	0.1750	0.1595	
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	32770885	0.1750	0.1550	
2	6.828	6.829	-0.001	207297956	0.1750	0.1473	
						RPD = 5.10	
7 Dicamba							
1	6.719	6.720	-0.001	84679519	0.0875	0.0786	
2	6.910	6.910	0.000	378314581	0.0875	0.0755	
						RPD = 4.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	8105752	17.5	15.5	
2	6.955	6.955	0.000	66707270	17.5	14.4	
						RPD = 7.18	
9 MCPA							
1	6.994	6.994	0.000	16247375	17.5	17.5	
2	7.154	7.155	-0.001	106598040	17.5	17.6	
						RPD = 0.16	
10 Dichlorprop							
1	7.180	7.180	0.000	44013318	0.1750	0.1586	
2	7.297	7.297	0.000	204624887	0.1750	0.1451	
						RPD = 8.87	
11 2,4-D							
1	7.324	7.326	-0.002	50433945	0.1750	0.1668	
2	7.516	7.517	-0.001	241432402	0.1750	0.1515	
						RPD = 9.60	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	218747485	0.0438	0.0406	
2	7.713	7.714	-0.001	739224164	0.0438	0.0393	
						RPD = 3.32	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	78082790	0.0438	0.0416	
2	7.846	7.846	0.000	285344847	0.0438	0.0386	
						RPD = 7.37	
14 Chloramben							
1	7.852	7.855	-0.003	238519349	0.1750	0.1484	
2	8.159	8.162	-0.003	877032133	0.1750	0.1559	
						RPD = 4.95	
15 2,4,5-T							
1	7.925	7.929	-0.004	86707127	0.0438	0.0395	
2	8.081	8.083	-0.002	257818803	0.0438	0.0388	
						RPD = 1.87	
16 2,4-DB							
1	8.172	8.175	-0.003	24503307	0.1750	0.1514	
2	8.299	8.302	-0.003	149059866	0.1750	0.1511	
						RPD = 0.18	
17 Dinoseb							
1	8.222	8.224	-0.002	193018959	0.1750	0.1577	
2	8.248	8.248	0.000	599229354	0.1750	0.1360	
						RPD = 14.76	
18 Bentazon							
1	8.299	8.300	-0.001	43418773	0.1750	0.1510	
2	8.662	8.662	0.000	121010538	0.1750	0.1505	
						RPD = 0.32	
19 Picloram							
1	8.526	8.529	-0.003	385667341	0.1750	0.1518	
2	9.005	9.005	0.000	1378057284	0.1750	0.1318	
						RPD = 14.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.623	8.623	0.000	525889391	0.1750	0.1597	
2	8.777	8.775	0.002	1570076998	0.1750	0.1599	
						RPD = 0.11	

21 Acifluorfen

1	9.665	9.666	-0.001	373341417	0.1750	0.1561	
2	9.791	9.792	-0.001	1116042155	0.1750	0.1517	
						RPD = 2.89	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

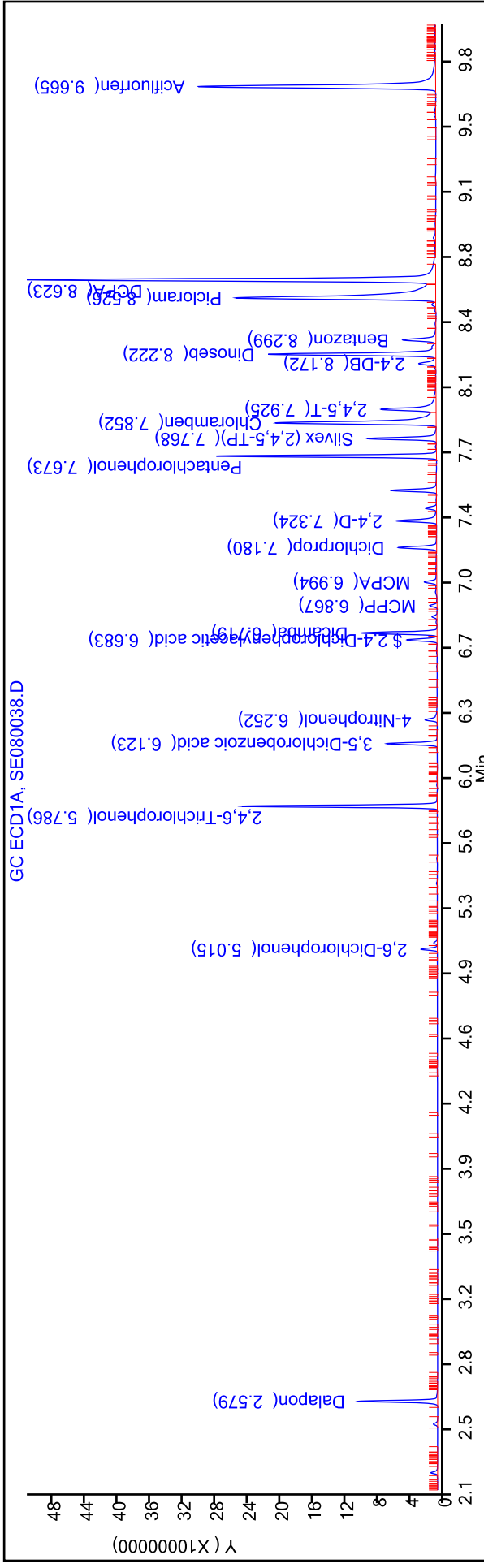
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D
 Injection Date: 09-May-2018 00:55:01
 Lims ID: ccv h5
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

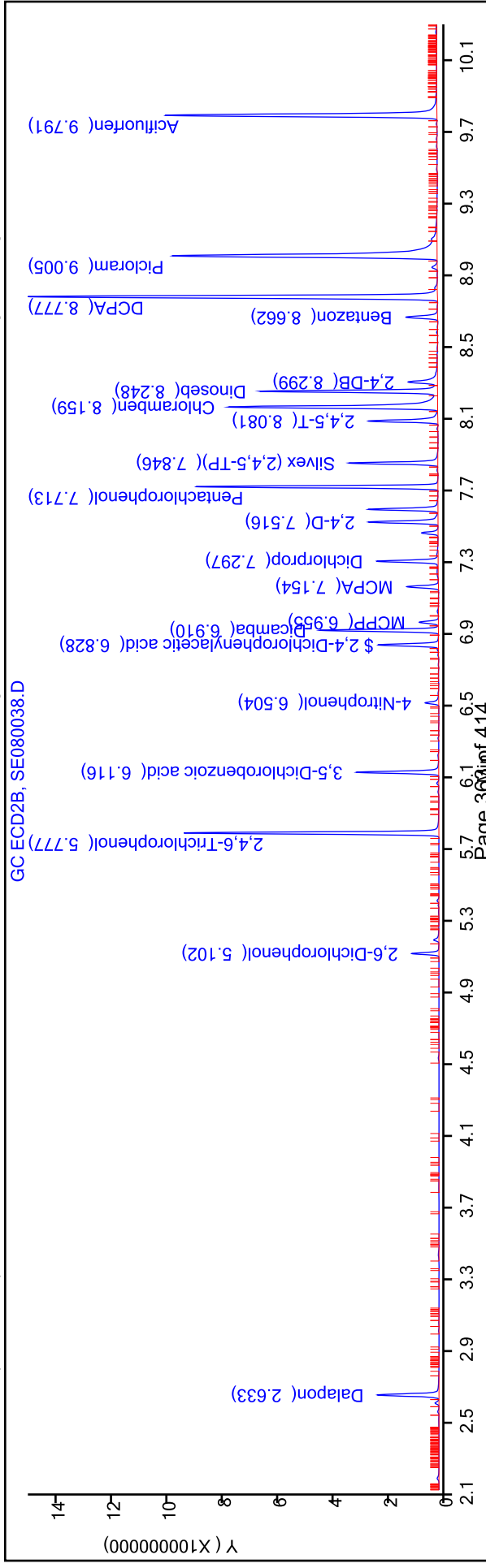
Operator ID: GEM
 Worklist Smp#: 38
 ALS Bottle#: 38

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1303377171		0.142	0.175	-19.1	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1540018486		0.150	0.175	-14.3	20.0
4-Nitrophenol	Ave	299039718	272482166		0.159	0.175	-8.9	20.0
Dicamba	Ave	5009061262	4323595211		0.0755	0.0875	-13.7	20.0
MCPPP	Lin2		3811844		14.4	17.5	-17.6	20.0
MCPA	QuaF		6091317		17.6	17.5	0.4	20.0
Dichlorprop	Ave	1409813393	1169285069		0.145	0.175	-17.1	20.0
2,4-D	Ave	1593535987	1379613726		0.152	0.175	-13.4	20.0
Pentachlorophenol	Ave	18808678996	16896552320		0.0393	0.0438	-10.2	20.0
Silvex (2,4,5-TP)	Ave	7391322149	6522167931		0.0386	0.0438	-11.8	20.0
2,4,5-T	Ave	6646535168	5893001211		0.0388	0.0438	-11.3	20.0
Chloramben	Ave	5625509945	5011612189		0.156	0.175	-10.9	20.0
Dinoseb	Lin1		3424167737		0.136	0.175	-22.3*	20.0
2,4-DB	Ave	986290097	851770663		0.151	0.175	-13.6	20.0
Bentazon	Ave	803969083	691488789		0.151	0.175	-14.0	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	8971868560		0.160	0.175	-8.6	20.0
Picloram	Lin1		7874613051		0.132	0.175	-24.7*	20.0
Acifluorfen	Qua		6377383743		0.152	0.175	-13.3	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1184559749		0.147	0.175	-15.9	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.50	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.15	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.71	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.79	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 00:55:01 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-038
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	74868642	0.1750	0.1429	
2	2.633	2.632	0.001	228091005	0.1750	0.1415	
						RPD = 0.94	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	15709201	NC	NC	
2	5.102	5.102	0.000	81447701	NC	NC	
						RPD = 6.40	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	197792324	NC	NC	
2	5.777	5.776	0.001	814623419	NC	NC	
						RPD = 4.12	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51902058	0.1750	0.1615	
2	6.116	6.116	0.000	269503235	0.1750	0.1500	
						RPD = 7.39	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	16026023	0.1750	0.1733	
2	6.504	6.505	-0.001	47684379	0.1750	0.1595	
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	32770885	0.1750	0.1550	
2	6.828	6.829	-0.001	207297956	0.1750	0.1473	
						RPD = 5.10	
7 Dicamba							
1	6.719	6.720	-0.001	84679519	0.0875	0.0786	
2	6.910	6.910	0.000	378314581	0.0875	0.0755	
						RPD = 4.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	8105752	17.5	15.5	
2	6.955	6.955	0.000	66707270	17.5	14.4	
						RPD = 7.18	
9 MCPA							
1	6.994	6.994	0.000	16247375	17.5	17.5	
2	7.154	7.155	-0.001	106598040	17.5	17.6	
						RPD = 0.16	
10 Dichlorprop							
1	7.180	7.180	0.000	44013318	0.1750	0.1586	
2	7.297	7.297	0.000	204624887	0.1750	0.1451	
						RPD = 8.87	
11 2,4-D							
1	7.324	7.326	-0.002	50433945	0.1750	0.1668	
2	7.516	7.517	-0.001	241432402	0.1750	0.1515	
						RPD = 9.60	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	218747485	0.0438	0.0406	
2	7.713	7.714	-0.001	739224164	0.0438	0.0393	
						RPD = 3.32	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	78082790	0.0438	0.0416	
2	7.846	7.846	0.000	285344847	0.0438	0.0386	
						RPD = 7.37	
14 Chloramben							
1	7.852	7.855	-0.003	238519349	0.1750	0.1484	
2	8.159	8.162	-0.003	877032133	0.1750	0.1559	
						RPD = 4.95	
15 2,4,5-T							
1	7.925	7.929	-0.004	86707127	0.0438	0.0395	
2	8.081	8.083	-0.002	257818803	0.0438	0.0388	
						RPD = 1.87	
16 2,4-DB							
1	8.172	8.175	-0.003	24503307	0.1750	0.1514	
2	8.299	8.302	-0.003	149059866	0.1750	0.1511	
						RPD = 0.18	
17 Dinoseb							
1	8.222	8.224	-0.002	193018959	0.1750	0.1577	
2	8.248	8.248	0.000	599229354	0.1750	0.1360	
						RPD = 14.76	
18 Bentazon							
1	8.299	8.300	-0.001	43418773	0.1750	0.1510	
2	8.662	8.662	0.000	121010538	0.1750	0.1505	
						RPD = 0.32	
19 Picloram							
1	8.526	8.529	-0.003	385667341	0.1750	0.1518	
2	9.005	9.005	0.000	1378057284	0.1750	0.1318	
						RPD = 14.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	525889391	0.1750	0.1597	
2	8.777	8.775	0.002	1570076998	0.1750	0.1599	
						RPD = 0.11	

21 Acifluorfen

1	9.665	9.666	-0.001	373341417	0.1750	0.1561	
2	9.791	9.792	-0.001	1116042155	0.1750	0.1517	
						RPD = 2.89	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D

Injection Date: 09-May-2018 00:55:01

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h5

Worklist Smp#: 38

Client ID:

Injection Vol: 1.0 ul

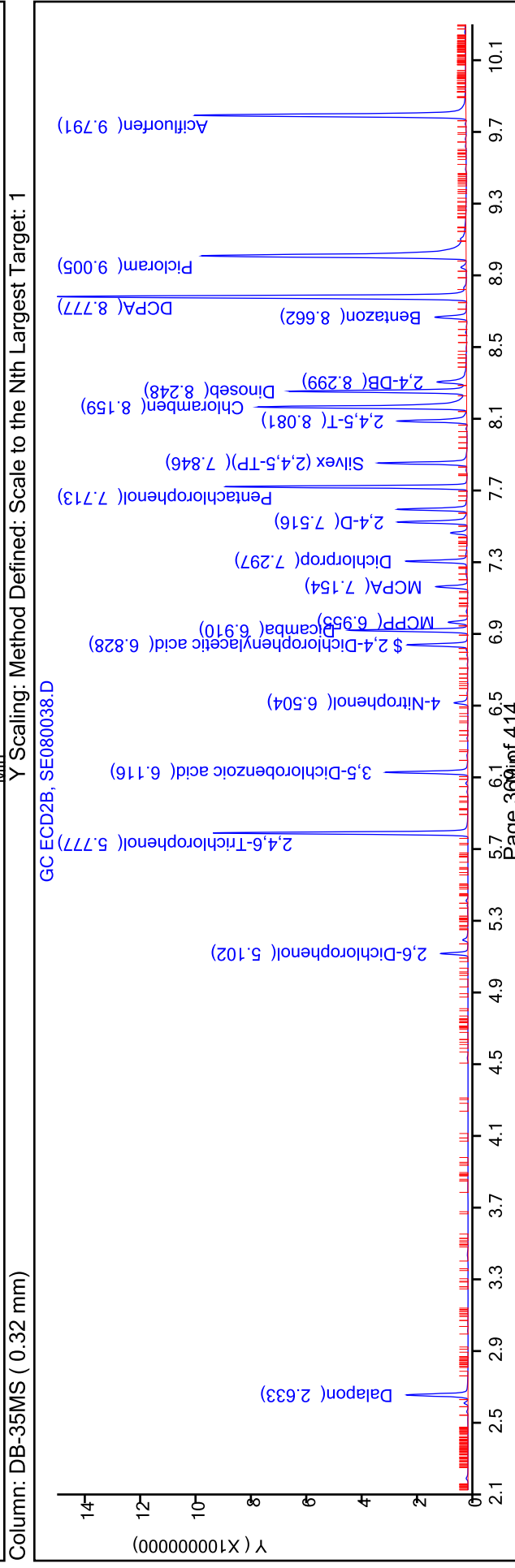
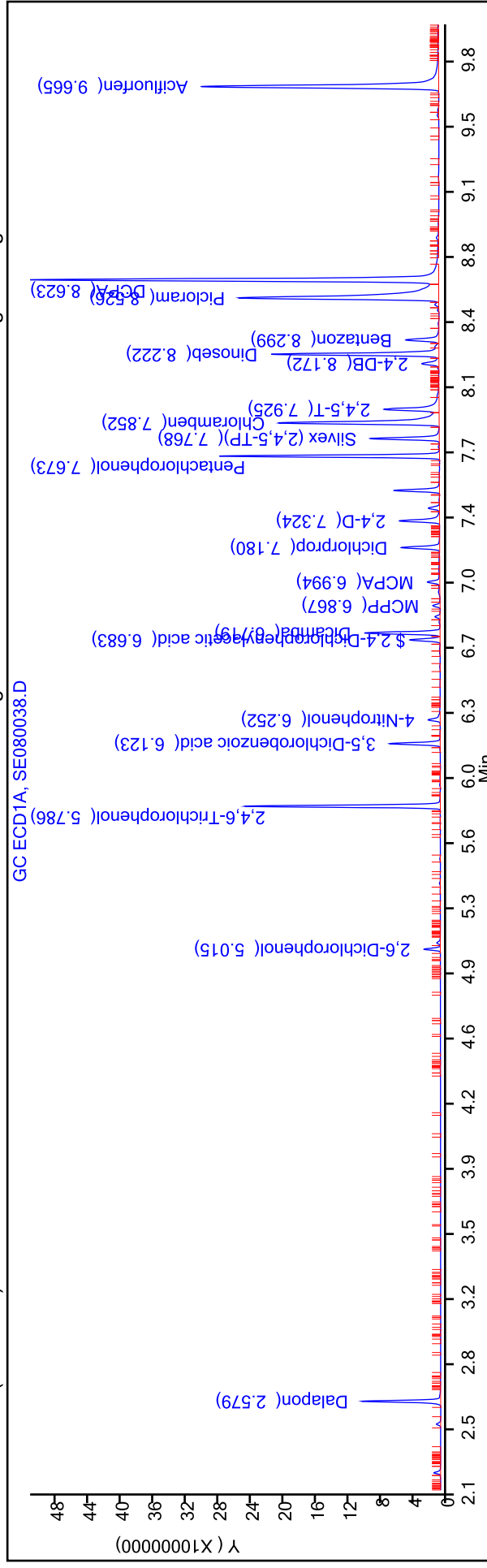
Dil. Factor: 1.0000

ALS Bottle#: 38

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-522541/10-A
 Matrix: Solid Lab File ID: SE080030.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.02(g) Date Analyzed: 05/08/2018 22:19
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.3	U M	8.3	4.3	2.3
94-75-7	2,4-D	8.3	U	8.3	8.3	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	52		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
 Lims ID: MB 680-522541/10-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2018 22:19:12 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-030
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:29:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.683	6.683	0.000	25404910	0.2000	0.1201	
2	6.828	6.829	-0.001	146536865	0.2000	0.1041	
						RPD = 14.31	

12 Pentachlorophenol

1	7.671	7.674	-0.003	2673336		0.000497	
2	7.714	7.714	0.000	4902202		0.000261	
						RPD = 62.31	

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D

Injection Date: 08-May-2018 22:19:12

Instrument ID: CSGS

Operator ID: GEM

Lims ID: MB 680-522541/10-A

Worklist Smp#: 30

Client ID:

Injection Vol: 1.0 ul

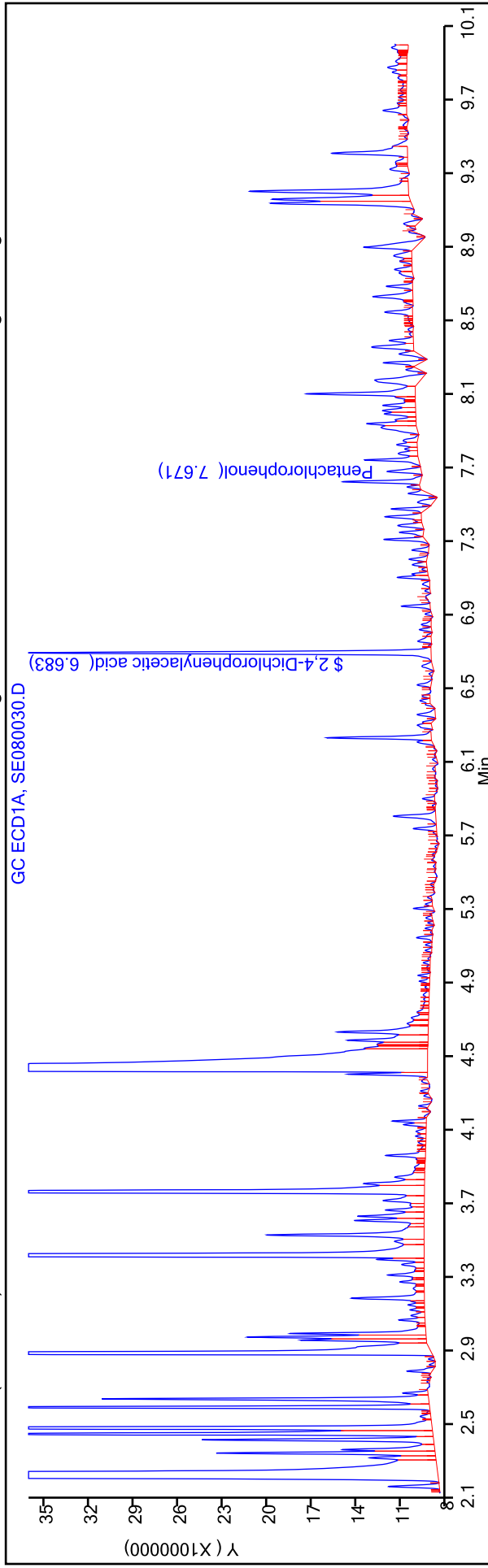
Dil. Factor: 1.0000

ALS Bottle#: 30

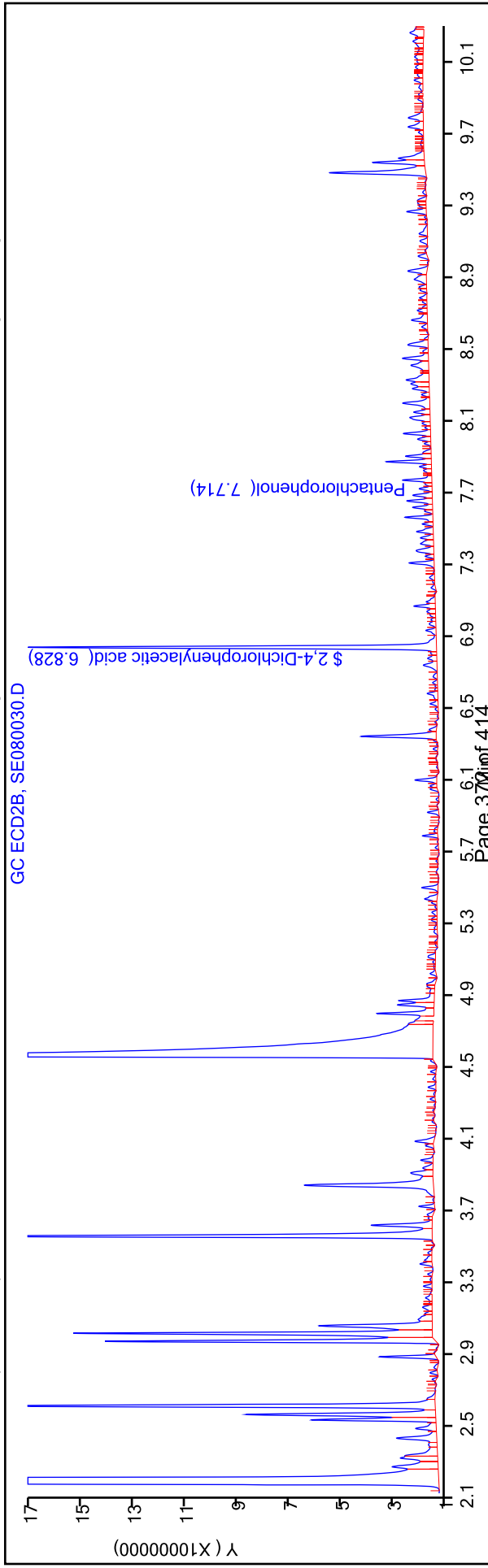
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
 Lims ID: MB 680-522541/10-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2018 22:19:12 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-030
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:29:27

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1201	60.07

Surrogate Recovery, Detector: GC ECD2B

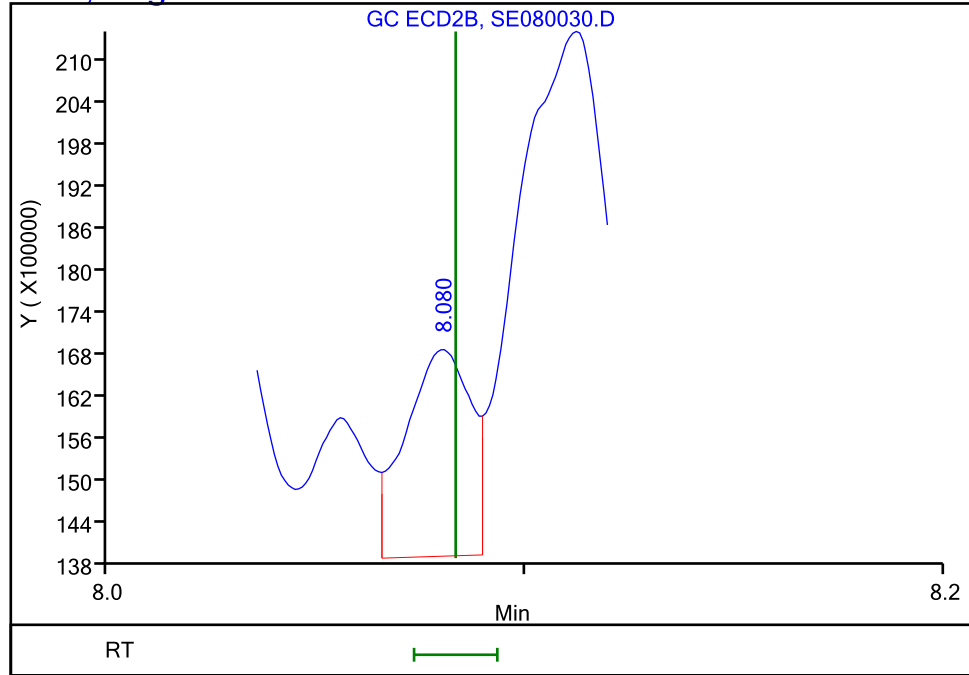
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1041	52.05

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
Injection Date: 08-May-2018 22:19:12 Instrument ID: CSGS
Lims ID: MB 680-522541/10-A
Client ID:
Operator ID: GEM ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

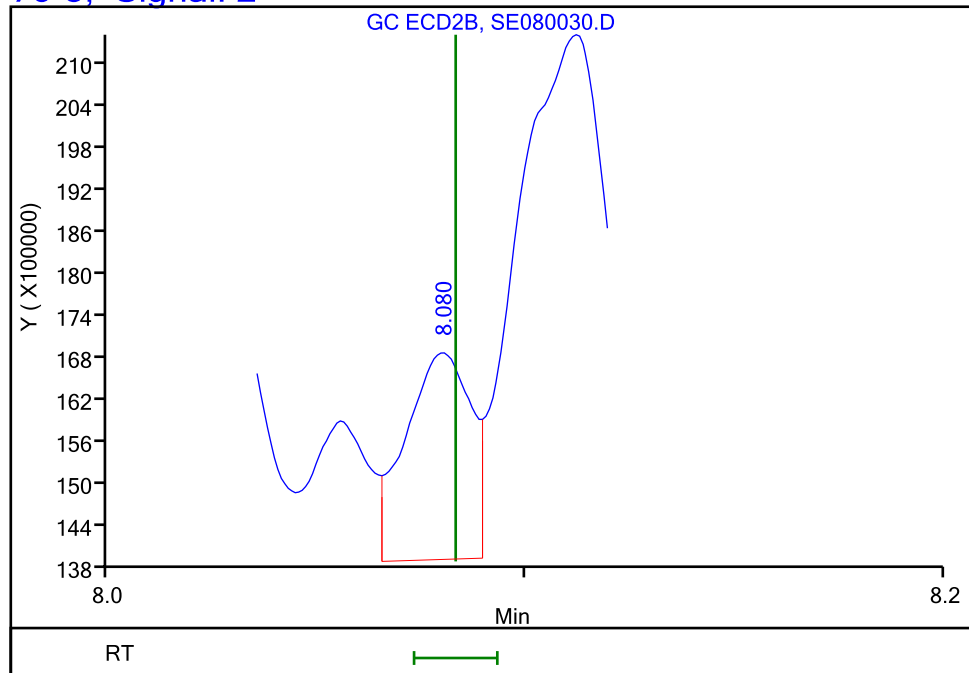
RT: 8.08
Response: 3234514
Amount: 0.000487



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.08
Response: 3234514
Amount: 0.000487



Reviewer: kellarj, 09-May-2018 09:29:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/29
 Matrix: Solid Lab File ID: SE080029.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2018 21:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	80		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.685	6.683	0.002	170593061	1.00	0.8067
2	6.831	6.829	0.002	995138894	1.00	0.7069

RPD = 13.18

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D

Injection Date: 08-May-2018 21:59:46

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 29

Client ID:

Injection Vol: 1.0 ul

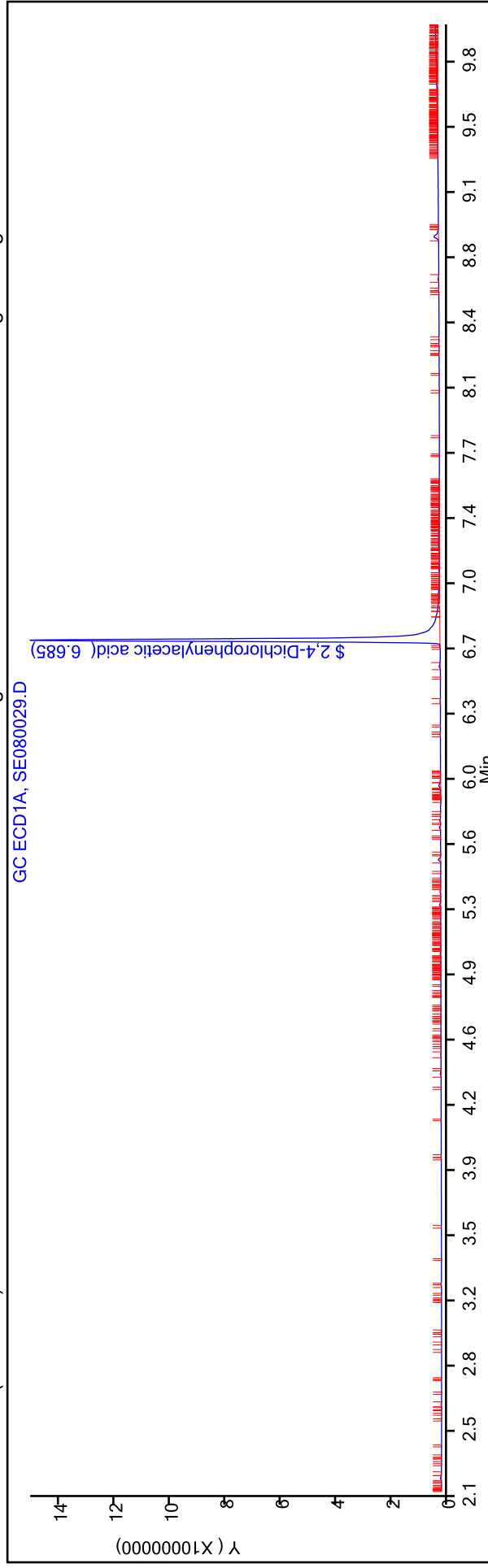
Dil. Factor: 1.0000

ALS Bottle#: 29

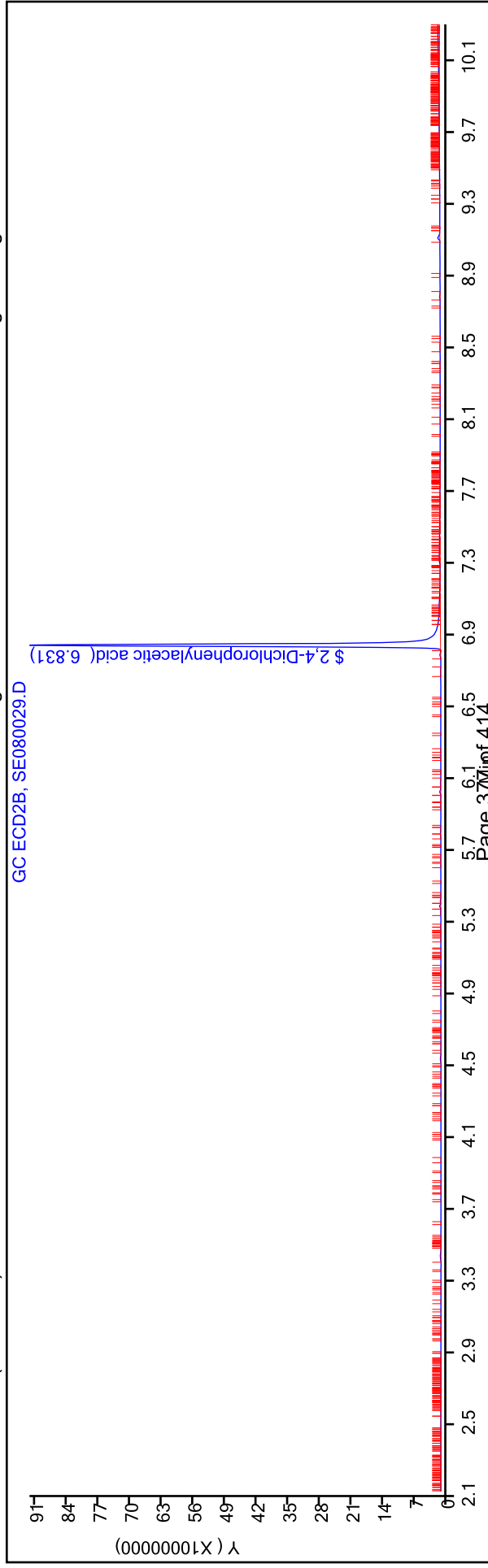
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8067	80.35

Surrogate Recovery, Detector: GC ECD2B

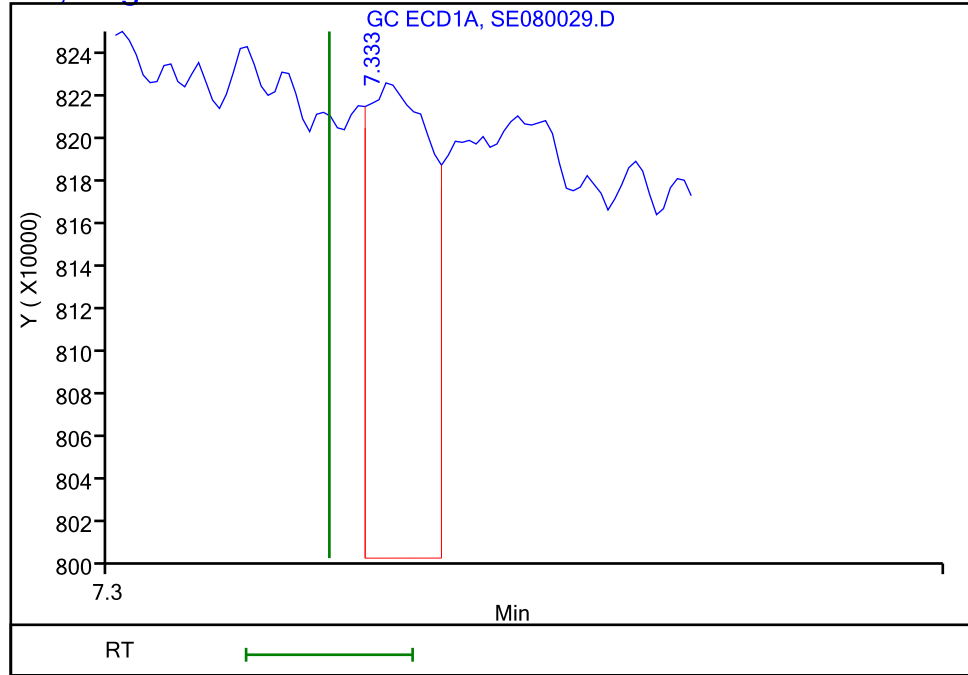
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7069	70.41

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
Injection Date: 08-May-2018 21:59:46 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

11 2,4-D, CAS: 94-75-7, Signal: 1

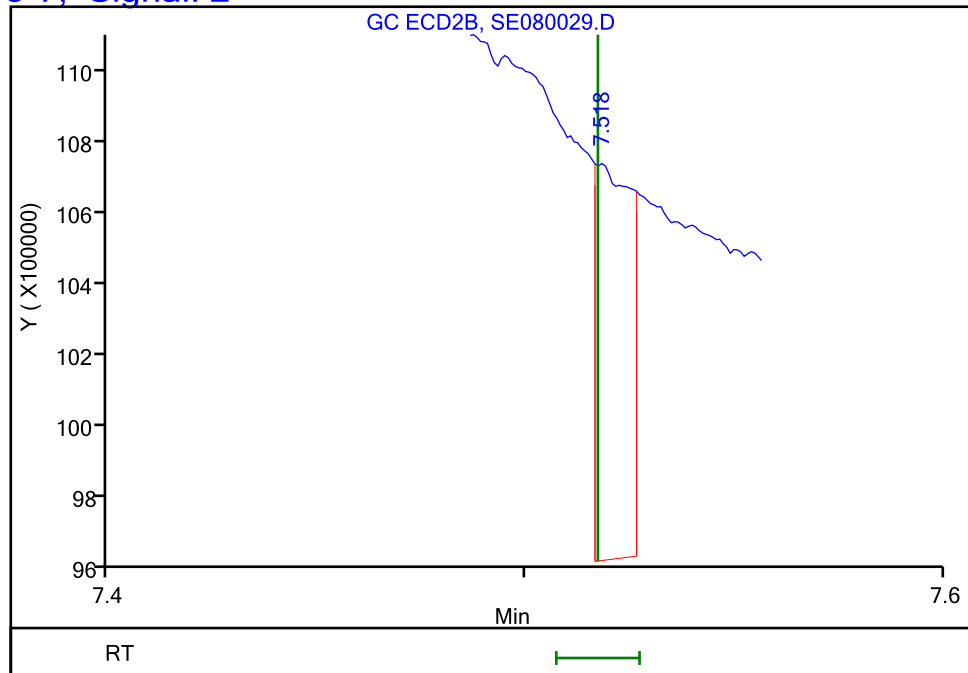
RT: 7.33
Response: 107513
Amount: 0.000356



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 574902
Amount: 0.000361



Reviewer: kellarj, 09-May-2018 09:21:42
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/29
 Matrix: Solid Lab File ID: SE080029.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2018 21:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	70		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.685	6.683	0.002	170593061	1.00	0.8067
2	6.831	6.829	0.002	995138894	1.00	0.7069

RPD = 13.18

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D

Injection Date: 08-May-2018 21:59:46

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 29

Client ID:

Injection Vol: 1.0 ul

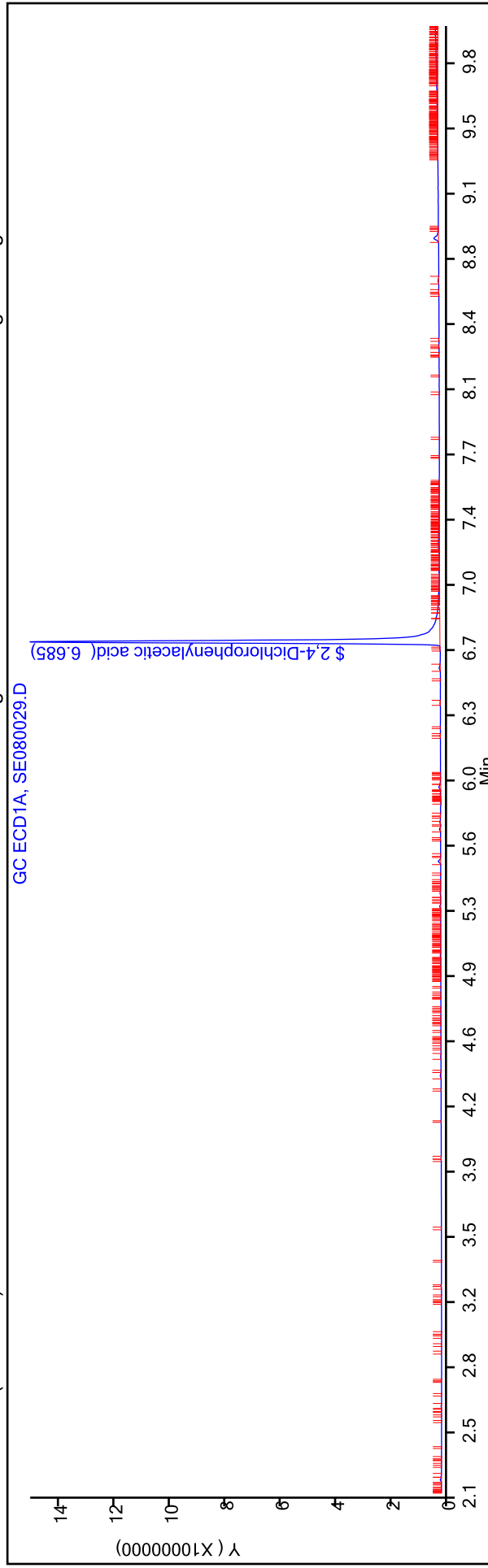
Dil. Factor: 1.0000

ALS Bottle#: 29

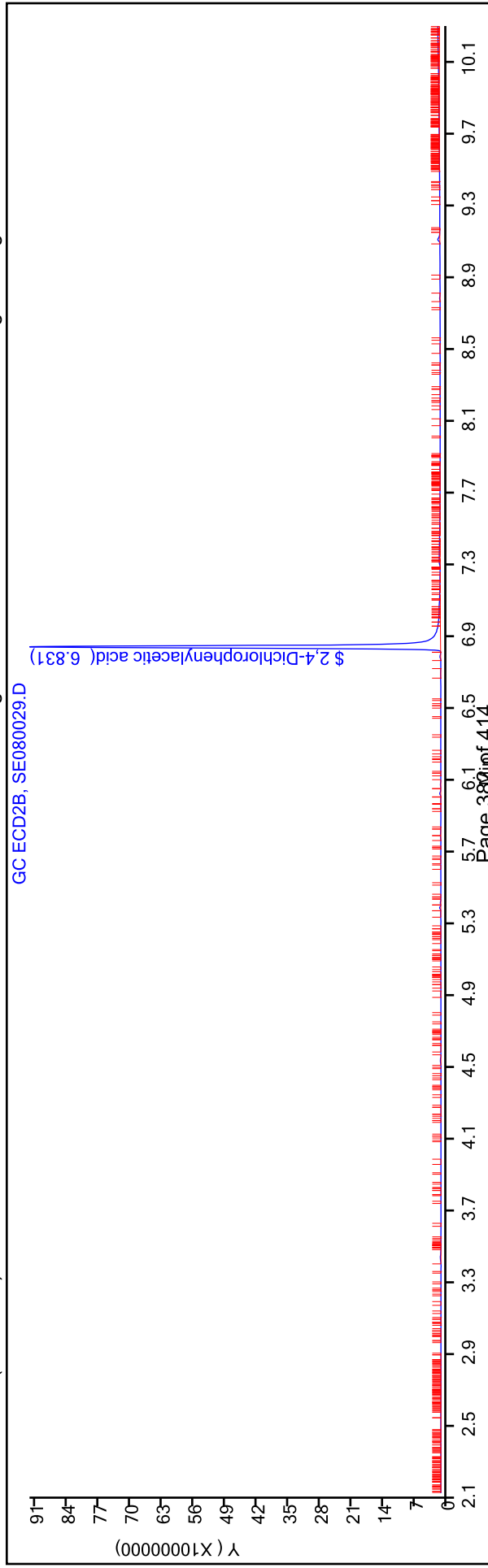
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8067	80.35

Surrogate Recovery, Detector: GC ECD2B

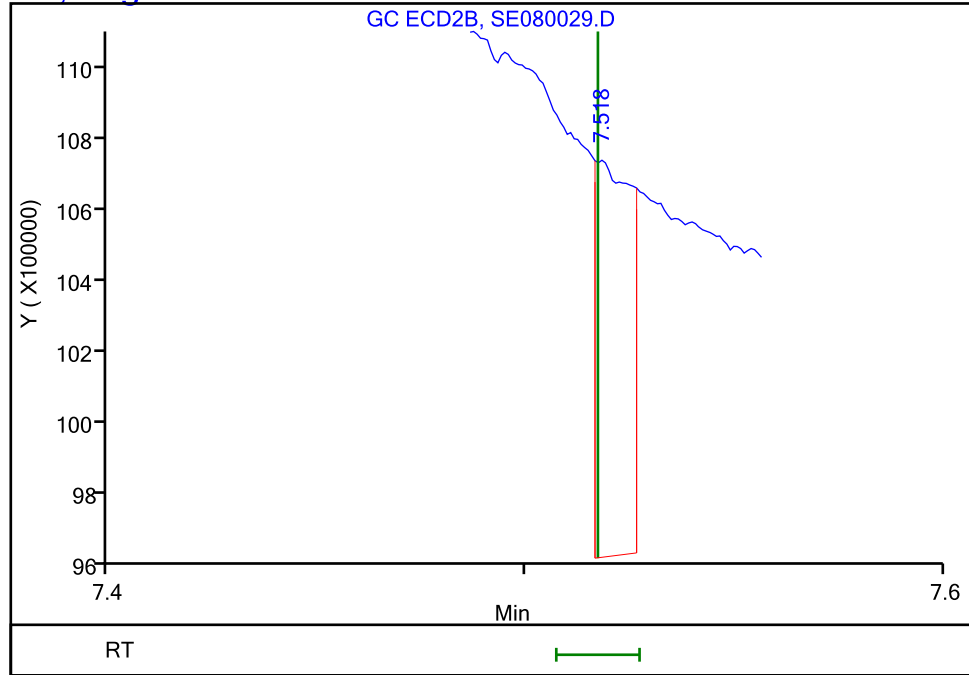
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7069	70.41

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
Injection Date: 08-May-2018 21:59:46 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

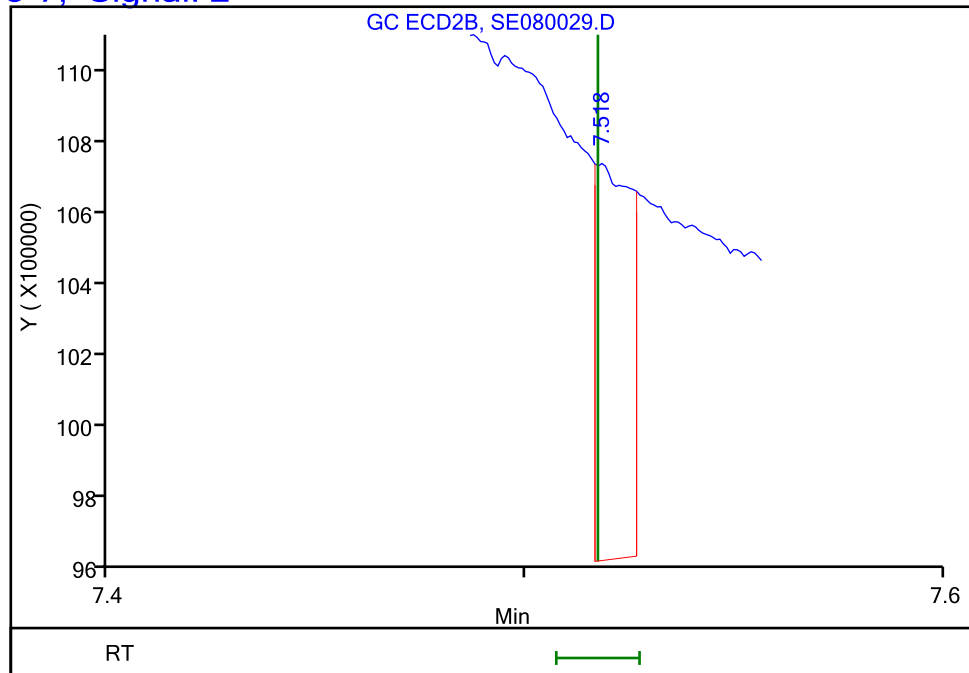
RT: 7.52
Response: 574902
Amount: 0.000361



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 574902
Amount: 0.000361



Reviewer: kellarj, 09-May-2018 09:21:42
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/39
 Matrix: Solid Lab File ID: SE080039.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/09/2018 01:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	75		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.684	6.683	0.001	159546417	1.00	0.7544
2	6.831	6.829	0.002	926668182	1.00	0.6583

RPD = 13.62

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D

Injection Date: 09-May-2018 01:14:39

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 39

Client ID:

Injection Vol: 1.0 ul

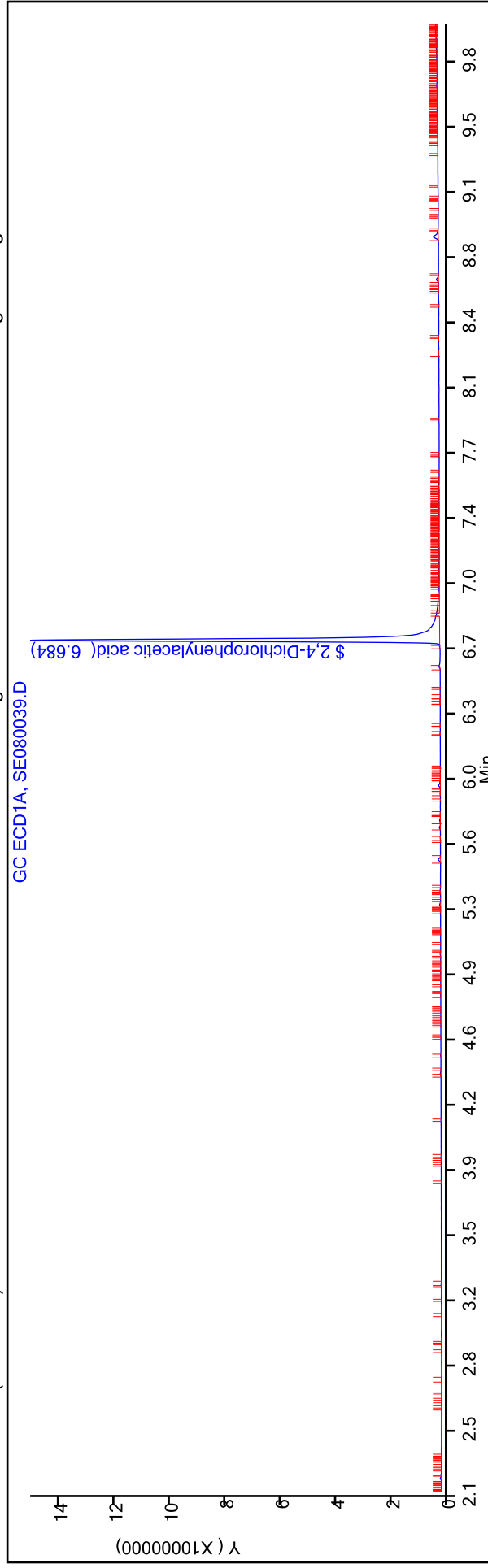
Dil. Factor: 1.0000

ALS Bottle#: 39

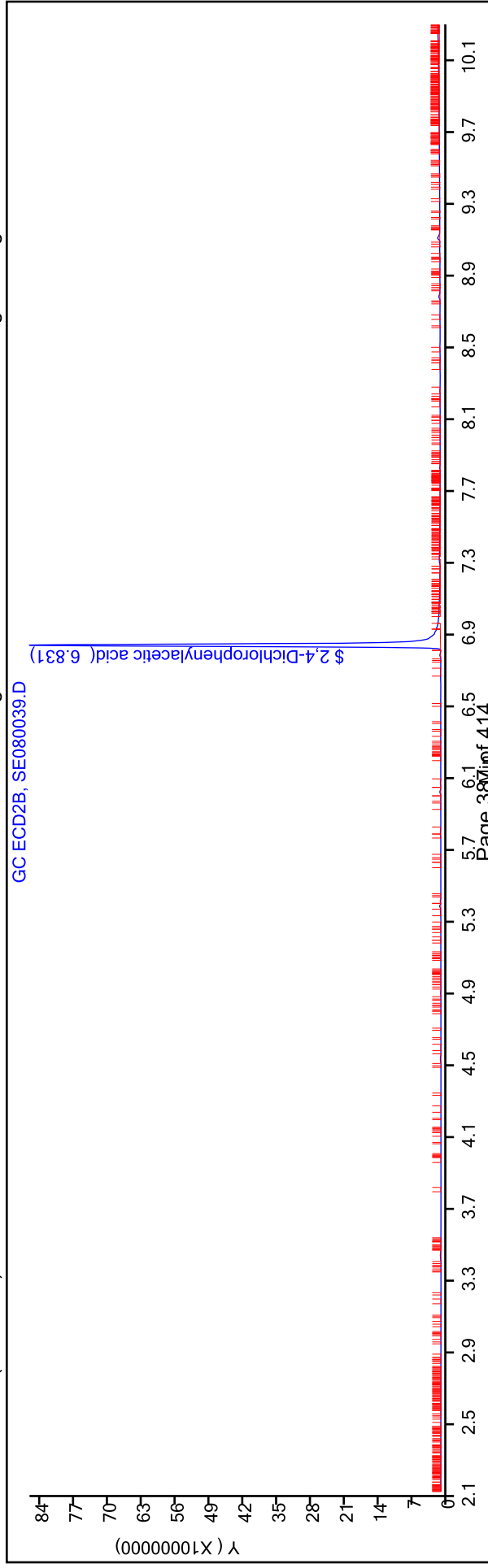
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7544	75.14

Surrogate Recovery, Detector: GC ECD2B

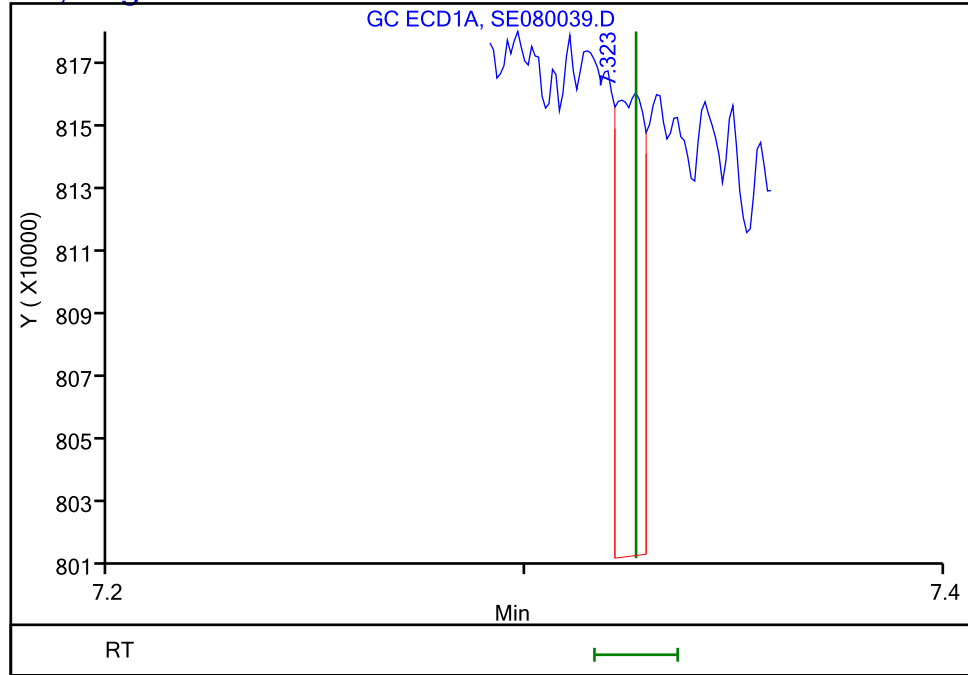
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.6583	65.56

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
Injection Date: 09-May-2018 01:14:39 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

11 2,4-D, CAS: 94-75-7, Signal: 1

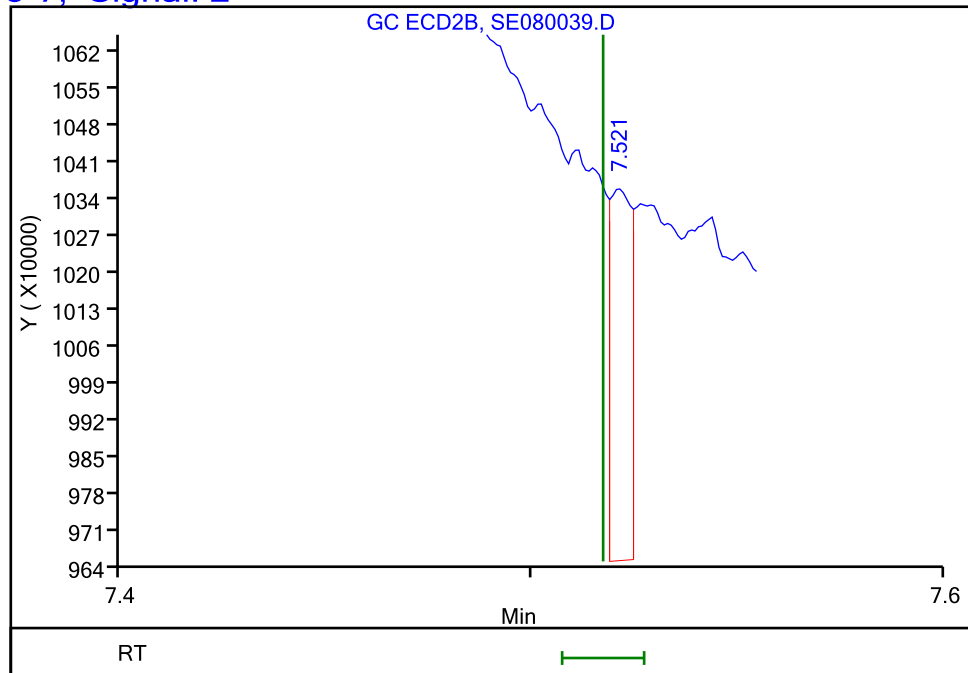
RT: 7.32
Response: 62011
Amount: 0.000205



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 240112
Amount: 0.000151



Reviewer: kellarj, 09-May-2018 09:22:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/39
 Matrix: Solid Lab File ID: SE080039.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/09/2018 01:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	66		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

\$ 6 2,4-Dichlorophenylacetic acid

1	6.684	6.683	0.001	159546417	1.00	0.7544
2	6.831	6.829	0.002	926668182	1.00	0.6583

RPD = 13.62

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D

Injection Date: 09-May-2018 01:14:39

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 39

Client ID:

Injection Vol: 1.0 ul

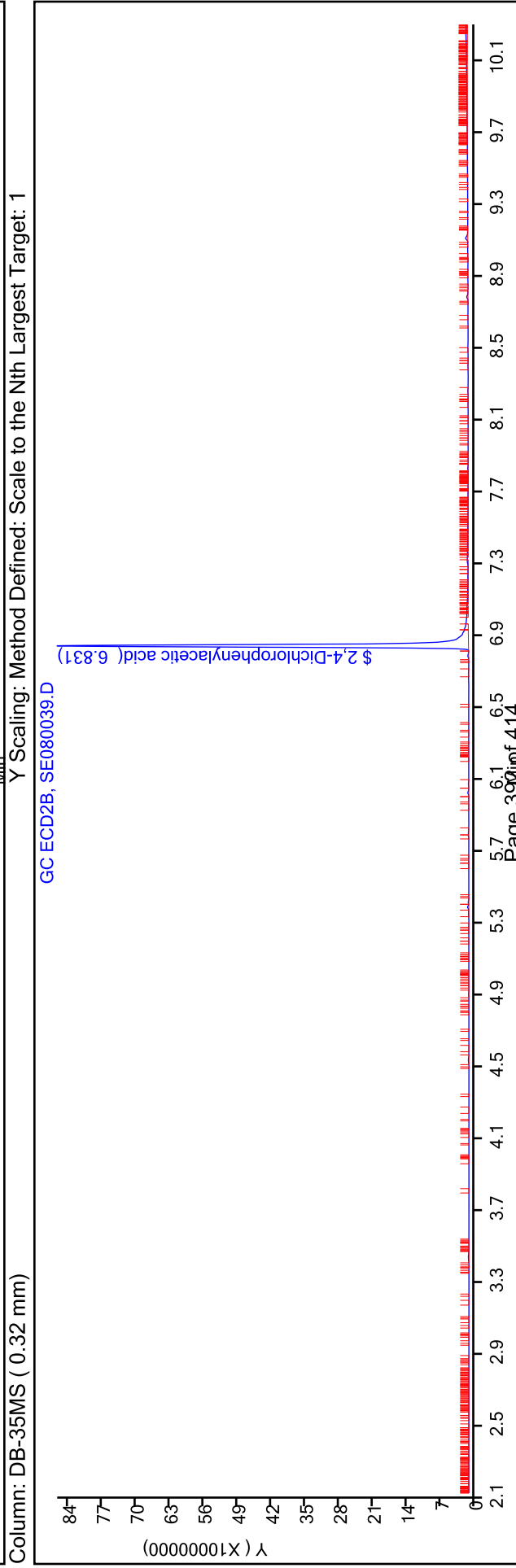
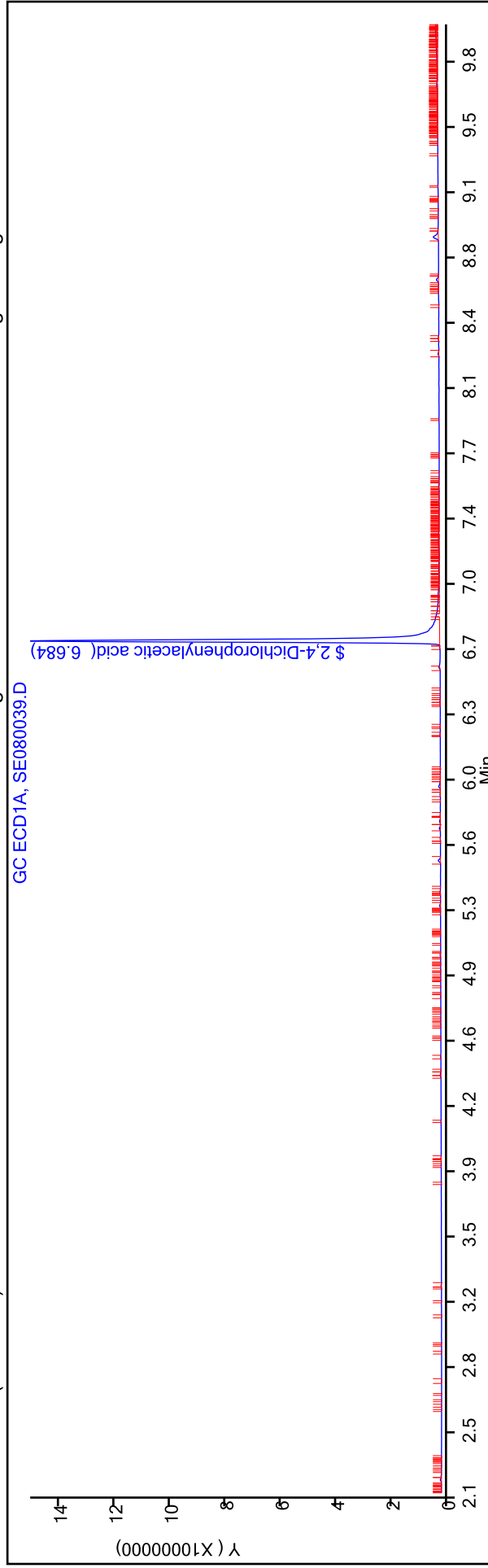
Dil. Factor: 1.0000

ALS Bottle#: 39

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7544	75.14

Surrogate Recovery, Detector: GC ECD2B

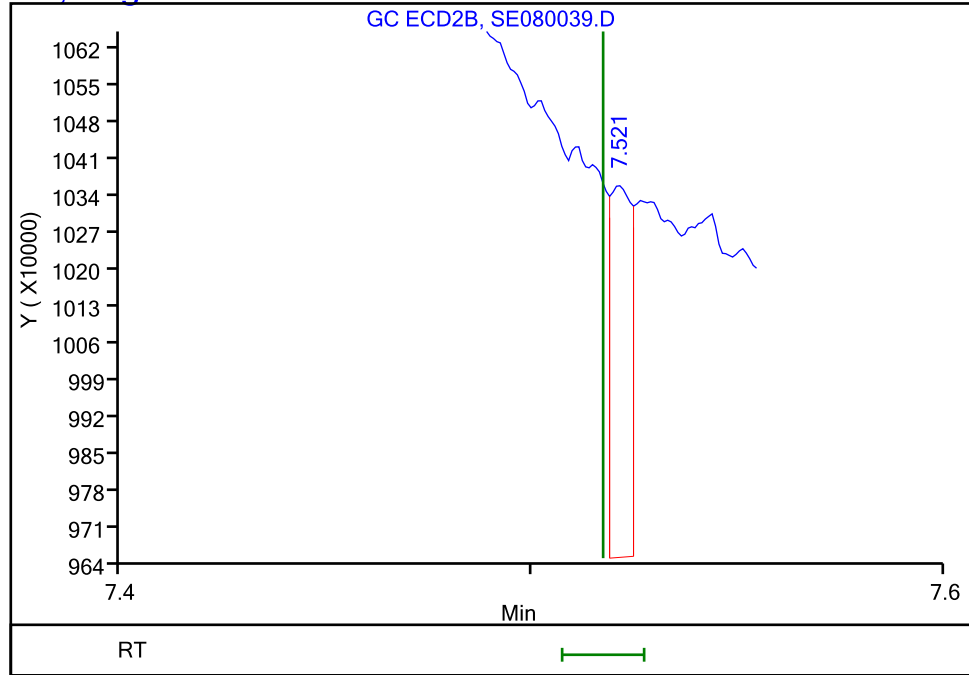
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.6583	65.56

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
Injection Date: 09-May-2018 01:14:39 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

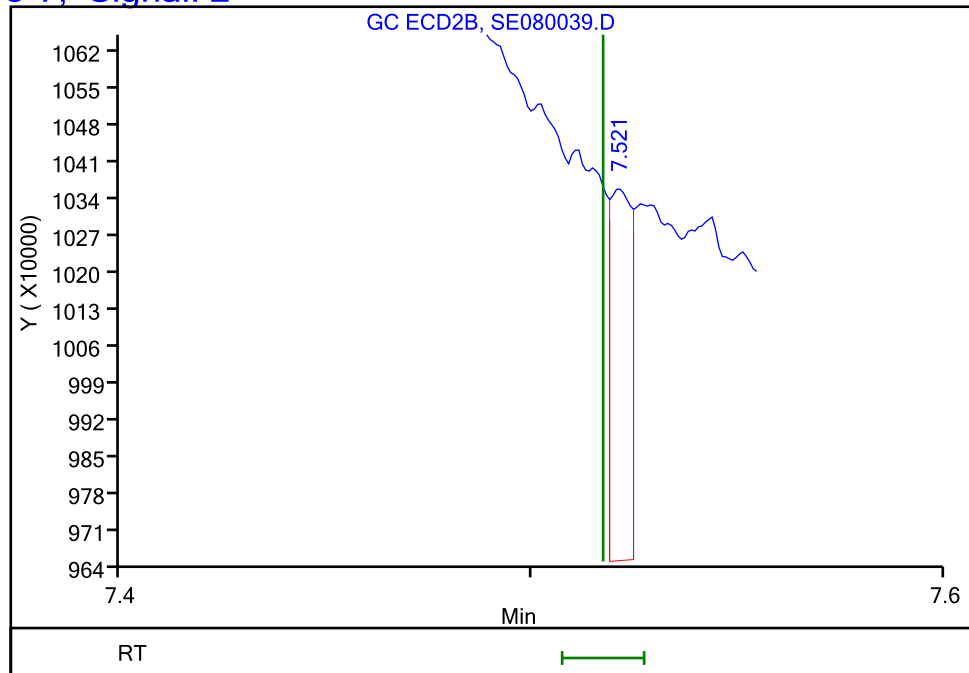
RT: 7.52
Response: 240112
Amount: 0.000151



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 240112
Amount: 0.000151



Reviewer: kellarj, 09-May-2018 09:22:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522541/11-A
 Matrix: Solid Lab File ID: SE080031.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.59(g) Date Analyzed: 05/08/2018 22:38
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	8.90		8.1	4.2	2.3
94-75-7	2,4-D	44.5		8.1	8.1	4.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	54		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Lims ID: LCS 680-522541/11-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2018 22:38:36 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:29:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.579	2.579	0.000	83977915	0.2000	0.1602	
2	2.632	2.632	0.000	193328681	0.2000	0.1199	
						RPD = 28.76	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	16997350	NC	NC	
2	5.102	5.102	0.000	88978142	NC	NC	
						RPD = 5.43	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	178016998	NC	NC	
2	5.777	5.776	0.001	722131967	NC	NC	
						RPD = 5.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51178561	0.2000	0.1592	M
2	6.116	6.116	0.000	252259500	0.2000	0.1404	
						RPD = 12.58	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	27190981	0.2000	0.2941	M
2	6.503	6.505	-0.002	80332197	0.2000	0.2686	
						RPD = 9.05	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.682	6.683	-0.001	26147601	0.2000	0.1236	M
2	6.828	6.829	-0.001	152742612	0.2000	0.1085	
						RPD = 13.04	
7 Dicamba							
1	6.720	6.720	0.000	84851579	0.1000	0.0788	M
2	6.911	6.910	0.001	370093579	0.1000	0.0739	
						RPD = 6.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4538433	20.0	9.59	M
2	6.956	6.955	0.001	37406683	20.0	7.70	
							RPD = 21.82
9 MCPA							M
1	6.994	6.994	0.000	10987097	20.0	11.9	M
2	7.155	7.155	0.000	83804849	20.0	14.3	
							RPD = 18.75
10 Dichlorprop							M
1	7.181	7.180	0.001	30283619	0.2000	0.1091	M
2	7.298	7.297	0.001	127406227	0.2000	0.0904	
							RPD = 18.81
11 2,4-D							M
1	7.323	7.326	-0.003	50602303	0.2000	0.1673	M
2	7.515	7.517	-0.002	217039232	0.2000	0.1362	
							RPD = 20.52
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	197004023	0.0500	0.0366	M
2	7.714	7.714	0.000	675390441	0.0500	0.0359	
							RPD = 1.88
13 Silvex (2,4,5-TP)							M
1	7.767	7.769	-0.002	54876357	0.0500	0.0292	M
2	7.845	7.846	-0.001	194520506	0.0500	0.0263	
							RPD = 10.42
14 Chloramben							M
1	7.849	7.855	-0.006	162603579	0.2000	0.1058	M
2	8.158	8.162	-0.004	591965188	0.2000	0.1052	
							RPD = 0.57
15 2,4,5-T							M
1	7.923	7.929	-0.006	62905916	0.0500	0.0287	M
2	8.079	8.083	-0.004	180973536	0.0500	0.0272	
							RPD = 5.17
16 2,4-DB							M
1	8.168	8.175	-0.007	14739200	0.2000	0.0977	M
2	8.297	8.302	-0.005	36947342	0.2000	0.0375	
							RPD = 89.12
17 Dinoseb							M
1	8.222	8.224	-0.002	127464708	0.2000	0.1041	M
2	8.247	8.248	-0.001	409994956	0.2000	0.0952	
							RPD = 8.97
18 Bentazon							M
1	8.298	8.300	-0.002	43923380	0.2000	0.1527	M
2	8.661	8.662	-0.001	122227001	0.2000	0.1520	
							RPD = 0.47
19 Picloram							M
1	8.522	8.529	-0.007	391520728	0.2000	0.1538	M
2	9.003	9.005	-0.002	1348730663	0.2000	0.1292	
							RPD = 17.39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA							M
1	8.622	8.623	-0.001	535390256	0.2000	0.1626	M
2	8.776	8.775	0.001	1600305347	0.2000	0.1629	
						RPD = 0.23	

21 Acifluorfen							
1	9.663	9.666	-0.003	338049880	0.2000	0.1426	
2	9.791	9.792	-0.001	1028601509	0.2000	0.1415	
						RPD = 0.78	

QC Flag Legend

Processing Flags

NC - Not Calibrated

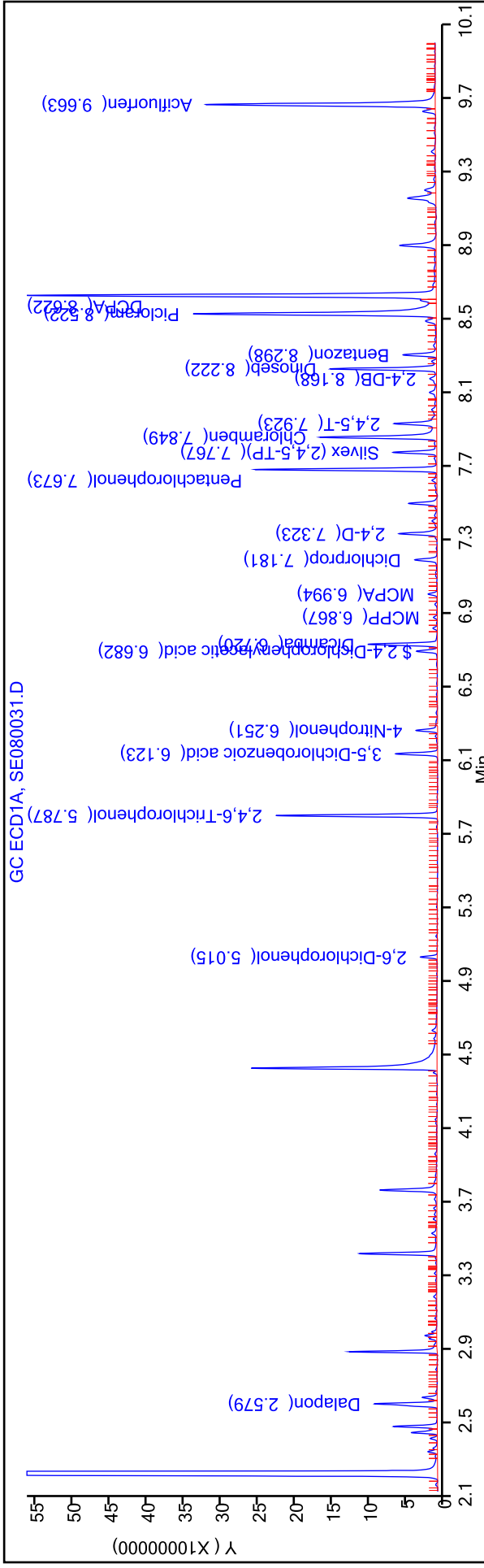
Review Flags

M - Manually Integrated

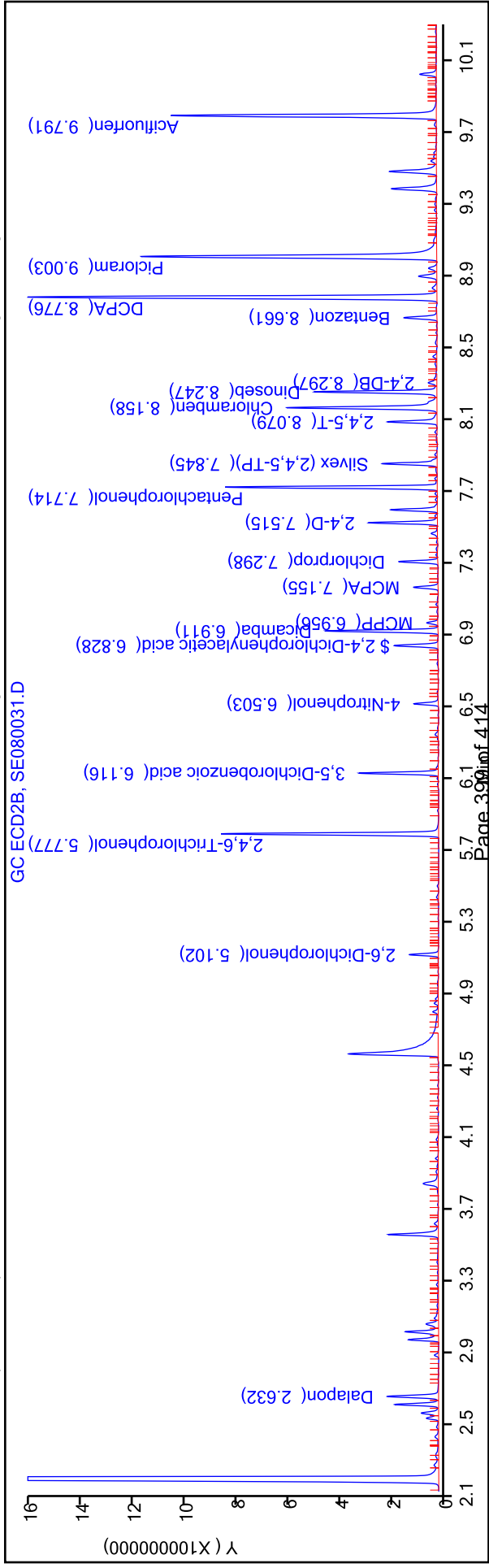
TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Injection Date: 08-May-2018 22:38:36
 Lims ID: LCS 680-522541\11-A
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 31
 Dil. Factor: 1.0000
 ALS Bottle#: 31
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Lims ID: LCS 680-522541/11-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2018 22:38:36 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:29:46

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1236	61.82

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1085	54.25

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/08/2018 11:58

Analysis Batch Number: 523063 End Date: 05/09/2018 08:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-523063/4		05/08/2018 11:58	1	SE080004.D	DB-XLB 0.32 (mm)
IC 680-523063/4		05/08/2018 11:58	1	SE080004.D	DB-35MS 0.32 (mm)
IC 680-523063/5		05/08/2018 12:17	1	SE080005.D	DB-XLB 0.32 (mm)
IC 680-523063/5		05/08/2018 12:17	1	SE080005.D	DB-35MS 0.32 (mm)
IC 680-523063/6		05/08/2018 12:37	1	SE080006.D	DB-XLB 0.32 (mm)
IC 680-523063/6		05/08/2018 12:37	1	SE080006.D	DB-35MS 0.32 (mm)
IC 680-523063/7		05/08/2018 12:56	1	SE080007.D	DB-XLB 0.32 (mm)
IC 680-523063/7		05/08/2018 12:56	1	SE080007.D	DB-35MS 0.32 (mm)
IC 680-523063/8		05/08/2018 13:16	1	SE080008.D	DB-XLB 0.32 (mm)
IC 680-523063/8		05/08/2018 13:16	1	SE080008.D	DB-35MS 0.32 (mm)
IC 680-523063/9		05/08/2018 13:36	1	SE080009.D	DB-XLB 0.32 (mm)
IC 680-523063/9		05/08/2018 13:36	1	SE080009.D	DB-35MS 0.32 (mm)
IC 680-523063/10		05/08/2018 13:55	1	SE080010.D	DB-XLB 0.32 (mm)
IC 680-523063/10		05/08/2018 13:55	1	SE080010.D	DB-35MS 0.32 (mm)
IC 680-523063/11		05/08/2018 14:15	1	SE080011.D	DB-XLB 0.32 (mm)
IC 680-523063/11		05/08/2018 14:15	1	SE080011.D	DB-35MS 0.32 (mm)
ICV 680-523063/12 CCV		05/08/2018 14:35	1	SE080012.D	DB-XLB 0.32 (mm)
ICV 680-523063/12 CCV		05/08/2018 14:35	1	SE080012.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/14		05/08/2018 15:14	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/14		05/08/2018 15:14	1		DB-35MS 0.32 (mm)
CCV 680-523063/28		05/08/2018 21:40	1	SE080028.D	DB-XLB 0.32 (mm)
CCV 680-523063/28		05/08/2018 21:40	1	SE080028.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/29		05/08/2018 21:59	1	SE080029.D	DB-XLB 0.32 (mm)
PIBLK 680-523063/29		05/08/2018 21:59	1	SE080029.D	DB-35MS 0.32 (mm)
MB 680-522541/10-A		05/08/2018 22:19	1	SE080030.D	DB-XLB 0.32 (mm)
MB 680-522541/10-A		05/08/2018 22:19	1	SE080030.D	DB-35MS 0.32 (mm)
LCS 680-522541/11-A		05/08/2018 22:38	1	SE080031.D	DB-XLB 0.32 (mm)
LCS 680-522541/11-A		05/08/2018 22:38	1	SE080031.D	DB-35MS 0.32 (mm)
ZZZZZ		05/08/2018 22:58	1		DB-XLB 0.32 (mm)
ZZZZZ		05/08/2018 22:58	1		DB-35MS 0.32 (mm)
ZZZZZ		05/08/2018 23:17	1		DB-XLB 0.32 (mm)
ZZZZZ		05/08/2018 23:17	1		DB-35MS 0.32 (mm)
ZZZZZ		05/08/2018 23:36	1		DB-XLB 0.32 (mm)
ZZZZZ		05/08/2018 23:36	1		DB-35MS 0.32 (mm)
680-151914-1		05/08/2018 23:56	1	SE080035.D	DB-XLB 0.32 (mm)
680-151914-1		05/08/2018 23:56	1	SE080035.D	DB-35MS 0.32 (mm)
680-151914-2		05/09/2018 00:16	1	SE080036.D	DB-XLB 0.32 (mm)
680-151914-2		05/09/2018 00:16	1	SE080036.D	DB-35MS 0.32 (mm)
680-151914-3		05/09/2018 00:35	1	SE080037.D	DB-XLB 0.32 (mm)
680-151914-3		05/09/2018 00:35	1	SE080037.D	DB-35MS 0.32 (mm)
CCV 680-523063/38		05/09/2018 00:55	1	SE080038.D	DB-XLB 0.32 (mm)
CCV 680-523063/38		05/09/2018 00:55	1	SE080038.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/39		05/09/2018 01:14	1	SE080039.D	DB-XLB 0.32 (mm)
PIBLK 680-523063/39		05/09/2018 01:14	1	SE080039.D	DB-35MS 0.32 (mm)

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/08/2018 11:58

Analysis Batch Number: 523063 End Date: 05/09/2018 08:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-523063/48		05/09/2018 04:10	1		DB-XLB 0.32 (mm)
CCV 680-523063/48		05/09/2018 04:10	1		DB-35MS 0.32 (mm)
PIBLK 680-523063/49		05/09/2018 04:30	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/49		05/09/2018 04:30	1		DB-35MS 0.32 (mm)
CCV 680-523063/61		05/09/2018 08:24	1		DB-XLB 0.32 (mm)
CCV 680-523063/61		05/09/2018 08:24	1		DB-35MS 0.32 (mm)
PIBLK 680-523063/62		05/09/2018 08:44	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/62		05/09/2018 08:44	1		DB-35MS 0.32 (mm)

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Batch Number: 522541 Batch Start Date: 05/03/18 11:22 Batch Analyst: McKinnon, Heather D

Batch Method: 8151A Batch End Date: 05/08/18 14:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HERBwKLS 00049	SG HerbwkSurr 00044
680-151914-A-1	GQ007	8151A, 8151A DOD	T	30.01 g	10 mL		1 mL
680-151914-A-2	GQ008	8151A, 8151A DOD	T	30.03 g	10 mL		1 mL
680-151914-A-3	GQ009	8151A, 8151A DOD	T	30.03 g	10 mL		1 mL
MB 680-522541/10		8151A, 8151A DOD		30.02 g	10 mL		1 mL
LCS 680-522541/11		8151A, 8151A DOD		30.59 g	10 mL	1 mL	1 mL

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.

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Batch Number: 522541 Batch Start Date: 05/03/18 11:22 Batch Analyst: McKinnon, Heather D

Batch Method: 8151A Batch End Date: 05/08/18 14:24

Batch Notes	
Balance ID	34
Batch Comment	BOX RC
Carbitol ID	5424057
Concentration End Time	1424
Concentration Start Time	0800
Diazald ID	5424071
Diethyl Ether ID	5389783
Sulfuric Acid Lot Number	5423977
Potassium Hydroxide ID	5370090
MeCL2 ID	5428080
Acidified Methanol ID	5442092
MTBE ID	5424031
N-evap ID	N-EVAP
Na2SO4 ID	5222493
NaOH Lot #	5423983
Ottawa Sand ID	5407071
pH Paper ID	5426313
Pipette ID	GE38/CC40G
Analyst ID - Reagent Drop	VT
Silica Gel ID	4252783
Silicic Acid ID	5183663
Uncorrected Temperature	EXKD2 77.0 EXKD3 77.6 EXKD4 Degrees C
Water Bath ID	EXKD2 EXKD3 EXKD4
Water Bath Temperature	EXKD2 77.0 EXKD3 77.3 EXKD4 Degrees C

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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151914-1

SDG No.: _____

Project: Andersen AFB, Guam - Herbicides

Client Sample ID

Lab Sample ID

GQ007

680-151914-1

GQ008

680-151914-2

GQ009

680-151914-3

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151914-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

LOQ Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151914-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/07/2018 16:07 End Date: 05/07/2018 16:07

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
680-151914-1	1	T	16:07	X	X																										
680-151914-2	1	T	16:07	X	X																										
680-151914-3	1	T	16:07	X	X																										
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
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ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151914-1

SDG No.:

Batch Number: 523856 Batch Start Date: 05/07/18 16:07 Batch Analyst: Chamberlain, Kim A

Batch Method: Moisture Batch End Date: 05/08/18 09:37

Lab Sample ID	Client Sample ID	Method	Chain	Basis	DishWeight	SampleMassWet	SampleMassDry
680-151914-A-1	GQ007	Moisture		T	1.021 g	6.433 g	6.205 g
680-151914-A-2	GQ008	Moisture		T	1.234 g	6.71 g	6.582 g
680-151914-A-3	GQ009	Moisture		T	1.248 g	6.31 g	6.129 g

Batch Notes	
Balance ID	NA- see documents
Oven ID	Na- See documents

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.

Moisture

MOISTURE CONTENT DETERMINATION

Analytical Batch: 18MCE001 Start Date/Time: 05/07/18 16:07 Temp IN (°C): 105
 Instrument ID: 10601202 End Date/Time: 05/08/18 9:37 Temp Out (°C): 105

Sample ID	Weight of Dish (g)	Wet Weight+ Dish (g)	Dry Weight+ Dish (g)	Percent Solids	Percent Moisture	NOTES
680-151865-1 D194-01	1.239	6.426	6.353	98.6%	1.4%	
D194-02	1.016	5.069	5.029	99.0%	1.0%	
D194-03	1.282	6.132	6.077	98.9%	1.1%	
680-151914-1 D202-01	1.021	6.433	6.205	95.8%	4.2%	
D202-02	1.234	6.71	6.582	97.7%	2.3%	
D202-03	1.248	6.31	6.129	96.4%	3.6%	
680-151915-1 D210-01	1.261	6.397	6.003	92.3%	7.7%	
D210-02	1.265	6.535	6.067	91.1%	8.9%	
D210-03	1.29	6.22	5.822	91.9%	8.1%	
E011-01	1.274	8.774	7.713	85.9%	14.1%	
E021-01	1.257	8.331	7.831	92.9%	7.1%	2.5% ✓
E021-01D	1.296	8.334	7.849	93.1%	6.9%	
E021-02	1.295	8.208	7.649	91.9%	8.1%	
E021-03	0.996	8.405	7.918	93.4%	6.6%	
E021-04	1.263	8.151	7.691	93.3%	6.7%	
E021-05	1.413	8.343	7.842	92.8%	7.2%	
E025-01	1.333	8.922	7.876	86.2%	13.8%	
E025-02	1.099	8.255	7.283	86.4%	13.6%	
E025-03	1.269	8.546	7.63	87.4%	12.6%	
E025-04	1.104	8.041	7.146	87.1%	12.9%	
E025-05	1.086	8.271	6.387	73.8%	26.2%	

COMMENT : Comments: Sample D194-02 was limited in amount

Initial Reading by: NCrist

Final Reading by: NCrist

Reviewed by: 

Thermometer ID: 660330

Shipping and Receiving Documents

CHAIN OF CUSTODY

		1835 W. 205th Street, Torrance, CA 90501 Tel #: 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com		PO NUMBER: 18D210			EMAX CONTROL NO. 18D210								
		SAMPLE STORAGE			PROJECT CODE: AEC1801										
CLIENT : AECOM				MATRIX CODE		PRESERVATIVE		ANALYSIS REQUIRED			TAT				
PROJECT : ANDERSEN AFB, JQ13				DW=Drinking Water		IC = Ice		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">8151A (2,4-D AND 2,4,5-T)</div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p style="font-size: 2em; margin: 0;">/</p> <p style="font-size: 1.5em; margin: 0;">IP 5/10/18</p> </div> </div>			<input type="checkbox"/> Rush __24__hrs. <input type="checkbox"/> Rush __48__hrs. <input type="checkbox"/> Rush __72__hrs. <input type="checkbox"/> 7 days <input type="checkbox"/> 14 days <input type="checkbox"/> 21 days				
COORDINATOR				GW=Ground Water		HC = HCl									
TEL		FAX		EMAIL		WW=Waste Water					HN=HNO3				
SEND REPORT TO BRANT LANDERS				SD=Solid Waste SL=Sl		SH=NaO3									
COMPANY AECOM				SS=Soil/ Sediment		ST=Na2S2O3									
ADDRESS 1001 BISHOP STREET, SUITE 1600				WP=Wipes PP=Pure P		ZA=Zinc Acetate		STANDARD							
HONOLULU HI 96813				AR=Air		HS=H2SO4									
EMAX PM				O=											
SAMPLE ID			SAMPLING			CONTAINER			PRESERVATIVE CODE			COMMENTS			
LAB	CLIENT	LOCATION	DATE	TIME	NO.	SIZE	TYPE	MATR IX CODE	QC	IC					
1	GQ007		4/25/2018	11:00	1	4OZ	JAR	SS		X				EMAX ID 18D210-01 (ISM SAMPLE)	
2	GQ008		4/25/2018	11:05	1	4OZ	JAR	SS		X				EMAX ID 18D210-02 (ISM SAMPLE)	
3	GQ009		4/25/2018	11:10	1	4OZ	JAR	SS		X				EMAX ID 18D219-03 (ISM SAMPLE)	
Instructions :										Cooler #	Temp. (°C)	Sample #s			
PLEASE FOLLOW PROJECT DATA REQUIREMENTS FROM AECOM.													Subcontract to:		
Project Number: #60540676													TA Savannah 5102 LaRoche Avenue Savannah, GA 31404-6019 Main Phone: 912.354.7858		
SAMPLER					COURIER/AIRBILL										
RELINQUISHED BY			Date	Time	RECEIVED BY										
			05/02/18	14:35											
			KAC 5/3/18	5/4/18	0900										
			5/3/18	3.5(3.4)											
<small>NOTICE: Turn-around-time (TAT) for samples shall not begin until all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be \$5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.</small>															



Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 680-151914-1

Login Number: 151914
List Number: 1
Creator: Chamberlain, Kim A

List Source: TestAmerica Savannah

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.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Job Number: 680-151915-1

Job Description: Andersen AFB, Guam - Herbicides

For:

AECOM Technical Services Inc.

1001 Bishop Street

Ste 1600

Honolulu, HI 96813

Attention: Dr. Brant Landers



Approved for release.
Stephanie K Rothmeyer
Project Manager I
5/15/2018 4:14 PM

Designee for
Patrick J McEntee, Manager of Project Management
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0107
patrick.mcentee@testamericainc.com
05/15/2018

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



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Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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)

CASE NARRATIVE

Client: AECOM Technical Services Inc.

Project: Andersen AFB, Guam - Herbicides

Report Number: 680-151915-1

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

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

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

RECEIPT

The samples were received on 5/3/2018 at 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Receipt Exceptions

ISM preparation was performed by EMAX Laboratories for the requested 8151 Herbicides analyses performed by TestAmerica.

Percent moisture analysis was performed by EMAX Laboratories and data was provided to TestAmerica for dry weight correction on analytical results.

CHLORINATED HERBICIDES

Samples GQ004 (680-151915-1), GQ005 (680-151915-2) and GQ006 (680-151915-3) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/03/2018 and analyzed on 05/08/2018.

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

PERCENT SOLIDS

Samples GQ004 (680-151915-1), GQ005 (680-151915-2) and GQ006 (680-151915-3) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 05/07/2018.

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

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Client Sample ID: GQ004

Lab Sample ID: 680-151915-1

No Detections.

Client Sample ID: GQ005

Lab Sample ID: 680-151915-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
2,4-D	8.3	J	9.1	5.5	ug/Kg	1	☼	8151A DOD	Total/NA

Client Sample ID: GQ006

Lab Sample ID: 680-151915-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Savannah

Client Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Client Sample ID: GQ004

Date Collected: 04/24/18 11:40
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-1

Matrix: Solid
 Percent Solids: 92.3

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.7	U M	9.0	2.5	ug/Kg	☼	05/03/18 11:22	05/08/18 22:58	1
2,4-D	9.0	U	9.0	5.4	ug/Kg	☼	05/03/18 11:22	05/08/18 22:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	96		27 - 122				05/03/18 11:22	05/08/18 22:58	1

Client Sample ID: GQ005

Date Collected: 04/24/18 11:45
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-2

Matrix: Solid
 Percent Solids: 91.1

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.7	U	9.1	2.5	ug/Kg	☼	05/03/18 11:22	05/08/18 23:17	1
2,4-D	8.3	J	9.1	5.5	ug/Kg	☼	05/03/18 11:22	05/08/18 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	93		27 - 122				05/03/18 11:22	05/08/18 23:17	1

Client Sample ID: GQ006

Date Collected: 04/24/18 11:50
 Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-3

Matrix: Solid
 Percent Solids: 91.9

Method: 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	4.7	U	9.0	2.5	ug/Kg	☼	05/03/18 11:22	05/08/18 23:36	1
2,4-D	9.0	U M	9.0	5.4	ug/Kg	☼	05/03/18 11:22	05/08/18 23:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	97		27 - 122				05/03/18 11:22	05/08/18 23:36	1

Default Detection Limits

Client: AECOM Technical Services Inc.

Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Method: 8151A DOD - Herbicides (GC) Prep: 8151A

Analyte	LOD	DL	Units	Method
2,4,5-T	8.3	2.3	ug/Kg	8151A DOD
2,4-D	8.3	5.0	ug/Kg	8151A DOD

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Method: 8151A DOD - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA2 (27-122)							
680-151915-1	GQ004	96							
680-151915-2	GQ005	93							
680-151915-3	GQ006	97							
LCS 680-522541/11-A	Lab Control Sample	54							
MB 680-522541/10-A	Method Blank	52							

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Method: 8151A DOD - Herbicides (GC)

Lab Sample ID: MB 680-522541/10-A
Matrix: Solid
Analysis Batch: 523063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522541

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,5-T	4.3	U M	8.3	2.3	ug/Kg		05/03/18 11:22	05/08/18 22:19	1
2,4-D	8.3	U	8.3	5.0	ug/Kg		05/03/18 11:22	05/08/18 22:19	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
2,4-Dichlorophenylacetic acid (Surr)	52		27 - 122				05/03/18 11:22	05/08/18 22:19	1

Lab Sample ID: LCS 680-522541/11-A
Matrix: Solid
Analysis Batch: 523063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-D	65.4	44.5		ug/Kg		68	28 - 144
Surrogate	LCS LCS		Limits				
%Recovery	Qualifier						
2,4-Dichlorophenylacetic acid (Surr)	54		27 - 122				

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

GC Semi VOA

Prep Batch: 522541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151915-1	GQ004	Total/NA	Solid	8151A	
680-151915-2	GQ005	Total/NA	Solid	8151A	
680-151915-3	GQ006	Total/NA	Solid	8151A	
MB 680-522541/10-A	Method Blank	Total/NA	Solid	8151A	
LCS 680-522541/11-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 523063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151915-1	GQ004	Total/NA	Solid	8151A DOD	522541
680-151915-2	GQ005	Total/NA	Solid	8151A DOD	522541
680-151915-3	GQ006	Total/NA	Solid	8151A DOD	522541
MB 680-522541/10-A	Method Blank	Total/NA	Solid	8151A DOD	522541
LCS 680-522541/11-A	Lab Control Sample	Total/NA	Solid	8151A DOD	522541

General Chemistry

Analysis Batch: 523856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-151915-1	GQ004	Total/NA	Solid	Moisture	
680-151915-2	GQ005	Total/NA	Solid	Moisture	
680-151915-3	GQ006	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Client Sample ID: GQ004

Date Collected: 04/24/18 11:40

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ004

Date Collected: 04/24/18 11:40

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-1

Matrix: Solid

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/08/18 22:58	JCK	TAL SAV

Client Sample ID: GQ005

Date Collected: 04/24/18 11:45

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ005

Date Collected: 04/24/18 11:45

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-2

Matrix: Solid

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/08/18 23:17	JCK	TAL SAV

Client Sample ID: GQ006

Date Collected: 04/24/18 11:50

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	523856	05/07/18 16:07	KAC	TAL SAV

Client Sample ID: GQ006

Date Collected: 04/24/18 11:50

Date Received: 05/03/18 09:00

Lab Sample ID: 680-151915-3

Matrix: Solid

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			522541	05/03/18 11:22	HDM	TAL SAV
Total/NA	Analysis	8151A DOD		1	523063	05/08/18 23:36	JCK	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
 Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-18
Alaska	State Program	10		06-30-18
Alaska (UST)	State Program	10	UST-104	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-18
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-18
GA Dept. of Agriculture	State Program	4	N/A	06-12-18
Georgia	State Program	4	803	06-30-18
Hawaii	State Program	9	N/A	06-30-18
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-18
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-18
Kentucky (WW)	State Program	4	90084	12-31-18 *
L-A-B	DoD ELAP		L2463	09-22-19
L-A-B	ISO/IEC 17025		L2463.01	09-22-19
Louisiana	NELAP	6	30690	06-30-18
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-24-18
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-18
Michigan	State Program	5	9925	06-30-18
Mississippi	State Program	4	N/A	06-30-18
Nebraska	State Program	7	TestAmerica-Savannah	06-30-18
New Jersey	NELAP	2	GA769	06-30-18
New Mexico	State Program	6	N/A	06-30-18
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-18
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-18
Pennsylvania	NELAP	3	68-00474	06-30-18
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18
Tennessee	State Program	4	TN02961	06-30-18
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas	State Program	6	T104704185	06-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-17-00213	06-14-20 *
Virginia	NELAP	3	460161	06-14-18
Washington	State Program	10	C805	06-10-18
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-18
Wisconsin	State Program	5	999819810	08-31-18
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-19
New Jersey	NELAP	2	CO004	06-30-18

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Method	Method Description	Protocol	Laboratory
8151A DOD	Herbicides (GC)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV
8151A	Extraction (Herbicides)	SW846	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Andersen AFB, Guam - Herbicides

TestAmerica Job ID: 680-151915-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-151915-1	GQ004	Solid	04/24/18 11:40	05/03/18 09:00
680-151915-2	GQ005	Solid	04/24/18 11:45	05/03/18 09:00
680-151915-3	GQ006	Solid	04/24/18 11:50	05/03/18 09:00

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Instrument ID: CS GS Analysis Batch Number: 523063
 Lab Sample ID: IC 680-523063/4 Client Sample ID: _____
 Date Analyzed: 05/08/18 11:58 Lab File ID: SE080004.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
Picloram	9.01	Baseline Smoothing	kellarj 05/08/18 16:07
Acifluorfen	9.80	Baseline Smoothing	kellarj 05/08/18 16:07

Lab Sample ID: IC 680-523063/8 Client Sample ID: _____

Date Analyzed: 05/08/18 13:16 Lab File ID: SE080008.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
MCPA	7.16	Baseline Smoothing	kellarj 05/08/18 16:10
Dichlorprop	7.30	Baseline Smoothing	kellarj 05/08/18 16:10
2,4-D	7.52	Baseline Smoothing	kellarj 05/08/18 16:10
Pentachlorophenol	7.71	Baseline Smoothing	kellarj 05/08/18 16:10
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj 05/08/18 16:10
2,4,5-T	8.08	Baseline Smoothing	kellarj 05/08/18 16:10
Chloramben	8.16	Baseline Smoothing	kellarj 05/08/18 16:10
Dinoseb	8.25	Baseline Smoothing	kellarj 05/08/18 16:10
2,4-DB	8.30	Baseline Smoothing	kellarj 05/08/18 16:10
Bentazon	8.66	Baseline Smoothing	kellarj 05/08/18 16:10
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj 05/08/18 16:10
Picloram	9.01	Baseline Smoothing	kellarj 05/08/18 16:10

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Instrument ID: CS GS Analysis Batch Number: 523063
 Lab Sample ID: IC 680-523063/11 Client Sample ID: _____
 Date Analyzed: 05/08/18 14:15 Lab File ID: SE080011.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.26	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-D	7.35	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-DB	8.19	Baseline Smoothing	kellarj	05/08/18 16:11
Picloram	8.55	Baseline Smoothing	kellarj	05/08/18 16:11

Lab Sample ID: IC 680-523063/11 Client Sample ID: _____
 Date Analyzed: 05/08/18 14:15 Lab File ID: SE080011.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.52	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-D	7.53	Baseline Smoothing	kellarj	05/08/18 16:11
2,4-DB	8.31	Baseline Smoothing	kellarj	05/08/18 16:11
Picloram	9.01	Baseline Smoothing	kellarj	05/08/18 16:11

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: ICV 680-523063/12 CCV Client Sample ID:
 Date Analyzed: 05/08/18 14:35 Lab File ID: SE080012.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrophenol	6.51	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-Dichlorophenylacetic acid (Surr)	6.83	Baseline Smoothing	kellarj	05/08/18 16:12
Dicamba	6.91	Baseline Smoothing	kellarj	05/08/18 16:12
MCPFP	6.96	Baseline Smoothing	kellarj	05/08/18 16:12
MCPA	7.16	Baseline Smoothing	kellarj	05/08/18 16:12
Dichlorprop	7.30	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-D	7.52	Baseline Smoothing	kellarj	05/08/18 16:12
Pentachlorophenol	7.72	Baseline Smoothing	kellarj	05/08/18 16:12
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj	05/08/18 16:12
2,4,5-T	8.08	Baseline Smoothing	kellarj	05/08/18 16:12
Chloramben	8.16	Baseline Smoothing	kellarj	05/08/18 16:12
Dinoseb	8.25	Baseline Smoothing	kellarj	05/08/18 16:12
2,4-DB	8.30	Baseline Smoothing	kellarj	05/08/18 16:12
Bentazon	8.66	Baseline Smoothing	kellarj	05/08/18 16:12
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj	05/08/18 16:12
Picloram	9.01	Baseline Smoothing	kellarj	05/08/18 16:12
Acifluorfen	9.80	Baseline Smoothing	kellarj	05/08/18 16:12

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: CCV 680-523063/28 Client Sample ID:
 Date Analyzed: 05/08/18 21:40 Lab File ID: SE080028.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dichlorophenylacetic acid (Surr)	6.68	Baseline Smoothing	kellarj	05/09/18 09:21
Dicamba	6.72	Baseline Smoothing	kellarj	05/09/18 09:21
MCPP	6.87	Baseline Smoothing	kellarj	05/09/18 09:21
MCPA	6.99	Baseline Smoothing	kellarj	05/09/18 09:21
Dichlorprop	7.18	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-D	7.33	Baseline Smoothing	kellarj	05/09/18 09:21
Pentachlorophenol	7.67	Baseline Smoothing	kellarj	05/09/18 09:21
Silvex (2,4,5-TP)	7.77	Baseline Smoothing	kellarj	05/09/18 09:21
Chloramben	7.86	Baseline Smoothing	kellarj	05/09/18 09:21
2,4,5-T	7.93	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-DB	8.18	Baseline Smoothing	kellarj	05/09/18 09:21
Dinoseb	8.22	Baseline Smoothing	kellarj	05/09/18 09:21
Bentazon	8.30	Baseline Smoothing	kellarj	05/09/18 09:21
Picloram	8.53	Baseline Smoothing	kellarj	05/09/18 09:21
Tetrathalic acid, tetrachloro-, dimethyl ester	8.62	Baseline Smoothing	kellarj	05/09/18 09:21
Acifluorfen	9.67	Baseline Smoothing	kellarj	05/09/18 09:21

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.:
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: CCV 680-523063/28 Client Sample ID:
 Date Analyzed: 05/08/18 21:40 Lab File ID: SE080028.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dichlorophenylacetic acid (Surr)	6.83	Baseline Smoothing	kellarj	05/09/18 09:21
Dicamba	6.91	Baseline Smoothing	kellarj	05/09/18 09:21
MCPFP	6.96	Baseline Smoothing	kellarj	05/09/18 09:21
MCPA	7.15	Baseline Smoothing	kellarj	05/09/18 09:21
Dichlorprop	7.30	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-D	7.52	Baseline Smoothing	kellarj	05/09/18 09:21
Pentachlorophenol	7.71	Baseline Smoothing	kellarj	05/09/18 09:21
Silvex (2,4,5-TP)	7.85	Baseline Smoothing	kellarj	05/09/18 09:21
2,4,5-T	8.08	Baseline Smoothing	kellarj	05/09/18 09:21
Chloramben	8.16	Baseline Smoothing	kellarj	05/09/18 09:21
Dinoseb	8.25	Baseline Smoothing	kellarj	05/09/18 09:21
2,4-DB	8.30	Baseline Smoothing	kellarj	05/09/18 09:21
Bentazon	8.66	Baseline Smoothing	kellarj	05/09/18 09:21
Tetrathalic acid, tetrachloro-, dimethyl ester	8.78	Baseline Smoothing	kellarj	05/09/18 09:21
Picloram	9.01	Baseline Smoothing	kellarj	05/09/18 09:21

Lab Sample ID: PIBLK 680-523063/29 Client Sample ID:
 Date Analyzed: 05/08/18 21:59 Lab File ID: SE080029.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-D		Invalid Compound ID	kellarj	05/09/18 09:21

Lab Sample ID: PIBLK 680-523063/29 Client Sample ID:
 Date Analyzed: 05/08/18 21:59 Lab File ID: SE080029.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-D		Unspecified		

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: MB 680-522541/10-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:19 Lab File ID: SE080030.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/09/18 09:29

Lab Sample ID: MB 680-522541/10-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:19 Lab File ID: SE080030.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

Lab Sample ID: LCS 680-522541/11-A Client Sample ID: _____
 Date Analyzed: 05/08/18 22:38 Lab File ID: SE080031.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-Dichlorophenylacetic acid (Surr)	6.68	Baseline Smoothing	kellarj 05/09/18 09:29
2,4-D	7.32	Baseline Smoothing	kellarj 05/09/18 09:29
2,4,5-T	7.92	Baseline Smoothing	kellarj 05/09/18 09:29

Lab Sample ID: 680-151915-1 Client Sample ID: GQ004
 Date Analyzed: 05/08/18 22:58 Lab File ID: SE080032.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Invalid Compound ID	kellarj 05/09/18 09:30

HERBICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Instrument ID: CSGS Analysis Batch Number: 523063
 Lab Sample ID: 680-151915-1 Client Sample ID: GQ004
 Date Analyzed: 05/08/18 22:58 Lab File ID: SE080032.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4,5-T		Unspecified	

Lab Sample ID: 680-151915-3 Client Sample ID: GQ006
 Date Analyzed: 05/08/18 23:36 Lab File ID: SE080034.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:30

Lab Sample ID: 680-151915-3 Client Sample ID: GQ006
 Date Analyzed: 05/08/18 23:36 Lab File ID: SE080034.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

Lab Sample ID: PIBLK 680-523063/39 Client Sample ID: _____
 Date Analyzed: 05/09/18 01:14 Lab File ID: SE080039.D GC Column: DB-XLB ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Invalid Compound ID	kellarj 05/09/18 09:22

Lab Sample ID: PIBLK 680-523063/39 Client Sample ID: _____
 Date Analyzed: 05/09/18 01:14 Lab File ID: SE080039.D GC Column: DB-35MS ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION	
		REASON	ANALYST DATE
2,4-D		Unspecified	

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
HERBwKLS_00049	05/05/18	04/25/18	meoh, Lot SG_meOH_00004	200 mL	HERBICVMASTER_00013	20 mL	2,4,6-Trichlorophenol	1 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							3,5-Dichlorobenzoic acid	2 ug/mL
							4-Nitrophenol	2 ug/mL
							Acifluorfen	2 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,5-T	0.5 ug/mL
							2,4-D	2 ug/mL
							2,4-DB	2 ug/mL
							Dalapon	2 ug/mL
							Dicamba	1 ug/mL
							Dichlorprop	2 ug/mL
							Dinoseb	2 ug/mL
							MCPA	200 ug/mL
							MCPP	200 ug/mL
							Pentachlorophenol	0.5 ug/mL
							Picloram	2 ug/mL
							Silvex (2,4,5-TP)	0.5 ug/mL
.HERBICVMASTER_00013	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	2 ug/mL
							Chloramben	2 ug/mL
							DCPA	2 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		1.3 mL	SGHerbICV1_00005	DCPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
Pentachlorophenol	1000 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.HERBMASTER_00032	05/05/18	02/05/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHerbList1_00006	1.3 mL	Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,6-Trichlorophenol	5 ug/mL							
2,6-Dichlorophenol	10 ug/mL							
3,5-Dichlorobenzoic acid	10 ug/mL							
4-Nitrophenol	10 ug/mL							
Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL							
Chloramben	10 ug/mL							
DCPA	10 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
..SGHerbList1_00006	07/31/18		Restek, Lot A0120183			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHerbList1_00008	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
..SGHMCCALFA_00040	06/30/18		RESTEK, Lot A0123630		(Purchased Reagent)		2,4,6-Trichlorophenol 2,6-Dichlorophenol 3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	100 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL
SG HerbWkSurr_00044	07/16/18	04/16/18	Methanol, Lot 5248086	500 mL	SGDCAAF_A_00054	1 mL	2,4-Dichlorophenylacetic acid (Surr)	2 ug/mL
.SGDCAAF_A_00054	10/16/18		Restek, Lot A0128506		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SG HIBLK_00063	11/08/18	05/08/18	MTBE, Lot A0380840	50 mL	DCAAME_00011	500 uL	2,4-Dichlorophenylacetic acid (Surr)	1.004 ug/mL
.DCAAME_00011	11/08/18		Ultra Scientific, Lot CP-4762		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	100.4 ug/mL
SGHERB-1_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.04 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	0.01 ug/mL 0.01 ug/mL 0.01 ug/mL 0.01 ug/mL 0.01 ug/mL 0.0025 ug/mL 0.01 ug/mL 0.01 ug/mL 0.01 ug/mL 0.005 ug/mL 0.01 ug/mL 0.01 ug/mL 1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCP	1 ug/mL
							Pentachlorophenol	0.0025 ug/mL
							Picloram	0.01 ug/mL
							Silvex (2,4,5-TP)	0.0025 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.01 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006		3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
2,4-D	200 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
Dichlorprop	100 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175				(Purchased Reagent)	
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		Restek, Lot A0120175		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
SGHERB-2_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 0.0125 ug/mL 0.025 ug/mL 0.025 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 0.00625 ug/mL 0.025 ug/mL 0.00625 ug/mL 0.025 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration						
					Reagent ID	Volume Added							
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	2,4-DB	2.5 ug/mL						
						Dalapon	2.5 ug/mL						
						Dicamba	1.25 ug/mL						
						Dichlorprop	2.5 ug/mL						
						Dinoseb	2.5 ug/mL						
						MCPA	250 ug/mL						
						MCPP	250 ug/mL						
						Pentachlorophenol	0.625 ug/mL						
						Picloram	2.5 ug/mL						
						Silvex (2,4,5-TP)	0.625 ug/mL						
						2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL						
						3,5-Dichlorobenzoic acid	10 ug/mL						
						4-Nitrophenol	10 ug/mL						
						Acifluorfen	10 ug/mL						
Bentazon	10 ug/mL												
Chloramben	10 ug/mL												
DCPA	10 ug/mL												
SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006	2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
						2,4-DB	10 ug/mL						
						Dalapon	10 ug/mL						
						Dicamba	5 ug/mL						
						Dichlorprop	10 ug/mL						
						Dinoseb	10 ug/mL						
						MCPA	1000 ug/mL						
						MCPP	1000 ug/mL						
						Pentachlorophenol	2.5 ug/mL						
						Picloram	10 ug/mL						
						Silvex (2,4,5-TP)	2.5 ug/mL						
						2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007	2,4-DB	10 ug/mL						
						Dalapon	10 ug/mL						
						Dicamba	5 ug/mL						
						Dichlorprop	10 ug/mL						
						Dinoseb	10 ug/mL						
						MCPA	1000 ug/mL						
						MCPP	1000 ug/mL						
						Pentachlorophenol	2.5 ug/mL						
						Picloram	10 ug/mL						
						Silvex (2,4,5-TP)	2.5 ug/mL						
						2,4,5-T	2.5 ug/mL						
						2,4-D	10 ug/mL						
						SGHerbICV1_00009	0.9 mL				SGHerbICV1_00009	2,4,5-T	2.5 ug/mL
												2,4-D	10 ug/mL
2,4-DB	10 ug/mL												
Dalapon	10 ug/mL												
Dicamba	5 ug/mL												
Dichlorprop	10 ug/mL												
Dinoseb	10 ug/mL												
MCPA	1000 ug/mL												
MCPP	1000 ug/mL												
Pentachlorophenol	2.5 ug/mL												
Picloram	10 ug/mL												
Silvex (2,4,5-TP)	2.5 ug/mL												
2,4,5-T	2.5 ug/mL												
2,4-D	10 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
						SGHerbICV1_00009	07/31/18
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	0.2 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-3_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	0.2 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.05 ug/mL 0.05 ug/mL 0.025 ug/mL 0.05 ug/mL 0.05 ug/mL 5 ug/mL 5 ug/mL 0.0125 ug/mL 0.05 ug/mL 0.0125 ug/mL 0.05 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHERBCALINT_00029	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064 SGHERBADDICV_00013	25 uL 2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL	2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA	2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					1.4 mL	SGHerbICV1_00007	MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006					0.9 mL	SGHerbICV1_00009	Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
.....SGHerbICV1_00007						(Purchased Reagent)	4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCP	20000 ug/mL
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)								3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL							
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641			(Purchased Reagent)	3,5-Dichlorobenzoic acid	0.1 ug/mL
							4-Nitrophenol	0.1 ug/mL
							Acifluorfen	0.1 ug/mL
							Bentazon	0.1 ug/mL
							Chloramben	0.1 ug/mL
							DCPA	0.1 ug/mL
							2,4,5-T	0.025 ug/mL
							2,4-D	0.1 ug/mL
							2,4-DB	0.1 ug/mL
							Dalapon	0.1 ug/mL
							Dicamba	0.05 ug/mL
							Dichlorprop	0.1 ug/mL
							Dinoseb	0.1 ug/mL
							MCPA	10 ug/mL
SGHERB-4_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	25 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid	0.1 ug/mL
							4-Nitrophenol	0.1 ug/mL
							Acifluorfen	0.1 ug/mL
							Bentazon	0.1 ug/mL
							Chloramben	0.1 ug/mL
							DCPA	0.1 ug/mL
							2,4,5-T	0.025 ug/mL
							2,4-D	0.1 ug/mL
							2,4-DB	0.1 ug/mL
							Dalapon	0.1 ug/mL
							Dicamba	0.05 ug/mL
							Dichlorprop	0.1 ug/mL
							Dinoseb	0.1 ug/mL
							MCPA	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCPP	10 ug/mL
							Pentachlorophenol	0.025 ug/mL
							Picloram	0.1 ug/mL
							Silvex (2,4,5-TP)	0.025 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.1 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006							3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013			RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
2,4-D	200 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	200 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)		
.....SGHerbICV1_00007					Restek, Lot A0120175		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration						
					Reagent ID	Volume Added							
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175	50 mL	(Purchased Reagent)	MCP	20000 ug/mL						
						Pentachlorophenol	50 ug/mL						
						Picloram	200 ug/mL						
						Silvex (2,4,5-TP)	50 ug/mL						
						2,4,5-T	50 ug/mL						
						2,4-D	200 ug/mL						
						2,4-DB	200 ug/mL						
						Dalapon	200 ug/mL						
						Dicamba	100 ug/mL						
						Dichlorprop	200 ug/mL						
						Dinoseb	200 ug/mL						
						MCPA	20000 ug/mL						
						MCP	20000 ug/mL						
						Pentachlorophenol	50 ug/mL						
Picloram	200 ug/mL												
Silvex (2,4,5-TP)	50 ug/mL												
2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL												
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641	50 mL	(Purchased Reagent)	3,5-Dichlorobenzoic acid	0.175 ug/mL						
						4-Nitrophenol	0.175 ug/mL						
						Acifluorfen	0.175 ug/mL						
						Bentazon	0.175 ug/mL						
						Chloramben	0.175 ug/mL						
						DCPA	0.175 ug/mL						
						2,4,5-T	0.04375 ug/mL						
						2,4-D	0.175 ug/mL						
						2,4-DB	0.175 ug/mL						
						Dalapon	0.175 ug/mL						
						Dicamba	0.0875 ug/mL						
						Dichlorprop	0.175 ug/mL						
						Dinoseb	0.175 ug/mL						
						MCPA	17.5 ug/mL						
MCP	17.5 ug/mL												
Pentachlorophenol	0.04375 ug/mL												
Picloram	0.175 ug/mL												
Silvex (2,4,5-TP)	0.04375 ug/mL												
2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL												
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	3,5-Dichlorobenzoic acid	2.5 ug/mL						
						4-Nitrophenol	2.5 ug/mL						
						Acifluorfen	2.5 ug/mL						
						Bentazon	2.5 ug/mL						
						Chloramben	2.5 ug/mL						
						DCPA	2.5 ug/mL						
						2,4,5-T	0.625 ug/mL						
						2,4-D	2.5 ug/mL						
						2,4-DB	2.5 ug/mL						
						Dalapon	2.5 ug/mL						
						SGHERB-5_00016	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	50 mL	SGHERBCALINT_00030	3,5-Dichlorobenzoic acid	0.175 ug/mL
												4-Nitrophenol	0.175 ug/mL
												Acifluorfen	0.175 ug/mL
												Bentazon	0.175 ug/mL
Chloramben	0.175 ug/mL												
DCPA	0.175 ug/mL												
2,4,5-T	0.04375 ug/mL												
2,4-D	0.175 ug/mL												
2,4-DB	0.175 ug/mL												
Dalapon	0.175 ug/mL												
Dicamba	0.0875 ug/mL												
Dichlorprop	0.175 ug/mL												
Dinoseb	0.175 ug/mL												
MCPA	17.5 ug/mL												
MCP	17.5 ug/mL												
Pentachlorophenol	0.04375 ug/mL												
Picloram	0.175 ug/mL												
Silvex (2,4,5-TP)	0.04375 ug/mL												
2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
MCPFP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPFP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPFP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPFP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration								
					Reagent ID	Volume Added									
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							3,5-Dichlorobenzoic acid	10 ug/mL							
							4-Nitrophenol	10 ug/mL							
							Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
SGHerbICV1_00006	0.2 mL						2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL						2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							SGHerbICV1_00009	0.9 mL						2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
						SGHerbICV1_00009	07/31/18
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAAPA_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBCALINT_00030	1 mL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERB-6_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	1 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.25 ug/mL 0.25 ug/mL 0.125 ug/mL 0.25 ug/mL 0.25 ug/mL 25 ug/mL 25 ug/mL 0.0625 ug/mL 0.25 ug/mL 0.0625 ug/mL 0.25 ug/mL
SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
					SGHERBCALINT_00029	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEPA	2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
SGDCAAF_00064	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
SGHerbICV1_00006	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHerbICV1_00006	0.2 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013					1.4 mL	SGHerbICV1_00007	MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
Picloram	10 ug/mL							
.....SGHerbICV1_00006					0.9 mL	SGHerbICV1_00009	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
.....SGHerbICV1_00007						(Purchased Reagent)	Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
							Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
Picloram	200 ug/mL							
.....SGHerbICV1_00007						(Purchased Reagent)	Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAFA_00064	25 uL	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
					SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
.....SGHERBADDICV_00013					SGHerbICV1_00006		Chloramben	10 ug/mL							
							DCPA	10 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
.....SGHerbICV1_00007					SGHerbICV1_00007		2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
						SGHerbICV1_00009					SGHerbICV1_00009		2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)								3,5-Dichlorobenzoic acid	200 ug/mL
														4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL							
							Bentazon	200 ug/mL							
							Chloramben	200 ug/mL							
							DCPA	200 ug/mL							
							2,4,5-T	50 ug/mL							
							2,4-D	200 ug/mL							
							2,4-DB	200 ug/mL							
							Dalapon	200 ug/mL							
						SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	2,4,5-T	50 ug/mL
														2,4-D	200 ug/mL
														2,4-DB	200 ug/mL
														Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL							
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641			(Purchased Reagent)	3,5-Dichlorobenzoic acid	0.5 ug/mL
							4-Nitrophenol	0.5 ug/mL
							Acifluorfen	0.5 ug/mL
							Bentazon	0.5 ug/mL
							Chloramben	0.5 ug/mL
							DCPA	0.5 ug/mL
							2,4,5-T	0.125 ug/mL
							2,4-D	0.5 ug/mL
							2,4-DB	0.5 ug/mL
							Dalapon	0.5 ug/mL
							Dicamba	0.25 ug/mL
							Dichlorprop	0.5 ug/mL
							Dinoseb	0.5 ug/mL
							MCPA	50 ug/mL
SGHERB-7_00015	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	2 mL	3,5-Dichlorobenzoic acid	0.5 ug/mL
							4-Nitrophenol	0.5 ug/mL
							Acifluorfen	0.5 ug/mL
							Bentazon	0.5 ug/mL
							Chloramben	0.5 ug/mL
							DCPA	0.5 ug/mL
							2,4,5-T	0.125 ug/mL
							2,4-D	0.5 ug/mL
							2,4-DB	0.5 ug/mL
							Dalapon	0.5 ug/mL
							Dicamba	0.25 ug/mL
							Dichlorprop	0.5 ug/mL
							Dinoseb	0.5 ug/mL
							MCPA	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	MCPP	50 ug/mL
							Pentachlorophenol	0.125 ug/mL
							Picloram	0.5 ug/mL
							Silvex (2,4,5-TP)	0.125 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
..SGHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
4-Nitrophenol	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration							
					Reagent ID	Volume Added									
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	Acifluorfen	2.5 ug/mL							
							Bentazon	2.5 ug/mL							
							Chloramben	2.5 ug/mL							
							DCPA	2.5 ug/mL							
							2,4,5-T	0.625 ug/mL							
							2,4-D	2.5 ug/mL							
							2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							SGHerbICV1_00006	0.2 mL				SGHerbICV1_00006		3,5-Dichlorobenzoic acid	10 ug/mL
														4-Nitrophenol	10 ug/mL
														Acifluorfen	10 ug/mL
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL				SGHerbICV1_00007		2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922		SGHerbICV1_00009	0.9 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
.....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
.....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 1.25 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 250 ug/mL 250 ug/mL 0.625 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL
...HERBICVMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHERBADDICV_00013	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPD Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 2.5 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 5 ug/mL 10 ug/mL 1000 ug/mL 1000 ug/mL 2.5 ug/mL 10 ug/mL 2.5 ug/mL 2.5 ug/mL
					SGHerbICV1_00006	0.2 mL		
					SGHerbICV1_00007	1.4 mL		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.....SGHERBADDICV_00013	07/31/18				SGHerbICV1_00009	0.9 mL	2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
Chloramben	200 ug/mL							
DCPA	200 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
MCPP	20000 ug/mL							
Pentachlorophenol	50 ug/mL							
Picloram	200 ug/mL							
Silvex (2,4,5-TP)	50 ug/mL							
2,4,5-T	50 ug/mL							
2,4-D	200 ug/mL							
2,4-DB	200 ug/mL							
Dalapon	200 ug/mL							
Dicamba	100 ug/mL							
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							
.....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175				(Purchased Reagent)	
.....SGHerbICV1_00007	07/31/18				Restek, Lot A0120175		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
Dichlorprop	200 ug/mL							
Dinoseb	200 ug/mL							
MCPA	20000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		MCP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 1000 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.5 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 100 ug/mL 100 ug/mL 0.25 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL
SGHERB-8_00011	07/31/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL	SGHERBCALINT_00030	4 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP) 2,4-Dichlorophenylacetic acid (Surr)	1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL 1 ug/mL 1 ug/mL 0.5 ug/mL 1 ug/mL 1 ug/mL 100 ug/mL 100 ug/mL 0.25 ug/mL 1 ug/mL 0.25 ug/mL 1 ug/mL
.SGHERBCALINT_00030	07/31/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBCALINT_00028	10 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 0.625 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SCHERBCALINT_00028	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	SGHERBCALINT_00029	10 mL	Dicamba	1.25 ug/mL
							Dichlorprop	2.5 ug/mL
							Dinoseb	2.5 ug/mL
							MCPA	250 ug/mL
							MCPP	250 ug/mL
							Pentachlorophenol	0.625 ug/mL
							Picloram	2.5 ug/mL
							Silvex (2,4,5-TP)	0.625 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	2.5 ug/mL
							4-Nitrophenol	2.5 ug/mL
							Acifluorfen	2.5 ug/mL
							Bentazon	2.5 ug/mL
							Chloramben	2.5 ug/mL
							DCEA	2.5 ug/mL
							2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-DB	2.5 ug/mL
							Dalapon	2.5 ug/mL
							Dicamba	1.25 ug/mL
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							
2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	2.5 ug/mL							
4-Nitrophenol	2.5 ug/mL							
Acifluorfen	2.5 ug/mL							
Bentazon	2.5 ug/mL							
Chloramben	2.5 ug/mL							
DCEA	2.5 ug/mL							
2,4,5-T	0.625 ug/mL							
2,4-D	2.5 ug/mL							
2,4-DB	2.5 ug/mL							
Dalapon	2.5 ug/mL							
Dicamba	1.25 ug/mL							
Dichlorprop	2.5 ug/mL							
Dinoseb	2.5 ug/mL							
MCPA	250 ug/mL							
MCPP	250 ug/mL							
Pentachlorophenol	0.625 ug/mL							
Picloram	2.5 ug/mL							
Silvex (2,4,5-TP)	0.625 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	SGHERBADDICV_00013	2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
							4-Nitrophenol	10 ug/mL
							3,5-Dichlorobenzoic acid	10 ug/mL
							Acifluorfen	10 ug/mL
							Bentazon	10 ug/mL
							Chloramben	10 ug/mL
							DCEPA	10 ug/mL
							2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4-DB	10 ug/mL
							Dalapon	10 ug/mL
							Dicamba	5 ug/mL
							Dichlorprop	10 ug/mL
							Dinoseb	10 ug/mL
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
2,4,5-T	2.5 ug/mL							
2,4-D	10 ug/mL							
2,4-DB	10 ug/mL							
Dalapon	10 ug/mL							
Dicamba	5 ug/mL							
Dichlorprop	10 ug/mL							
Dinoseb	10 ug/mL							
MCPA	1000 ug/mL							
MCPP	1000 ug/mL							
Pentachlorophenol	2.5 ug/mL							
Picloram	10 ug/mL							
Silvex (2,4,5-TP)	2.5 ug/mL							
3,5-Dichlorobenzoic acid	200 ug/mL							
4-Nitrophenol	200 ug/mL							
Acifluorfen	200 ug/mL							
Bentazon	200 ug/mL							
.....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)		

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		Chloramben DCPA 2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	200 ug/mL 200 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL 50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175		(Purchased Reagent)		2,4,5-T 2,4-D 2,4-DB Dalapon Dicamba Dichlorprop Dinoseb MCPA MCPP Pentachlorophenol Picloram Silvex (2,4,5-TP)	50 ug/mL 200 ug/mL 200 ug/mL 200 ug/mL 100 ug/mL 200 ug/mL 200 ug/mL 20000 ug/mL 20000 ug/mL 50 ug/mL 200 ug/mL 50 ug/mL
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
..SGHERBCALINT_00029	07/31/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBICVMMASTER_00014	2.5 mL	3,5-Dichlorobenzoic acid 4-Nitrophenol Acifluorfen Bentazon Chloramben DCPA	2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL 2.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Concentration								
					Reagent ID	Volume Added									
...HERBICVMMASTER_00014	07/31/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGDCAAF_00064	25 uL	2,4-DB	2.5 ug/mL							
							Dalapon	2.5 ug/mL							
							Dicamba	1.25 ug/mL							
							Dichlorprop	2.5 ug/mL							
							Dinoseb	2.5 ug/mL							
							MCPA	250 ug/mL							
							MCPP	250 ug/mL							
							Pentachlorophenol	0.625 ug/mL							
							Picloram	2.5 ug/mL							
							Silvex (2,4,5-TP)	0.625 ug/mL							
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL							
							3,5-Dichlorobenzoic acid	10 ug/mL							
							4-Nitrophenol	10 ug/mL							
							Acifluorfen	10 ug/mL							
Bentazon	10 ug/mL														
Chloramben	10 ug/mL														
DCPA	10 ug/mL														
SGHerbICV1_00006	0.2 mL						2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
SGHerbICV1_00007	1.4 mL						2,4-DB	10 ug/mL							
							Dalapon	10 ug/mL							
							Dicamba	5 ug/mL							
							Dichlorprop	10 ug/mL							
							Dinoseb	10 ug/mL							
							MCPA	1000 ug/mL							
							MCPP	1000 ug/mL							
							Pentachlorophenol	2.5 ug/mL							
							Picloram	10 ug/mL							
							Silvex (2,4,5-TP)	2.5 ug/mL							
							2,4,5-T	2.5 ug/mL							
							2,4-D	10 ug/mL							
							SGHerbICV1_00009	0.9 mL						2,4,5-T	2.5 ug/mL
														2,4-D	10 ug/mL
2,4-DB	10 ug/mL														
Dalapon	10 ug/mL														
Dicamba	5 ug/mL														
Dichlorprop	10 ug/mL														
Dinoseb	10 ug/mL														
MCPA	1000 ug/mL														
MCPP	1000 ug/mL														
Pentachlorophenol	2.5 ug/mL														
Picloram	10 ug/mL														
Silvex (2,4,5-TP)	2.5 ug/mL														
2,4,5-T	2.5 ug/mL														
2,4-D	10 ug/mL														

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
....SGHERBADDICV_00013	07/31/18		RESTEK, Lot A0123922			(Purchased Reagent)	Dinoseb	10 ug/mL
							MCPA	1000 ug/mL
							MCPP	1000 ug/mL
							Pentachlorophenol	2.5 ug/mL
							Picloram	10 ug/mL
							Silvex (2,4,5-TP)	2.5 ug/mL
							3,5-Dichlorobenzoic acid	200 ug/mL
							4-Nitrophenol	200 ug/mL
							Acifluorfen	200 ug/mL
							Bentazon	200 ug/mL
....SGHerbICV1_00006	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Chloramben	200 ug/mL
							DCPA	200 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
							Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
....SGHerbICV1_00007	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL
							Dicamba	100 ug/mL
							Dichlorprop	200 ug/mL
....SGHerbICV1_00009	07/31/18		Restek, Lot A0120175			(Purchased Reagent)	Dinoseb	200 ug/mL
							MCPA	20000 ug/mL
							MCPP	20000 ug/mL
							Pentachlorophenol	50 ug/mL
							Picloram	200 ug/mL
							Silvex (2,4,5-TP)	50 ug/mL
							2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
							2,4-DB	200 ug/mL
							Dalapon	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAAF_00064	11/07/18		Restek, Lot A0132641	10 mL	SGHERBICVINT_00037	700 uL	2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL
SGHERBICV_00014								
	06/30/18	05/08/18	MTBE, Lot ex_mtbe_00073	10 mL			2,4-D	0.04375 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	0.175 ug/mL
.SGHERBICVINT_00037	06/30/18	05/08/18	MTBE, Lot 4648897	20 mL	SGHERBICVINT_00035	10 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
..SGHERBICVINT_00035	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
							2,4-Dichlorophenylacetic acid (Surr)	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
...SGDCAAF_00064	11/07/18		Restek, Lot A0132641		(Purchased Reagent)		2,4-D	200 ug/mL
..SGHERBICVINT_00036	06/30/18	05/07/18	MTBE, Lot 4648897	10 mL	HERBMASTER_00033	2.5 mL	2,4,5-T	0.625 ug/mL
							2,4-D	2.5 ug/mL
...HERBMASTER_00033	06/30/18	05/05/18	MTBE, Lot ex_mtbe_00072	50 mL	SGHerbList1_00007	1.3 mL	2,4,5-T	2.5 ug/mL
							2,4-D	10 ug/mL
							2,4,5-T	2.5 ug/mL
....SGHerbList1_00007	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00008	07/31/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL
....SGHerbList1_00011	11/05/18		Restek, Lot A0120183		(Purchased Reagent)		2,4,5-T	50 ug/mL
							2,4-D	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID (Purchased Reagent)	Volume Added		
...SGDCAFA_00064	11/07/18		Restek, Lot A0132641				2,4-Dichlorophenylacetic acid (Surr)	1000 ug/mL

Reagent

DCAAME_00011

DCAA Methyl Ester Solution

Product Number: PPS-161

Page: 1 of 1

Lot Number: CP-4762

Lot Issue Date: 20-Sep-2016

Expiration Date: 31-Oct-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
DCAA methyl ester	055954-23-9	RM03071	100.0 ± 0.5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSS Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Reagent

SGDCAAF_A_00054



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0128506

Description : DCAA Standard
DCAA Standard 1,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : June 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 53.5730	µg/mL	Unstressed
			+/- 53.6627	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

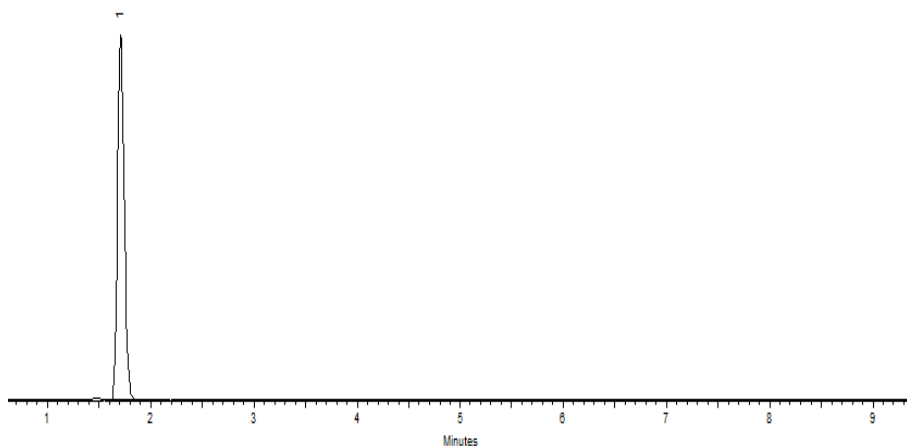
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

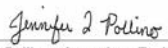


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Joseph Jaglowski - Mix Technician

Date Mixed: 15-Jun-2017

Balance: B251644995


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jun-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGDCAAF_A_00064



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 567804 **Lot No.:** A0132641

Description : DCAA Standard
DCAA Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : November 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-dichlorophenylacetic acid CAS # 19719-28-9 (Lot S30618V) Purity 99%	1,000.8 µg/mL	+/- 5.8733	µg/mL	Gravimetric
			+/- 53.2353	µg/mL	Unstressed
			+/- 53.3244	µg/mL	Stressed

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

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

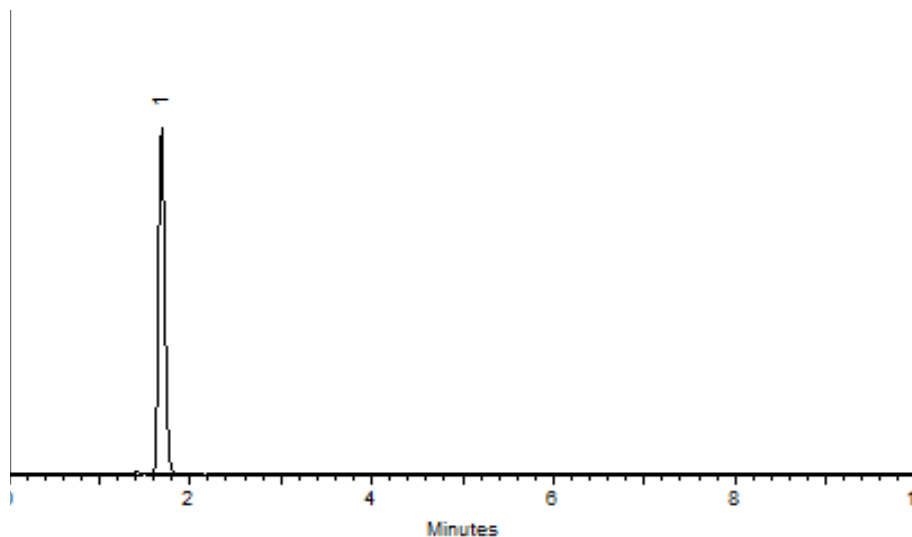
Flow Rate:
1.0 ml/min.

Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 21-Nov-2017 **Balance:** B442140311

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Nov-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHERBADDICV_00013



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473.SEC **Lot No.:** A0123922

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,6-Trichlorophenol	100.0 µg/mL	+/- 0.7088	µg/mL Gravimetric
	CAS # 88-06-2.SEC (Lot UUMYM)			+/- 5.3320 µg/mL Unstressed
	Purity 98%			+/- 5.3409 µg/mL Stressed
2	2,6-Dichlorophenol	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 87-65-0.SEC (Lot SIDBB)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
3	3,5-Dichlorobenzoic acid	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 51-36-5.SEC (Lot 00823)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
4	4-Nitrophenol	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 100-02-7.SEC (Lot 2J5LB)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
5	Acifluorfen (blazer)	200.0 µg/mL	+/- 1.4182	µg/mL Gravimetric
	CAS # 50594-66-6.SEC (Lot 30619)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	Bentazon	201.0 µg/mL	+/- 1.4253	µg/mL Gravimetric
	CAS # 25057-89-0.SEC (Lot 90723)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Chloramben	199.9 µg/mL	+/- 1.4176	µg/mL Gravimetric
	CAS # 133-90-4.SEC (Lot PSJUA)			+/- 10.6640 µg/mL Unstressed
	Purity 98%			+/- 10.6818 µg/mL Stressed

8	DCPA diacid (tetrachloroterephthalic acid)	201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 2136-79-0.SEC (Lot 3931400)			+/-	10.7216	µg/mL	Unstressed
	Purity ----%			+/-	10.7395	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%



Brandon Reish - Mix Technician

Date Mixed: 04-Jan-2017

Balance: B345965662

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00005



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric	
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL	Unstressed
	Purity 95%			+/- 10.6847 µg/mL	Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric	
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL	Unstressed
	Purity 99%			+/- 5.3430 µg/mL	Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric	
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL	Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL	Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric	
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL	Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL	Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric	
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL	Unstressed
	Purity 99%			+/- 10.6860 µg/mL	Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric	
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL	Unstressed
	Purity 99%			+/- 10.7929 µg/mL	Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric	
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL	Unstressed
	Purity 99%			+/- 2.6715 µg/mL	Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

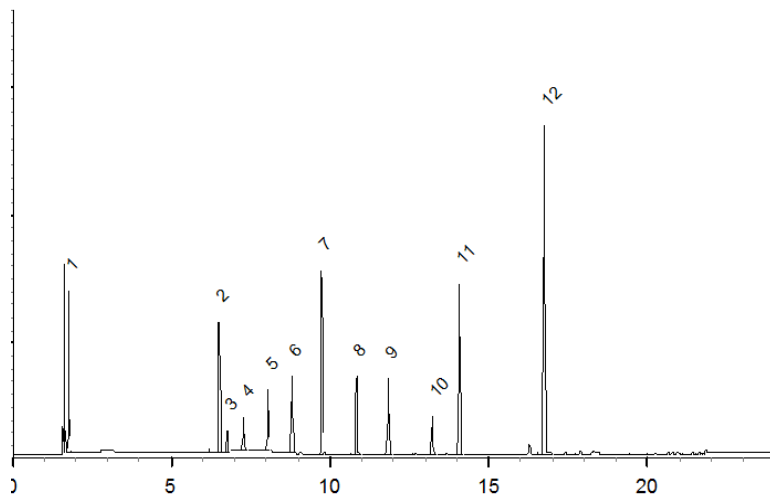
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

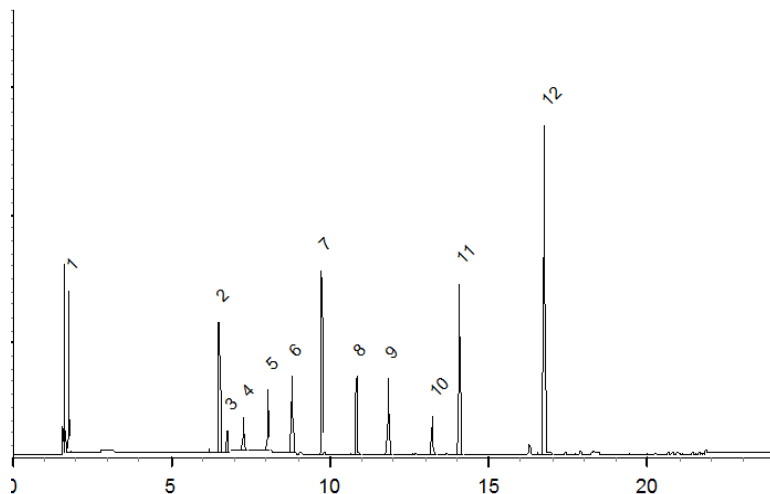
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T			50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB			201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram			200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

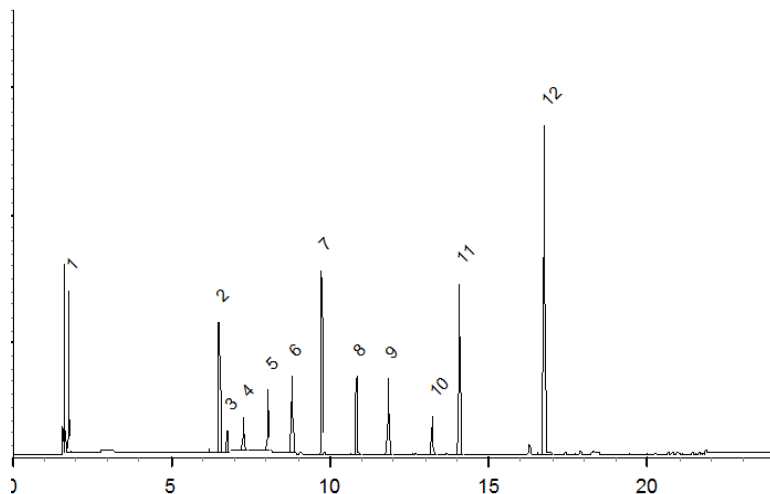
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbICV1_00009



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749.sec **Lot No.:** A0120175

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.0 µg/mL	+/- 1.4180 µg/mL	Gravimetric
	CAS # 75-99-0.SEC (Lot 692400)			+/- 10.6669 µg/mL Unstressed
	Purity 95%			+/- 10.6847 µg/mL Stressed
2	Dicamba	100.0 µg/mL	+/- 0.7091 µg/mL	Gravimetric
	CAS # 1918-00-9.SEC (Lot SZBB175XV)			+/- 5.3341 µg/mL Unstressed
	Purity 99%			+/- 5.3430 µg/mL Stressed
3	MCP (Mecoprop)	20,040.0 µg/mL	+/- 117.3386 µg/mL	Gravimetric
	CAS # 93-65-2.SEC (Lot 1-KAS-91-1)			+/- 1,065.9524 µg/mL Unstressed
	Purity 99%			+/- 1,067.7379 µg/mL Stressed
4	MCPA	20,124.3 µg/mL	+/- 117.8322 µg/mL	Gravimetric
	CAS # 94-74-6.SEC (Lot FBV01/)			+/- 1,070.4364 µg/mL Unstressed
	Purity 98%			+/- 1,072.2294 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5.SEC (Lot 11007)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	202.0 µg/mL	+/- 1.4323 µg/mL	Gravimetric
	CAS # 94-75-7.SEC (Lot 31119)			+/- 10.7750 µg/mL Unstressed
	Purity 99%			+/- 10.7929 µg/mL Stressed
7	Pentachlorophenol	50.0 µg/mL	+/- 0.3545 µg/mL	Gravimetric
	CAS # 87-86-5.SEC (Lot 1239600)			+/- 2.6671 µg/mL Unstressed
	Purity 99%			+/- 2.6715 µg/mL Stressed

8	2,4,5-TP (silvex)		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-72-1.SEC	(Lot 80703)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
9	2,4,5-T		50.0	µg/mL	+/-	0.3545	µg/mL	Gravimetric	
	CAS #	93-76-5.SEC	(Lot 20724)			+/-	2.6671	µg/mL	Unstressed
	Purity	99%				+/-	2.6715	µg/mL	Stressed
10	2,4-DB		201.0	µg/mL	+/-	1.4253	µg/mL	Gravimetric	
	CAS #	94-82-6.SEC	(Lot 20822)			+/-	10.7216	µg/mL	Unstressed
	Purity	99%				+/-	10.7395	µg/mL	Stressed
11	Dinoseb		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	88-85-7.SEC	(Lot 2837700)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
12	Picloram		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric	
	CAS #	1918-02-1.SEC	(Lot 40121)			+/-	10.6683	µg/mL	Unstressed
	Purity	99%				+/-	10.6860	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

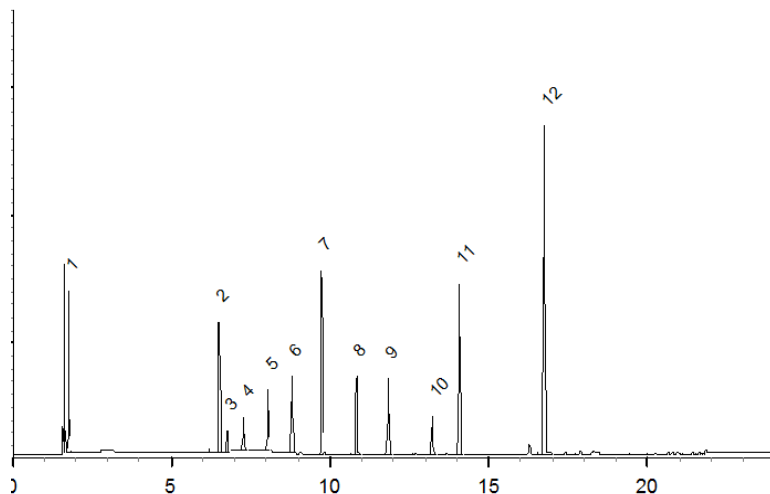
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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

Bradley Meyer
Bradley Meyer - Mix Technician

Date Mixed: 05-Jul-2016 **Balance:** 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00006



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

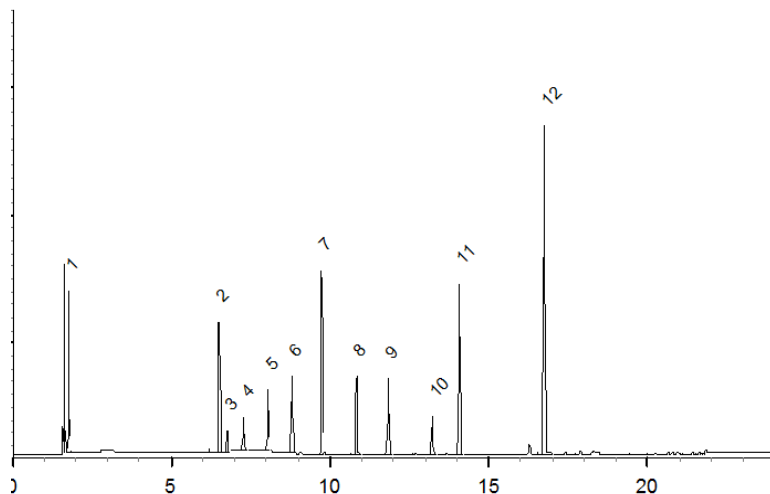
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00007



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

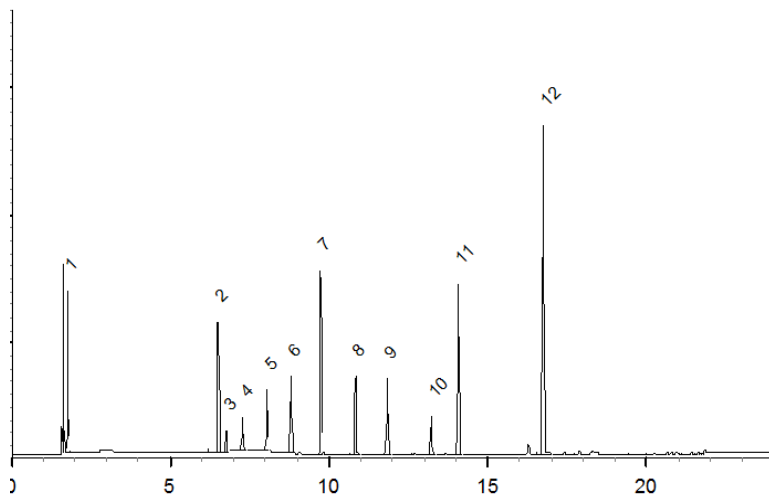
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00008



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000 µg/ml, Methanol, 1 ml/ampul

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

Expiration Date : July 31, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

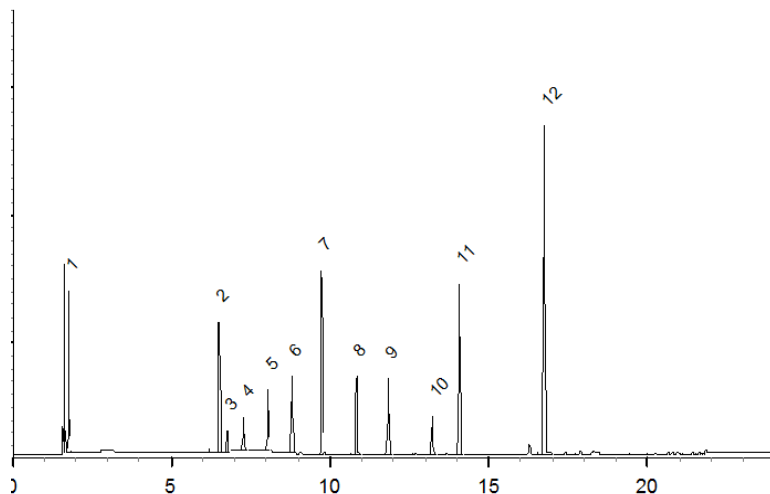
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHerbList1_00011



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569749 **Lot No.:** A0120183

Description : Herbicide List #1 Standard (2015)
Herbicide List #1 Standard (2015) 50-20,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dalapon	200.3 µg/mL	+/- 1.4203 µg/mL	Gravimetric
	CAS # 75-99-0 (Lot 4819200)			+/- 10.6847 µg/mL Unstressed
	Purity 95%			+/- 10.7025 µg/mL Stressed
2	Dicamba	100.2 µg/mL	+/- 0.7105 µg/mL	Gravimetric
	CAS # 1918-00-9 (Lot 3357300)			+/- 5.3451 µg/mL Unstressed
	Purity 98%			+/- 5.3540 µg/mL Stressed
3	MCP (Mecoprop)	20,035.0 µg/mL	+/- 117.3093 µg/mL	Gravimetric
	CAS # 93-65-2 (Lot PB041700)			+/- 1,065.6864 µg/mL Unstressed
	Purity 99%			+/- 1,067.4715 µg/mL Stressed
4	MCPA	20,020.8 µg/mL	+/- 117.2262 µg/mL	Gravimetric
	CAS # 94-74-6 (Lot 4868000)			+/- 1,064.9311 µg/mL Unstressed
	Purity 96%			+/- 1,066.7149 µg/mL Stressed
5	Dichlorprop	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 120-36-5 (Lot 3684800)			+/- 10.6683 µg/mL Unstressed
	Purity 99%			+/- 10.6860 µg/mL Stressed
6	2,4-D	201.0 µg/mL	+/- 1.4253 µg/mL	Gravimetric
	CAS # 94-75-7 (Lot 4457200)			+/- 10.7216 µg/mL Unstressed
	Purity 99%			+/- 10.7395 µg/mL Stressed
7	Pentachlorophenol	50.5 µg/mL	+/- 0.3581 µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 160412JLM)			+/- 2.6937 µg/mL Unstressed
	Purity 99%			+/- 2.6982 µg/mL Stressed

8	2,4,5-TP (silvex)		50.2	µg/mL	+/-	0.3556	µg/mL	Gravimetric	
	CAS #	93-72-1	(Lot 4185600)			+/-	2.6751	µg/mL	Unstressed
	Purity	99%				+/-	2.6795	µg/mL	Stressed
9	2,4,5-T		50.5	µg/mL	+/-	0.3581	µg/mL	Gravimetric	
	CAS #	93-76-5	(Lot 4236800)			+/-	2.6937	µg/mL	Unstressed
	Purity	99%				+/-	2.6982	µg/mL	Stressed
10	2,4-DB		201.5	µg/mL	+/-	1.4288	µg/mL	Gravimetric	
	CAS #	94-82-6	(Lot 4174600)			+/-	10.7483	µg/mL	Unstressed
	Purity	99%				+/-	10.7662	µg/mL	Stressed
11	Dinoseb		202.0	µg/mL	+/-	1.4323	µg/mL	Gravimetric	
	CAS #	88-85-7	(Lot 50001)			+/-	10.7750	µg/mL	Unstressed
	Purity	99%				+/-	10.7929	µg/mL	Stressed
12	Picloram		200.5	µg/mL	+/-	1.4217	µg/mL	Gravimetric	
	CAS #	1918-02-1	(Lot 863400)			+/-	10.6949	µg/mL	Unstressed
	Purity	99%				+/-	10.7128	µg/mL	Stressed
Solvent:	Methanol								
	CAS #	67-56-1							
	Purity	99%							

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

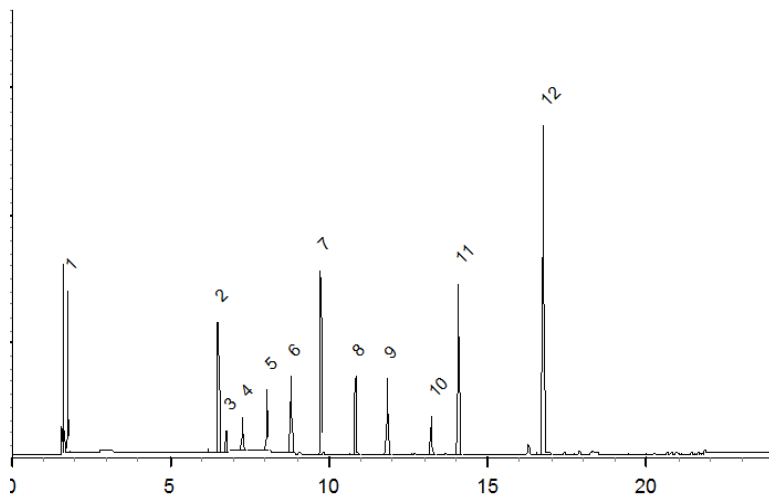
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



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


Joseph Jaglowski - Mix Technician

Date Mixed: 05-Jul-2016

Balance: B251644995


Justine Albertson - Operations Tech-ARM QC

Date Passed: 04-Aug-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
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25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SGHMCCALFA_00040



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Gravimetric Certificate



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570473 **Lot No.:** A0123630

Description : Custom Herbicide Additions Standard
Custom Herbicide Additions Standard 100-200 µg/mL, Acetonitrile, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2018 **Storage:** 10°C or colder

Handling: This product is photosensitive.

C E R T I F I E D V A L U E S

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	2,4,6-Trichlorophenol	100.0 µg/mL	+/-	0.7091	µg/mL	Gravimetric
	CAS # 88-06-2 (Lot MKBL4698V)		+/-	5.3341	µg/mL	Unstressed
	Purity 99%		+/-	5.3430	µg/mL	Stressed
2	2,6-Dichlorophenol	200.0 µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS # 87-65-0 (Lot MKBP8620V)		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
3	3,5-Dichlorobenzoic acid	201.0 µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 51-36-5 (Lot 08004EH)		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
4	4-Nitrophenol	201.0 µg/mL	+/-	1.4253	µg/mL	Gravimetric
	CAS # 100-02-7 (Lot MKBV0501V)		+/-	10.7216	µg/mL	Unstressed
	Purity 99%		+/-	10.7395	µg/mL	Stressed
5	Acifluorfen (blazer)	200.0 µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS # 50594-66-6 (Lot 83-46A)		+/-	10.6683	µg/mL	Unstressed
	Purity 99%		+/-	10.6860	µg/mL	Stressed
6	Bentazon	199.9 µg/mL	+/-	1.4176	µg/mL	Gravimetric
	CAS # 25057-89-0 (Lot 2735000)		+/-	10.6640	µg/mL	Unstressed
	Purity 98%		+/-	10.6818	µg/mL	Stressed
7	Chloramben	202.0 µg/mL	+/-	1.4323	µg/mL	Gravimetric
	CAS # 133-90-4 (Lot 83-49A)		+/-	10.7750	µg/mL	Unstressed
	Purity 99%		+/-	10.7929	µg/mL	Stressed

8 DCPA diacid (tetrachloroterephthalic acid)
CAS # 2136-79-0 (Lot DWL0462)
Purity 99%

201.0 µg/mL

+/- 1.4253
+/- 10.7216
+/- 10.7395

µg/mL
µg/mL
µg/mL

Gravimetric
Unstressed
Stressed

Solvent:

Acetonitrile

CAS # 75-05-8

Purity 99%



Date Mixed: 20-Dec-2016 Balance: 1125113331

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Method 8151 DOD

Herbicides (GC) by Method 8151A DOD

FORM II
HERBICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Savannah

Job No.: 680-151915-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (1): DB-35MS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	DCPAA1 #
GQ004	680-151915-1	96
GQ005	680-151915-2	93
GQ006	680-151915-3	97
	MB 680-522541/10-A	52
	LCS 680-522541/11-A	54

DCPAA = 2,4-Dichlorophenylacetic acid (Surr) $\frac{\text{QC LIMITS}}{27-122}$

Column to be used to flag recovery values

FORM II 8151A DOD

FORM III
HERBICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: SE080031.D

Lab ID: LCS 680-522541/11-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4,5-T	16.3	8.90	54	31-138	
2,4-D	65.4	44.5	68	28-144	

Column to be used to flag recovery and RPD values

FORM IV
HERBICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: MB 680-522541/10-A
 Matrix: Solid Date Extracted: 05/03/2018 11:22
 Lab File ID: (1) SE080030.D Lab File ID: (2) SE080030.D
 Date Analyzed: (1) 05/08/2018 22:19 Date Analyzed: (2) 05/08/2018 22:19
 Instrument ID: (1) CSGS Instrument ID: (2) CSGS
 GC Column: (1) DB-35MS ID: 0.32 (mm) GC Column: (2) DB-XLB ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1		DATE ANALYZED 2	
	LCS 680-522541/11-A	05/08/2018	22:38	05/08/2018	22:38
GQ004	680-151915-1	05/08/2018	22:58	05/08/2018	22:58
GQ005	680-151915-2	05/08/2018	23:17	05/08/2018	23:17
GQ006	680-151915-3	05/08/2018	23:36	05/08/2018	23:36

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: GQ005 Lab Sample ID: 680-151915-2
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/08/2018 23:17 Date Analyzed (2): 05/08/2018 23:17
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.52	7.51	7.53	8.3		19.6
	2		7.32	7.32	7.34	10		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522541/11-A
 Instrument ID (1): CSGS Instrument ID (2): CSGS
 Date Analyzed (1): 05/08/2018 22:38 Date Analyzed (2): 05/08/2018 22:38
 GC Column (1): DB-35MS ID: 0.32 (mm) GC Column (2): DB-XLB ID: 0.32 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4-D	1		7.52	7.51	7.53	44.5		20.5
	2		7.32	7.32	7.34	54.7		
2,4,5-T	1		8.08	8.07	8.09	8.90		5.2
	2		7.92	7.92	7.94	9.37		

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: GQ004 Lab Sample ID: 680-151915-1
 Matrix: Solid Lab File ID: SE080032.D
 Analysis Method: 8151A DOD Date Collected: 04/24/2018 11:40
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.02(g) Date Analyzed: 05/08/2018 22:58
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: 7.7 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.7	U M	9.0	4.7	2.5
94-75-7	2,4-D	9.0	U	9.0	9.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	96		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080032.D
 Lims ID: 680-151915-A-1-A
 Client ID: GQ004
 Sample Type: Client
 Inject. Date: 08-May-2018 22:58:04 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-032
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.682	6.683	-0.001	22672595	0.1072
2	6.831	6.829	0.002	270341985	0.1920
RPD = 56.69					

11 2,4-D

1	7.323	7.326	-0.003	9106923	0.0301
2	7.515	7.517	-0.002	23205306	0.0146
RPD = 69.62					

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080032.D

Injection Date: 08-May-2018 22:58:04

Operator ID: GEM

Lims ID: 680-151915-A-1-A

Instrument ID: CSGS

Worklist Smp#: 32

Client ID: GQ004

Injection Vol: 1.0 ul

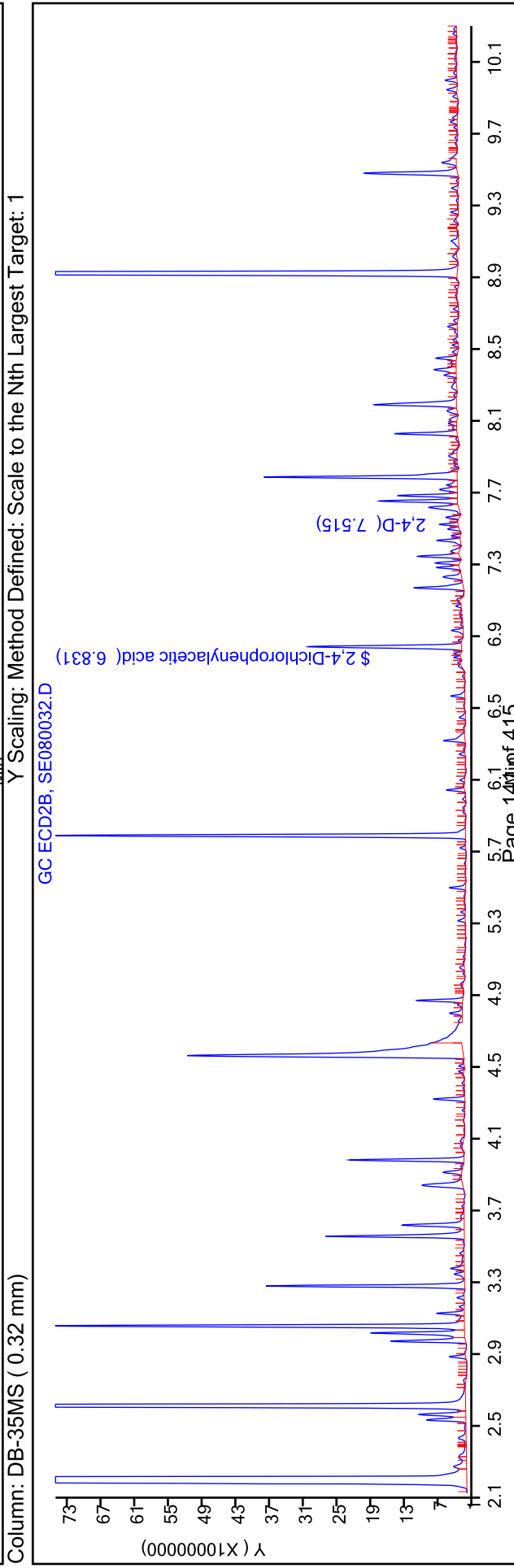
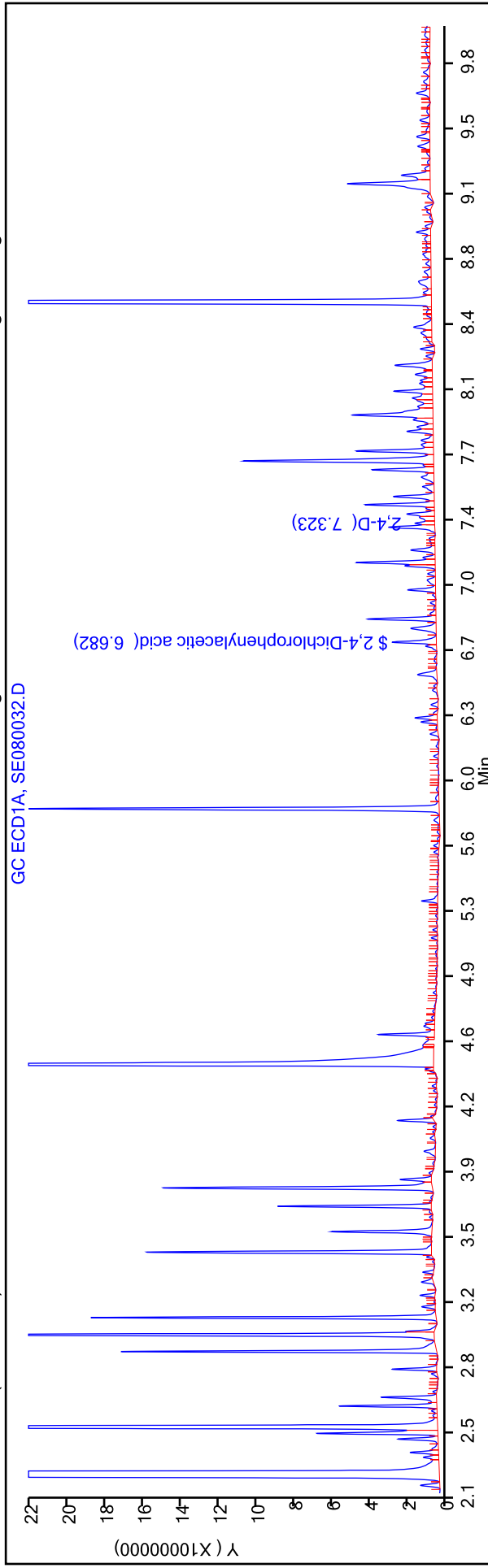
Dil. Factor: 1.0000

ALS Bottle#: 32

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080032.D
 Lims ID: 680-151915-A-1-A
 Client ID: GQ004
 Sample Type: Client
 Inject. Date: 08-May-2018 22:58:04 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-032
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:01

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1072	53.61

Surrogate Recovery, Detector: GC ECD2B

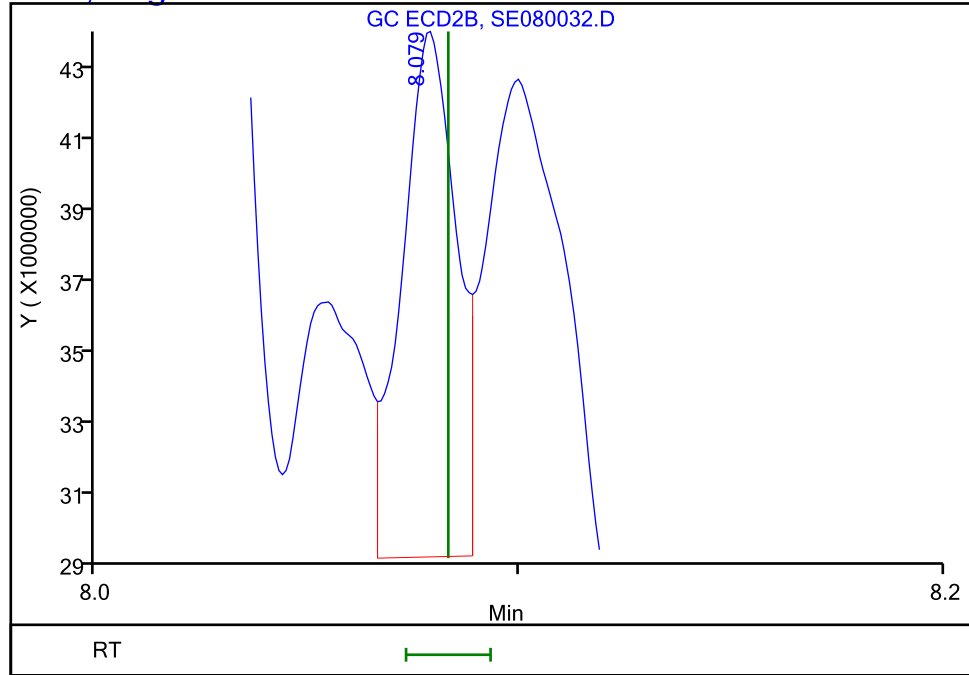
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1920	96.02

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080032.D
Injection Date: 08-May-2018 22:58:04 Instrument ID: CSGS
Lims ID: 680-151915-A-1-A Lab Sample ID: 680-151915-1
Client ID: GQ004
Operator ID: GEM ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

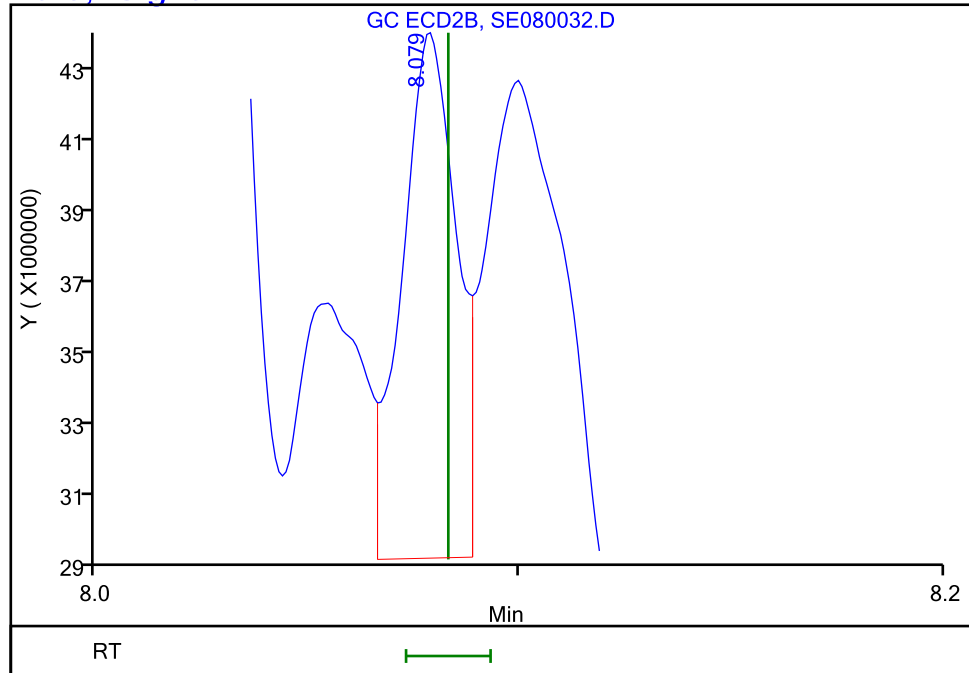
RT: 8.08
Response: 12934996
Amount: 0.001946



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.08
Response: 12934996
Amount: 0.001946



Reviewer: kellarj, 09-May-2018 09:30:01
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: GQ005 Lab Sample ID: 680-151915-2
 Matrix: Solid Lab File ID: SE080033.D
 Analysis Method: 8151A DOD Date Collected: 04/24/2018 11:45
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.03(g) Date Analyzed: 05/08/2018 23:17
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: 8.9 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.7	U	9.1	4.7	2.5
94-75-7	2,4-D	8.3	J	9.1	9.1	5.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	93		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080033.D
 Lims ID: 680-151915-A-2-A
 Client ID: GQ005
 Sample Type: Client
 Inject. Date: 08-May-2018 23:17:31 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

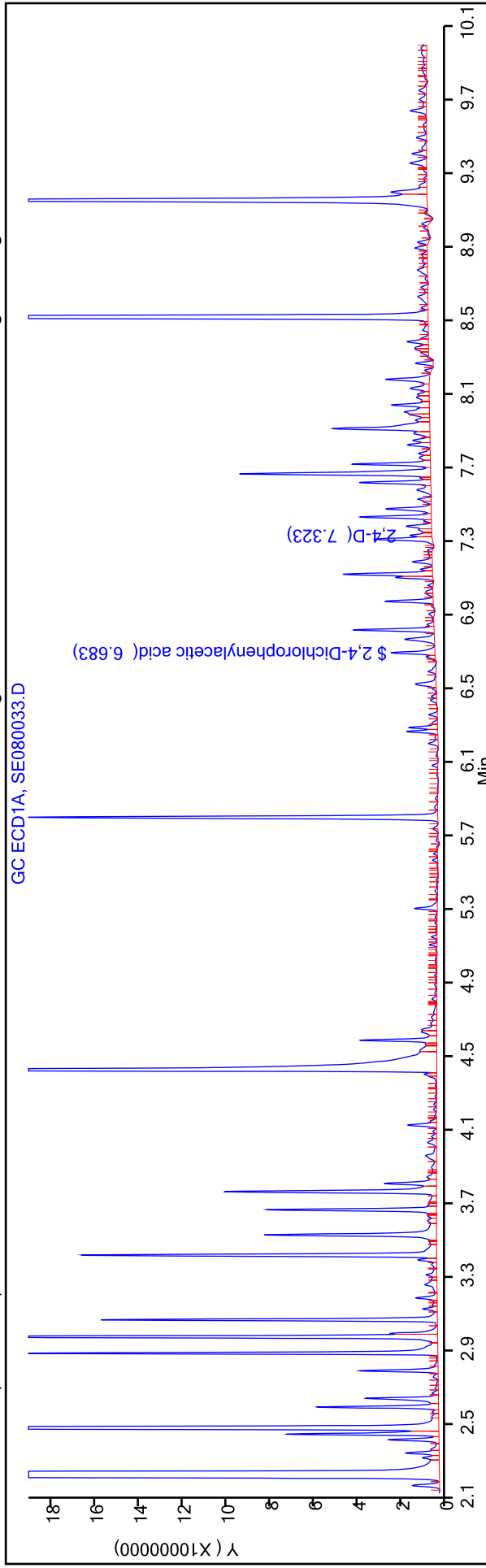
1	6.683	6.683	0.000	19154212	0.0906	
2	6.831	6.829	0.002	262522301	0.1865	
						RPD = 69.23

11 2,4-D

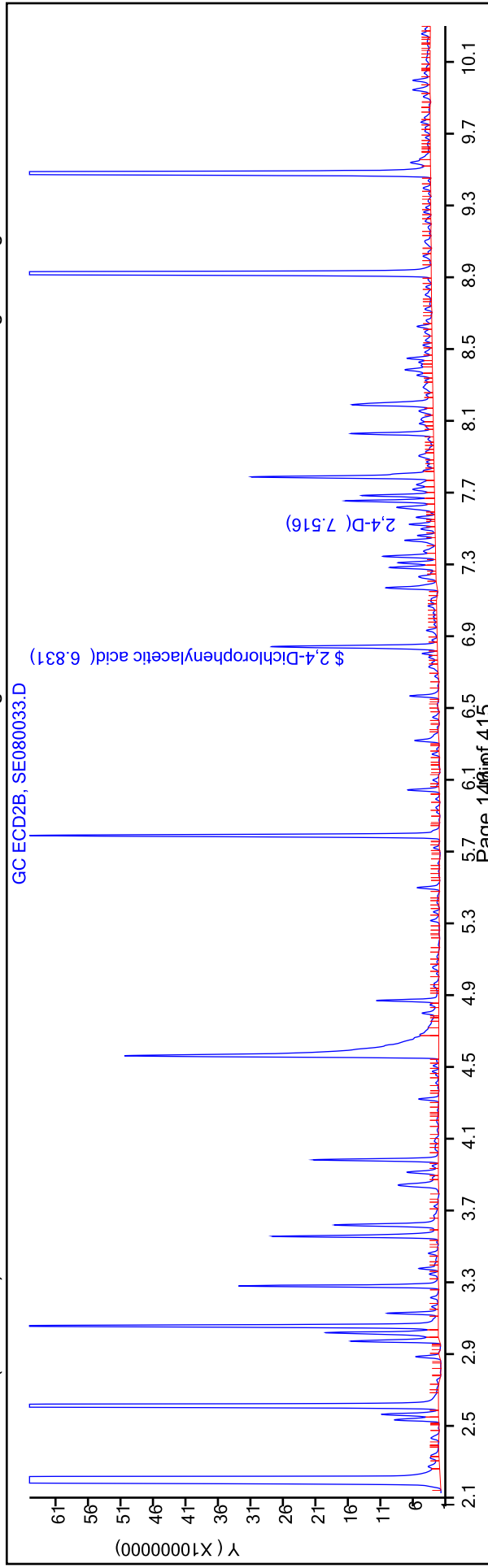
1	7.323	7.326	-0.003	8342960	0.0276	
2	7.516	7.517	-0.001	36113981	0.0227	
						RPD = 19.61

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080033.D
 Injection Date: 08-May-2018 23:17:31
 Instrument ID: CSGS
 Lims ID: 680-151915-A-2-A
 Lab Sample ID: 680-151915-2
 Client ID: GQ005
 Inj. Vol: 1.0 ul
 Dil. Factor: 1.0000
 Method: Herbicides_CSGS
 Limit Group: 8151A - DOD_V5
 Operator ID: GEM
 Worklist Smp#: 33
 ALS Bottle#: 33

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080033.D
 Lims ID: 680-151915-A-2-A
 Client ID: GQ005
 Sample Type: Client
 Inject. Date: 08-May-2018 23:17:31 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-033
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:10

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.0906	45.29

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1865	93.24

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Savannah</u>	Job No.: <u>680-151915-1</u>
SDG No.: _____	
Client Sample ID: <u>GQ006</u>	Lab Sample ID: <u>680-151915-3</u>
Matrix: <u>Solid</u>	Lab File ID: <u>SE080034.D</u>
Analysis Method: <u>8151A DOD</u>	Date Collected: <u>04/24/2018 11:50</u>
Extraction Method: <u>8151A</u>	Date Extracted: <u>05/03/2018 11:22</u>
Sample wt/vol: <u>30.15(g)</u>	Date Analyzed: <u>05/08/2018 23:36</u>
Con. Extract Vol.: <u>10(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	GC Column: <u>DB-35MS</u> ID: <u>0.32(mm)</u>
% Moisture: <u>8.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>523063</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.7	U	9.0	4.7	2.5
94-75-7	2,4-D	9.0	U M	9.0	9.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	97		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080034.D
 Lims ID: 680-151915-A-3-A
 Client ID: GQ006
 Sample Type: Client
 Inject. Date: 08-May-2018 23:36:57 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-034
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.682	6.683	-0.001	32729863	0.1548
2	6.830	6.829	0.001	272544502	0.1936

RPD = 22.30

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080034.D

Injection Date: 08-May-2018 23:36:57

Operator ID: GEM

Lims ID: 680-151915-A-3-A

Worklist Smp#: 34

Client ID: GQ006

Injection Vol: 1.0 ul

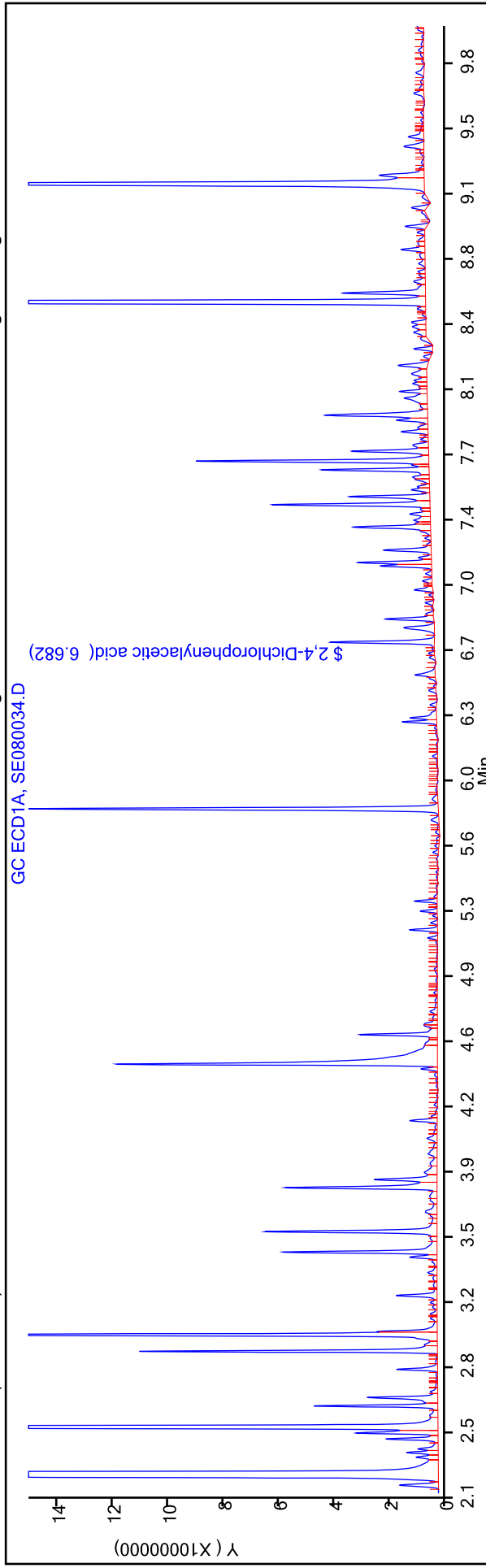
ALS Bottle#: 34

Method: Herbicides_CSGS

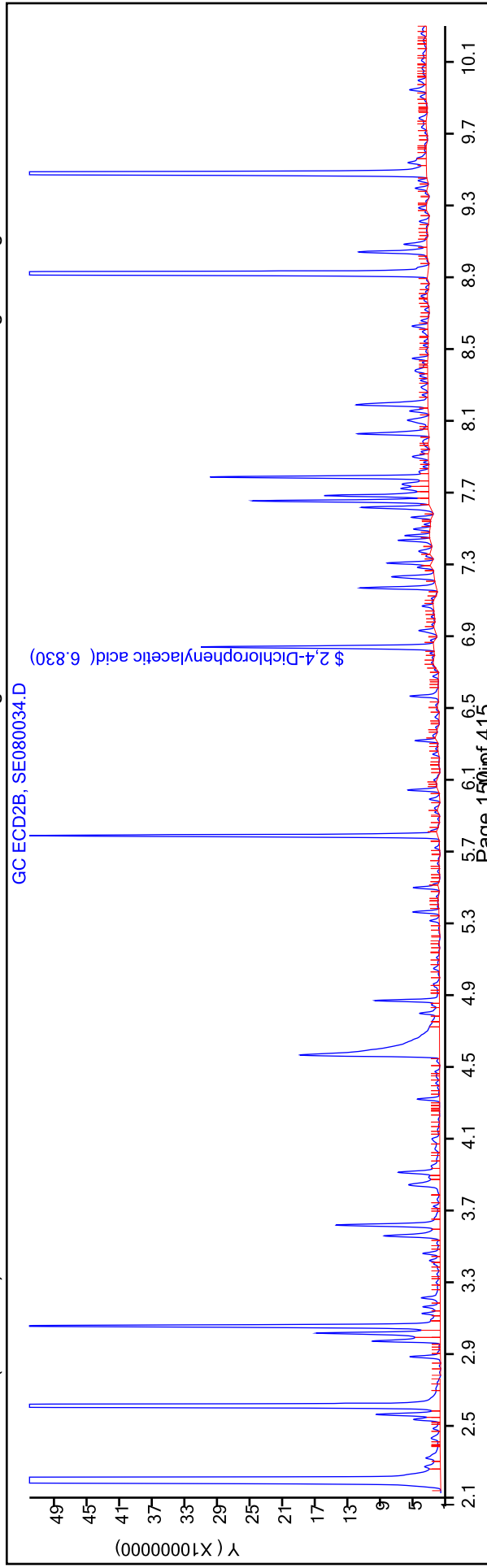
Dil. Factor: 1.0000

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080034.D
 Lims ID: 680-151915-A-3-A
 Client ID: GQ006
 Sample Type: Client
 Inject. Date: 08-May-2018 23:36:57 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-034
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:30:18

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1548	77.38

Surrogate Recovery, Detector: GC ECD2B

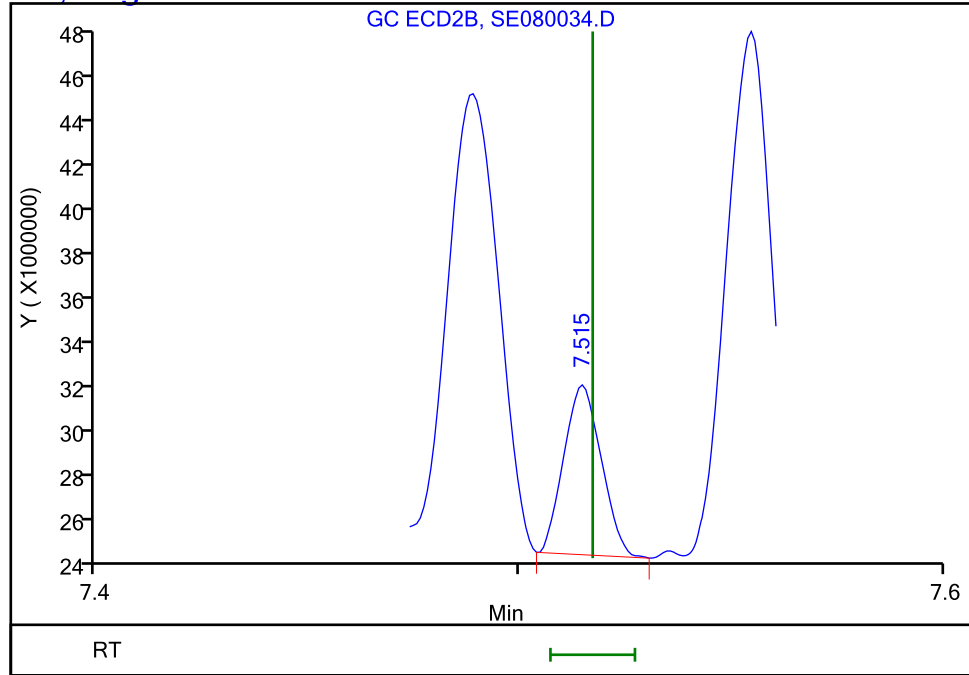
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1936	96.80

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080034.D
Injection Date: 08-May-2018 23:36:57 Instrument ID: CSGS
Lims ID: 680-151915-A-3-A Lab Sample ID: 680-151915-3
Client ID: GQ006
Operator ID: GEM ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

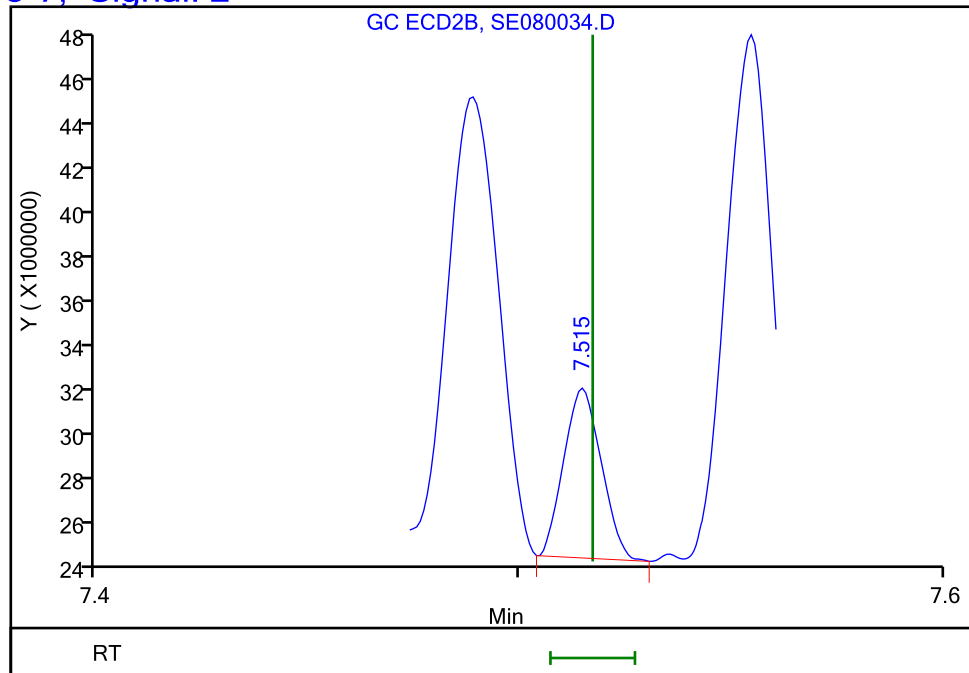
RT: 7.51
Response: 4710776
Amount: 0.002956



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.51
Response: 4710776
Amount: 0.002956



Reviewer: kellarj, 09-May-2018 09:30:18
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.580	2.580	2.579	++++	2.579	2.580	2.580	2.580	2.559 - 2.599	2.580
3,5-Dichlorobenzoic acid	6.126	6.125	6.124	++++	6.123	6.123	6.123	6.123	6.114 - 6.134	6.124
4-Nitrophenol	6.263	6.258	6.254	++++	6.251	6.251	6.250	6.250	6.243 - 6.263	6.254
Dicamba	6.721	6.720	6.721	++++	6.721	6.721	6.720	6.721	6.710 - 6.730	6.721
MCPP	6.868	6.867	6.866	++++	6.868	6.868	6.870	6.872	6.857 - 6.877	6.868
MCPA	6.996	6.995	6.994	++++	6.994	6.995	6.996	7.000	6.984 - 7.004	6.996
Dichlorprop	7.182	7.182	7.181	++++	7.181	7.181	7.180	7.181	7.170 - 7.190	7.181
2,4-D	7.346	7.337	7.331	++++	7.324	7.323	7.322	7.323	7.316 - 7.336	7.329
Pentachlorophenol	7.674	7.673	7.674	++++	7.673	7.674	7.674	7.675	7.664 - 7.684	7.674
Silvex (2,4,5-TP)	7.776	7.771	7.771	++++	7.767	7.768	7.767	7.768	7.759 - 7.779	7.770
Chloramben	7.868	7.864	7.860	++++	7.852	7.850	7.849	7.848	7.845 - 7.865	7.856
2,4,5-T	7.937	7.935	7.933	++++	7.925	7.924	7.922	7.923	7.919 - 7.939	7.928
2,4-DB	8.185	8.182	8.178	++++	8.171	8.169	8.167	8.167	8.165 - 8.185	8.174
Dinoseb	8.227	8.225	8.225	++++	8.222	8.223	8.223	8.224	8.214 - 8.234	8.224
Bentazon	8.306	8.304	8.301	++++	8.299	8.299	8.299	8.299	8.290 - 8.310	8.301
Picloram	8.546	8.538	8.533	++++	8.526	8.525	8.523	8.523	8.519 - 8.539	8.531
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.626	8.625	8.624	++++	8.623	8.623	8.625	8.626	8.613 - 8.633	8.625
Acifluorfen	9.670	9.668	9.667	++++	9.665	9.665	9.665	9.667	9.656 - 9.676	9.667
2,4-Dichlorophenylacetic acid (Surr)	6.685	6.684	6.683	++++	6.683	6.683	6.683	6.683	6.673 - 6.693	6.683

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.:

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	590623000 501343863	548749400 505359752	505816280 505630140	++++ 511012321					Ave		524076394		6.4		20.0			
3,5-Dichlorobenzoic acid	320222900 310170354	325925160 330009804	302358360 330009804	++++ 337068861					Ave		321415612		3.7		20.0			
4-Nitrophenol	71198600 97415017	92280320 107969032	84618080 96163496	++++ 97562965					Ave		92458215.7		12.6		20.0			
Dicamba	106926900 1046294606	1056001840 1085307760	981963600 1129742140	++++ 1170487746					Ave		1077009527		5.6		20.0			
MCPP	383358 493718	515556 507506	513185 781805	++++ 1043440					Qua		-375682.35	5947.60489			0.9990		0.9900	
MCPA	684536 1015244	855075 1035632	874696 1031921	++++ 984673					Ave		925968.148		14.0		20.0			
Dichlorprop	269946200 274910263	274874480 282466000	261287600 288126840	++++ 290874356					Ave		277497963		3.8		20.0			
2,4-D	240093400 309104989	269609520 325959236	270573020 344276094	++++ 357181097					Ave		302399622		14.4		20.0			
Pentachlorophenol	4403400800 5421816411	4723432800 5716695024	4804851680 6102875736	++++ 6514196396					Ave		5383895550		14.5		20.0			
Silvex (2,4,5-TP)	1412480800 1934512549	1589272800 2084549792	1624198880 2215309200	++++ 2290775776					Ave		1878728542		18.1		20.0			
Chloramben	1014630400 1540114857	1125919240 1683249404	1201713680 1896110694	++++ 21248006109					Qua		1661493099	484746839			1.0000		0.9900	
2,4,5-T	2273542000 2137927269	2222943840 2194574216	2125359040 2188067564	++++ 2188067564					Ave		2193840481		2.3		20.0			
2,4-DB	95715600 148913017	1066596600 167659108	115257020 191517264	++++ 208315295					Qua		-2436902.3	172002569			0.9990		0.9900	
Dinoseb	1080237600 1186151777	1085648760 1272822120	1065912980 1373798070	++++ 1502700567					Ave		1223895982		13.7		20.0			

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

ANALYTE	CF				CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2						
Bentazon	316467700 271492754	279450640 287045072	274389100 288476476	274389100 295542031	Ave	287551968			5.3	20.0				
Picloram	1624991300 2449319440	1765360320 2701195528	1895185740 3103274140	1895185740 3668133130	Qua	-26505316	2539444890	1158759739			1.0000			0.9900
Tetraphthalic acid, tetrachloro-, dimethyl	2893947000 3231119337	3086549440 3370780948	3028981420 3593631444	3028981420 3847093339	Ave		3293157561		10.2	20.0				
Acifluorfen	1819999100 2329574200	1959295600 2532153916	1944516240 2764112324	1944516240 3202033523	Qua	-14470608	2348239053	869421475			1.0000			0.9900
2,4-Dichlorophenylacetic acid (Surr)	232590900 200079320	221537720 204599376	196434220 210440590	196434220 214663766	Ave		211477985		6.0	20.0				

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)							
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	
Dalapon	Ave	5906230 126339938	13718735 252815070	25290814 511012321	+++++	87735176	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.0175						
3,5-Dichlorobenzoic acid	Ave	3202229 81038461	8148129 165004902	15117918 337068861	+++++	54279812	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
4-Nitrophenol	Ave	711986 26992258	2307008 48081748	4230904 97562965	+++++	17047628	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Dicamba	Ave	5346345 135663470	13200023 282435535	24549090 585243873	+++++	91550778	0.00500 0.125	0.0125 0.250	0.0250 0.500	+++++	0.0875						
MCP	Qua	383358 12687646	1288891 39090261	2565927 104343971	+++++	8640069	1.00 25.0	2.50 50.0	5.00 100	+++++	17.5						
MCPA	Ave	684536 25890792	2137688 51596040	4373482 98467290	+++++	17766771	1.00 25.0	2.50 50.0	5.00 100	+++++	17.5						
Dichlorprop	Ave	2699462 70616500	6871862 144063420	13064380 290874356	+++++	48109296	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
2,4-D	Ave	2400934 81489809	6740238 172138047	13528651 357181097	+++++	54093373	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Pentachlorophenol	Ave	11008502 357293439	29521455 762859467	60060646 1628549099	+++++	237204468	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
Silvex (2,4,5-TP)	Ave	3531202 130284362	9932955 276913650	20302486 572693944	+++++	84634924	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
Chloramben	Qua	10146304 420812351	28147981 948055347	60085684 2124806109	+++++	269520100	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
2,4,5-T	Ave	5683855 138404340	13893399 274321777	26566988 547016891	+++++	93534318	0.00250 0.0625	0.00625 0.125	0.0125 0.250	+++++	0.0438						
2,4-DB	Qua	957156 41914777	2666490 95758632	5762851 208315295	+++++	26059778	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Dinoseb	Ave	10802376 318205530	27141219 686899035	53295649 1502700567	+++++	207576561	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						
Bentazon	Ave	3164677 71761268	6986266 144238238	13719455 295542031	+++++	47511232	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175						

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-XLB ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57164

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Picloram	Qua	16249913 675298882	44134008 1551637070	94759287 3668133130	+++++	428630902	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	28939470 842695237	77163736 1796815722	151449071 3847093339	+++++	565445884	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
Acifluorfen	Qua	18199991 633038479	48982390 1382056162	97225812 3202033523	+++++	407675485	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	2325909 51149844	5538443 105220295	9821711 214663766	+++++	35013881	0.0100 0.250	0.0250 0.500	0.0500 1.00	+++++	0.175			

Curve Type Legend:
 Ave = Average
 Qua = Quadratic

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-May-2018 11:58:00 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:24:59 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:07:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	511012321	1.00	0.9751	
2	2.635	2.632	0.003	1725206867	1.00	1.07	
						RPD = 9.32	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	95938059	NC	NC	
2	5.103	5.102	0.001	555849594	NC	NC	
						RPD = 4.71	
3 2,4,6-Trichlorophenol							
1	5.788	5.786	0.002	1387562807	NC	NC	
2	5.780	5.776	0.004	5355785086	NC	NC	
						RPD = 10.60	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	337068861	1.00	1.05	
2	6.118	6.116	0.002	1954171685	1.00	1.09	
						RPD = 3.63	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	97562965	1.00	1.06	
2	6.503	6.505	-0.002	334991246	1.00	1.12	
						RPD = 5.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	214663766	1.00	1.02	
2	6.831	6.829	0.002	1537345376	1.00	1.09	
						RPD = 7.31	
7 Dicamba							
1	6.721	6.720	0.001	585243873	0.5000	0.5434	
2	6.914	6.910	0.004	2806366329	0.5000	0.5603	
						RPD = 3.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.872	6.867	0.005	104343971	100.0	99.8	
2	6.960	6.955	0.005	444937631	100.0	101.1	
						RPD = 1.25	
9 MCPA							
1	7.000	6.994	0.006	98467290	100.0	106.3	
2	7.161	7.155	0.006	1151515629	100.0	100.2	
						RPD = 5.90	
10 Dichlorprop							
1	7.181	7.180	0.001	290874356	1.00	1.05	
2	7.300	7.297	0.003	1571966456	1.00	1.12	
						RPD = 6.18	
11 2,4-D							
1	7.323	7.326	-0.003	357181097	1.00	1.18	
2	7.517	7.517	0.000	1888747044	1.00	1.19	
						RPD = 0.35	
12 Pentachlorophenol							
1	7.675	7.674	0.001	1628549099	0.2500	0.3025	
2	7.718	7.714	0.004	5004401348	0.2500	0.2661	
						RPD = 12.81	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	572693944	0.2500	0.3048	
2	7.848	7.846	0.002	2191601950	0.2500	0.2965	
						RPD = 2.77	
14 Chloramben							
1	7.848	7.855	-0.007	2124806109	1.00	1.00	
2	8.161	8.162	-0.001	6392220091	1.00	1.14	
						RPD = 12.86	
15 2,4,5-T							
1	7.923	7.929	-0.006	547016891	0.2500	0.2493	
2	8.082	8.083	-0.001	2066383005	0.2500	0.3109	
						RPD = 21.97	
16 2,4-DB							
1	8.167	8.175	-0.008	208315295	1.00	1.00	
2	8.298	8.302	-0.004	1002259721	1.00	1.02	
						RPD = 1.78	
17 Dinoseb							
1	8.224	8.224	0.000	1502700567	1.00	1.23	
2	8.252	8.248	0.004	4922703086	1.00	1.07	
						RPD = 13.86	
18 Bentazon							
1	8.299	8.300	-0.001	295542031	1.00	1.03	
2	8.664	8.662	0.002	907942100	1.00	1.13	
						RPD = 9.41	
19 Picloram							
1	8.523	8.529	-0.006	3668133130	1.00	1.00	M
2	9.011	9.005	0.006	11467491007	1.00	1.03	M
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.626	8.623	0.003	3847093339	1.00	1.17	
2	8.784	8.775	0.009	9887348056	1.00	1.01	
							RPD = 14.85

21 Acifluorfen

1	9.667	9.666	0.001	3202033523	1.00	1.00	M
2	9.799	9.792	0.007	9631196972	1.00	0.8404	M
							RPD = 17.32

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-8_00011

Amount Added: 1.00

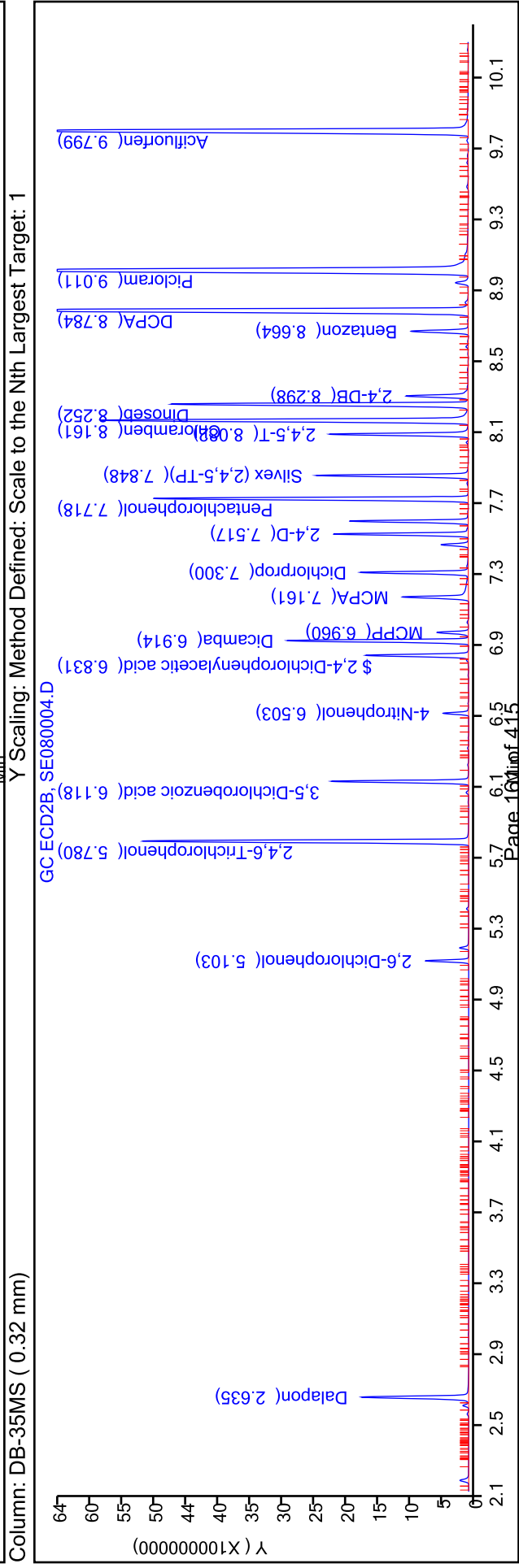
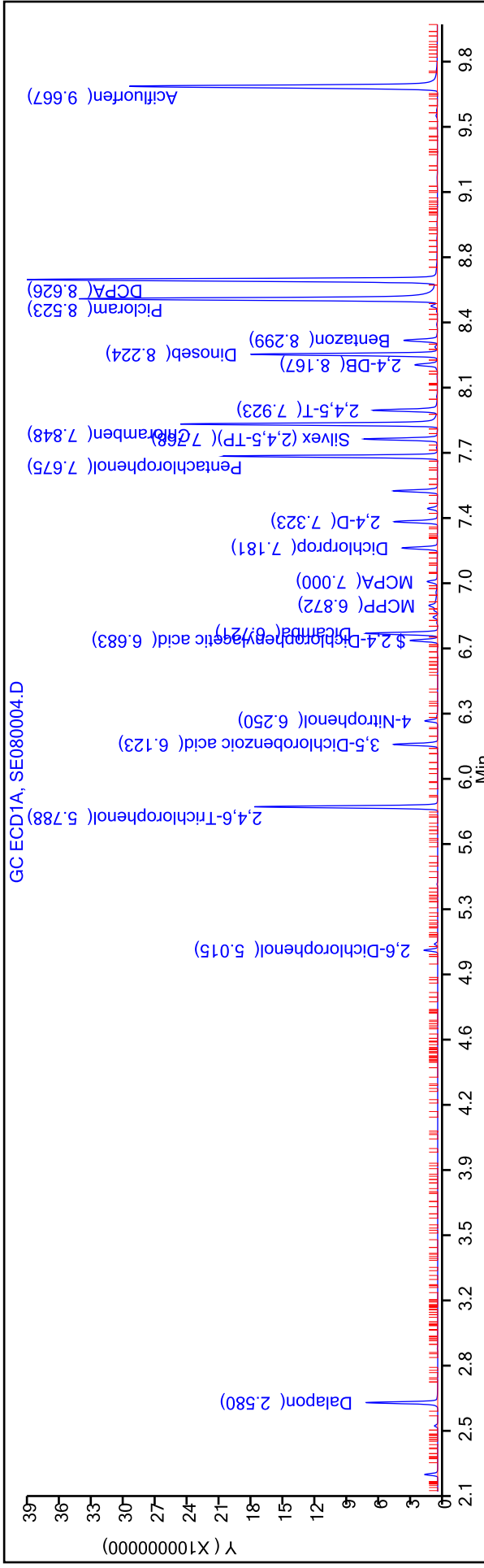
Units: mL

TestAmerica Savannah
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
Injection Date: 08-May-2018 11:58:00
Lims ID: ic h8
Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS
Column: DB-XLB (0.32 mm)

Operator ID: GEM
Worklist Smp#: 4
ALS Bottle#: 4

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-May-2018 12:17:37 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:07 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	252815070	0.5000	0.4824	
2	2.634	2.632	0.002	817578391	0.5000	0.5073	
						RPD = 5.02	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	47948482	NC	NC	
2	5.102	5.102	0.000	271150549	NC	NC	
						RPD = 2.29	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	660797633	NC	NC	
2	5.779	5.776	0.003	2813586787	NC	NC	
						RPD = 0.79	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	165004902	0.5000	0.5134	
2	6.116	6.116	0.000	930526789	0.5000	0.5178	
						RPD = 0.87	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	48081748	0.5000	0.5200	
2	6.503	6.505	-0.002	158696116	0.5000	0.5307	
						RPD = 2.03	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	105220295	0.5000	0.4975	
2	6.830	6.829	0.001	717491043	0.5000	0.5097	
						RPD = 2.41	
7 Dicamba							
1	6.720	6.720	0.000	282435535	0.2500	0.2622	
2	6.911	6.910	0.001	1347001642	0.2500	0.2689	
						RPD = 2.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.870	6.867	0.003	39090261	50.0	51.7	
2	6.957	6.955	0.002	205635557	50.0	46.2	
						RPD = 11.18	
9 MCPA							
1	6.996	6.994	0.002	51596040	50.0	55.7	
2	7.157	7.155	0.002	386345329	50.0	47.9	
						RPD = 14.99	
10 Dichlorprop							
1	7.180	7.180	0.000	144063420	0.5000	0.5192	
2	7.298	7.297	0.001	719800477	0.5000	0.5106	
						RPD = 1.67	
11 2,4-D							
1	7.322	7.326	-0.004	172138047	0.5000	0.5692	
2	7.515	7.517	-0.002	885627489	0.5000	0.5558	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	762859467	0.1250	0.1417	
2	7.716	7.714	0.002	2634537256	0.1250	0.1401	
						RPD = 1.15	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	276913650	0.1250	0.1474	
2	7.846	7.846	0.000	1061020220	0.1250	0.1435	
						RPD = 2.64	
14 Chloramben							
1	7.849	7.855	-0.006	948055347	0.5000	0.5069	
2	8.160	8.162	-0.002	3398296359	0.5000	0.6041	
						RPD = 17.50	
15 2,4,5-T							
1	7.922	7.929	-0.007	274321777	0.1250	0.1250	
2	8.080	8.083	-0.003	974569507	0.1250	0.1466	
						RPD = 15.89	
16 2,4-DB							
1	8.167	8.175	-0.008	95758632	0.5000	0.5113	
2	8.297	8.302	-0.005	474832365	0.5000	0.4814	
						RPD = 6.02	
17 Dinoseb							
1	8.223	8.224	-0.001	686899035	0.5000	0.5612	
2	8.250	8.248	0.002	2438912841	0.5000	0.5329	
						RPD = 5.19	
18 Bentazon							
1	8.299	8.300	-0.001	144238238	0.5000	0.5016	
2	8.663	8.662	0.001	439887803	0.5000	0.5471	
						RPD = 8.68	
19 Picloram							
1	8.523	8.529	-0.006	1551637070	0.5000	0.5051	
2	9.005	9.005	0.000	5780160796	0.5000	0.5230	
						RPD = 3.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	1796815722	0.5000	0.5456	
2	8.779	8.775	0.004	5536696155	0.5000	0.5638	
						RPD = 3.27	

21 Acifluorfen

1	9.665	9.666	-0.001	1382056162	0.5000	0.5016	
2	9.794	9.792	0.002	4770908516	0.5000	0.4992	
						RPD = 0.48	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
Injection Date: 08-May-2018 12:17:37
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 5

Lims ID: ic h7

Client ID:

Injection Vol: 1.0 ul

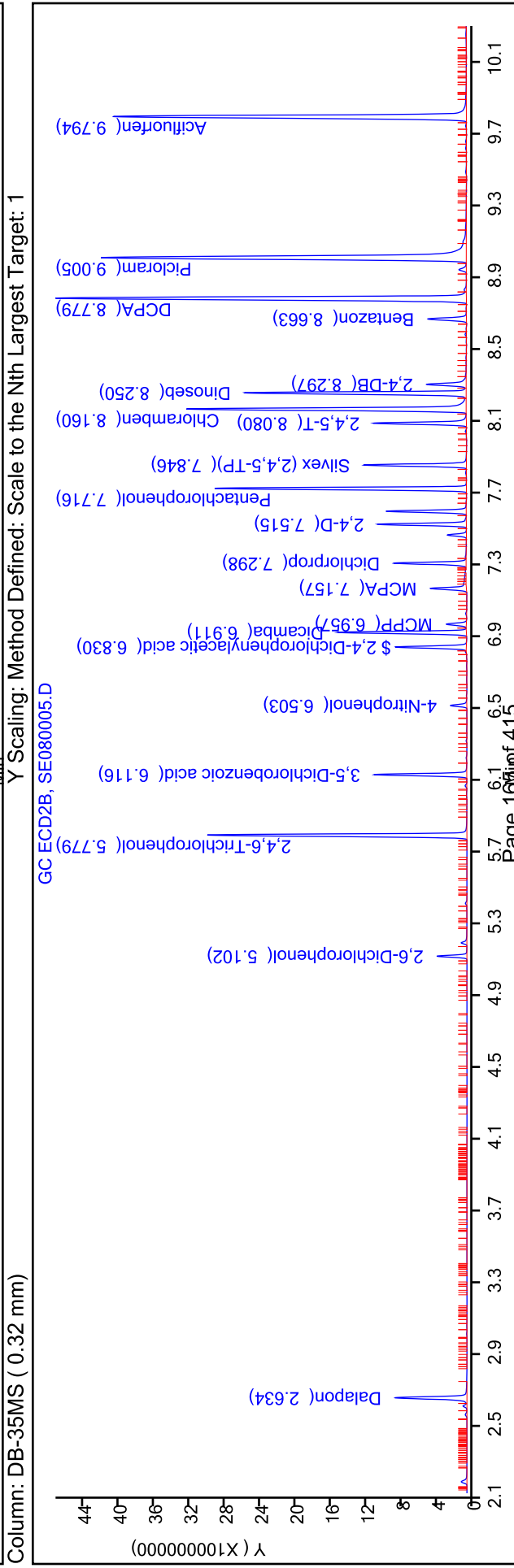
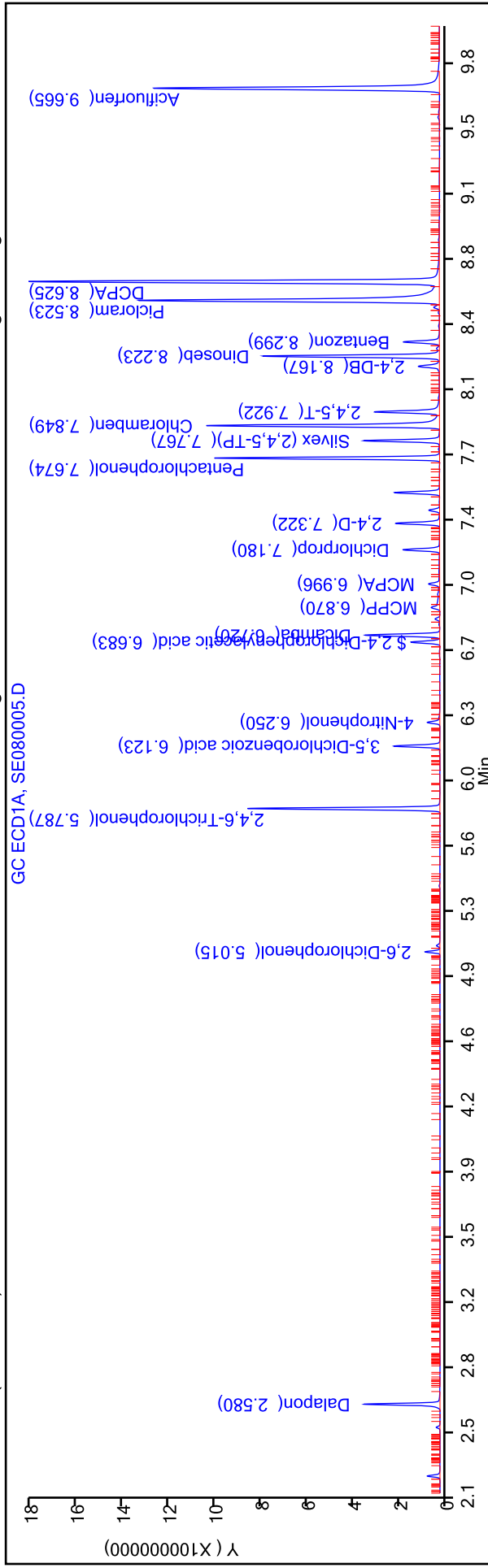
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-May-2018 12:37:18 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:13 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.580	2.579	0.001	126339938	0.2500	0.2411	
2	2.633	2.632	0.001	395304302	0.2500	0.2453	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	24075005	NC	NC	
2	5.102	5.102	0.000	134909465	NC	NC	
						RPD = 1.37	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	317115758	NC	NC	
2	5.778	5.776	0.002	1376798630	NC	NC	
						RPD = 1.15	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	81038461	0.2500	0.2521	
2	6.117	6.116	0.001	448811682	0.2500	0.2498	
						RPD = 0.94	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	26992258	0.2500	0.2919	
2	6.503	6.505	-0.002	77606749	0.2500	0.2595	
						RPD = 11.76	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	51149844	0.2500	0.2419	
2	6.829	6.829	0.000	353488120	0.2500	0.2511	
						RPD = 3.75	
7 Dicamba							
1	6.721	6.720	0.001	135663470	0.1250	0.1260	
2	6.911	6.910	0.001	650915415	0.1250	0.1299	
						RPD = 3.11	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	12687646	25.0	22.2	
2	6.956	6.955	0.001	111381364	25.0	24.6	
						RPD = 10.33	
9 MCPA							
1	6.995	6.994	0.001	25890792	25.0	28.0	
2	7.155	7.155	0.000	177192173	25.0	26.6	
						RPD = 4.94	
10 Dichlorprop							
1	7.181	7.180	0.001	70616500	0.2500	0.2545	
2	7.298	7.297	0.001	352257271	0.2500	0.2499	
						RPD = 1.83	
11 2,4-D							
1	7.323	7.326	-0.003	81489809	0.2500	0.2695	
2	7.516	7.517	-0.001	419247494	0.2500	0.2631	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	357293439	0.0625	0.0664	
2	7.715	7.714	0.001	1280290405	0.0625	0.0681	
						RPD = 2.54	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	130284362	0.0625	0.0693	
2	7.846	7.846	0.000	500698059	0.0625	0.0677	
						RPD = 2.34	
14 Chloramben							
1	7.850	7.855	-0.005	420812351	0.2500	0.2467	
2	8.159	8.162	-0.003	1585218711	0.2500	0.2818	
						RPD = 13.26	
15 2,4,5-T							
1	7.924	7.929	-0.005	138404340	0.0625	0.0631	
2	8.079	8.083	-0.004	450029272	0.0625	0.0677	
						RPD = 7.07	
16 2,4-DB							
1	8.169	8.175	-0.006	41914777	0.2500	0.2443	
2	8.298	8.302	-0.004	234527590	0.2500	0.2378	
						RPD = 2.69	
17 Dinoseb							
1	8.223	8.224	-0.001	318205530	0.2500	0.2600	
2	8.248	8.248	0.000	1104528845	0.2500	0.2450	
						RPD = 5.93	
18 Bentazon							
1	8.299	8.300	-0.001	71761268	0.2500	0.2496	
2	8.661	8.662	-0.001	209189101	0.2500	0.2602	
						RPD = 4.17	
19 Picloram							
1	8.525	8.529	-0.004	675298882	0.2500	0.2482	
2	9.005	9.005	0.000	2545447676	0.2500	0.2355	
						RPD = 5.25	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	842695237	0.2500	0.2559	
2	8.778	8.775	0.003	2733977251	0.2500	0.2784	
						RPD = 8.42	

21 Acifluorfen

1	9.665	9.666	-0.001	633038479	0.2500	0.2522	
2	9.793	9.792	0.001	2098074459	0.2500	0.2582	
						RPD = 2.37	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

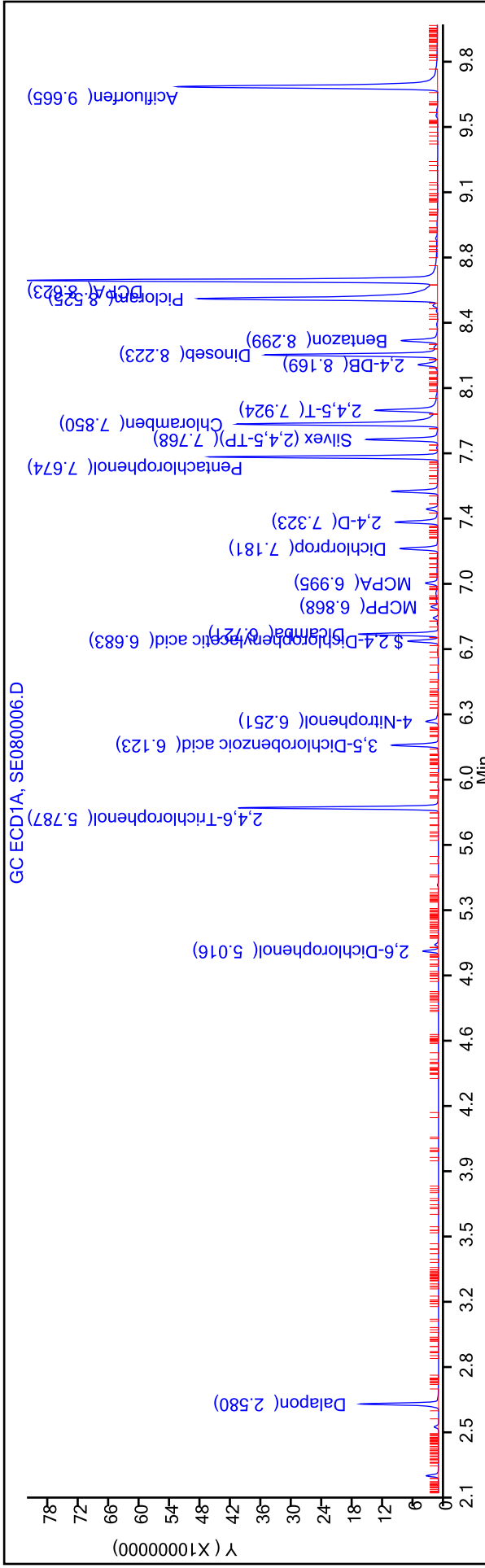
SGHERB-6_00015

Amount Added: 1.00

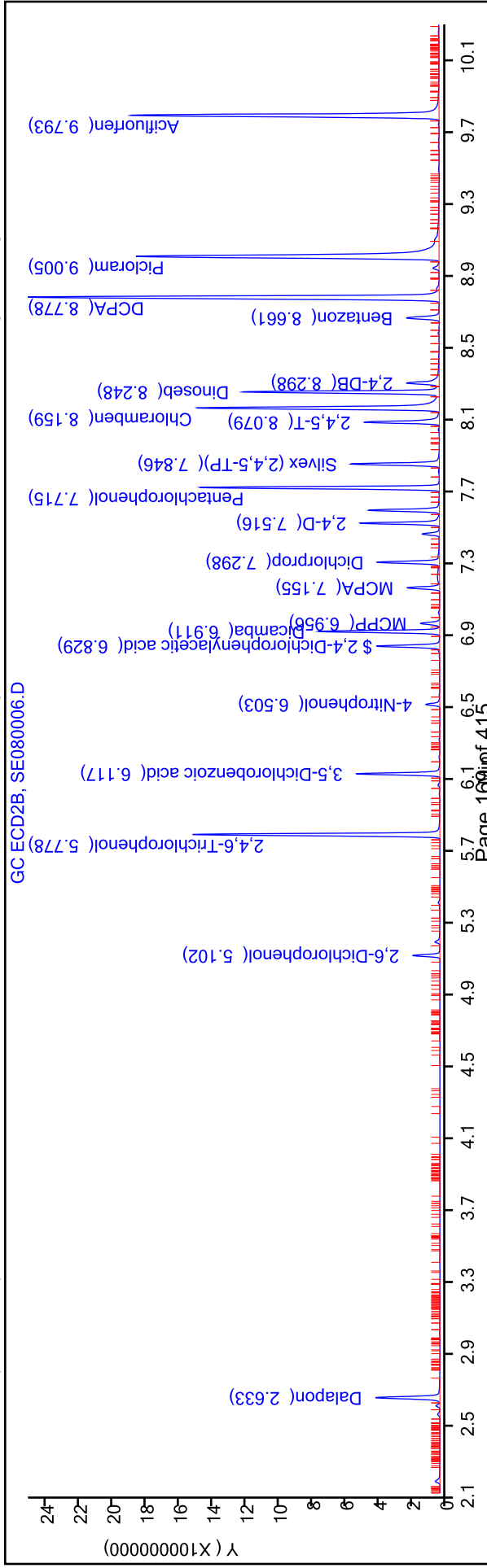
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Injection Date: 08-May-2018 12:37:18
 Instrument ID: CSGS
 Operator ID: GEM
 Lims ID: ic h6
 Client ID:
 Injection Vol: 1.0 ul
 Dil. Factor: 1.0000
 Method: Herbicides_CSGS
 Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm)
 ALS Bottle#: 6
 Worklist Smp#: 6

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-May-2018 12:56:54 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:18 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: meinckeg Date: 08-May-2018 13:25:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	87735176	0.1750	0.1674	
2	2.633	2.632	0.001	265586882	0.1750	0.1648	
						RPD = 1.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16721808	NC	NC	
2	5.101	5.102	-0.001	91409134	NC	NC	
						RPD = 1.11	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	212201404	NC	NC	
2	5.776	5.776	0.000	921748528	NC	NC	
						RPD = 1.20	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	54279812	0.1750	0.1689	
2	6.116	6.116	0.000	300893318	0.1750	0.1674	
						RPD = 0.85	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17047628	0.1750	0.1844	
2	6.504	6.505	-0.001	52193224	0.1750	0.1745	
						RPD = 5.49	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35013881	0.1750	0.1656	
2	6.829	6.829	0.000	235040238	0.1750	0.1670	
						RPD = 0.84	
7 Dicamba							
1	6.721	6.720	0.001	91550778	0.0875	0.0850	
2	6.911	6.910	0.001	429620976	0.0875	0.0858	
						RPD = 0.89	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	8640069	17.5	16.3	
2	6.955	6.955	0.000	77011106	17.5	16.8	
						RPD = 2.77	
9 MCPA							
1	6.994	6.994	0.000	17766771	17.5	19.2	
2	7.153	7.155	-0.002	121752778	17.5	19.6	
						RPD = 2.31	
10 Dichlorprop							
1	7.181	7.180	0.001	48109296	0.1750	0.1734	
2	7.296	7.297	-0.001	231436814	0.1750	0.1642	
						RPD = 5.46	
11 2,4-D							
1	7.324	7.326	-0.002	54093373	0.1750	0.1789	
2	7.515	7.517	-0.002	272374787	0.1750	0.1709	
						RPD = 4.55	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	237204468	0.0438	0.0441	
2	7.713	7.714	-0.001	840761037	0.0438	0.0447	
						RPD = 1.45	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	84634924	0.0438	0.0450	
2	7.845	7.846	-0.001	324244276	0.0438	0.0439	
						RPD = 2.66	
14 Chloramben							
1	7.852	7.855	-0.003	269520100	0.1750	0.1655	
2	8.159	8.162	-0.003	1019151525	0.1750	0.1812	
						RPD = 9.06	
15 2,4,5-T							
1	7.925	7.929	-0.004	93534318	0.0438	0.0426	
2	8.080	8.083	-0.003	287476934	0.0438	0.0433	
						RPD = 1.44	
16 2,4-DB							
1	8.171	8.175	-0.004	26059778	0.1750	0.1599	
2	8.298	8.302	-0.004	166644052	0.1750	0.1690	
						RPD = 5.54	
17 Dinoseb							
1	8.222	8.224	-0.002	207576561	0.1750	0.1696	
2	8.246	8.248	-0.002	688241161	0.1750	0.1552	
						RPD = 8.85	
18 Bentazon							
1	8.299	8.300	-0.001	47511232	0.1750	0.1652	
2	8.661	8.662	-0.001	137471207	0.1750	0.1710	
						RPD = 3.43	
19 Picloram							
1	8.526	8.529	-0.003	428630902	0.1750	0.1666	
2	9.005	9.005	0.000	1548770490	0.1750	0.1470	
						RPD = 12.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	565445884	0.1750	0.1717	
2	8.776	8.775	0.001	1775677219	0.1750	0.1808	
						RPD = 5.16	

21 Acifluorfen

1	9.665	9.666	-0.001	407675485	0.1750	0.1692	
2	9.791	9.792	-0.001	1244184045	0.1750	0.1664	
						RPD = 1.67	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
Injection Date: 08-May-2018 12:56:54
Lims ID: ic h5
Instrument ID: CSGS

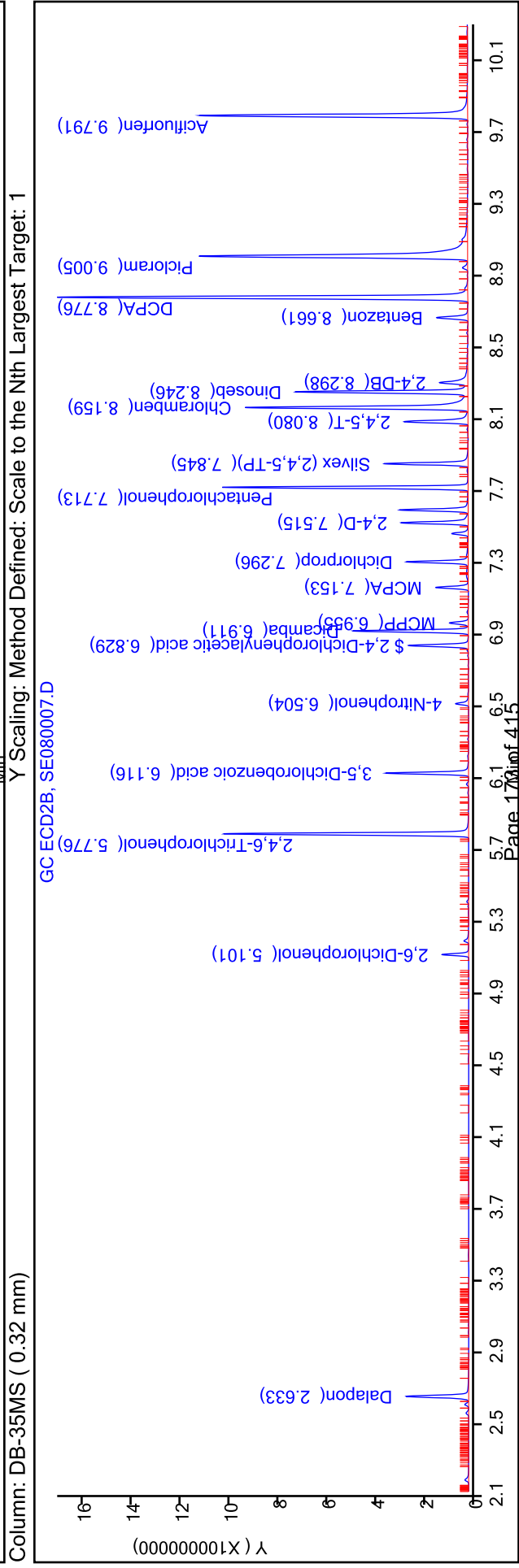
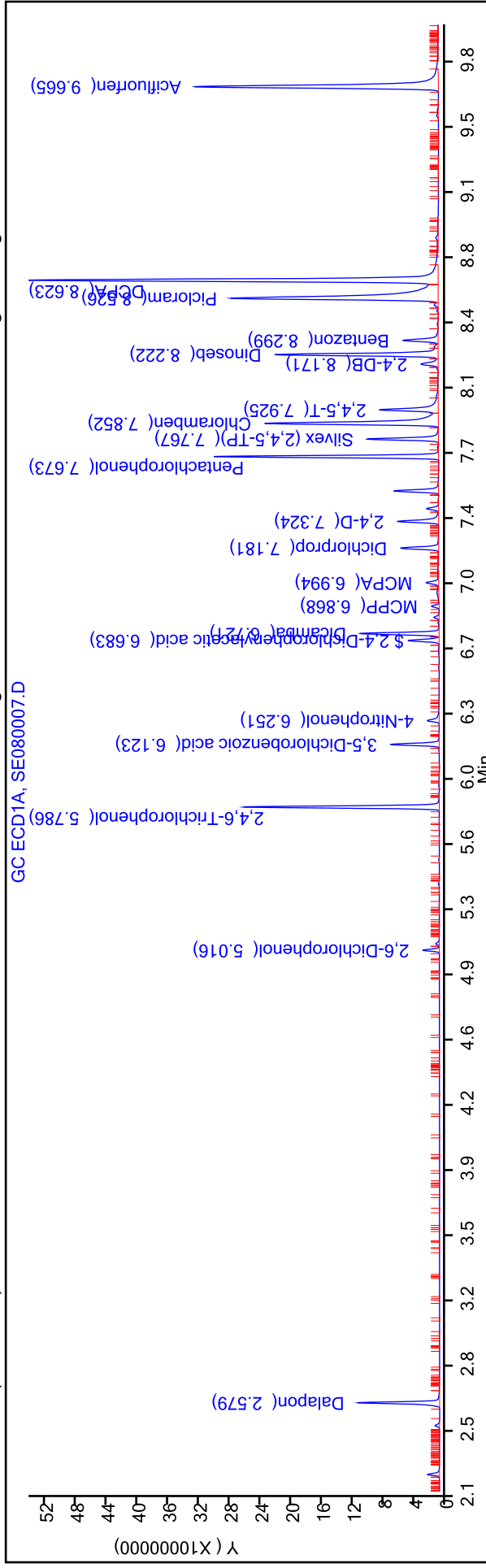
Operator ID: GEM
Worklist Smp#: 7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-May-2018 13:16:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:24 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	49026258	0.1000	0.0935	
2	2.632	2.632	0.000	144107629	0.1000	0.0894	
						RPD = 4.52	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	9648349	NC	NC	
2	5.102	5.102	0.000	51409780	NC	NC	
						RPD = 3.66	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	115367190	NC	NC	
2	5.776	5.776	0.000	492889358	NC	NC	
						RPD = 0.46	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	30442227	0.1000	0.0947	
2	6.116	6.116	0.000	163818500	0.1000	0.0912	
						RPD = 3.82	
5 4-Nitrophenol							
1	6.253	6.253	0.000	9830837	0.1000	0.1063	
2	6.505	6.505	0.000	28145758	0.1000	0.0941	
						RPD = 12.18	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	19553071	0.1000	0.0925	
2	6.829	6.829	0.000	126698158	0.1000	0.0900	
						RPD = 2.70	
7 Dicamba							
1	6.720	6.720	0.000	50221281	0.0500	0.0466	
2	6.910	6.910	0.000	229111440	0.0500	0.0457	
						RPD = 1.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	5032337	10.0	10.4	
2	6.955	6.955	0.000	44613118	10.0	9.35	
						RPD = 11.06	
9 MCPA							
1	6.994	6.994	0.000	10021981	10.0	10.8	M
2	7.155	7.155	0.000	72306759	10.0	12.6	M
						RPD = 15.16	
10 Dichlorprop							
1	7.180	7.180	0.000	27204673	0.1000	0.0980	
2	7.297	7.297	0.000	128102012	0.1000	0.0909	M
						RPD = 7.59	
11 2,4-D							
1	7.326	7.326	0.000	29475053	0.1000	0.0975	M
2	7.517	7.517	0.000	145386532	0.1000	0.0912	M
						RPD = 6.61	
12 Pentachlorophenol							
1	7.674	7.674	0.000	126808590	0.0250	0.0236	
2	7.714	7.714	0.000	448807878	0.0250	0.0239	M
						RPD = 1.30	
13 Silvex (2,4,5-TP)							
1	7.769	7.769	0.000	44774730	0.0250	0.0238	M
2	7.846	7.846	0.000	170517091	0.0250	0.0231	M
						RPD = 3.25	
14 Chloramben							
1	7.855	7.855	0.000	136550994	0.1000	0.0910	
2	8.162	8.162	0.000	528388568	0.1000	0.0939	M
						RPD = 3.16	
15 2,4,5-T							
1	7.929	7.929	0.000	56867356	0.0250	0.0259	M
2	8.083	8.083	0.000	149160522	0.0250	0.0224	M
						RPD = 14.39	
16 2,4-DB							
1	8.175	8.175	0.000	13655211	0.1000	0.0916	
2	8.302	8.302	0.000	97285447	0.1000	0.0986	M
						RPD = 7.35	
17 Dinoseb							
1	8.224	8.224	0.000	110631354	0.1000	0.0904	M
2	8.248	8.248	0.000	344721192	0.1000	0.0811	M
						RPD = 10.80	
18 Bentazon							
1	8.300	8.300	0.000	27567147	0.1000	0.0959	M
2	8.662	8.662	0.000	74902105	0.1000	0.0932	M
						RPD = 2.86	
19 Picloram							
1	8.529	8.529	0.000	216808821	0.1000	0.0920	
2	9.005	9.005	0.000	759779337	0.1000	0.0769	M
						RPD = 17.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.623	8.623	0.000	315619469	0.1000	0.0958	
2	8.775	8.775	0.000	947740711	0.1000	0.0965	M
						RPD = 0.69	

21 Acifluorfen							
1	9.666	9.666	0.000	217026310	0.1000	0.0952	
2	9.792	9.792	0.000	596281084	0.1000	0.0890	
						RPD = 6.71	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 8

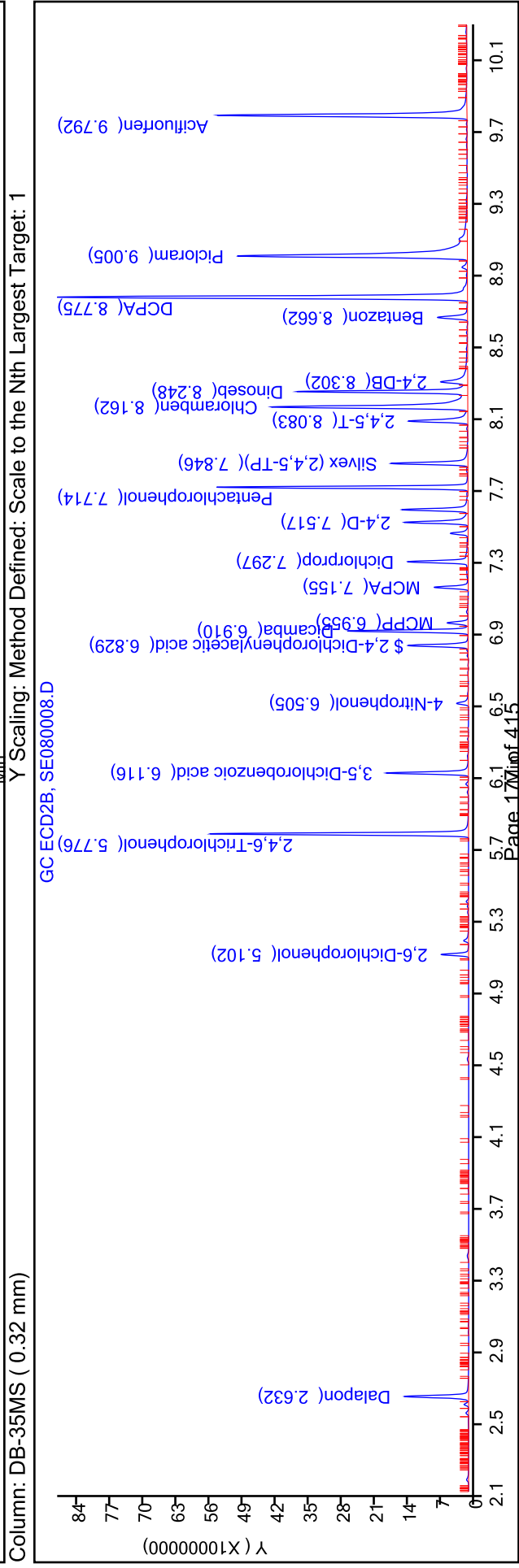
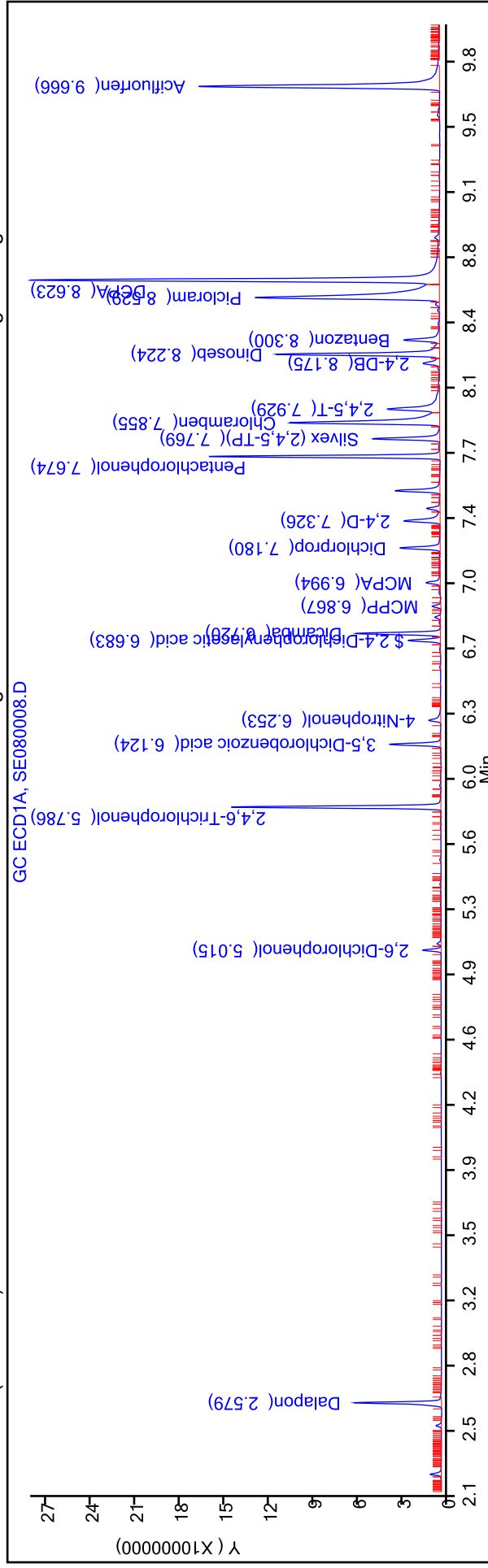
Lims ID: ic h4

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-May-2018 13:36:16 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:32 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:19:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	25290814	0.0500	0.0483	
2	2.632	2.632	0.000	71378402	0.0500	0.0443	
						RPD = 8.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	5120223	NC	NC	
2	5.101	5.102	-0.001	27211487	NC	NC	
						RPD = 3.92	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	55102499	NC	NC	
2	5.776	5.776	0.000	240010788	NC	NC	
						RPD = 1.48	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	15117918	0.0500	0.0470	
2	6.116	6.116	0.000	82525138	0.0500	0.0459	
						RPD = 2.39	
5 4-Nitrophenol							
1	6.254	6.253	0.001	4230904	0.0500	0.0458	
2	6.506	6.505	0.001	14245923	0.0500	0.0476	
						RPD = 4.02	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	9821711	0.0500	0.0464	
2	6.829	6.829	0.000	65002540	0.0500	0.0462	
						RPD = 0.58	
7 Dicamba							
1	6.721	6.720	0.001	24549090	0.0250	0.0228	
2	6.909	6.910	-0.001	113374207	0.0250	0.0226	
						RPD = 0.70	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.866	6.867	-0.001	2565927	5.00	5.99	
2	6.955	6.955	0.000	26339273	5.00	5.17	
						RPD = 14.76	
9 MCPA							
1	6.994	6.994	0.000	4373482	5.00	4.72	
2	7.154	7.155	-0.001	40478712	5.00	7.49	
						RPD = 45.31	
10 Dichlorprop							
1	7.181	7.180	0.001	13064380	0.0500	0.0471	
2	7.297	7.297	0.000	62424883	0.0500	0.0443	
						RPD = 6.13	
11 2,4-D							
1	7.331	7.326	0.005	13528651	0.0500	0.0447	
2	7.520	7.517	0.003	68918972	0.0500	0.0432	
						RPD = 3.38	
12 Pentachlorophenol							
1	7.674	7.674	0.000	60060646	0.0125	0.0112	
2	7.713	7.714	-0.001	214964113	0.0125	0.0114	
						RPD = 2.42	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	20302486	0.0125	0.0108	
2	7.846	7.846	0.000	78639731	0.0125	0.0106	
						RPD = 1.56	
14 Chloramben							
1	7.860	7.855	0.005	60085684	0.0500	0.0468	
2	8.164	8.162	0.002	240336393	0.0500	0.0427	
						RPD = 9.03	
15 2,4,5-T							
1	7.933	7.929	0.004	26566988	0.0125	0.0121	
2	8.086	8.083	0.003	68256754	0.0125	0.0103	
						RPD = 16.45	
16 2,4-DB							
1	8.178	8.175	0.003	5762851	0.0500	0.0472	
2	8.305	8.302	0.003	46624287	0.0500	0.0473	
						RPD = 0.23	
17 Dinoseb							
1	8.225	8.224	0.001	53295649	0.0500	0.0435	
2	8.248	8.248	0.000	154960345	0.0500	0.0402	
						RPD = 8.01	
18 Bentazon							
1	8.301	8.300	0.001	13719455	0.0500	0.0477	
2	8.663	8.662	0.001	35565067	0.0500	0.0442	
						RPD = 7.56	
19 Picloram							
1	8.533	8.529	0.004	94759287	0.0500	0.0468	
2	9.009	9.005	0.004	328532437	0.0500	0.0386	
						RPD = 19.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.624	8.623	0.001	151449071	0.0500	0.0460	
2	8.775	8.775	0.000	451881325	0.0500	0.0460	
						RPD = 0.05	

21 Acifluorfen

1	9.667	9.666	0.001	97225812	0.0500	0.0468	
2	9.791	9.792	-0.001	248586919	0.0500	0.0440	
						RPD = 6.11	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

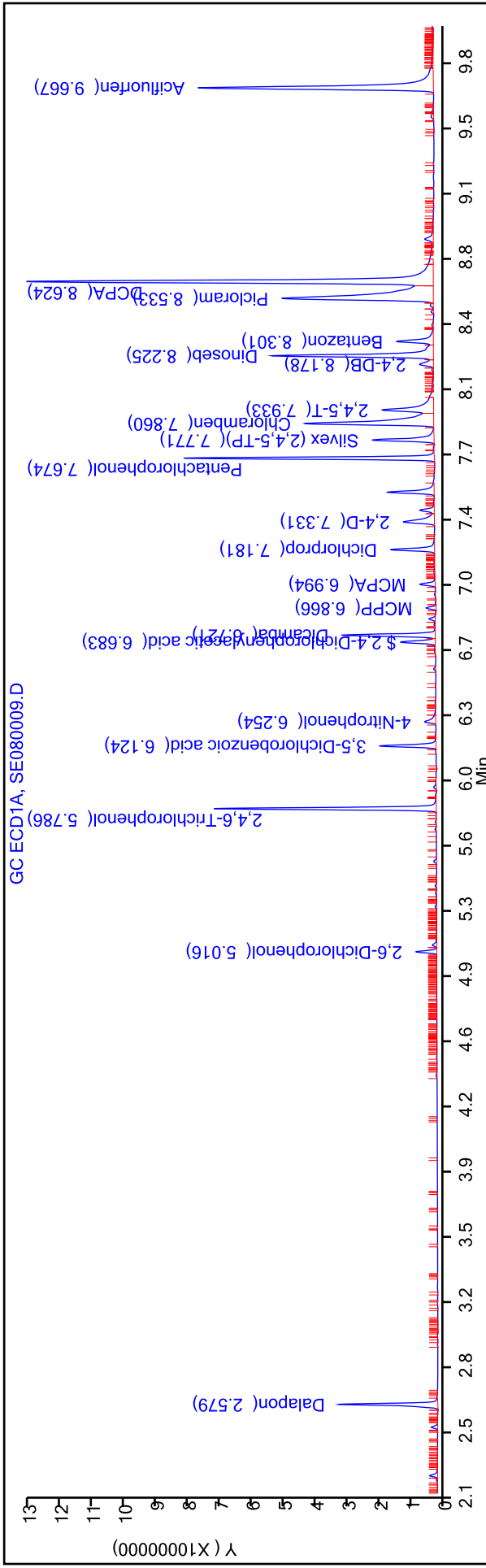
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
 Injection Date: 08-May-2018 13:36:16
 Instrument ID: CSGS
 Lims ID: ic h3
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

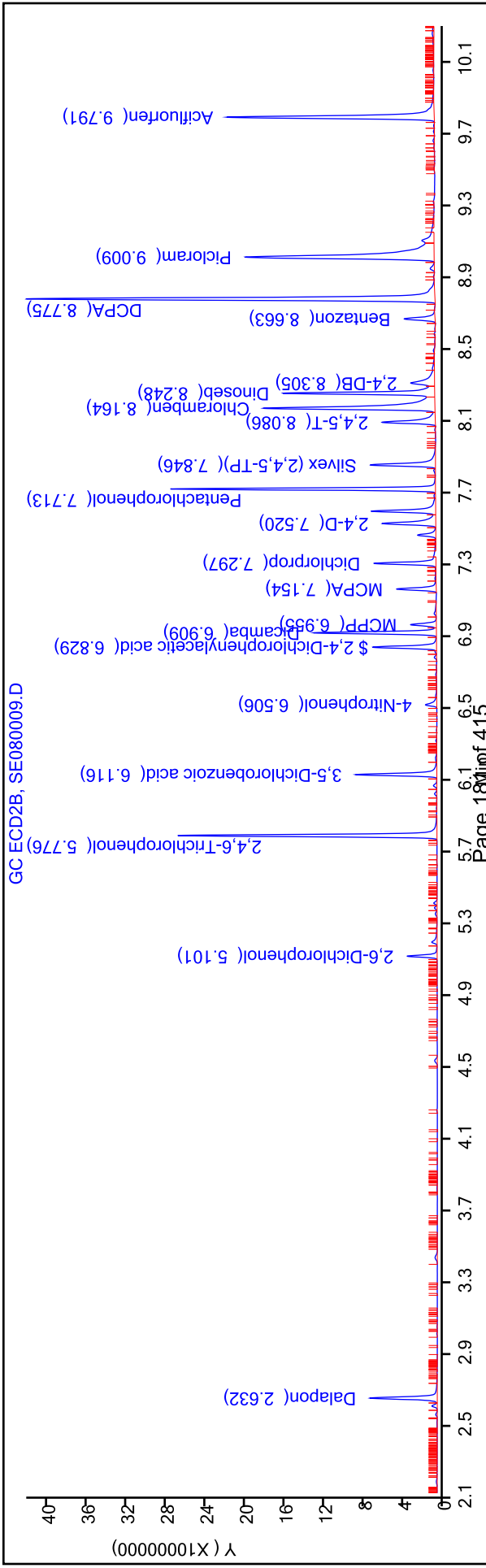
Operator ID: GEM
 Worklist Smp#: 9
 ALS Bottle#: 9

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-May-2018 13:55:52 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:38 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	13718735	0.0250	0.0262	
2	2.632	2.632	0.000	39932951	0.0250	0.0248	
						RPD = 5.50	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	2779258	NC	NC	
2	5.102	5.102	0.000	15274619	NC	NC	
						RPD = 0.57	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	27400593	NC	NC	
2	5.776	5.776	0.000	122077658	NC	NC	
						RPD = 3.74	
4 3,5-Dichlorobenzoic acid							
1	6.125	6.124	0.001	8148129	0.0250	0.0254	
2	6.118	6.116	0.002	44015926	0.0250	0.0245	
						RPD = 3.44	
5 4-Nitrophenol							
1	6.258	6.253	0.005	2307008	0.0250	0.0250	
2	6.511	6.505	0.006	7416225	0.0250	0.0248	
						RPD = 0.61	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.684	6.683	0.001	5538443	0.0250	0.0262	
2	6.830	6.829	0.001	34723127	0.0250	0.0247	
						RPD = 5.99	
7 Dicamba							
1	6.720	6.720	0.000	13200023	0.0125	0.0123	
2	6.910	6.910	0.000	58578625	0.0125	0.0117	
						RPD = 4.69	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	1288891	2.50	3.49	
2	6.955	6.955	0.000	16319936	2.50	2.87	
						RPD = 19.60	
9 MCPA							
1	6.995	6.994	0.001	2137688	2.50	2.31	
2	7.155	7.155	0.000	24668652	2.50	4.72	
						RPD = 68.67	
10 Dichlorprop							
1	7.182	7.180	0.002	6871862	0.0250	0.0248	
2	7.298	7.297	0.001	33672808	0.0250	0.0239	
						RPD = 3.61	
11 2,4-D							
1	7.337	7.326	0.011	6740238	0.0250	0.0223	
2	7.524	7.517	0.007	35695833	0.0250	0.0224	
						RPD = 0.50	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	29521455	0.006250	0.005483	
2	7.713	7.714	-0.001	107509203	0.006250	0.005716	
						RPD = 4.15	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	9932955	0.006250	0.005287	
2	7.850	7.846	0.004	39284572	0.006250	0.005315	
						RPD = 0.53	
14 Chloramben							
1	7.864	7.855	0.009	28147981	0.0250	0.0279	
2	8.167	8.162	0.005	117512235	0.0250	0.0209	
						RPD = 28.91	
15 2,4,5-T							
1	7.935	7.929	0.006	13893399	0.006250	0.006333	
2	8.090	8.083	0.007	34680183	0.006250	0.005218	
						RPD = 19.31	
16 2,4-DB							
1	8.182	8.175	0.007	2666490	0.0250	0.0295	
2	8.308	8.302	0.006	26051520	0.0250	0.0264	
						RPD = 10.95	
17 Dinoseb							
1	8.225	8.224	0.001	27141219	0.0250	0.0222	
2	8.250	8.248	0.002	77307007	0.0250	0.0234	
						RPD = 5.56	
18 Bentazon							
1	8.304	8.300	0.004	6986266	0.0250	0.0243	
2	8.665	8.662	0.003	18151512	0.0250	0.0226	
						RPD = 7.33	
19 Picloram							
1	8.538	8.529	0.009	44134008	0.0250	0.0275	
2	9.011	9.005	0.006	155603121	0.0250	0.0232	
						RPD = 16.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	77163736	0.0250	0.0234	
2	8.776	8.775	0.001	226645361	0.0250	0.0231	
						RPD = 1.52	

21 Acifluorfen

1	9.668	9.666	0.002	48982390	0.0250	0.0268	
2	9.795	9.792	0.003	120359495	0.0250	0.0266	
						RPD = 0.57	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
Injection Date: 08-May-2018 13:55:52
Lims ID: ic h2
Instrument ID: CSGS

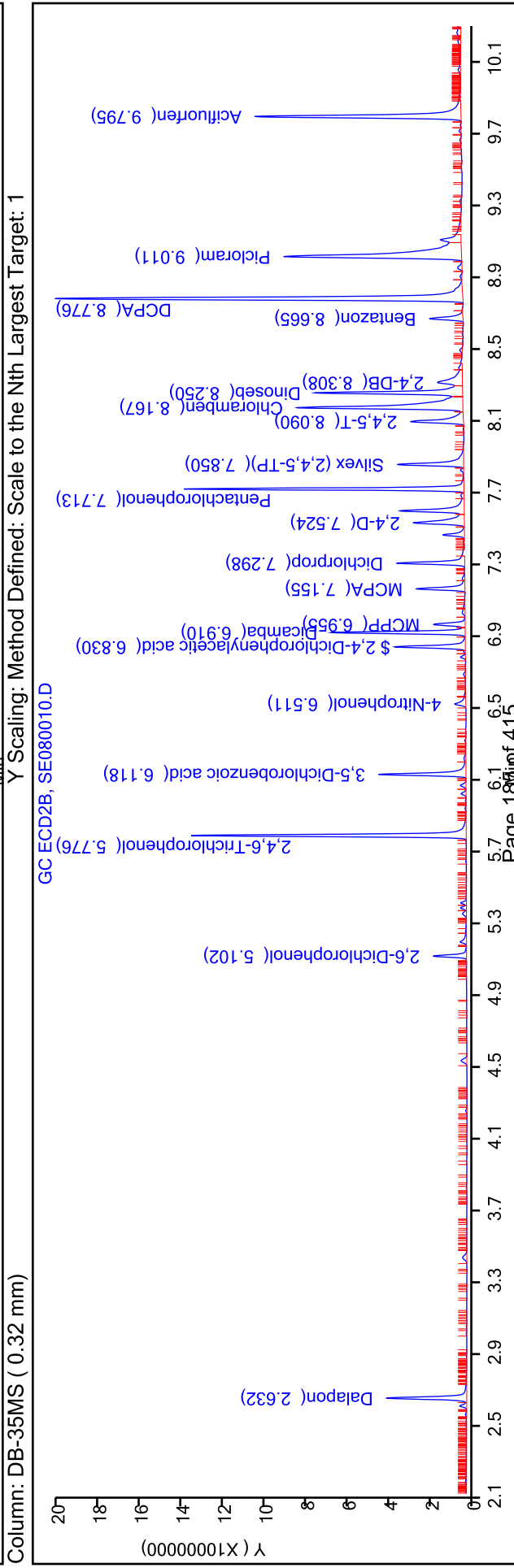
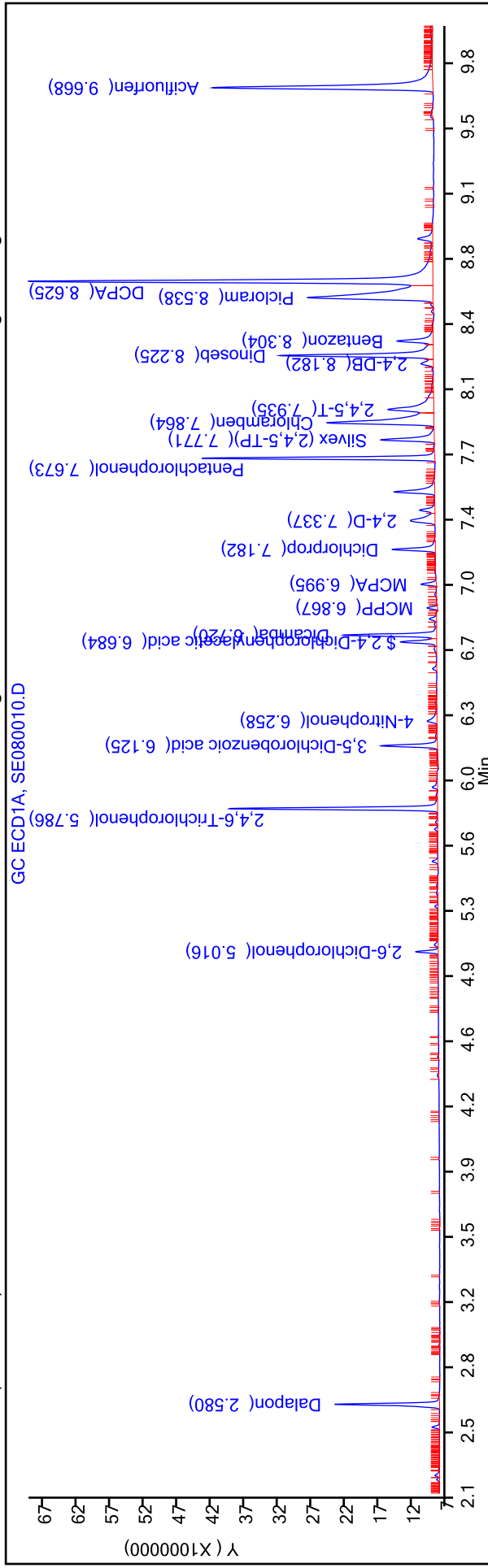
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-May-2018 14:15:28 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:44 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	5906230	0.0100	0.0113	
2	2.633	2.632	0.001	17983150	0.0100	0.0112	
						RPD = 1.00	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	1242849	NC	NC	
2	5.103	5.102	0.001	6728448	NC	NC	
						RPD = 2.08	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	10511883	NC	NC	
2	5.776	5.776	0.000	47802186	NC	NC	
						RPD = 5.78	
4 3,5-Dichlorobenzoic acid							
1	6.126	6.124	0.002	3202229	0.0100	0.0100	
2	6.119	6.116	0.003	18377513	0.0100	0.0102	
						RPD = 2.62	
5 4-Nitrophenol							
1	6.263	6.253	0.010	711986	0.0100	0.007701	a
2	6.516	6.505	0.011	2506531	0.0100	0.008382	M
						RPD = 8.47	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.685	6.683	0.002	2325909	0.0100	0.0110	
2	6.831	6.829	0.002	14359475	0.0100	0.0102	
						RPD = 7.53	
7 Dicamba							
1	6.721	6.720	0.001	5346345	0.005000	0.004964	
2	6.911	6.910	0.001	23620770	0.005000	0.004716	
						RPD = 5.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	383358	1.00	1.63	
2	6.956	6.955	0.001	7884133	1.00	0.9383	
						RPD = 53.96	
9 MCPA							
1	6.996	6.994	0.002	684536	1.00	0.7393	
2	7.156	7.155	0.001	12132999	1.00	2.39	
						RPD = 105.59	
10 Dichlorprop							
1	7.182	7.180	0.002	2699462	0.0100	0.009728	
2	7.299	7.297	0.002	15301912	0.0100	0.0109	
						RPD = 10.94	
11 2,4-D							
1	7.346	7.326	0.020	2400934	0.0100	0.007940	a
2	7.531	7.517	0.014	14551198	0.0100	0.009131	a
						RPD = 13.96	
12 Pentachlorophenol							
1	7.674	7.674	0.000	11008502	0.002500	0.002045	
2	7.713	7.714	-0.001	41165516	0.002500	0.002189	
						RPD = 6.80	
13 Silvex (2,4,5-TP)							
1	7.776	7.769	0.007	3531202	0.002500	0.001880	
2	7.851	7.846	0.005	16213772	0.002500	0.002194	
						RPD = 15.42	
14 Chloramben							
1	7.868	7.855	0.013	10146304	0.0100	0.0173	
2	8.171	8.162	0.009	45179417	0.0100	0.008031	
						RPD = 72.95	
15 2,4,5-T							
1	7.937	7.929	0.008	5683855	0.002500	0.002591	
2	8.089	8.083	0.006	14207297	0.002500	0.002138	
						RPD = 19.17	
16 2,4-DB							
1	8.185	8.175	0.010	957156	0.0100	0.0196	Ma
2	8.312	8.302	0.010	10871976	0.0100	0.0110	a
						RPD = 56.23	
17 Dinoseb							
1	8.227	8.224	0.003	10802376	0.0100	0.008826	
2	8.251	8.248	0.003	30077804	0.0100	0.0133	
						RPD = 40.12	
18 Bentazon							
1	8.306	8.300	0.006	3164677	0.0100	0.0110	
2	8.665	8.662	0.003	7803979	0.0100	0.009707	
						RPD = 12.54	
19 Picloram							
1	8.546	8.529	0.017	16249913	0.0100	0.0167	a
2	9.014	9.005	0.009	57128370	0.0100	0.0144	a
						RPD = 14.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA

1	8.626	8.623	0.003	28939470	0.0100	0.008788	
2	8.777	8.775	0.002	86672796	0.0100	0.008825	
						RPD = 0.42	

21 Acifluorfen

1	9.670	9.666	0.004	18199991	0.0100	0.0138	
2	9.794	9.792	0.002	40645245	0.0100	0.0156	
						RPD = 11.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

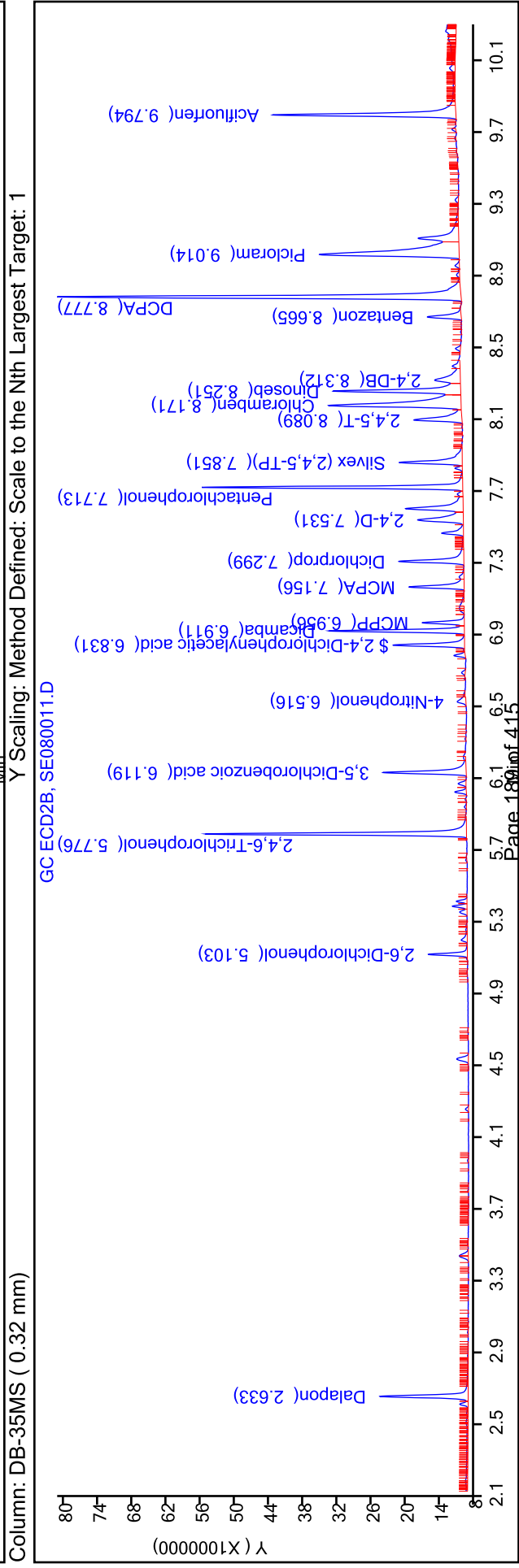
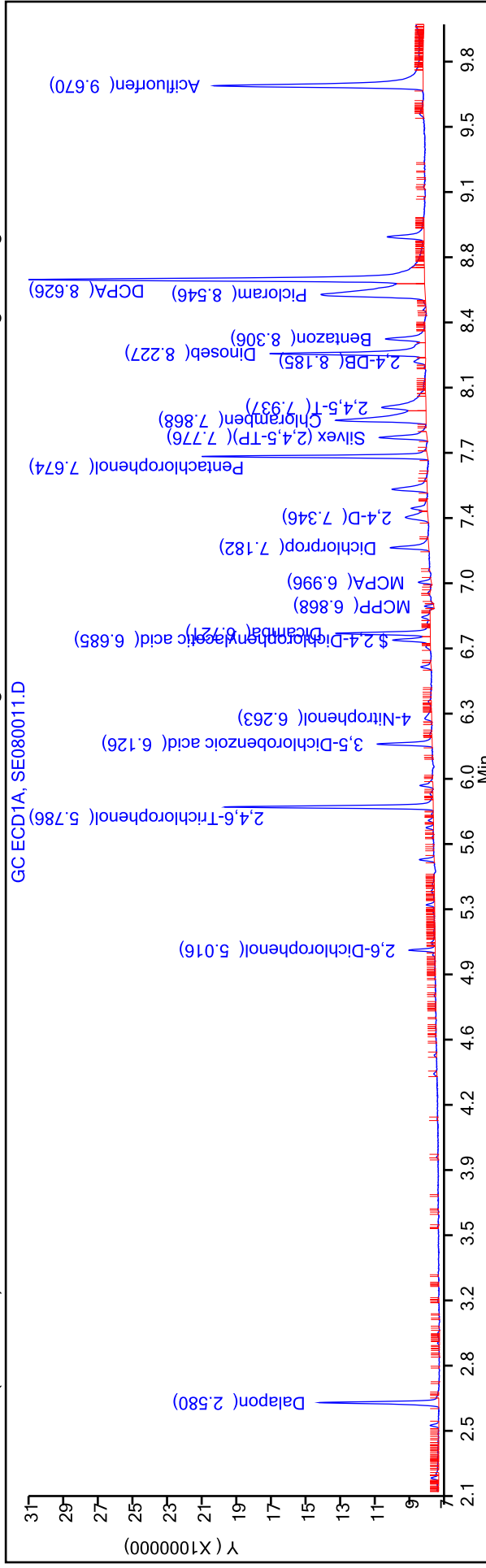
SGHERB-1_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Injection Date: 08-May-2018 14:15:28
 Lims ID: ic h1
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)
 Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 11
 ALS Bottle#: 11



TestAmerica Savannah

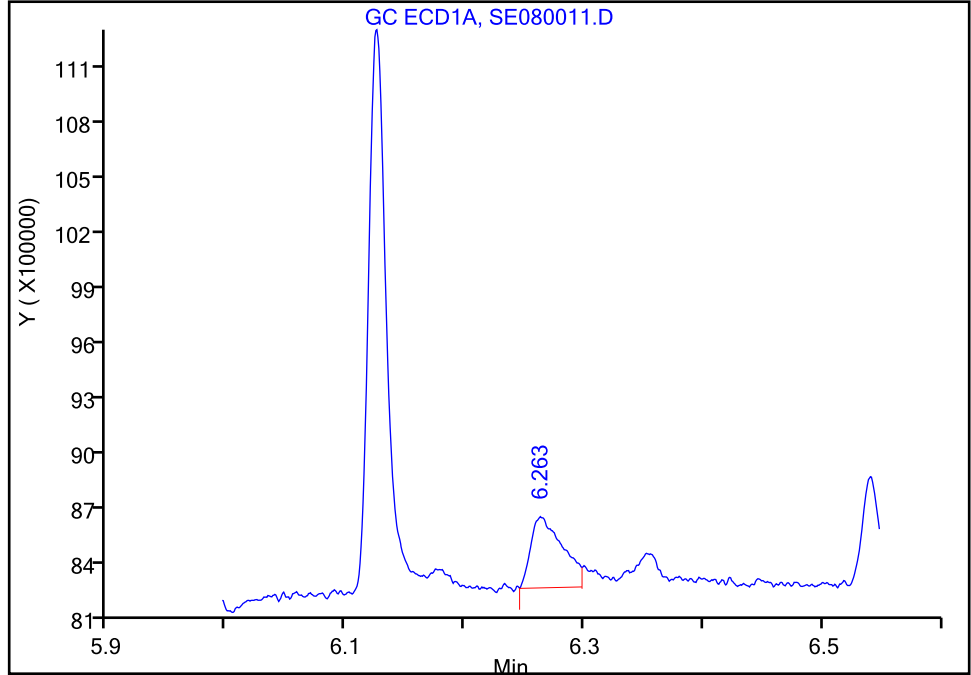
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

5 4-Nitrophenol, CAS: 100-02-7

Signal: 1

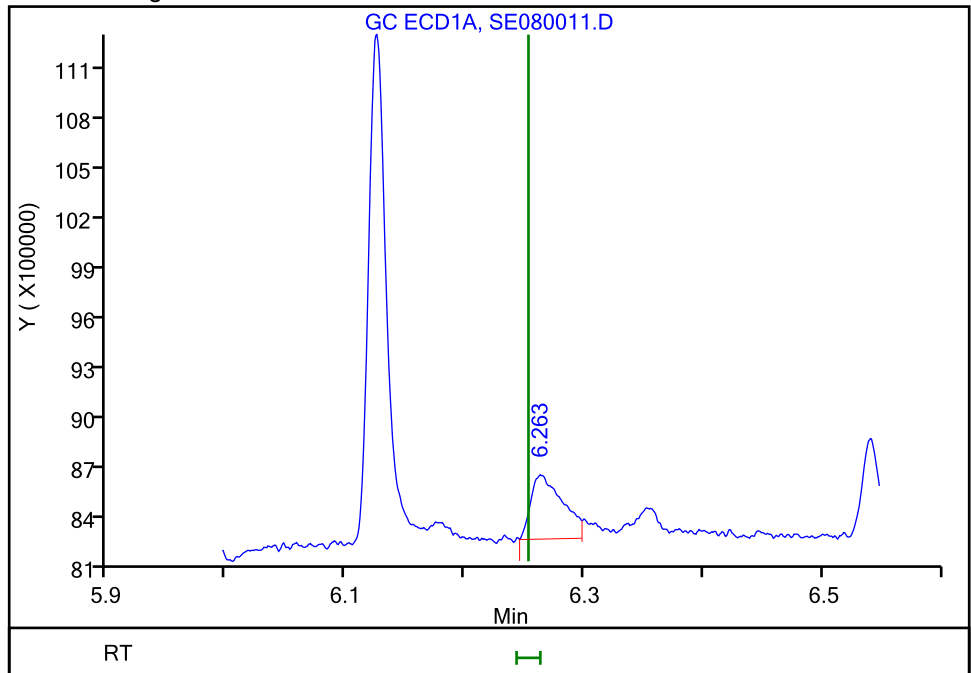
RT: 6.26
Area: 711986
Amount: 0.007640
Amount Units: ug/ml

Processing Integration Results



RT: 6.26
Area: 711986
Amount: 0.007701
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:18
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
Page 190 of 415

TestAmerica Savannah

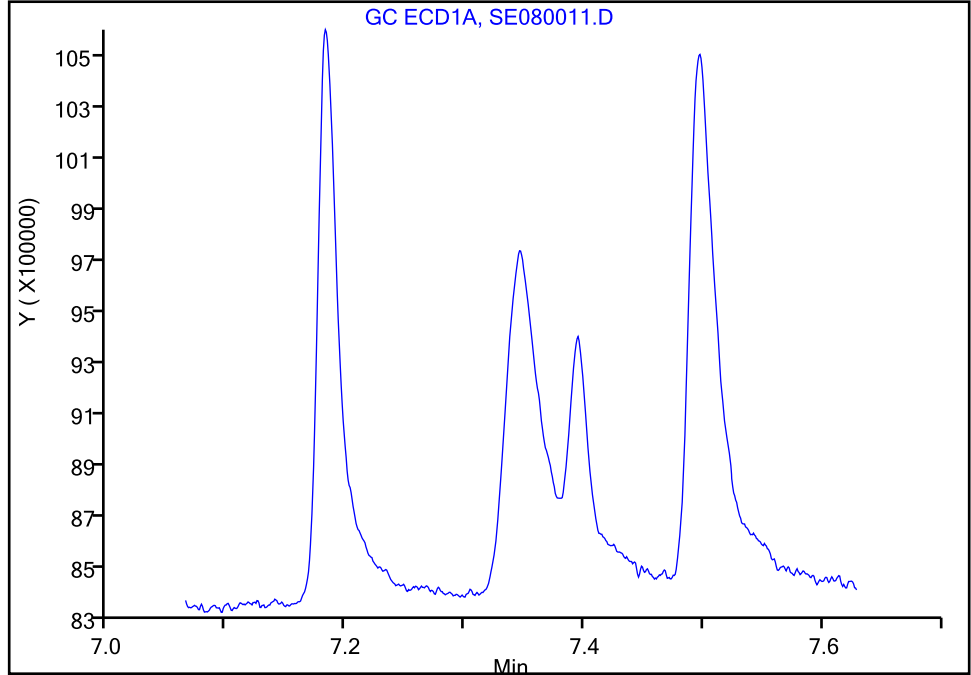
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

11 2,4-D, CAS: 94-75-7

Signal: 1

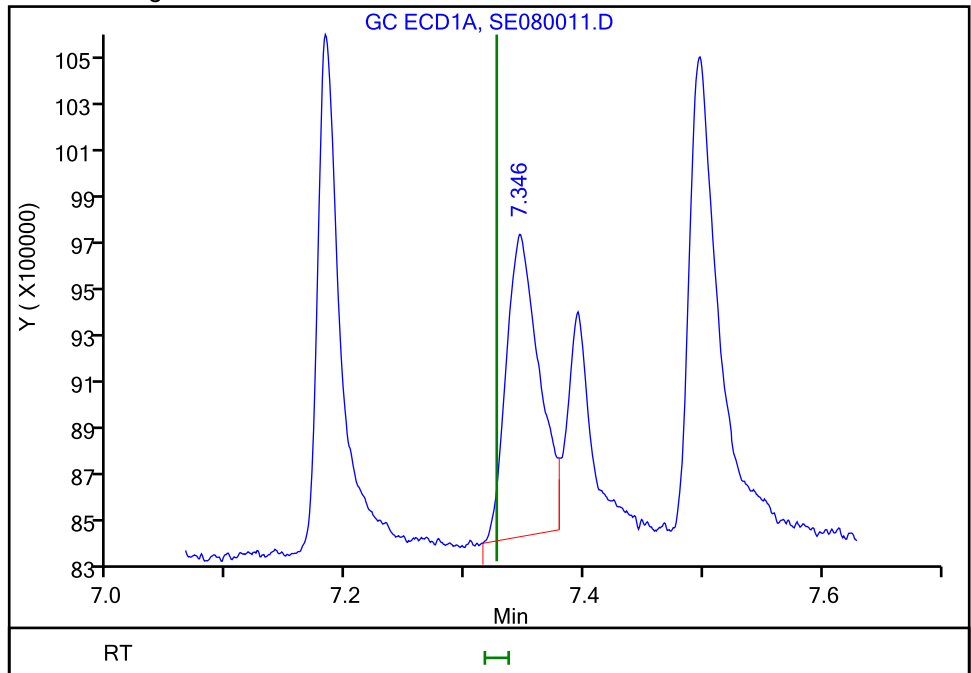
Not Detected
Expected RT: 7.33

Processing Integration Results



RT: 7.35
Area: 2400934
Amount: 0.007940
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:12
Audit Action: Assigned Compound ID

TestAmerica Savannah

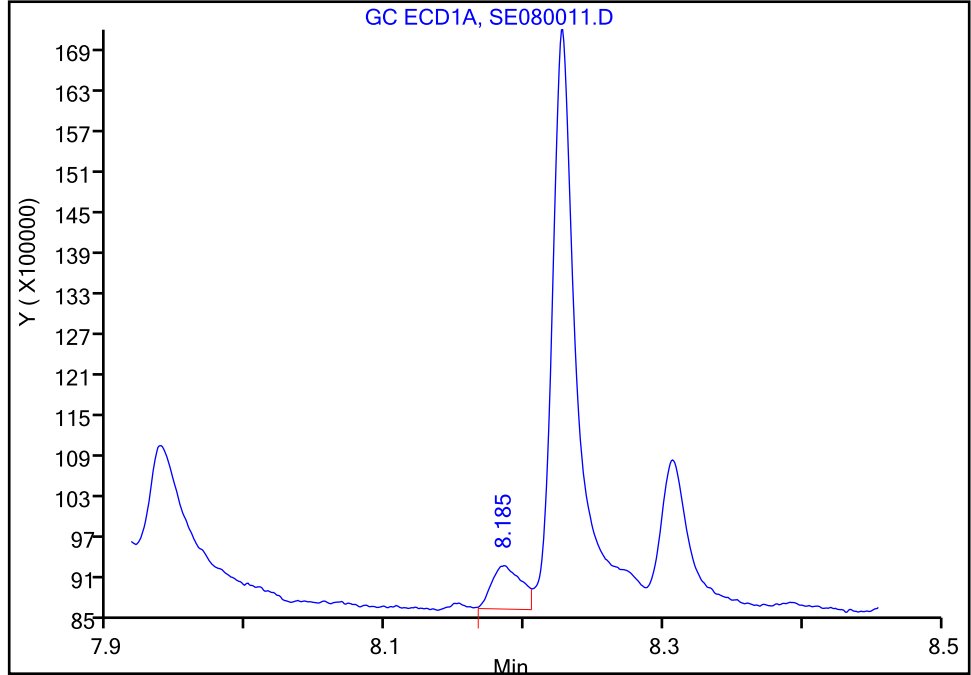
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

16 2,4-DB, CAS: 94-82-6

Signal: 1

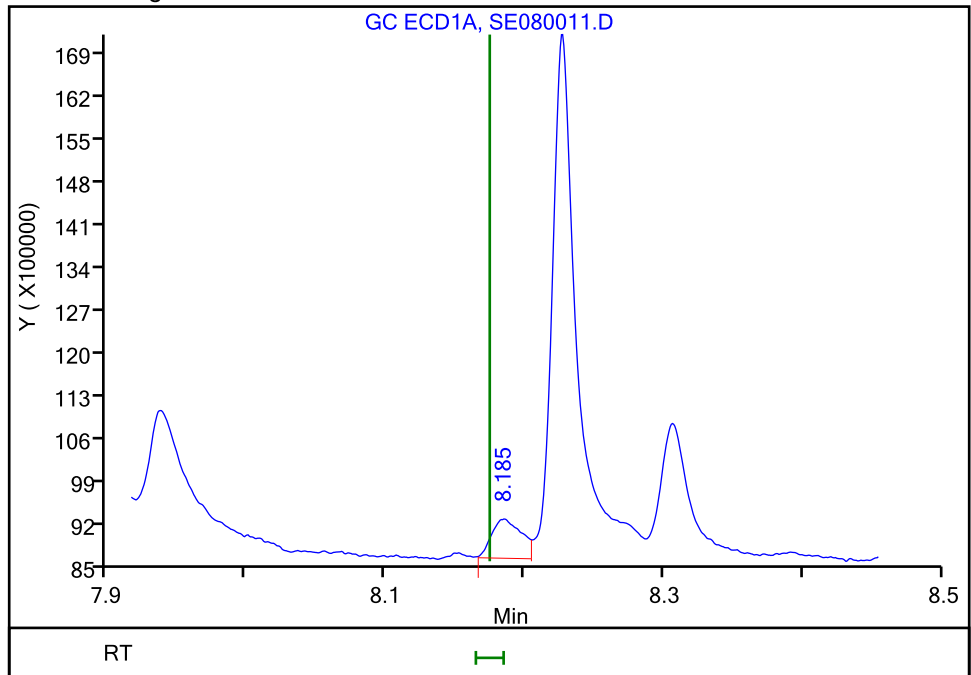
RT: 8.18
Area: 957156
Amount: 0.021175
Amount Units: ug/ml

Processing Integration Results



RT: 8.18
Area: 957156
Amount: 0.019645
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:32

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

TestAmerica Savannah

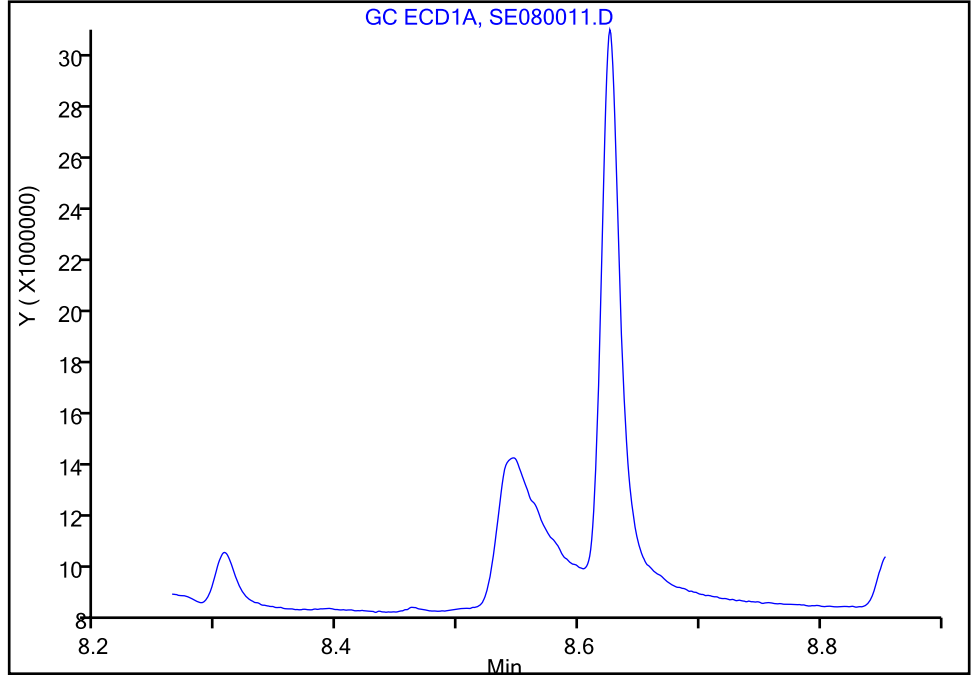
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

19 Picloram, CAS: 1918-02-1

Signal: 1

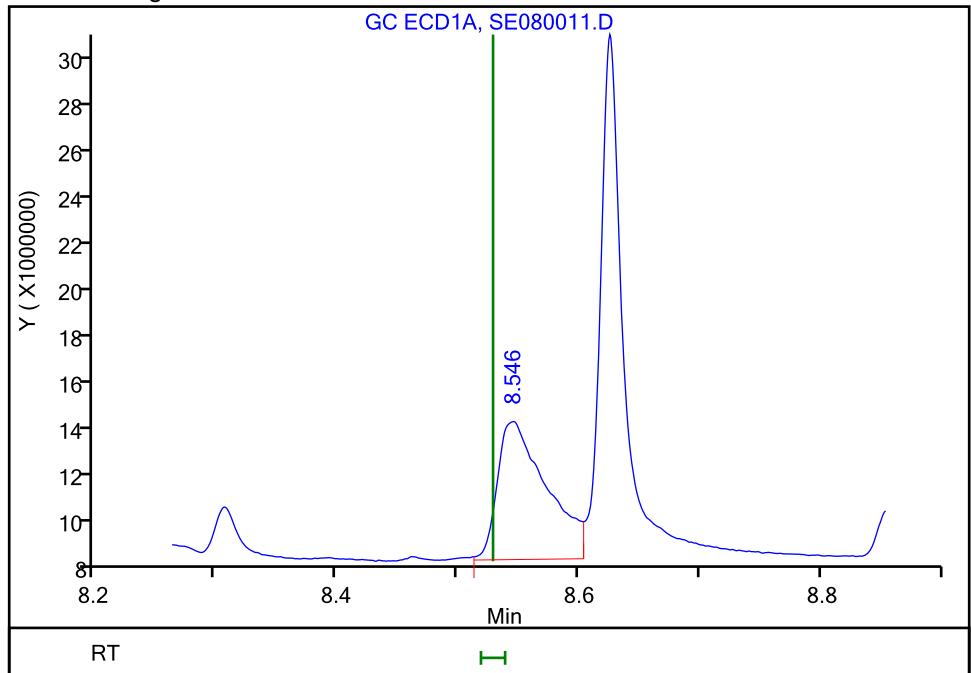
Not Detected
Expected RT: 8.53

Processing Integration Results



Manual Integration Results

RT: 8.55
Area: 16249913
Amount: 0.016709
Amount Units: ug/ml



Reviewer: kellarj, 08-May-2018 16:11:41
Audit Action: Assigned Compound ID

Calibration

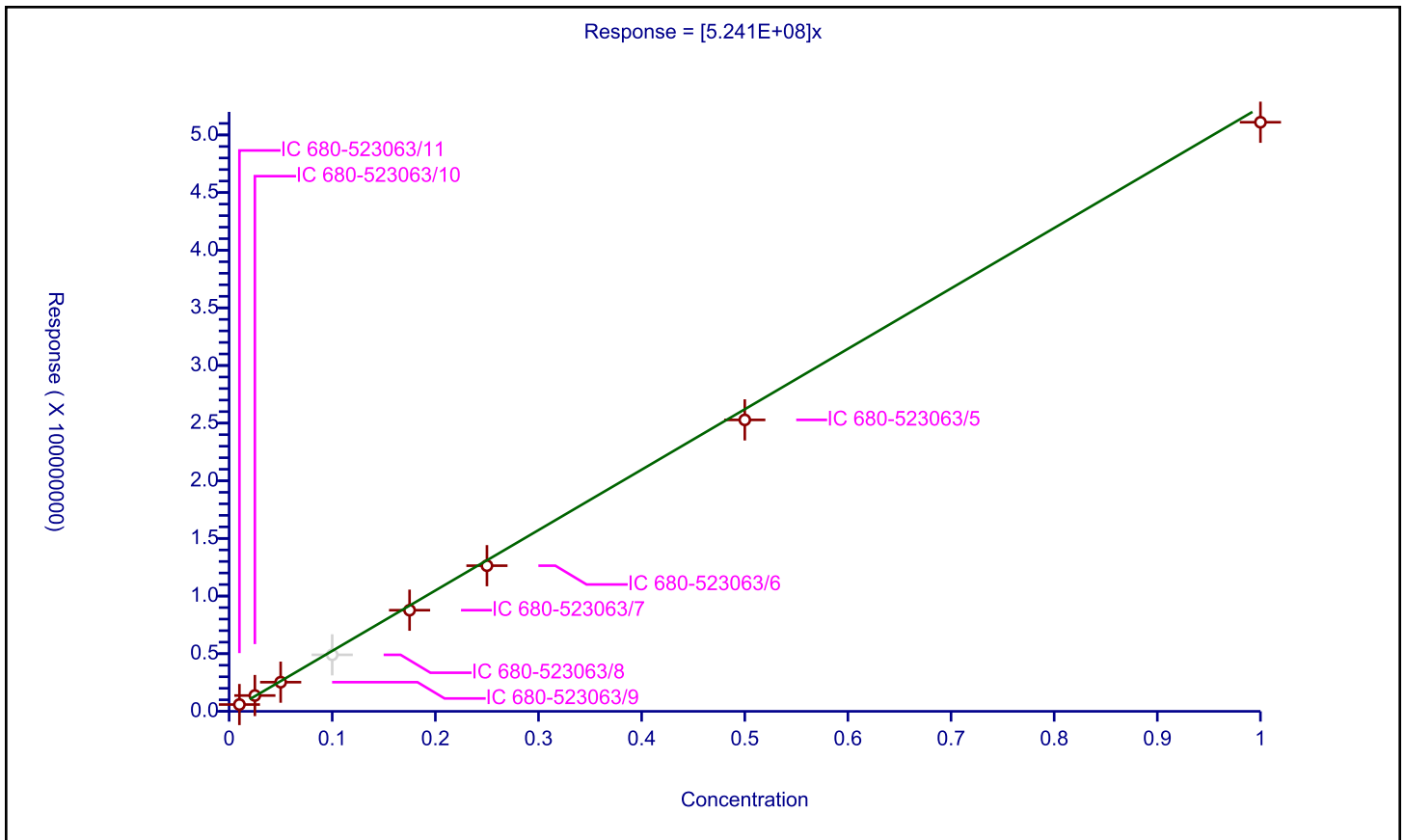
/ Dalapon

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

Curve Coefficients	
Intercept:	0
Slope:	5.241E+08

Error Coefficients	
Standard Error:	7010000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	5906230.0			590623000.0	Y
2	IC 680-523063/10	0.025	13718735.0			548749400.0	Y
3	IC 680-523063/9	0.05	25290814.0			505816280.0	Y
4	IC 680-523063/8	0.1	49026258.0			490262580.0	N
5	IC 680-523063/7	0.175	87735176.0			501343862.857143	Y
6	IC 680-523063/6	0.25	126339938.0			505359752.0	Y
7	IC 680-523063/5	0.5	252815070.0			505630140.0	Y
8	IC 680-523063/4	1.0	511012321.0			511012321.0	Y



Calibration

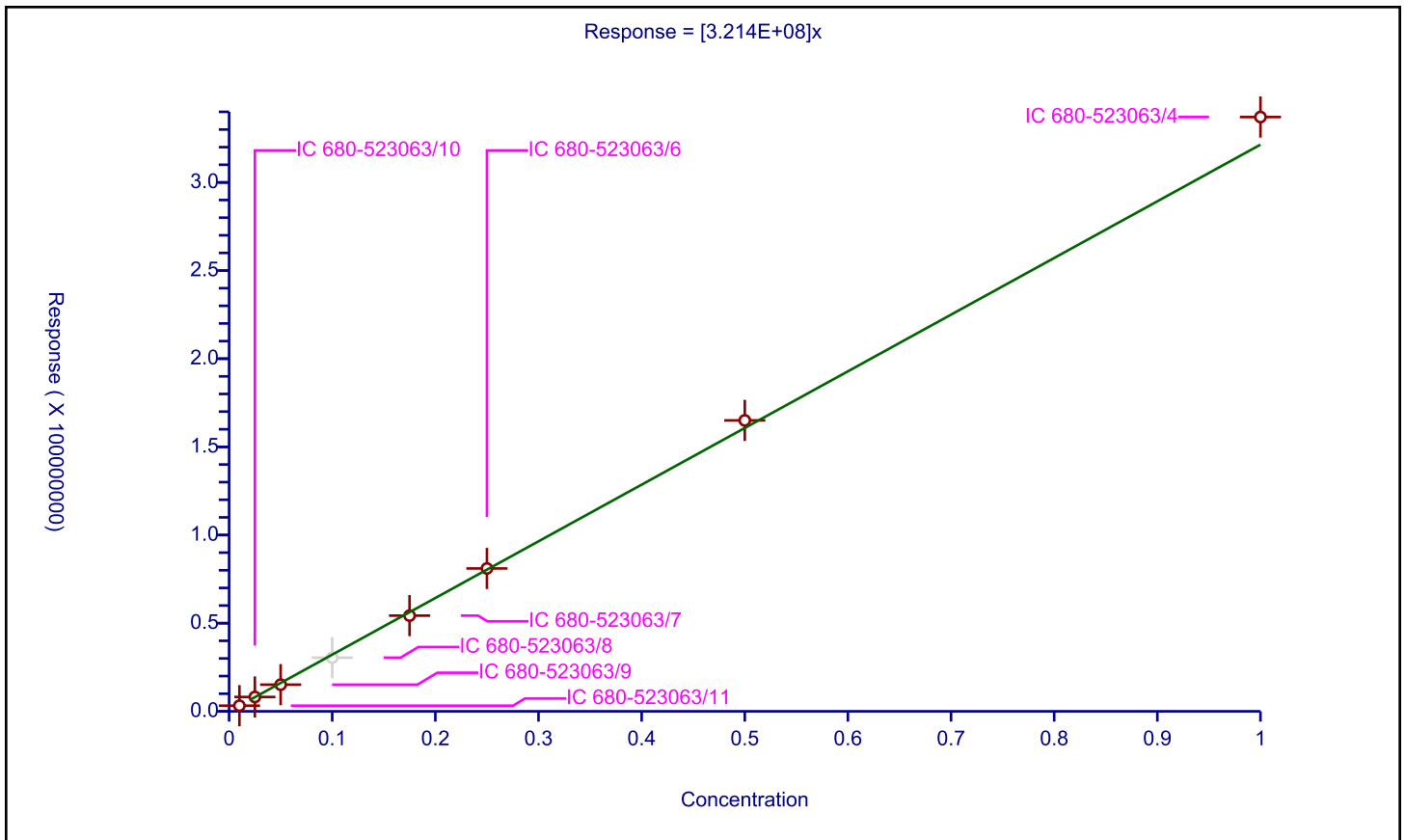
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	3.214E+08

Error Coefficients	
Standard Error:	6690000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	3202229.0			320222900.0	Y
2	IC 680-523063/10	0.025	8148129.0			325925160.0	Y
3	IC 680-523063/9	0.05	15117918.0			302358360.0	Y
4	IC 680-523063/8	0.1	30442227.0			304422270.0	N
5	IC 680-523063/7	0.175	54279812.0			310170354.285714	Y
6	IC 680-523063/6	0.25	81038461.0			324153844.0	Y
7	IC 680-523063/5	0.5	165004902.0			330009804.0	Y
8	IC 680-523063/4	1.0	337068861.0			337068861.0	Y



Calibration

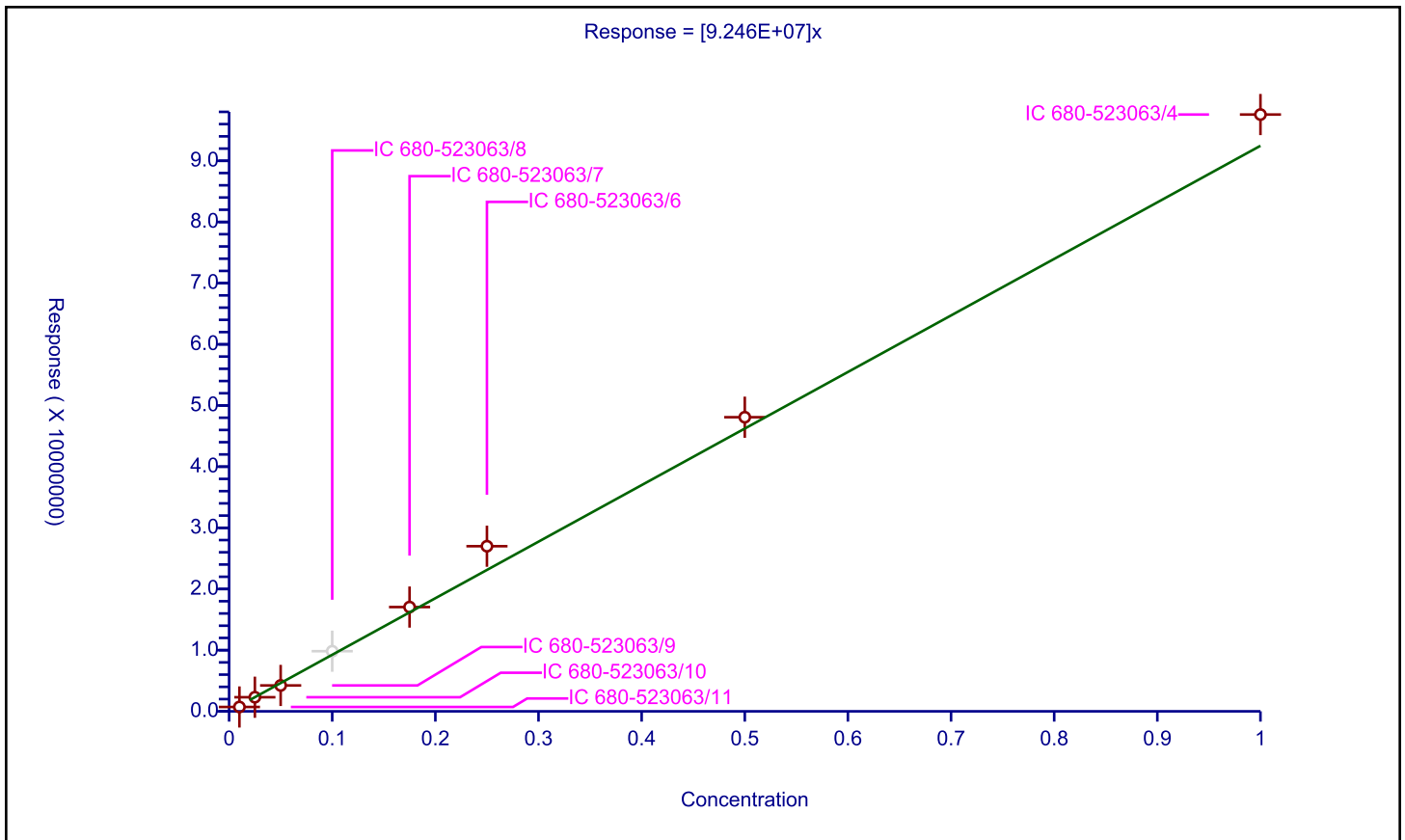
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	9.246E+07

Error Coefficients	
Standard Error:	2750000
Relative Standard Error:	12.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	711986.0			71198600.0	Y
2	IC 680-523063/10	0.025	2307008.0			92280320.0	Y
3	IC 680-523063/9	0.05	4230904.0			84618080.0	Y
4	IC 680-523063/8	0.1	9830837.0			98308370.0	N
5	IC 680-523063/7	0.175	17047628.0			97415017.142857	Y
6	IC 680-523063/6	0.25	26992258.0			107969032.0	Y
7	IC 680-523063/5	0.5	48081748.0			96163496.0	Y
8	IC 680-523063/4	1.0	97562965.0			97562965.0	Y



Calibration

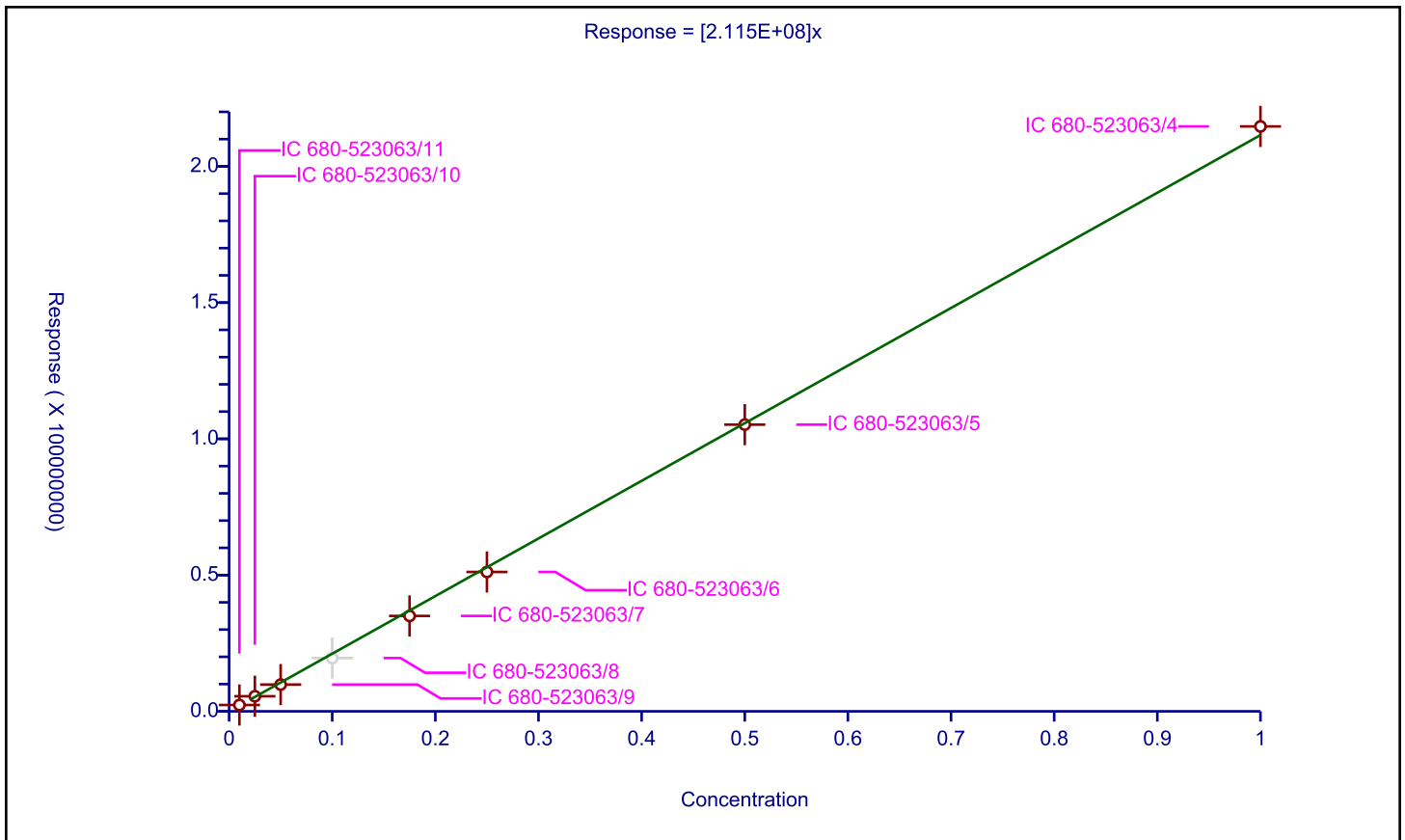
/ 2,4-Dichlorophenylacetic acid

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

Curve Coefficients	
Intercept:	0
Slope:	2.115E+08

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2325909.0			232590900.0	Y
2	IC 680-523063/10	0.025	5538443.0			221537720.0	Y
3	IC 680-523063/9	0.05	9821711.0			196434220.0	Y
4	IC 680-523063/8	0.1	19553071.0			195530710.0	N
5	IC 680-523063/7	0.175	35013881.0			200079320.0	Y
6	IC 680-523063/6	0.25	51149844.0			204599376.0	Y
7	IC 680-523063/5	0.5	105220295.0			210440590.0	Y
8	IC 680-523063/4	1.0	214663766.0			214663766.0	Y



Calibration

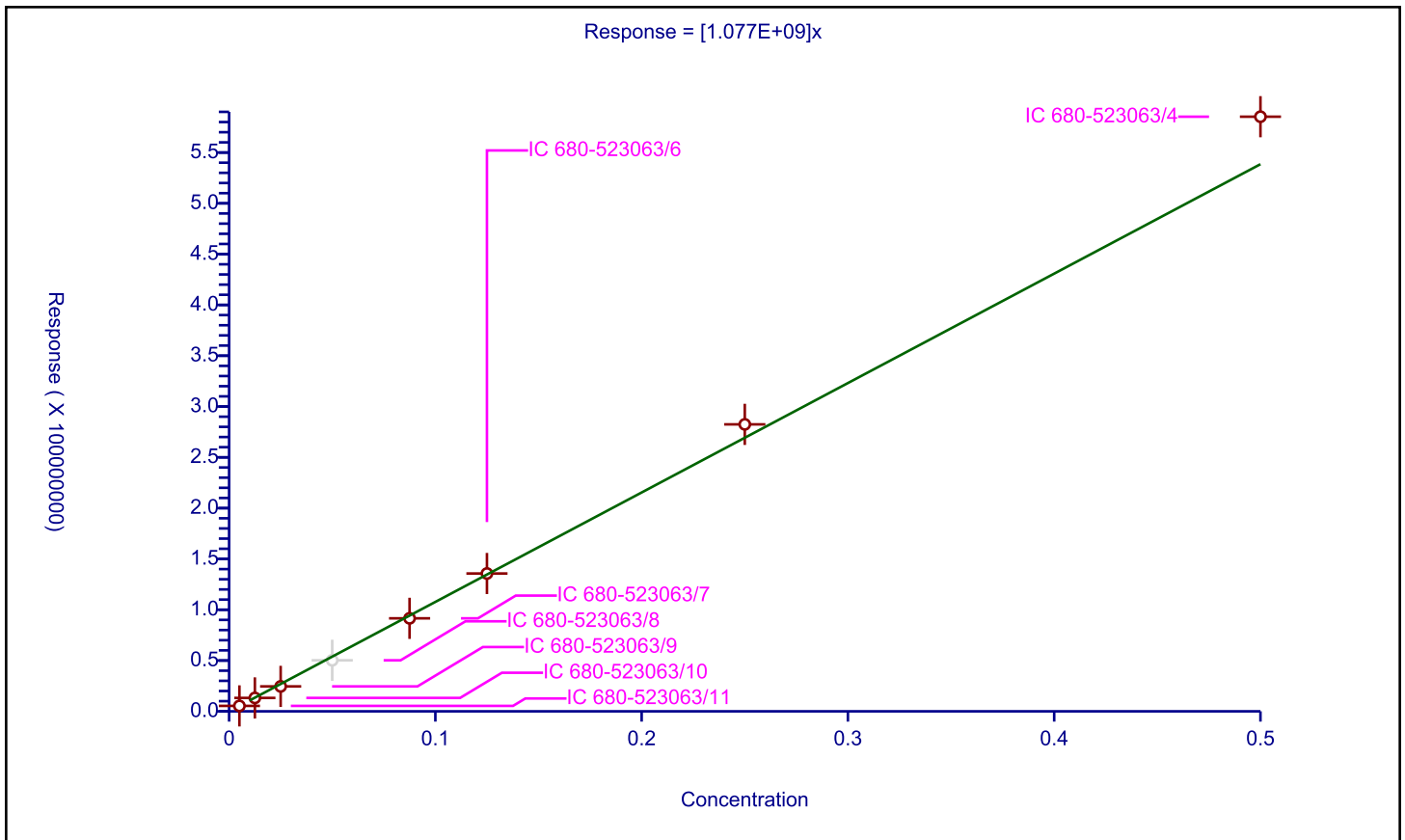
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	1.077E+09

Error Coefficients	
Standard Error:	19900000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.005	5346345.0			1069269000.0	Y
2	IC 680-523063/10	0.0125	13200023.0			1056001840.0	Y
3	IC 680-523063/9	0.025	24549090.0			981963600.0	Y
4	IC 680-523063/8	0.05	50221281.0			1004425620.0	N
5	IC 680-523063/7	0.0875	91550778.0			1046294605.71429	Y
6	IC 680-523063/6	0.125	135663470.0			1085307760.0	Y
7	IC 680-523063/5	0.25	282435535.0			1129742140.0	Y
8	IC 680-523063/4	0.5	585243873.0			1170487746.0	Y



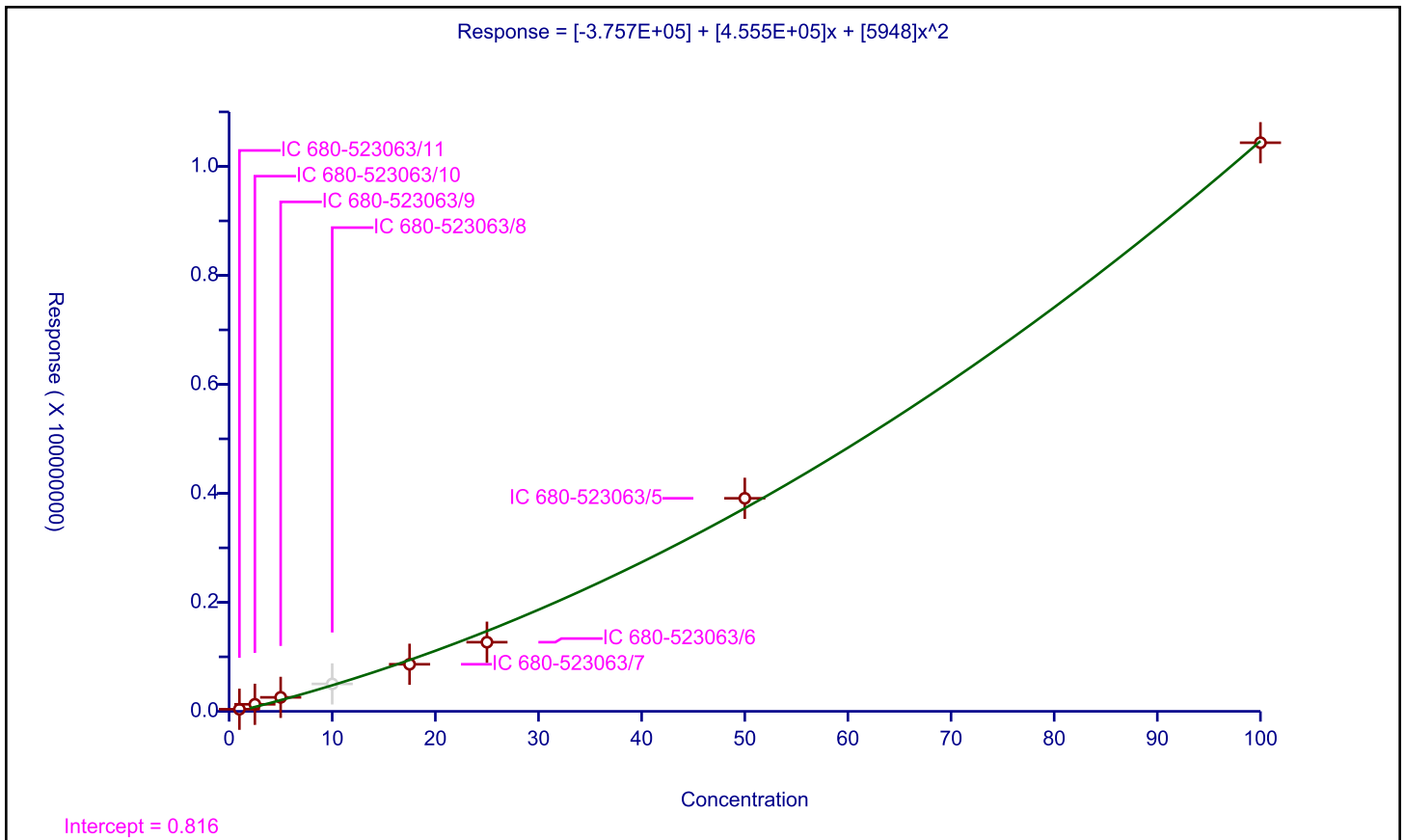
Calibration

Curve Type: Quadratic
Weighting: None
Origin: None
Dependency: Response
Calib Mode: ESTD
Response Base:
RF Rounding: 0

Curve Coefficients	
Intercept:	-3.757E+05
Slope:	4.555E+05
Second Order:	5948

Error Coefficients	
Standard Error:	1480000
Relative Standard Error:	39.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	383358.0			383358.0	Y
2	IC 680-523063/10	2.5	1288891.0			515556.4	Y
3	IC 680-523063/9	5.0	2565927.0			513185.4	Y
4	IC 680-523063/8	10.0	5032337.0			503233.7	N
5	IC 680-523063/7	17.5	8640069.0			493718.228571	Y
6	IC 680-523063/6	25.0	12687646.0			507505.84	Y
7	IC 680-523063/5	50.0	39090261.0			781805.22	Y
8	IC 680-523063/4	100.0	104343971.0			1043439.71	Y



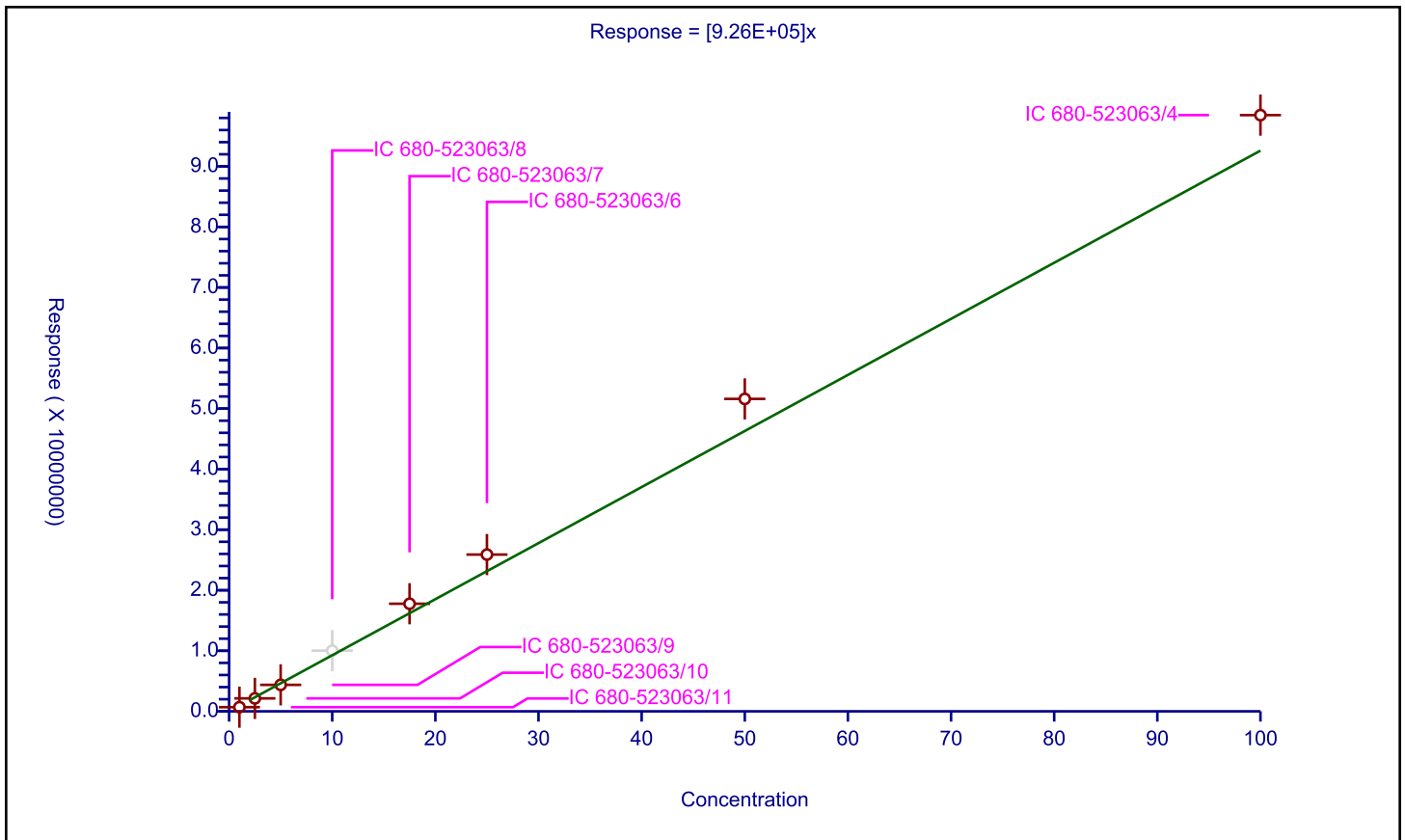
Calibration

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

Curve Coefficients	
Intercept:	0
Slope:	9.26E+05

Error Coefficients	
Standard Error:	3480000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	684536.0			684536.0	Y
2	IC 680-523063/10	2.5	2137688.0			855075.2	Y
3	IC 680-523063/9	5.0	4373482.0			874696.4	Y
4	IC 680-523063/8	10.0	10021981.0			1002198.1	N
5	IC 680-523063/7	17.5	17766771.0			1015244.057143	Y
6	IC 680-523063/6	25.0	25890792.0			1035631.68	Y
7	IC 680-523063/5	50.0	51596040.0			1031920.8	Y
8	IC 680-523063/4	100.0	98467290.0			984672.9	Y



Calibration

/ Dichlorprop

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

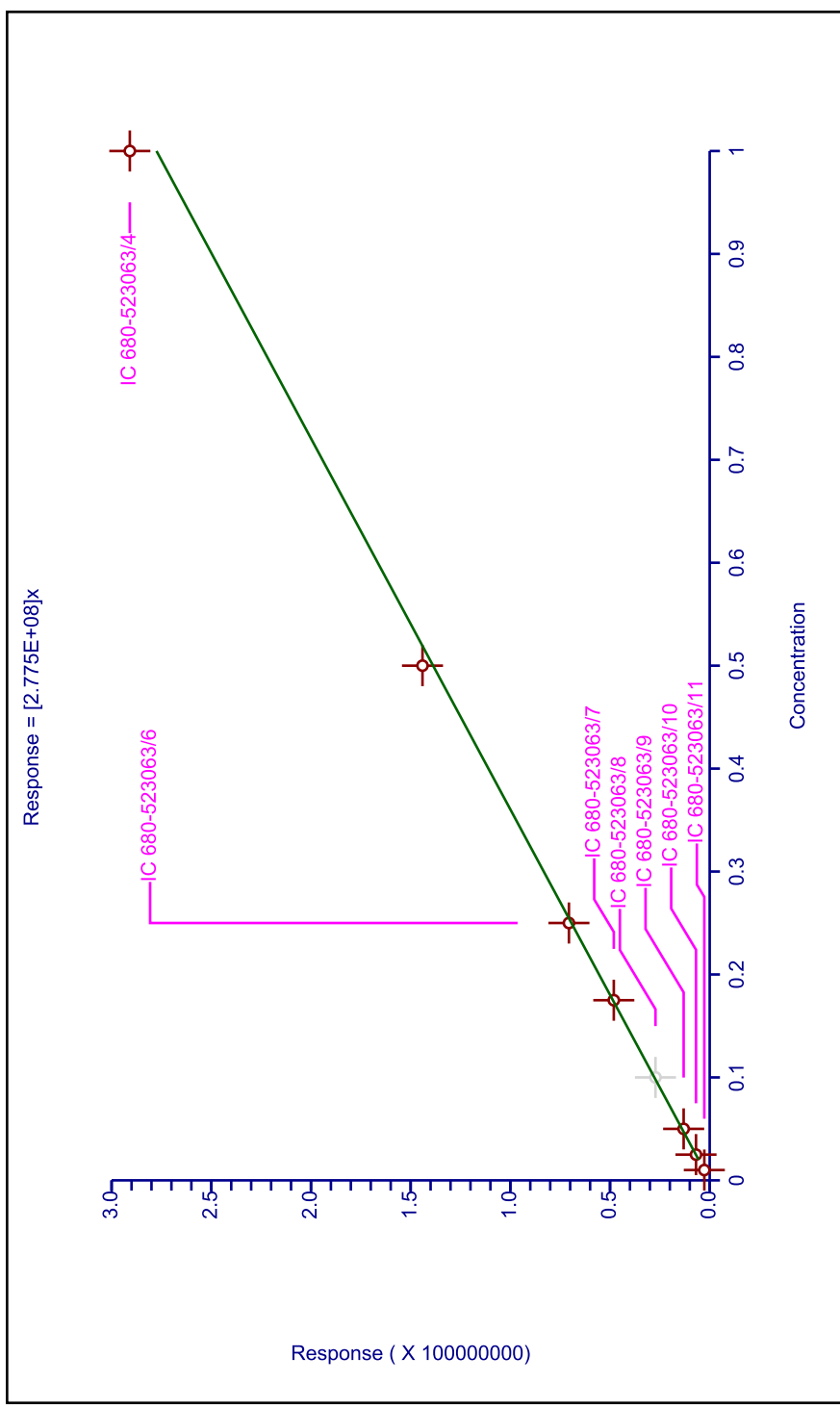
Curve Coefficients

Intercept: 0
 Slope: 2.775E+08

Error Coefficients

Standard Error: 5910000
 Relative Standard Error: 3.8
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2699462.0			269946200.0	Y
2	IC 680-523063/10	0.025	6871862.0			274874480.0	Y
3	IC 680-523063/9	0.05	13064380.0			261287600.0	Y
4	IC 680-523063/8	0.1	27204673.0			272046730.0	N
5	IC 680-523063/7	0.175	48109296.0			274910262.857143	Y
6	IC 680-523063/6	0.25	70616500.0			282466000.0	Y
7	IC 680-523063/5	0.5	144063420.0			288126840.0	Y
8	IC 680-523063/4	1.0	290874356.0			290874356.0	Y



Calibration

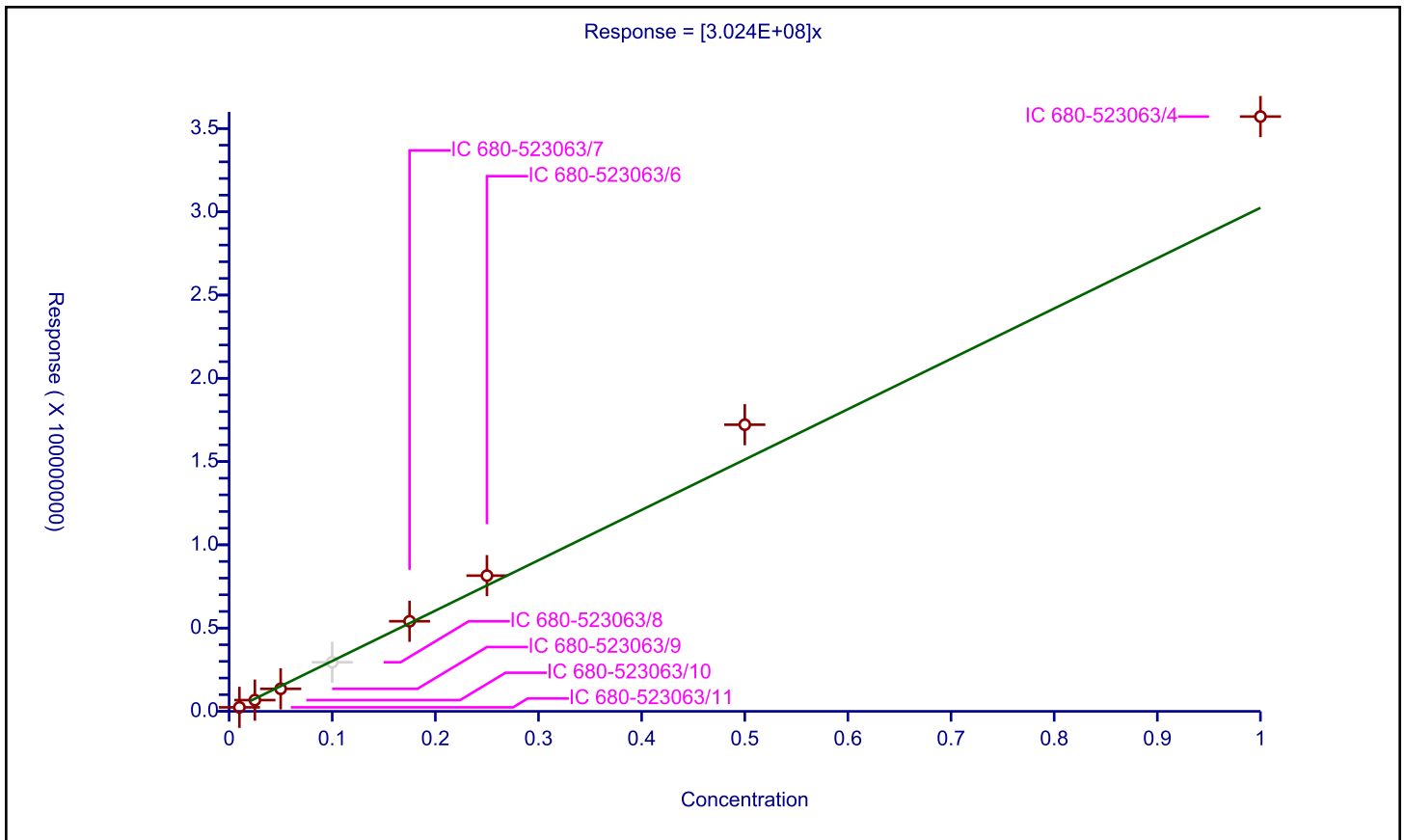
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	3.024E+08

Error Coefficients	
Standard Error:	24100000
Relative Standard Error:	14.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2400934.0			240093400.0	Y
2	IC 680-523063/10	0.025	6740238.0			269609520.0	Y
3	IC 680-523063/9	0.05	13528651.0			270573020.0	Y
4	IC 680-523063/8	0.1	29475053.0			294750530.0	N
5	IC 680-523063/7	0.175	54093373.0			309104988.571429	Y
6	IC 680-523063/6	0.25	81489809.0			325959236.0	Y
7	IC 680-523063/5	0.5	172138047.0			344276094.0	Y
8	IC 680-523063/4	1.0	357181097.0			357181097.0	Y



Calibration

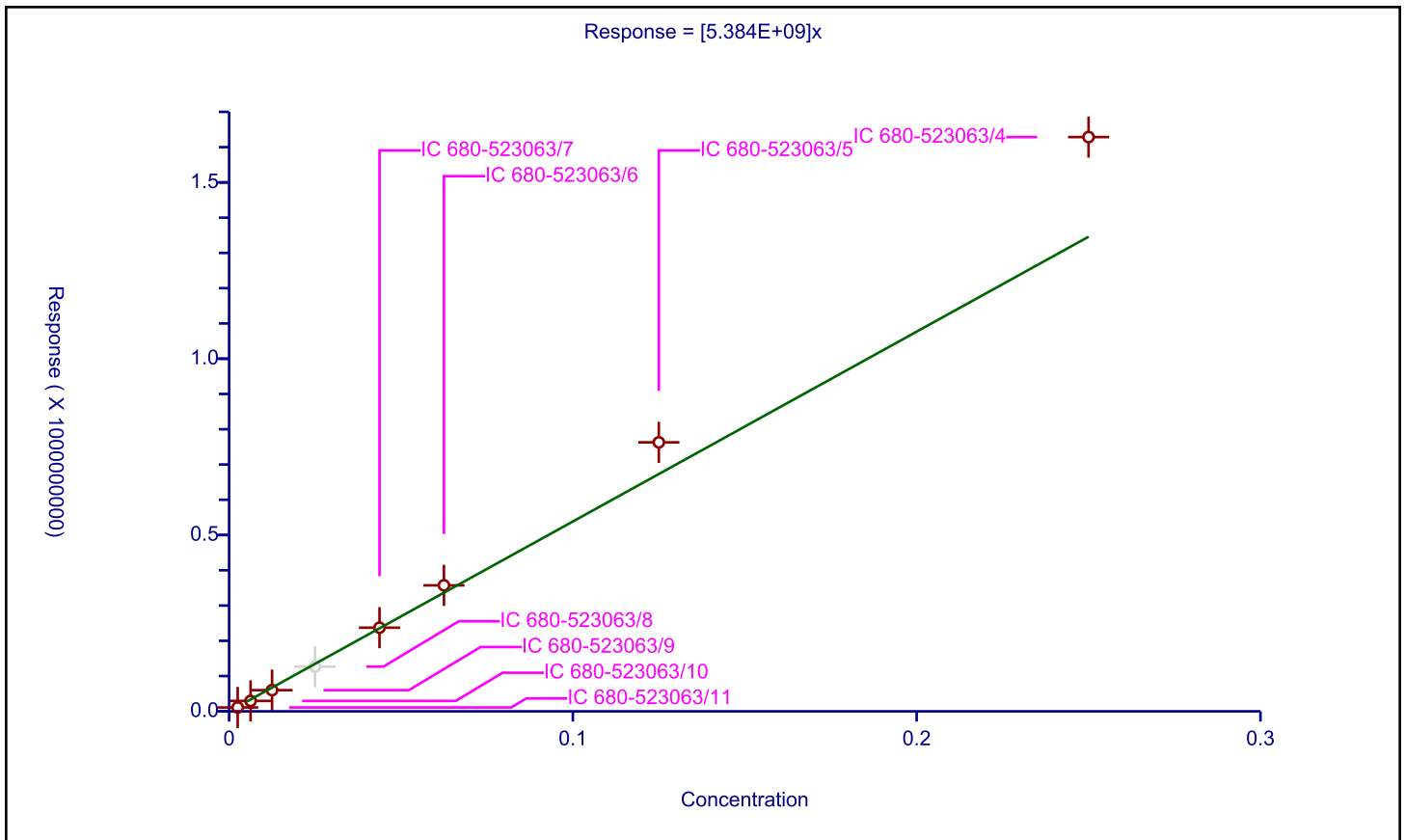
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	5.384E+09

Error Coefficients	
Standard Error:	121000000
Relative Standard Error:	14.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	11008502.0			4403400800.0	Y
2	IC 680-523063/10	0.00625	29521455.0			4723432800.0	Y
3	IC 680-523063/9	0.0125	60060646.0			4804851680.0	Y
4	IC 680-523063/8	0.025	126808590.0			5072343600.0	N
5	IC 680-523063/7	0.04375	237204468.0			5421816411.42857	Y
6	IC 680-523063/6	0.0625	357293439.0			5716695024.0	Y
7	IC 680-523063/5	0.125	762859467.0			6102875736.0	Y
8	IC 680-523063/4	0.25	1628549099.0			6514196396.0	Y



Calibration

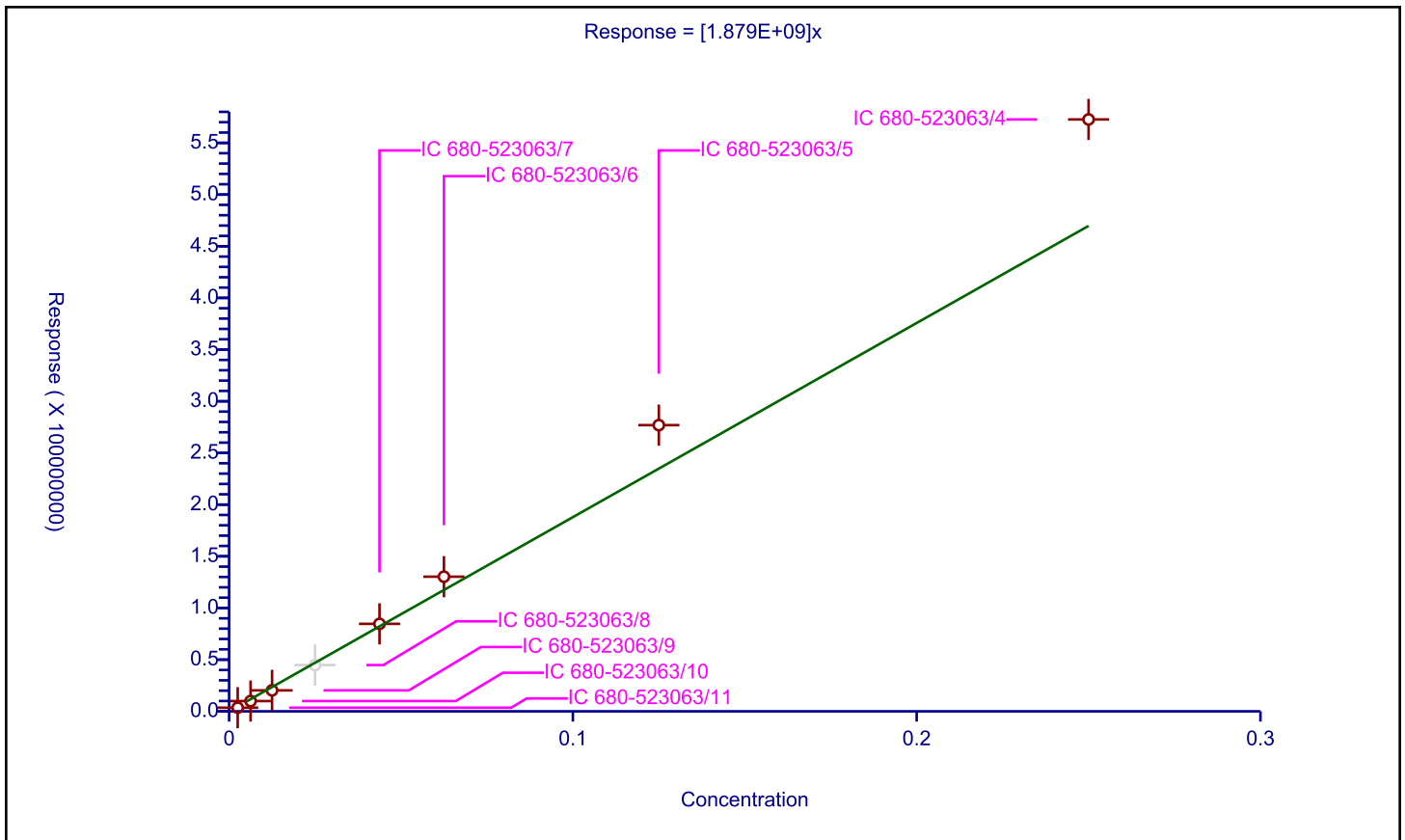
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	1.879E+09

Error Coefficients	
Standard Error:	45800000
Relative Standard Error:	18.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	3531202.0			1412480800.0	Y
2	IC 680-523063/10	0.00625	9932955.0			1589272800.0	Y
3	IC 680-523063/9	0.0125	20302486.0			1624198880.0	Y
4	IC 680-523063/8	0.025	44774730.0			1790989200.0	N
5	IC 680-523063/7	0.04375	84634924.0			1934512548.57143	Y
6	IC 680-523063/6	0.0625	130284362.0			2084549792.0	Y
7	IC 680-523063/5	0.125	276913650.0			2215309200.0	Y
8	IC 680-523063/4	0.25	572693944.0			2290775776.0	Y



Calibration

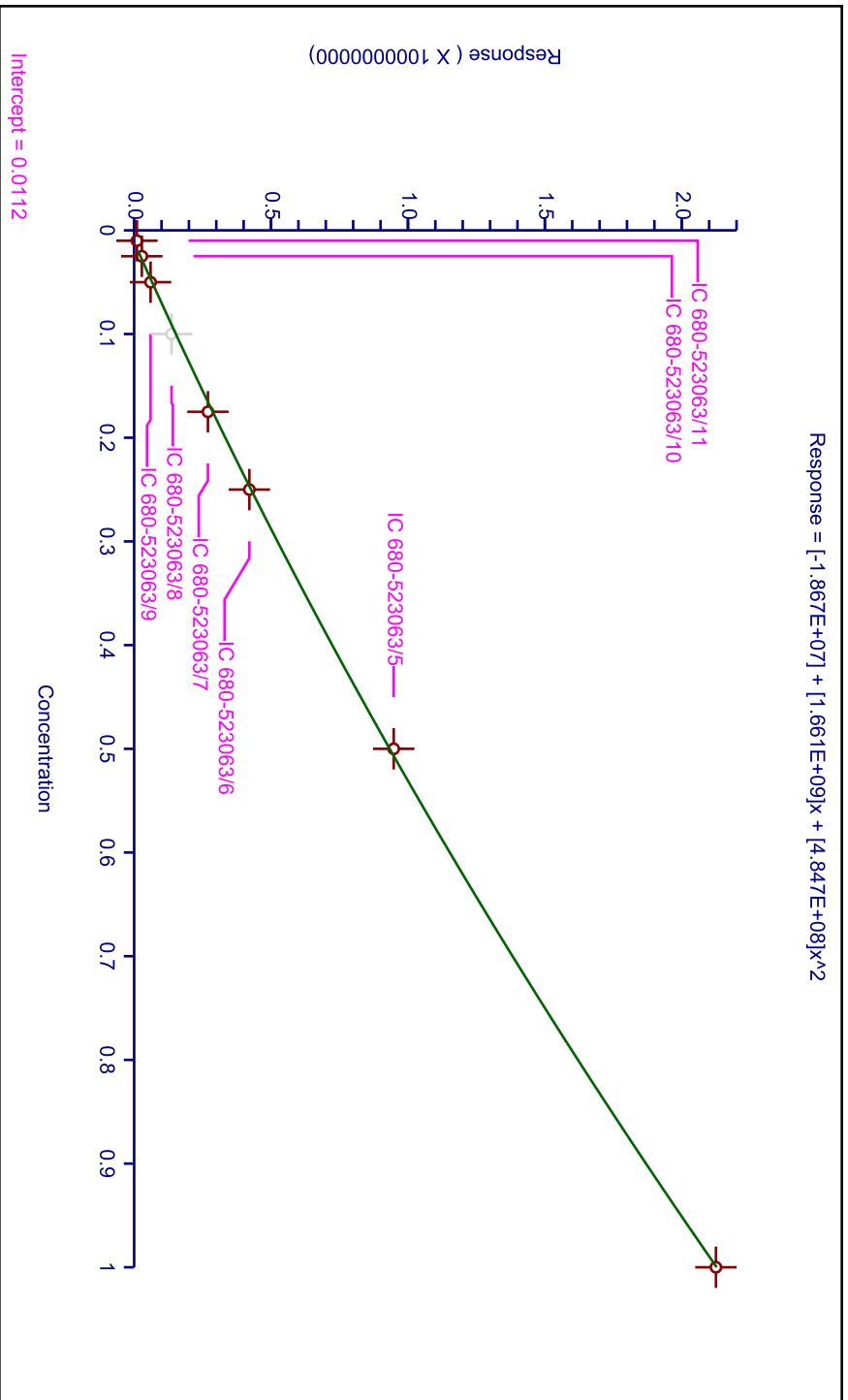
/ Chloramben

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients
 Intercept: -1.867E+07
 Slope: 1.661E+09
 Second Order: 4.847E+08

Error Coefficients
 Standard Error: 139000000
 Relative Standard Error: 37.0
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10146304.0	1014630400.0	Y	
2	IC 680-523063/10	0.025	28147981.0	1125919240.0	Y	
3	IC 680-523063/9	0.05	60085684.0	1201713680.0	Y	
4	IC 680-523063/8	0.1	136550994.0	1365509940.0	N	
5	IC 680-523063/7	0.175	269520100.0	1540114857.14286	Y	
6	IC 680-523063/6	0.25	420812351.0	1683249404.0	Y	
7	IC 680-523063/5	0.5	948055347.0	1896110694.0	Y	
8	IC 680-523063/4	1.0	2124806109.0	2124806109.0	Y	



Calibration

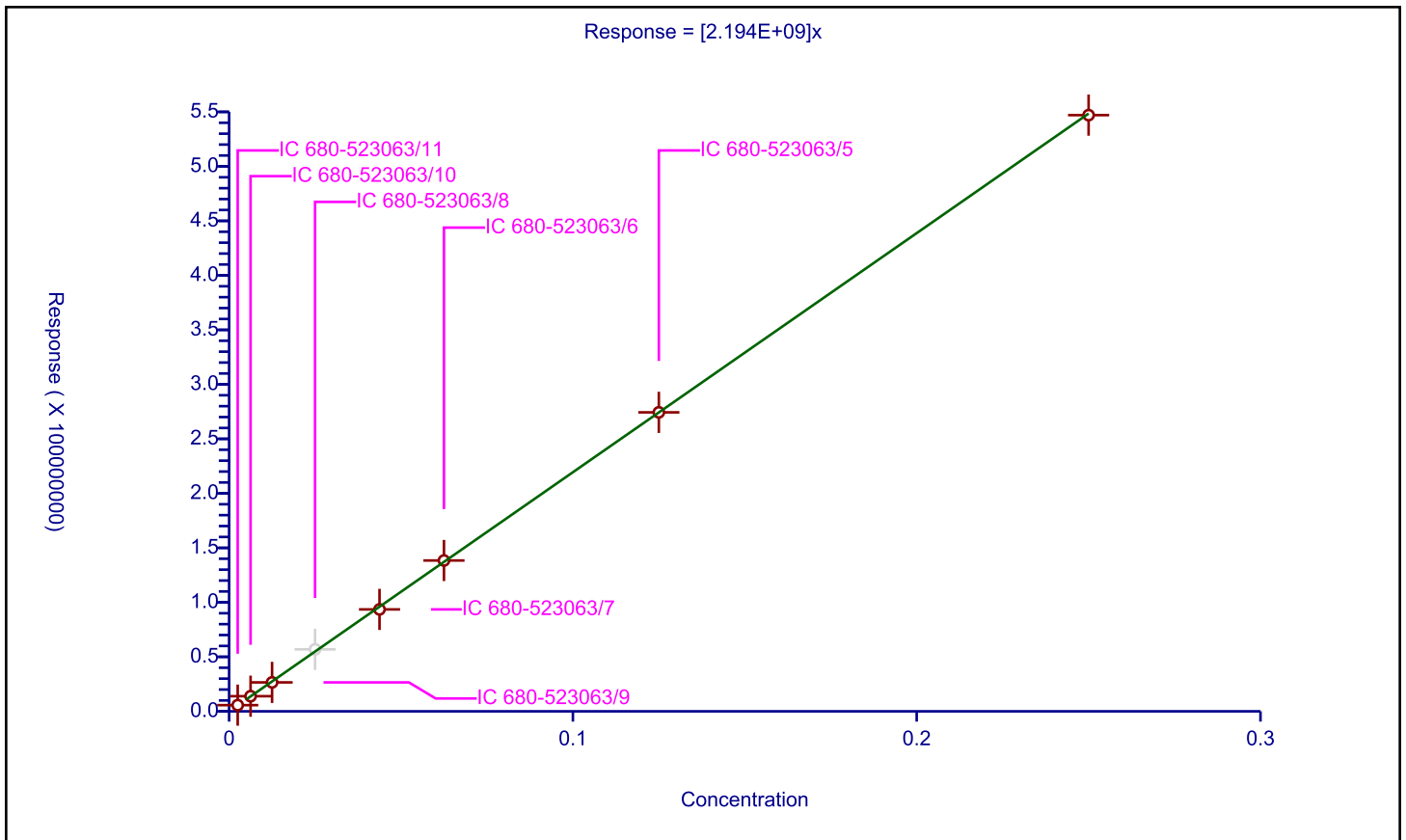
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	2.194E+09

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	5683855.0			2273542000.0	Y
2	IC 680-523063/10	0.00625	13893399.0			2222943840.0	Y
3	IC 680-523063/9	0.0125	26566988.0			2125359040.0	Y
4	IC 680-523063/8	0.025	56867356.0			2274694240.0	N
5	IC 680-523063/7	0.04375	93534318.0			2137927268.57143	Y
6	IC 680-523063/6	0.0625	138404340.0			2214469440.0	Y
7	IC 680-523063/5	0.125	274321777.0			2194574216.0	Y
8	IC 680-523063/4	0.25	547016891.0			2188067564.0	Y



Calibration

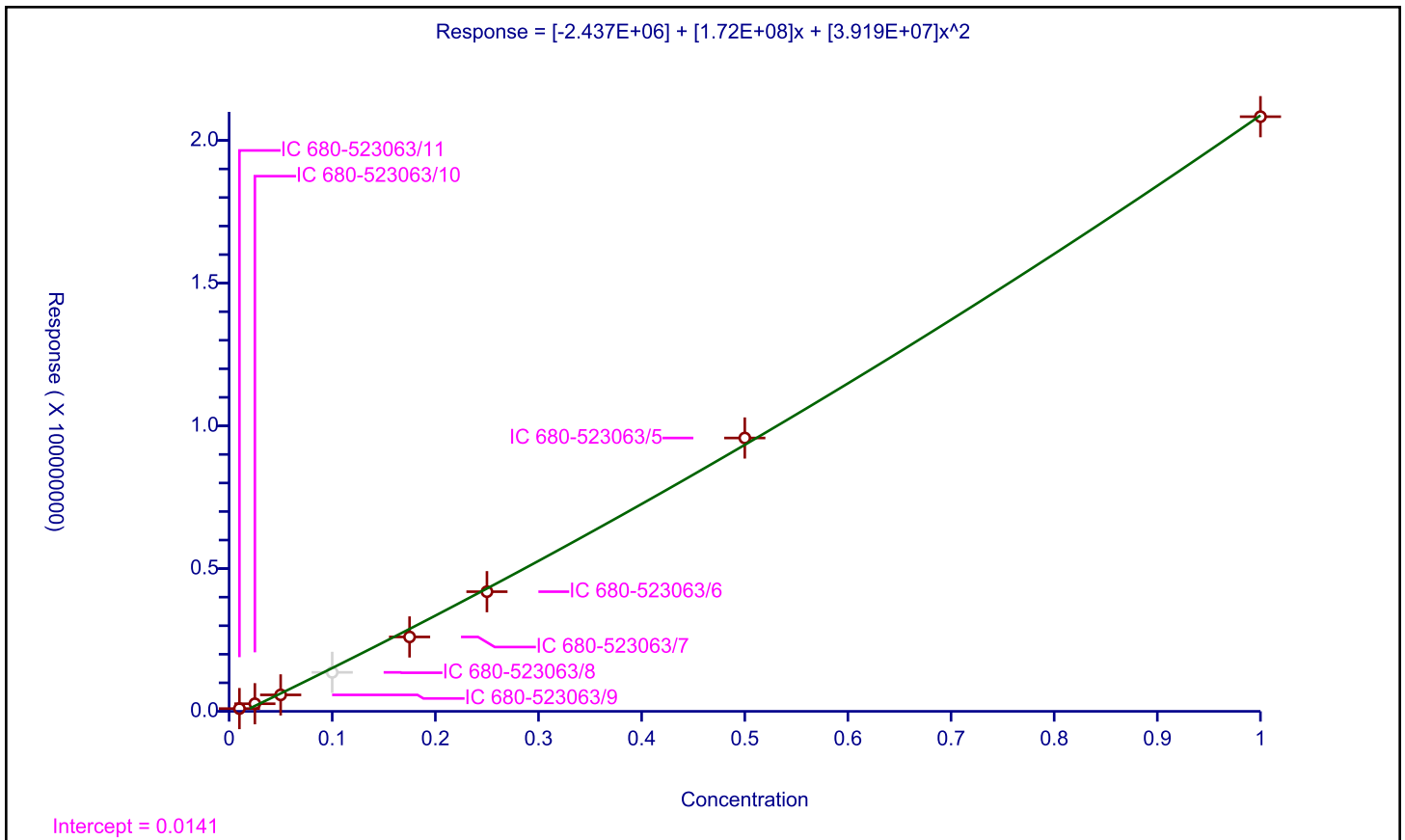
/ 2,4-DB

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.437E+06
Slope:	1.72E+08
Second Order:	3.919E+07

Error Coefficients	
Standard Error:	2160000
Relative Standard Error:	49.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	957156.0			95715600.0	Y
2	IC 680-523063/10	0.025	2666490.0			106659600.0	Y
3	IC 680-523063/9	0.05	5762851.0			115257020.0	Y
4	IC 680-523063/8	0.1	13655211.0			136552110.0	N
5	IC 680-523063/7	0.175	26059778.0			148913017.142857	Y
6	IC 680-523063/6	0.25	41914777.0			167659108.0	Y
7	IC 680-523063/5	0.5	95758632.0			191517264.0	Y
8	IC 680-523063/4	1.0	208315295.0			208315295.0	Y



Calibration

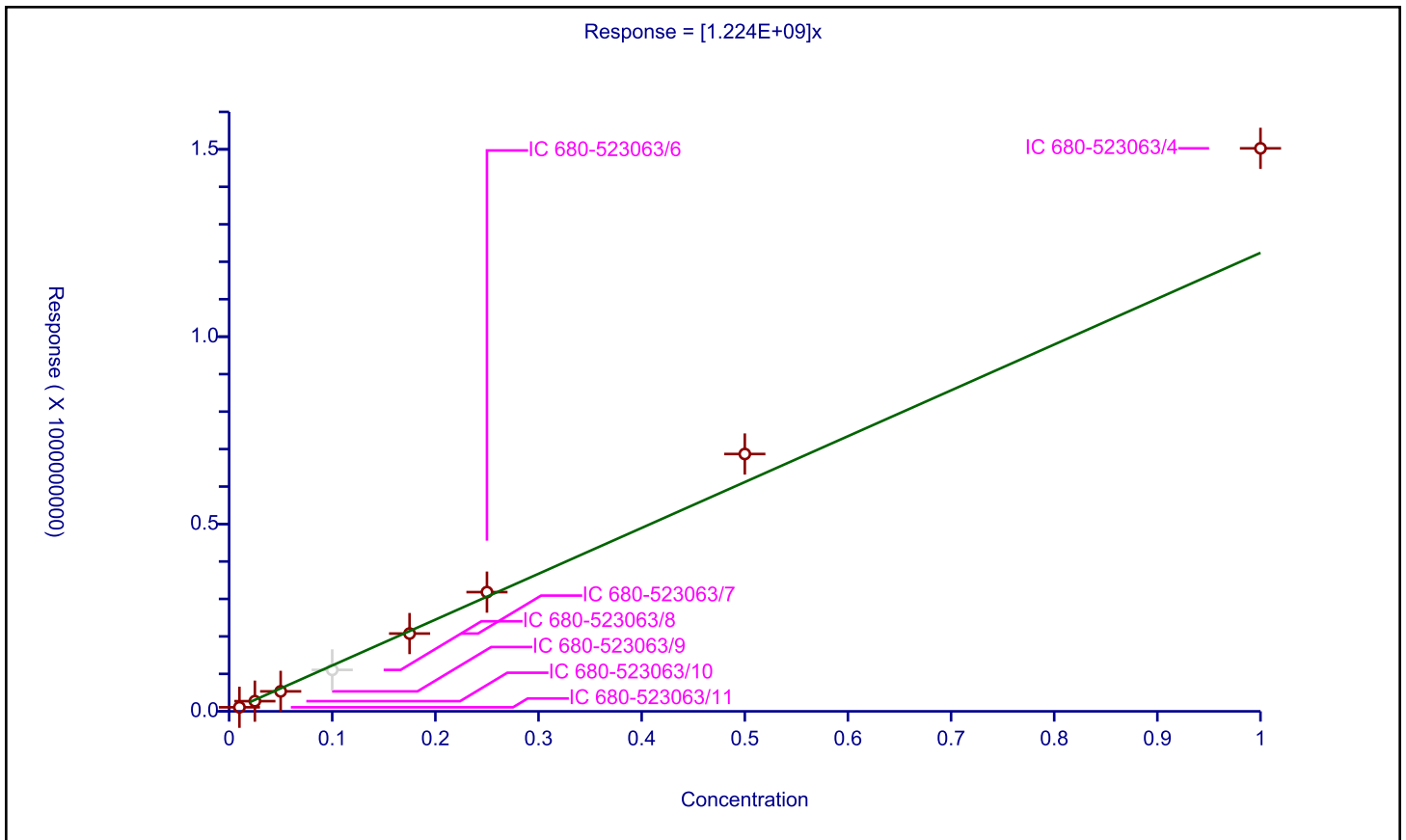
/ Dinoseb

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

Curve Coefficients	
Intercept:	0
Slope:	1.224E+09

Error Coefficients	
Standard Error:	118000000
Relative Standard Error:	13.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10802376.0			1080237600.0	Y
2	IC 680-523063/10	0.025	27141219.0			1085648760.0	Y
3	IC 680-523063/9	0.05	53295649.0			1065912980.0	Y
4	IC 680-523063/8	0.1	110631354.0			1106313540.0	N
5	IC 680-523063/7	0.175	207576561.0			1186151777.14286	Y
6	IC 680-523063/6	0.25	318205530.0			1272822120.0	Y
7	IC 680-523063/5	0.5	686899035.0			1373798070.0	Y
8	IC 680-523063/4	1.0	1502700567.0			1502700567.0	Y



Calibration

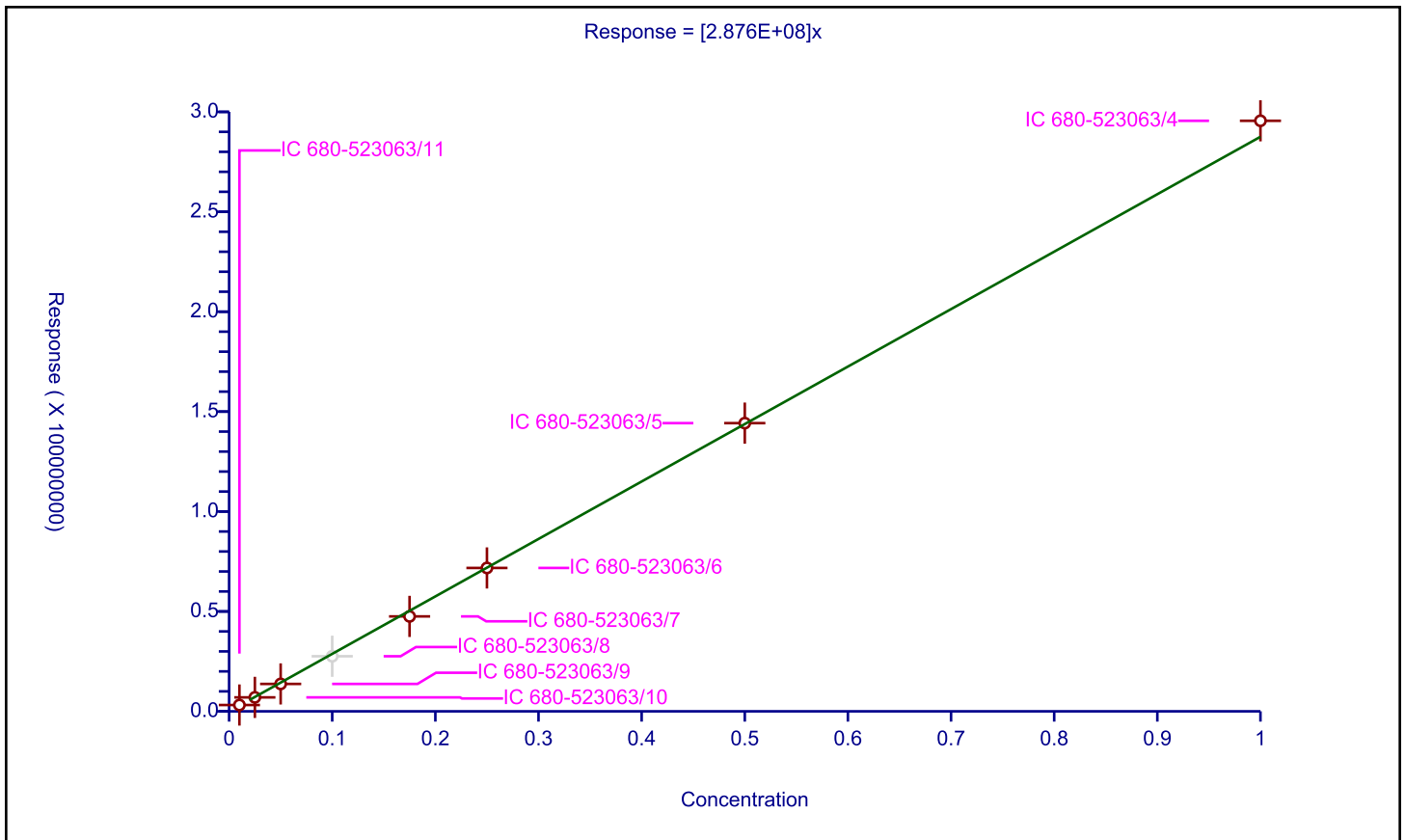
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	2.876E+08

Error Coefficients	
Standard Error:	3480000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	3164677.0			316467700.0	Y
2	IC 680-523063/10	0.025	6986266.0			279450640.0	Y
3	IC 680-523063/9	0.05	13719455.0			274389100.0	Y
4	IC 680-523063/8	0.1	27567147.0			275671470.0	N
5	IC 680-523063/7	0.175	47511232.0			271492754.285714	Y
6	IC 680-523063/6	0.25	71761268.0			287045072.0	Y
7	IC 680-523063/5	0.5	144238238.0			288476476.0	Y
8	IC 680-523063/4	1.0	295542031.0			295542031.0	Y



Calibration

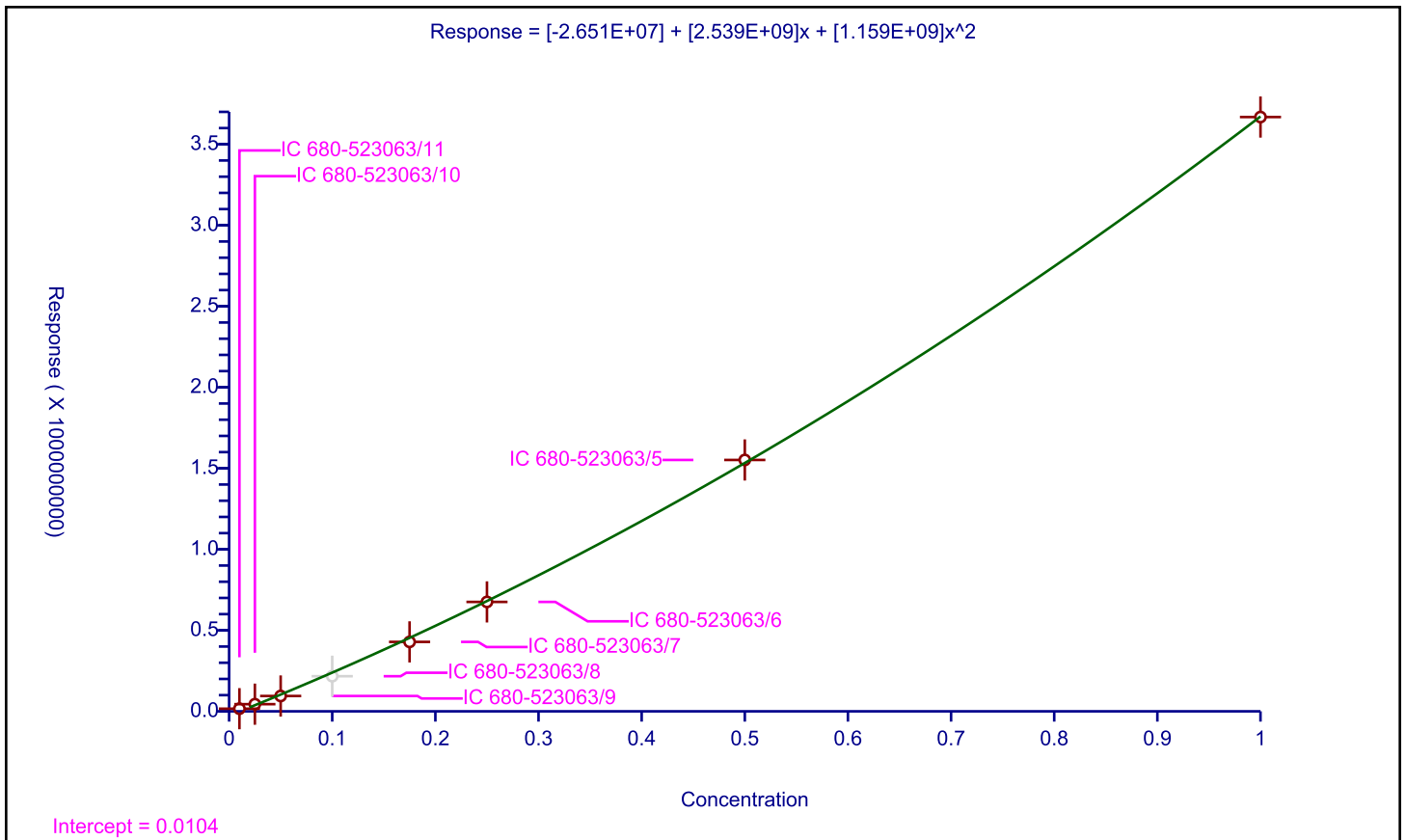
/ Picloram

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-2.651E+07
Slope:	2.539E+09
Second Order:	1.159E+09

Error Coefficients	
Standard Error:	18800000
Relative Standard Error:	34.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	16249913.0			1624991300.0	Y
2	IC 680-523063/10	0.025	44134008.0			1765360320.0	Y
3	IC 680-523063/9	0.05	94759287.0			1895185740.0	Y
4	IC 680-523063/8	0.1	216808821.0			2168088210.0	N
5	IC 680-523063/7	0.175	428630902.0			2449319440.0	Y
6	IC 680-523063/6	0.25	675298882.0			2701195528.0	Y
7	IC 680-523063/5	0.5	1551637070.0			3103274140.0	Y
8	IC 680-523063/4	1.0	3668133130.0			3668133130.0	Y



Calibration

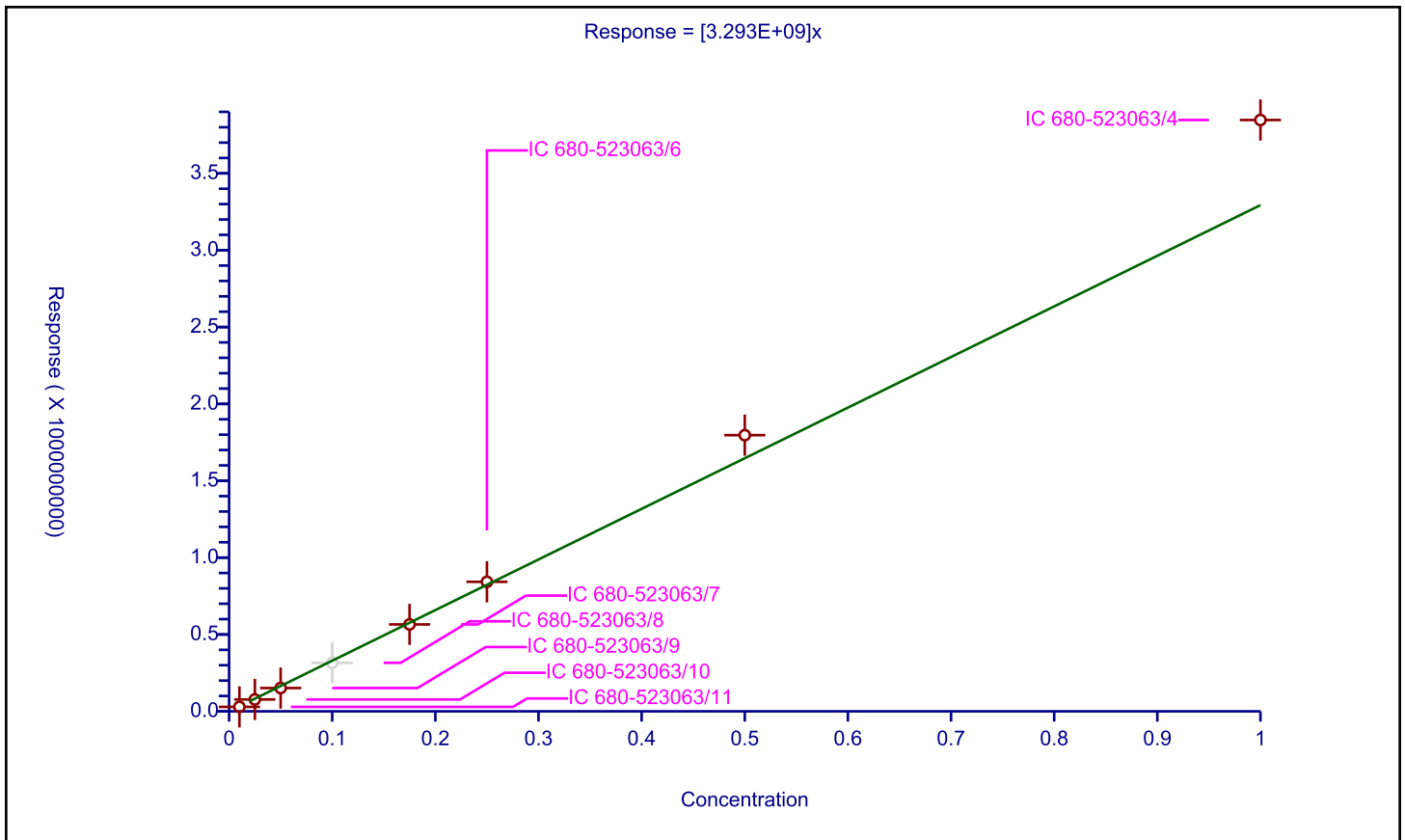
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	3.293E+09

Error Coefficients	
Standard Error:	235000000
Relative Standard Error:	10.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	28939470.0			2893947000.0	Y
2	IC 680-523063/10	0.025	77163736.0			3086549440.0	Y
3	IC 680-523063/9	0.05	151449071.0			3028981420.0	Y
4	IC 680-523063/8	0.1	315619469.0			3156194690.0	N
5	IC 680-523063/7	0.175	565445884.0			3231119337.14286	Y
6	IC 680-523063/6	0.25	842695237.0			3370780948.0	Y
7	IC 680-523063/5	0.5	1796815722.0			3593631444.0	Y
8	IC 680-523063/4	1.0	3847093339.0			3847093339.0	Y



Calibration

/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

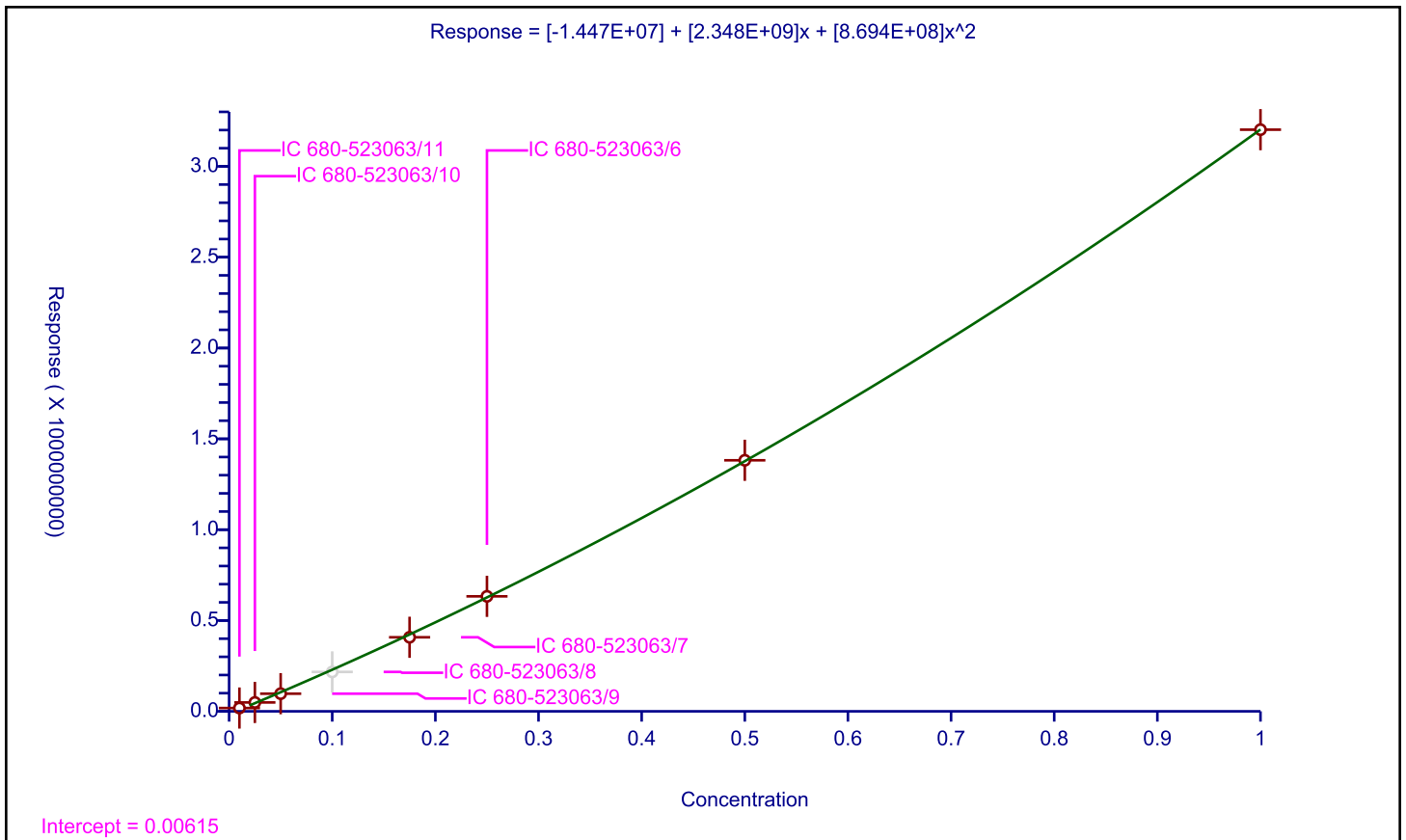
Curve Coefficients

Intercept: -1.447E+07
 Slope: 2.348E+09
 Second Order: 8.694E+08

Error Coefficients

Standard Error: 10800000
 Relative Standard Error: 19.9
 Correlation Coefficient: 1.000
 Coefficient of Determination (Adjusted): 1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	18199991.0			1819999100.0	Y
2	IC 680-523063/10	0.025	48982390.0			1959295600.0	Y
3	IC 680-523063/9	0.05	97225812.0			1944516240.0	Y
4	IC 680-523063/8	0.1	217026310.0			2170263100.0	N
5	IC 680-523063/7	0.175	407675485.0			2329574200.0	Y
6	IC 680-523063/6	0.25	633038479.0			2532153916.0	Y
7	IC 680-523063/5	0.5	1382056162.0			2764112324.0	Y
8	IC 680-523063/4	1.0	3202033523.0			3202033523.0	Y



FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	RT WINDOW	AVG RT
Dalapon	2.633	2.632	2.632	++++	2.633	2.633	2.634	2.635	2.612 - 2.652	2.633
3,5-Dichlorobenzoic acid	6.119	6.118	6.116	++++	6.116	6.117	6.116	6.118	6.106 - 6.126	6.117
4-Nitrophenol	6.516	6.511	6.506	++++	6.504	6.503	6.503	6.503	6.495 - 6.515	6.507
Dicamba	6.911	6.910	6.909	++++	6.911	6.911	6.911	6.914	6.900 - 6.920	6.911
MCPP	6.956	6.955	6.955	++++	6.955	6.956	6.957	6.960	6.945 - 6.965	6.956
MCPA	7.156	7.155	7.154	++++	7.153	7.155	7.157	7.161	7.145 - 7.165	7.156
Dichlorprop	7.299	7.298	7.297	++++	7.296	7.298	7.298	7.300	7.287 - 7.307	7.298
2,4-D	7.531	7.524	7.520	++++	7.515	7.516	7.515	7.517	7.507 - 7.527	7.520
Pentachlorophenol	7.713	7.713	7.713	++++	7.713	7.715	7.716	7.718	7.704 - 7.724	7.714
Silvex (2,4,5-TP)	7.851	7.850	7.846	++++	7.845	7.846	7.846	7.848	7.836 - 7.856	7.847
2,4,5-T	8.089	8.090	8.086	++++	8.080	8.079	8.080	8.082	8.073 - 8.093	8.084
Chloramben	8.171	8.167	8.164	++++	8.159	8.159	8.160	8.161	8.152 - 8.172	8.163
Dinoseb	8.251	8.250	8.248	++++	8.246	8.248	8.250	++++	8.238 - 8.258	8.249
2,4-DB	8.312	8.308	8.305	++++	8.298	8.298	8.297	8.298	8.292 - 8.312	8.302
Bentazon	8.665	8.665	8.663	++++	8.661	8.661	8.663	8.664	8.652 - 8.672	8.663
Tetrathalic acid, tetrachloro-, dimethyl ester	8.777	8.776	8.775	++++	8.776	8.776	8.779	++++	8.765 - 8.785	8.777
Picloram	9.014	9.011	9.009	++++	9.005	9.005	9.005	9.011	8.995 - 9.015	9.009
Acifluorfen	9.794	9.795	9.791	++++	9.791	9.793	9.794	++++	9.782 - 9.802	9.793
2,4-Dichlorophenylacetic acid (Surr)	6.831	6.830	6.829	++++	6.829	6.829	6.830	6.831	6.819 - 6.839	6.830

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CF								CURVE TYPE	COEFFICIENT			MIN CF	%RSD #	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8	B	M1	M2											
Dalapon	1798315000 1517639326	1597318040 1635156782	1427568040 1725206867	++++ 1725206867				Ave	1611774466			7.7	20.0					
3,5-Dichlorobenzoic acid	1837751300 1719390389	1760637040 1861053578	1650502760 1954171685	++++ 1954171685				Ave	1796964783			5.5	20.0					
4-Nitrophenol	250653100 298246994	296649000 310426996	284918460 317392232	++++ 334991246				Ave	299039718			9.0	20.0					
Dicamba	4724154000 4909954011	4686290000 5207323320	4534968280 5388006568	++++ 5612732658				Ave	5009061262			8.0	20.0					
MCP	7884133 4400635	6527974 4455255	5267855 4112711	++++ 4449376				Lin2	3788366.60					0.9920			0.9900	
MCPA	12132999 6957302	9867461 7087687	8095742 7726907	++++ 11515156				QuaF	4913346.02	65572.7829				0.9990			0.9900	
Dichlorprop	1530191200 1322496080	1346912320 1409029084	1248497660 1439600954	++++ 1571966456				Ave	1409813393			8.2	20.0					
2,4-D	1455119800 1556427354	1427833320 1676989976	1378379440 1771254978	++++ 1888747044				Ave	1593535987			12.0	20.0					
Pentachlorophenol	1646620640 1921739510	1720147248 2048464640	1719712904 2107629800	++++ 2001760539				Ave	1.88087 E+010			9.8	20.0					
Silvex (2,4,5-TP)	6485508800 7411297737	6285531520 8011168944	6291178480 8488161760	++++ 8766407800				Ave	7391322149			14.3	20.0					
2,4,5-T	5682918800 6570901349	5548829280 7200468352	5460540320 7796556056	++++ 8265532020				Ave	6646535168			17.2	20.0					
Chloramben	4517941700 5823723000	4700489400 6340874844	4806727860 6796592718	++++ 6392220091				Ave	5625509945			16.6	20.0					
Dinoseb	3007780400 3932806634	3092280280 4418115380	3099206900 4877825682	++++ 4877825682				Lin1	-31374720	4635917151				0.9910			0.9900	

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

FORM VI
HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

ANALYTE	CF				CURVE TYPE	B	COEFFICIENT		MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8			M1	M2							
2,4-DB	1087197600 952251726	1042060800 938110360	932485740 949664730	1002259721 1002259721	Ave		986290097		6.0		20.0				
Bentazon	780397900 785549754	726060480 836756404	711301340 879775606	907942100 907942100	Ave		803969083		9.3		20.0				
Tetraphthalic acid, tetrachloro-, dimethyl	8667279600 1014672696	9065814440 1093590900	9037626500 1107339231	++++ ++++	Ave		9821124803		10.6		20.0				
Picloram	5712837000 8850117086	6224124840 1018179070	6570648740 1156032159	++++ 1146749100 7	Lin1		1.12544 E+010				0.9930			0.9900	
Acifluorfen	4064524500 7109623114	4814379800 8392297836	4971738380 9541817032	++++ ++++	Qua		-69625687				0.9990			0.9900	
2,4-Dichlorophenylacetic acid (Surr)	1435947500 1343087074	1388925080 1413952480	1300050800 1434982086	++++ 1537345376	Ave		1407755771		5.4		20.0				

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

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.: _____

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-523063/11	SE080011.D
Level 2	IC 680-523063/10	SE080010.D
Level 3	IC 680-523063/9	SE080009.D
Level 4	IC 680-523063/8	SE080008.D
Level 5	IC 680-523063/7	SE080007.D
Level 6	IC 680-523063/6	SE080006.D
Level 7	IC 680-523063/5	SE080005.D
Level 8	IC 680-523063/4	SE080004.D

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Dalapon	Ave	17983150	39932951	71378402	265586882	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
3,5-Dichlorobenzoic acid	Ave	395304302	817578391	1725206867	300893318	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
4-Nitrophenol	Ave	18377513	44015926	82525138	1954171685	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
Dicamba	Ave	448811682	930526789	14245923	429620976	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
MCP	Lin2	2506531	7416225	334991246	77011106	0.00500	0.0125	0.0250	0.0875	0.00500	0.0125	0.0250	0.0875	
MCPA	QuaF	23620770	58578625	113374207	121752778	1.00	2.50	5.00	17.5	1.00	2.50	5.00	17.5	
Dichlorprop	Ave	650915415	1347001642	2806366329	231436814	25.0	50.0	100	17.5	1.00	2.50	5.00	17.5	
2,4-D	Ave	7884133	16319936	26339273	272374787	1.00	2.50	5.00	17.5	1.00	2.50	5.00	17.5	
Pentachlorophenol	Ave	111381364	205635557	444937631	840761037	1.00	2.50	5.00	17.5	1.00	2.50	5.00	17.5	
Silvex (2,4,5-TP)	Ave	12132999	24668652	40478712	324244276	25.0	50.0	100	17.5	0.0100	0.0250	0.0500	0.175	
2,4,5-T	Ave	177192173	386345329	1151515629	287476934	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
Chloramben	Ave	15301912	33672808	62424883	1019151525	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
Dinoseb	Lin1	352257271	719800477	1571966456	688241161	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
Bentazon	Ave	14551198	35695833	68918972	166644052	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	419247494	885627489	1888747044	137471207	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	41165516	107509203	214964113	907942100	0.00250	0.00625	0.0125	0.0438	0.00250	0.00625	0.0125	0.0438	
	Ave	1280290405	2634537256	5004401348	287476934	0.0625	0.125	0.250	0.0438	0.0625	0.125	0.250	0.0438	
	Ave	16213772	39284572	78639731	1019151525	0.00250	0.00625	0.0125	0.0438	0.00250	0.00625	0.0125	0.0438	
	Ave	500698059	1061020220	2191601950	166644052	0.00250	0.00625	0.0125	0.0438	0.00250	0.00625	0.0125	0.0438	
	Ave	14207297	34680183	68256754	287476934	0.00250	0.00625	0.0125	0.0438	0.00250	0.00625	0.0125	0.0438	
	Ave	450029272	974569507	2066383005	1019151525	0.00250	0.00625	0.0125	0.0438	0.00250	0.00625	0.0125	0.0438	
	Ave	45179417	117512235	240336393	688241161	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	1585218711	3398296359	6392220091	166644052	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	30077804	77307007	154960345	137471207	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	1104528845	2438912841	46624287	166644052	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	10871976	26051520	46624287	166644052	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	234527590	474832365	1002259721	137471207	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	7803979	18151512	35565067	907942100	0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	
	Ave	209189101	439887803	907942100		0.0100	0.0250	0.0500	0.175	0.0100	0.0250	0.0500	0.175	

FORM VI
 HERBICIDES BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-151915-1 Analy Batch No.: 523063

SDG No.:

Instrument ID: CSGS GC Column: DB-35MS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/08/2018 11:58 Calibration End Date: 05/08/2018 14:15 Calibration ID: 57165

ANALYTE	CURVE TYPE	RESPONSE								CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5			
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	86672796	226645361	451881325	+++++	1775677219	0.0100	0.0250	0.0500	+++++	0.175			
Picloram	Lin1	2733977251	5536696155	328532437	+++++	1548770490	0.0100	0.0250	0.0500	+++++	0.175			
Acifluorfen	Qua	2545447676	5780160796	1467491007	+++++	1244184045	0.0100	0.0250	0.0500	+++++	0.175			
2,4-Dichlorophenylacetic acid (Surr)	Ave	40645245	120359495	248586919	+++++	235040238	0.0100	0.0250	0.0500	+++++	0.175			
		2098074459	4770908516	65002540	+++++		0.0100	0.0250	0.0500	+++++	0.175			
		14359475	34723127	1537345376	+++++		0.0100	0.0250	0.0500	+++++	0.175			
		353488120	717491043		+++++		0.0100	0.0250	0.0500	+++++	0.175			

Curve Type Legend:
 Ave = Average
 Lin1 = Linear 1/conc
 Lin2 = Linear 1/conc^2
 Qua = Quadratic
 QuaF = Quadratic forced zero

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Lims ID: ic h8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-May-2018 11:58:00 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-004
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:24:59 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:07:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	511012321	1.00	0.9751	
2	2.635	2.632	0.003	1725206867	1.00	1.07	
						RPD = 9.32	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	95938059	NC	NC	
2	5.103	5.102	0.001	555849594	NC	NC	
						RPD = 4.71	
3 2,4,6-Trichlorophenol							
1	5.788	5.786	0.002	1387562807	NC	NC	
2	5.780	5.776	0.004	5355785086	NC	NC	
						RPD = 10.60	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	337068861	1.00	1.05	
2	6.118	6.116	0.002	1954171685	1.00	1.09	
						RPD = 3.63	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	97562965	1.00	1.06	
2	6.503	6.505	-0.002	334991246	1.00	1.12	
						RPD = 5.98	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	214663766	1.00	1.02	
2	6.831	6.829	0.002	1537345376	1.00	1.09	
						RPD = 7.31	
7 Dicamba							
1	6.721	6.720	0.001	585243873	0.5000	0.5434	
2	6.914	6.910	0.004	2806366329	0.5000	0.5603	
						RPD = 3.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.872	6.867	0.005	104343971	100.0	99.8	
2	6.960	6.955	0.005	444937631	100.0	101.1	
						RPD = 1.25	
9 MCPA							
1	7.000	6.994	0.006	98467290	100.0	106.3	
2	7.161	7.155	0.006	1151515629	100.0	100.2	
						RPD = 5.90	
10 Dichlorprop							
1	7.181	7.180	0.001	290874356	1.00	1.05	
2	7.300	7.297	0.003	1571966456	1.00	1.12	
						RPD = 6.18	
11 2,4-D							
1	7.323	7.326	-0.003	357181097	1.00	1.18	
2	7.517	7.517	0.000	1888747044	1.00	1.19	
						RPD = 0.35	
12 Pentachlorophenol							
1	7.675	7.674	0.001	1628549099	0.2500	0.3025	
2	7.718	7.714	0.004	5004401348	0.2500	0.2661	
						RPD = 12.81	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	572693944	0.2500	0.3048	
2	7.848	7.846	0.002	2191601950	0.2500	0.2965	
						RPD = 2.77	
14 Chloramben							
1	7.848	7.855	-0.007	2124806109	1.00	1.00	
2	8.161	8.162	-0.001	6392220091	1.00	1.14	
						RPD = 12.86	
15 2,4,5-T							
1	7.923	7.929	-0.006	547016891	0.2500	0.2493	
2	8.082	8.083	-0.001	2066383005	0.2500	0.3109	
						RPD = 21.97	
16 2,4-DB							
1	8.167	8.175	-0.008	208315295	1.00	1.00	
2	8.298	8.302	-0.004	1002259721	1.00	1.02	
						RPD = 1.78	
17 Dinoseb							
1	8.224	8.224	0.000	1502700567	1.00	1.23	
2	8.252	8.248	0.004	4922703086	1.00	1.07	
						RPD = 13.86	
18 Bentazon							
1	8.299	8.300	-0.001	295542031	1.00	1.03	
2	8.664	8.662	0.002	907942100	1.00	1.13	
						RPD = 9.41	
19 Picloram							
1	8.523	8.529	-0.006	3668133130	1.00	1.00	M
2	9.011	9.005	0.006	11467491007	1.00	1.03	M
						RPD = 2.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	3847093339	1.00	1.17	
2	8.784	8.775	0.009	9887348056	1.00	1.01	
							RPD = 14.85

21 Acifluorfen

1	9.667	9.666	0.001	3202033523	1.00	1.00	M
2	9.799	9.792	0.007	9631196972	1.00	0.8404	M
							RPD = 17.32

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-8_00011

Amount Added: 1.00

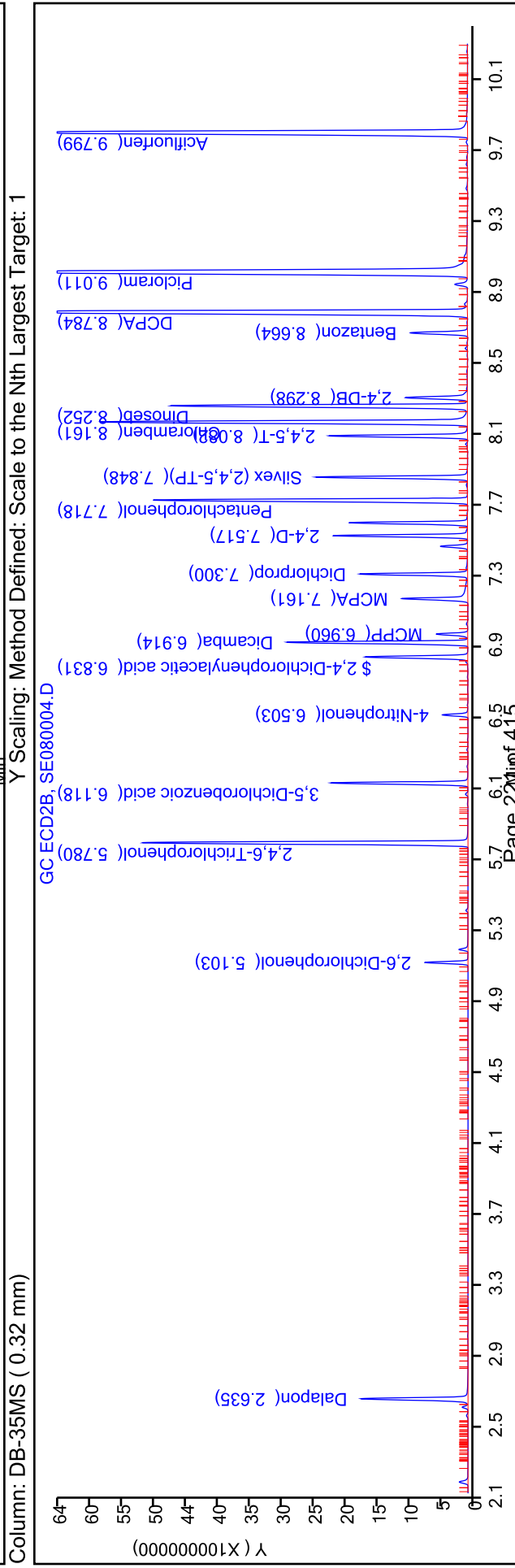
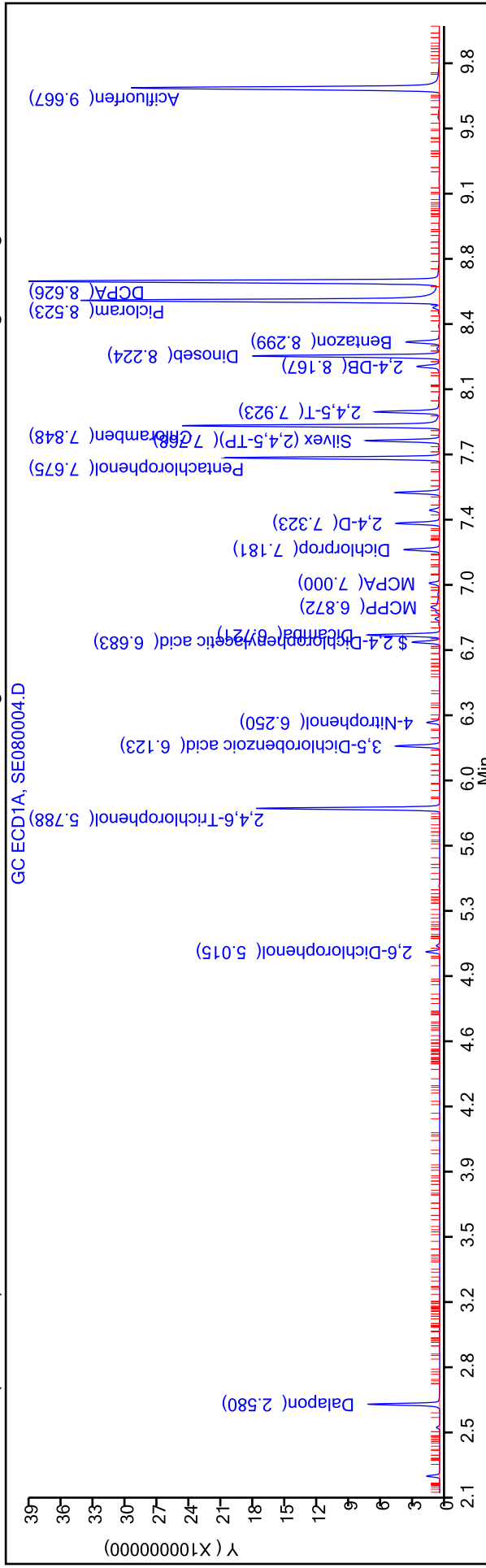
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080004.D
 Injection Date: 08-May-2018 11:58:00
 Lims ID: ic h8
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 4
 ALS Bottle#: 4

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

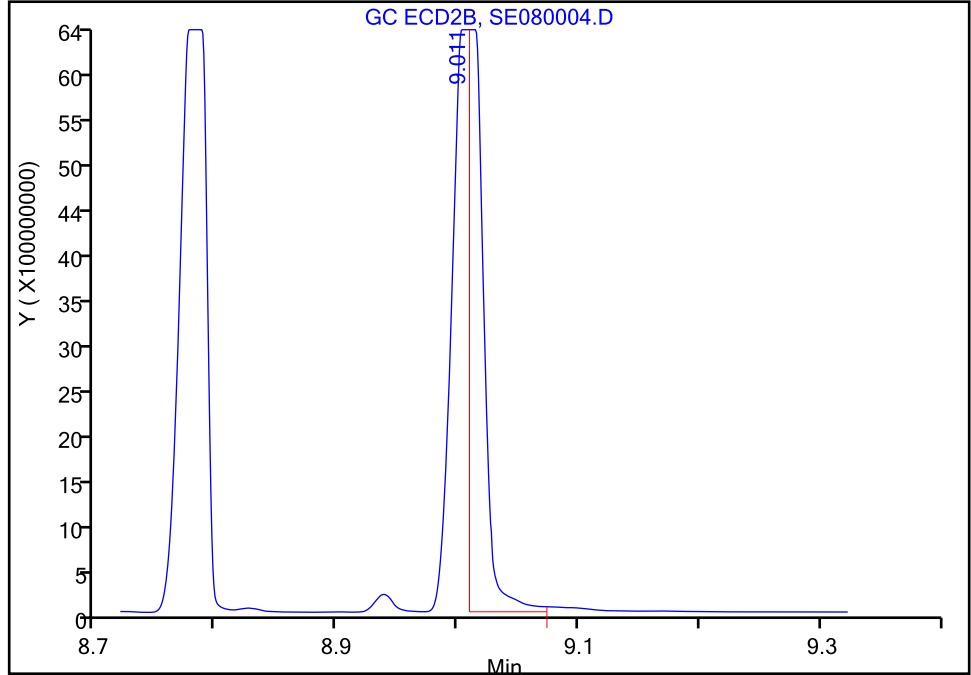
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Injection Date: 08-May-2018 11:58:00 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

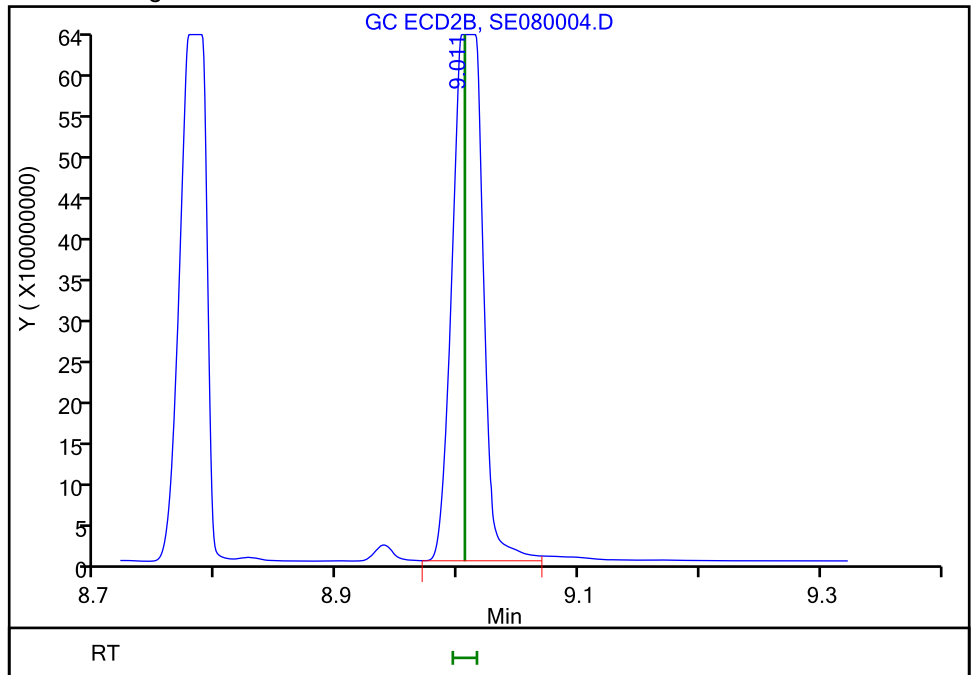
RT: 9.01
Area: 5287226212
Amount: 0.658684
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 11467491007
Amount: 1.028306
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:07:43
Audit Action: Manually Integrated

TestAmerica Savannah

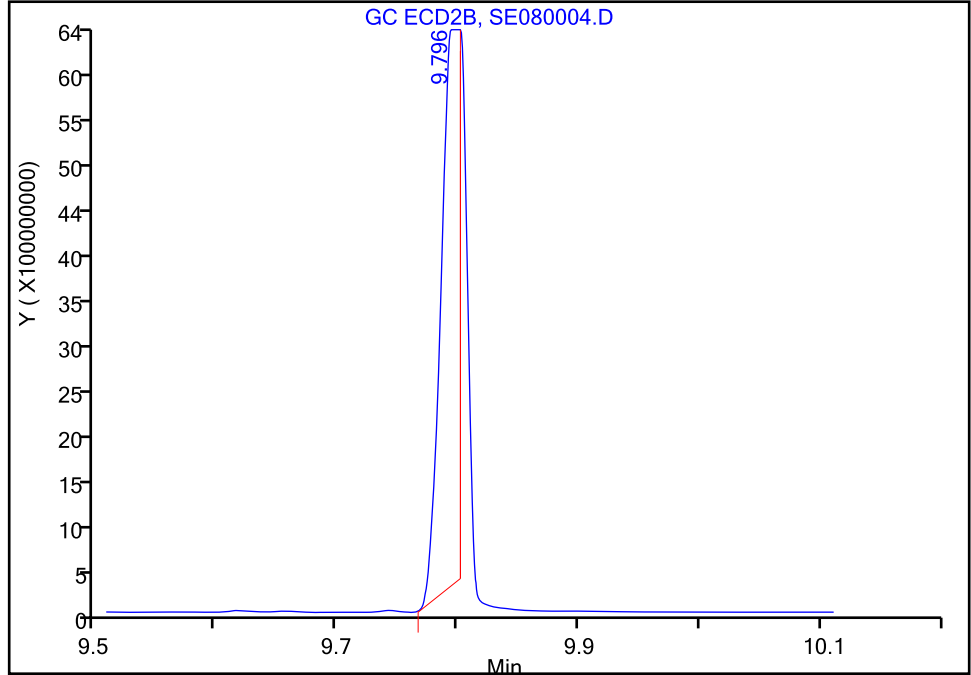
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Injection Date: 08-May-2018 11:58:00 Instrument ID: CSGS
Lims ID: ic h8
Client ID:
Operator ID: GEM ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

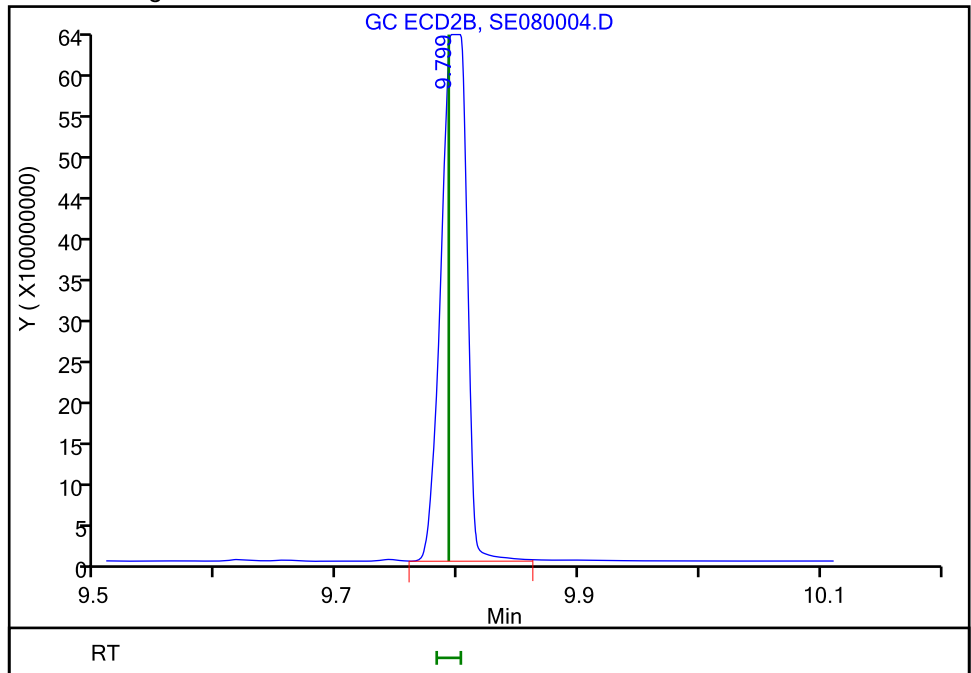
RT: 9.80
Area: 6439853161
Amount: 1.004323
Amount Units: ug/ml

Processing Integration Results



RT: 9.80
Area: 9631196972
Amount: 0.840395
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:07:45
Audit Action: Manually Integrated

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
 Lims ID: ic h7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-May-2018 12:17:37 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-005
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:07 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.580	2.579	0.001	252815070	0.5000	0.4824	
2	2.634	2.632	0.002	817578391	0.5000	0.5073	
						RPD = 5.02	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	47948482	NC	NC	
2	5.102	5.102	0.000	271150549	NC	NC	
						RPD = 2.29	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	660797633	NC	NC	
2	5.779	5.776	0.003	2813586787	NC	NC	
						RPD = 0.79	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	165004902	0.5000	0.5134	
2	6.116	6.116	0.000	930526789	0.5000	0.5178	
						RPD = 0.87	
5 4-Nitrophenol							
1	6.250	6.253	-0.003	48081748	0.5000	0.5200	
2	6.503	6.505	-0.002	158696116	0.5000	0.5307	
						RPD = 2.03	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	105220295	0.5000	0.4975	
2	6.830	6.829	0.001	717491043	0.5000	0.5097	
						RPD = 2.41	
7 Dicamba							
1	6.720	6.720	0.000	282435535	0.2500	0.2622	
2	6.911	6.910	0.001	1347001642	0.2500	0.2689	
						RPD = 2.51	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.870	6.867	0.003	39090261	50.0	51.7	
2	6.957	6.955	0.002	205635557	50.0	46.2	
						RPD = 11.18	
9 MCPA							
1	6.996	6.994	0.002	51596040	50.0	55.7	
2	7.157	7.155	0.002	386345329	50.0	47.9	
						RPD = 14.99	
10 Dichlorprop							
1	7.180	7.180	0.000	144063420	0.5000	0.5192	
2	7.298	7.297	0.001	719800477	0.5000	0.5106	
						RPD = 1.67	
11 2,4-D							
1	7.322	7.326	-0.004	172138047	0.5000	0.5692	
2	7.515	7.517	-0.002	885627489	0.5000	0.5558	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	762859467	0.1250	0.1417	
2	7.716	7.714	0.002	2634537256	0.1250	0.1401	
						RPD = 1.15	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	276913650	0.1250	0.1474	
2	7.846	7.846	0.000	1061020220	0.1250	0.1435	
						RPD = 2.64	
14 Chloramben							
1	7.849	7.855	-0.006	948055347	0.5000	0.5069	
2	8.160	8.162	-0.002	3398296359	0.5000	0.6041	
						RPD = 17.50	
15 2,4,5-T							
1	7.922	7.929	-0.007	274321777	0.1250	0.1250	
2	8.080	8.083	-0.003	974569507	0.1250	0.1466	
						RPD = 15.89	
16 2,4-DB							
1	8.167	8.175	-0.008	95758632	0.5000	0.5113	
2	8.297	8.302	-0.005	474832365	0.5000	0.4814	
						RPD = 6.02	
17 Dinoseb							
1	8.223	8.224	-0.001	686899035	0.5000	0.5612	
2	8.250	8.248	0.002	2438912841	0.5000	0.5329	
						RPD = 5.19	
18 Bentazon							
1	8.299	8.300	-0.001	144238238	0.5000	0.5016	
2	8.663	8.662	0.001	439887803	0.5000	0.5471	
						RPD = 8.68	
19 Picloram							
1	8.523	8.529	-0.006	1551637070	0.5000	0.5051	
2	9.005	9.005	0.000	5780160796	0.5000	0.5230	
						RPD = 3.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	1796815722	0.5000	0.5456	
2	8.779	8.775	0.004	5536696155	0.5000	0.5638	
						RPD = 3.27	

21 Acifluorfen

1	9.665	9.666	-0.001	1382056162	0.5000	0.5016	
2	9.794	9.792	0.002	4770908516	0.5000	0.4992	
						RPD = 0.48	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-7_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080005.D
Injection Date: 08-May-2018 12:17:37
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 5

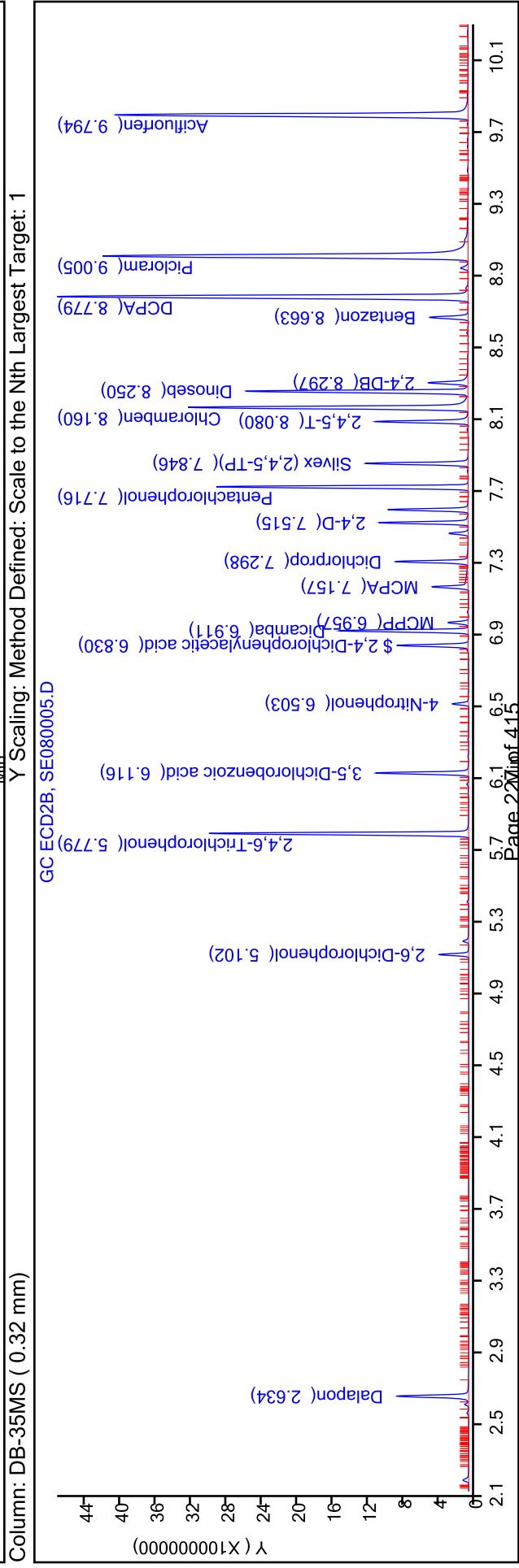
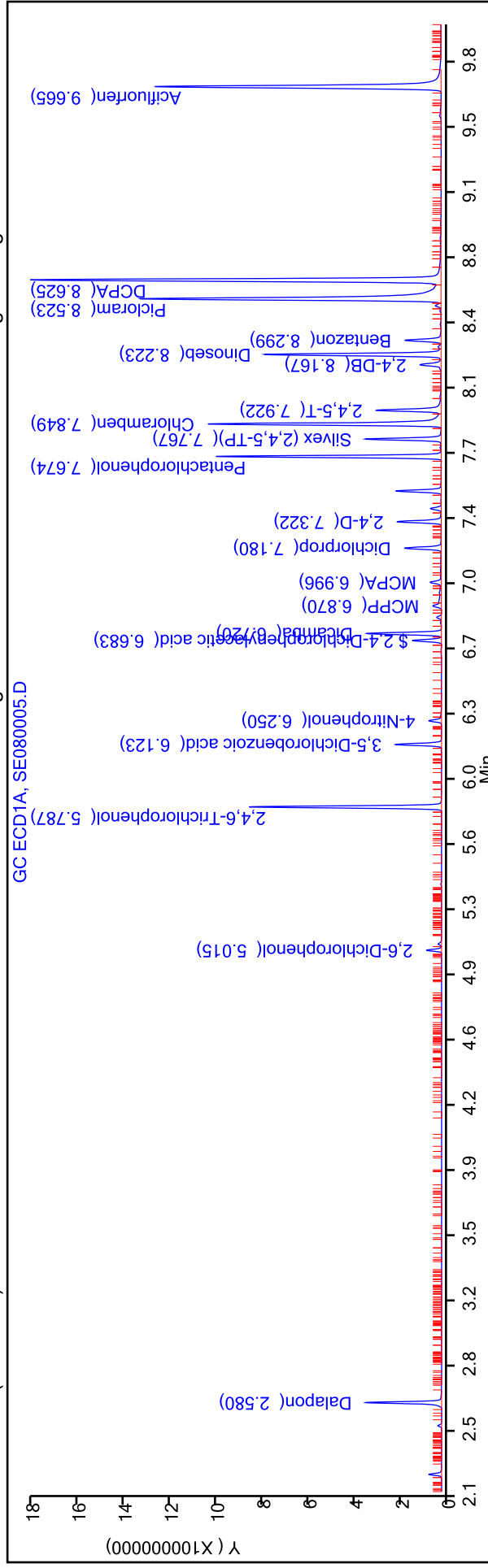
Lims ID: ic h7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Lims ID: ic h6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 08-May-2018 12:37:18 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-006
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:13 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Dalapon							
1	2.580	2.579	0.001	126339938	0.2500	0.2411	
2	2.633	2.632	0.001	395304302	0.2500	0.2453	
						RPD = 1.72	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	24075005	NC	NC	
2	5.102	5.102	0.000	134909465	NC	NC	
						RPD = 1.37	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	317115758	NC	NC	
2	5.778	5.776	0.002	1376798630	NC	NC	
						RPD = 1.15	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	81038461	0.2500	0.2521	
2	6.117	6.116	0.001	448811682	0.2500	0.2498	
						RPD = 0.94	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	26992258	0.2500	0.2919	
2	6.503	6.505	-0.002	77606749	0.2500	0.2595	
						RPD = 11.76	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	51149844	0.2500	0.2419	
2	6.829	6.829	0.000	353488120	0.2500	0.2511	
						RPD = 3.75	
7 Dicamba							
1	6.721	6.720	0.001	135663470	0.1250	0.1260	
2	6.911	6.910	0.001	650915415	0.1250	0.1299	
						RPD = 3.11	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	12687646	25.0	22.2	
2	6.956	6.955	0.001	111381364	25.0	24.6	
						RPD = 10.33	
9 MCPA							
1	6.995	6.994	0.001	25890792	25.0	28.0	
2	7.155	7.155	0.000	177192173	25.0	26.6	
						RPD = 4.94	
10 Dichlorprop							
1	7.181	7.180	0.001	70616500	0.2500	0.2545	
2	7.298	7.297	0.001	352257271	0.2500	0.2499	
						RPD = 1.83	
11 2,4-D							
1	7.323	7.326	-0.003	81489809	0.2500	0.2695	
2	7.516	7.517	-0.001	419247494	0.2500	0.2631	
						RPD = 2.40	
12 Pentachlorophenol							
1	7.674	7.674	0.000	357293439	0.0625	0.0664	
2	7.715	7.714	0.001	1280290405	0.0625	0.0681	
						RPD = 2.54	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	130284362	0.0625	0.0693	
2	7.846	7.846	0.000	500698059	0.0625	0.0677	
						RPD = 2.34	
14 Chloramben							
1	7.850	7.855	-0.005	420812351	0.2500	0.2467	
2	8.159	8.162	-0.003	1585218711	0.2500	0.2818	
						RPD = 13.26	
15 2,4,5-T							
1	7.924	7.929	-0.005	138404340	0.0625	0.0631	
2	8.079	8.083	-0.004	450029272	0.0625	0.0677	
						RPD = 7.07	
16 2,4-DB							
1	8.169	8.175	-0.006	41914777	0.2500	0.2443	
2	8.298	8.302	-0.004	234527590	0.2500	0.2378	
						RPD = 2.69	
17 Dinoseb							
1	8.223	8.224	-0.001	318205530	0.2500	0.2600	
2	8.248	8.248	0.000	1104528845	0.2500	0.2450	
						RPD = 5.93	
18 Bentazon							
1	8.299	8.300	-0.001	71761268	0.2500	0.2496	
2	8.661	8.662	-0.001	209189101	0.2500	0.2602	
						RPD = 4.17	
19 Picloram							
1	8.525	8.529	-0.004	675298882	0.2500	0.2482	
2	9.005	9.005	0.000	2545447676	0.2500	0.2355	
						RPD = 5.25	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	842695237	0.2500	0.2559	
2	8.778	8.775	0.003	2733977251	0.2500	0.2784	
						RPD = 8.42	

21 Acifluorfen

1	9.665	9.666	-0.001	633038479	0.2500	0.2522	
2	9.793	9.792	0.001	2098074459	0.2500	0.2582	
						RPD = 2.37	

QC Flag Legend

Processing Flags

NC - Not Calibrated

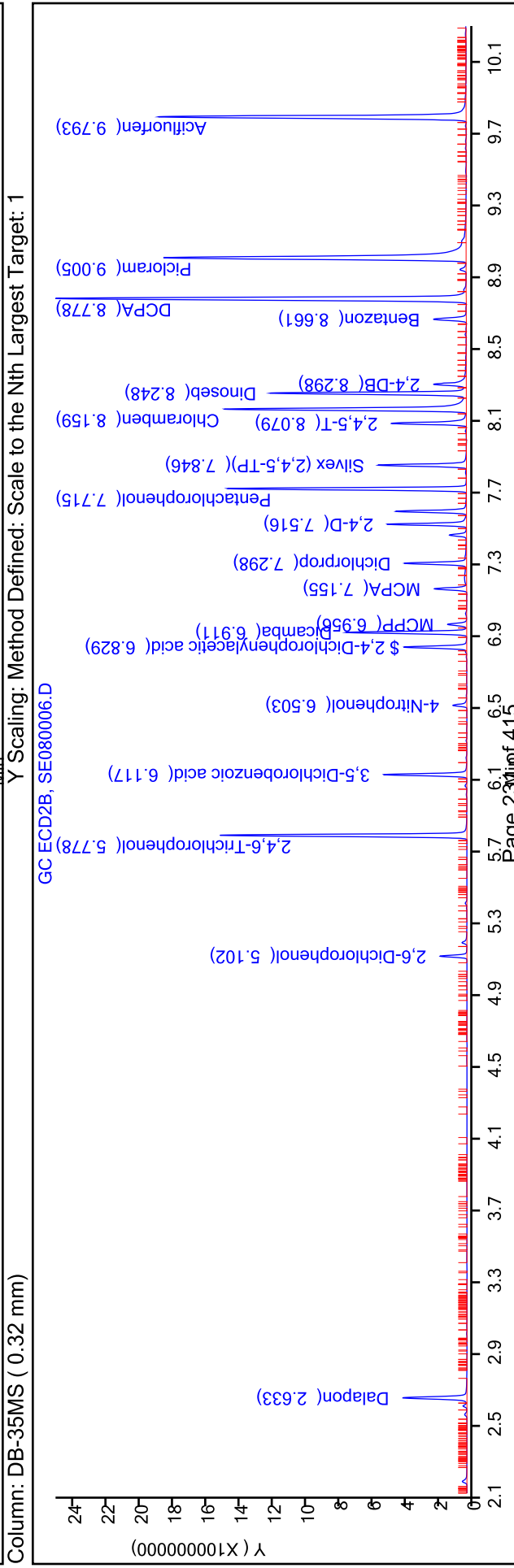
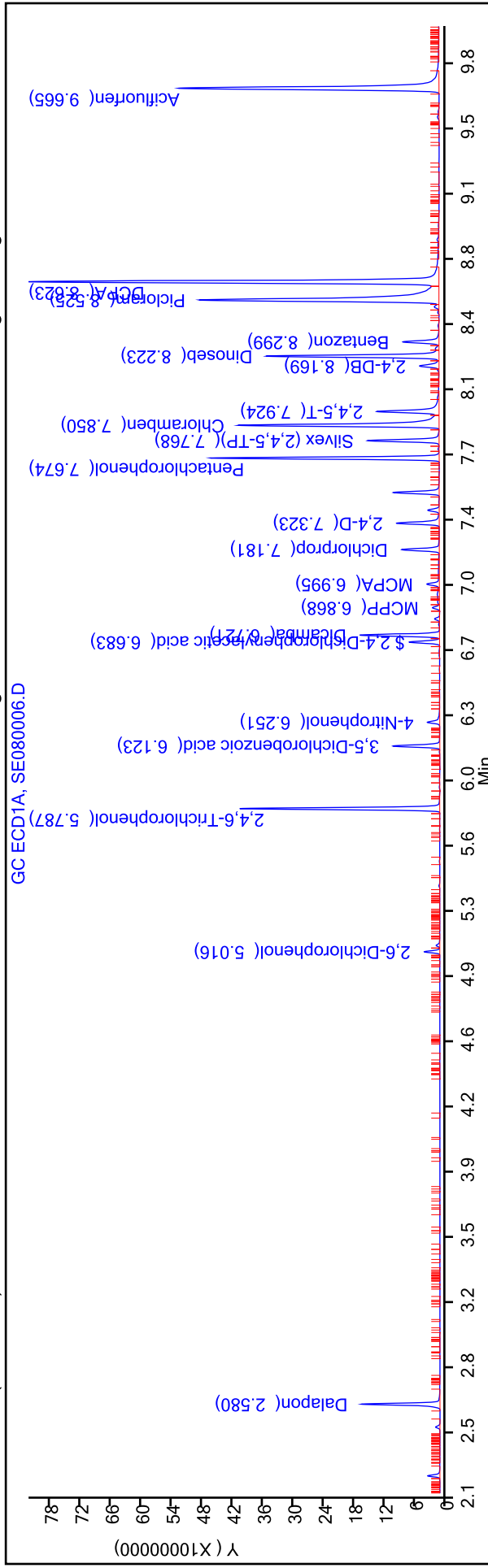
Reagents:

SGHERB-6_00015

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080006.D
 Injection Date: 08-May-2018 12:37:18
 Instrument ID: CSGS
 Operator ID: GEM
 Worklist Smp#: 6
 Client ID:
 Injection Vol: 1.0 ul
 Dil. Factor: 1.0000
 ALS Bottle#: 6
 Method: Herbicides_CSGS
 Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm)
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
 Lims ID: ic h5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-May-2018 12:56:54 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-007
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:18 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: meinckeg Date: 08-May-2018 13:25:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	87735176	0.1750	0.1674	
2	2.633	2.632	0.001	265586882	0.1750	0.1648	
						RPD = 1.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16721808	NC	NC	
2	5.101	5.102	-0.001	91409134	NC	NC	
						RPD = 1.11	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	212201404	NC	NC	
2	5.776	5.776	0.000	921748528	NC	NC	
						RPD = 1.20	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	54279812	0.1750	0.1689	
2	6.116	6.116	0.000	300893318	0.1750	0.1674	
						RPD = 0.85	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17047628	0.1750	0.1844	
2	6.504	6.505	-0.001	52193224	0.1750	0.1745	
						RPD = 5.49	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35013881	0.1750	0.1656	
2	6.829	6.829	0.000	235040238	0.1750	0.1670	
						RPD = 0.84	
7 Dicamba							
1	6.721	6.720	0.001	91550778	0.0875	0.0850	
2	6.911	6.910	0.001	429620976	0.0875	0.0858	
						RPD = 0.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	8640069	17.5	16.3	
2	6.955	6.955	0.000	77011106	17.5	16.8	
						RPD = 2.77	
9 MCPA							
1	6.994	6.994	0.000	17766771	17.5	19.2	
2	7.153	7.155	-0.002	121752778	17.5	19.6	
						RPD = 2.31	
10 Dichlorprop							
1	7.181	7.180	0.001	48109296	0.1750	0.1734	
2	7.296	7.297	-0.001	231436814	0.1750	0.1642	
						RPD = 5.46	
11 2,4-D							
1	7.324	7.326	-0.002	54093373	0.1750	0.1789	
2	7.515	7.517	-0.002	272374787	0.1750	0.1709	
						RPD = 4.55	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	237204468	0.0438	0.0441	
2	7.713	7.714	-0.001	840761037	0.0438	0.0447	
						RPD = 1.45	
13 Silvex (2,4,5-TP)							
1	7.767	7.769	-0.002	84634924	0.0438	0.0450	
2	7.845	7.846	-0.001	324244276	0.0438	0.0439	
						RPD = 2.66	
14 Chloramben							
1	7.852	7.855	-0.003	269520100	0.1750	0.1655	
2	8.159	8.162	-0.003	1019151525	0.1750	0.1812	
						RPD = 9.06	
15 2,4,5-T							
1	7.925	7.929	-0.004	93534318	0.0438	0.0426	
2	8.080	8.083	-0.003	287476934	0.0438	0.0433	
						RPD = 1.44	
16 2,4-DB							
1	8.171	8.175	-0.004	26059778	0.1750	0.1599	
2	8.298	8.302	-0.004	166644052	0.1750	0.1690	
						RPD = 5.54	
17 Dinoseb							
1	8.222	8.224	-0.002	207576561	0.1750	0.1696	
2	8.246	8.248	-0.002	688241161	0.1750	0.1552	
						RPD = 8.85	
18 Bentazon							
1	8.299	8.300	-0.001	47511232	0.1750	0.1652	
2	8.661	8.662	-0.001	137471207	0.1750	0.1710	
						RPD = 3.43	
19 Picloram							
1	8.526	8.529	-0.003	428630902	0.1750	0.1666	
2	9.005	9.005	0.000	1548770490	0.1750	0.1470	
						RPD = 12.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	565445884	0.1750	0.1717	
2	8.776	8.775	0.001	1775677219	0.1750	0.1808	
						RPD = 5.16	

21 Acifluorfen

1	9.665	9.666	-0.001	407675485	0.1750	0.1692	
2	9.791	9.792	-0.001	1244184045	0.1750	0.1664	
						RPD = 1.67	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080007.D
Injection Date: 08-May-2018 12:56:54
Lims ID: ic h5
Instrument ID: CSGS

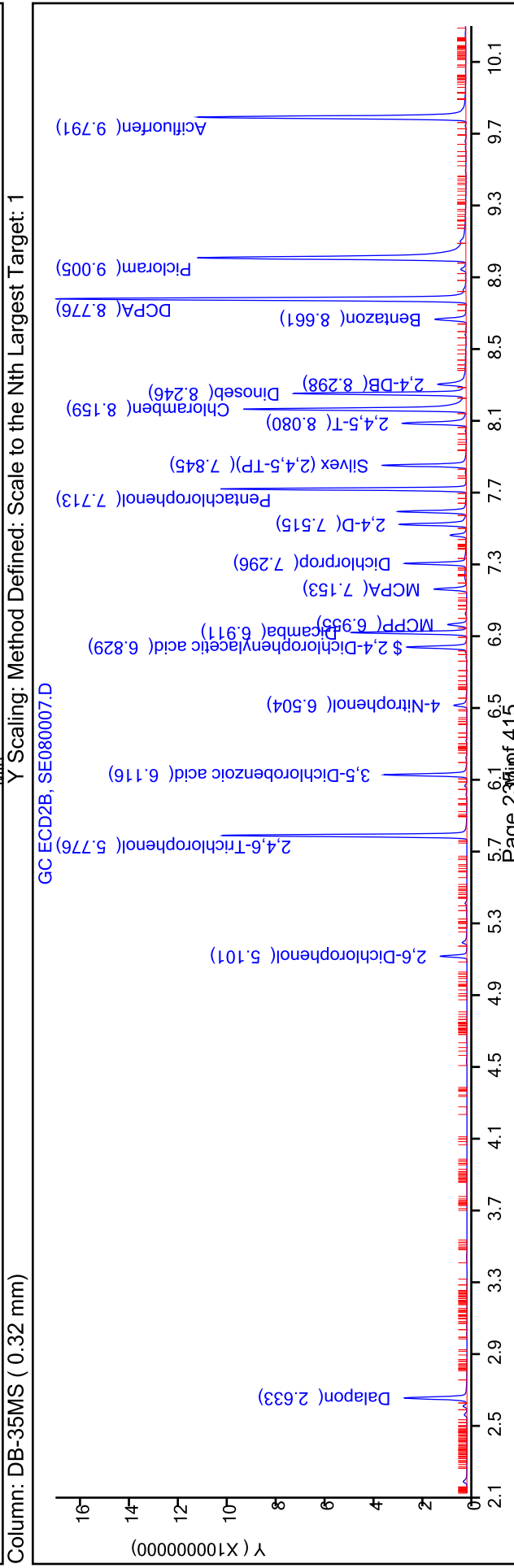
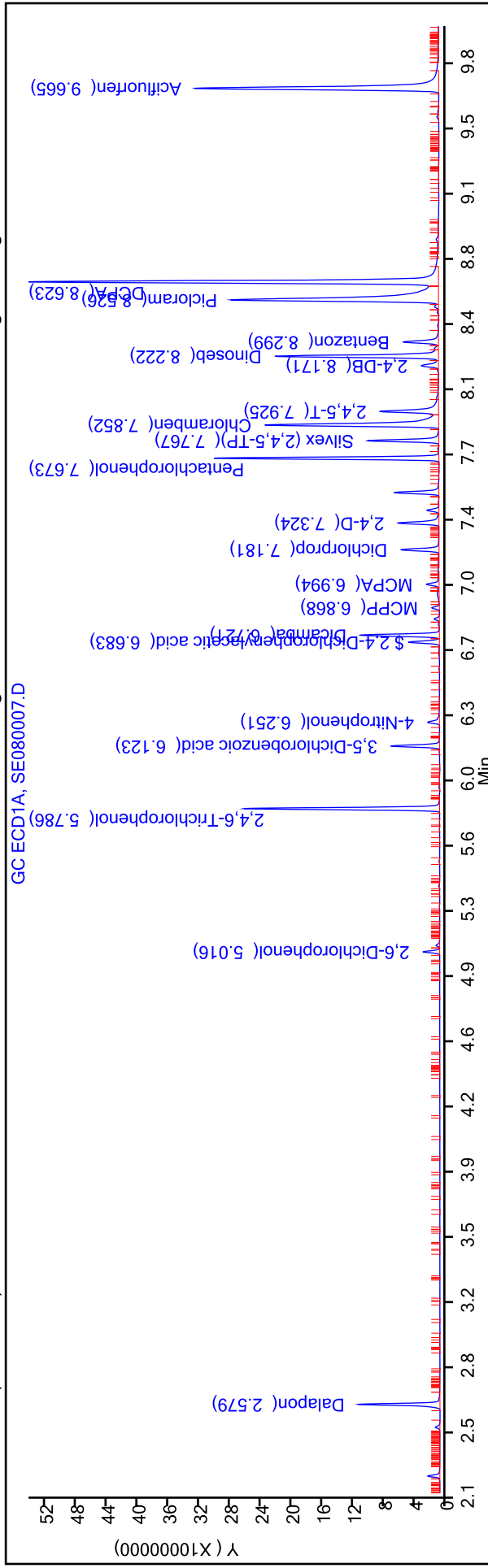
Operator ID: GEM
Worklist Smp#: 7

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 7

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
 Lims ID: ic h4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-May-2018 13:16:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-008
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:24 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	49026258	0.1000	0.0935	
2	2.632	2.632	0.000	144107629	0.1000	0.0894	
						RPD = 4.52	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	9648349	NC	NC	
2	5.102	5.102	0.000	51409780	NC	NC	
						RPD = 3.66	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	115367190	NC	NC	
2	5.776	5.776	0.000	492889358	NC	NC	
						RPD = 0.46	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	30442227	0.1000	0.0947	
2	6.116	6.116	0.000	163818500	0.1000	0.0912	
						RPD = 3.82	
5 4-Nitrophenol							
1	6.253	6.253	0.000	9830837	0.1000	0.1063	
2	6.505	6.505	0.000	28145758	0.1000	0.0941	
						RPD = 12.18	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	19553071	0.1000	0.0925	
2	6.829	6.829	0.000	126698158	0.1000	0.0900	
						RPD = 2.70	
7 Dicamba							
1	6.720	6.720	0.000	50221281	0.0500	0.0466	
2	6.910	6.910	0.000	229111440	0.0500	0.0457	
						RPD = 1.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	5032337	10.0	10.4	
2	6.955	6.955	0.000	44613118	10.0	9.35	
						RPD = 11.06	
9 MCPA							
1	6.994	6.994	0.000	10021981	10.0	10.8	M
2	7.155	7.155	0.000	72306759	10.0	12.6	M
						RPD = 15.16	
10 Dichlorprop							
1	7.180	7.180	0.000	27204673	0.1000	0.0980	
2	7.297	7.297	0.000	128102012	0.1000	0.0909	M
						RPD = 7.59	
11 2,4-D							
1	7.326	7.326	0.000	29475053	0.1000	0.0975	M
2	7.517	7.517	0.000	145386532	0.1000	0.0912	M
						RPD = 6.61	
12 Pentachlorophenol							
1	7.674	7.674	0.000	126808590	0.0250	0.0236	
2	7.714	7.714	0.000	448807878	0.0250	0.0239	M
						RPD = 1.30	
13 Silvex (2,4,5-TP)							
1	7.769	7.769	0.000	44774730	0.0250	0.0238	M
2	7.846	7.846	0.000	170517091	0.0250	0.0231	M
						RPD = 3.25	
14 Chloramben							
1	7.855	7.855	0.000	136550994	0.1000	0.0910	
2	8.162	8.162	0.000	528388568	0.1000	0.0939	M
						RPD = 3.16	
15 2,4,5-T							
1	7.929	7.929	0.000	56867356	0.0250	0.0259	M
2	8.083	8.083	0.000	149160522	0.0250	0.0224	M
						RPD = 14.39	
16 2,4-DB							
1	8.175	8.175	0.000	13655211	0.1000	0.0916	
2	8.302	8.302	0.000	97285447	0.1000	0.0986	M
						RPD = 7.35	
17 Dinoseb							
1	8.224	8.224	0.000	110631354	0.1000	0.0904	M
2	8.248	8.248	0.000	344721192	0.1000	0.0811	M
						RPD = 10.80	
18 Bentazon							
1	8.300	8.300	0.000	27567147	0.1000	0.0959	M
2	8.662	8.662	0.000	74902105	0.1000	0.0932	M
						RPD = 2.86	
19 Picloram							
1	8.529	8.529	0.000	216808821	0.1000	0.0920	
2	9.005	9.005	0.000	759779337	0.1000	0.0769	M
						RPD = 17.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	315619469	0.1000	0.0958	M
2	8.775	8.775	0.000	947740711	0.1000	0.0965	M

RPD = 0.69

21 Acifluorfen

1	9.666	9.666	0.000	217026310	0.1000	0.0952	
2	9.792	9.792	0.000	596281084	0.1000	0.0890	

RPD = 6.71

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38
Instrument ID: CSGS

Operator ID: GEM
Worklist Smp#: 8

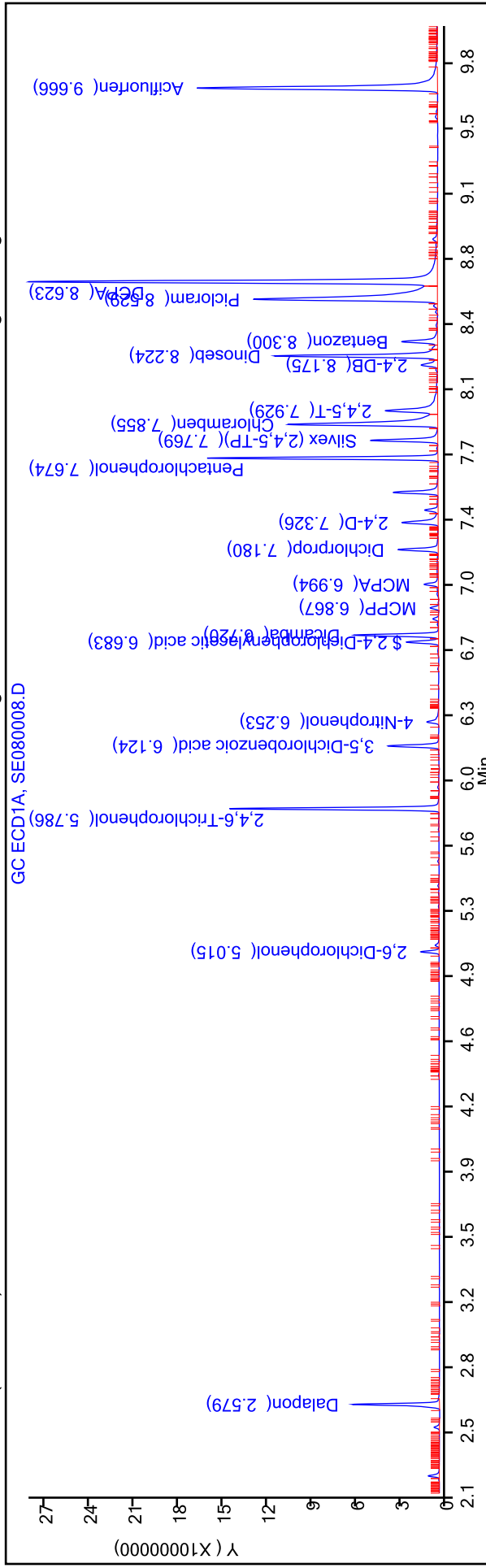
Lims ID: ic h4
Client ID:

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

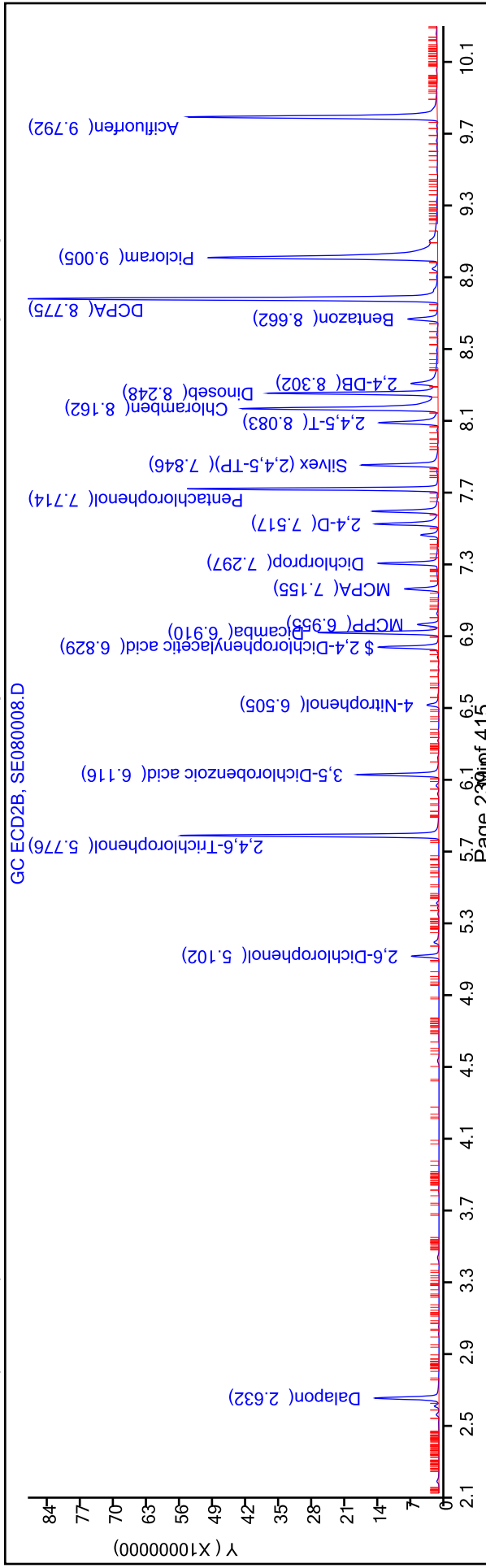
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 8

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

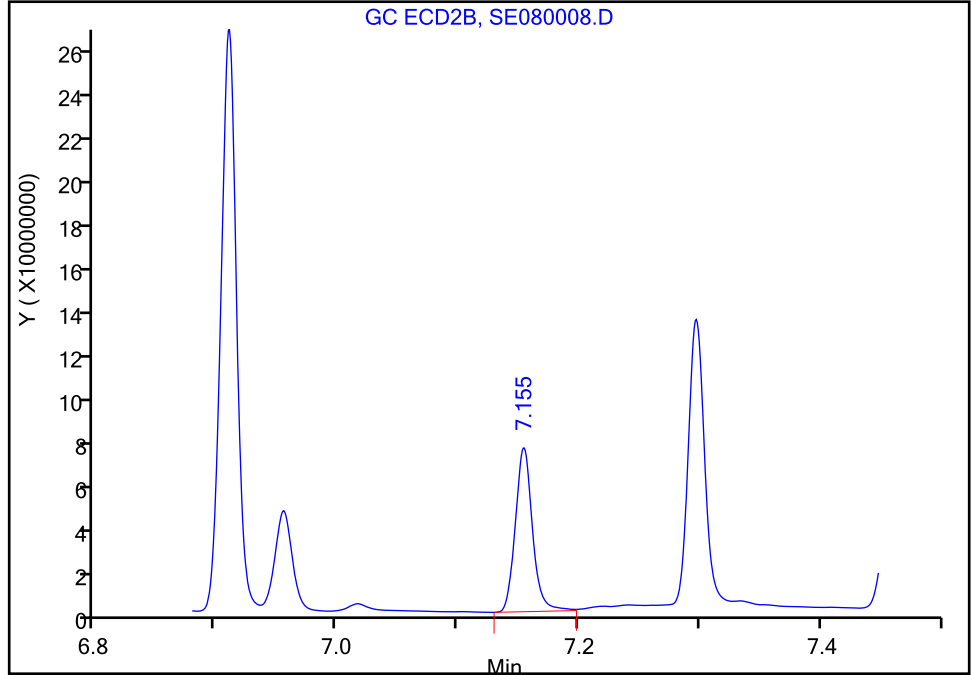
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Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

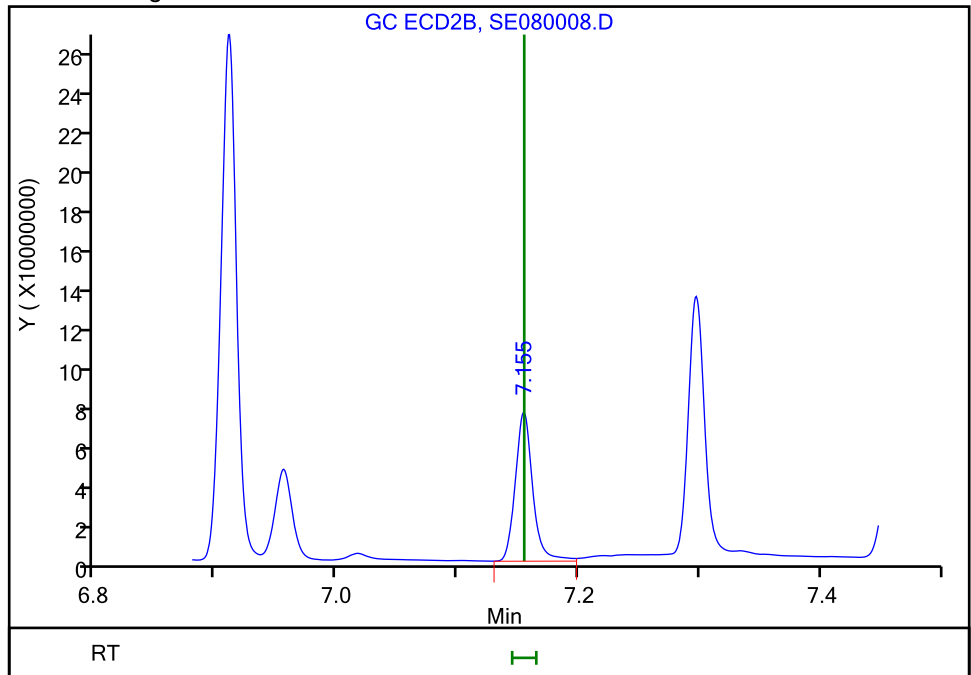
RT: 7.15
Area: 70638307
Amount: 12.168042
Amount Units: ug/ml

Processing Integration Results



RT: 7.15
Area: 72306759
Amount: 12.598213
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

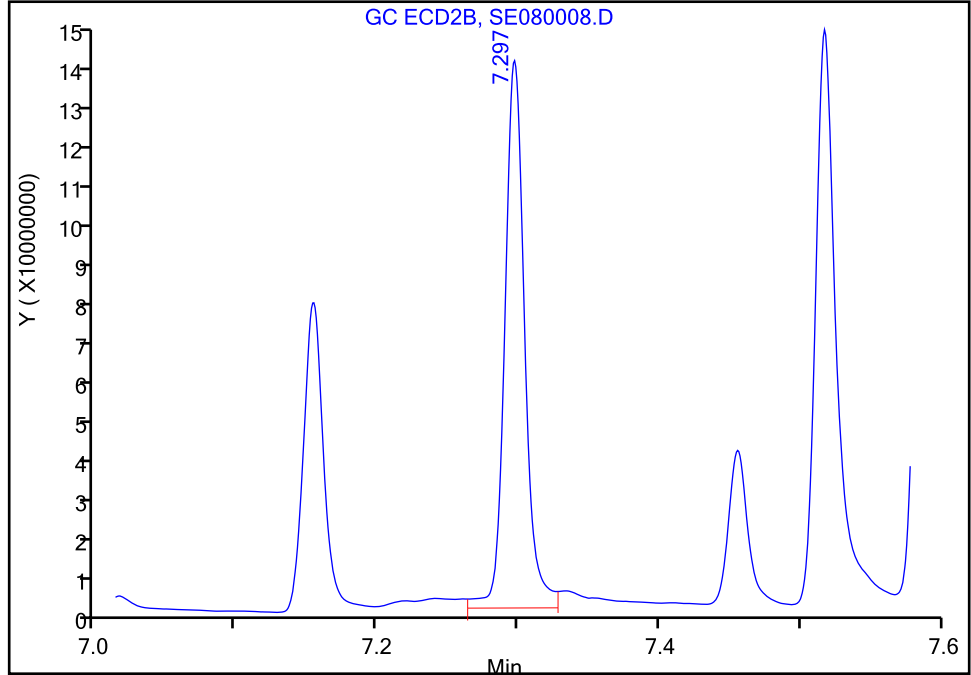
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

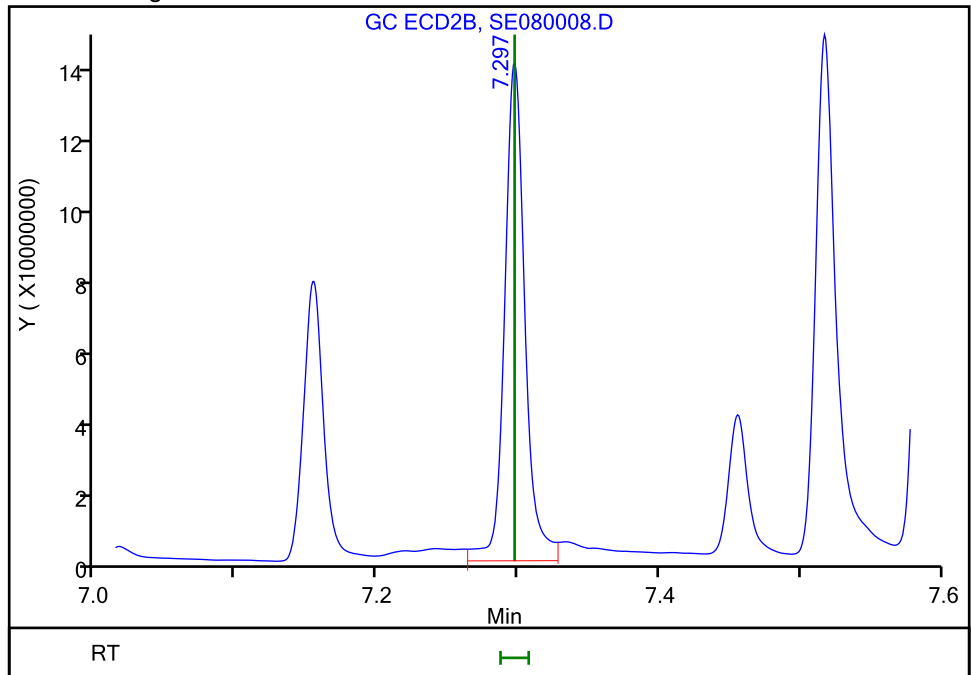
RT: 7.30
Area: 124658322
Amount: 0.089720
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 128102012
Amount: 0.090865
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

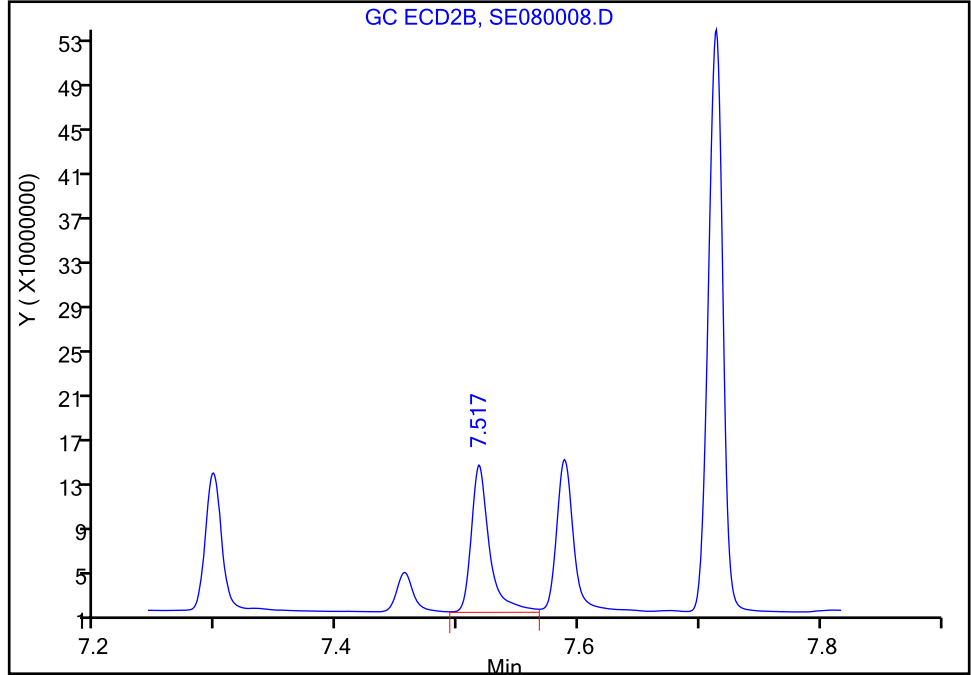
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

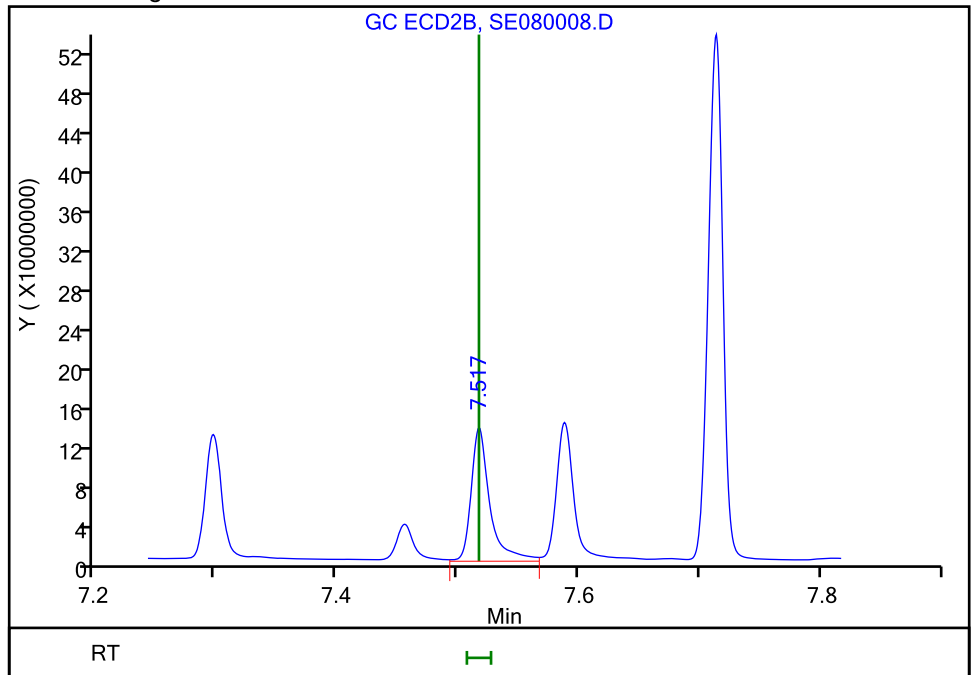
RT: 7.52
Area: 140860308
Amount: 0.087306
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 145386532
Amount: 0.091235
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

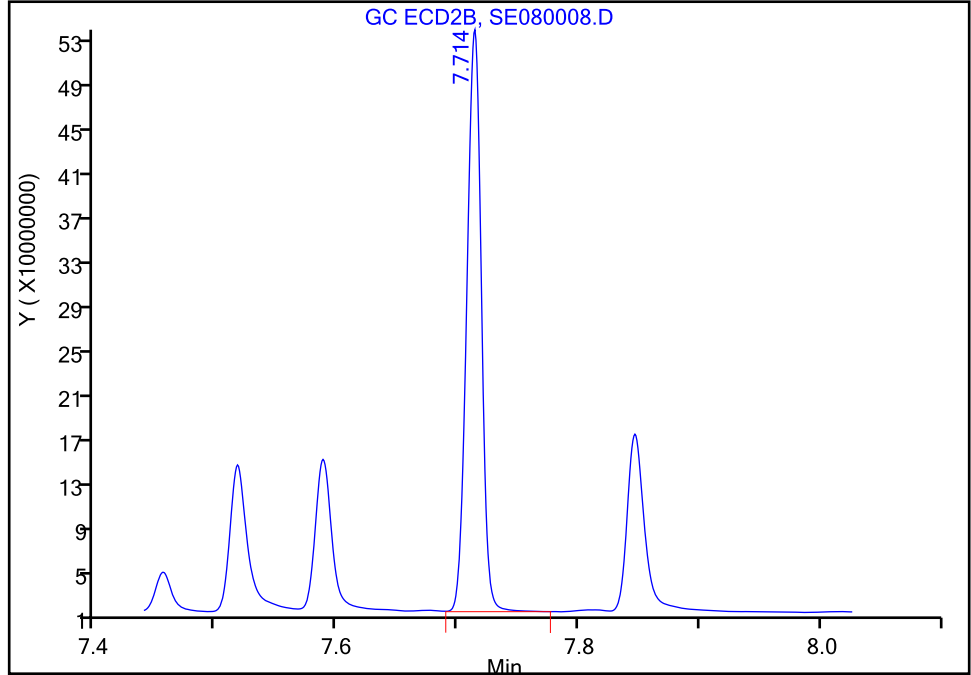
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

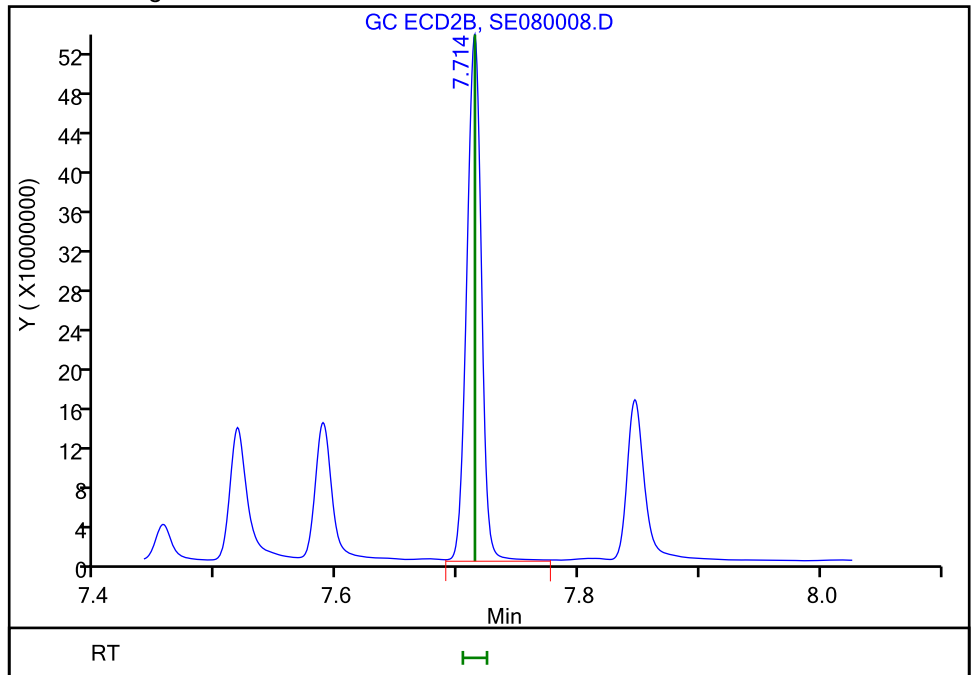
RT: 7.71
Area: 442694800
Amount: 0.023710
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 448807878
Amount: 0.023862
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

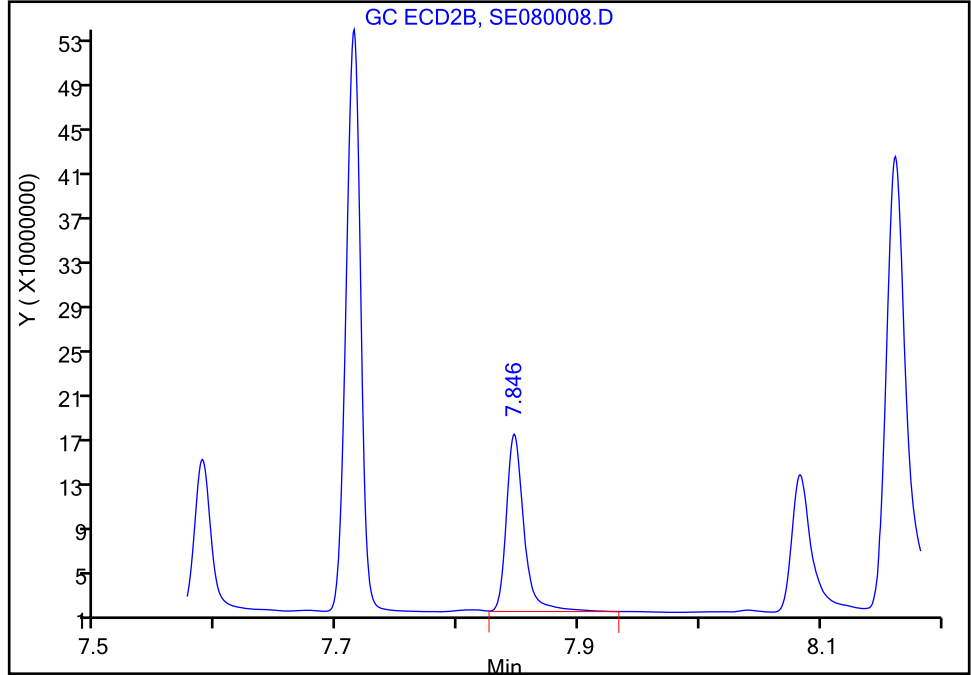
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

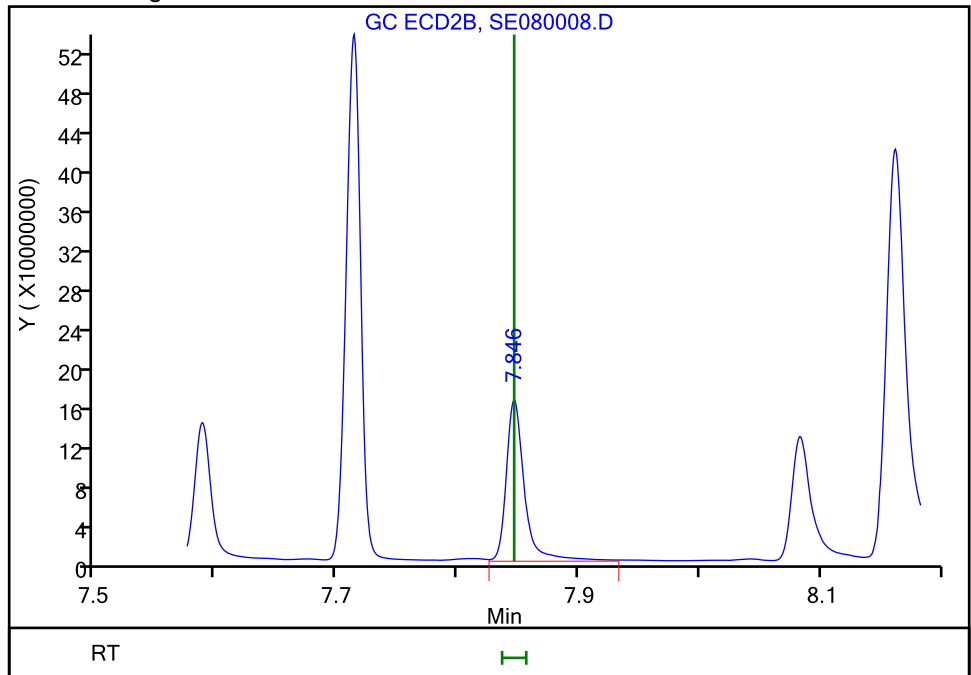
RT: 7.85
Area: 163005295
Amount: 0.022383
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 170517091
Amount: 0.023070
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

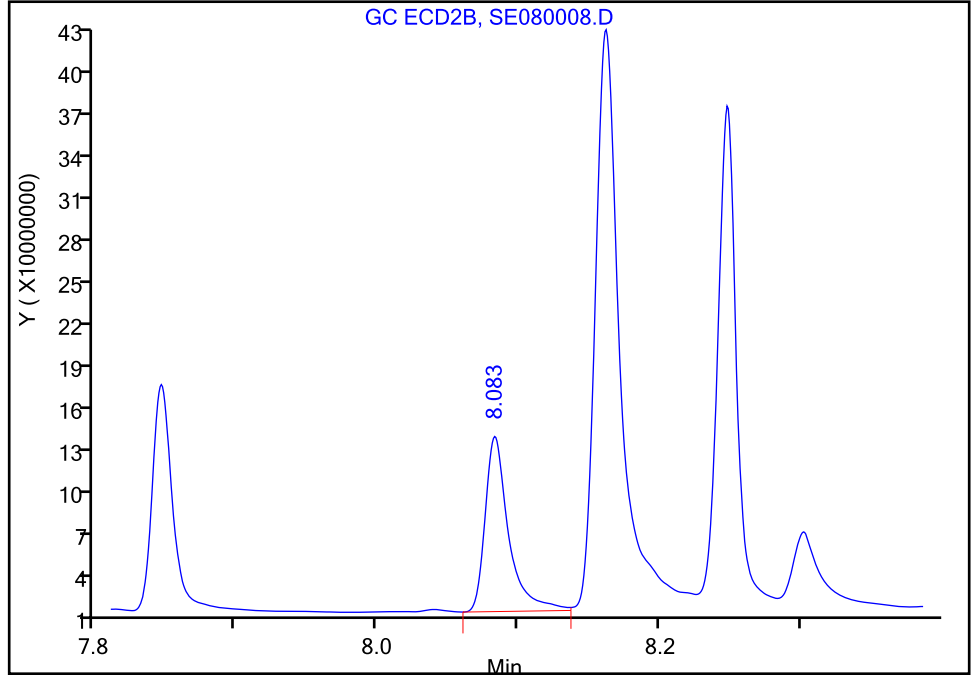
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

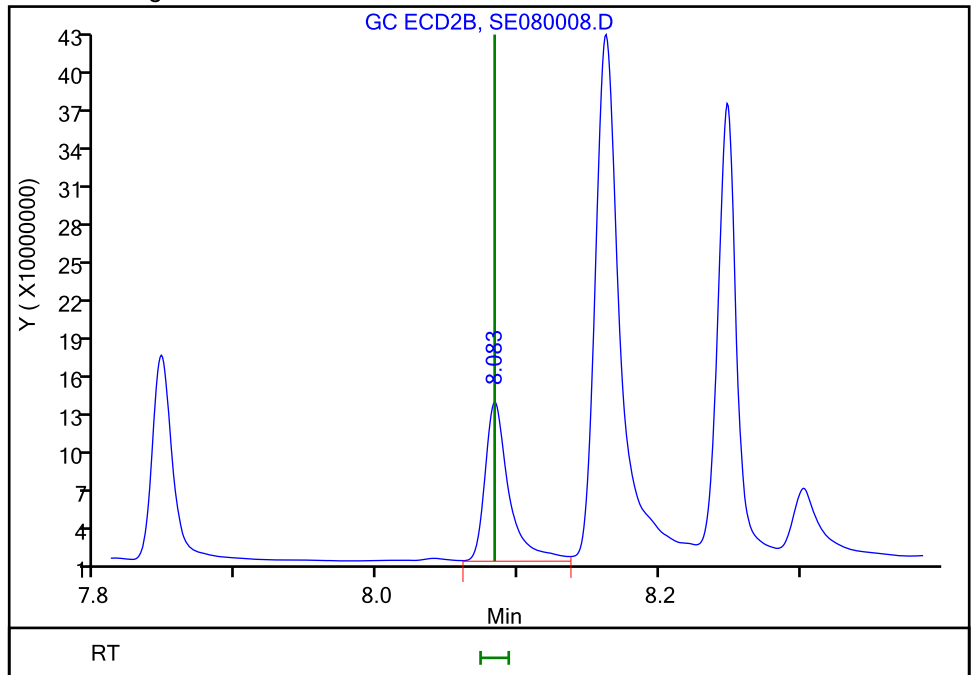
RT: 8.08
Area: 144622118
Amount: 0.022117
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 149160522
Amount: 0.022442
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

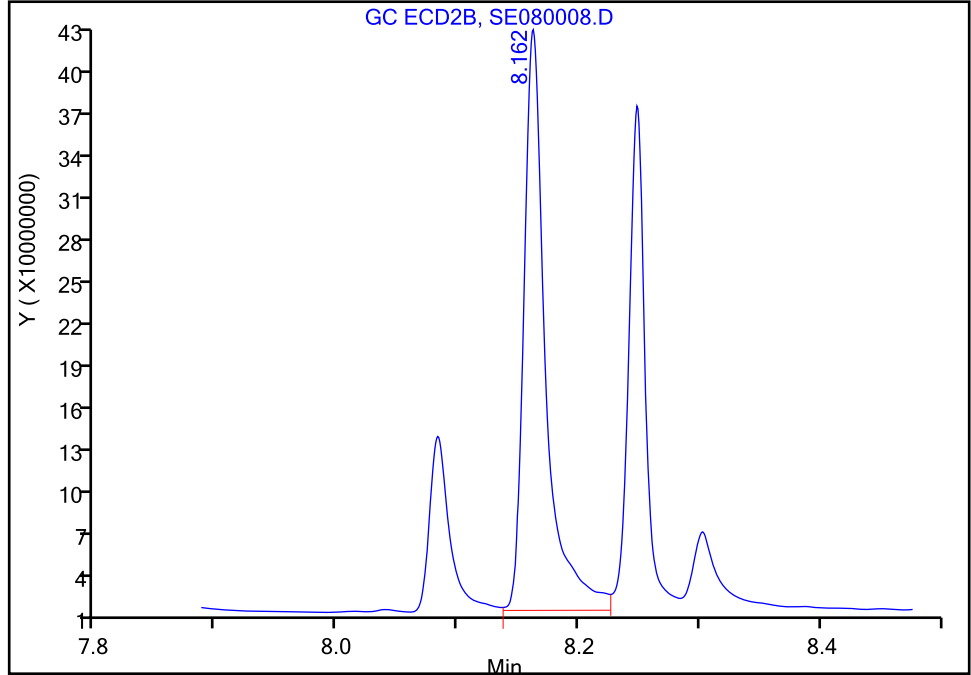
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

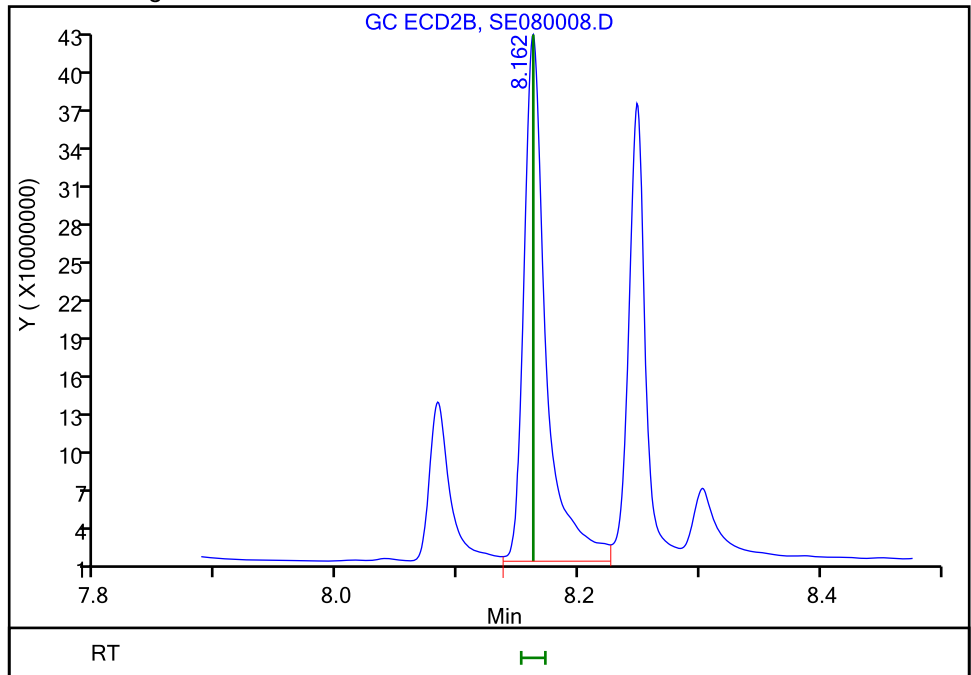
RT: 8.16
Area: 520020336
Amount: 0.090865
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 528388568
Amount: 0.093927
Amount Units: ug/ml

Manual Integration Results



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TestAmerica Savannah

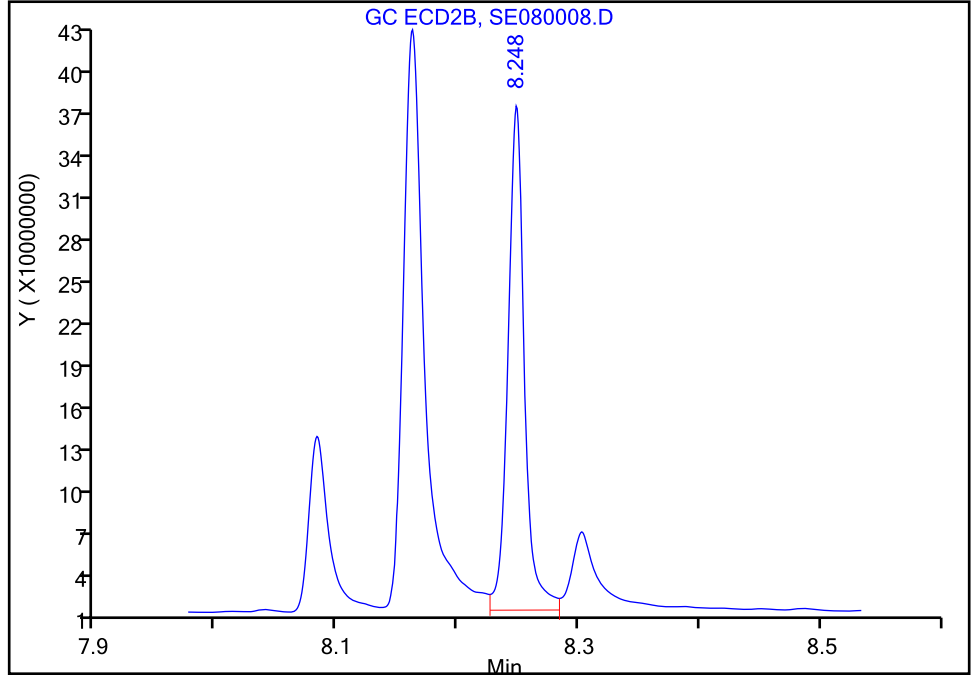
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

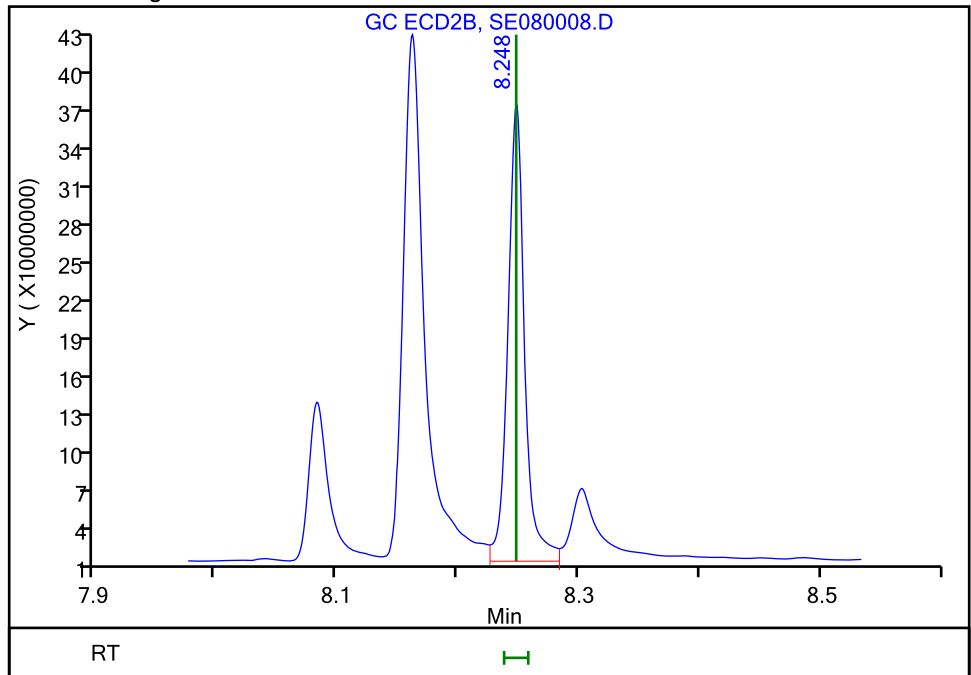
RT: 8.25
Area: 339033784
Amount: 0.079521
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 344721192
Amount: 0.081127
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

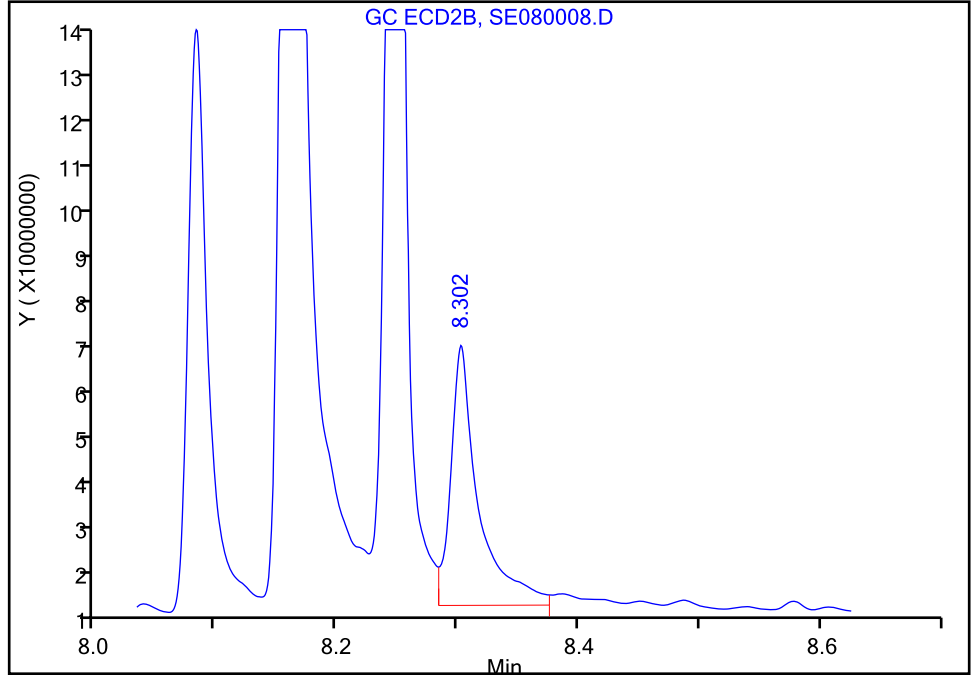
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

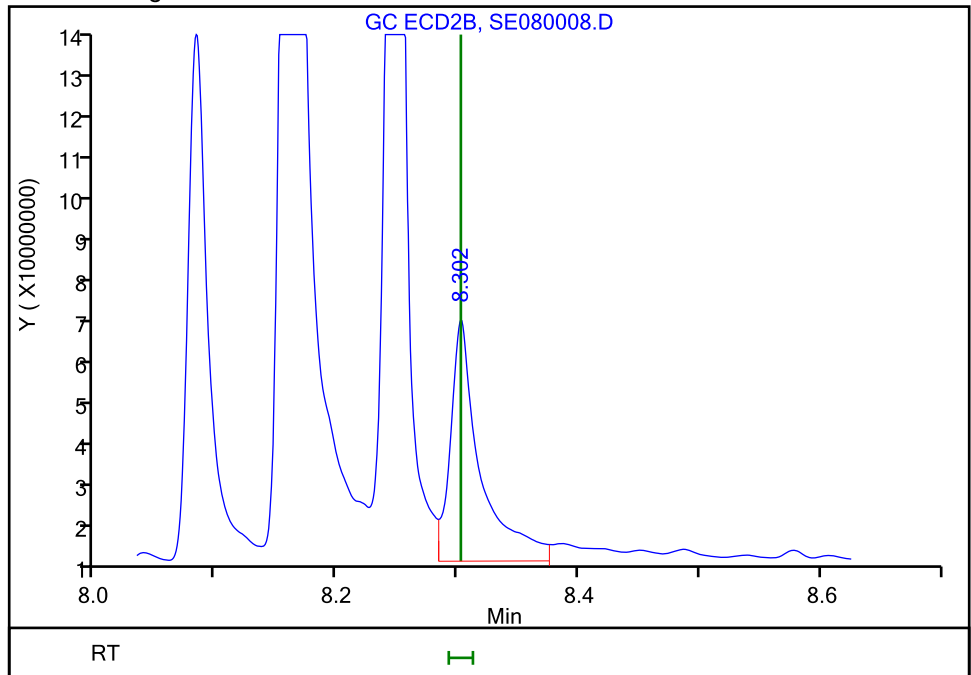
RT: 8.30
Area: 87960984
Amount: 0.091948
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 97285447
Amount: 0.098638
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah

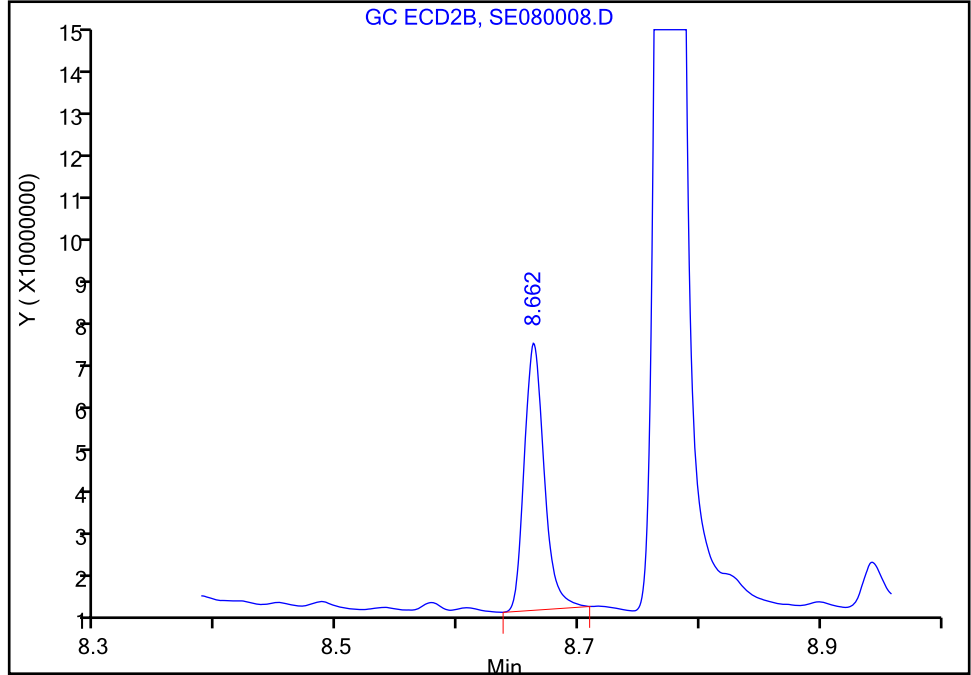
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

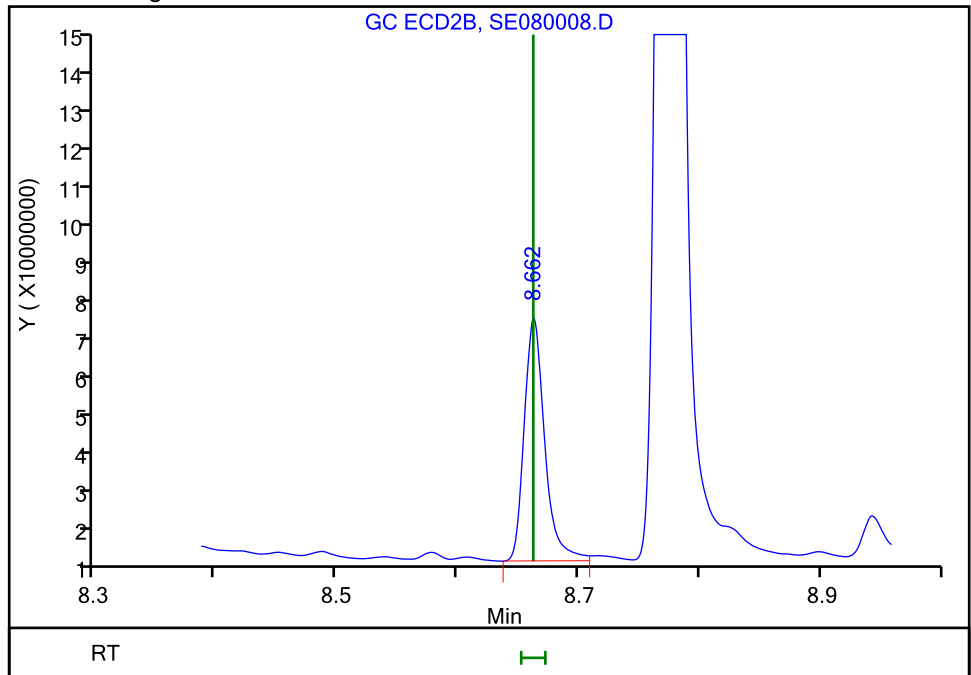
RT: 8.66
Area: 72376111
Amount: 0.091160
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 74902105
Amount: 0.093165
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

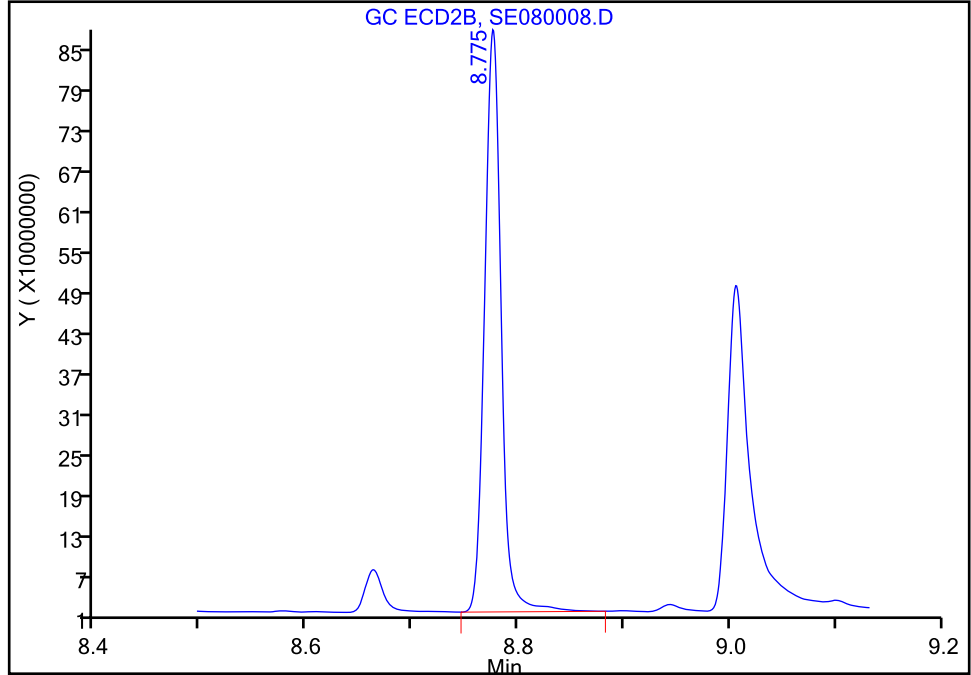
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

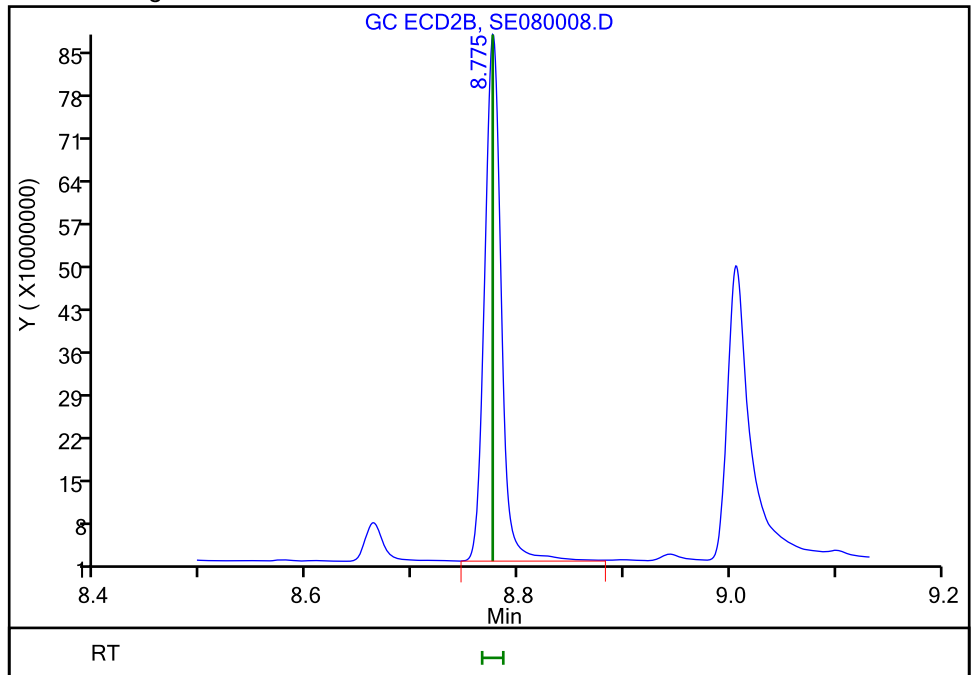
RT: 8.78
Area: 941669698
Amount: 0.096297
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 947740711
Amount: 0.096500
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

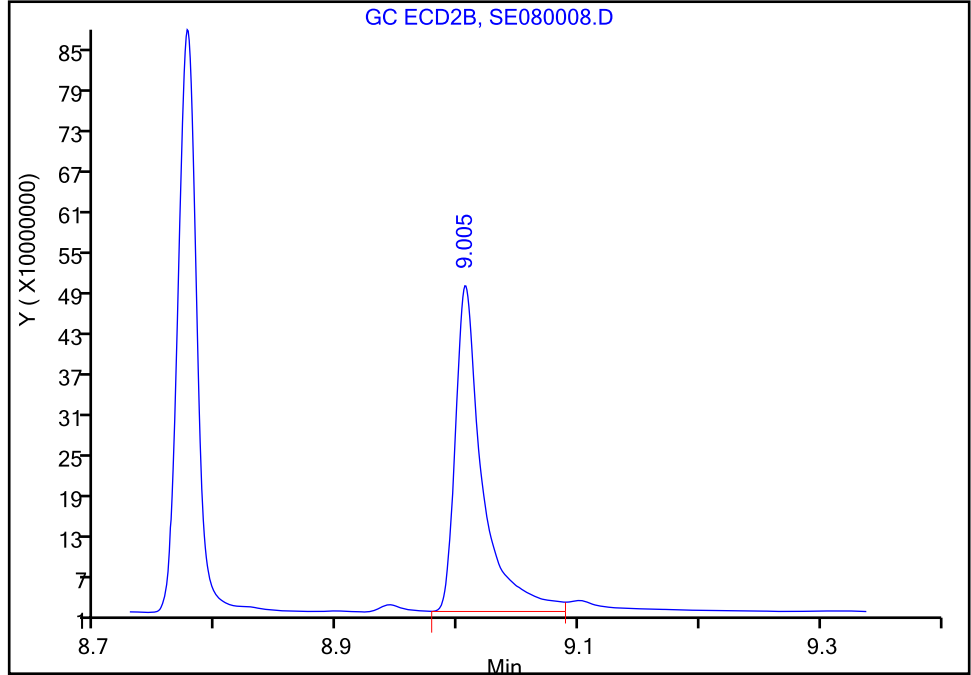
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080008.D
Injection Date: 08-May-2018 13:16:38 Instrument ID: CSGS
Lims ID: ic h4
Client ID:
Operator ID: GEM ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

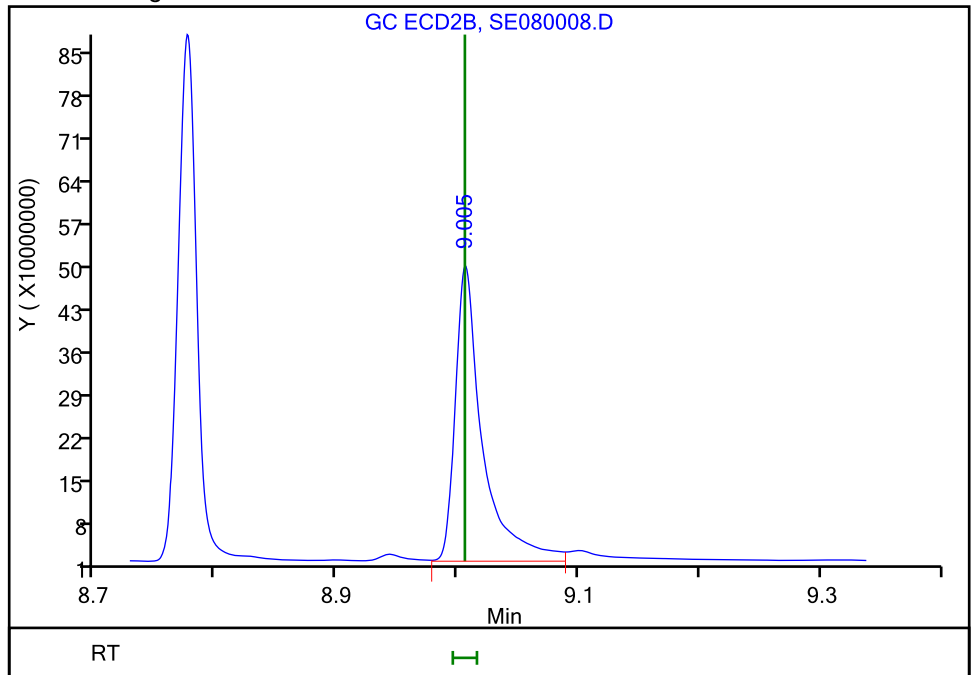
RT: 9.01
Area: 751443253
Amount: 0.084403
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 759779337
Amount: 0.076880
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:10:11
Audit Action: Assigned New Baseline

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
 Lims ID: ic h3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-May-2018 13:36:16 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-009
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:32 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:19:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	25290814	0.0500	0.0483	
2	2.632	2.632	0.000	71378402	0.0500	0.0443	
						RPD = 8.58	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	5120223	NC	NC	
2	5.101	5.102	-0.001	27211487	NC	NC	
						RPD = 3.92	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	55102499	NC	NC	
2	5.776	5.776	0.000	240010788	NC	NC	
						RPD = 1.48	
4 3,5-Dichlorobenzoic acid							
1	6.124	6.124	0.000	15117918	0.0500	0.0470	
2	6.116	6.116	0.000	82525138	0.0500	0.0459	
						RPD = 2.39	
5 4-Nitrophenol							
1	6.254	6.253	0.001	4230904	0.0500	0.0458	
2	6.506	6.505	0.001	14245923	0.0500	0.0476	
						RPD = 4.02	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	9821711	0.0500	0.0464	
2	6.829	6.829	0.000	65002540	0.0500	0.0462	
						RPD = 0.58	
7 Dicamba							
1	6.721	6.720	0.001	24549090	0.0250	0.0228	
2	6.909	6.910	-0.001	113374207	0.0250	0.0226	
						RPD = 0.70	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.866	6.867	-0.001	2565927	5.00	5.99	
2	6.955	6.955	0.000	26339273	5.00	5.17	
						RPD = 14.76	
9 MCPA							
1	6.994	6.994	0.000	4373482	5.00	4.72	
2	7.154	7.155	-0.001	40478712	5.00	7.49	
						RPD = 45.31	
10 Dichlorprop							
1	7.181	7.180	0.001	13064380	0.0500	0.0471	
2	7.297	7.297	0.000	62424883	0.0500	0.0443	
						RPD = 6.13	
11 2,4-D							
1	7.331	7.326	0.005	13528651	0.0500	0.0447	
2	7.520	7.517	0.003	68918972	0.0500	0.0432	
						RPD = 3.38	
12 Pentachlorophenol							
1	7.674	7.674	0.000	60060646	0.0125	0.0112	
2	7.713	7.714	-0.001	214964113	0.0125	0.0114	
						RPD = 2.42	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	20302486	0.0125	0.0108	
2	7.846	7.846	0.000	78639731	0.0125	0.0106	
						RPD = 1.56	
14 Chloramben							
1	7.860	7.855	0.005	60085684	0.0500	0.0468	
2	8.164	8.162	0.002	240336393	0.0500	0.0427	
						RPD = 9.03	
15 2,4,5-T							
1	7.933	7.929	0.004	26566988	0.0125	0.0121	
2	8.086	8.083	0.003	68256754	0.0125	0.0103	
						RPD = 16.45	
16 2,4-DB							
1	8.178	8.175	0.003	5762851	0.0500	0.0472	
2	8.305	8.302	0.003	46624287	0.0500	0.0473	
						RPD = 0.23	
17 Dinoseb							
1	8.225	8.224	0.001	53295649	0.0500	0.0435	
2	8.248	8.248	0.000	154960345	0.0500	0.0402	
						RPD = 8.01	
18 Bentazon							
1	8.301	8.300	0.001	13719455	0.0500	0.0477	
2	8.663	8.662	0.001	35565067	0.0500	0.0442	
						RPD = 7.56	
19 Picloram							
1	8.533	8.529	0.004	94759287	0.0500	0.0468	
2	9.009	9.005	0.004	328532437	0.0500	0.0386	
						RPD = 19.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.624	8.623	0.001	151449071	0.0500	0.0460	
2	8.775	8.775	0.000	451881325	0.0500	0.0460	
						RPD = 0.05	

21 Acifluorfen

1	9.667	9.666	0.001	97225812	0.0500	0.0468	
2	9.791	9.792	-0.001	248586919	0.0500	0.0440	
						RPD = 6.11	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-3_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080009.D
Injection Date: 08-May-2018 13:36:16
Lims ID: ic h3
Instrument ID: CSGS

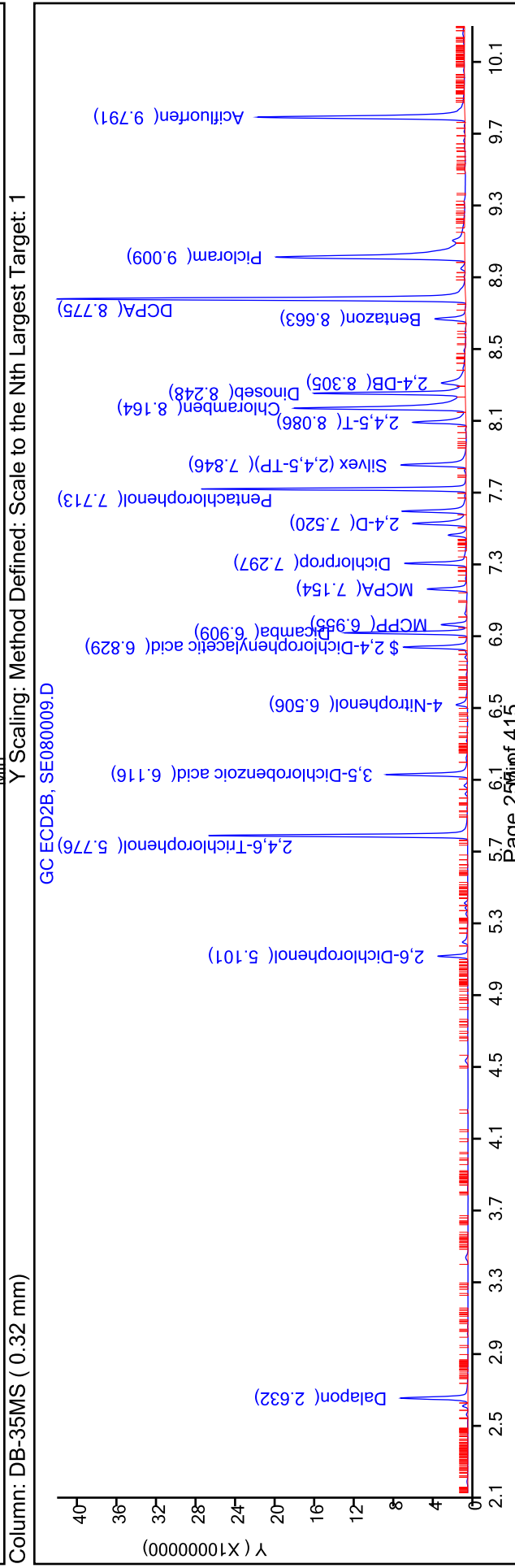
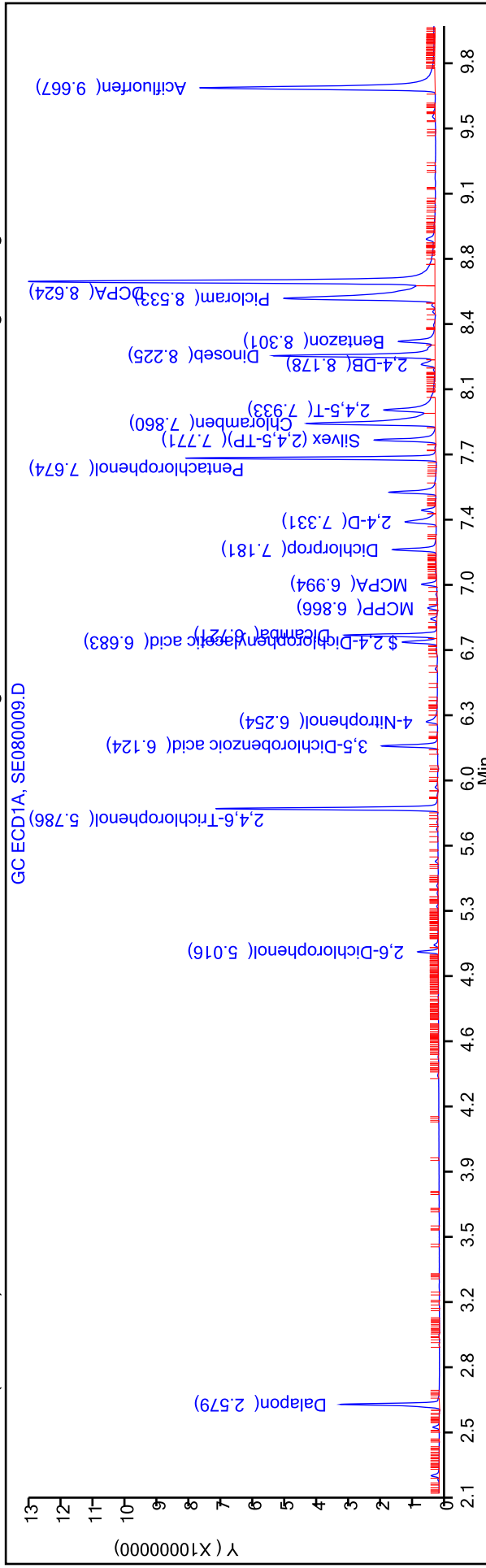
Operator ID: GEM
Worklist Smp#: 9

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 9

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
 Lims ID: ic h2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-May-2018 13:55:52 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-010
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:38 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:10:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	13718735	0.0250	0.0262	
2	2.632	2.632	0.000	39932951	0.0250	0.0248	
						RPD = 5.50	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	2779258	NC	NC	
2	5.102	5.102	0.000	15274619	NC	NC	
						RPD = 0.57	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	27400593	NC	NC	
2	5.776	5.776	0.000	122077658	NC	NC	
						RPD = 3.74	
4 3,5-Dichlorobenzoic acid							
1	6.125	6.124	0.001	8148129	0.0250	0.0254	
2	6.118	6.116	0.002	44015926	0.0250	0.0245	
						RPD = 3.44	
5 4-Nitrophenol							
1	6.258	6.253	0.005	2307008	0.0250	0.0250	
2	6.511	6.505	0.006	7416225	0.0250	0.0248	
						RPD = 0.61	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.684	6.683	0.001	5538443	0.0250	0.0262	
2	6.830	6.829	0.001	34723127	0.0250	0.0247	
						RPD = 5.99	
7 Dicamba							
1	6.720	6.720	0.000	13200023	0.0125	0.0123	
2	6.910	6.910	0.000	58578625	0.0125	0.0117	
						RPD = 4.69	

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	1288891	2.50	3.49	
2	6.955	6.955	0.000	16319936	2.50	2.87	
						RPD = 19.60	
9 MCPA							
1	6.995	6.994	0.001	2137688	2.50	2.31	
2	7.155	7.155	0.000	24668652	2.50	4.72	
						RPD = 68.67	
10 Dichlorprop							
1	7.182	7.180	0.002	6871862	0.0250	0.0248	
2	7.298	7.297	0.001	33672808	0.0250	0.0239	
						RPD = 3.61	
11 2,4-D							
1	7.337	7.326	0.011	6740238	0.0250	0.0223	
2	7.524	7.517	0.007	35695833	0.0250	0.0224	
						RPD = 0.50	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	29521455	0.006250	0.005483	
2	7.713	7.714	-0.001	107509203	0.006250	0.005716	
						RPD = 4.15	
13 Silvex (2,4,5-TP)							
1	7.771	7.769	0.002	9932955	0.006250	0.005287	
2	7.850	7.846	0.004	39284572	0.006250	0.005315	
						RPD = 0.53	
14 Chloramben							
1	7.864	7.855	0.009	28147981	0.0250	0.0279	
2	8.167	8.162	0.005	117512235	0.0250	0.0209	
						RPD = 28.91	
15 2,4,5-T							
1	7.935	7.929	0.006	13893399	0.006250	0.006333	
2	8.090	8.083	0.007	34680183	0.006250	0.005218	
						RPD = 19.31	
16 2,4-DB							
1	8.182	8.175	0.007	2666490	0.0250	0.0295	
2	8.308	8.302	0.006	26051520	0.0250	0.0264	
						RPD = 10.95	
17 Dinoseb							
1	8.225	8.224	0.001	27141219	0.0250	0.0222	
2	8.250	8.248	0.002	77307007	0.0250	0.0234	
						RPD = 5.56	
18 Bentazon							
1	8.304	8.300	0.004	6986266	0.0250	0.0243	
2	8.665	8.662	0.003	18151512	0.0250	0.0226	
						RPD = 7.33	
19 Picloram							
1	8.538	8.529	0.009	44134008	0.0250	0.0275	
2	9.011	9.005	0.006	155603121	0.0250	0.0232	
						RPD = 16.88	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.625	8.623	0.002	77163736	0.0250	0.0234	
2	8.776	8.775	0.001	226645361	0.0250	0.0231	
						RPD = 1.52	

21 Acifluorfen

1	9.668	9.666	0.002	48982390	0.0250	0.0268	
2	9.795	9.792	0.003	120359495	0.0250	0.0266	
						RPD = 0.57	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-2_00015

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080010.D
Injection Date: 08-May-2018 13:55:52
Lims ID: ic h2
Instrument ID: CSGS

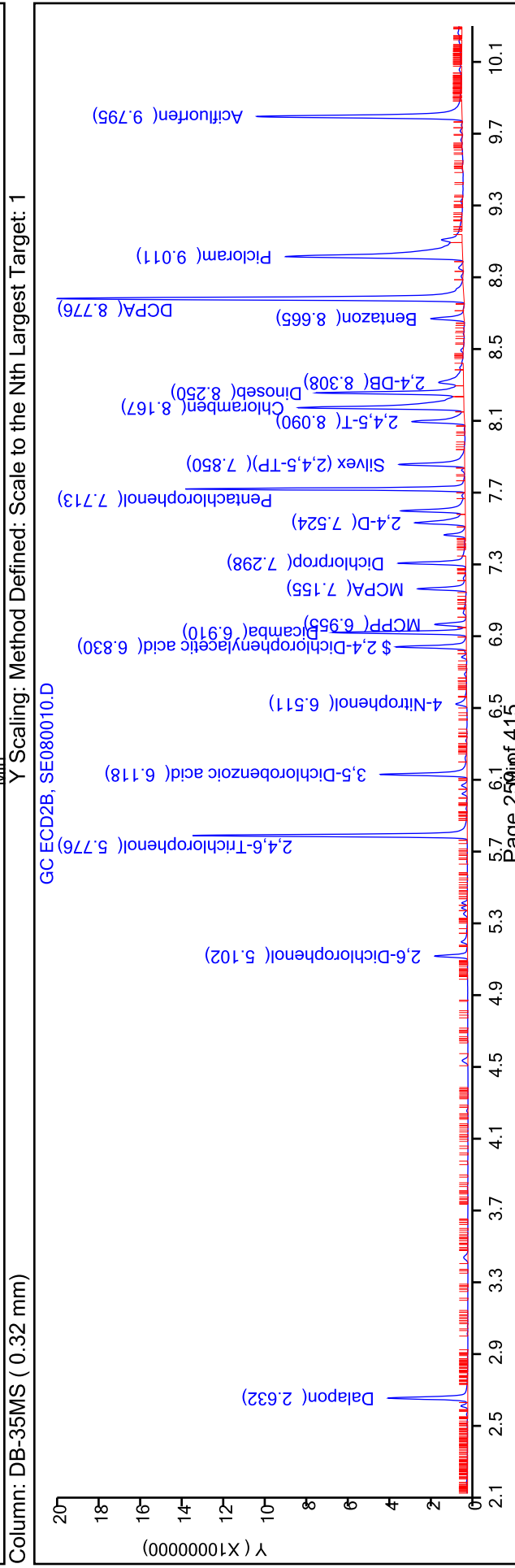
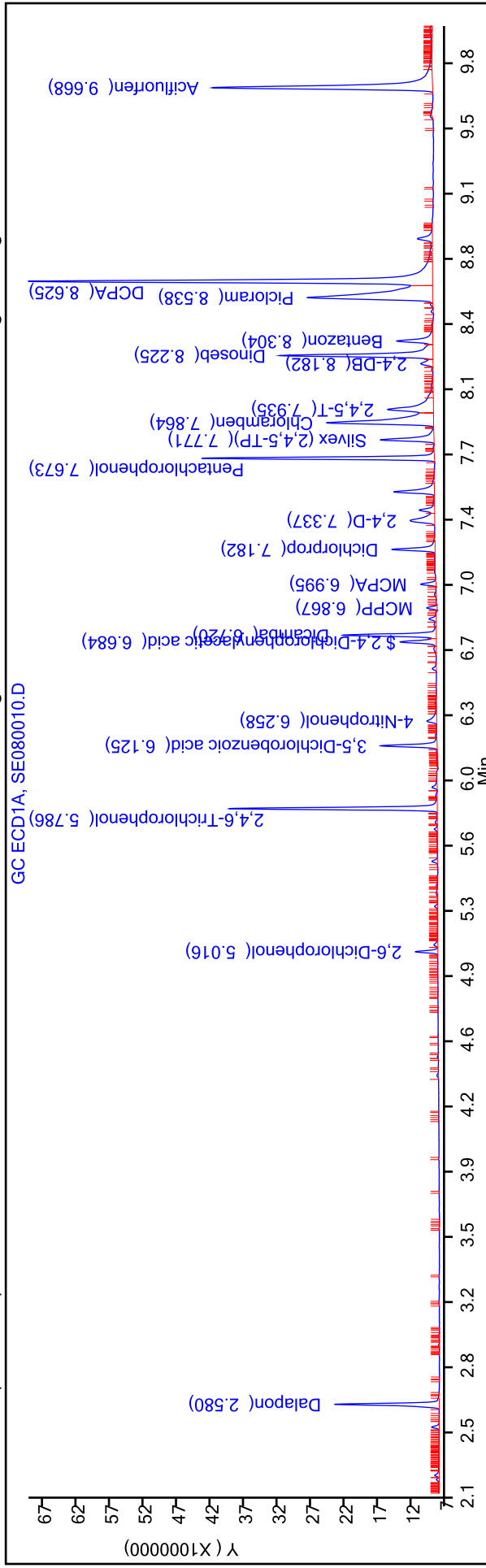
Operator ID: GEM
Worklist Smp#: 10

Client ID:
Injection Vol: 1.0 ul
Method: Herbicides_CSGS

Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 10

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Lims ID: ic h1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-May-2018 14:15:28 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-011
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:25:44 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	5906230	0.0100	0.0113	
2	2.633	2.632	0.001	17983150	0.0100	0.0112	
						RPD = 1.00	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	1242849	NC	NC	
2	5.103	5.102	0.001	6728448	NC	NC	
						RPD = 2.08	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	10511883	NC	NC	
2	5.776	5.776	0.000	47802186	NC	NC	
						RPD = 5.78	
4 3,5-Dichlorobenzoic acid							
1	6.126	6.124	0.002	3202229	0.0100	0.0100	
2	6.119	6.116	0.003	18377513	0.0100	0.0102	
						RPD = 2.62	
5 4-Nitrophenol							
1	6.263	6.253	0.010	711986	0.0100	0.007701	a
2	6.516	6.505	0.011	2506531	0.0100	0.008382	M
						RPD = 8.47	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.685	6.683	0.002	2325909	0.0100	0.0110	
2	6.831	6.829	0.002	14359475	0.0100	0.0102	
						RPD = 7.53	
7 Dicamba							
1	6.721	6.720	0.001	5346345	0.005000	0.004964	
2	6.911	6.910	0.001	23620770	0.005000	0.004716	
						RPD = 5.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.868	6.867	0.001	383358	1.00	1.63	
2	6.956	6.955	0.001	7884133	1.00	0.9383	
						RPD = 53.96	
9 MCPA							
1	6.996	6.994	0.002	684536	1.00	0.7393	
2	7.156	7.155	0.001	12132999	1.00	2.39	
						RPD = 105.59	
10 Dichlorprop							
1	7.182	7.180	0.002	2699462	0.0100	0.009728	
2	7.299	7.297	0.002	15301912	0.0100	0.0109	
						RPD = 10.94	
11 2,4-D							
1	7.346	7.326	0.020	2400934	0.0100	0.007940	a
2	7.531	7.517	0.014	14551198	0.0100	0.009131	a
						RPD = 13.96	
12 Pentachlorophenol							
1	7.674	7.674	0.000	11008502	0.002500	0.002045	
2	7.713	7.714	-0.001	41165516	0.002500	0.002189	
						RPD = 6.80	
13 Silvex (2,4,5-TP)							
1	7.776	7.769	0.007	3531202	0.002500	0.001880	
2	7.851	7.846	0.005	16213772	0.002500	0.002194	
						RPD = 15.42	
14 Chloramben							
1	7.868	7.855	0.013	10146304	0.0100	0.0173	
2	8.171	8.162	0.009	45179417	0.0100	0.008031	
						RPD = 72.95	
15 2,4,5-T							
1	7.937	7.929	0.008	5683855	0.002500	0.002591	
2	8.089	8.083	0.006	14207297	0.002500	0.002138	
						RPD = 19.17	
16 2,4-DB							
1	8.185	8.175	0.010	957156	0.0100	0.0196	Ma
2	8.312	8.302	0.010	10871976	0.0100	0.0110	a
						RPD = 56.23	
17 Dinoseb							
1	8.227	8.224	0.003	10802376	0.0100	0.008826	
2	8.251	8.248	0.003	30077804	0.0100	0.0133	
						RPD = 40.12	
18 Bentazon							
1	8.306	8.300	0.006	3164677	0.0100	0.0110	
2	8.665	8.662	0.003	7803979	0.0100	0.009707	
						RPD = 12.54	
19 Picloram							
1	8.546	8.529	0.017	16249913	0.0100	0.0167	a
2	9.014	9.005	0.009	57128370	0.0100	0.0144	a
						RPD = 14.53	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.626	8.623	0.003	28939470	0.0100	0.008788	
2	8.777	8.775	0.002	86672796	0.0100	0.008825	
						RPD = 0.42	

21 Acifluorfen

1	9.670	9.666	0.004	18199991	0.0100	0.0138	
2	9.794	9.792	0.002	40645245	0.0100	0.0156	
						RPD = 11.77	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SGHERB-1_00016

Amount Added: 1.00

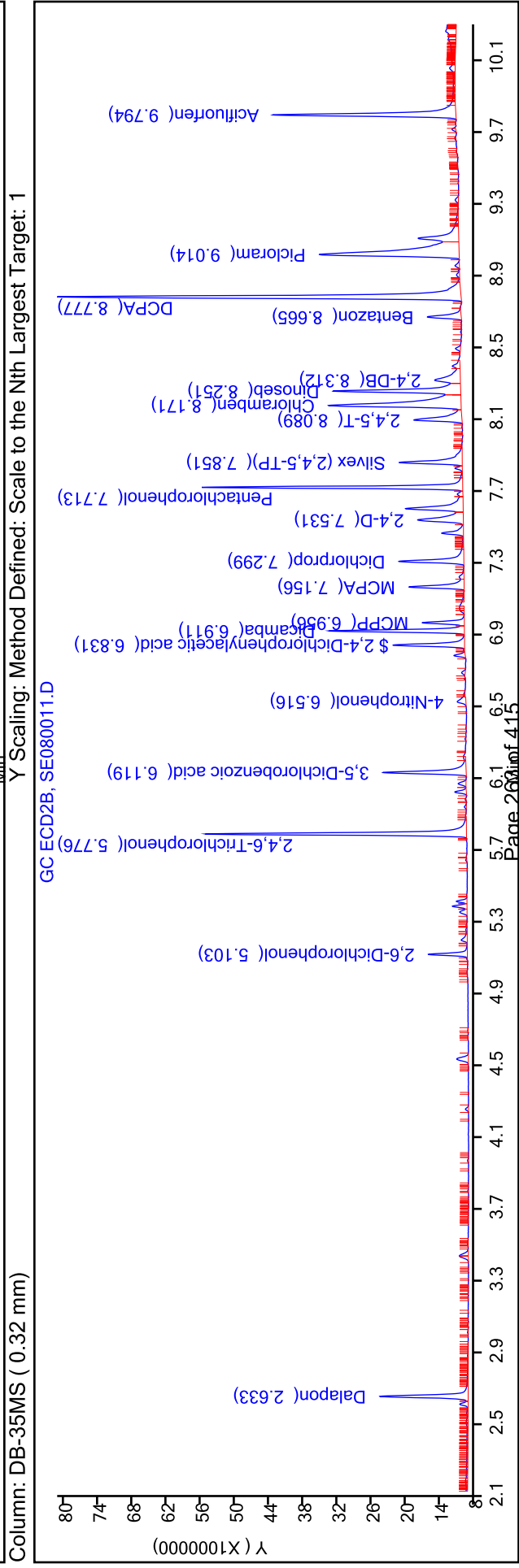
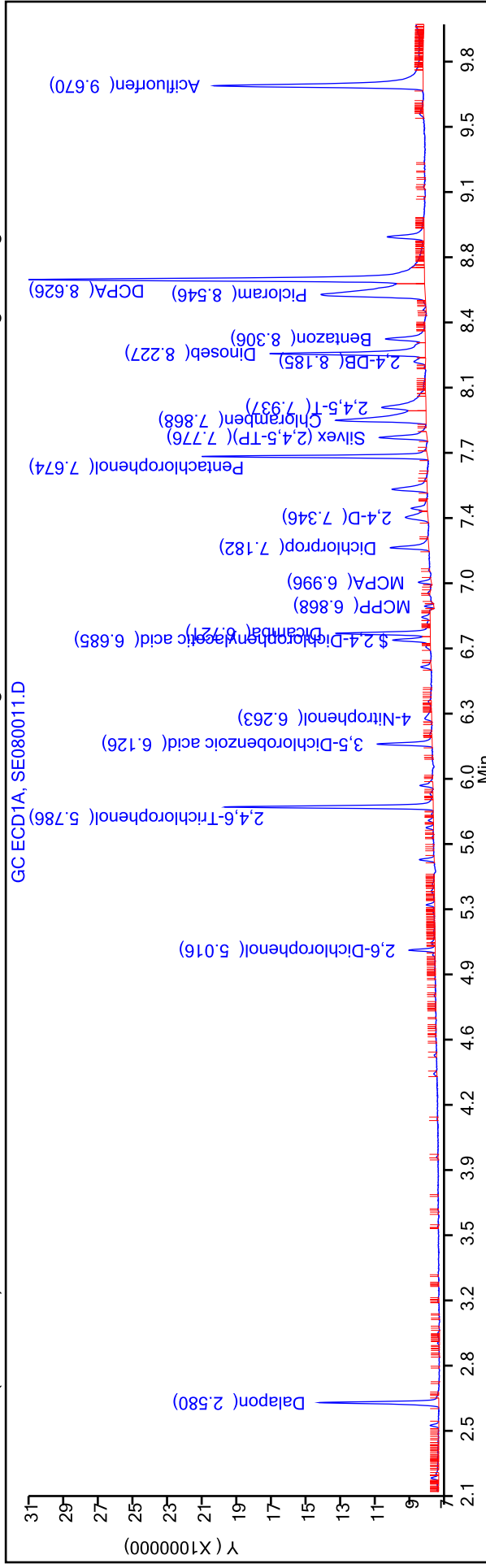
Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Injection Date: 08-May-2018 14:15:28
 Lims ID: ic h1
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

Operator ID: GEM
 Worklist Smp#: 11
 ALS Bottle#: 11

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

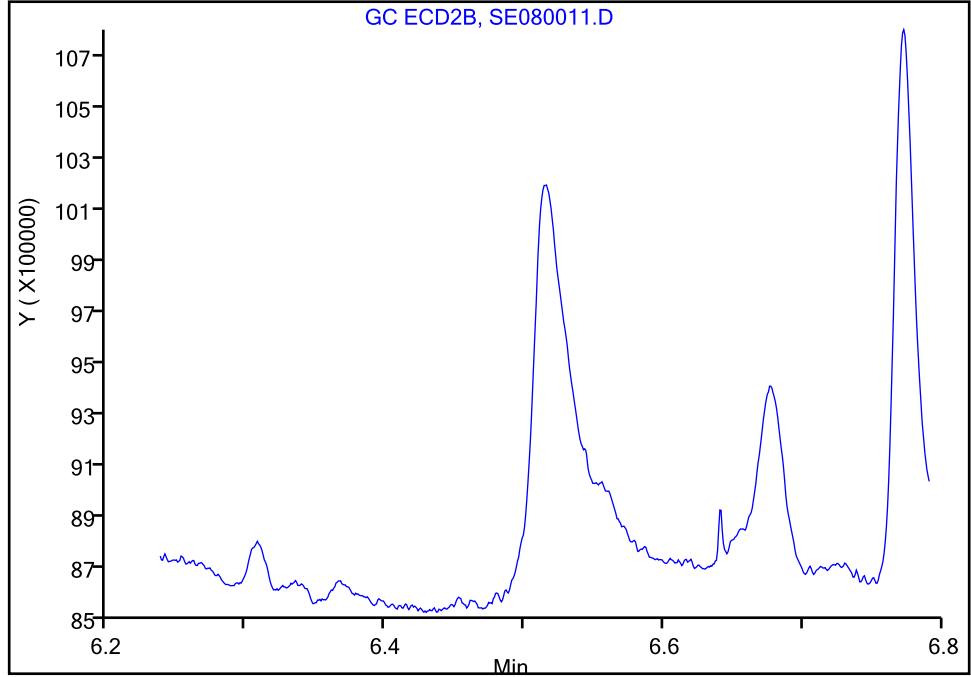
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Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

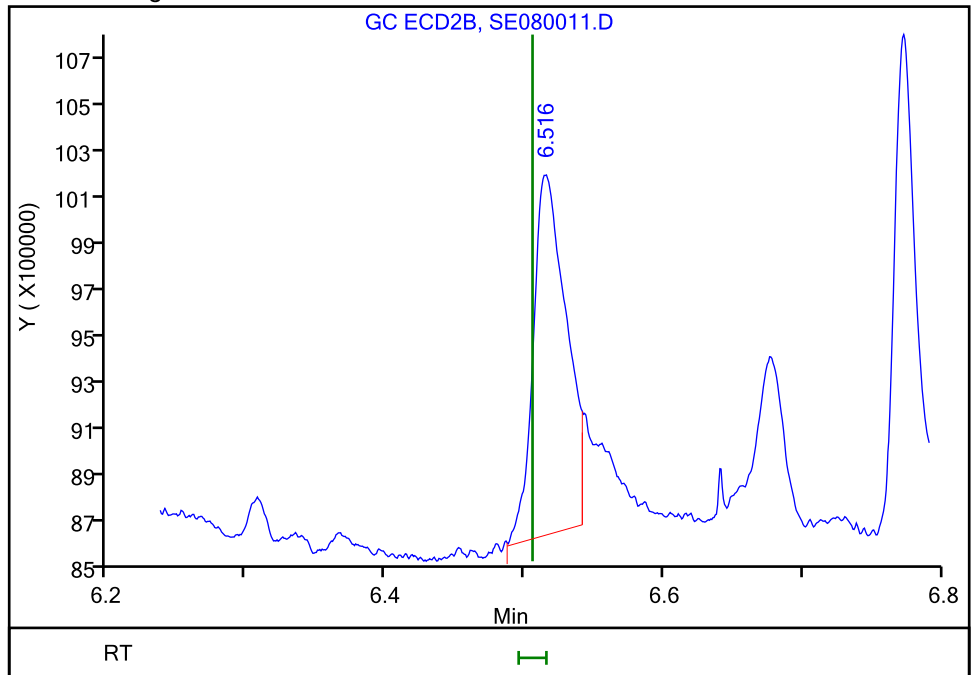
RT: 6.51
Area: 0
Amount: 0.007640
Amount Units: ug/ml

Processing Integration Results



RT: 6.52
Area: 2506531
Amount: 0.008382
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:20

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

TestAmerica Savannah

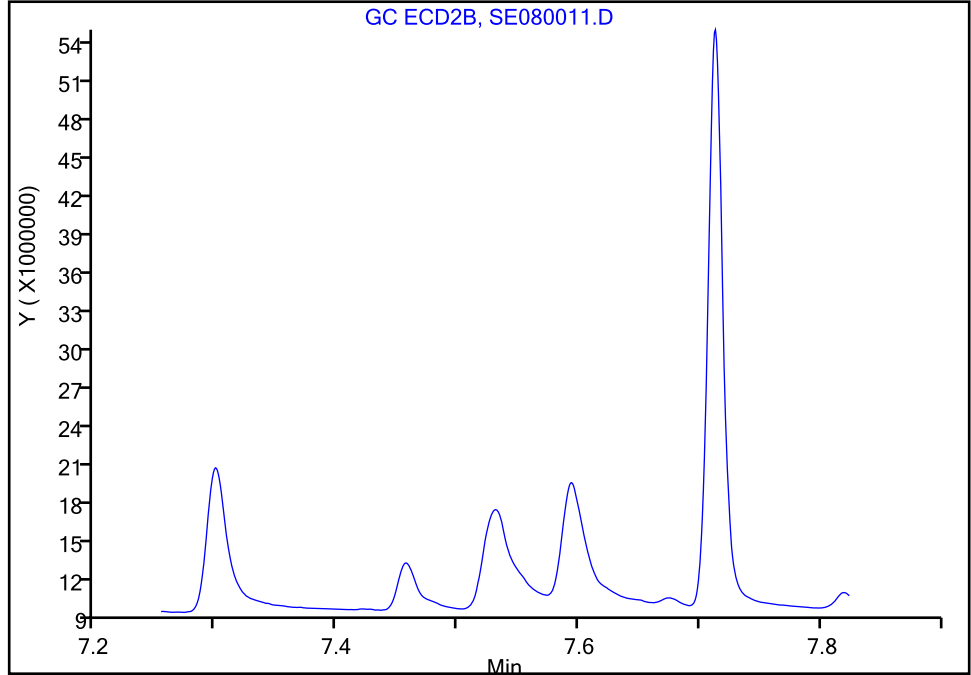
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

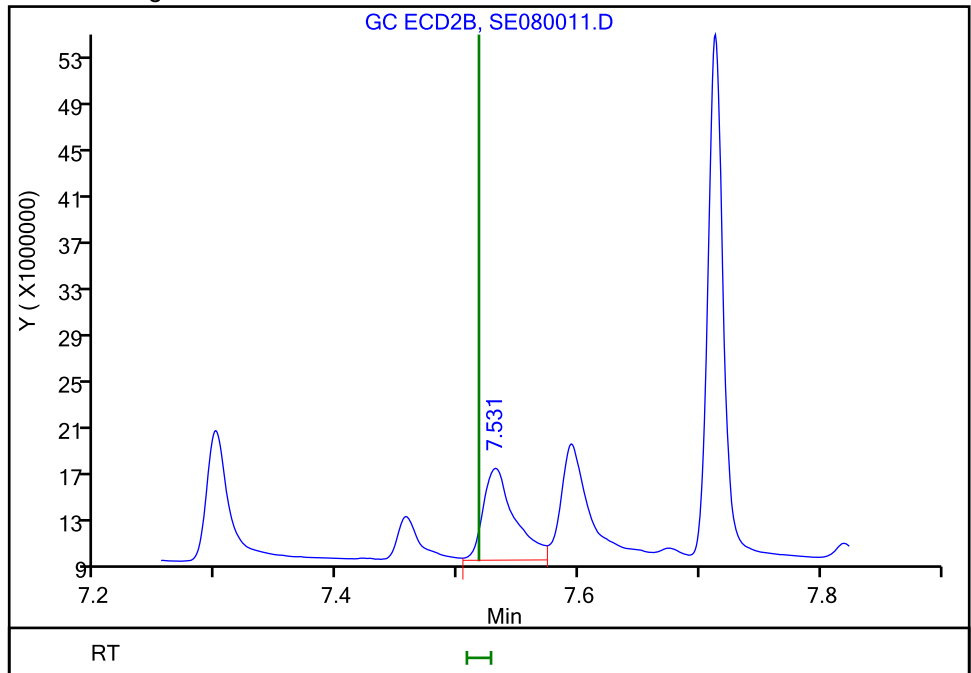
Not Detected
Expected RT: 7.52

Processing Integration Results



Manual Integration Results

RT: 7.53
Area: 14551198
Amount: 0.009131
Amount Units: ug/ml



Reviewer: kellarj, 08-May-2018 16:11:16
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

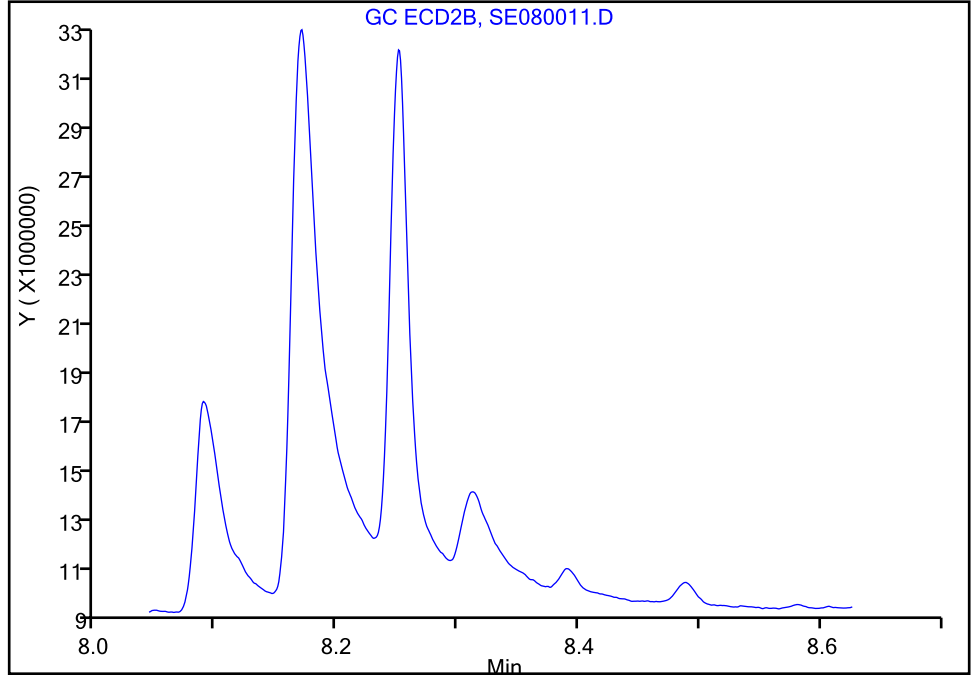
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

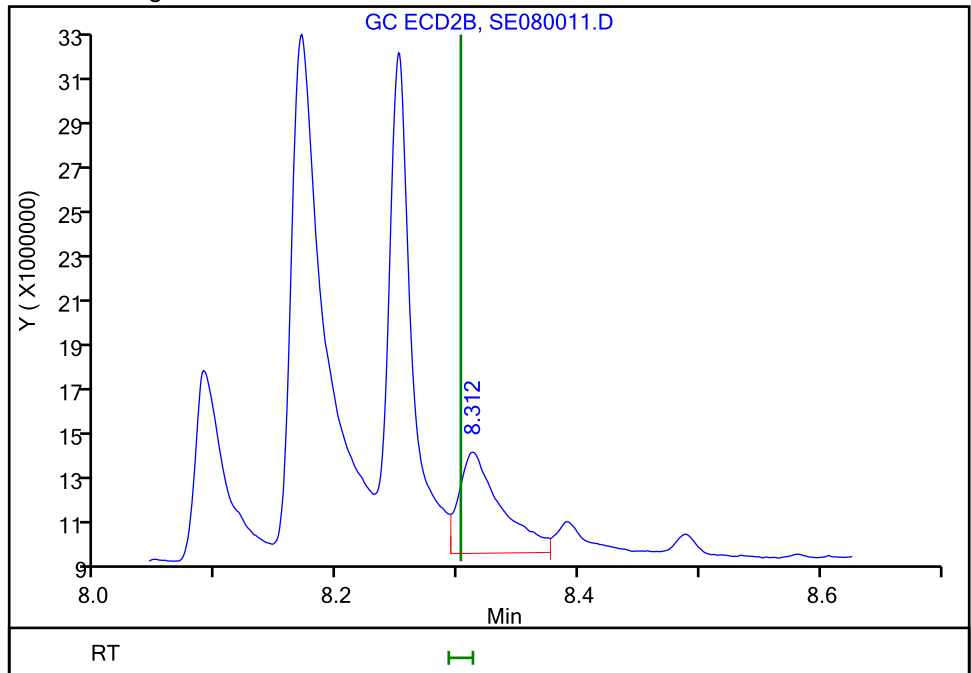
RT: 8.30
Area: 0
Amount: 0.021175
Amount Units: ug/ml

Processing Integration Results



RT: 8.31
Area: 10871976
Amount: 0.011023
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:35
Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing
Page 266 of 415

TestAmerica Savannah

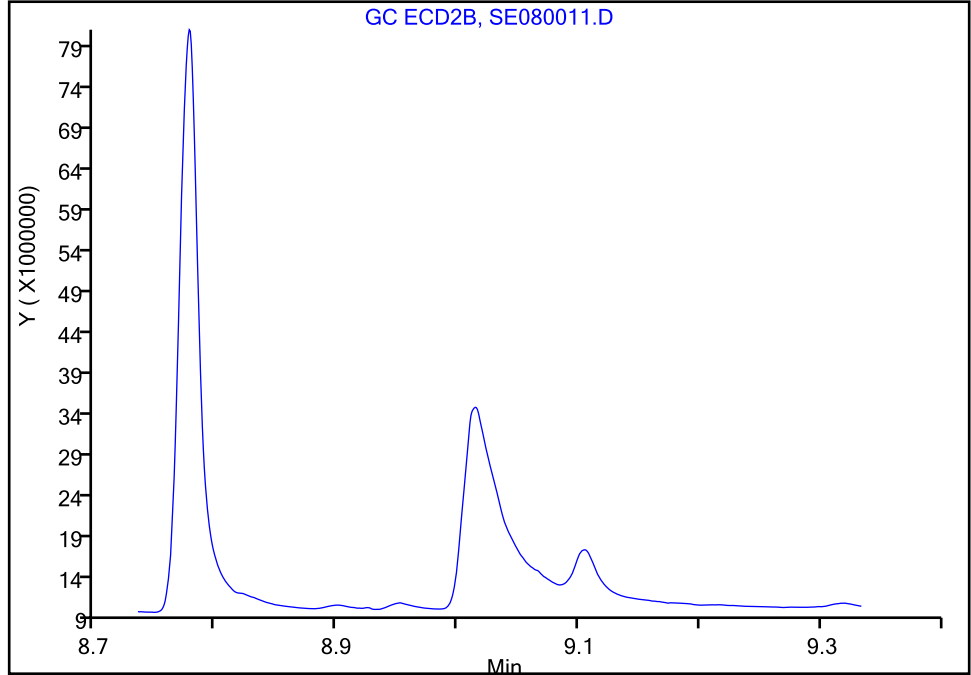
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
Injection Date: 08-May-2018 14:15:28 Instrument ID: CSGS
Lims ID: ic h1
Client ID:
Operator ID: GEM ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

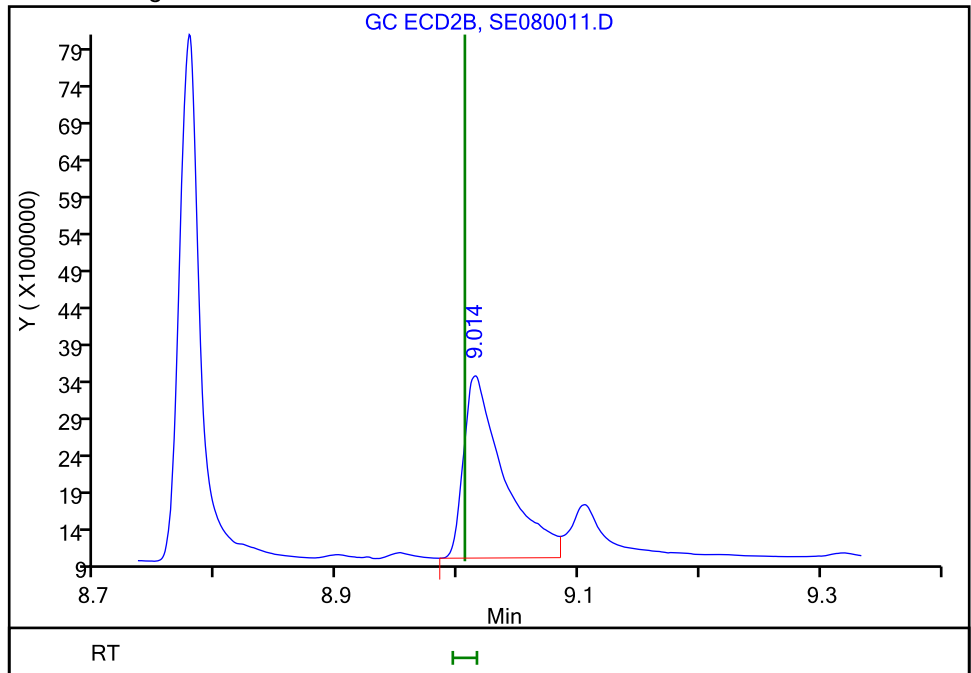
Not Detected
Expected RT: 9.01

Processing Integration Results



RT: 9.01
Area: 57128370
Amount: 0.014446
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:11:45
Audit Action: Assigned Compound ID

Calibration

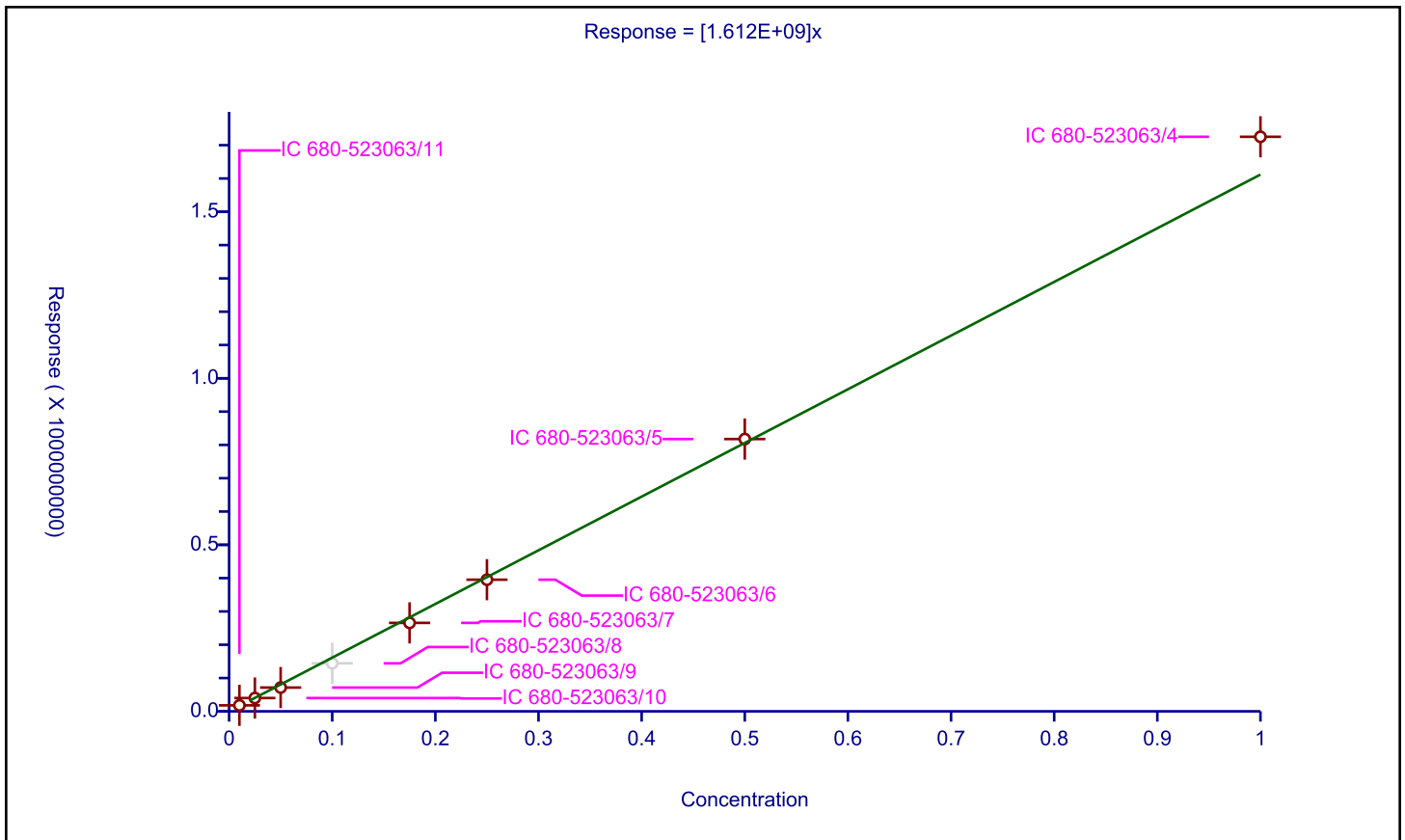
/ Dalapon

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

Curve Coefficients	
Intercept:	0
Slope:	1.612E+09

Error Coefficients	
Standard Error:	47300000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	17983150.0			1798315000.0	Y
2	IC 680-523063/10	0.025	39932951.0			1597318040.0	Y
3	IC 680-523063/9	0.05	71378402.0			1427568040.0	Y
4	IC 680-523063/8	0.1	144107629.0			1441076290.0	N
5	IC 680-523063/7	0.175	265586882.0			1517639325.71429	Y
6	IC 680-523063/6	0.25	395304302.0			1581217208.0	Y
7	IC 680-523063/5	0.5	817578391.0			1635156782.0	Y
8	IC 680-523063/4	1.0	1725206867.0			1725206867.0	Y



Calibration

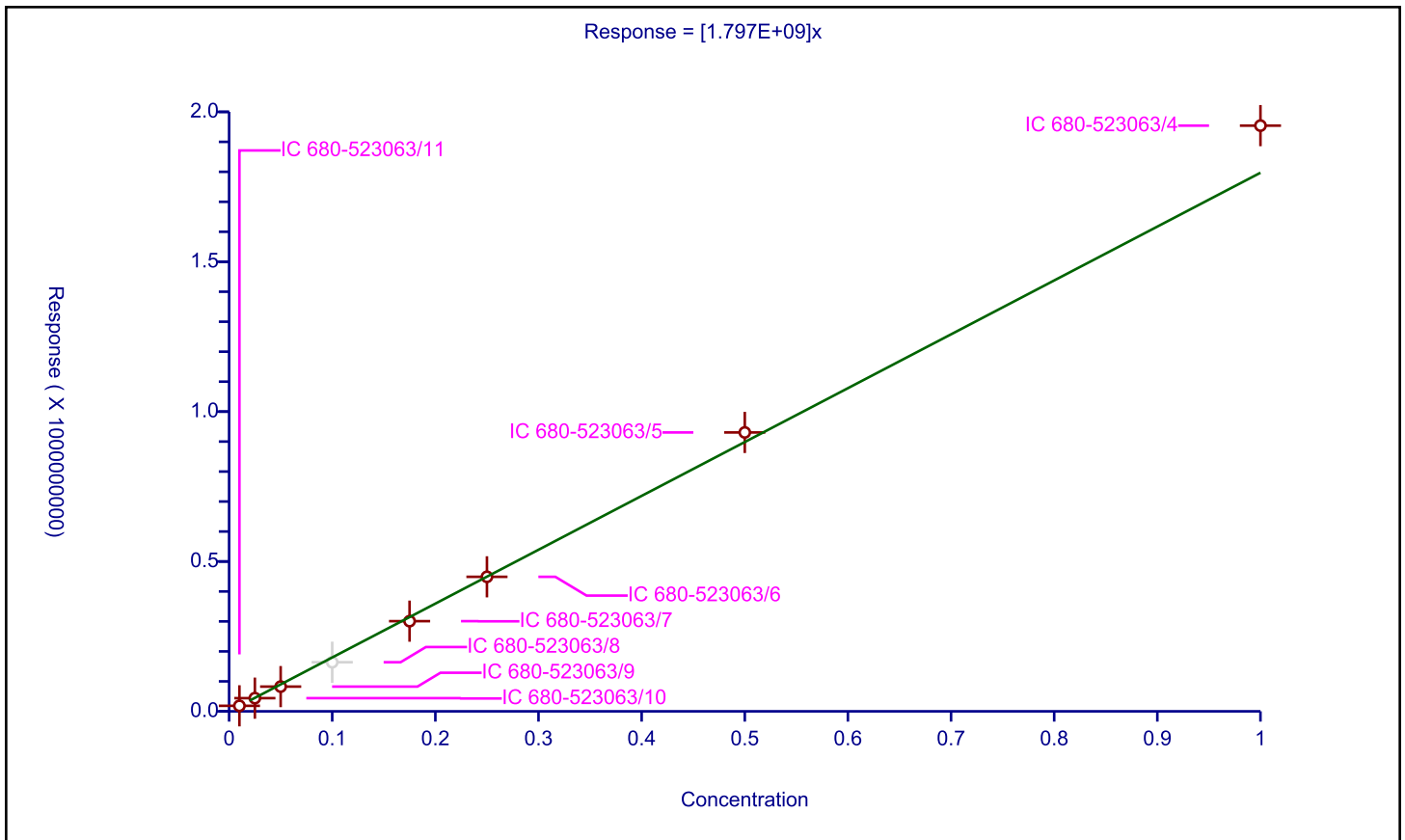
/ 3,5-Dichlorobenzoic acid

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

Curve Coefficients	
Intercept:	0
Slope:	1.797E+09

Error Coefficients	
Standard Error:	65800000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	18377513.0			1837751300.0	Y
2	IC 680-523063/10	0.025	44015926.0			1760637040.0	Y
3	IC 680-523063/9	0.05	82525138.0			1650502760.0	Y
4	IC 680-523063/8	0.1	163818500.0			1638185000.0	N
5	IC 680-523063/7	0.175	300893318.0			1719390388.57143	Y
6	IC 680-523063/6	0.25	448811682.0			1795246728.0	Y
7	IC 680-523063/5	0.5	930526789.0			1861053578.0	Y
8	IC 680-523063/4	1.0	1954171685.0			1954171685.0	Y



Calibration

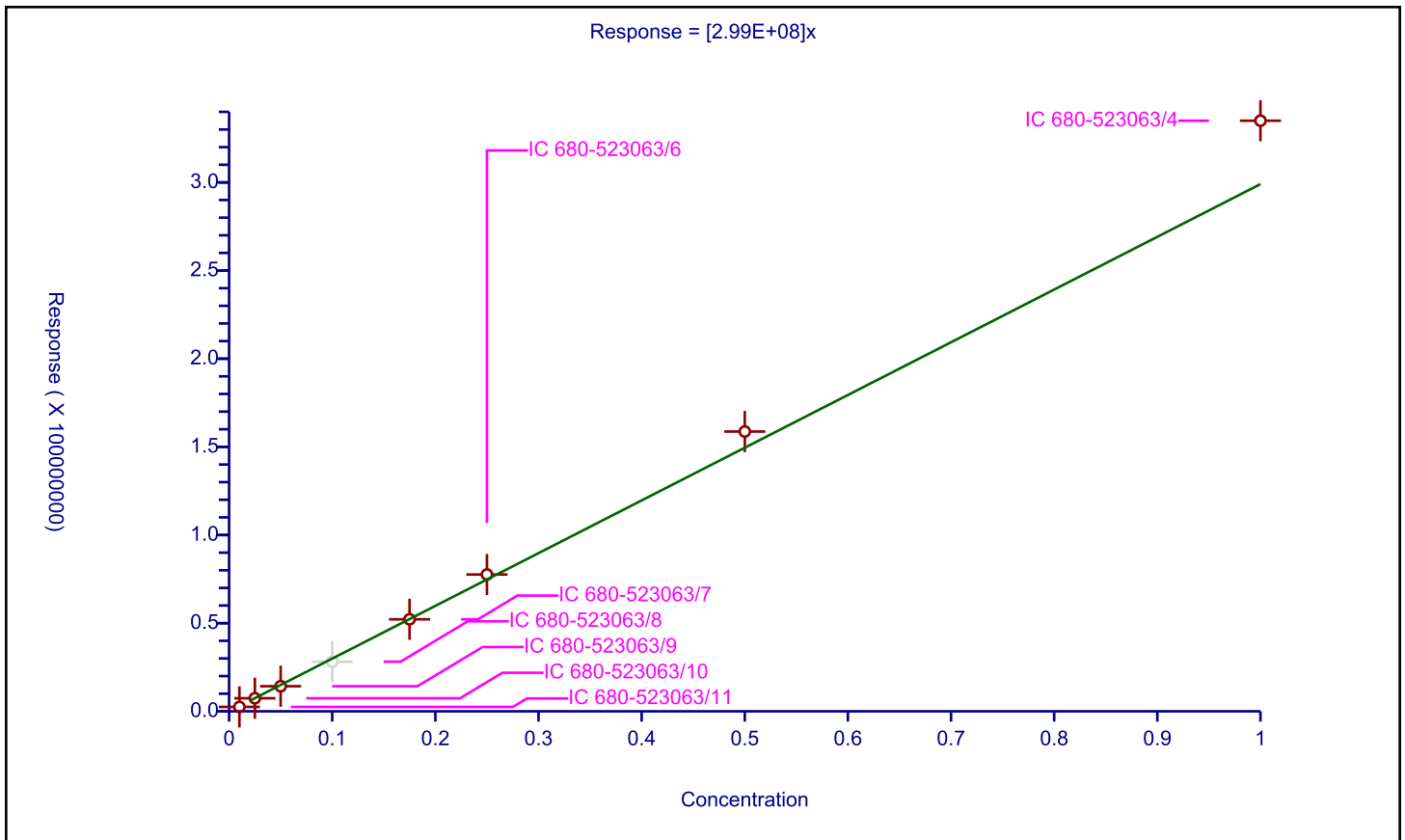
/ 4-Nitrophenol

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

Curve Coefficients	
Intercept:	0
Slope:	2.99E+08

Error Coefficients	
Standard Error:	15200000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	2506531.0			250653100.0	Y
2	IC 680-523063/10	0.025	7416225.0			296649000.0	Y
3	IC 680-523063/9	0.05	14245923.0			284918460.0	Y
4	IC 680-523063/8	0.1	28145758.0			281457580.0	N
5	IC 680-523063/7	0.175	52193224.0			298246994.285714	Y
6	IC 680-523063/6	0.25	77606749.0			310426996.0	Y
7	IC 680-523063/5	0.5	158696116.0			317392232.0	Y
8	IC 680-523063/4	1.0	334991246.0			334991246.0	Y



Calibration

/ 2,4-Dichlorophenylacetic acid

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

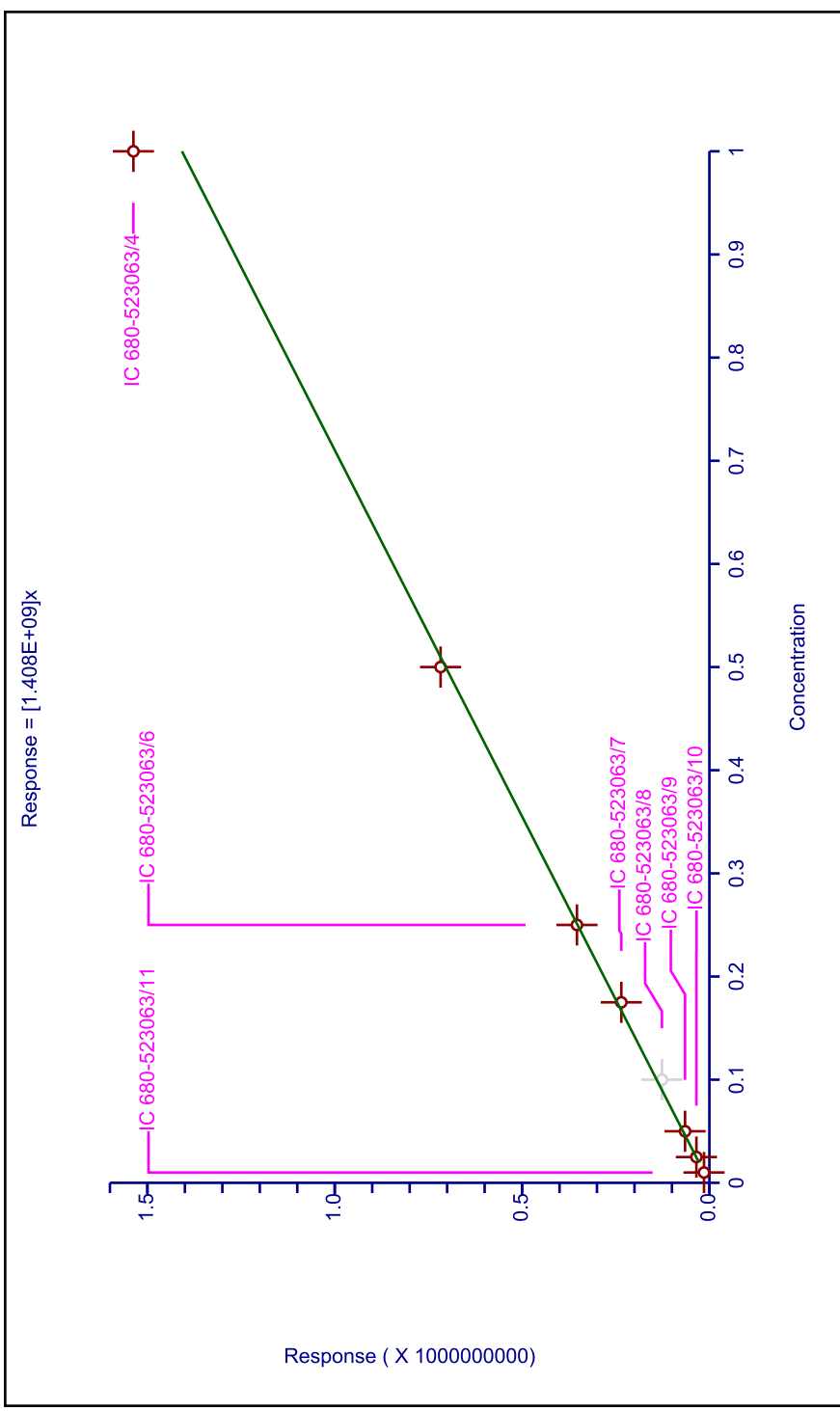
Curve Coefficients

Intercept: 0
Slope: 1.408E+09

Error Coefficients

Standard Error: 53400000
Relative Standard Error: 5.4
Correlation Coefficient: 0.999
Coefficient of Determination (Adjusted): 0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	14359475.0			1435947500.0	Y
2	IC 680-523063/10	0.025	34723127.0			1388925080.0	Y
3	IC 680-523063/9	0.05	65002540.0			1300050800.0	Y
4	IC 680-523063/8	0.1	126698158.0			1266981580.0	N
5	IC 680-523063/7	0.175	235040238.0			1343087074.28571	Y
6	IC 680-523063/6	0.25	353488120.0			1413952480.0	Y
7	IC 680-523063/5	0.5	717491043.0			1434982086.0	Y
8	IC 680-523063/4	1.0	1537345376.0			1537345376.0	Y



Calibration

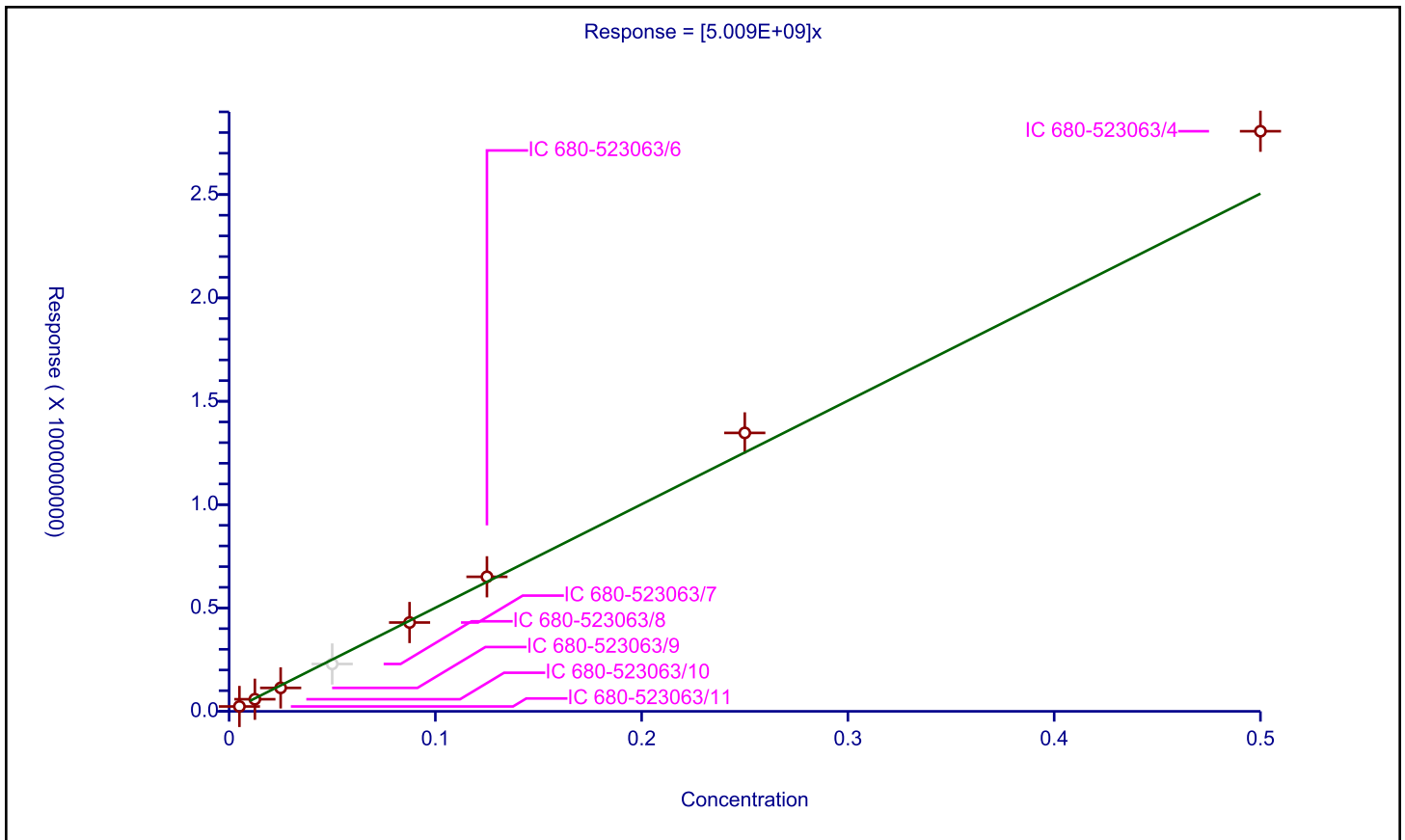
/ Dicamba

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

Curve Coefficients	
Intercept:	0
Slope:	5.009E+09

Error Coefficients	
Standard Error:	130000000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.005	23620770.0			4724154000.0	Y
2	IC 680-523063/10	0.0125	58578625.0			4686290000.0	Y
3	IC 680-523063/9	0.025	113374207.0			4534968280.0	Y
4	IC 680-523063/8	0.05	229111440.0			4582228800.0	N
5	IC 680-523063/7	0.0875	429620976.0			4909954011.42857	Y
6	IC 680-523063/6	0.125	650915415.0			5207323320.0	Y
7	IC 680-523063/5	0.25	1347001642.0			5388006568.0	Y
8	IC 680-523063/4	0.5	2806366329.0			5612732658.0	Y



Calibration

/ MCPP

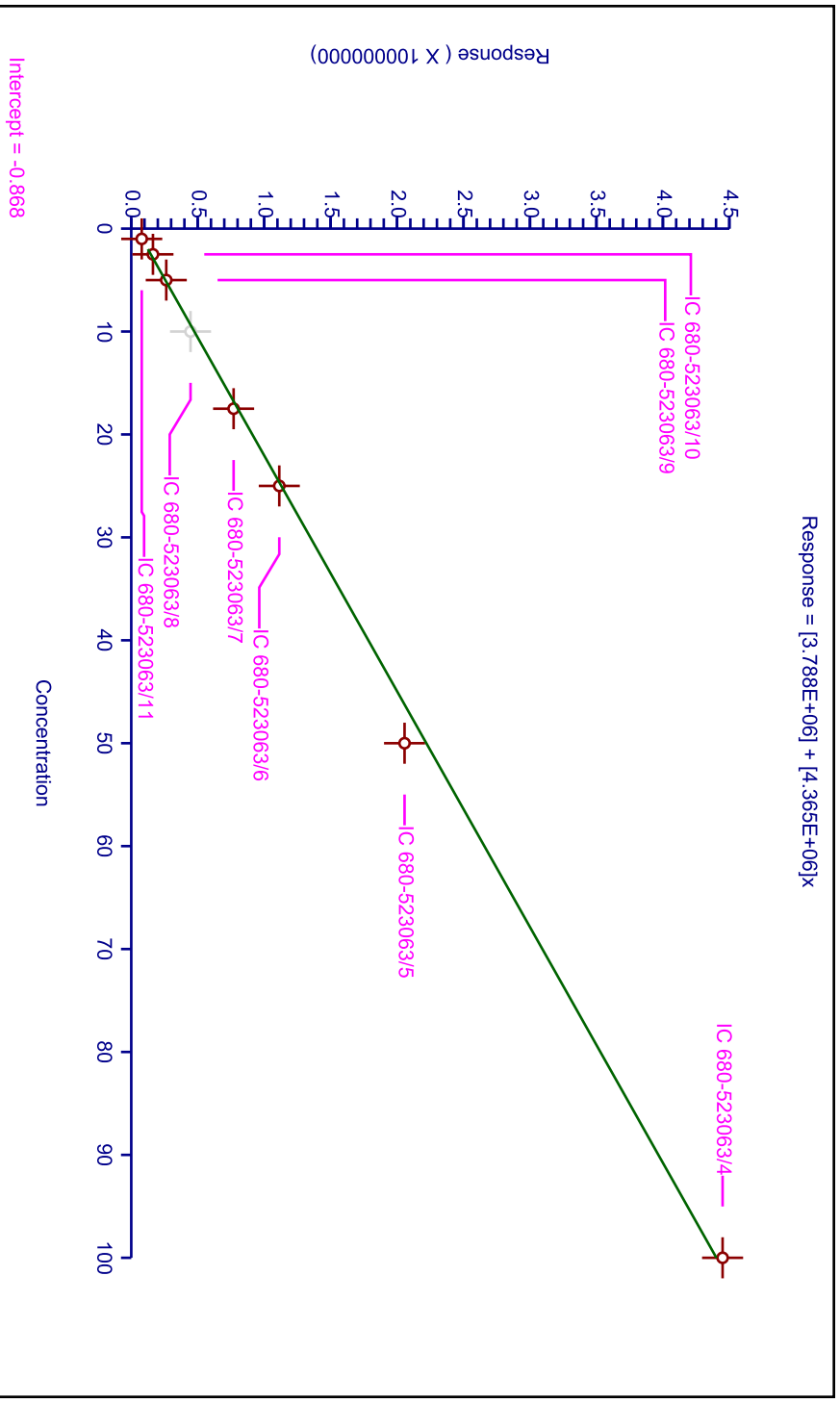
Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients
 Intercept: 3.788E+06
 Slope: 4.365E+06

Error Coefficients

Standard Error: 7830000
 Relative Standard Error: 8.3
 Correlation Coefficient: 0.998
 Coefficient of Determination (Adjusted): 0.992

ID Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	7884133.0	7884133.0	7884133.0	Y
2	IC 680-523063/10	2.5	16319936.0	6527974.4	6527974.4	Y
3	IC 680-523063/9	5.0	26339273.0	5267854.6	5267854.6	Y
4	IC 680-523063/8	10.0	44613118.0	4461311.8	4461311.8	N
5	IC 680-523063/7	17.5	77011106.0	4400634.628571	4400634.628571	Y
6	IC 680-523063/6	25.0	111381364.0	4455254.56	4455254.56	Y
7	IC 680-523063/5	50.0	205635557.0	4112711.14	4112711.14	Y
8	IC 680-523063/4	100.0	444937631.0	4449376.31	4449376.31	Y



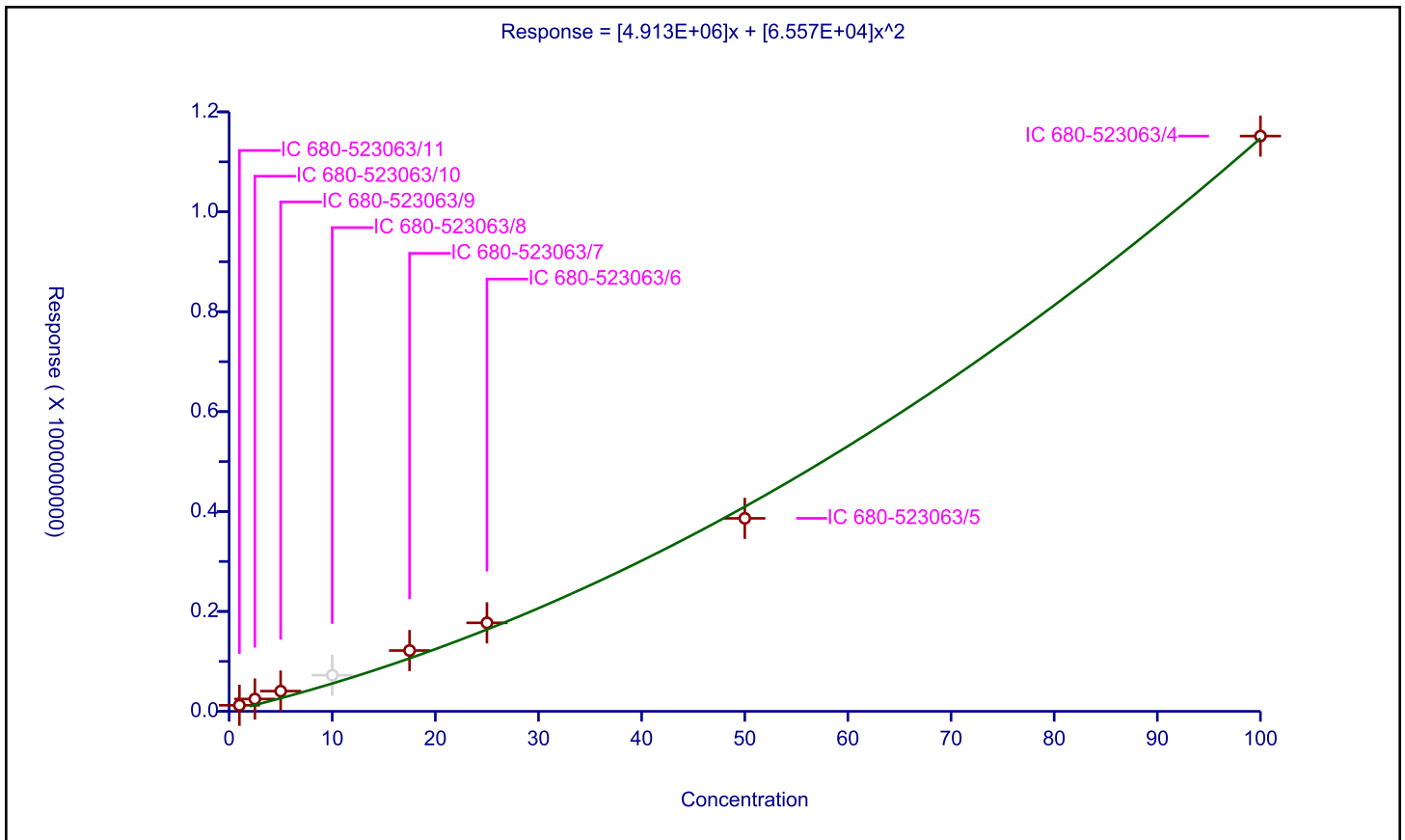
Calibration

Curve Type: Quadratic
 Weighting: None
 Origin: Force
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.913E+06
Second Order:	6.557E+04

Error Coefficients	
Standard Error:	16600000
Relative Standard Error:	77.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	1.0	12132999.0			12132999.0	Y
2	IC 680-523063/10	2.5	24668652.0			9867460.8	Y
3	IC 680-523063/9	5.0	40478712.0			8095742.4	Y
4	IC 680-523063/8	10.0	72306759.0			7230675.9	N
5	IC 680-523063/7	17.5	121752778.0			6957301.6	Y
6	IC 680-523063/6	25.0	177192173.0			7087686.92	Y
7	IC 680-523063/5	50.0	386345329.0			7726906.58	Y
8	IC 680-523063/4	100.0	1151515629.0			11515156.29	Y



Calibration

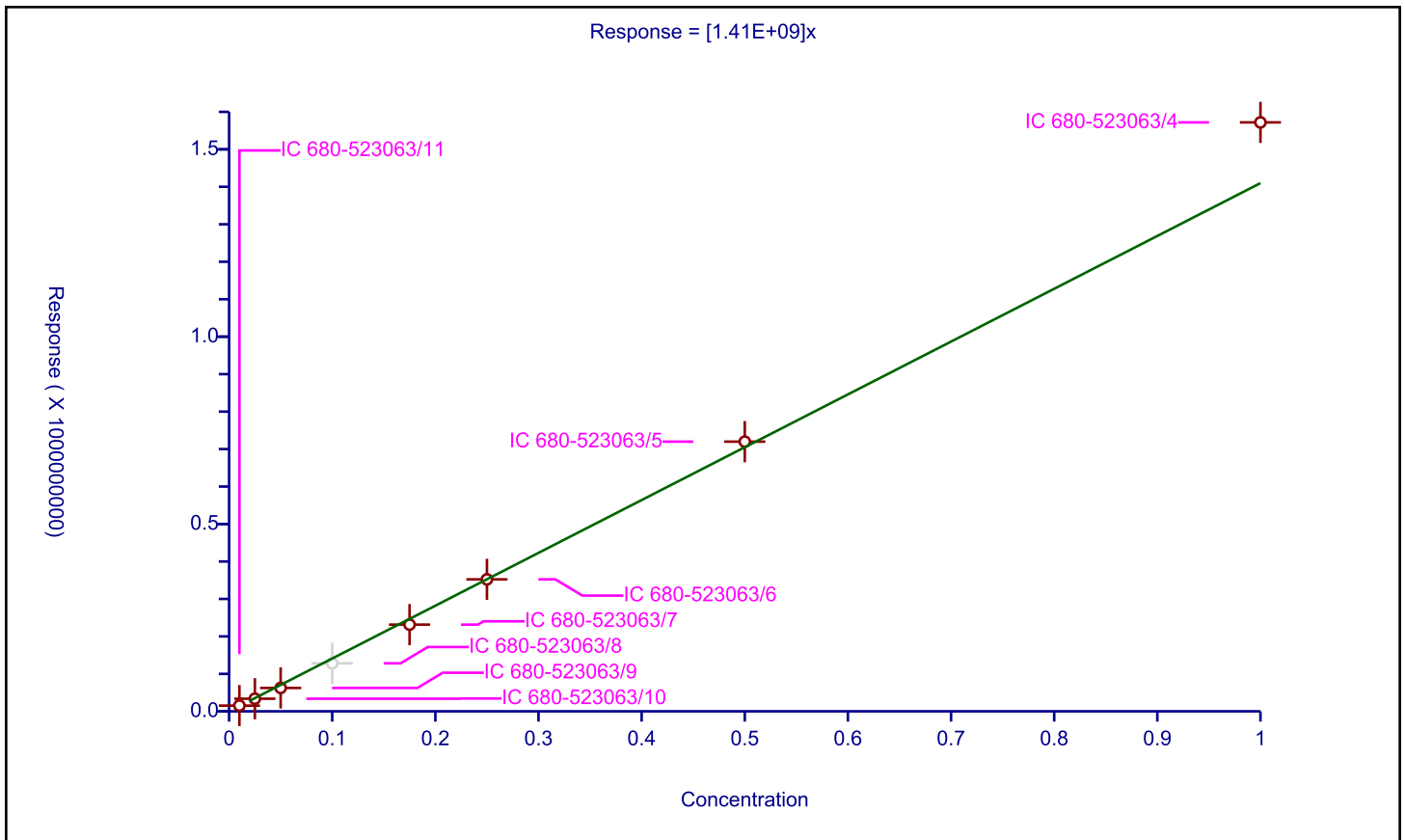
/ Dichlorprop

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

Curve Coefficients	
Intercept:	0
Slope:	1.41E+09

Error Coefficients	
Standard Error:	66900000
Relative Standard Error:	8.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	15301912.0			1530191200.0	Y
2	IC 680-523063/10	0.025	33672808.0			1346912320.0	Y
3	IC 680-523063/9	0.05	62424883.0			1248497660.0	Y
4	IC 680-523063/8	0.1	128102012.0			1281020120.0	N
5	IC 680-523063/7	0.175	231436814.0			1322496080.0	Y
6	IC 680-523063/6	0.25	352257271.0			1409029084.0	Y
7	IC 680-523063/5	0.5	719800477.0			1439600954.0	Y
8	IC 680-523063/4	1.0	1571966456.0			1571966456.0	Y



Calibration

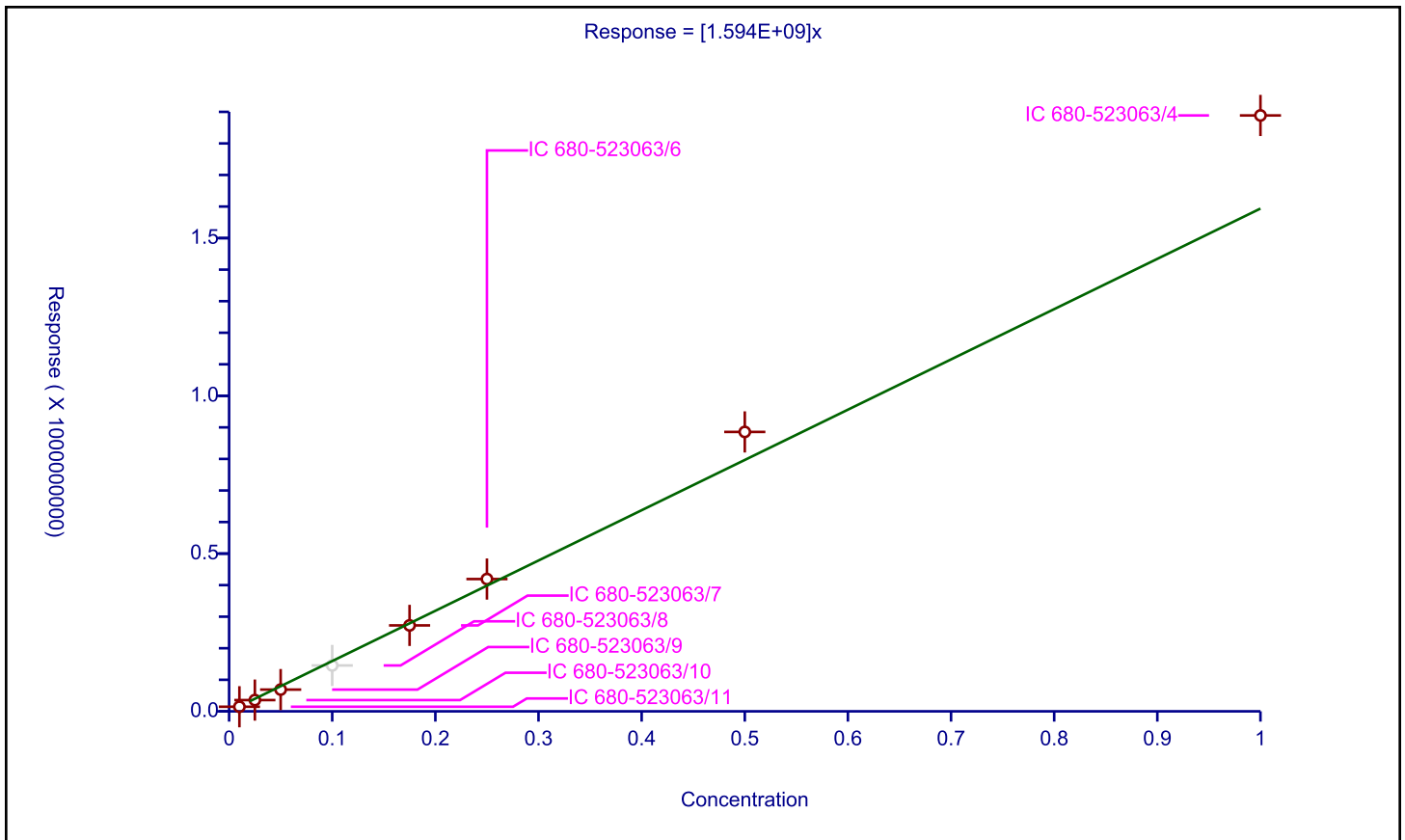
/ 2,4-D

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

Curve Coefficients	
Intercept:	0
Slope:	1.594E+09

Error Coefficients	
Standard Error:	126000000
Relative Standard Error:	12.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	14551198.0			1455119800.0	Y
2	IC 680-523063/10	0.025	35695833.0			1427833320.0	Y
3	IC 680-523063/9	0.05	68918972.0			1378379440.0	Y
4	IC 680-523063/8	0.1	145386532.0			1453865320.0	N
5	IC 680-523063/7	0.175	272374787.0			1556427354.28571	Y
6	IC 680-523063/6	0.25	419247494.0			1676989976.0	Y
7	IC 680-523063/5	0.5	885627489.0			1771254978.0	Y
8	IC 680-523063/4	1.0	1888747044.0			1888747044.0	Y



Calibration

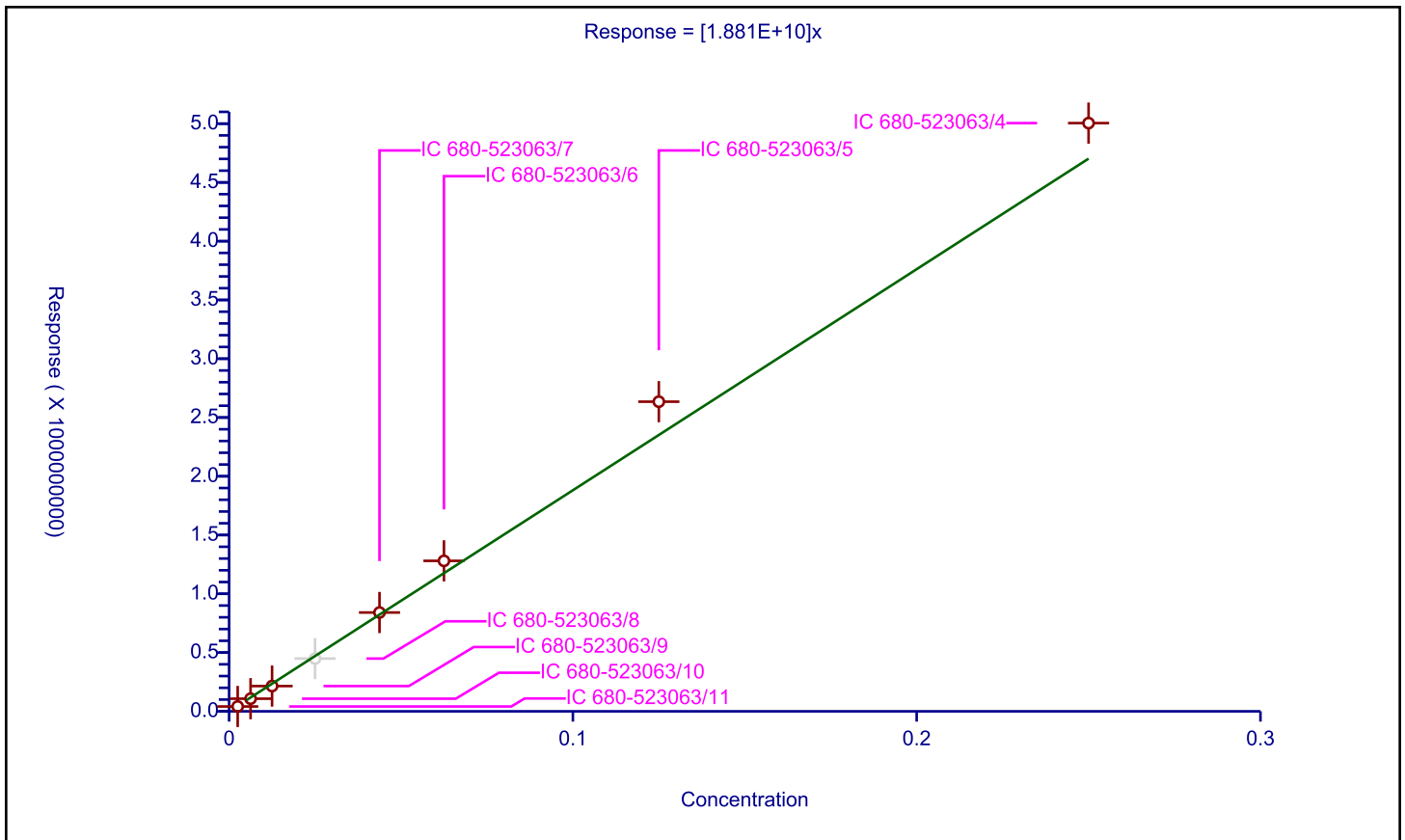
/ Pentachlorophenol

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

Curve Coefficients	
Intercept:	0
Slope:	1.881E+10

Error Coefficients	
Standard Error:	175000000
Relative Standard Error:	9.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	41165516.0			16466206400.0	Y
2	IC 680-523063/10	0.00625	107509203.0			17201472480.0	Y
3	IC 680-523063/9	0.0125	214964113.0			17197129040.0	Y
4	IC 680-523063/8	0.025	448807878.0			17952315120.0	N
5	IC 680-523063/7	0.04375	840761037.0			19217395131.4286	Y
6	IC 680-523063/6	0.0625	1280290405.0			20484646480.0	Y
7	IC 680-523063/5	0.125	2634537256.0			21076298048.0	Y
8	IC 680-523063/4	0.25	5004401348.0			20017605392.0	Y



Calibration

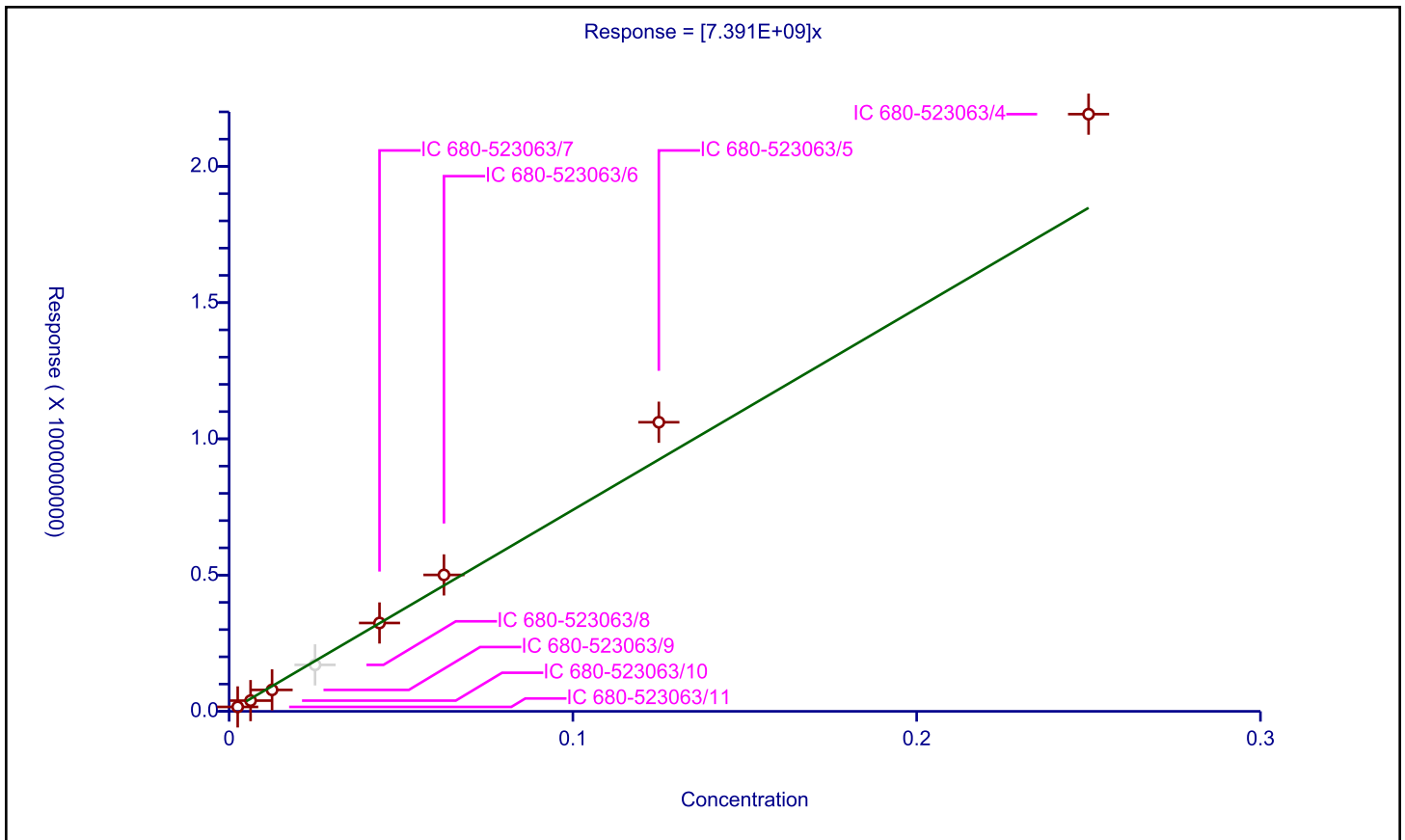
/ Silvex (2,4,5-TP)

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

Curve Coefficients	
Intercept:	0
Slope:	7.391E+09

Error Coefficients	
Standard Error:	152000000
Relative Standard Error:	14.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	16213772.0			6485508800.0	Y
2	IC 680-523063/10	0.00625	39284572.0			6285531520.0	Y
3	IC 680-523063/9	0.0125	78639731.0			6291178480.0	Y
4	IC 680-523063/8	0.025	170517091.0			6820683640.0	N
5	IC 680-523063/7	0.04375	324244276.0			7411297737.14286	Y
6	IC 680-523063/6	0.0625	500698059.0			8011168944.0	Y
7	IC 680-523063/5	0.125	1061020220.0			8488161760.0	Y
8	IC 680-523063/4	0.25	2191601950.0			8766407800.0	Y



Calibration

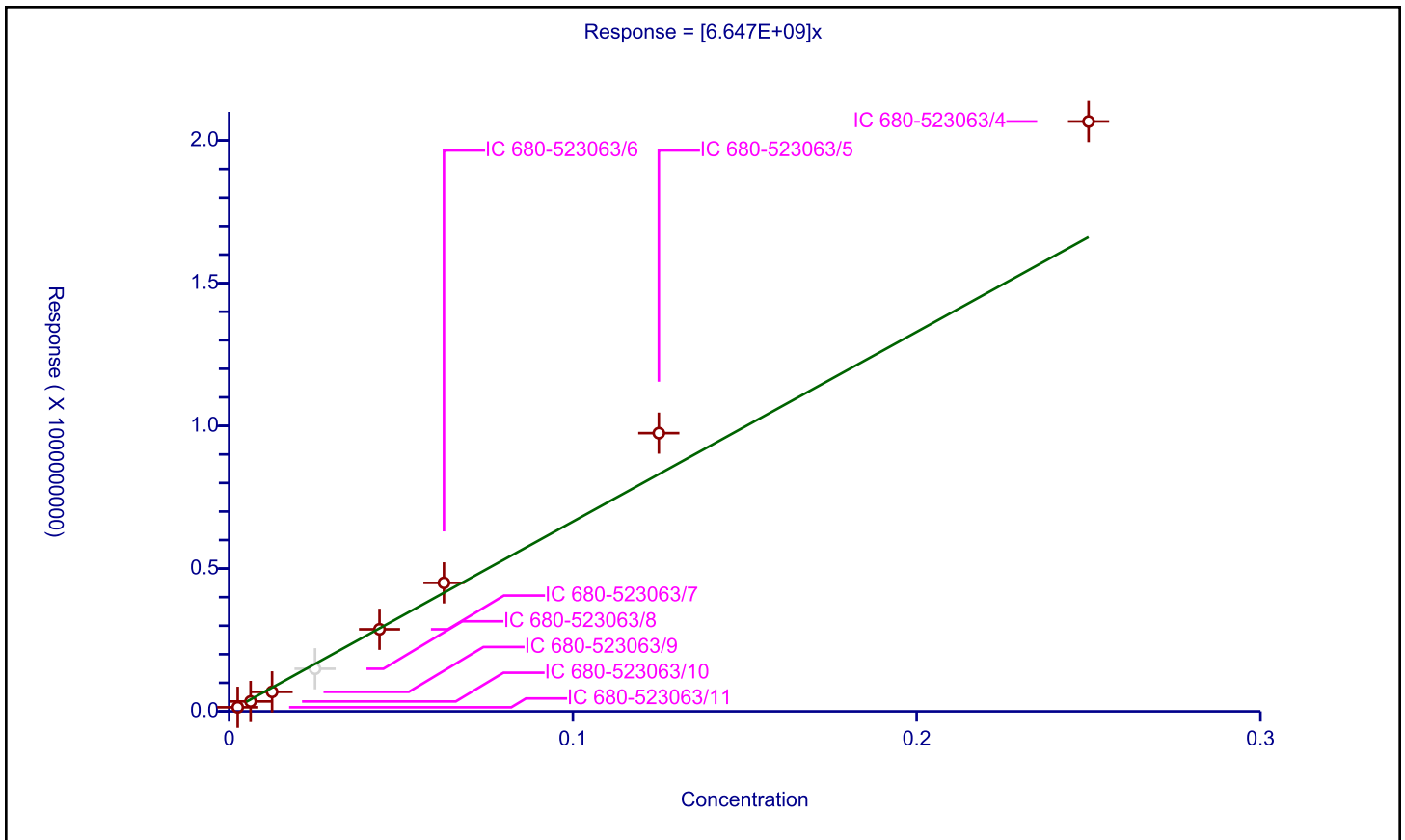
/ 2,4,5-T

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

Curve Coefficients	
Intercept:	0
Slope:	6.647E+09

Error Coefficients	
Standard Error:	176000000
Relative Standard Error:	17.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.0025	14207297.0			5682918800.0	Y
2	IC 680-523063/10	0.00625	34680183.0			5548829280.0	Y
3	IC 680-523063/9	0.0125	68256754.0			5460540320.0	Y
4	IC 680-523063/8	0.025	149160522.0			5966420880.0	N
5	IC 680-523063/7	0.04375	287476934.0			6570901348.57143	Y
6	IC 680-523063/6	0.0625	450029272.0			7200468352.0	Y
7	IC 680-523063/5	0.125	974569507.0			7796556056.0	Y
8	IC 680-523063/4	0.25	2066383005.0			8265532020.0	Y



Calibration

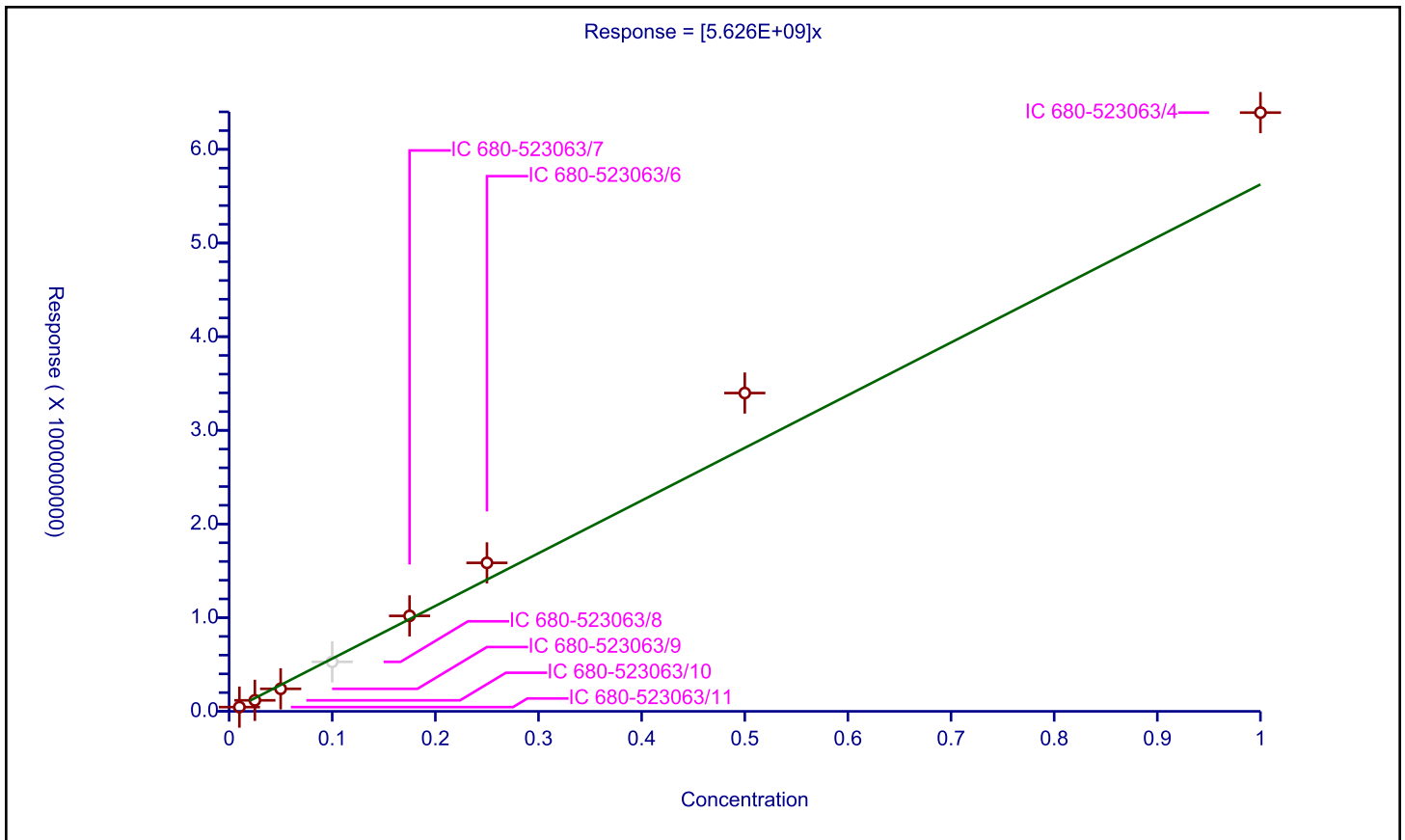
/ Chloramben

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

Curve Coefficients	
Intercept:	0
Slope:	5.626E+09

Error Coefficients	
Standard Error:	401000000
Relative Standard Error:	16.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	45179417.0			4517941700.0	Y
2	IC 680-523063/10	0.025	117512235.0			4700489400.0	Y
3	IC 680-523063/9	0.05	240336393.0			4806727860.0	Y
4	IC 680-523063/8	0.1	528388568.0			5283885680.0	N
5	IC 680-523063/7	0.175	1019151525.0			5823723000.0	Y
6	IC 680-523063/6	0.25	1585218711.0			6340874844.0	Y
7	IC 680-523063/5	0.5	3398296359.0			6796592718.0	Y
8	IC 680-523063/4	1.0	6392220091.0			6392220091.0	Y



Calibration

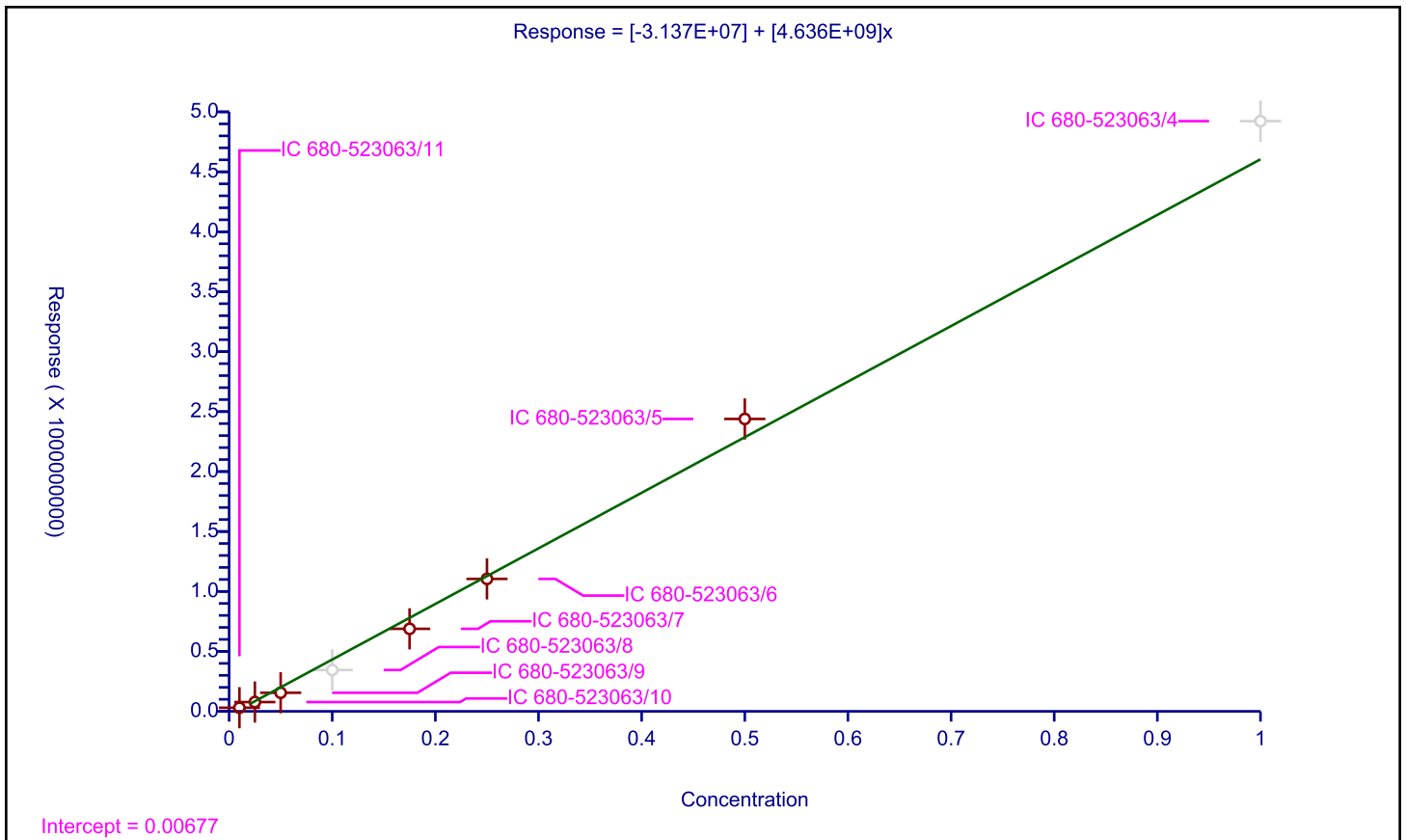
/ Dinoseb

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

Curve Coefficients	
Intercept:	-3.137E+07
Slope:	4.636E+09

Error Coefficients	
Standard Error:	92900000
Relative Standard Error:	20.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	30077804.0			3007780400.0	Y
2	IC 680-523063/10	0.025	77307007.0			3092280280.0	Y
3	IC 680-523063/9	0.05	154960345.0			3099206900.0	Y
4	IC 680-523063/8	0.1	344721192.0			3447211920.0	N
5	IC 680-523063/7	0.175	688241161.0			3932806634.28571	Y
6	IC 680-523063/6	0.25	1104528845.0			4418115380.0	Y
7	IC 680-523063/5	0.5	2438912841.0			4877825682.0	Y
8	IC 680-523063/4	1.0	4922703086.0			4922703086.0	N



Calibration

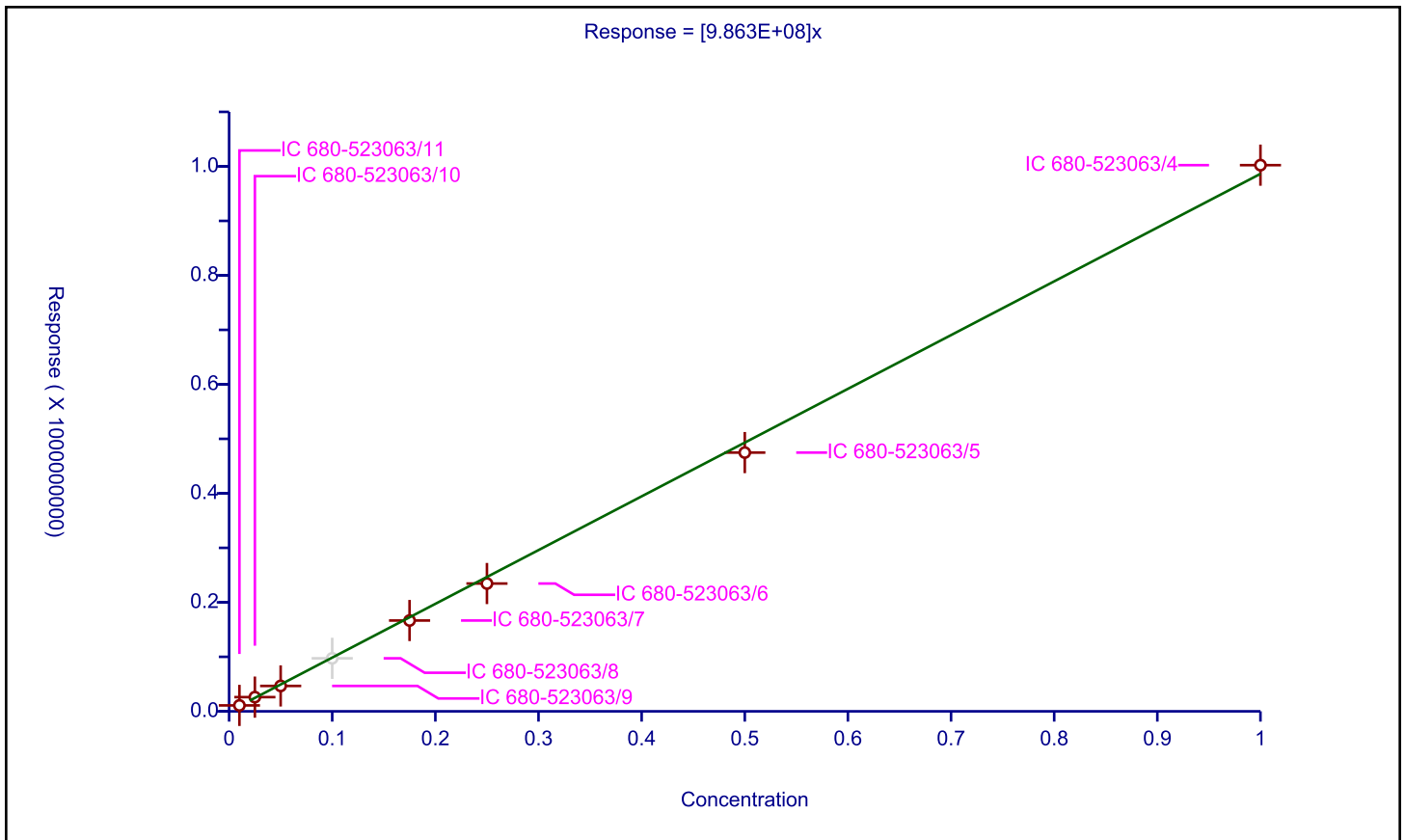
/ 2,4-DB

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

Curve Coefficients	
Intercept:	0
Slope:	9.863E+08

Error Coefficients	
Standard Error:	11400000
Relative Standard Error:	6.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	10871976.0			1087197600.0	Y
2	IC 680-523063/10	0.025	26051520.0			1042060800.0	Y
3	IC 680-523063/9	0.05	46624287.0			932485740.0	Y
4	IC 680-523063/8	0.1	97285447.0			972854470.0	N
5	IC 680-523063/7	0.175	166644052.0			952251725.714286	Y
6	IC 680-523063/6	0.25	234527590.0			938110360.0	Y
7	IC 680-523063/5	0.5	474832365.0			949664730.0	Y
8	IC 680-523063/4	1.0	1002259721.0			1002259721.0	Y



Calibration

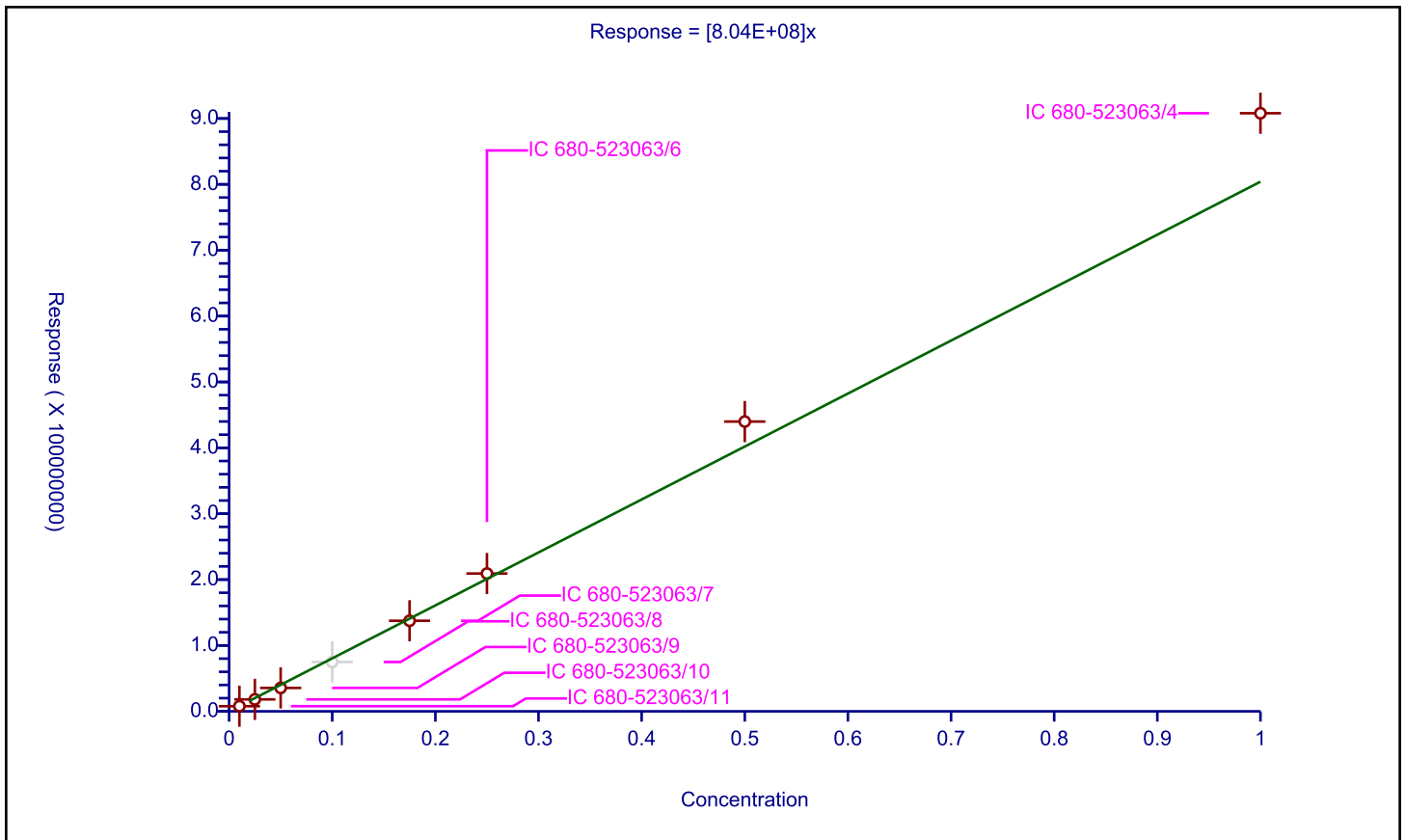
/ Bentazon

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

Curve Coefficients	
Intercept:	0
Slope:	8.04E+08

Error Coefficients	
Standard Error:	45400000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	7803979.0			780397900.0	Y
2	IC 680-523063/10	0.025	18151512.0			726060480.0	Y
3	IC 680-523063/9	0.05	35565067.0			711301340.0	Y
4	IC 680-523063/8	0.1	74902105.0			749021050.0	N
5	IC 680-523063/7	0.175	137471207.0			785549754.285714	Y
6	IC 680-523063/6	0.25	209189101.0			836756404.0	Y
7	IC 680-523063/5	0.5	439887803.0			879775606.0	Y
8	IC 680-523063/4	1.0	907942100.0			907942100.0	Y



Calibration

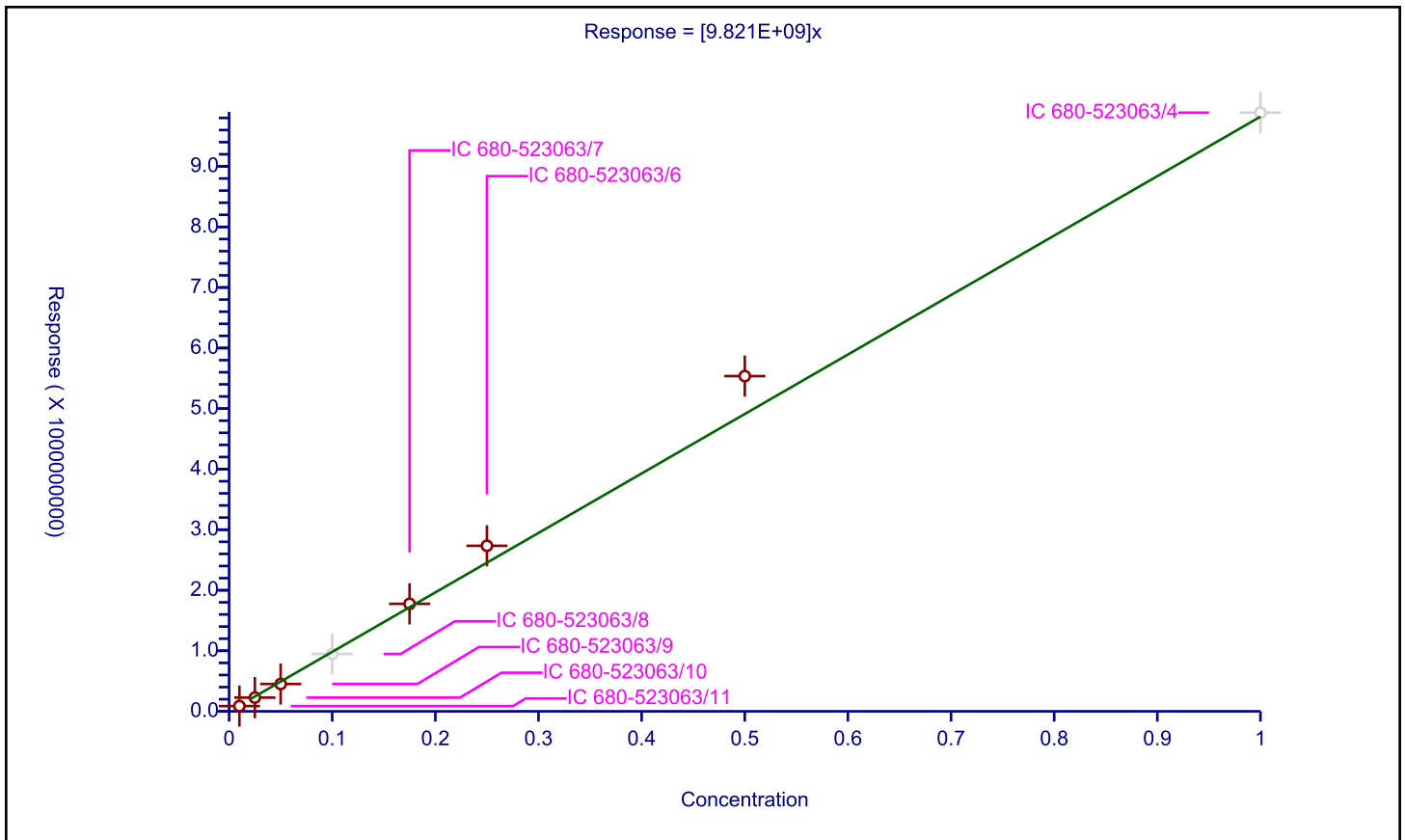
/ DCPA

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

Curve Coefficients	
Intercept:	0
Slope:	9.821E+09

Error Coefficients	
Standard Error:	308000000
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	86672796.0			8667279600.0	Y
2	IC 680-523063/10	0.025	226645361.0			9065814440.0	Y
3	IC 680-523063/9	0.05	451881325.0			9037626500.0	Y
4	IC 680-523063/8	0.1	947740711.0			9477407110.0	N
5	IC 680-523063/7	0.175	1775677219.0			10146726965.7143	Y
6	IC 680-523063/6	0.25	2733977251.0			10935909004.0	Y
7	IC 680-523063/5	0.5	5536696155.0			11073392310.0	Y
8	IC 680-523063/4	1.0	9887348056.0			9887348056.0	N



Calibration

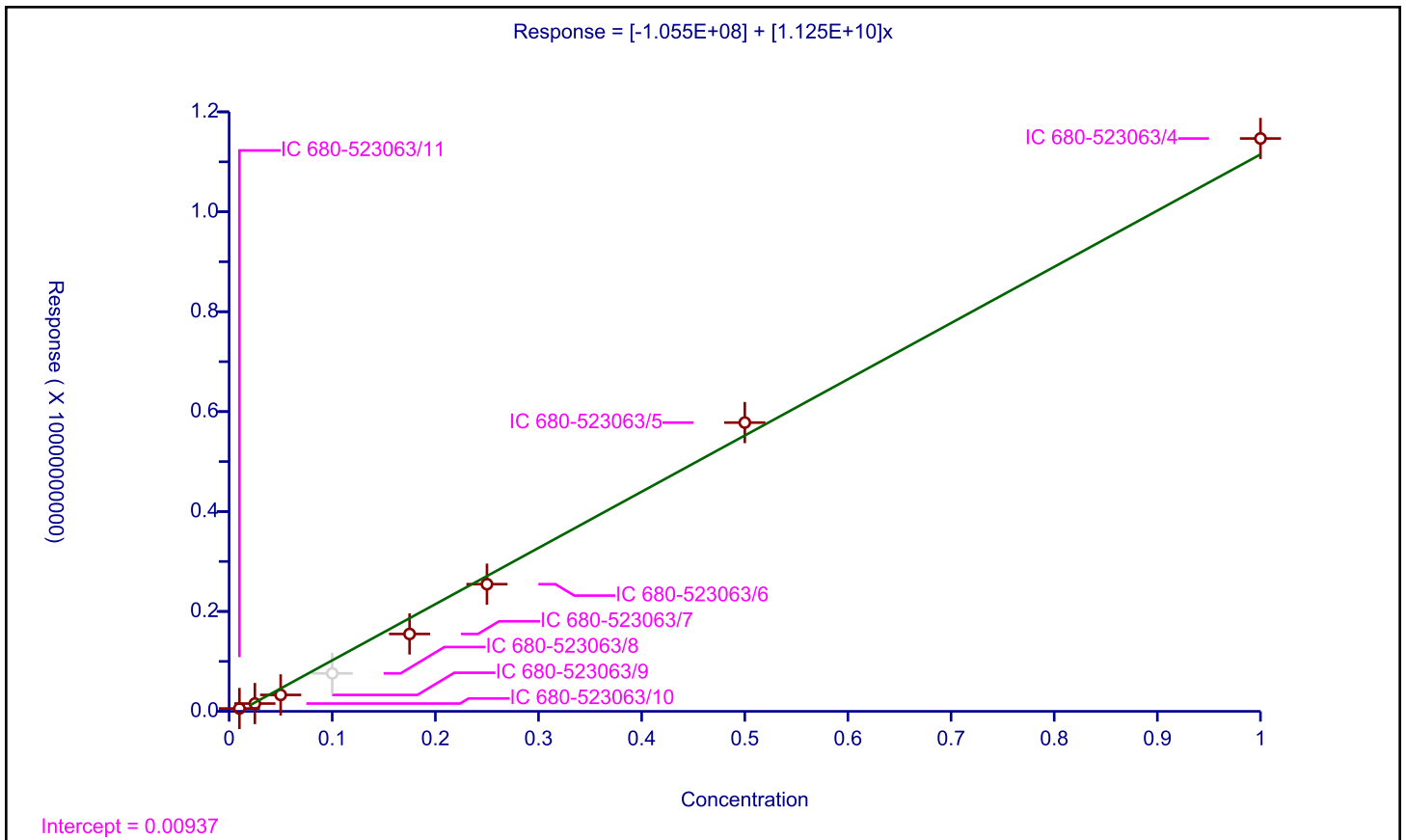
/ Picloram

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

Curve Coefficients	
Intercept:	-1.055E+08
Slope:	1.125E+10

Error Coefficients	
Standard Error:	250000000
Relative Standard Error:	24.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	57128370.0			5712837000.0	Y
2	IC 680-523063/10	0.025	155603121.0			6224124840.0	Y
3	IC 680-523063/9	0.05	328532437.0			6570648740.0	Y
4	IC 680-523063/8	0.1	759779337.0			7597793370.0	N
5	IC 680-523063/7	0.175	1548770490.0			8850117085.71429	Y
6	IC 680-523063/6	0.25	2545447676.0			10181790704.0	Y
7	IC 680-523063/5	0.5	5780160796.0			11560321592.0	Y
8	IC 680-523063/4	1.0	11467491007.0			11467491007.0	Y



Calibration

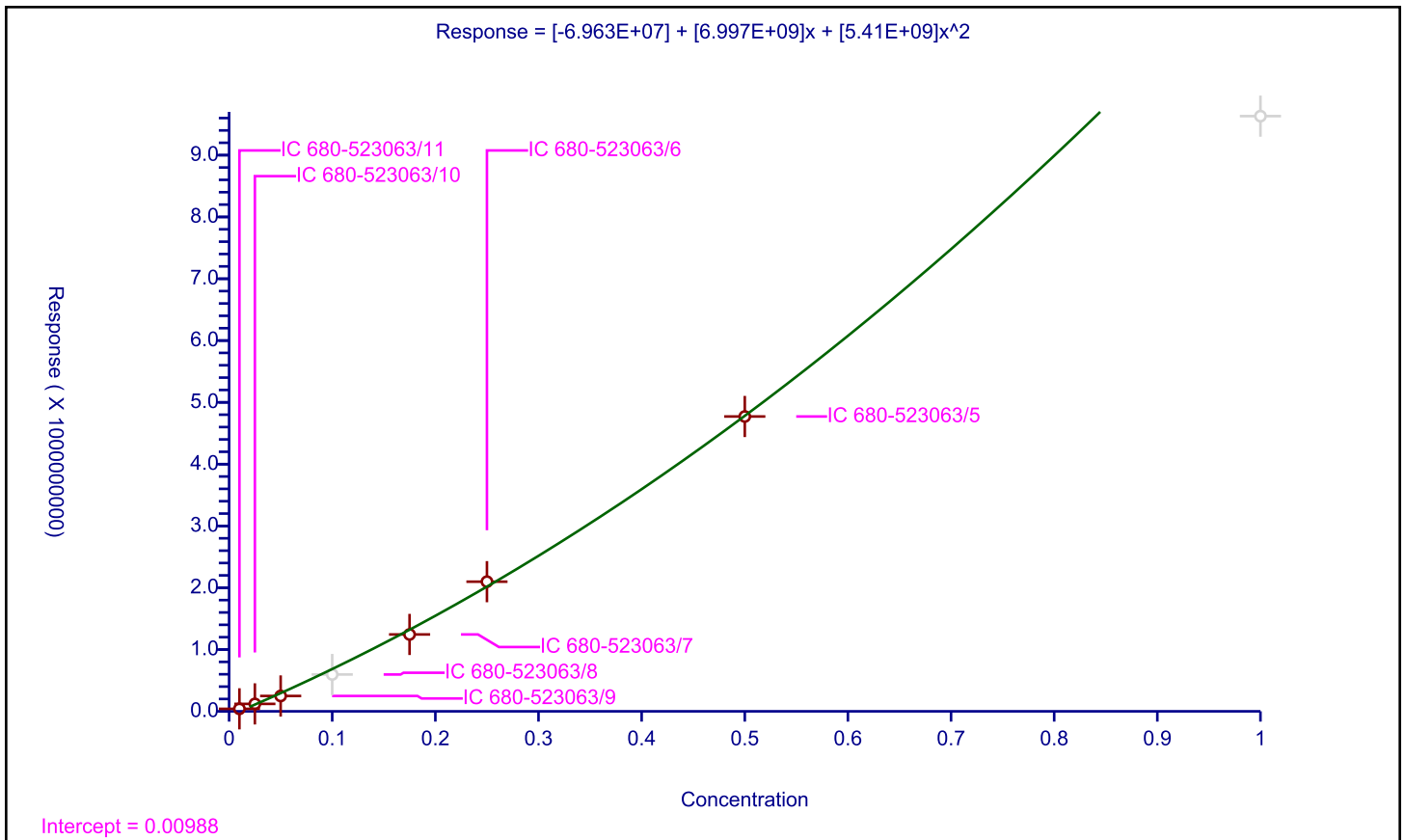
/ Acifluorfen

Curve Type: Quadratic
 Weighting: None
 Origin: None
 Dependency: Response
 Calib Mode: ESTD
 Response Base:
 RF Rounding: 0

Curve Coefficients	
Intercept:	-6.963E+07
Slope:	6.997E+09
Second Order:	5.41E+09

Error Coefficients	
Standard Error:	73400000
Relative Standard Error:	33.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 680-523063/11	0.01	40645245.0			4064524500.0	Y
2	IC 680-523063/10	0.025	120359495.0			4814379800.0	Y
3	IC 680-523063/9	0.05	248586919.0			4971738380.0	Y
4	IC 680-523063/8	0.1	596281084.0			5962810840.0	N
5	IC 680-523063/7	0.175	1244184045.0			7109623114.28572	Y
6	IC 680-523063/6	0.25	2098074459.0			8392297836.0	Y
7	IC 680-523063/5	0.5	4770908516.0			9541817032.0	Y
8	IC 680-523063/4	1.0	9631196972.0			9631196972.0	N



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	501665051		0.168	0.175	-4.3	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	314763497		0.171	0.175	-2.1	20.0
4-Nitrophenol	Ave	92458216	102031594		0.193	0.175	10.4	20.0
Dicamba	Ave	1077009527	1054404651		0.0857	0.0875	-2.1	20.0
MCPP	Qua		498721		16.5	17.5	-6.0	20.0
MCPA	Ave	925968	1023116		19.3	17.5	10.5	20.0
Dichlorprop	Ave	277497963	279363520		0.176	0.175	0.7	20.0
2,4-D	Ave	302399622	313230406		0.181	0.175	3.6	20.0
Pentachlorophenol	Ave	5383895550	5465498149		0.0444	0.0438	1.5	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1967042629		0.0458	0.0438	4.7	20.0
Chloramben	Qua		1552941966		0.167	0.175	-4.7	20.0
2,4,5-T	Ave	2193840481	2185537531		0.0436	0.0438	-0.4	20.0
2,4-DB	Qua		156523029		0.167	0.175	-4.5	20.0
Dinoseb	Ave	1223895982	1139844429		0.163	0.175	-6.9	20.0
Bentazon	Ave	287551968	283273971		0.172	0.175	-1.5	20.0
Picloram	Qua		2479981994		0.168	0.175	-3.8	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	3248557994		0.173	0.175	-1.4	20.0
Acifluorfen	Qua		2226762514		0.162	0.175	-7.2	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	202049760		0.167	0.175	-4.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	7.00	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.32	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.85	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.17	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 14:35:04 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:27:14 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:12:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	87791384	0.1750	0.1675	
2	2.634	2.632	0.002	268322043	0.1750	0.1665	
						RPD = 0.62	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16860262	NC	NC	
2	5.102	5.102	0.000	93176385	NC	NC	
						RPD = 0.02	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	215525699	NC	NC	
2	5.777	5.776	0.001	930949918	NC	NC	
						RPD = 0.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	55083612	0.1750	0.1714	
2	6.116	6.116	0.000	304054087	0.1750	0.1692	
						RPD = 1.28	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17855529	0.1750	0.1931	M
2	6.505	6.505	0.000	52975624	0.1750	0.1772	M
						RPD = 8.62	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35358708	0.1750	0.1672	M
2	6.830	6.829	0.001	240517141	0.1750	0.1709	M
						RPD = 2.16	
7 Dicamba							
1	6.721	6.720	0.001	92260407	0.0875	0.0857	M
2	6.912	6.910	0.002	438385412	0.0875	0.0875	M
						RPD = 2.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	8727611	17.5	16.5	
2	6.956	6.955	0.001	79838277	17.5	17.4	M
							RPD = 5.73
9 MCPA							M
1	6.995	6.994	0.001	17904527	17.5	19.3	
2	7.156	7.155	0.001	125917297	17.5	20.2	M
							RPD = 4.31
10 Dichlorprop							M
1	7.181	7.180	0.001	48888616	0.1750	0.1762	
2	7.298	7.297	0.001	236765319	0.1750	0.1679	M
							RPD = 4.79
11 2,4-D							M
1	7.324	7.326	-0.002	54815321	0.1750	0.1813	
2	7.516	7.517	-0.001	280829565	0.1750	0.1762	M
							RPD = 2.82
12 Pentachlorophenol							M
1	7.674	7.674	0.000	239115544	0.0438	0.0444	
2	7.715	7.714	0.001	861630277	0.0438	0.0458	M
							RPD = 3.10
13 Silvex (2,4,5-TP)							M
1	7.768	7.769	-0.001	86058115	0.0438	0.0458	
2	7.847	7.846	0.001	335327121	0.0438	0.0454	M
							RPD = 0.96
14 Chloramben							M
1	7.852	7.855	-0.003	271764844	0.1750	0.1667	
2	8.161	8.162	-0.001	1043446048	0.1750	0.1855	M
							RPD = 10.67
15 2,4,5-T							M
1	7.926	7.929	-0.003	95617267	0.0438	0.0436	
2	8.082	8.083	-0.001	298977240	0.0438	0.0450	M
							RPD = 3.16
16 2,4-DB							M
1	8.172	8.175	-0.003	27391530	0.1750	0.1671	
2	8.301	8.302	-0.001	175272842	0.1750	0.1777	M
							RPD = 6.18
17 Dinoseb							M
1	8.223	8.224	-0.001	199472775	0.1750	0.1630	
2	8.249	8.248	0.001	670832472	0.1750	0.1515	M
							RPD = 7.32
18 Bentazon							M
1	8.300	8.300	0.000	49572945	0.1750	0.1724	
2	8.664	8.662	0.002	149493508	0.1750	0.1859	M
							RPD = 7.56
19 Picloram							M
1	8.526	8.529	-0.003	433996849	0.1750	0.1684	
2	9.008	9.005	0.003	1596868377	0.1750	0.1513	M
							RPD = 10.72

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA							M
1	8.624	8.623	0.001	568497649	0.1750	0.1726	
2	8.779	8.775	0.004	1822835497	0.1750	0.1856	M
						RPD = 7.24	

21 Acifluorfen							M
1	9.666	9.666	0.000	389683440	0.1750	0.1624	
2	9.796	9.792	0.004	1189239771	0.1750	0.1601	M
						RPD = 1.40	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

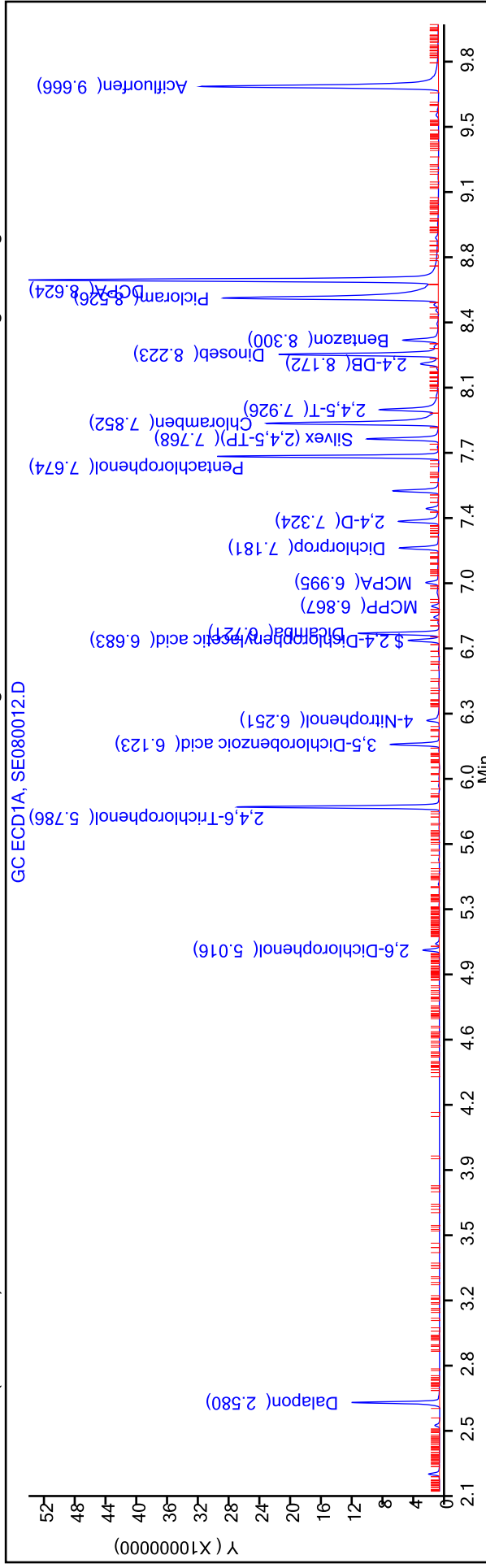
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04
Lims ID: icv herb
Client ID:

Operator ID: GEM
Worklist Smp#: 12

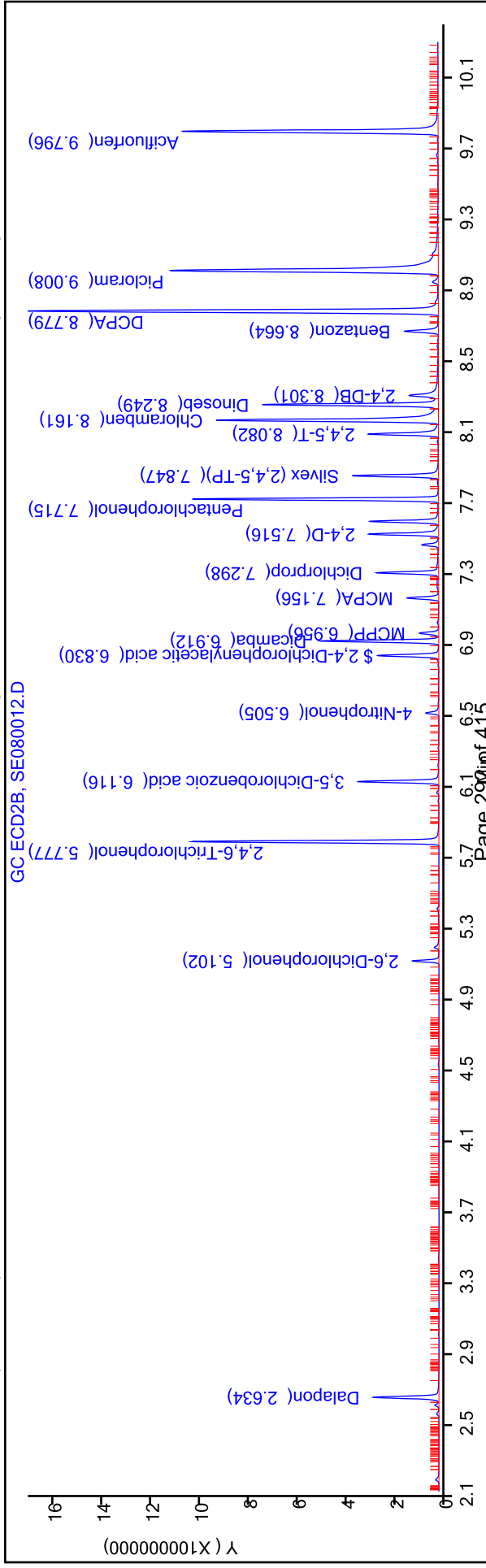
Injection Vol: 1.0 ul
Method: Herbicides_CSGS
Column: DB-XLB (0.32 mm)
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1533268817		0.166	0.175	-4.9	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1737451926		0.169	0.175	-3.3	20.0
4-Nitrophenol	Ave	299039718	302717851		0.177	0.175	1.2	20.0
Dicamba	Ave	5009061262	5010118994		0.0875	0.0875	0.0	20.0
MCPP	Lin2		4562187		17.4	17.5	-0.4	20.0
MCPA	QuaF		7195274		20.2	17.5	15.4	20.0
Dichlorprop	Ave	1409813393	1352944680		0.168	0.175	-4.0	20.0
2,4-D	Ave	1593535987	1604740371		0.176	0.175	0.7	20.0
Pentachlorophenol	Ave	18808678996	19694406331		0.0458	0.0438	4.7	20.0
Silvex (2,4,5-TP)	Ave	7391322149	7664619909		0.0454	0.0438	3.7	20.0
2,4,5-T	Ave	6646535168	6833765486		0.0450	0.0438	2.8	20.0
Chloramben	Ave	5625509945	5962548846		0.185	0.175	6.0	20.0
Dinoseb	Lin1		3833328411		0.151	0.175	-13.4	20.0
2,4-DB	Ave	986290097	1001559097		0.178	0.175	1.5	20.0
Bentazon	Ave	803969083	854248617		0.186	0.175	6.3	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	10416202840		0.186	0.175	6.1	20.0
Picloram	Lin1		9124962154		0.151	0.175	-13.6	20.0
Acifluorfen	Qua		6795655834		0.160	0.175	-8.5	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1374383663		0.171	0.175	-2.4	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: ICV 680-523063/12 Calibration Date: 05/08/2018 14:35
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.51	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.16	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.72	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.80	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
 Lims ID: icv herb
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 14:35:04 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-012
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 08-May-2018 16:27:14 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 08-May-2018 16:12:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.580	2.579	0.001	87791384	0.1750	0.1675	
2	2.634	2.632	0.002	268322043	0.1750	0.1665	
						RPD = 0.62	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	16860262	NC	NC	
2	5.102	5.102	0.000	93176385	NC	NC	
						RPD = 0.02	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	215525699	NC	NC	
2	5.777	5.776	0.001	930949918	NC	NC	
						RPD = 0.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	55083612	0.1750	0.1714	
2	6.116	6.116	0.000	304054087	0.1750	0.1692	
						RPD = 1.28	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	17855529	0.1750	0.1931	M
2	6.505	6.505	0.000	52975624	0.1750	0.1772	M
						RPD = 8.62	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	35358708	0.1750	0.1672	M
2	6.830	6.829	0.001	240517141	0.1750	0.1709	M
						RPD = 2.16	
7 Dicamba							
1	6.721	6.720	0.001	92260407	0.0875	0.0857	M
2	6.912	6.910	0.002	438385412	0.0875	0.0875	M
						RPD = 2.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	8727611	17.5	16.5	
2	6.956	6.955	0.001	79838277	17.5	17.4	M
							RPD = 5.73
9 MCPA							M
1	6.995	6.994	0.001	17904527	17.5	19.3	
2	7.156	7.155	0.001	125917297	17.5	20.2	M
							RPD = 4.31
10 Dichlorprop							M
1	7.181	7.180	0.001	48888616	0.1750	0.1762	
2	7.298	7.297	0.001	236765319	0.1750	0.1679	M
							RPD = 4.79
11 2,4-D							M
1	7.324	7.326	-0.002	54815321	0.1750	0.1813	
2	7.516	7.517	-0.001	280829565	0.1750	0.1762	M
							RPD = 2.82
12 Pentachlorophenol							M
1	7.674	7.674	0.000	239115544	0.0438	0.0444	
2	7.715	7.714	0.001	861630277	0.0438	0.0458	M
							RPD = 3.10
13 Silvex (2,4,5-TP)							M
1	7.768	7.769	-0.001	86058115	0.0438	0.0458	
2	7.847	7.846	0.001	335327121	0.0438	0.0454	M
							RPD = 0.96
14 Chloramben							M
1	7.852	7.855	-0.003	271764844	0.1750	0.1667	
2	8.161	8.162	-0.001	1043446048	0.1750	0.1855	M
							RPD = 10.67
15 2,4,5-T							M
1	7.926	7.929	-0.003	95617267	0.0438	0.0436	
2	8.082	8.083	-0.001	298977240	0.0438	0.0450	M
							RPD = 3.16
16 2,4-DB							M
1	8.172	8.175	-0.003	27391530	0.1750	0.1671	
2	8.301	8.302	-0.001	175272842	0.1750	0.1777	M
							RPD = 6.18
17 Dinoseb							M
1	8.223	8.224	-0.001	199472775	0.1750	0.1630	
2	8.249	8.248	0.001	670832472	0.1750	0.1515	M
							RPD = 7.32
18 Bentazon							M
1	8.300	8.300	0.000	49572945	0.1750	0.1724	
2	8.664	8.662	0.002	149493508	0.1750	0.1859	M
							RPD = 7.56
19 Picloram							M
1	8.526	8.529	-0.003	433996849	0.1750	0.1684	
2	9.008	9.005	0.003	1596868377	0.1750	0.1513	M
							RPD = 10.72

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.624	8.623	0.001	568497649	0.1750	0.1726	
2	8.779	8.775	0.004	1822835497	0.1750	0.1856	M
						RPD = 7.24	

21 Acifluorfen							M
1	9.666	9.666	0.000	389683440	0.1750	0.1624	
2	9.796	9.792	0.004	1189239771	0.1750	0.1601	M
						RPD = 1.40	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERBICV_00014

Amount Added: 1.00

Units: mL

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04
Lims ID: icv herb
Client ID:

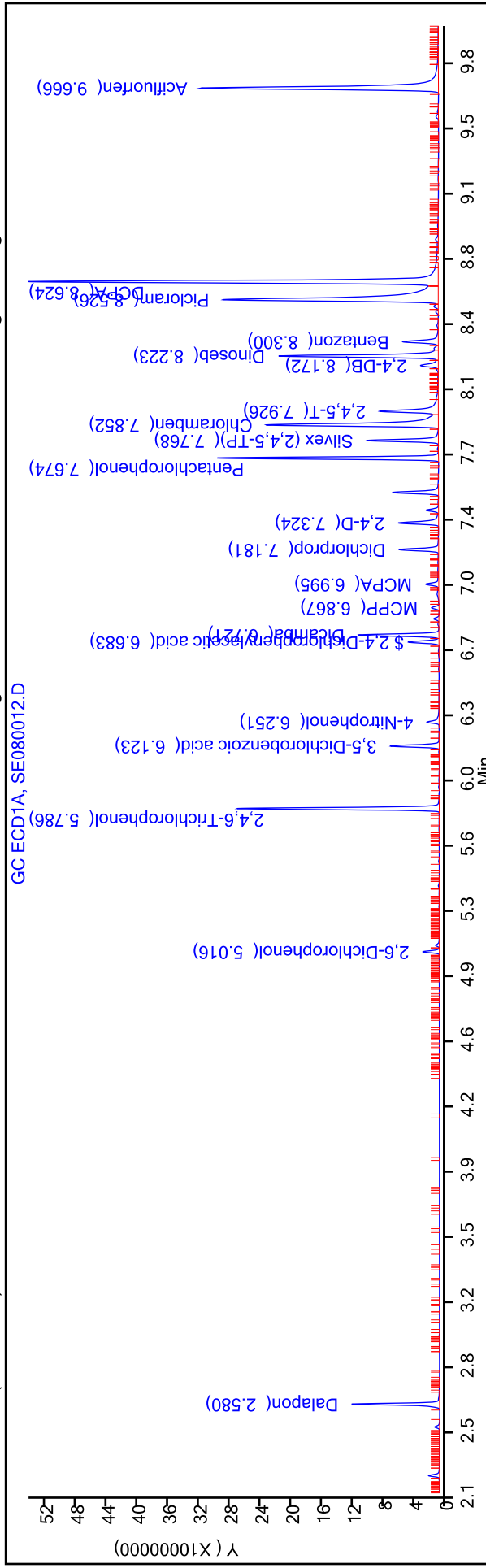
Operator ID: GEM
Worklist Smp#: 12

Injection Vol: 1.0 ul
Method: Herbicides_CSGS

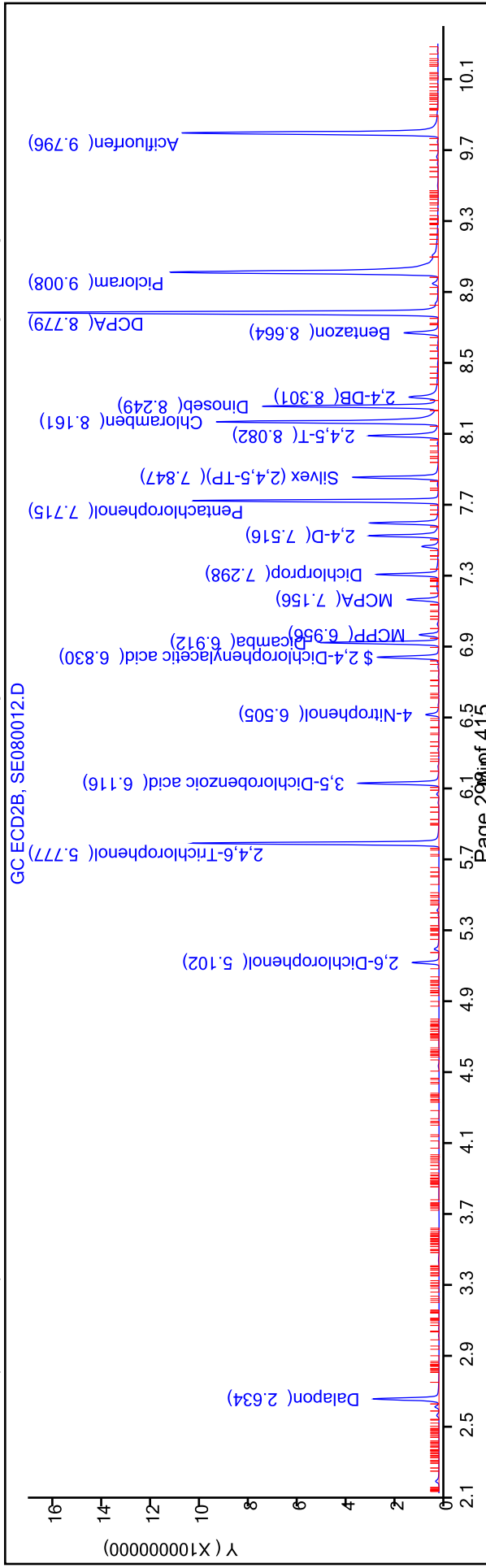
Dil. Factor: 1.0000
Limit Group: 8151A - DOD_V5

ALS Bottle#: 12

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

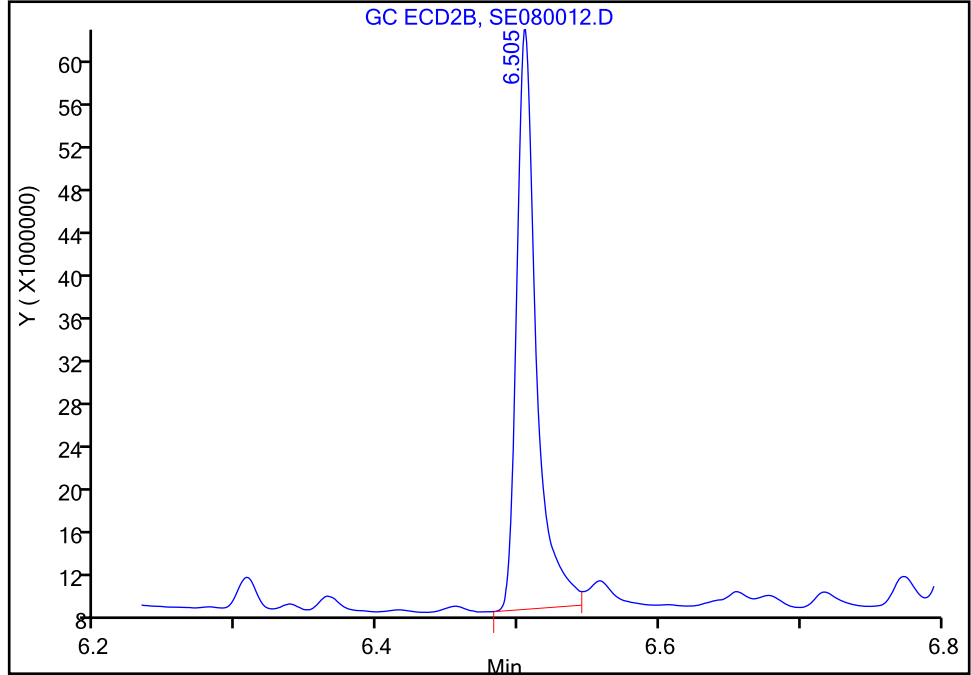
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

5 4-Nitrophenol, CAS: 100-02-7

Signal: 2

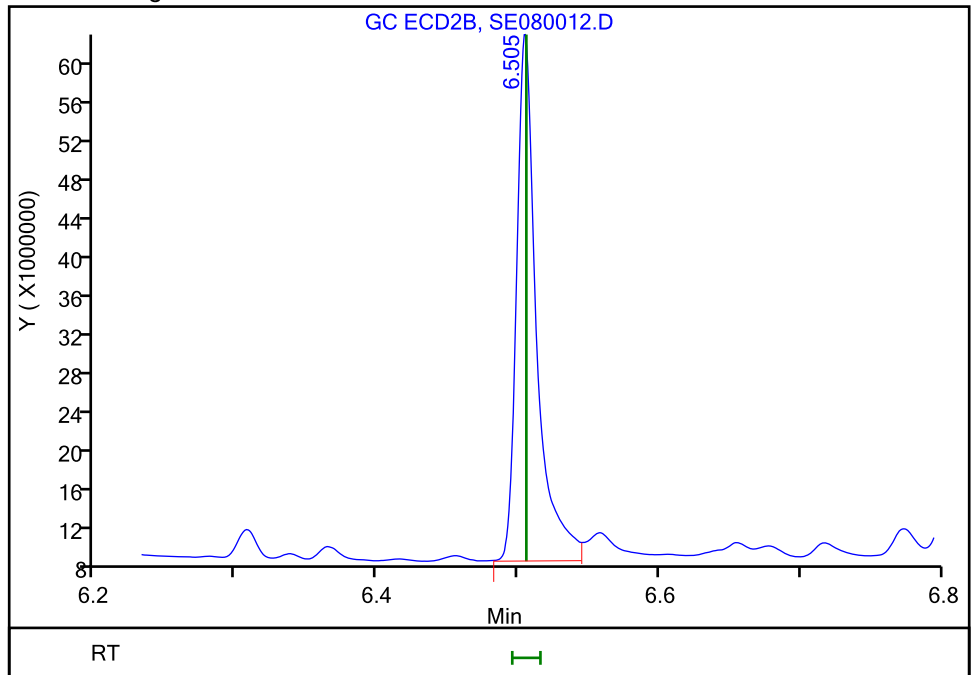
RT: 6.50
Area: 51736440
Amount: 0.174290
Amount Units: ug/ml

Processing Integration Results



RT: 6.50
Area: 52975624
Amount: 0.177152
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

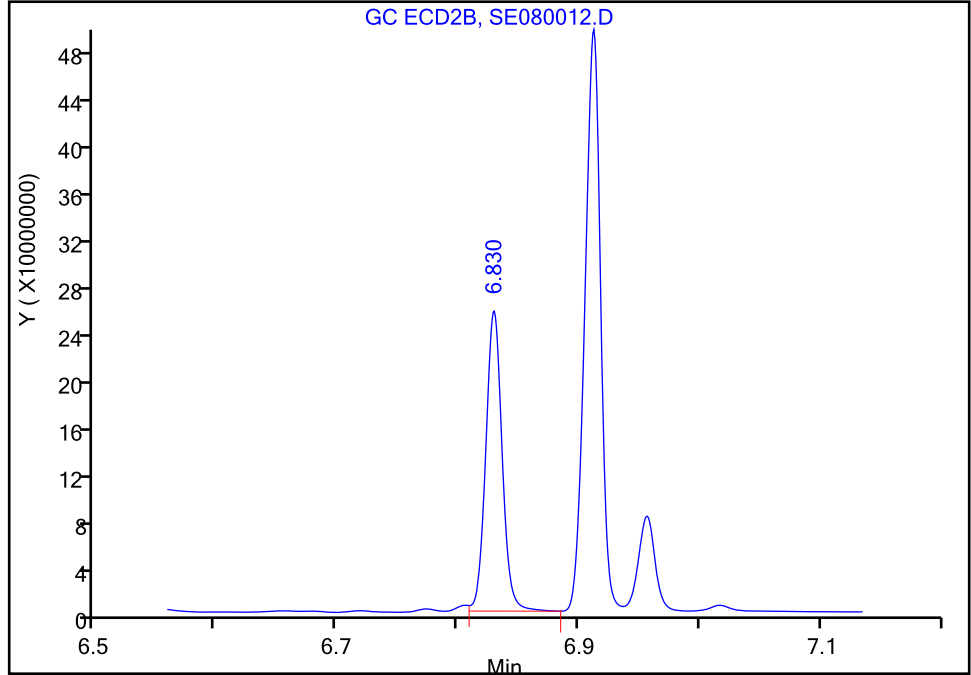
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

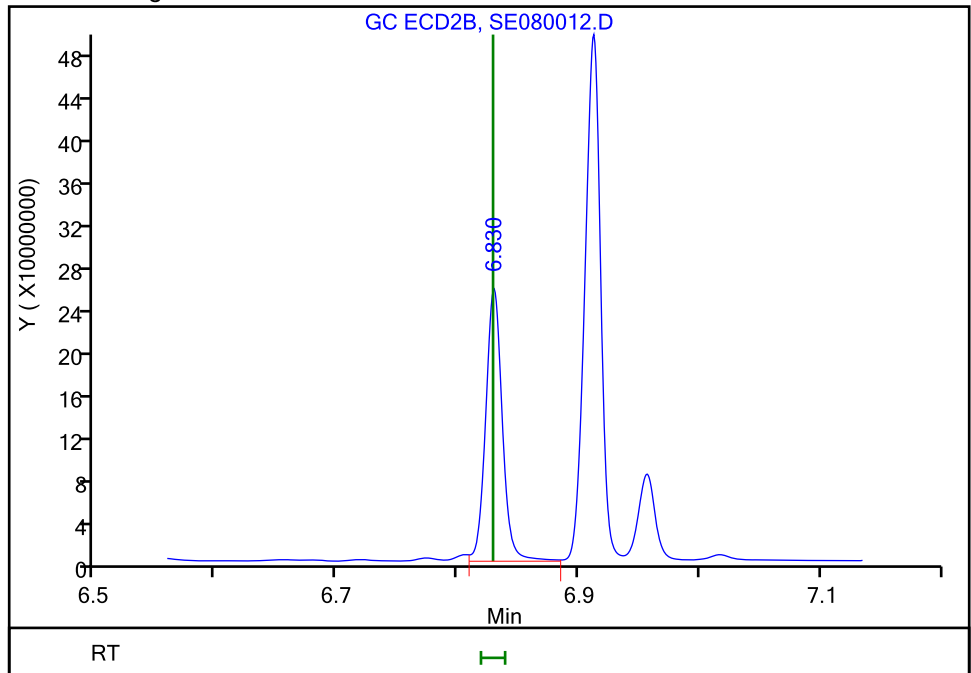
RT: 6.83
Area: 235256676
Amount: 0.169230
Amount Units: ug/ml

Processing Integration Results



RT: 6.83
Area: 240517141
Amount: 0.170851
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

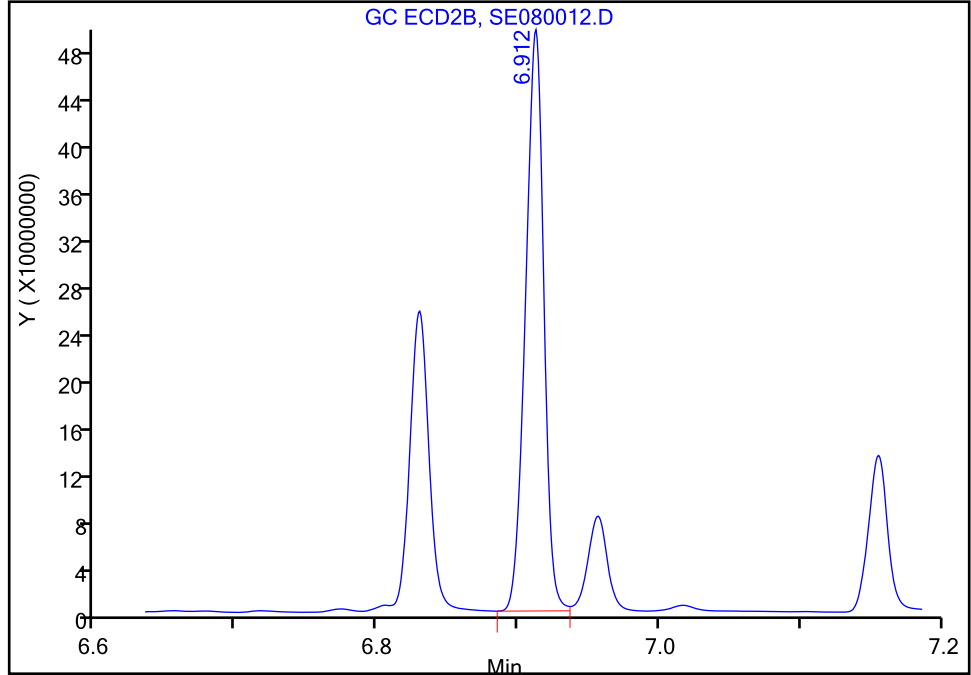
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

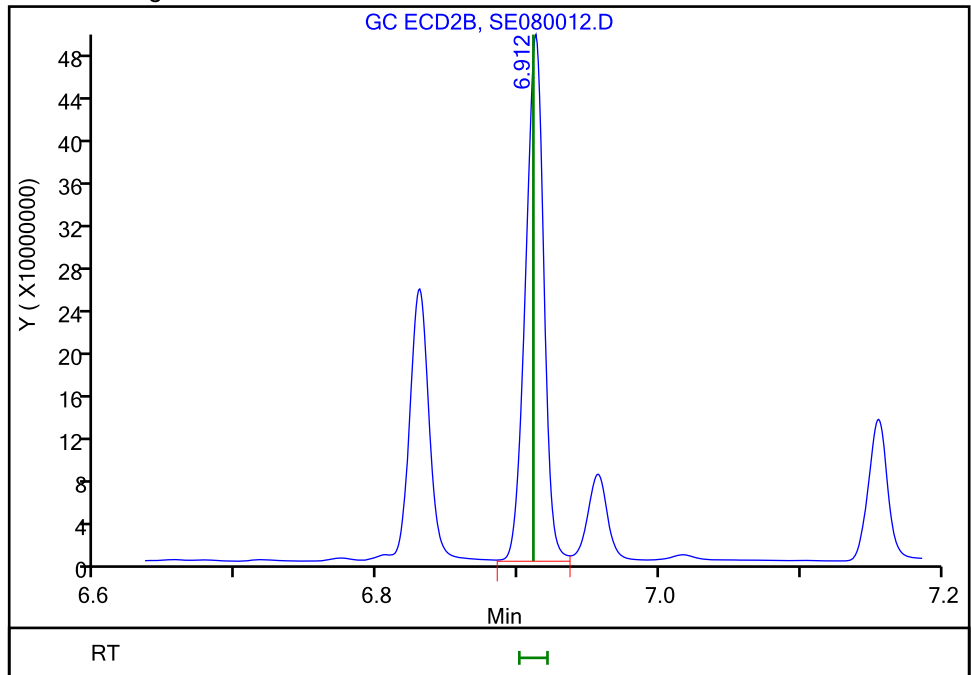
RT: 6.91
Area: 434653021
Amount: 0.087708
Amount Units: ug/ml

Processing Integration Results



RT: 6.91
Area: 438385412
Amount: 0.087518
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

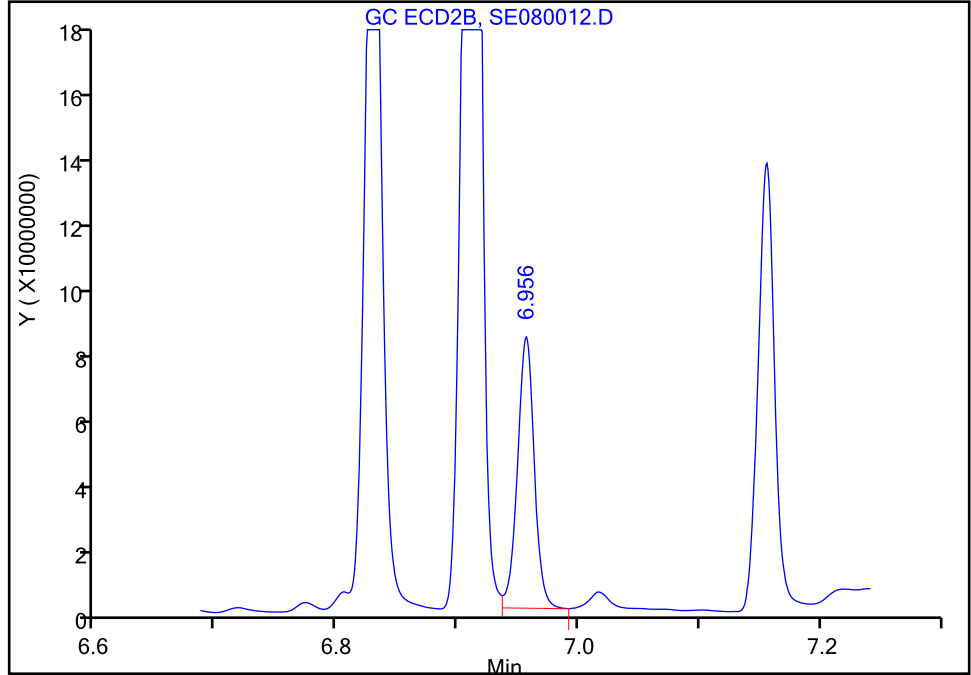
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

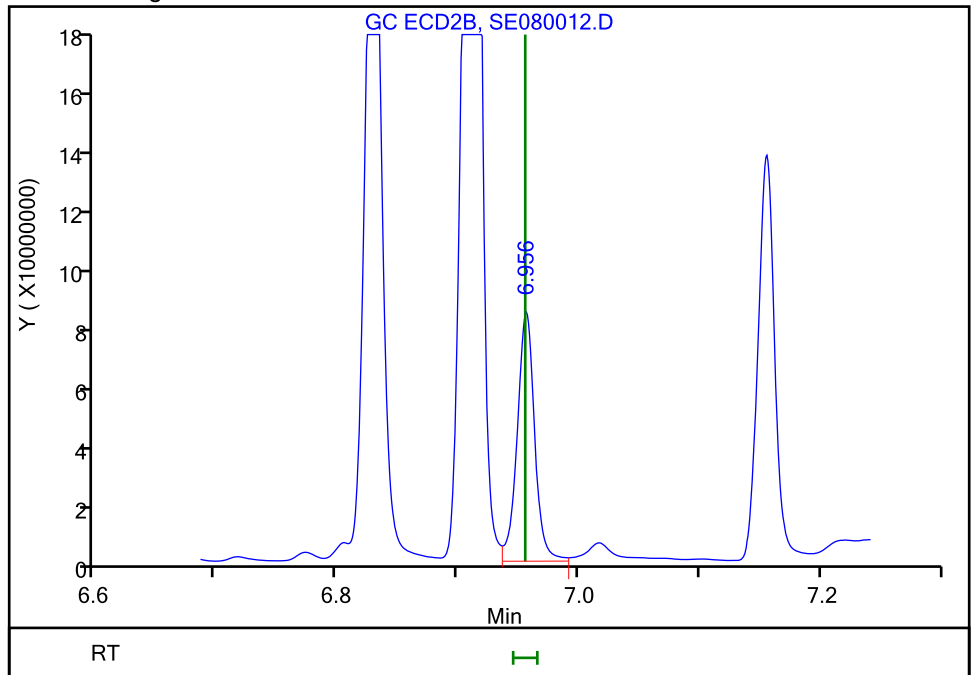
RT: 6.96
Area: 75934344
Amount: 16.692681
Amount Units: ug/ml

Processing Integration Results



RT: 6.96
Area: 79838277
Amount: 17.422724
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

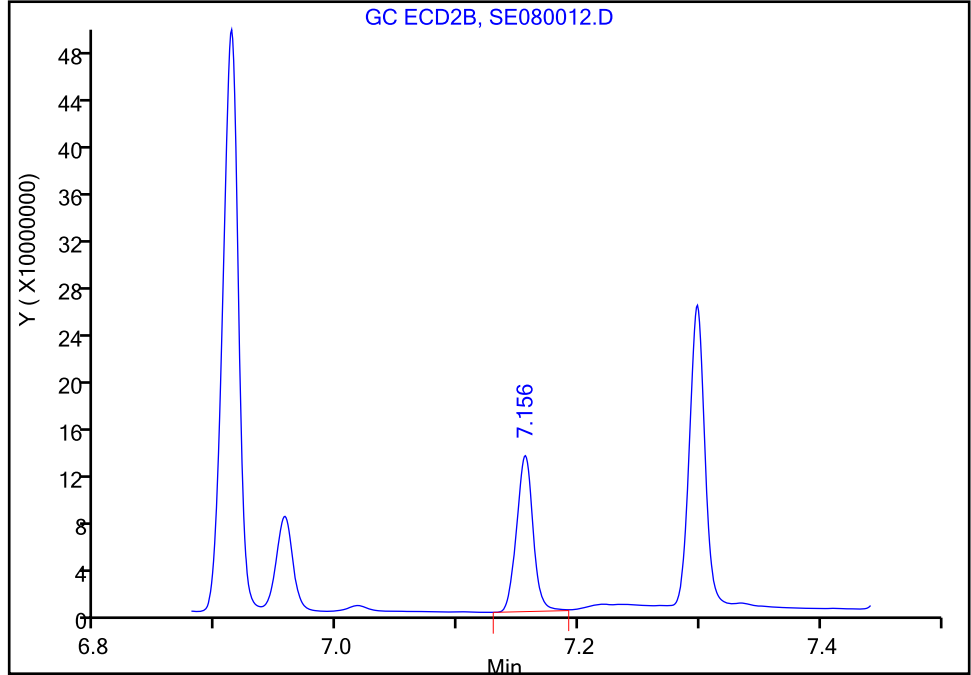
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

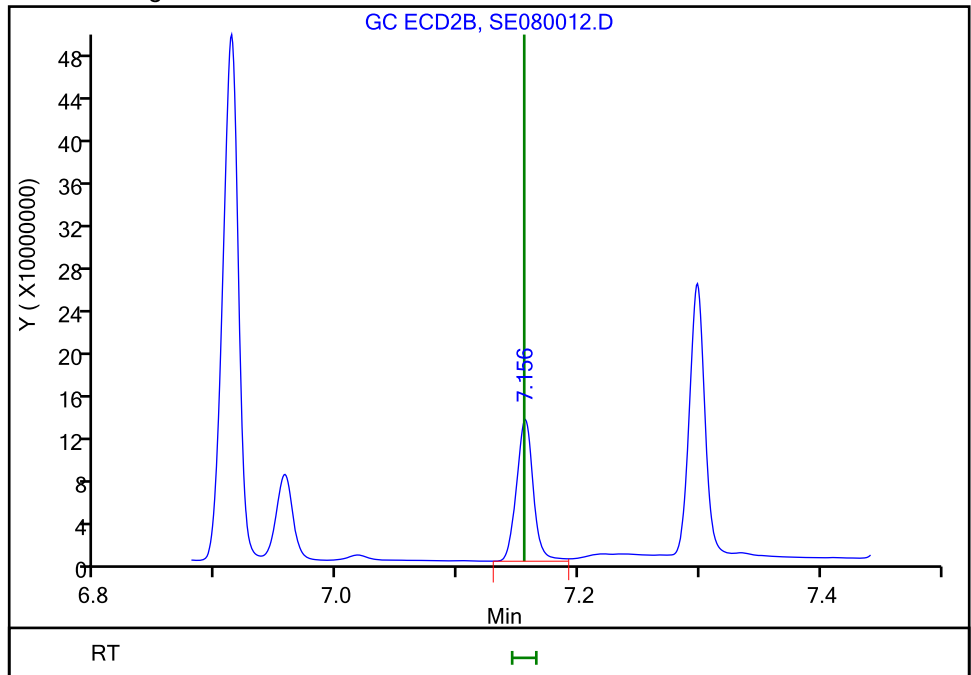
RT: 7.16
Area: 123031336
Amount: 19.557220
Amount Units: ug/ml

Processing Integration Results



RT: 7.16
Area: 125917297
Amount: 20.188282
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

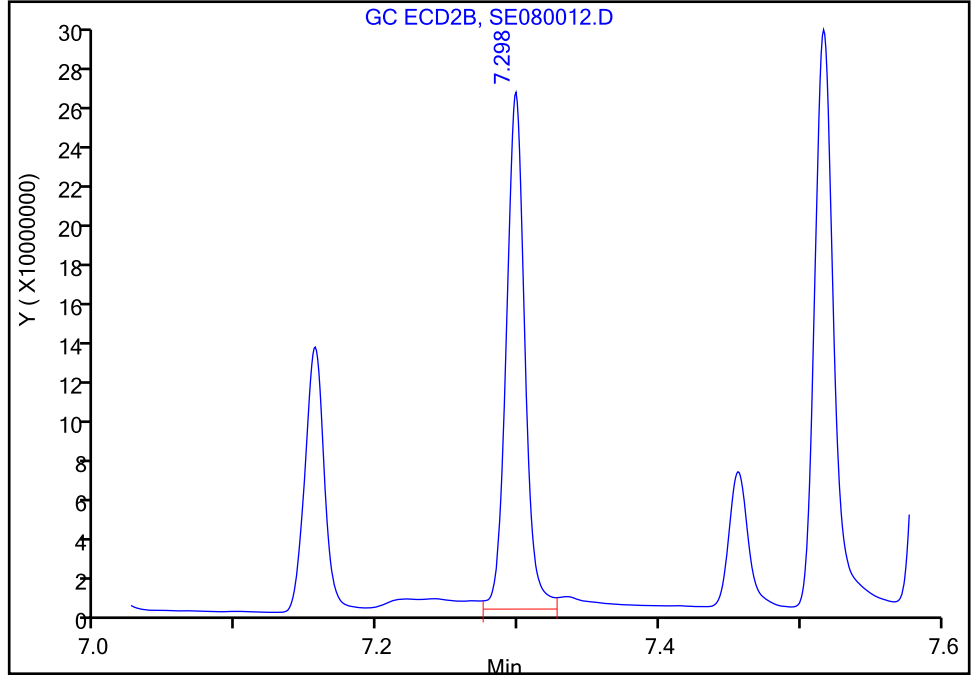
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

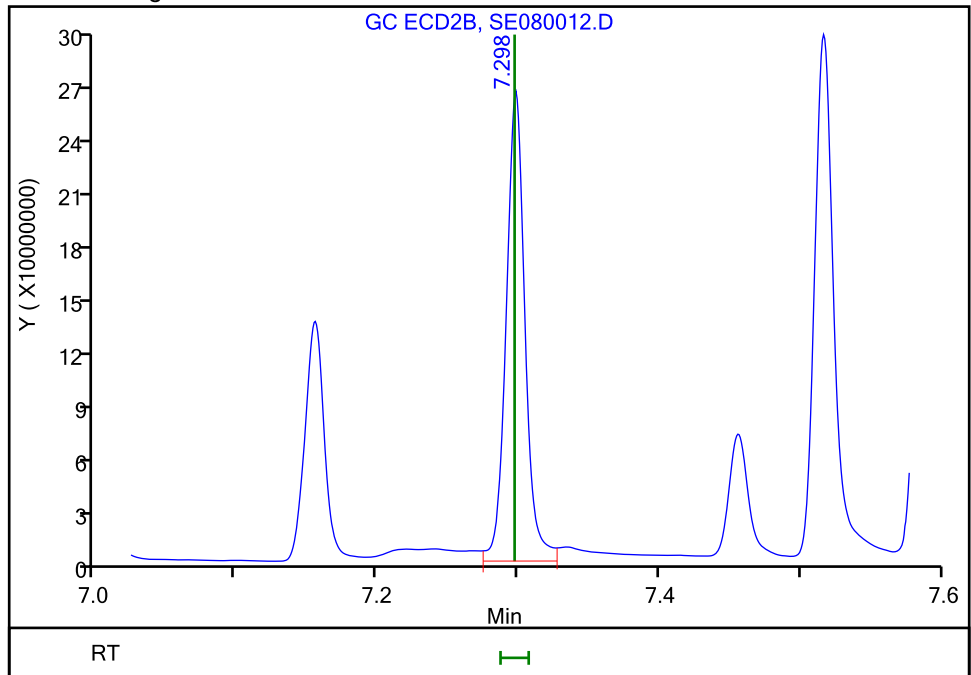
RT: 7.30
Area: 232007263
Amount: 0.166467
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 236765319
Amount: 0.167941
Amount Units: ug/ml

Manual Integration Results



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Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

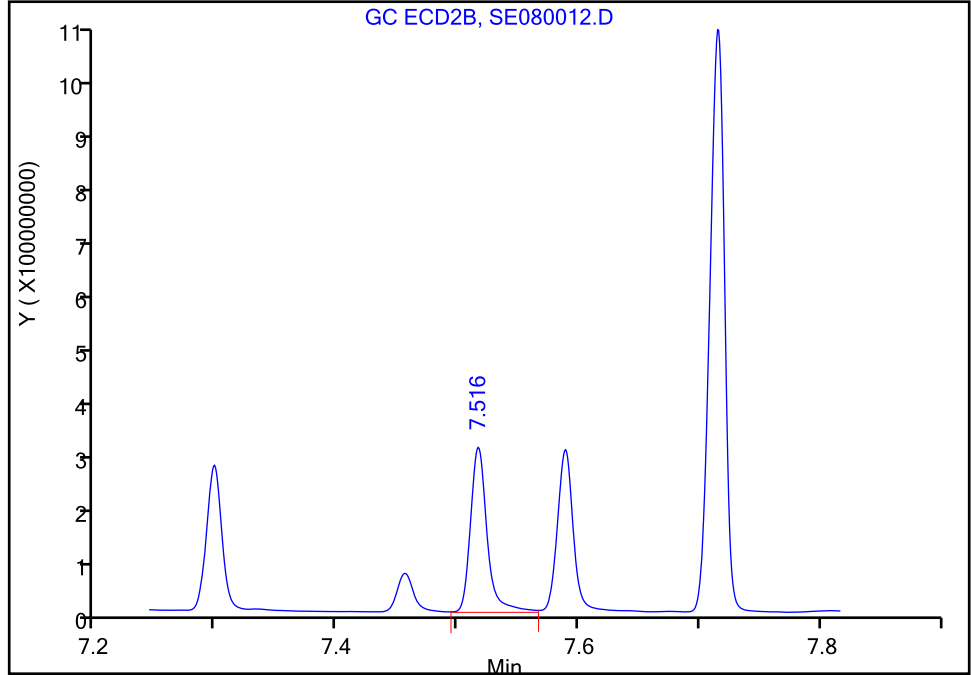
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

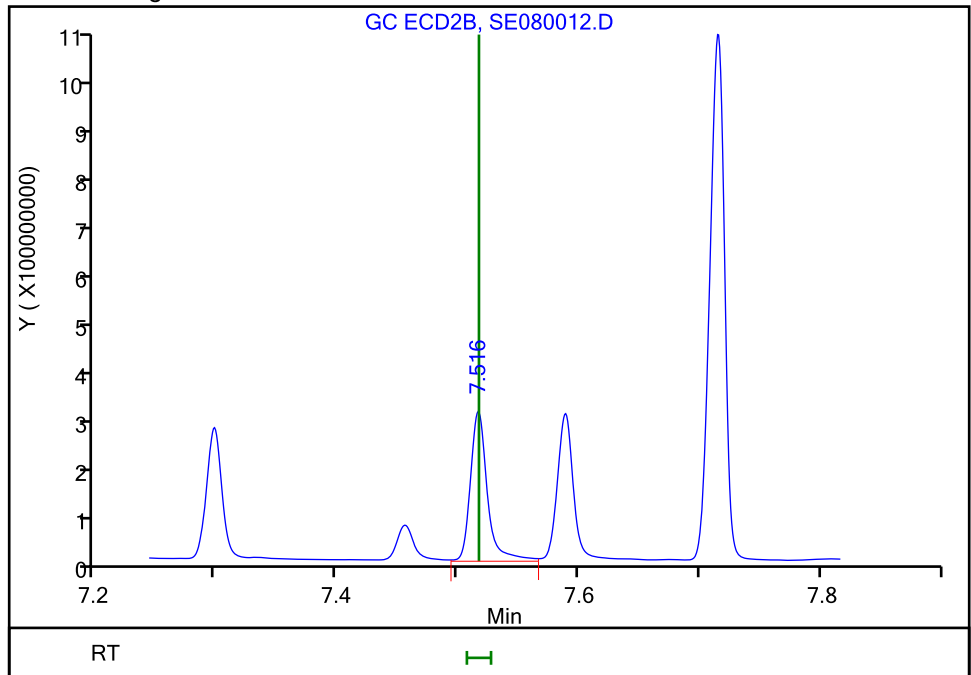
RT: 7.52
Area: 273831818
Amount: 0.173743
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 280829565
Amount: 0.176230
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

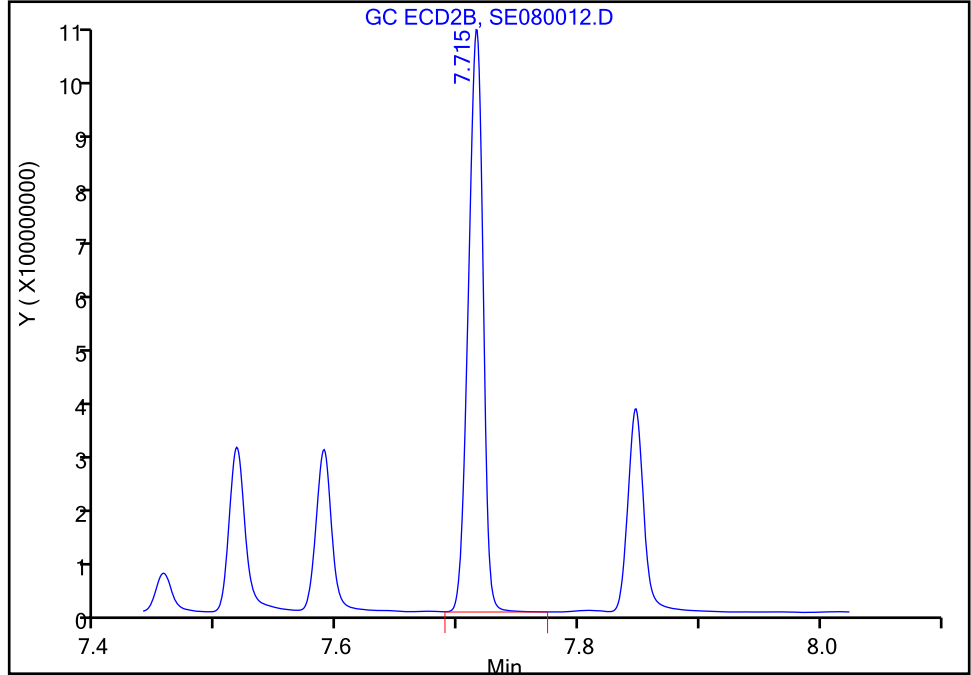
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

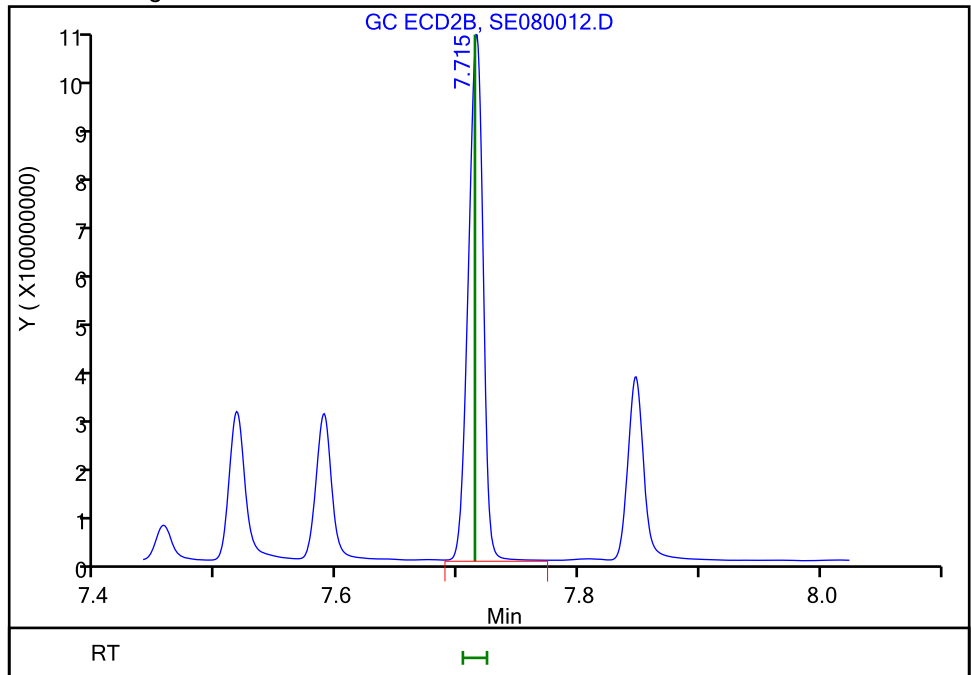
RT: 7.71
Area: 852692667
Amount: 0.045595
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 861630277
Amount: 0.045810
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

TestAmerica Savannah

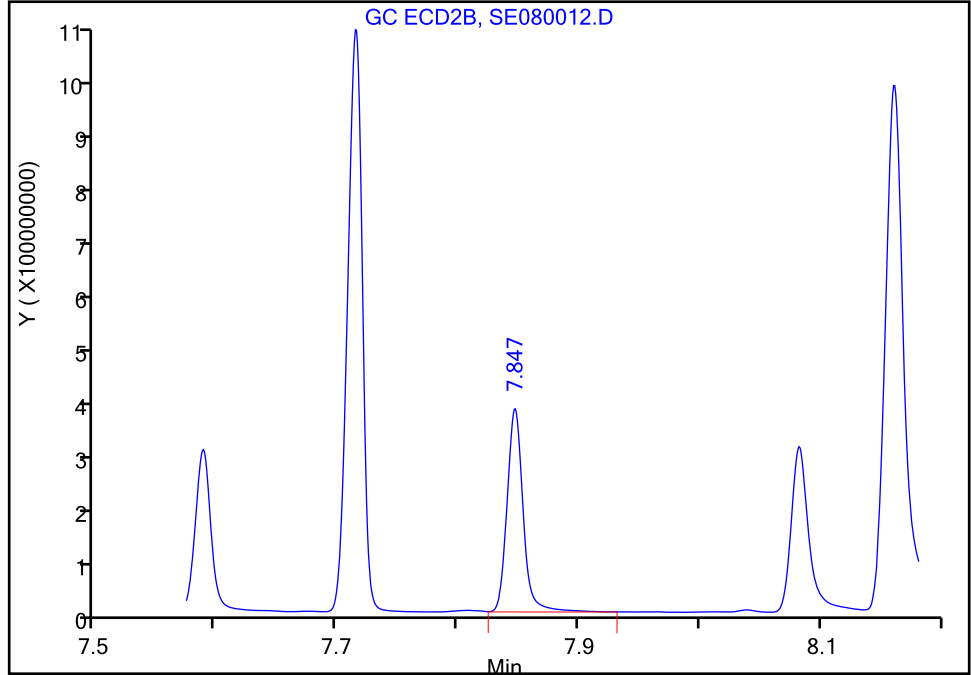
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

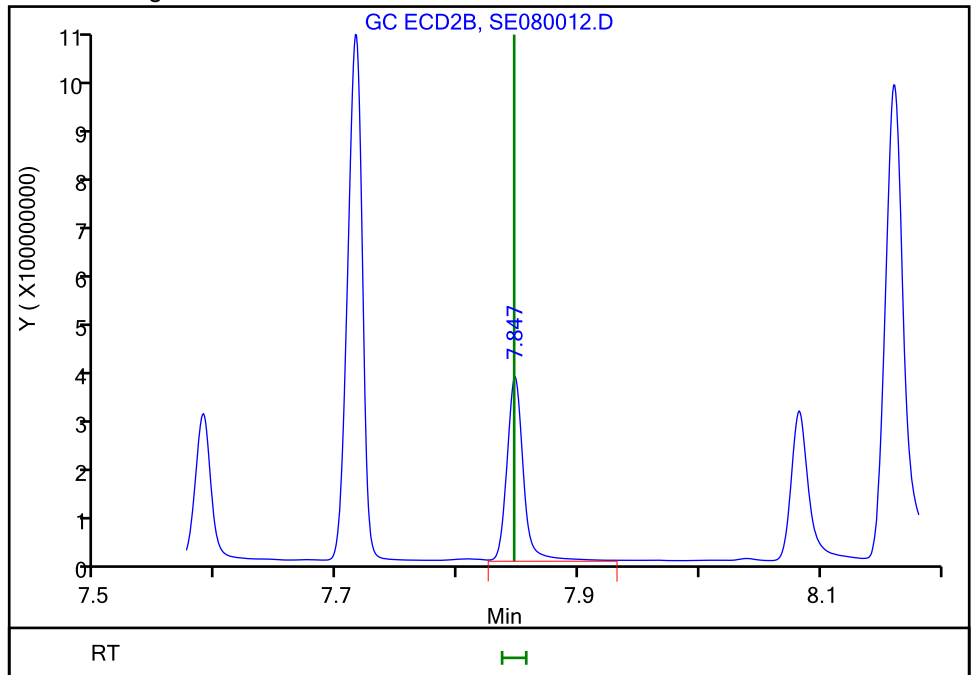
RT: 7.85
Area: 324462017
Amount: 0.044325
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 335327121
Amount: 0.045368
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

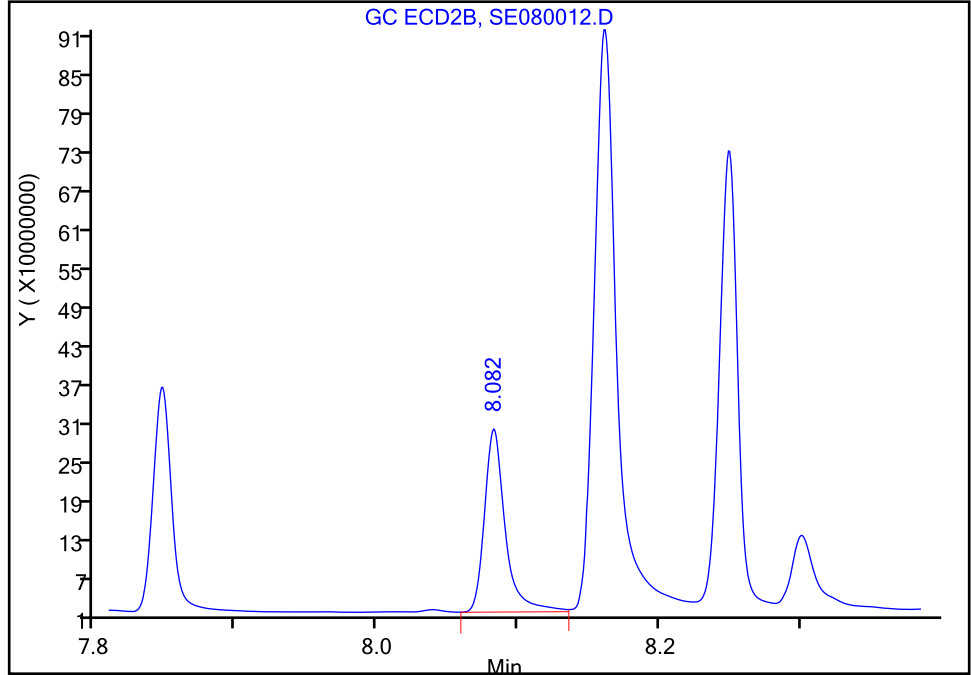
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

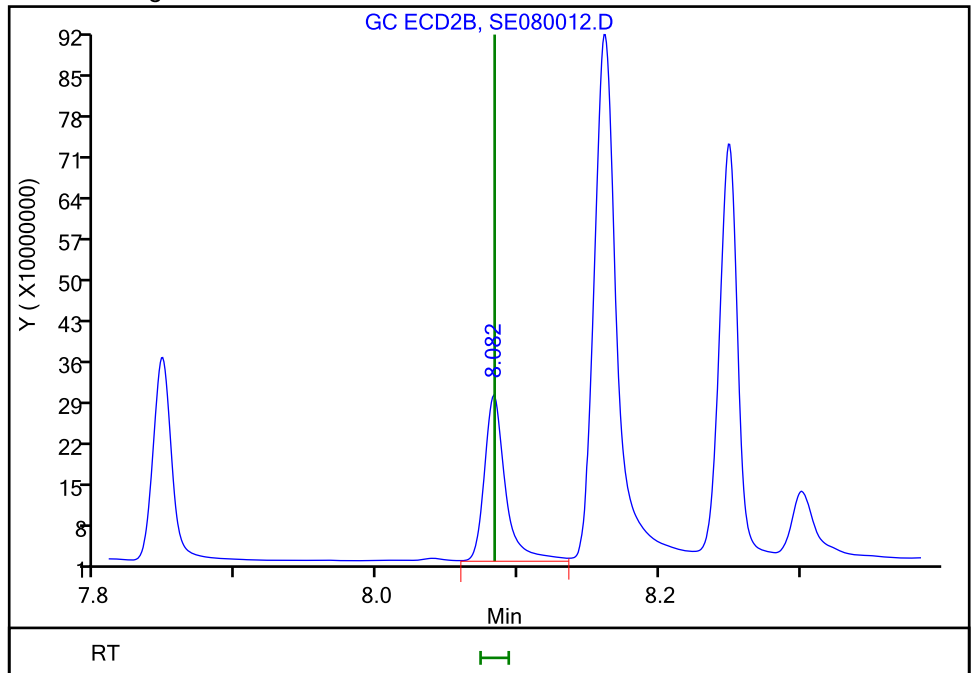
RT: 8.08
Area: 292476486
Amount: 0.044574
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 298977240
Amount: 0.044982
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

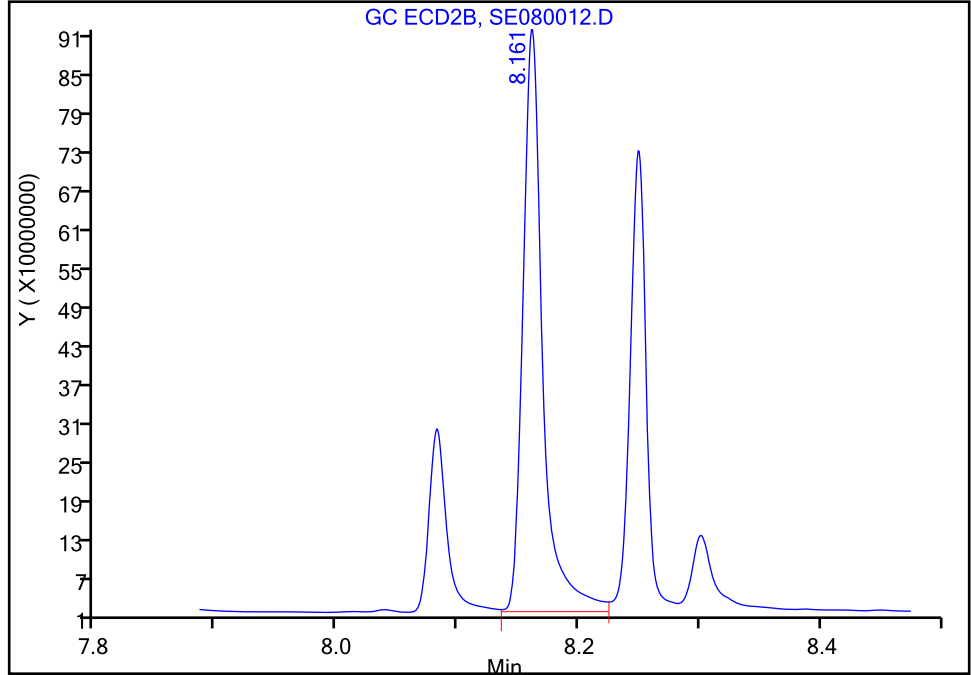
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

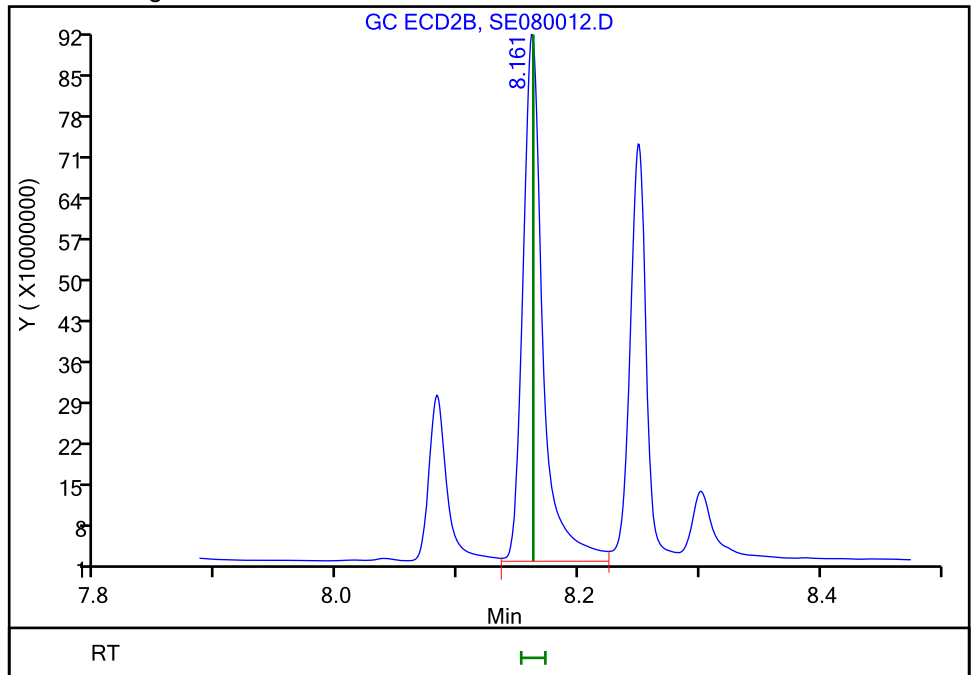
RT: 8.16
Area: 1033507912
Amount: 0.185123
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 1043446048
Amount: 0.185485
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

TestAmerica Savannah

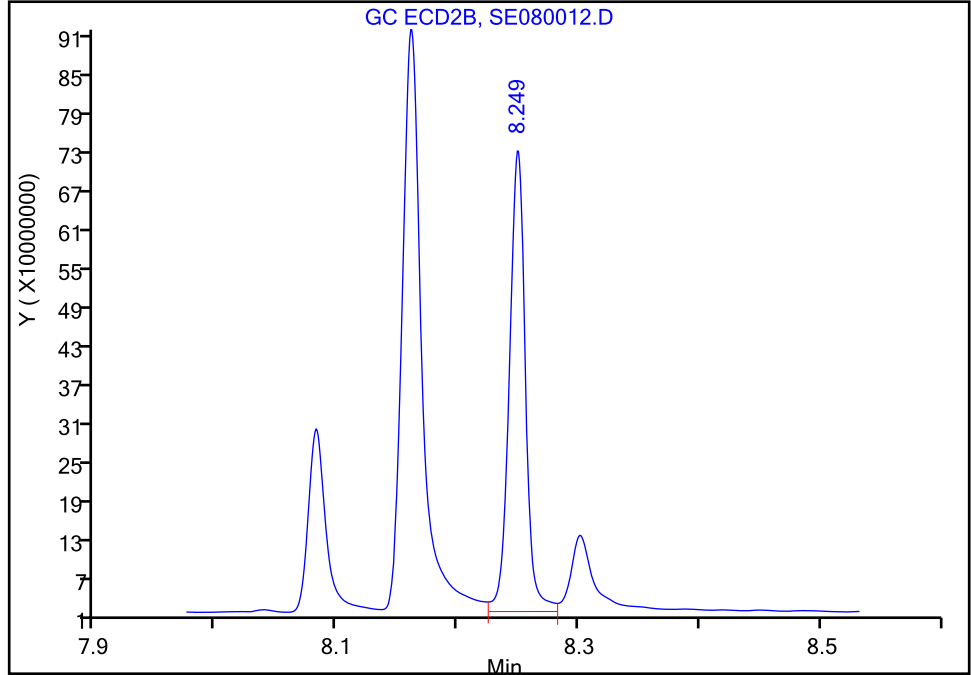
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

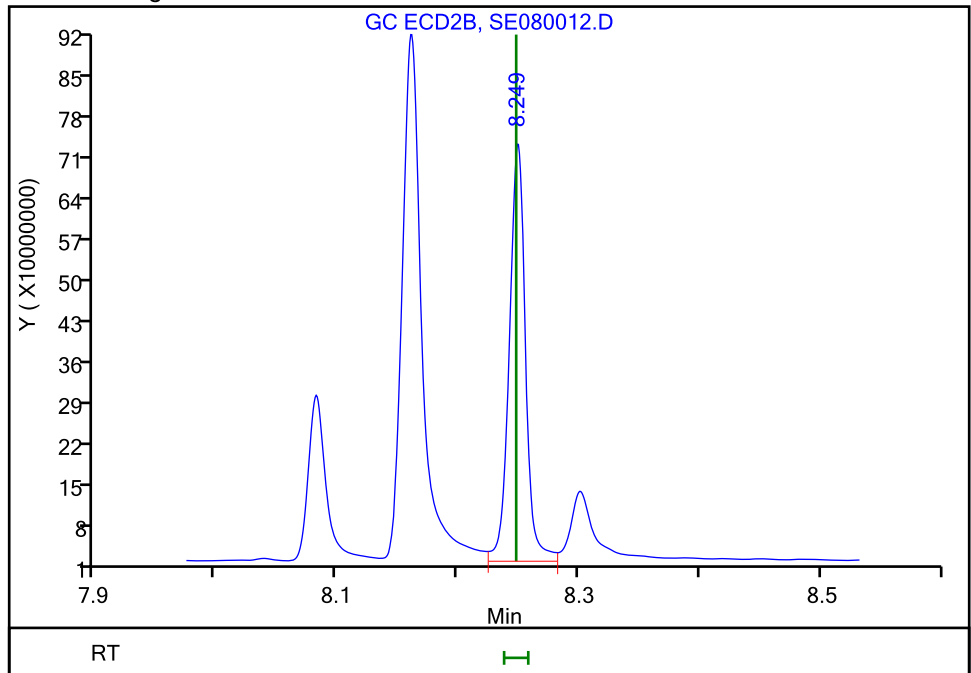
RT: 8.25
Area: 664185314
Amount: 0.147454
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 670832472
Amount: 0.151471
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

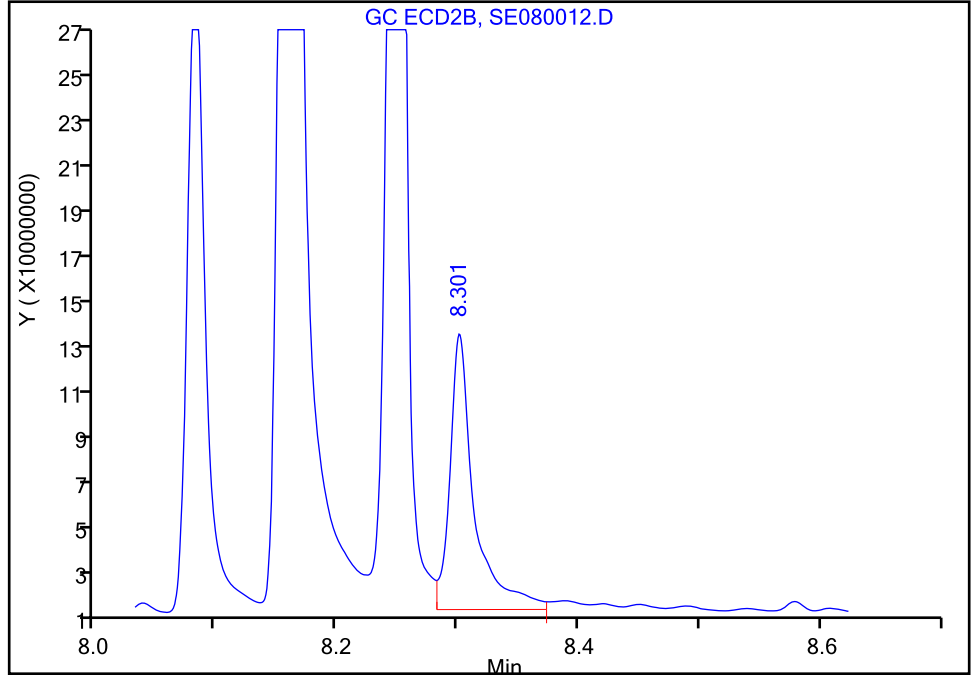
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

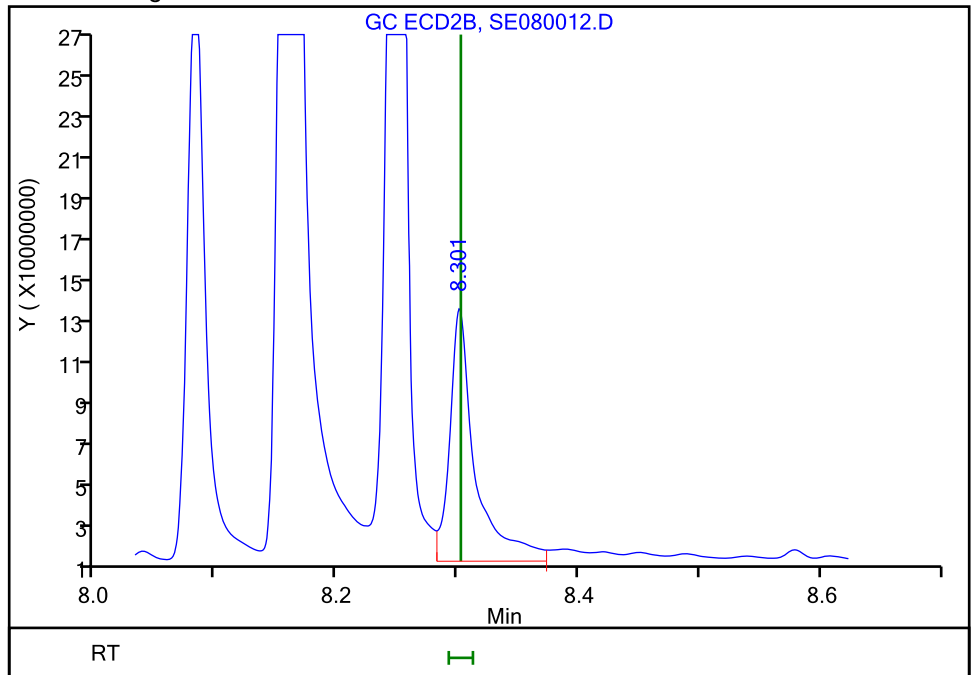
RT: 8.30
Area: 164528949
Amount: 0.167101
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 175272842
Amount: 0.177709
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

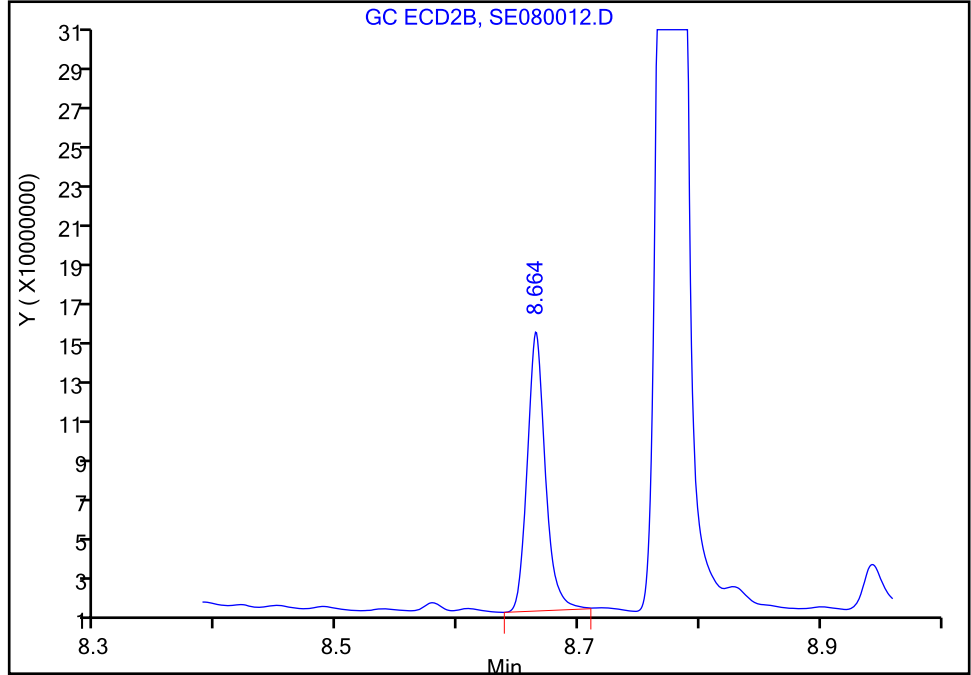
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

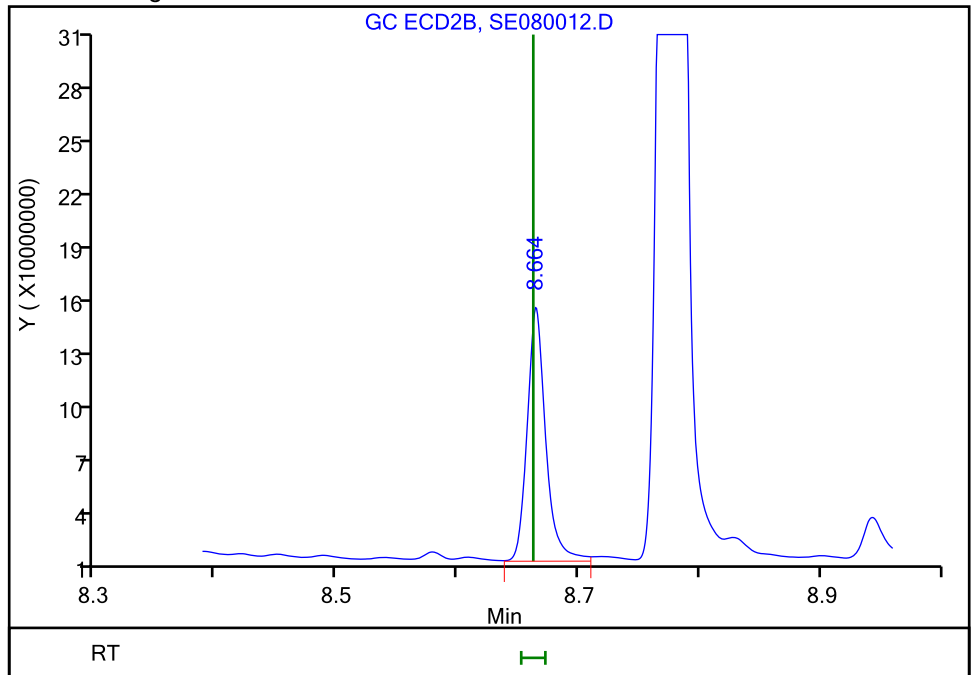
RT: 8.66
Area: 144381017
Amount: 0.181133
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 149493508
Amount: 0.185944
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

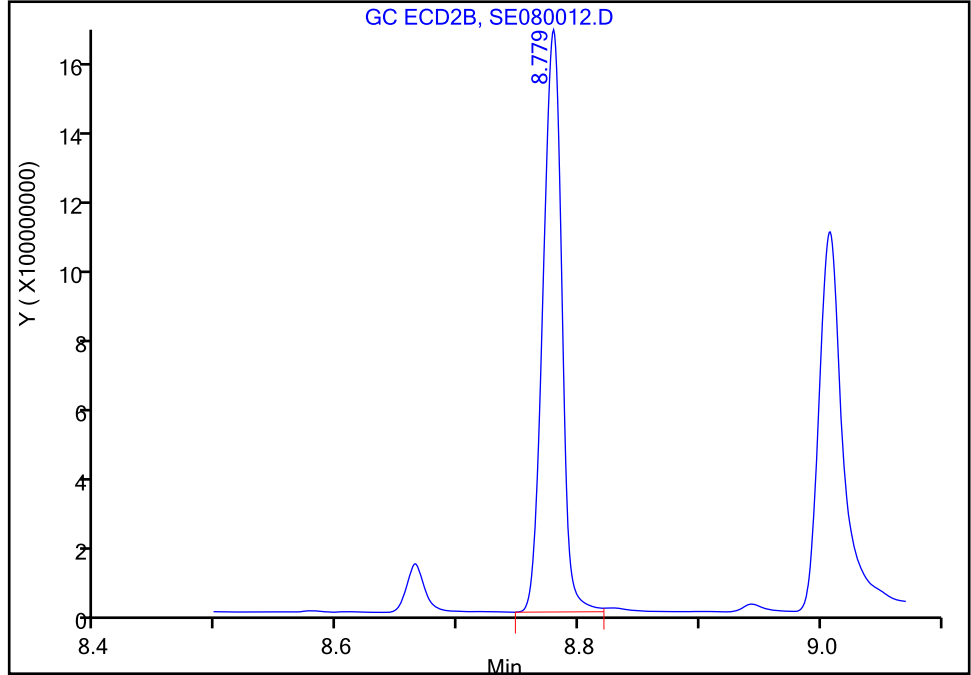
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

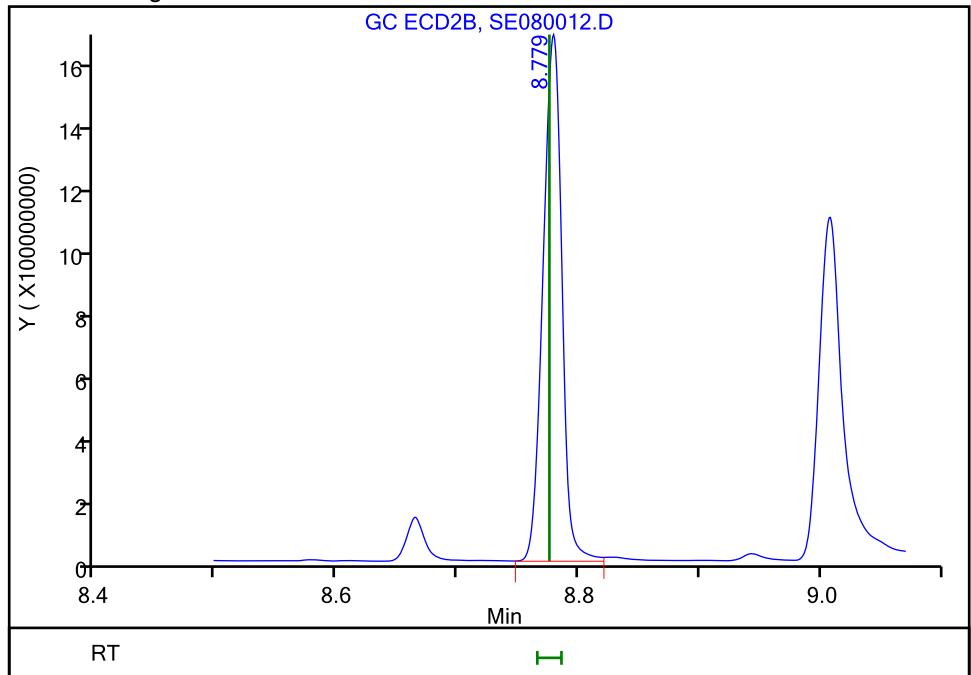
RT: 8.78
Area: 1816748627
Amount: 0.185639
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 1822835497
Amount: 0.185604
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

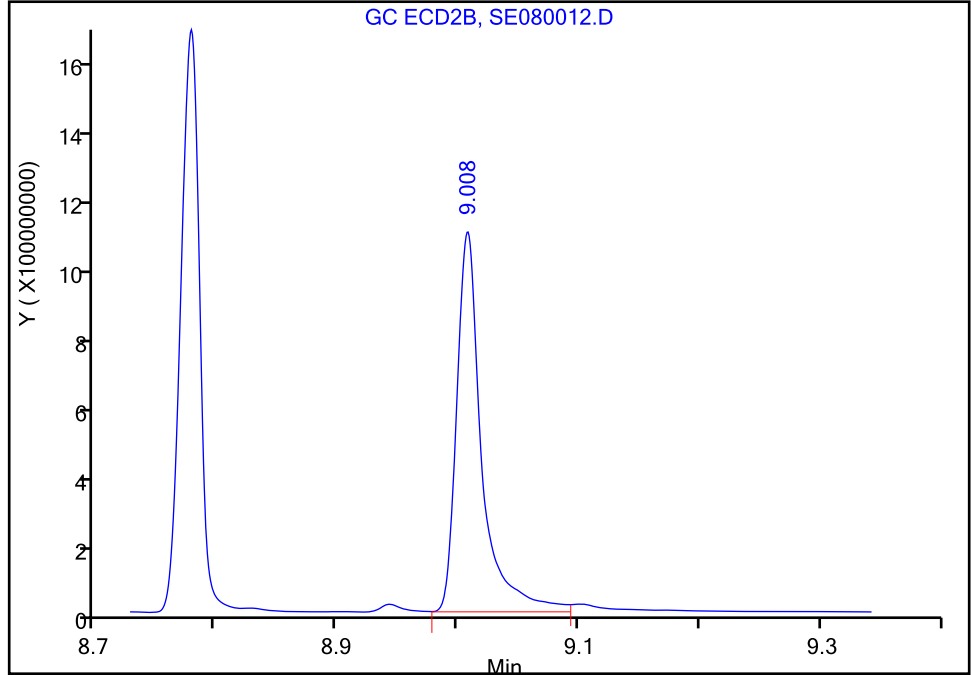
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

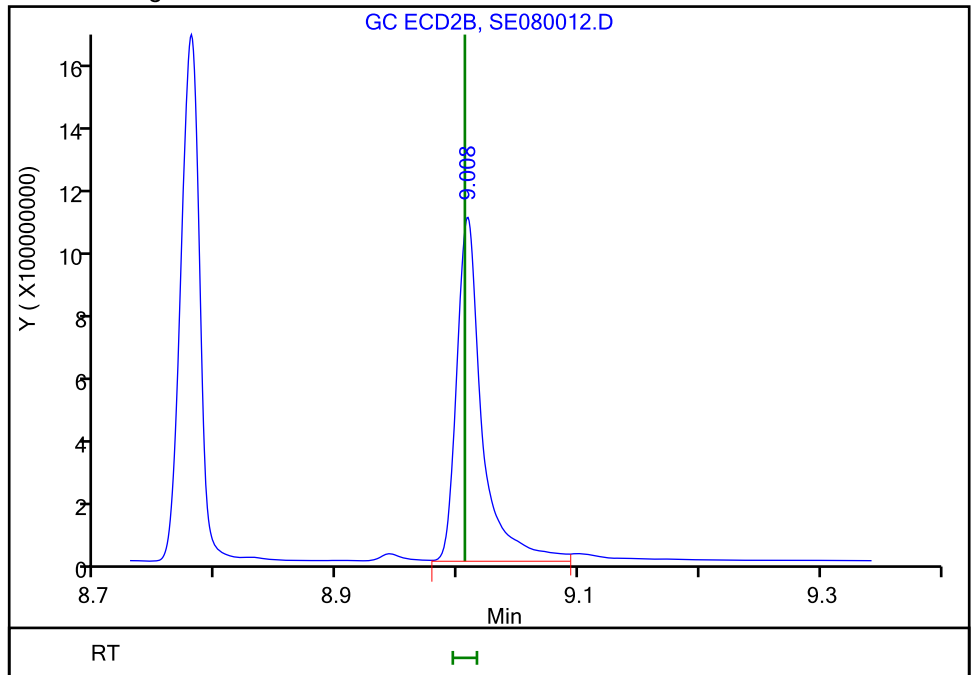
RT: 9.01
Area: 1583160054
Amount: 0.152106
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 1596868377
Amount: 0.151259
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

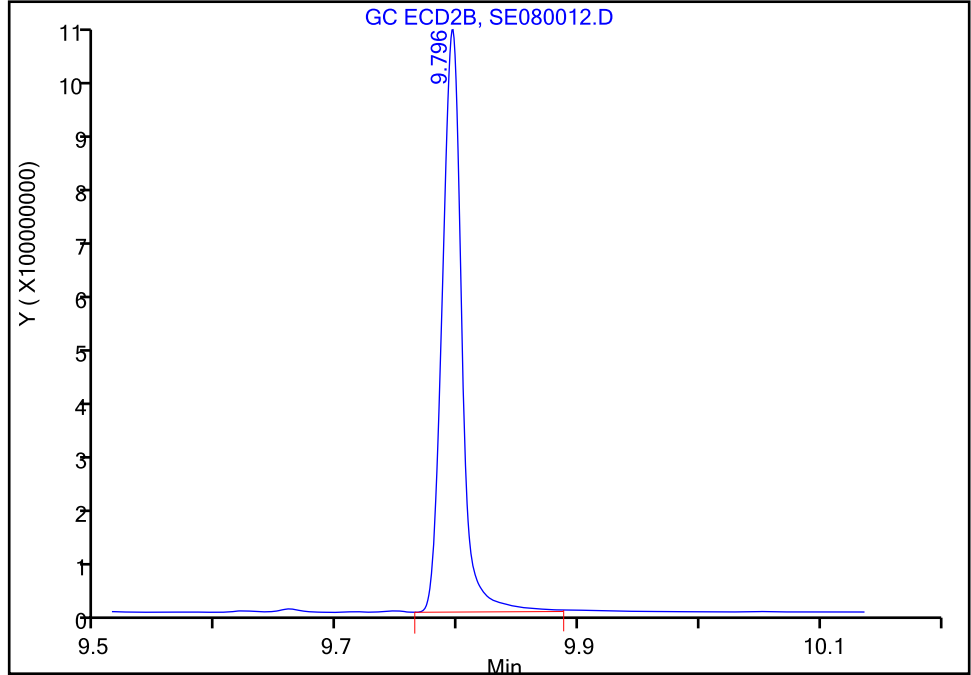
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080012.D
Injection Date: 08-May-2018 14:35:04 Instrument ID: CSGS
Lims ID: icv herb
Client ID:
Operator ID: GEM ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

21 Acifluorfen, CAS: 50594-66-6

Signal: 2

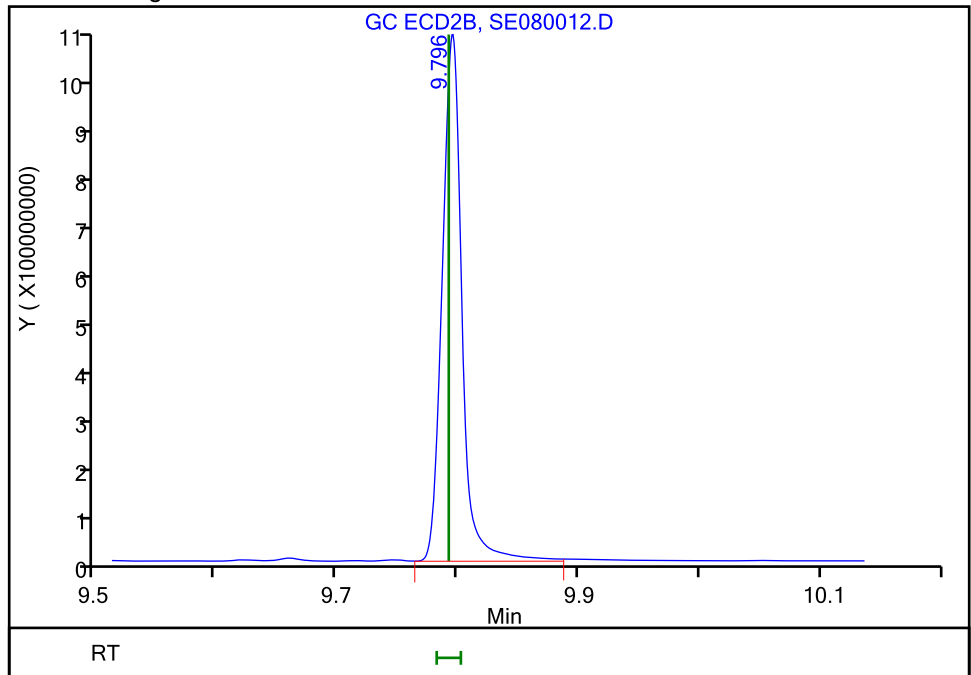
RT: 9.80
Area: 1182788136
Amount: 0.148067
Amount Units: ug/ml

Processing Integration Results



RT: 9.80
Area: 1189239771
Amount: 0.160100
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 08-May-2018 16:12:13
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	407346190		0.0777	0.100	-22.3*	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	283173340		0.0881	0.100	-11.9	20.0
4-Nitrophenol	Ave	92458216	91901530		0.0994	0.100	-0.6	20.0
Dicamba	Ave	1077009527	922446760		0.0428	0.0500	-14.4	20.0
MCPP	Qua		469003		9.85	10.0	-1.5	20.0
MCPA	Ave	925968	935489		10.1	10.0	1.0	20.0
Dichlorprop	Ave	277497963	258402050		0.0931	0.100	-6.9	20.0
2,4-D	Ave	302399622	279399860		0.0924	0.100	-7.6	20.0
Pentachlorophenol	Ave	5383895550	4633460080		0.0215	0.0250	-13.9	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1676673120		0.0223	0.0250	-10.8	20.0
Chloramben	Qua		1205892700		0.0819	0.100	-18.1	20.0
2,4,5-T	Ave	2193840481	2024242400		0.0231	0.0250	-7.7	20.0
2,4-DB	Qua		131484440		0.0888	0.100	-11.2	20.0
Dinoseb	Ave	1223895982	1063035430		0.0869	0.100	-13.1	20.0
Bentazon	Ave	287551968	263316600		0.0916	0.100	-8.4	20.0
Picloram	Qua		1934015400		0.0834	0.100	-16.6	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	2909428780		0.0883	0.100	-11.7	20.0
Acifluorfen	Qua		1962049570		0.0869	0.100	-13.1	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	183772960		0.0869	0.100	-13.1	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	6.99	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.33	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.86	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.18	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 21:40:11 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-028
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:37:48 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.578	2.579	-0.001	40734619	0.1000	0.0777	
2	2.632	2.632	0.000	124683071	0.1000	0.0774	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	8885882	NC	NC	
2	5.102	5.102	0.000	45742372	NC	NC	
						RPD = 7.11	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	104333704	NC	NC	
2	5.776	5.776	0.000	435611631	NC	NC	
						RPD = 2.76	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	28317334	0.1000	0.0881	
2	6.116	6.116	0.000	146847224	0.1000	0.0817	
						RPD = 7.52	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	9190153	0.1000	0.0994	
2	6.505	6.505	0.000	26148392	0.1000	0.0874	
						RPD = 12.80	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.683	6.683	0.000	18377296	0.1000	0.0869	M
2	6.828	6.829	-0.001	116117949	0.1000	0.0825	M
						RPD = 5.21	
7 Dicamba M							
1	6.720	6.720	0.000	46122338	0.0500	0.0428	M
2	6.911	6.910	0.001	205108302	0.0500	0.0409	M
						RPD = 4.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4690034	10.0	9.85	M
2	6.956	6.955	0.001	42581663	10.0	8.89	M
							RPD = 10.31
9 MCPA							M
1	6.994	6.994	0.000	9354886	10.0	10.1	M
2	7.153	7.155	-0.002	65630302	10.0	11.6	M
							RPD = 13.55
10 Dichlorprop							M
1	7.180	7.180	0.000	25840205	0.1000	0.0931	M
2	7.297	7.297	0.000	117222842	0.1000	0.0831	M
							RPD = 11.31
11 2,4-D							M
1	7.327	7.326	0.001	27939986	0.1000	0.0924	M
2	7.517	7.517	0.000	133627356	0.1000	0.0839	M
							RPD = 9.69
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	115836502	0.0250	0.0215	M
2	7.713	7.714	-0.001	399815476	0.0250	0.0213	M
							RPD = 1.21
13 Silvex (2,4,5-TP)							M
1	7.769	7.769	0.000	41916828	0.0250	0.0223	M
2	7.847	7.846	0.001	155993801	0.0250	0.0211	M
							RPD = 5.56
14 Chloramben							M
1	7.857	7.855	0.002	120589270	0.1000	0.0819	M
2	8.162	8.162	0.000	457969533	0.1000	0.0814	M
							RPD = 0.55
15 2,4,5-T							M
1	7.929	7.929	0.000	50606060	0.0250	0.0231	M
2	8.083	8.083	0.000	135127386	0.0250	0.0203	M
							RPD = 12.61
16 2,4-DB							M
1	8.176	8.175	0.001	13148444	0.1000	0.0888	M
2	8.302	8.302	0.000	91637209	0.1000	0.0929	M
							RPD = 4.51
17 Dinoseb							M
1	8.222	8.224	-0.002	106303543	0.1000	0.0869	M
2	8.248	8.248	0.000	310276845	0.1000	0.0737	M
							RPD = 16.39
18 Bentazon							M
1	8.301	8.300	0.001	26331660	0.1000	0.0916	M
2	8.663	8.662	0.001	67492156	0.1000	0.0839	M
							RPD = 8.69
19 Picloram							M
1	8.530	8.529	0.001	193401540	0.1000	0.0834	M
2	9.007	9.005	0.002	686881952	0.1000	0.0704	M
							RPD = 16.93

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.624	8.623	0.001	290942878	0.1000	0.0883	M
2	8.777	8.775	0.002	842841434	0.1000	0.0858	M
						RPD = 2.90	

21 Acifluorfen							M
1	9.667	9.666	0.001	196204957	0.1000	0.0869	M
2	9.793	9.792	0.001	538041096	0.1000	0.0817	
						RPD = 6.20	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

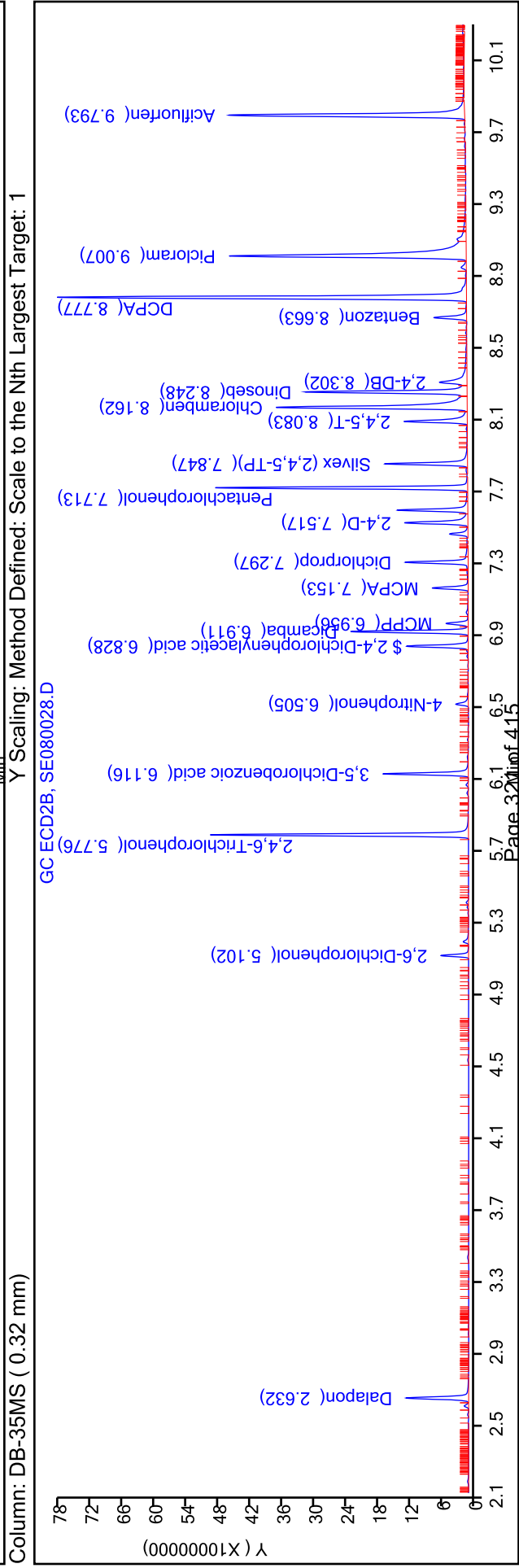
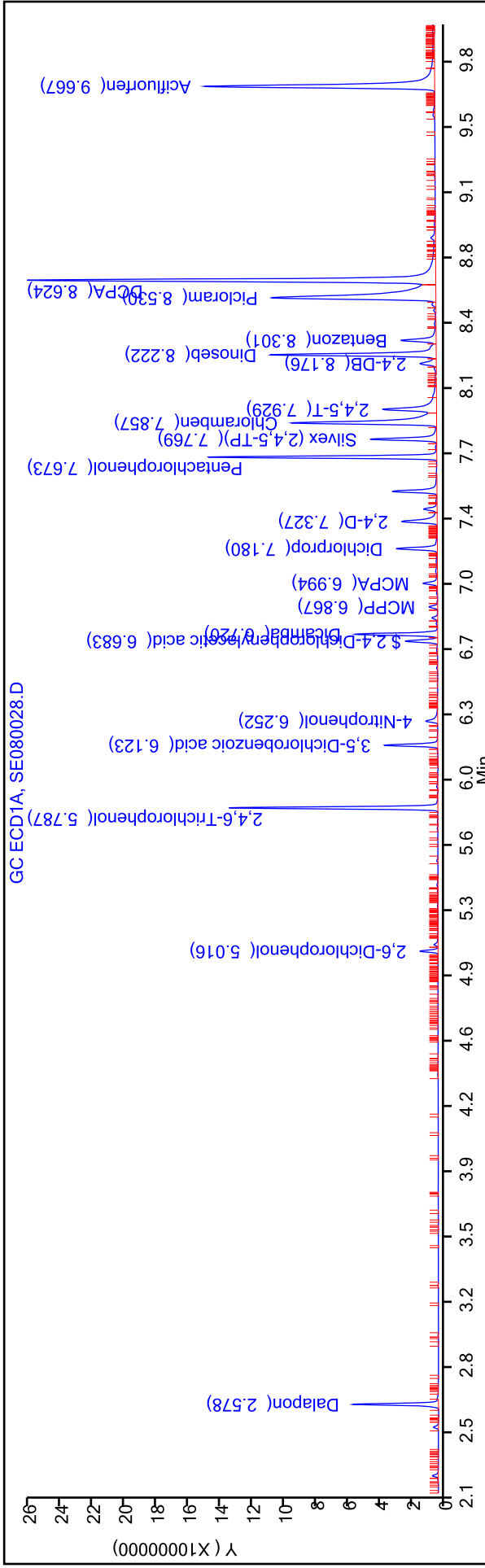
SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
 Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
 Lims ID: ccv h4
 Client ID:
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Operator ID: GEM
 Worklist Smp#: 28
 ALS Bottle#: 28



TestAmerica Savannah

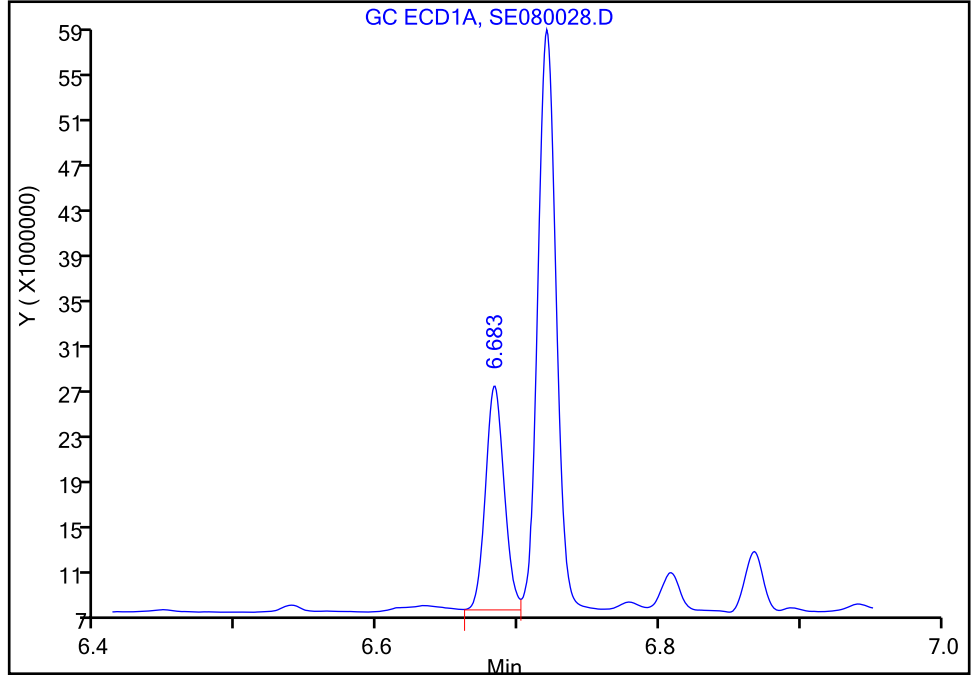
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 1

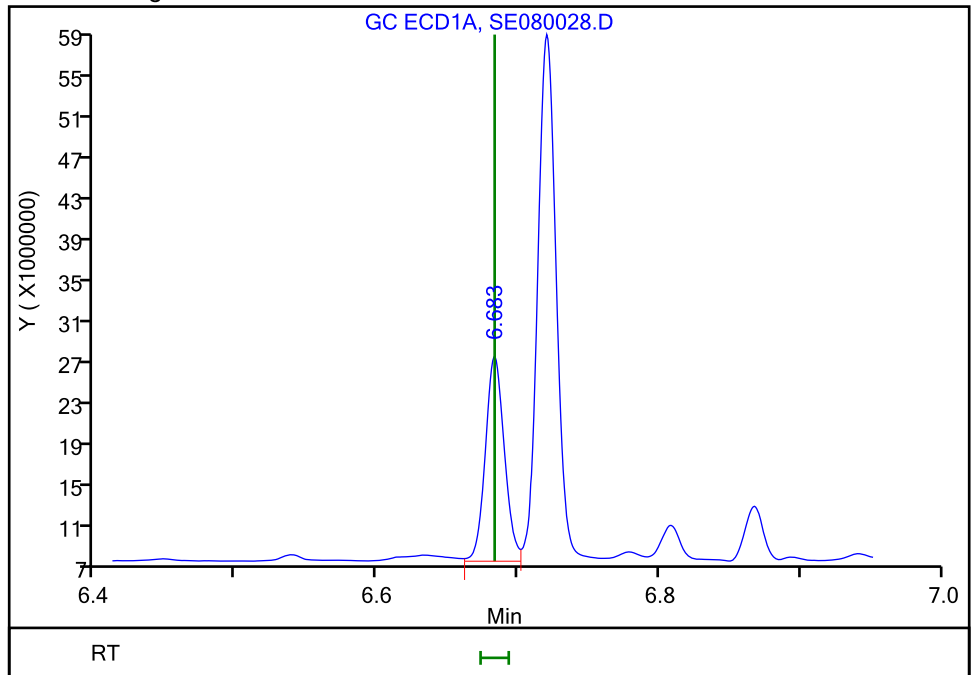
RT: 6.68
Area: 17876221
Amount: 0.084530
Amount Units: ug/ml

Processing Integration Results



RT: 6.68
Area: 18377296
Amount: 0.086899
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

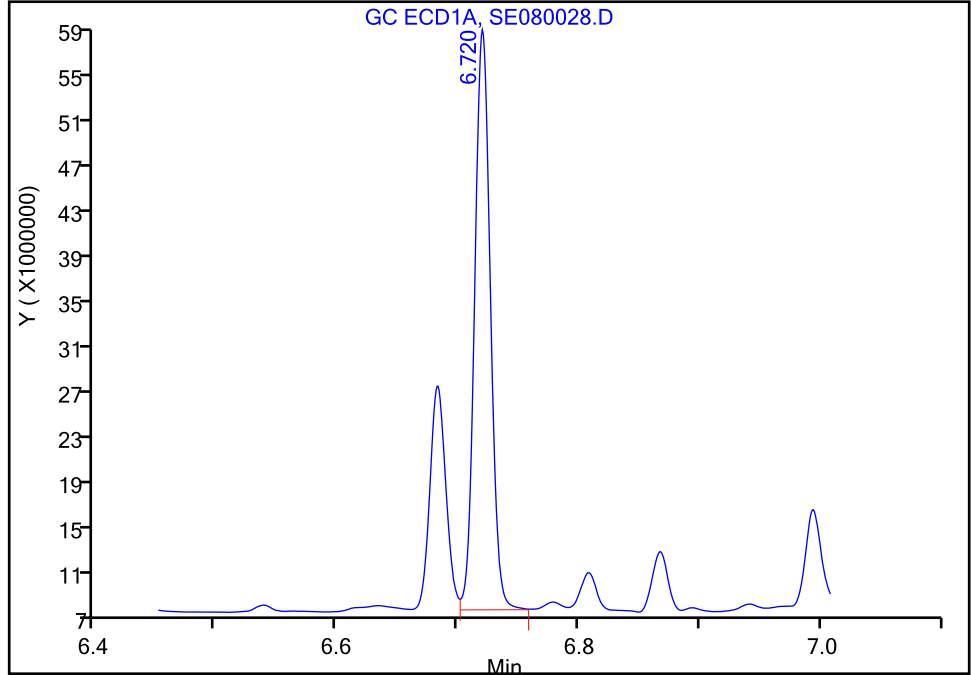
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

7 Dicamba, CAS: 1918-00-9

Signal: 1

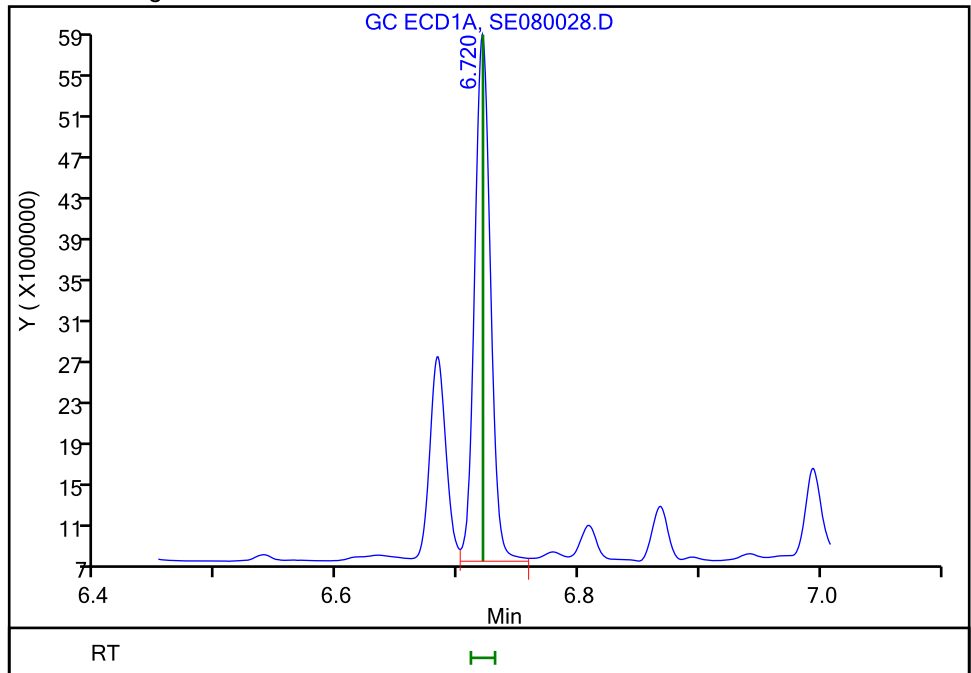
RT: 6.72
Area: 45383724
Amount: 0.042139
Amount Units: ug/ml

Processing Integration Results



RT: 6.72
Area: 46122338
Amount: 0.042824
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

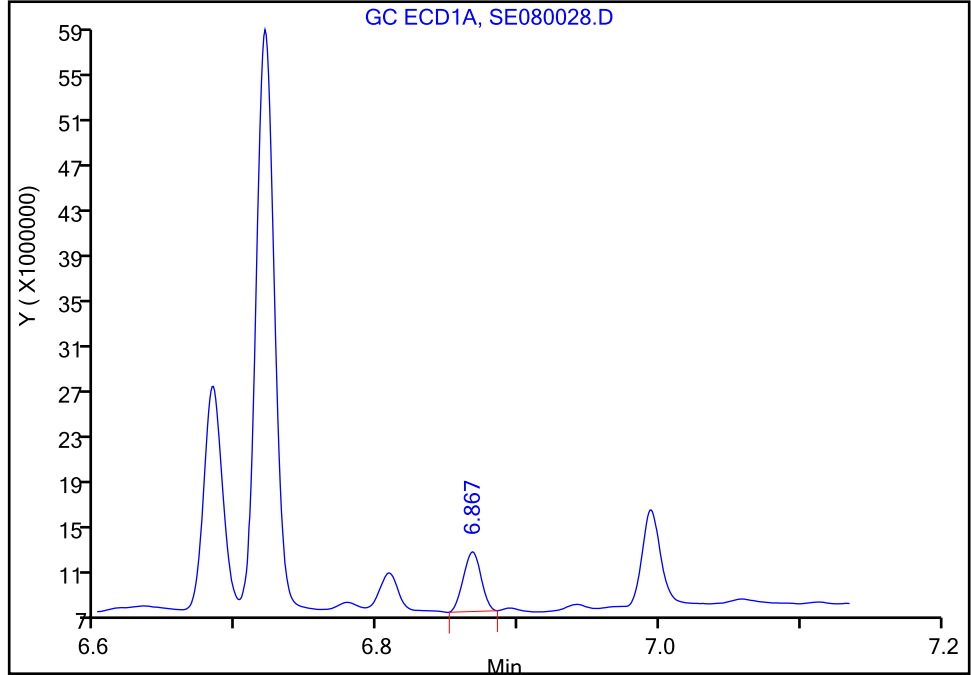
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

8 MCPP, CAS: 93-65-2

Signal: 1

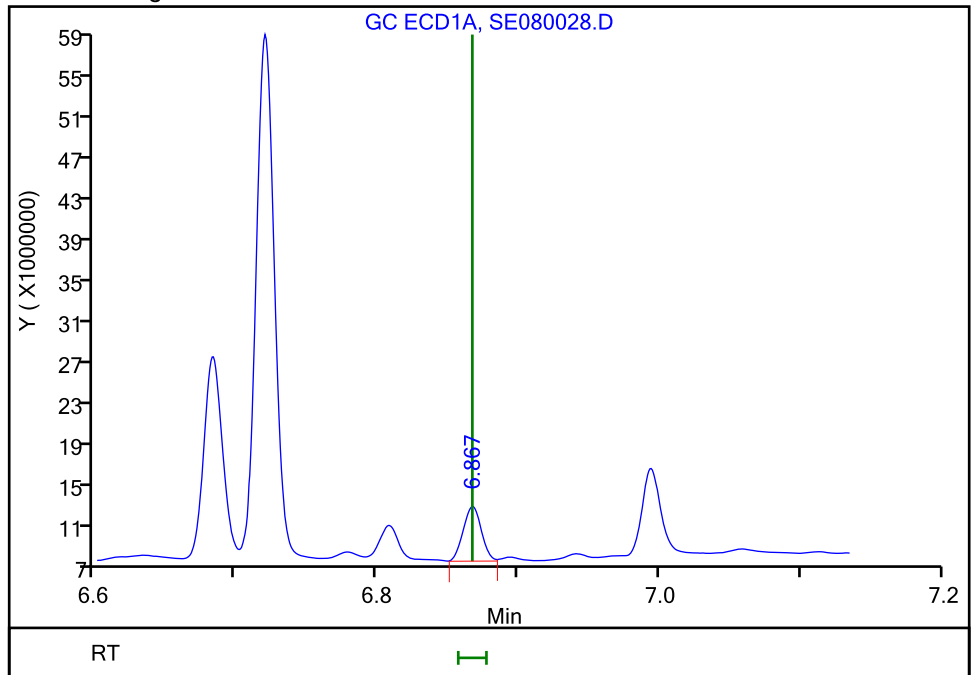
RT: 6.87
Area: 4516934
Amount: 9.550371
Amount Units: ug/ml

Processing Integration Results



RT: 6.87
Area: 4690034
Amount: 9.853576
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:14
Audit Action: Assigned New Baseline

TestAmerica Savannah

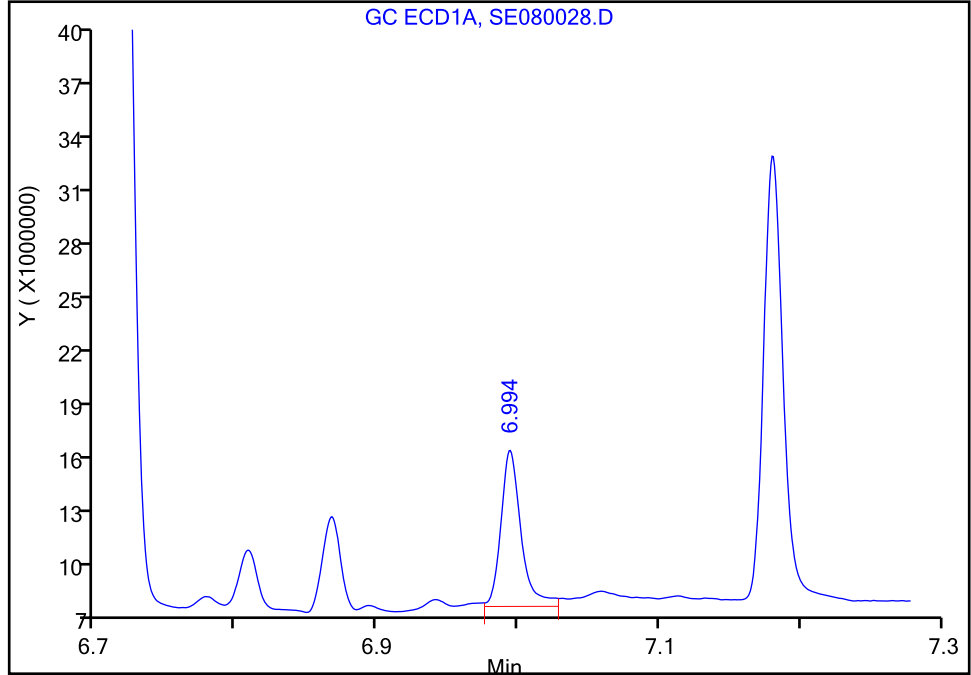
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

9 MCPA, CAS: 94-74-6

Signal: 1

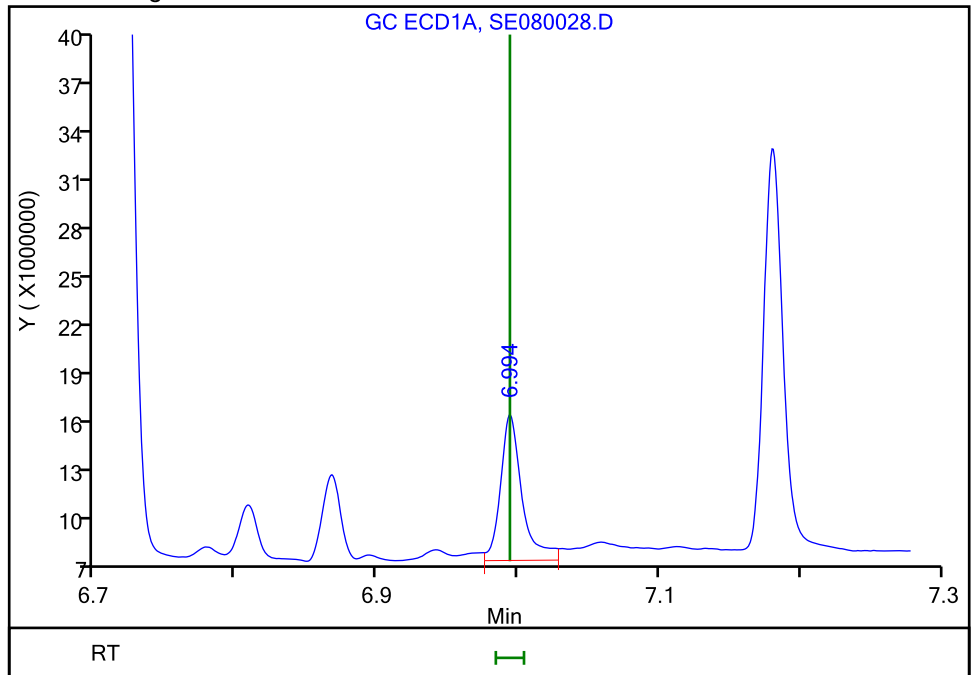
RT: 6.99
Area: 8493762
Amount: 9.172845
Amount Units: ug/ml

Processing Integration Results



RT: 6.99
Area: 9354886
Amount: 10.102816
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

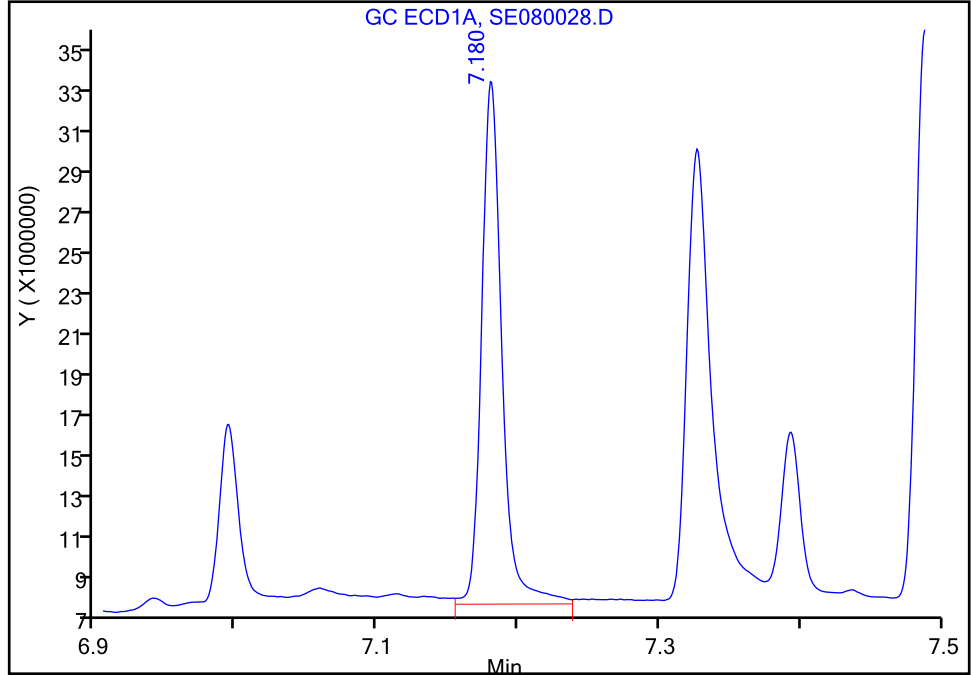
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

10 Dichlorprop, CAS: 120-36-5

Signal: 1

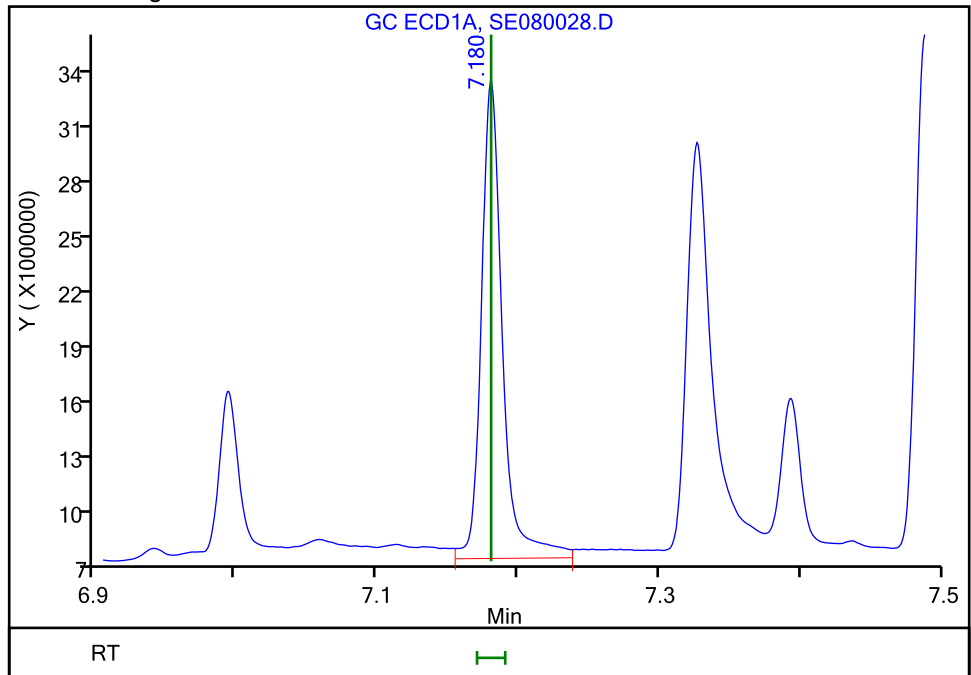
RT: 7.18
Area: 24664605
Amount: 0.088882
Amount Units: ug/ml

Processing Integration Results



RT: 7.18
Area: 25840205
Amount: 0.093119
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

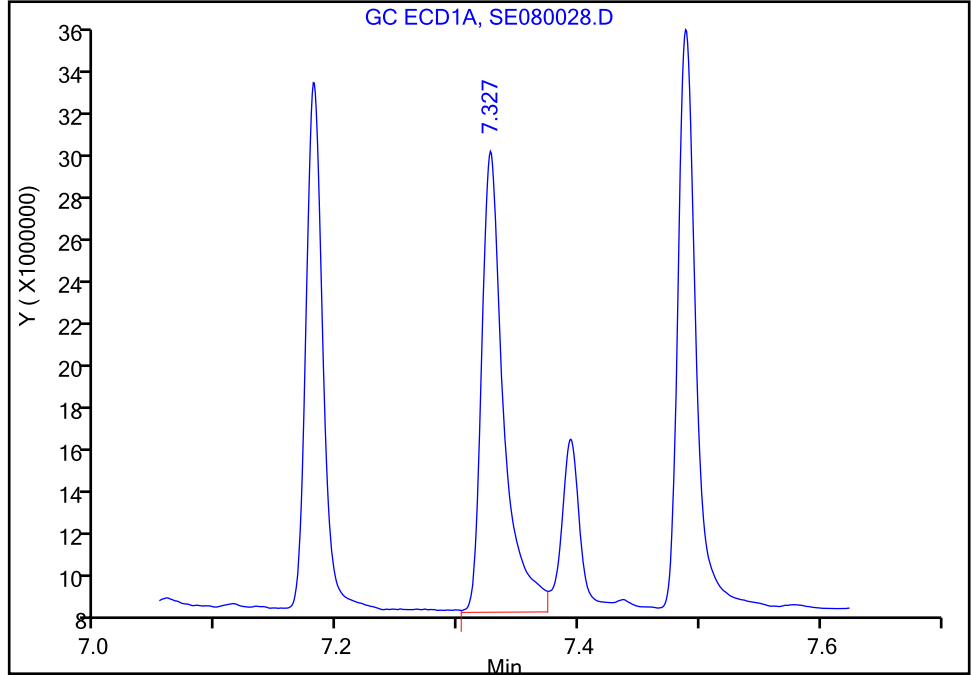
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

11 2,4-D, CAS: 94-75-7

Signal: 1

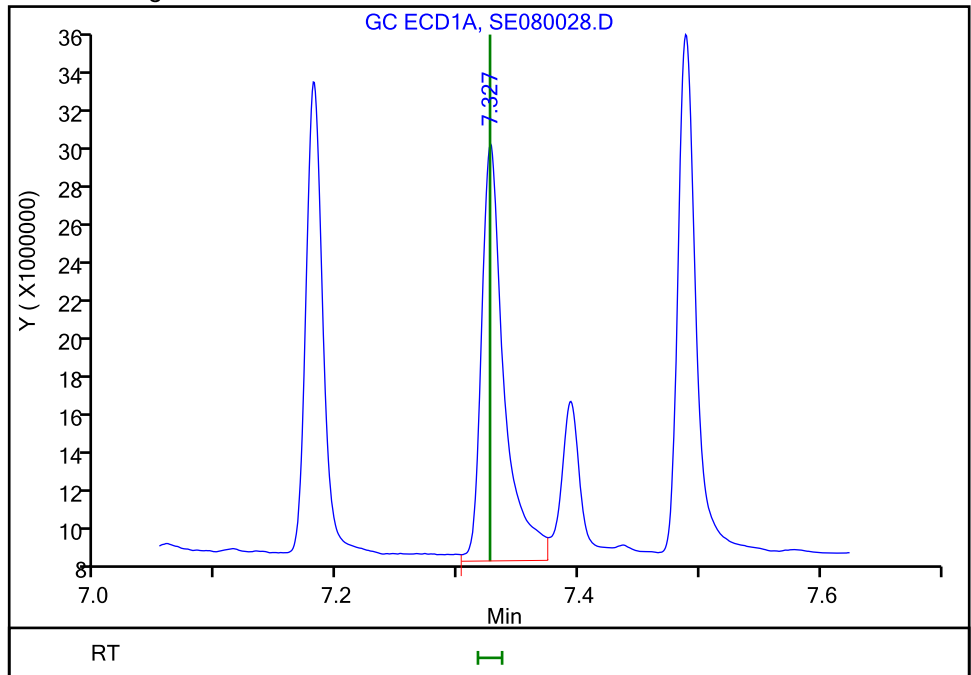
RT: 7.33
Area: 26942730
Amount: 0.089096
Amount Units: ug/ml

Processing Integration Results



RT: 7.33
Area: 27939986
Amount: 0.092394
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

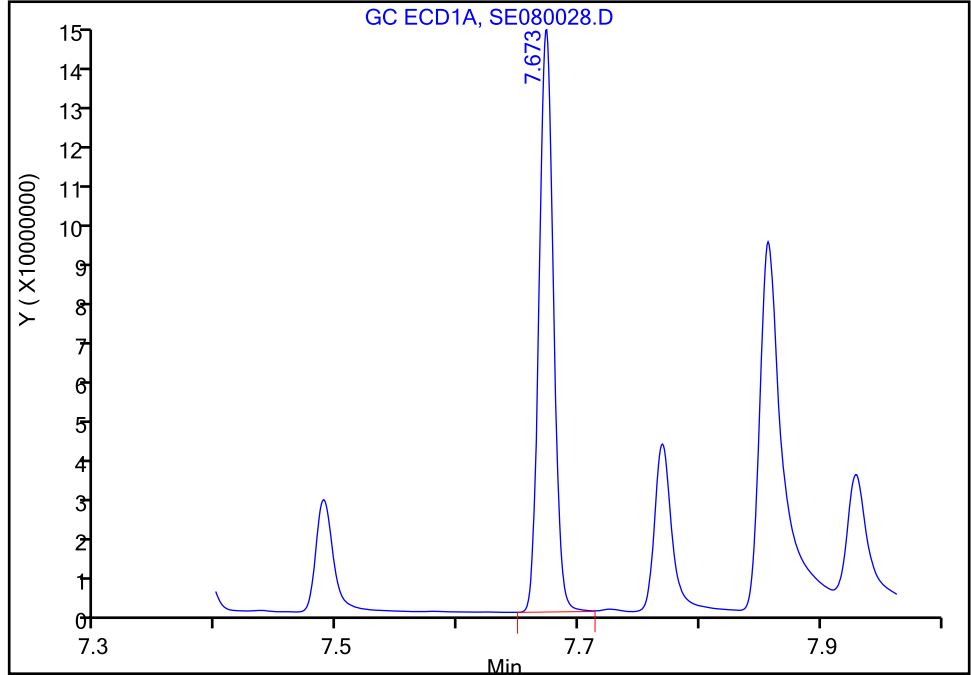
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

12 Pentachlorophenol, CAS: 87-86-5

Signal: 1

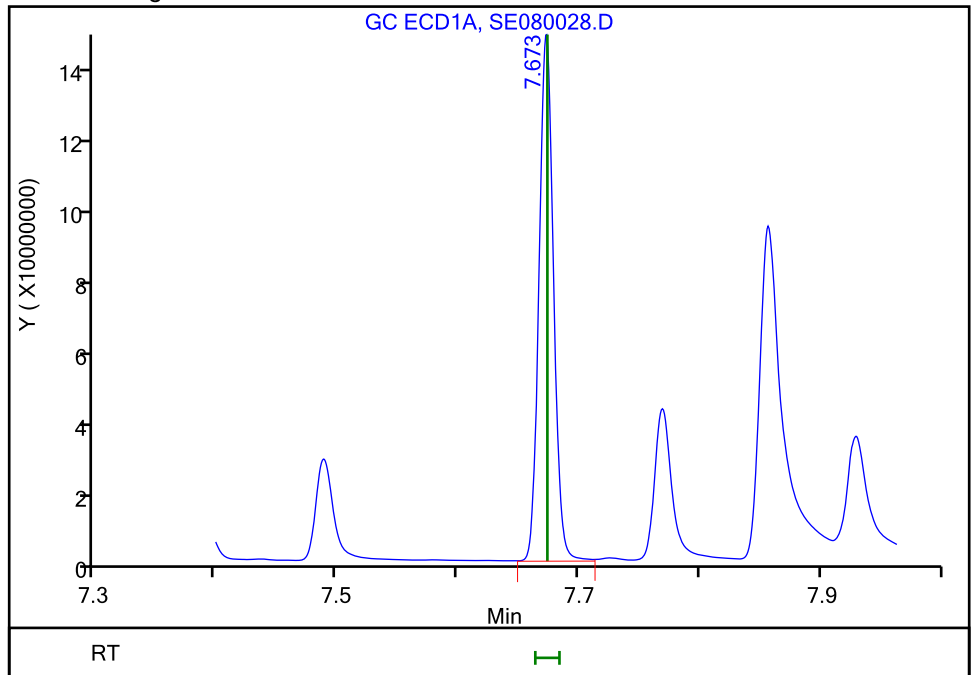
RT: 7.67
Area: 115029769
Amount: 0.021366
Amount Units: ug/ml

Processing Integration Results



RT: 7.67
Area: 115836502
Amount: 0.021515
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

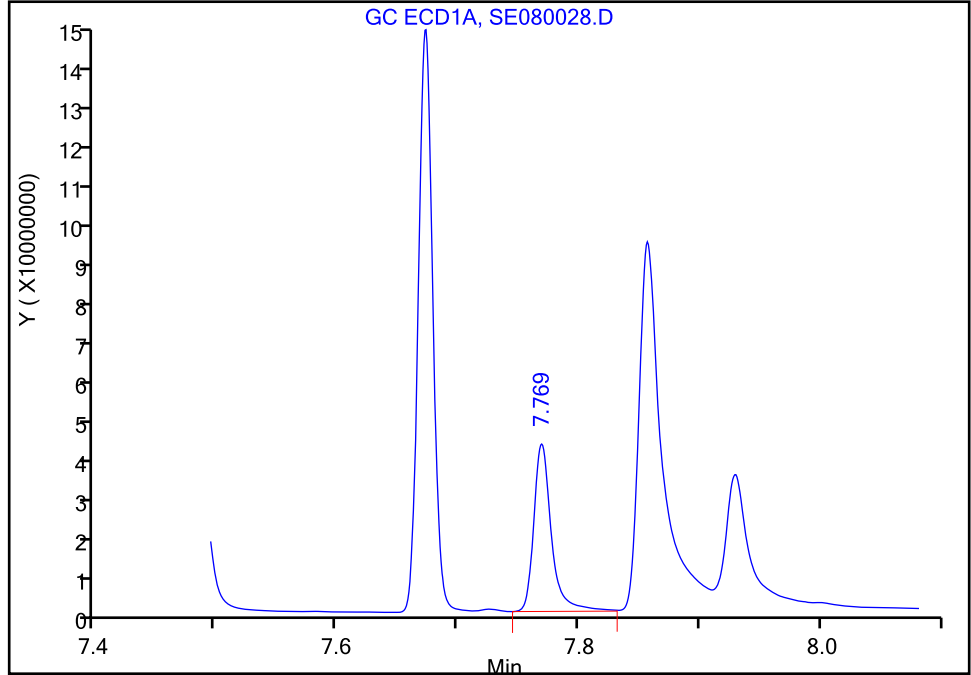
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 1

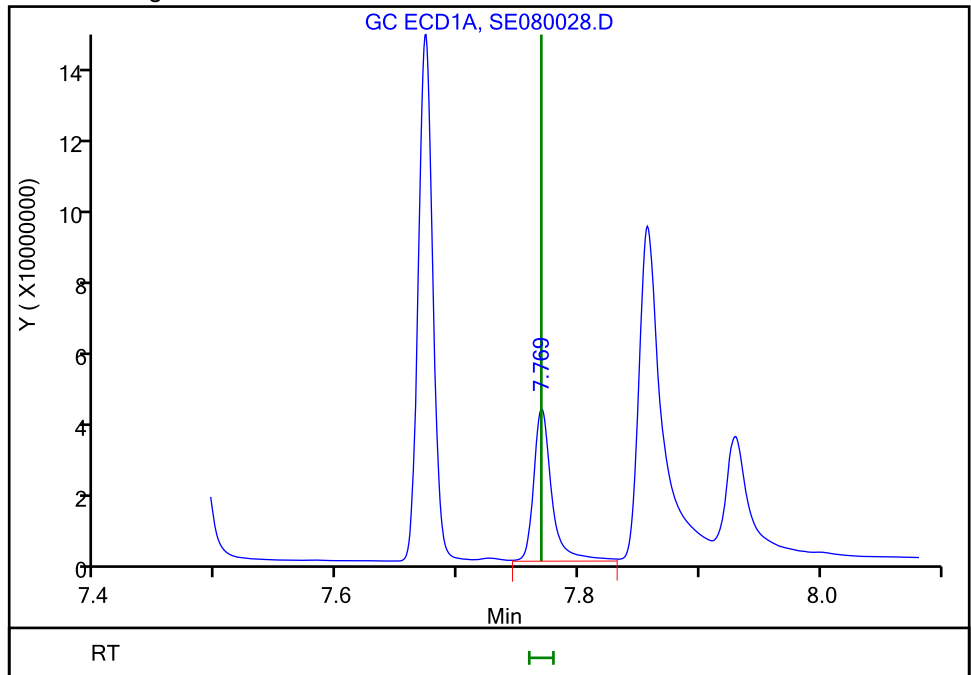
RT: 7.77
Area: 40488427
Amount: 0.021551
Amount Units: ug/ml

Processing Integration Results



RT: 7.77
Area: 41916828
Amount: 0.022311
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

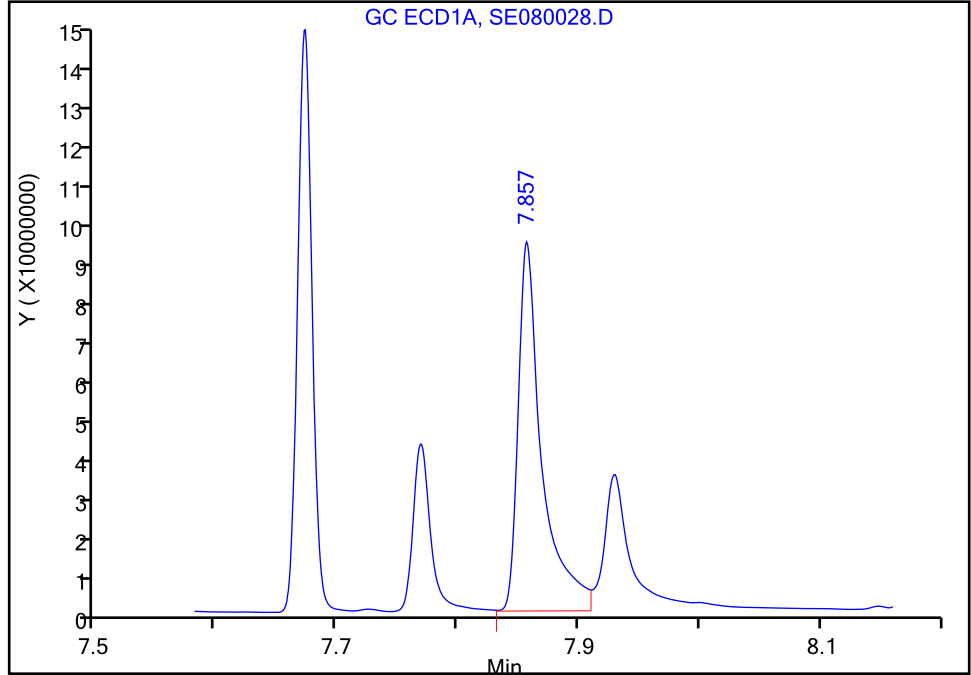
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

14 Chloramben, CAS: 133-90-4

Signal: 1

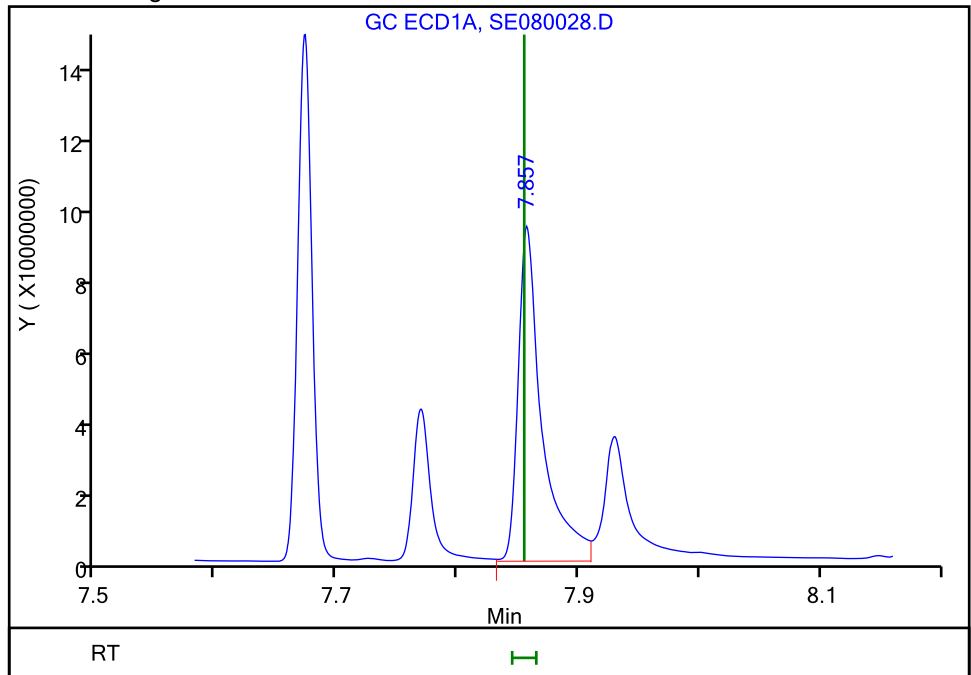
RT: 7.86
Area: 119097819
Amount: 0.081002
Amount Units: ug/ml

Processing Integration Results



RT: 7.86
Area: 120589270
Amount: 0.081859
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

TestAmerica Savannah

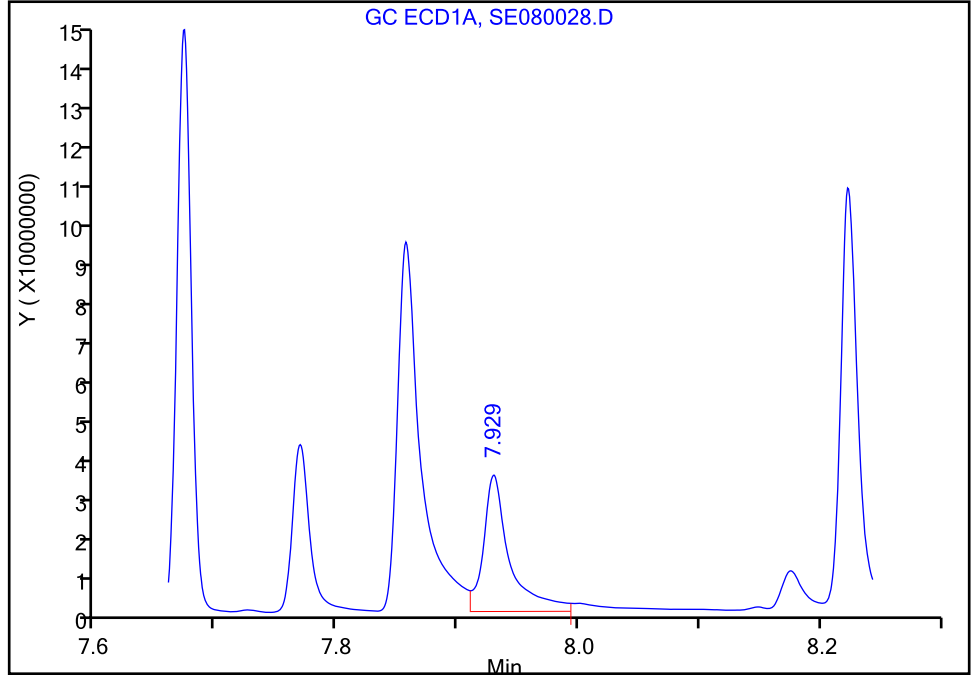
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

15 2,4,5-T, CAS: 93-76-5

Signal: 1

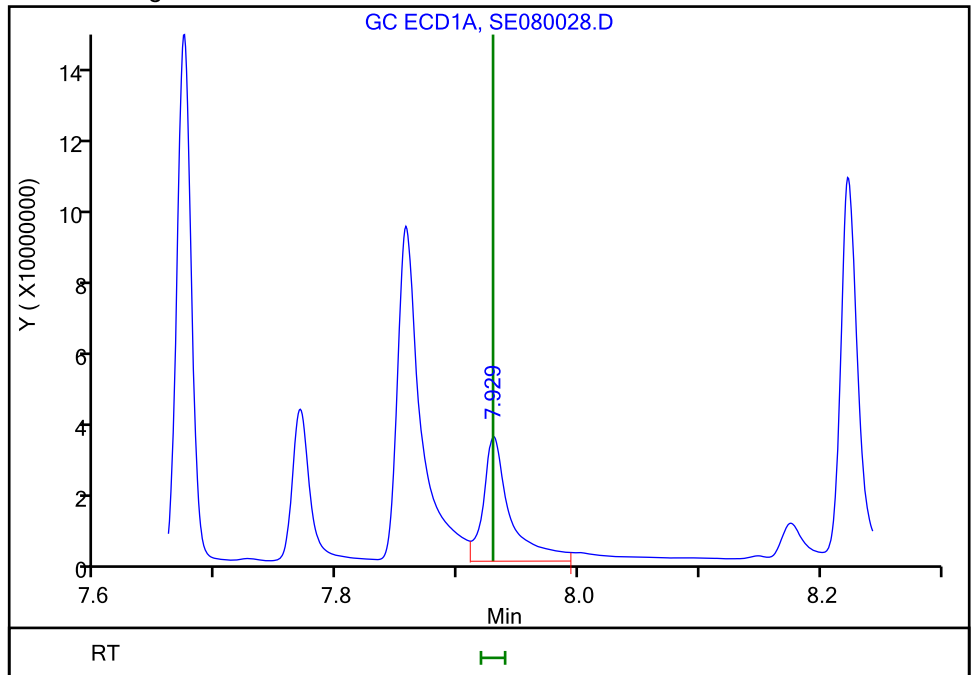
RT: 7.93
Area: 48927313
Amount: 0.022302
Amount Units: ug/ml

Processing Integration Results



RT: 7.93
Area: 50606060
Amount: 0.023067
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

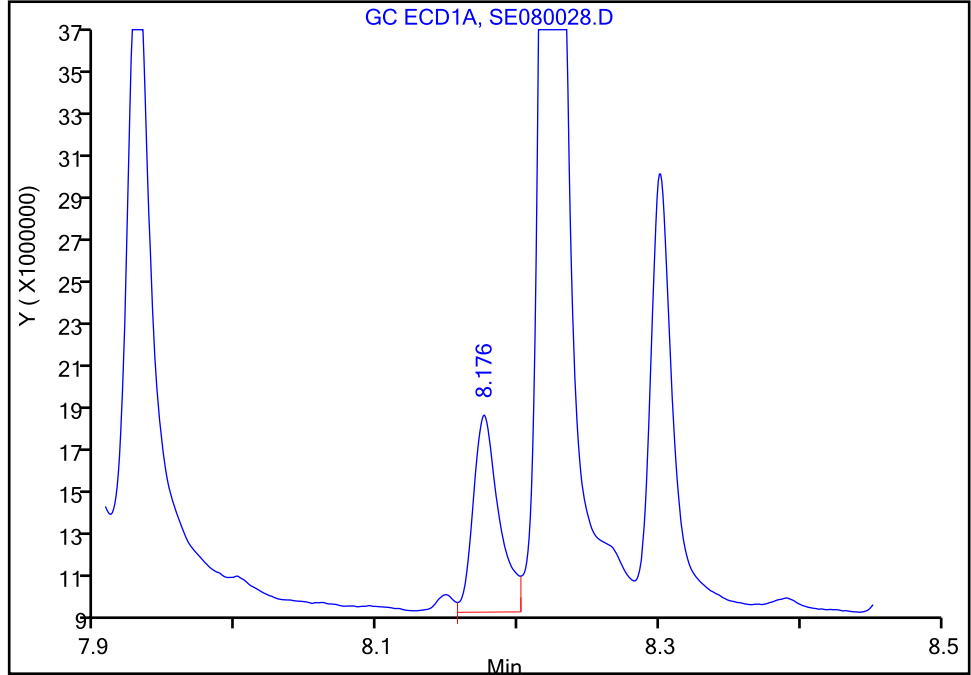
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

16 2,4-DB, CAS: 94-82-6

Signal: 1

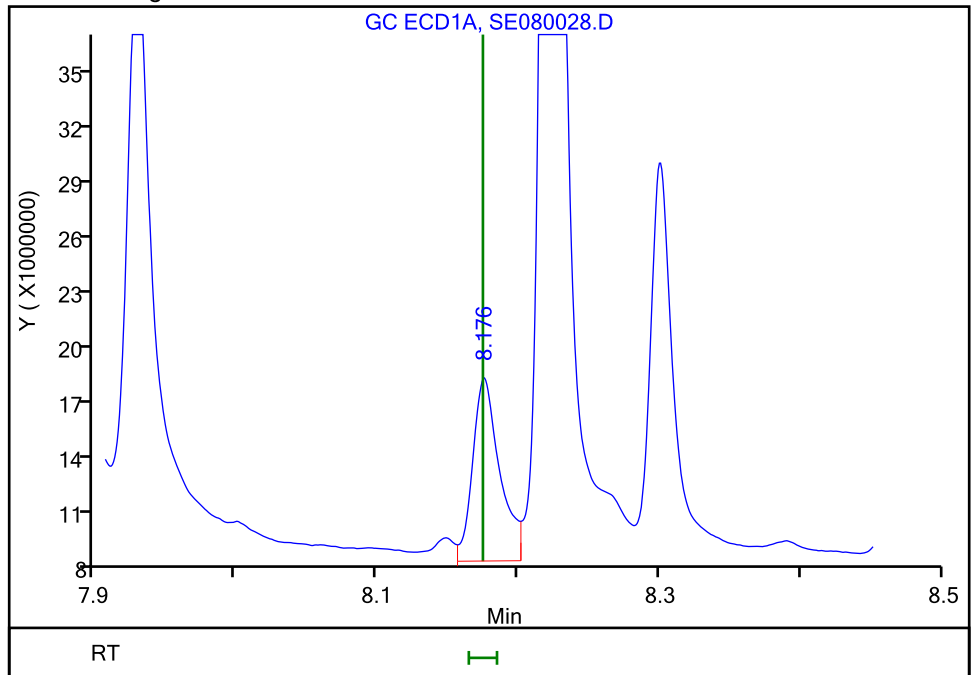
RT: 8.18
Area: 12042105
Amount: 0.082623
Amount Units: ug/ml

Processing Integration Results



RT: 8.18
Area: 13148444
Amount: 0.088814
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

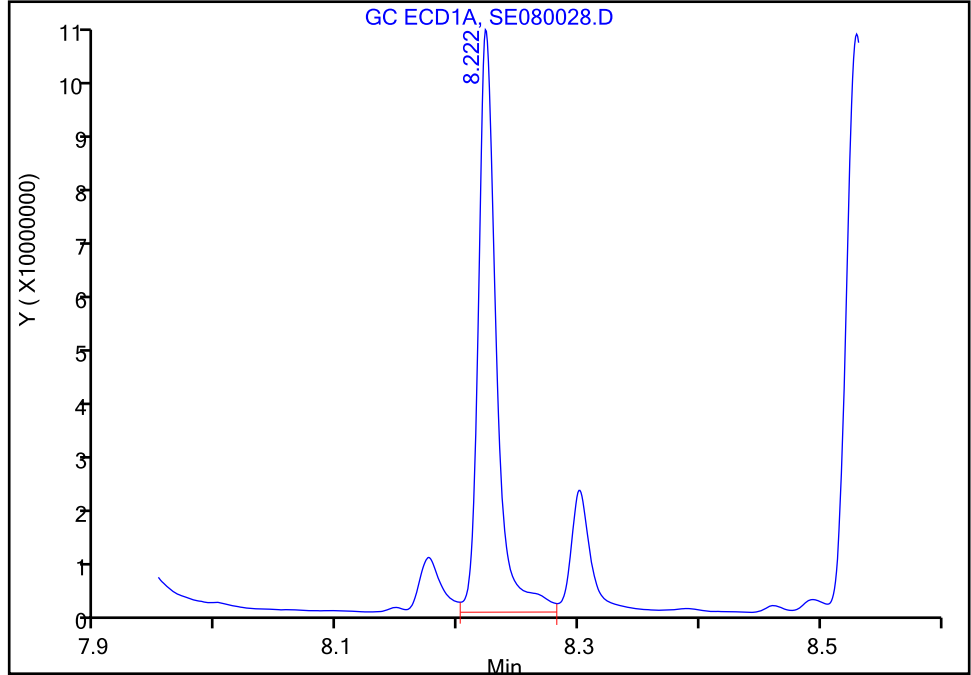
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

17 Dinoseb, CAS: 88-85-7

Signal: 1

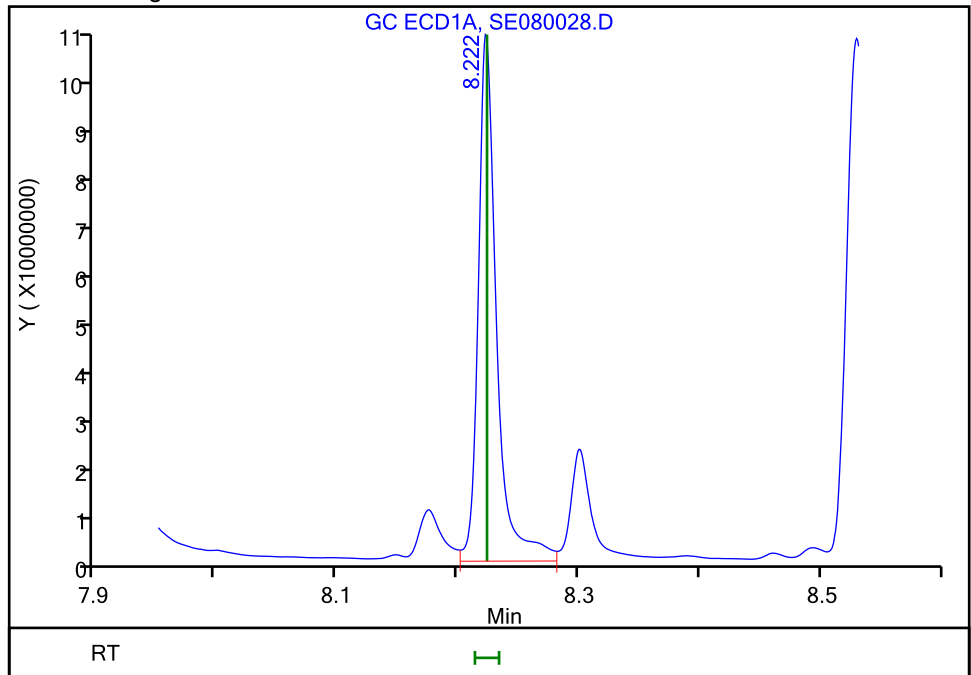
RT: 8.22
Area: 104391134
Amount: 0.085294
Amount Units: ug/ml

Processing Integration Results



RT: 8.22
Area: 106303543
Amount: 0.086857
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

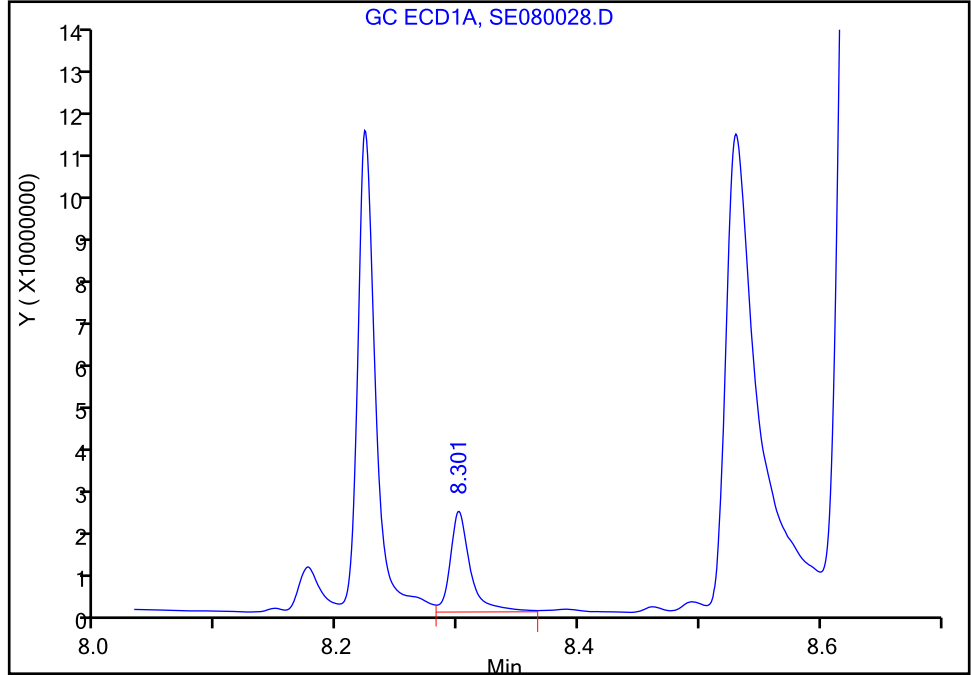
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

18 Bentazon, CAS: 25057-89-0

Signal: 1

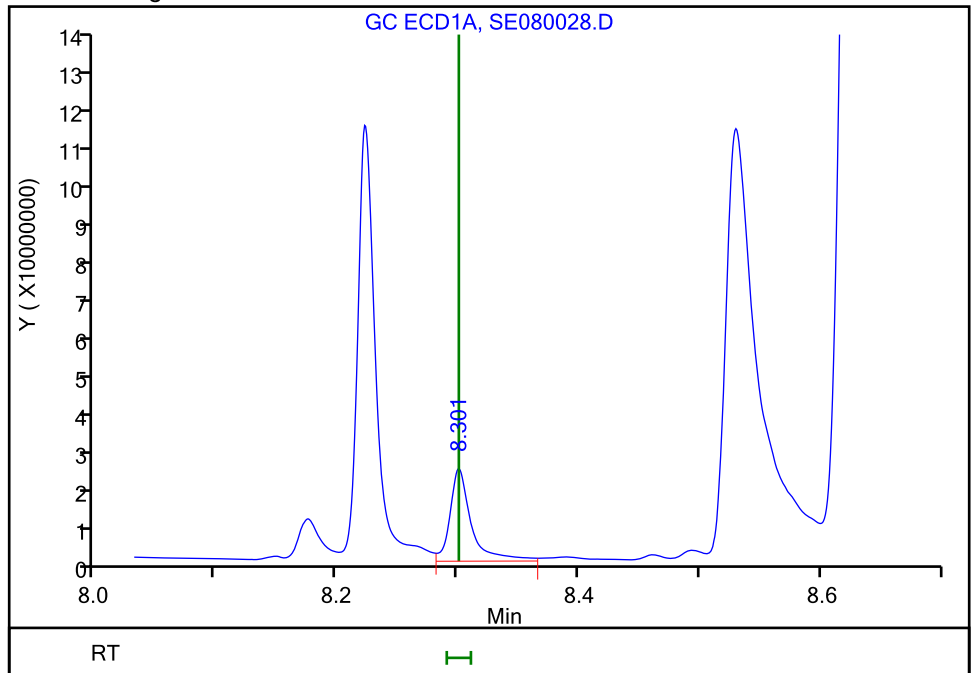
RT: 8.30
Area: 24343283
Amount: 0.084657
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 26331660
Amount: 0.091572
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

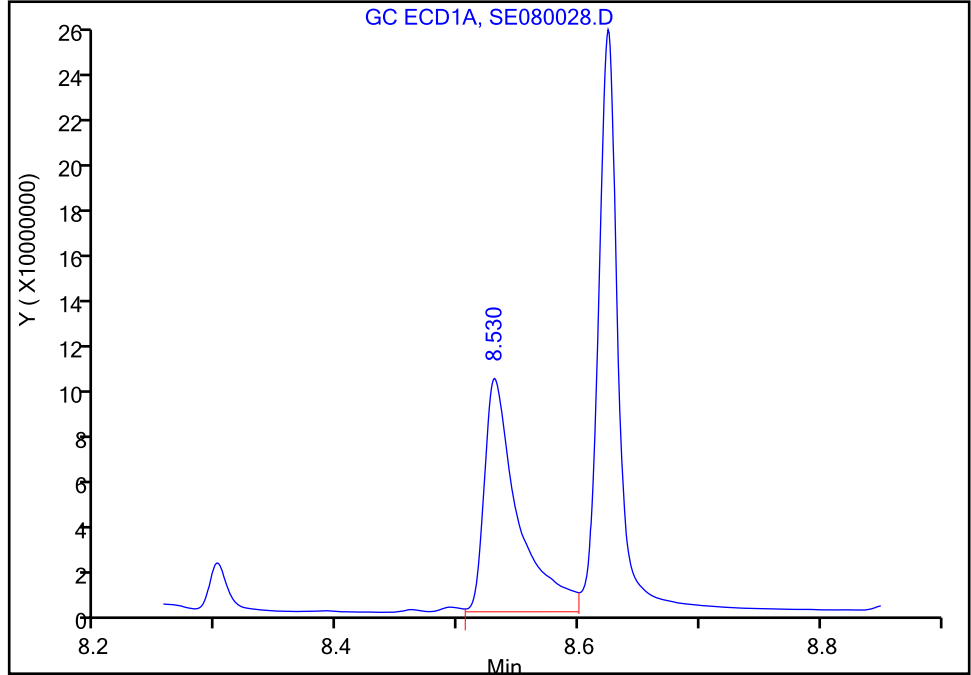
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

19 Picloram, CAS: 1918-02-1

Signal: 1

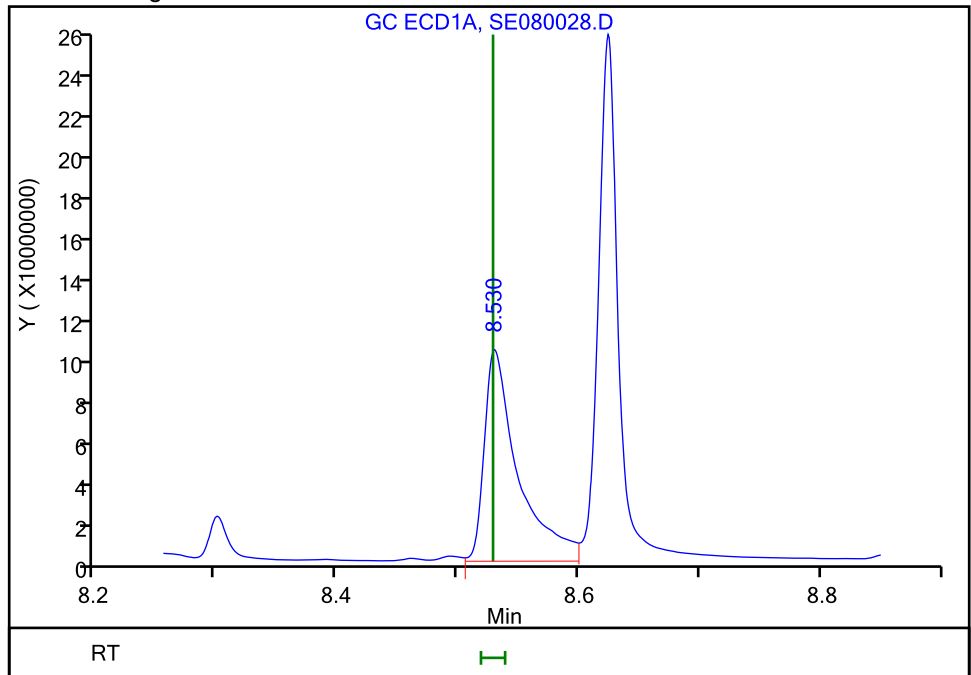
RT: 8.53
Area: 191152812
Amount: 0.082598
Amount Units: ug/ml

Processing Integration Results



RT: 8.53
Area: 193401540
Amount: 0.083421
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

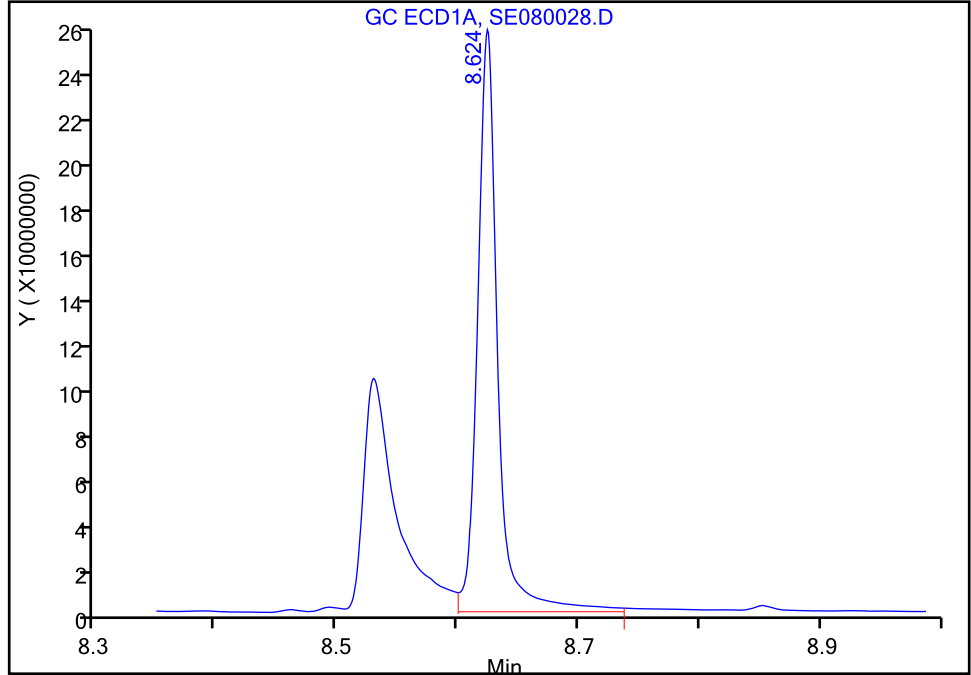
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

20 DCPA, CAS: 1861-32-1

Signal: 1

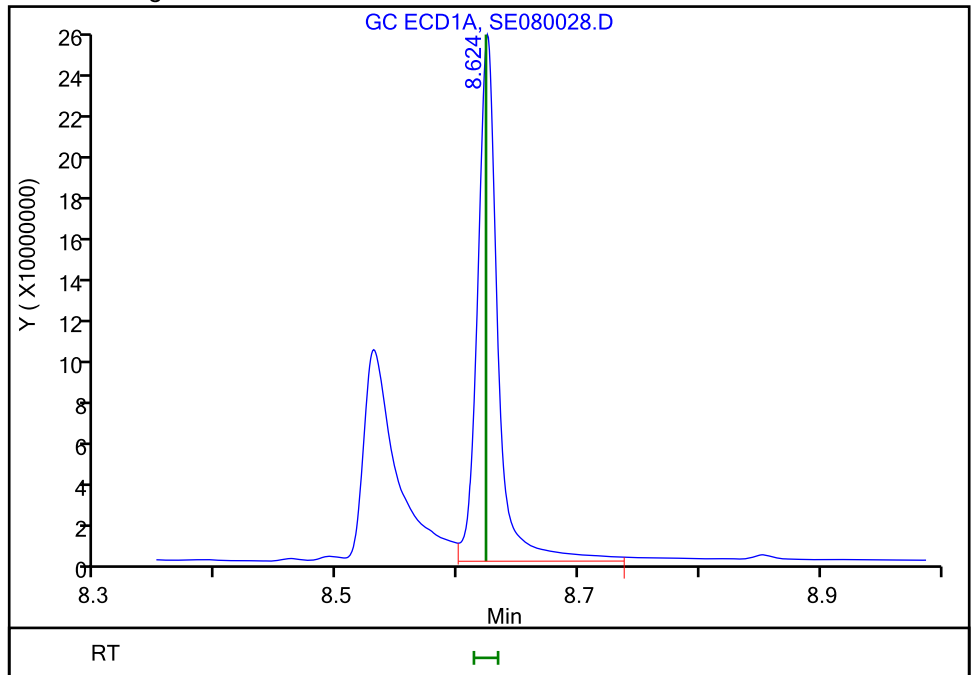
RT: 8.62
Area: 288144985
Amount: 0.087498
Amount Units: ug/ml

Processing Integration Results



RT: 8.62
Area: 290942878
Amount: 0.088348
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

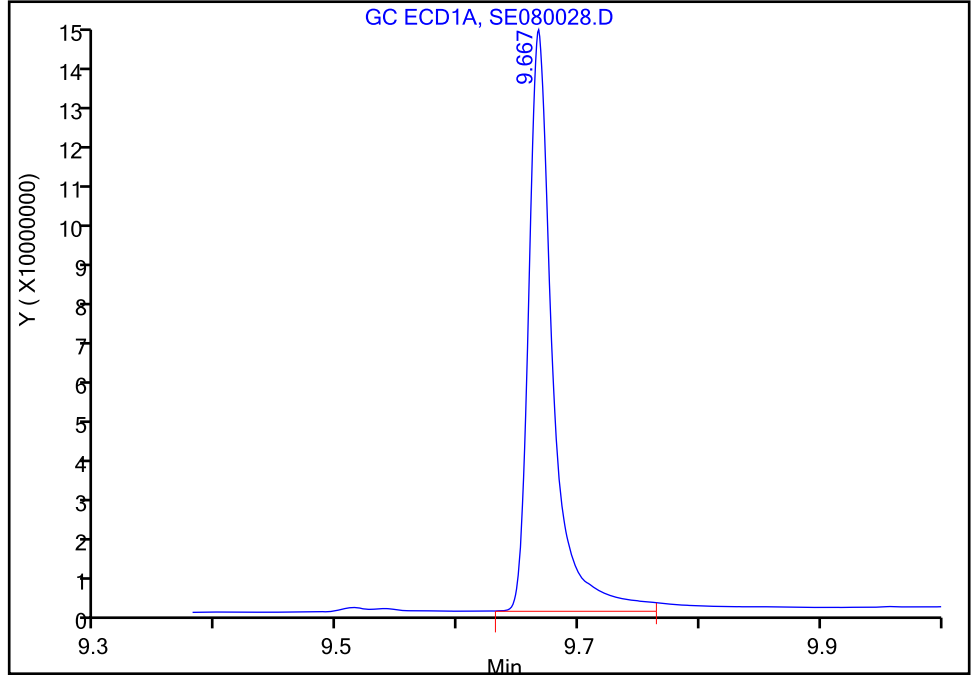
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector: GC ECD1A

21 Acifluorfen, CAS: 50594-66-6

Signal: 1

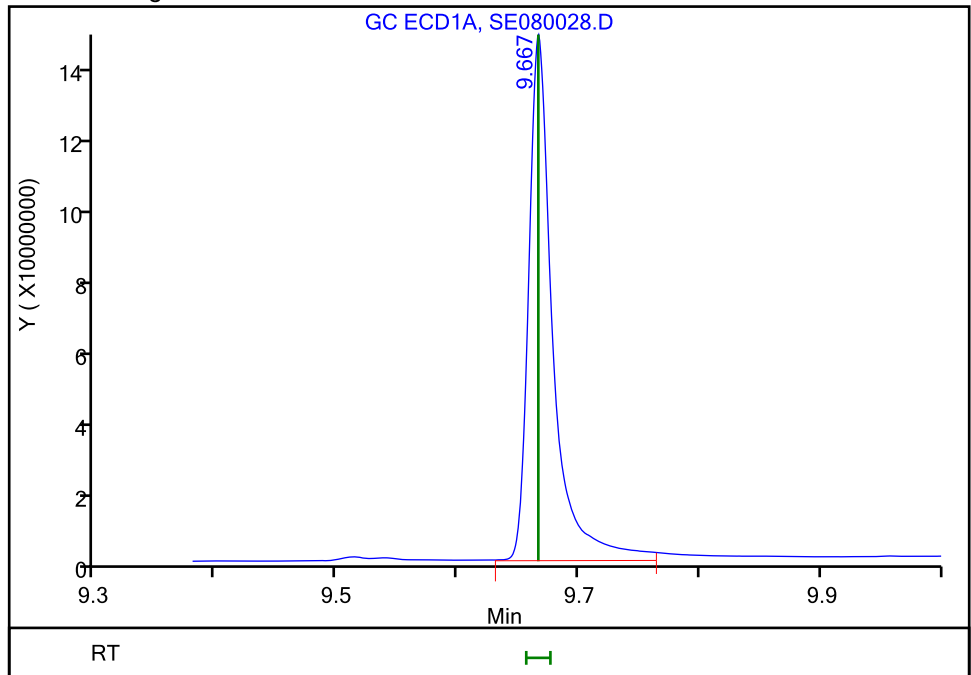
RT: 9.67
Area: 195467381
Amount: 0.086624
Amount Units: ug/ml

Processing Integration Results



RT: 9.67
Area: 196204957
Amount: 0.086919
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:18
Audit Action: Assigned New Baseline

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1246830710		0.0774	0.100	-22.6*	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1468472240		0.0817	0.100	-18.3	20.0
4-Nitrophenol	Ave	299039718	261483920		0.0874	0.100	-12.6	20.0
Dicamba	Ave	5009061262	4102166040		0.0409	0.0500	-18.1	20.0
MCPP	Lin2		4258166		8.89	10.0	-11.1	20.0
MCPA	QuaF		6563030		11.6	10.0	15.7	20.0
Dichlorprop	Ave	1409813393	1172228420		0.0831	0.100	-16.9	20.0
2,4-D	Ave	1593535987	1336273560		0.0839	0.100	-16.1	20.0
Pentachlorophenol	Ave	18808678996	15992619040		0.0213	0.0250	-15.0	20.0
Silvex (2,4,5-TP)	Ave	7391322149	6239752040		0.0211	0.0250	-15.6	20.0
2,4,5-T	Ave	6646535168	5405095440		0.0203	0.0250	-18.7	20.0
Chloramben	Ave	5625509945	4579695330		0.0814	0.100	-18.6	20.0
Dinoseb	Lin1		3102768450		0.0737	0.100	-26.3*	20.0
2,4-DB	Ave	986290097	916372090		0.0929	0.100	-7.1	20.0
Bentazon	Ave	803969083	674921560		0.0839	0.100	-16.1	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	8428414340		0.0858	0.100	-14.2	20.0
Picloram	Lin1		6868819520		0.0704	0.100	-29.6*	20.0
Acifluorfen	Qua		5380410960		0.0817	0.100	-18.3	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1161179490		0.0825	0.100	-17.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/28 Calibration Date: 05/08/2018 21:40
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.51	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.15	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.71	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.79	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
 Lims ID: ccv h4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2018 21:40:11 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-028
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:37:48 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.578	2.579	-0.001	40734619	0.1000	0.0777	
2	2.632	2.632	0.000	124683071	0.1000	0.0774	
						RPD = 0.48	
2 2,6-Dichlorophenol							
1	5.016	5.015	0.001	8885882	NC	NC	
2	5.102	5.102	0.000	45742372	NC	NC	
						RPD = 7.11	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	104333704	NC	NC	
2	5.776	5.776	0.000	435611631	NC	NC	
						RPD = 2.76	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	28317334	0.1000	0.0881	
2	6.116	6.116	0.000	146847224	0.1000	0.0817	
						RPD = 7.52	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	9190153	0.1000	0.0994	
2	6.505	6.505	0.000	26148392	0.1000	0.0874	
						RPD = 12.80	
\$ 6 2,4-Dichlorophenylacetic acid M							
1	6.683	6.683	0.000	18377296	0.1000	0.0869	M
2	6.828	6.829	-0.001	116117949	0.1000	0.0825	M
						RPD = 5.21	
7 Dicamba M							
1	6.720	6.720	0.000	46122338	0.0500	0.0428	M
2	6.911	6.910	0.001	205108302	0.0500	0.0409	M
						RPD = 4.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4690034	10.0	9.85	M
2	6.956	6.955	0.001	42581663	10.0	8.89	M
							RPD = 10.31
9 MCPA							M
1	6.994	6.994	0.000	9354886	10.0	10.1	M
2	7.153	7.155	-0.002	65630302	10.0	11.6	M
							RPD = 13.55
10 Dichlorprop							M
1	7.180	7.180	0.000	25840205	0.1000	0.0931	M
2	7.297	7.297	0.000	117222842	0.1000	0.0831	M
							RPD = 11.31
11 2,4-D							M
1	7.327	7.326	0.001	27939986	0.1000	0.0924	M
2	7.517	7.517	0.000	133627356	0.1000	0.0839	M
							RPD = 9.69
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	115836502	0.0250	0.0215	M
2	7.713	7.714	-0.001	399815476	0.0250	0.0213	M
							RPD = 1.21
13 Silvex (2,4,5-TP)							M
1	7.769	7.769	0.000	41916828	0.0250	0.0223	M
2	7.847	7.846	0.001	155993801	0.0250	0.0211	M
							RPD = 5.56
14 Chloramben							M
1	7.857	7.855	0.002	120589270	0.1000	0.0819	M
2	8.162	8.162	0.000	457969533	0.1000	0.0814	M
							RPD = 0.55
15 2,4,5-T							M
1	7.929	7.929	0.000	50606060	0.0250	0.0231	M
2	8.083	8.083	0.000	135127386	0.0250	0.0203	M
							RPD = 12.61
16 2,4-DB							M
1	8.176	8.175	0.001	13148444	0.1000	0.0888	M
2	8.302	8.302	0.000	91637209	0.1000	0.0929	M
							RPD = 4.51
17 Dinoseb							M
1	8.222	8.224	-0.002	106303543	0.1000	0.0869	M
2	8.248	8.248	0.000	310276845	0.1000	0.0737	M
							RPD = 16.39
18 Bentazon							M
1	8.301	8.300	0.001	26331660	0.1000	0.0916	M
2	8.663	8.662	0.001	67492156	0.1000	0.0839	M
							RPD = 8.69
19 Picloram							M
1	8.530	8.529	0.001	193401540	0.1000	0.0834	M
2	9.007	9.005	0.002	686881952	0.1000	0.0704	M
							RPD = 16.93

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.624	8.623	0.001	290942878	0.1000	0.0883	M
2	8.777	8.775	0.002	842841434	0.1000	0.0858	M
						RPD = 2.90	

21 Acifluorfen							M
1	9.667	9.666	0.001	196204957	0.1000	0.0869	M
2	9.793	9.792	0.001	538041096	0.1000	0.0817	
						RPD = 6.20	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SGHERB-4_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D

Injection Date: 08-May-2018 21:40:11

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h4

Worklist Smp#: 28

Client ID:

Injection Vol: 1.0 ul

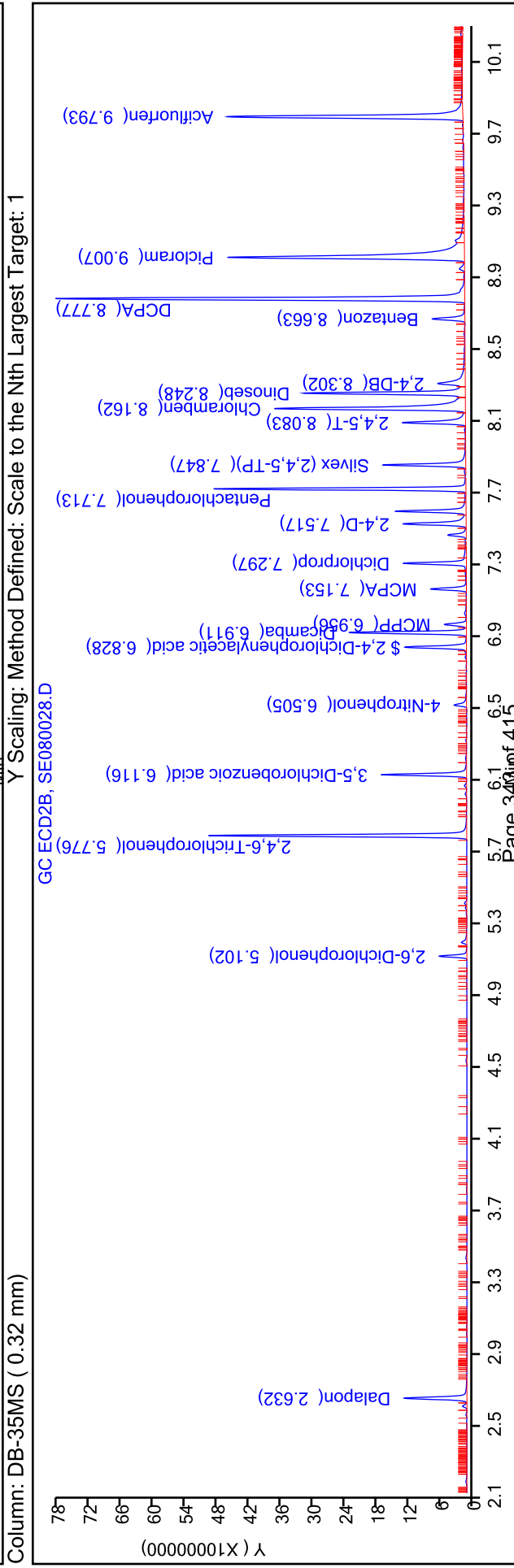
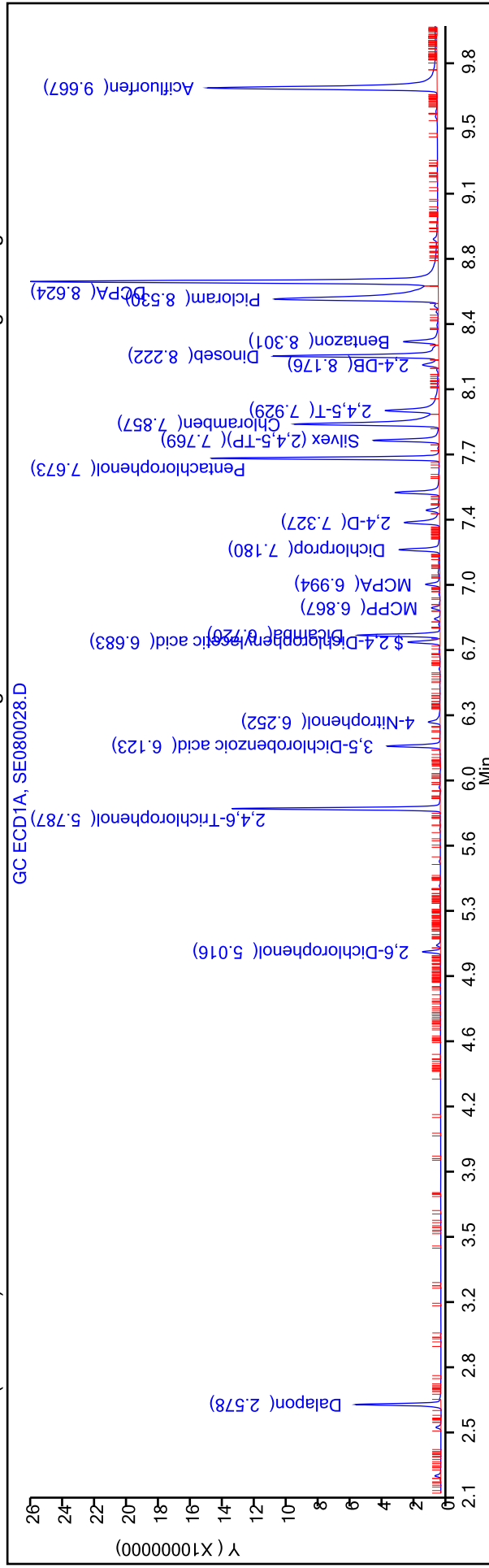
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah

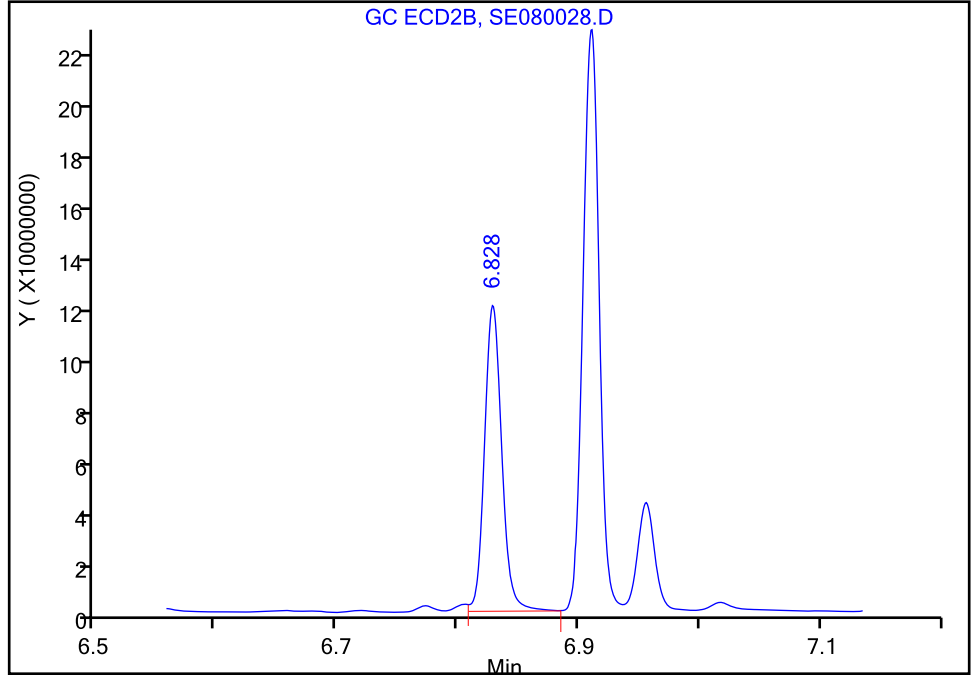
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

\$ 6 2,4-Dichlorophenylacetic acid, CAS: 19719-28-9

Signal: 2

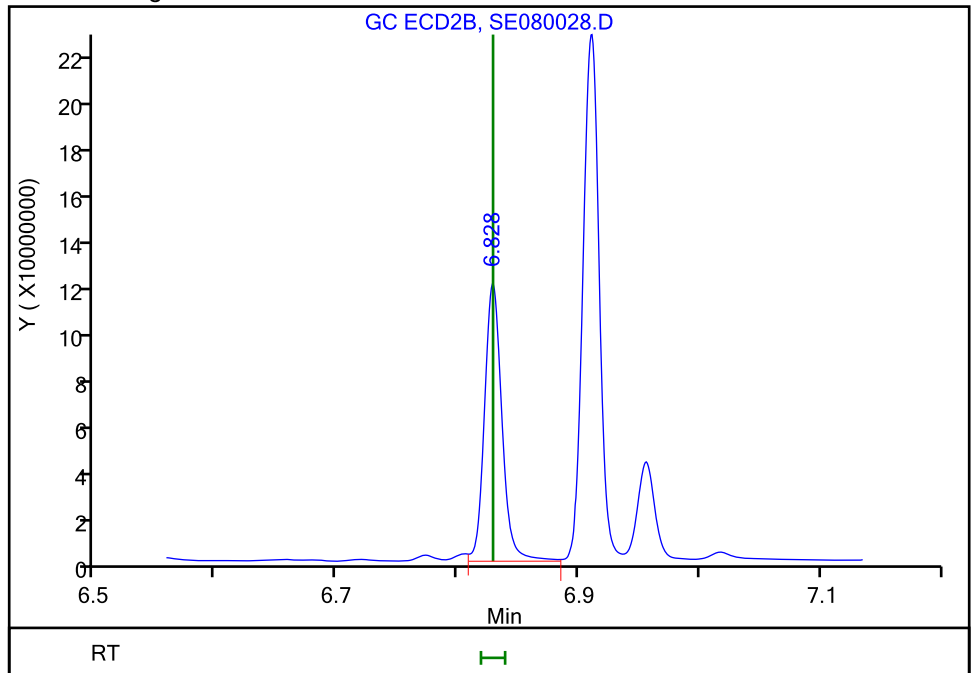
RT: 6.83
Area: 113880445
Amount: 0.080895
Amount Units: ug/ml

Processing Integration Results



RT: 6.83
Area: 116117949
Amount: 0.082484
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

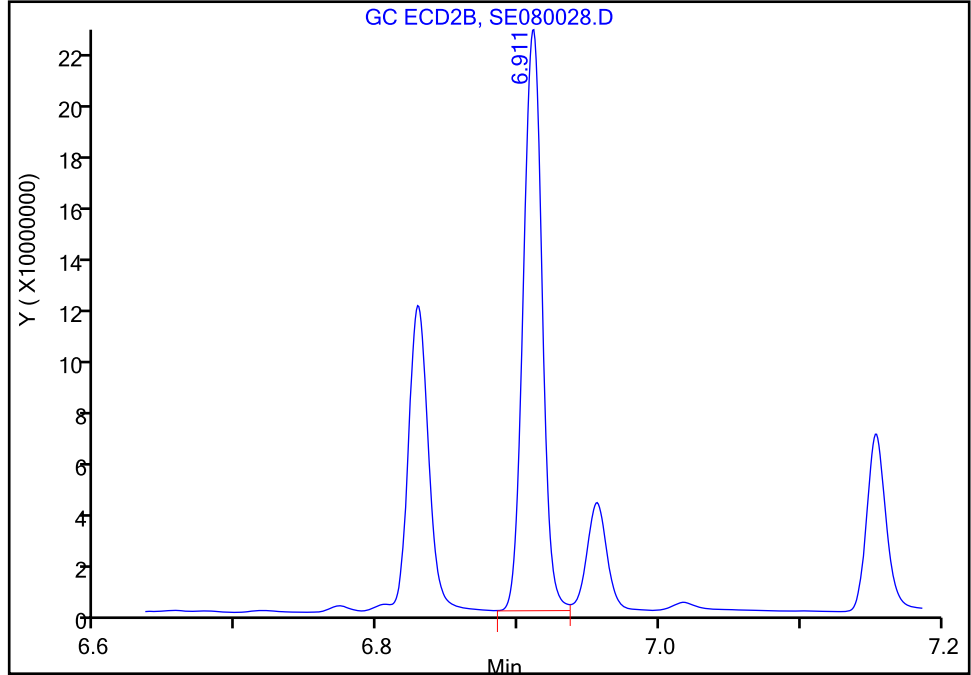
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

7 Dicamba, CAS: 1918-00-9

Signal: 2

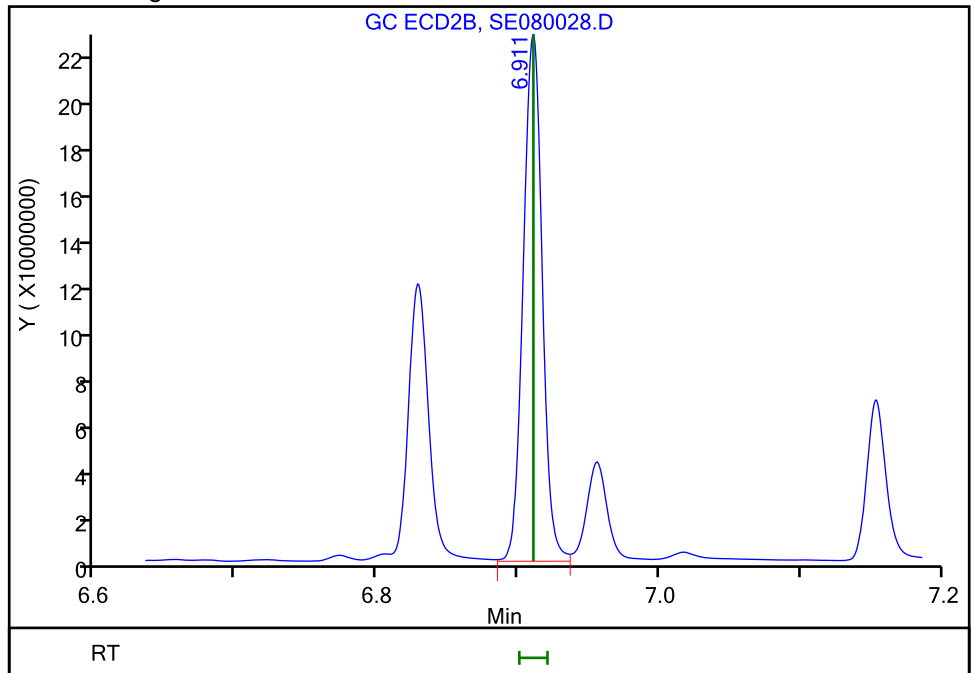
RT: 6.91
Area: 203232530
Amount: 0.040573
Amount Units: ug/ml

Processing Integration Results



RT: 6.91
Area: 205108302
Amount: 0.040947
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:24
Audit Action: Assigned New Baseline

TestAmerica Savannah

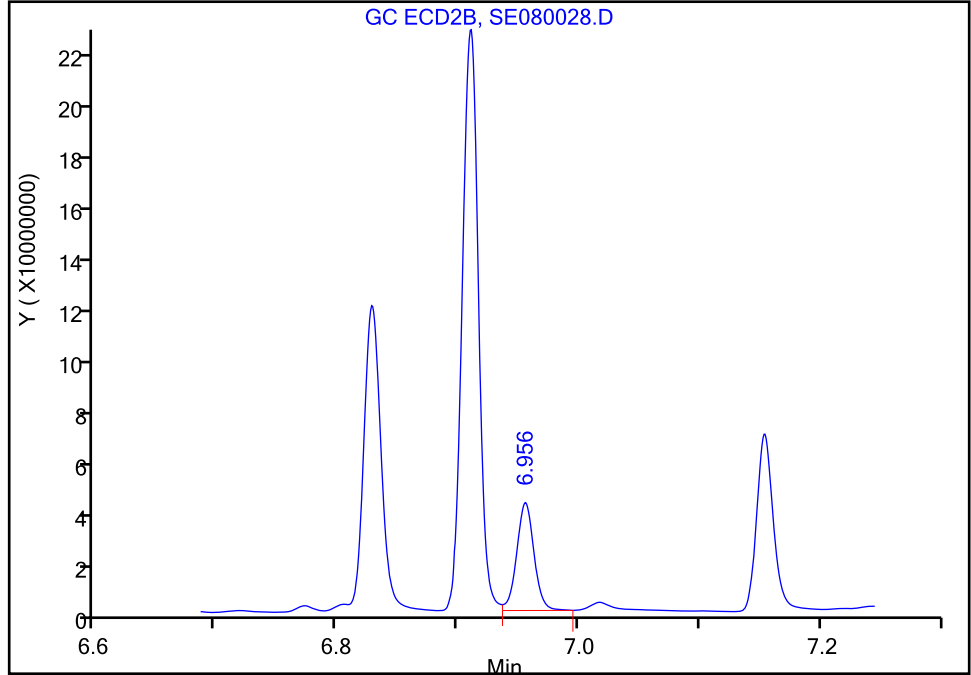
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

8 MCPP, CAS: 93-65-2

Signal: 2

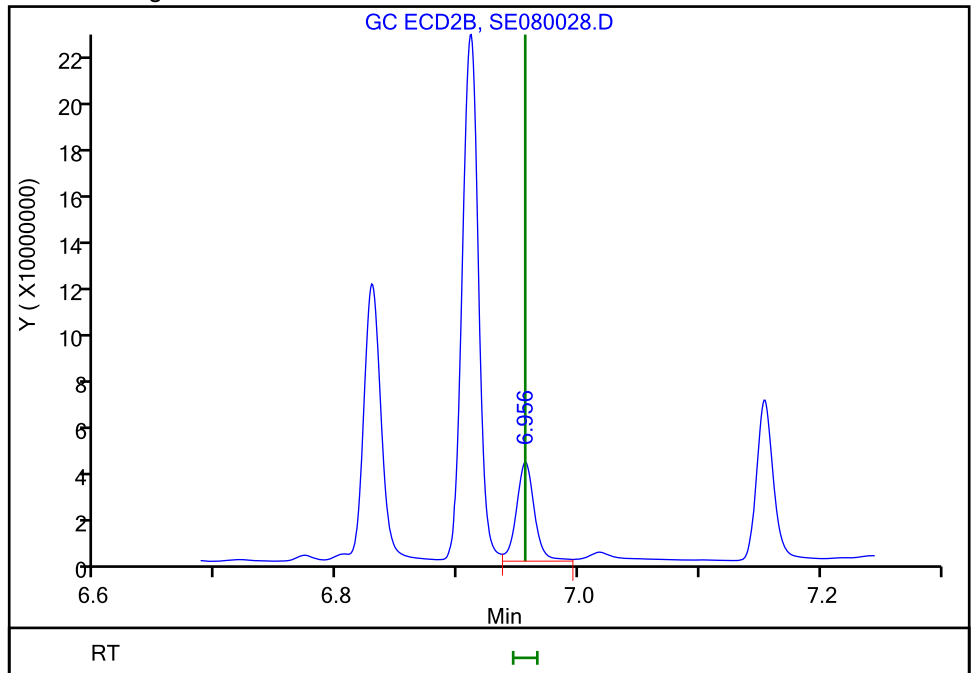
RT: 6.96
Area: 40241793
Amount: 8.351331
Amount Units: ug/ml

Processing Integration Results



RT: 6.96
Area: 42581663
Amount: 8.887386
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:24
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

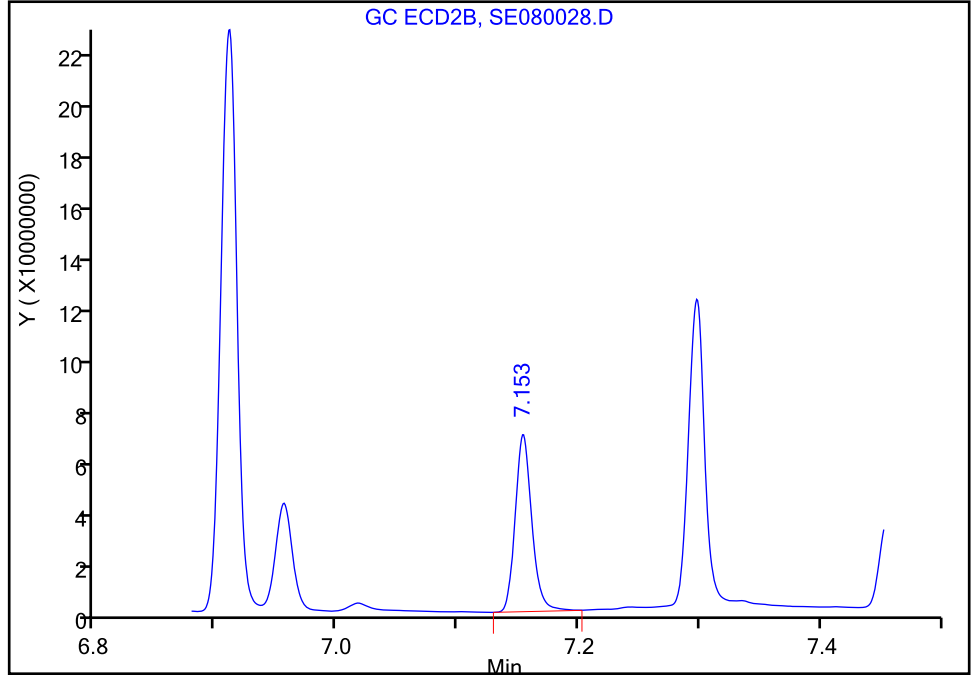
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Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

9 MCPA, CAS: 94-74-6

Signal: 2

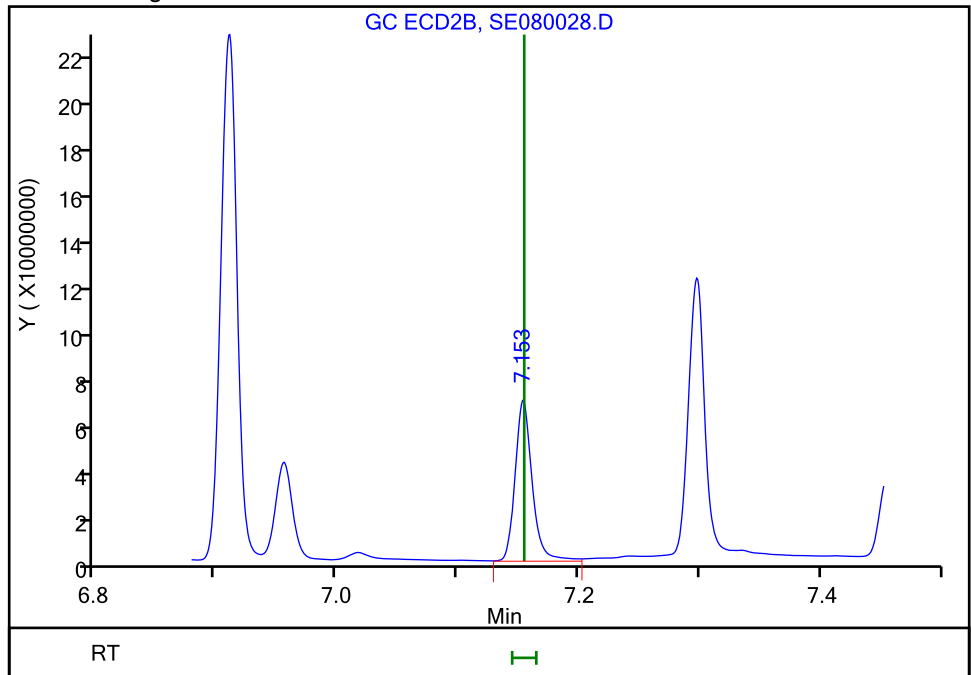
RT: 7.15
Area: 63346761
Amount: 11.214387
Amount Units: ug/ml

Processing Integration Results



RT: 7.15
Area: 65630302
Amount: 11.570777
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:24
Audit Action: Assigned New Baseline

TestAmerica Savannah

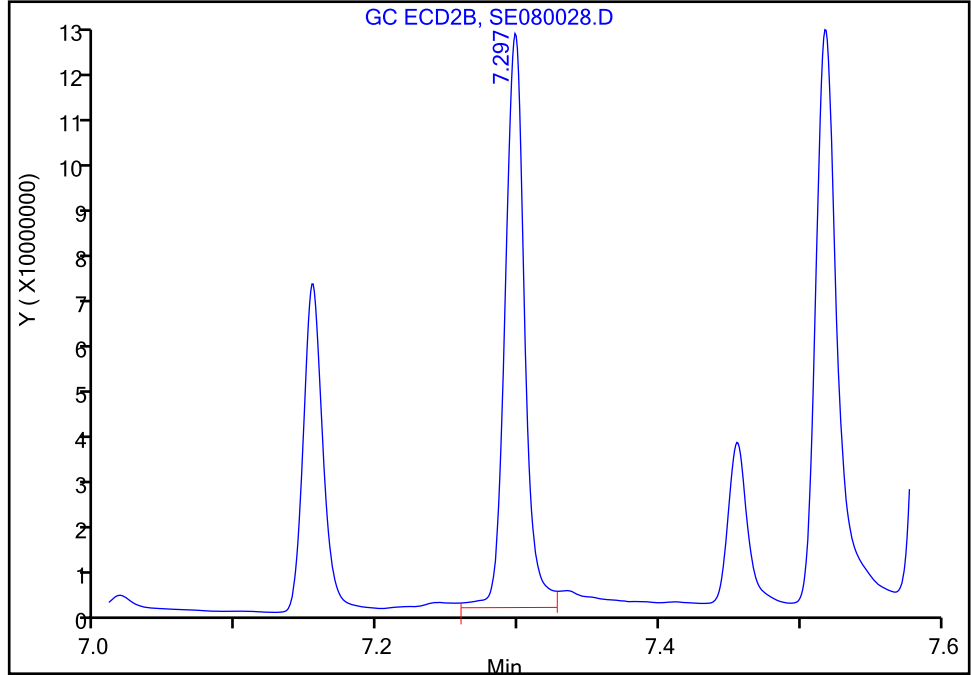
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

10 Dichlorprop, CAS: 120-36-5

Signal: 2

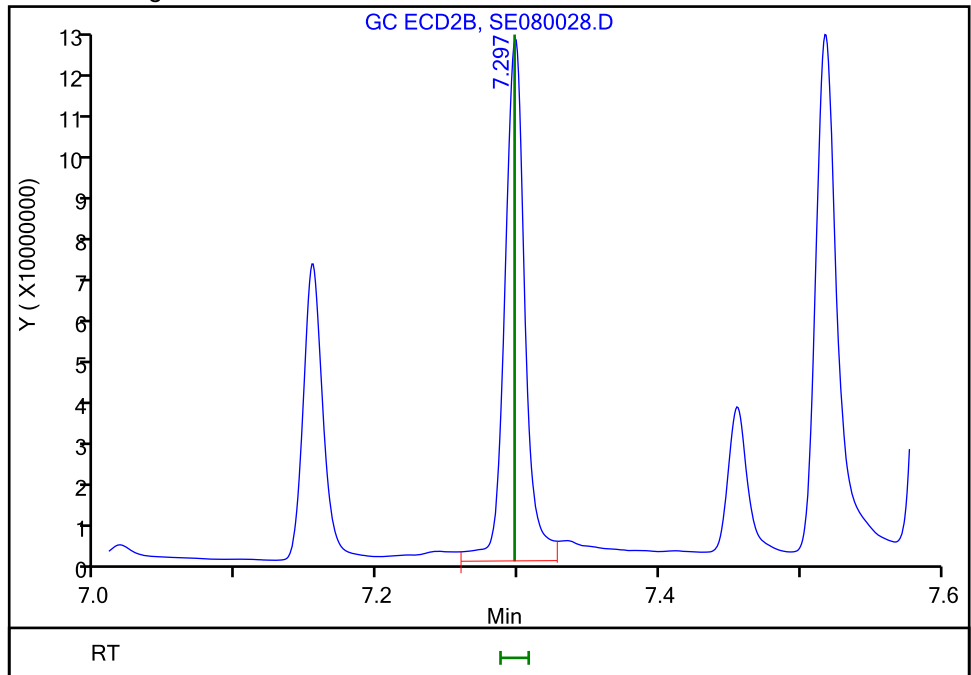
RT: 7.30
Area: 112626711
Amount: 0.079888
Amount Units: ug/ml

Processing Integration Results



RT: 7.30
Area: 117222842
Amount: 0.083148
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

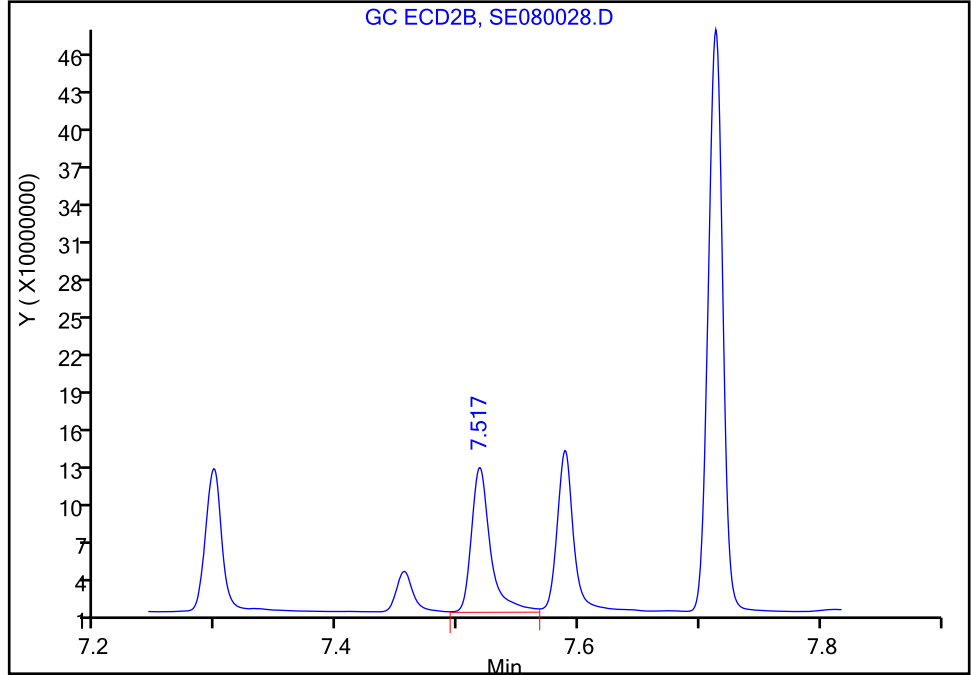
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

11 2,4-D, CAS: 94-75-7

Signal: 2

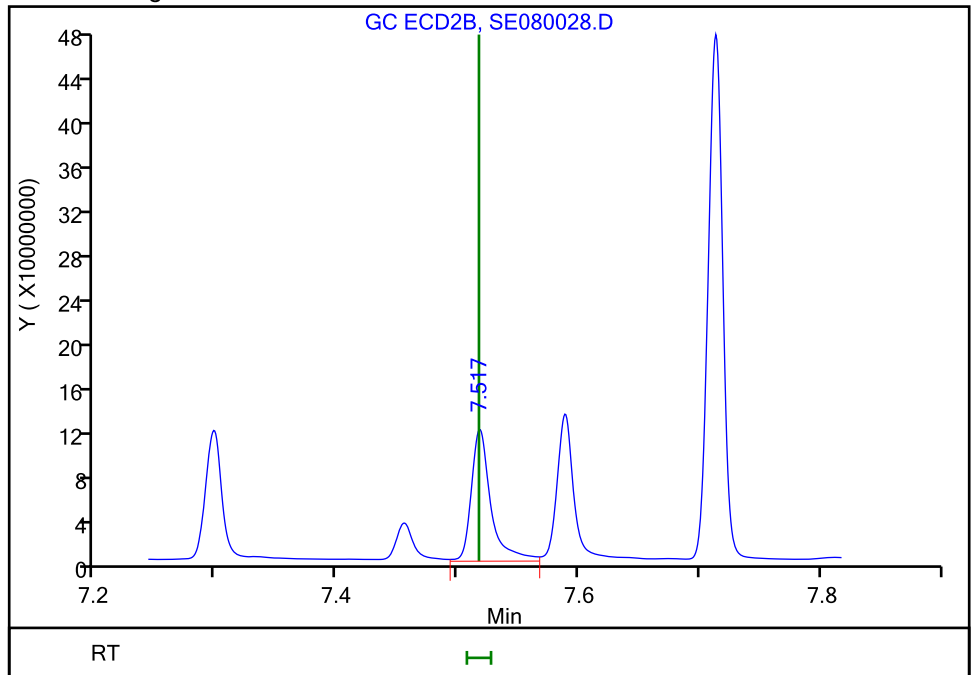
RT: 7.52
Area: 128784842
Amount: 0.080817
Amount Units: ug/ml

Processing Integration Results



RT: 7.52
Area: 133627356
Amount: 0.083856
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing
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TestAmerica Savannah

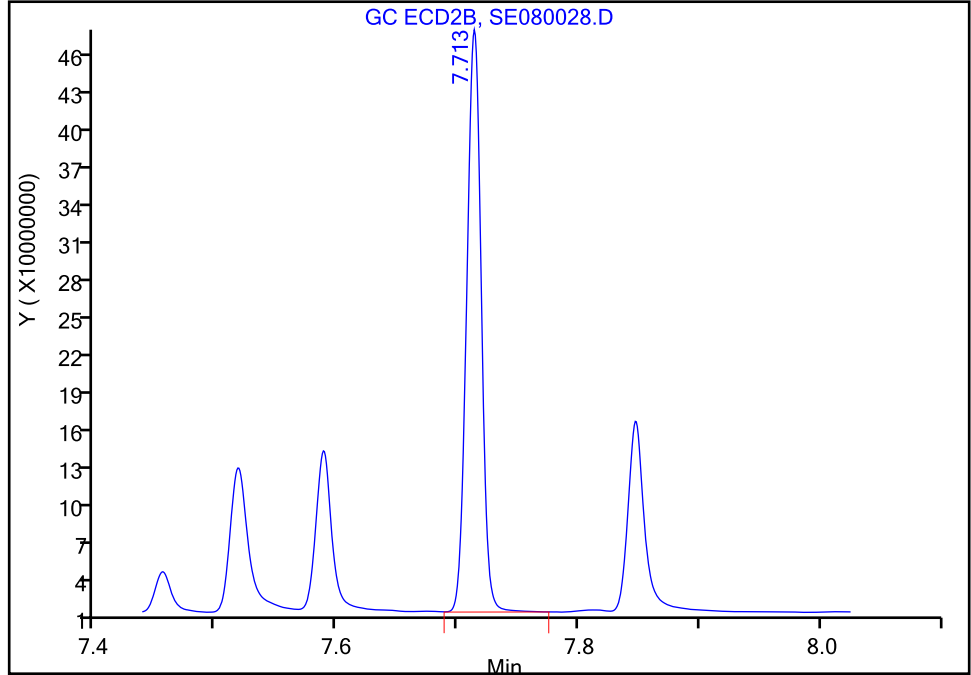
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

12 Pentachlorophenol, CAS: 87-86-5

Signal: 2

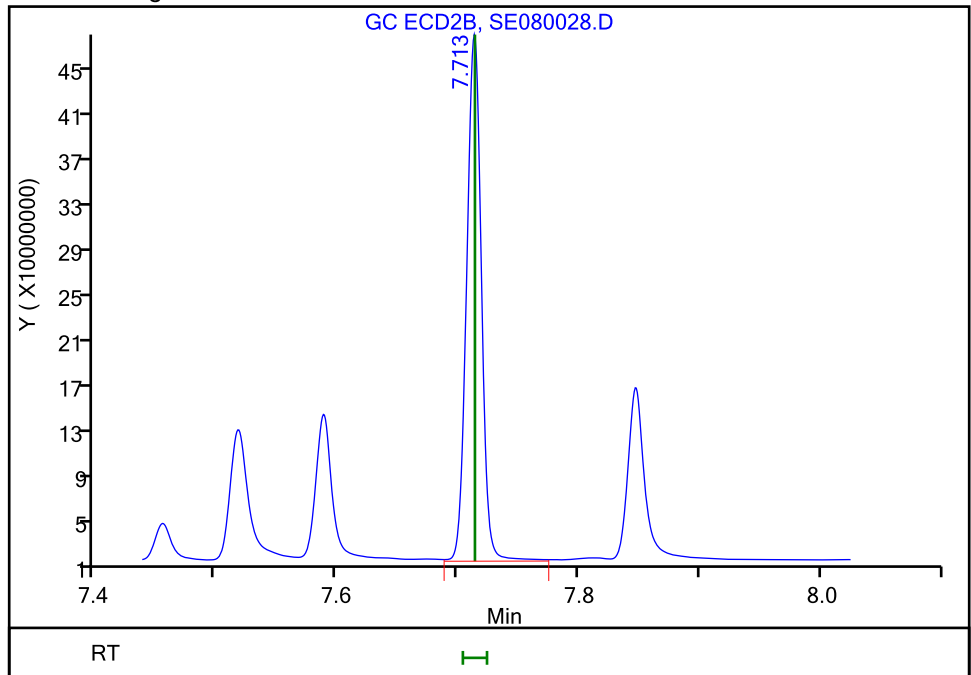
RT: 7.71
Area: 393349149
Amount: 0.020913
Amount Units: ug/ml

Processing Integration Results



RT: 7.71
Area: 399815476
Amount: 0.021257
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

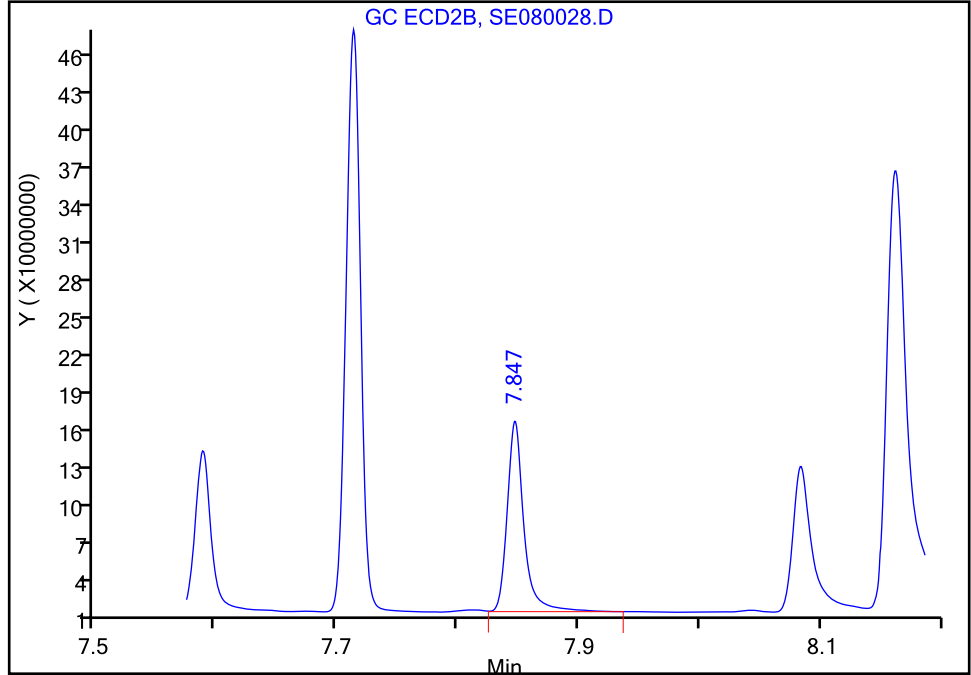
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

13 Silvex (2,4,5-TP), CAS: 93-72-1

Signal: 2

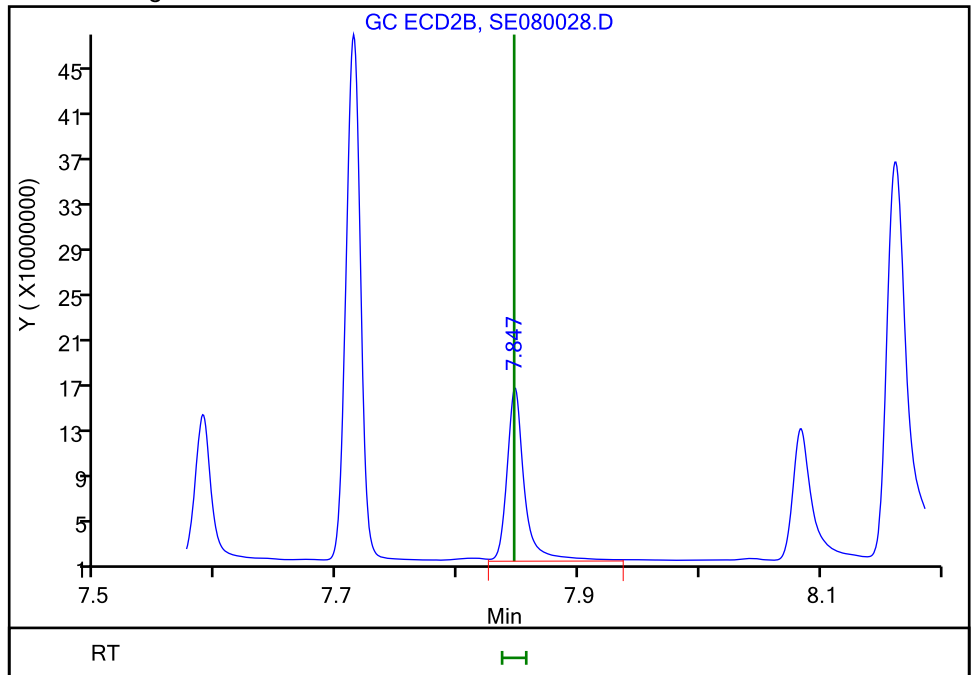
RT: 7.85
Area: 147739565
Amount: 0.019988
Amount Units: ug/ml

Processing Integration Results



RT: 7.85
Area: 155993801
Amount: 0.021105
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

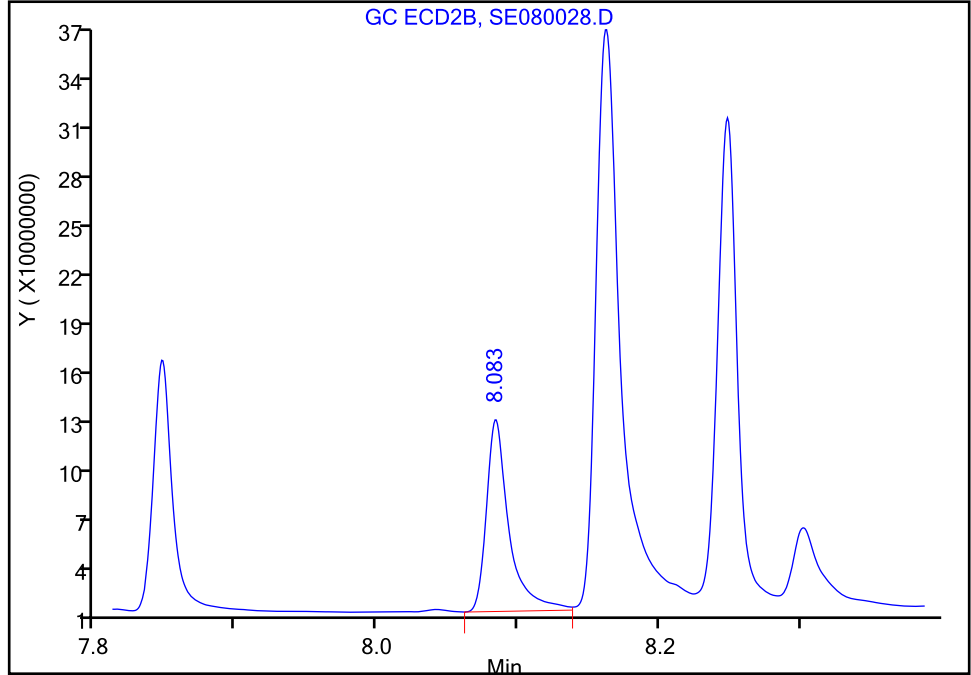
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

15 2,4,5-T, CAS: 93-76-5

Signal: 2

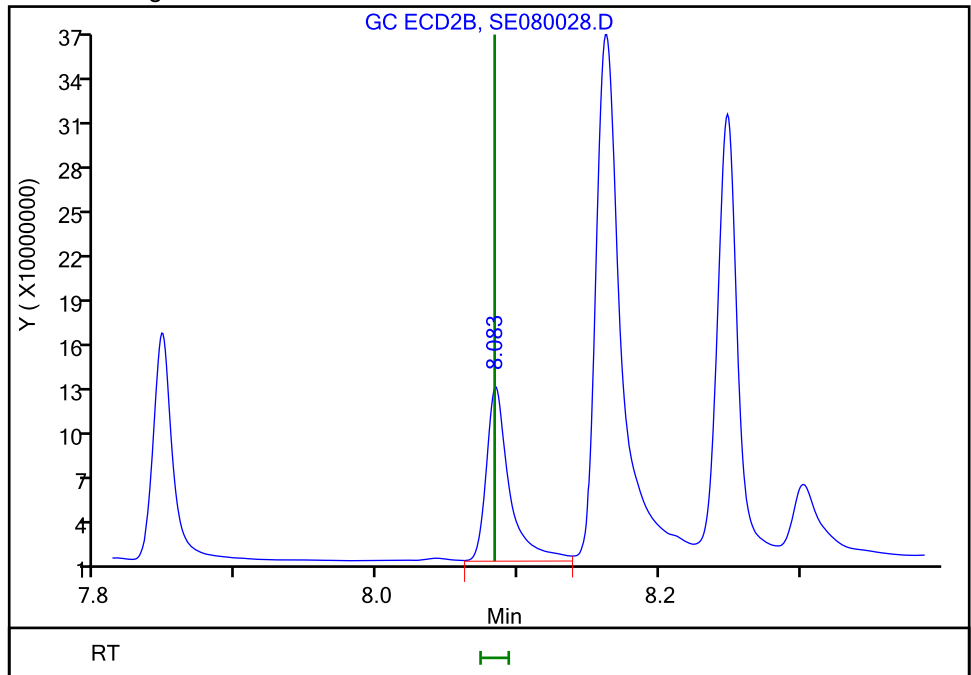
RT: 8.08
Area: 130590316
Amount: 0.019648
Amount Units: ug/ml

Processing Integration Results



RT: 8.08
Area: 135127386
Amount: 0.020331
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

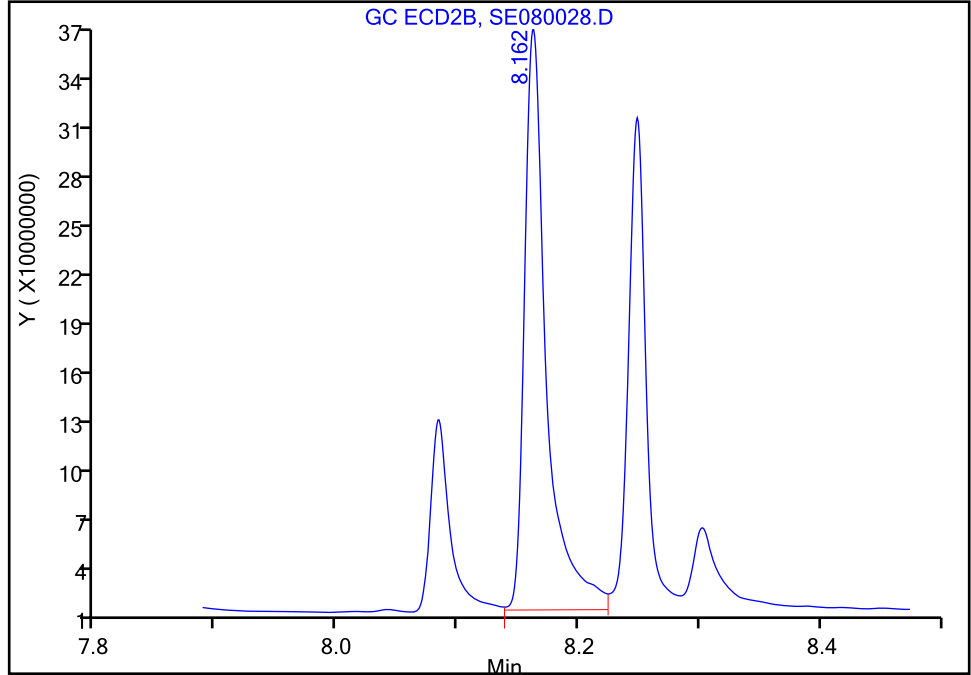
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

14 Chloramben, CAS: 133-90-4

Signal: 2

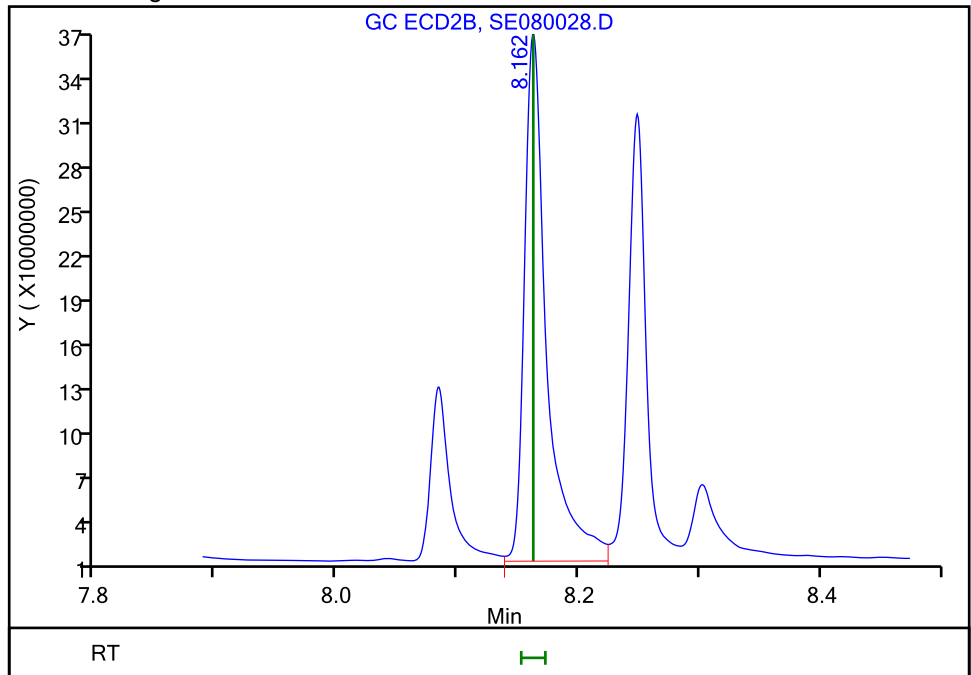
RT: 8.16
Area: 449929024
Amount: 0.079980
Amount Units: ug/ml

Processing Integration Results



RT: 8.16
Area: 457969533
Amount: 0.081409
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

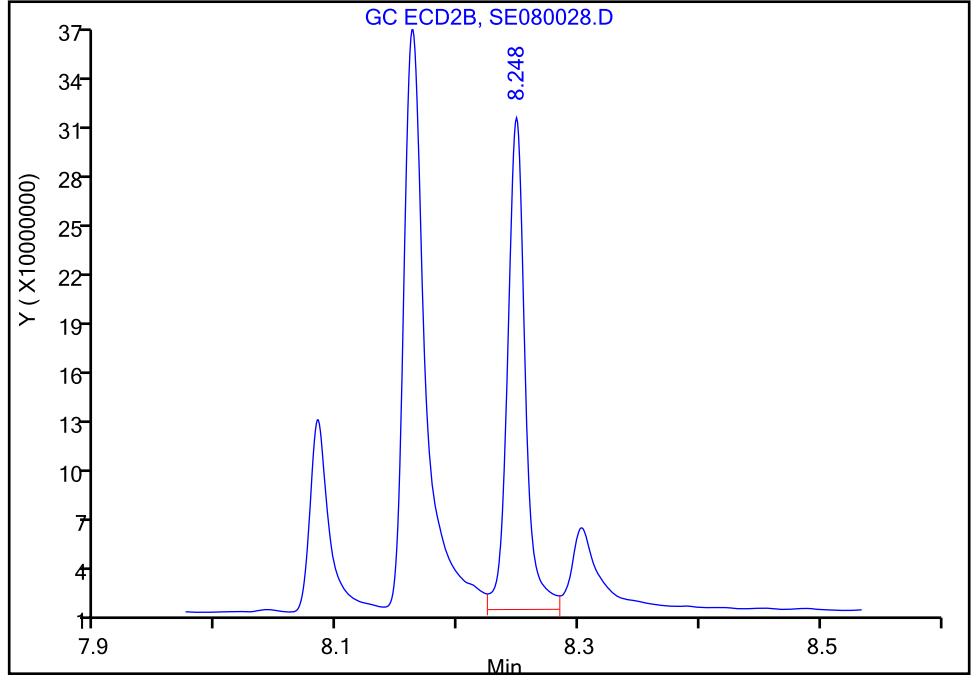
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

17 Dinoseb, CAS: 88-85-7

Signal: 2

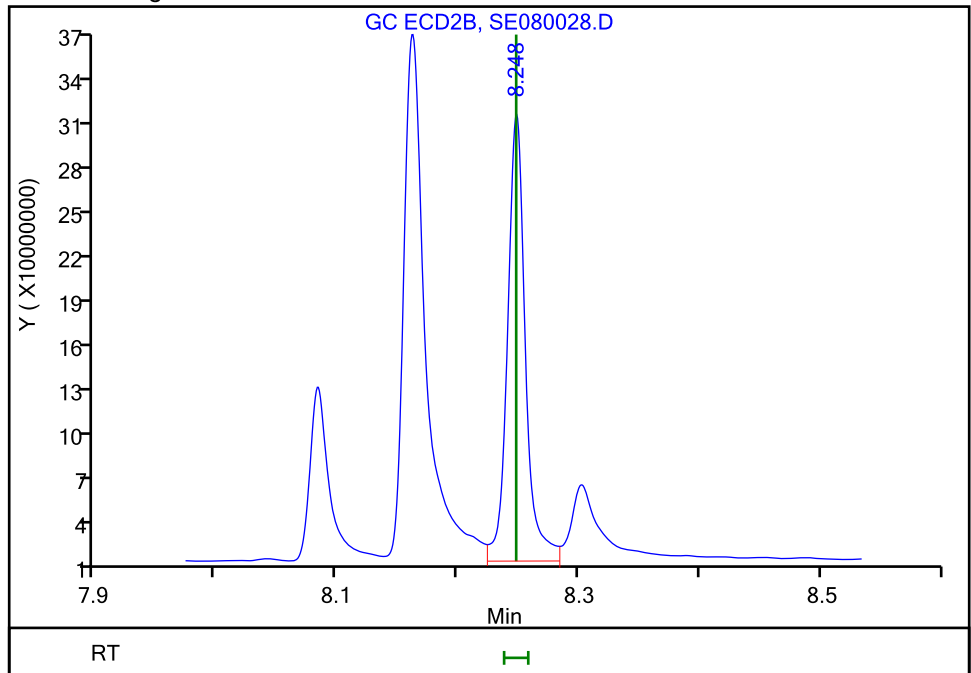
RT: 8.25
Area: 304317252
Amount: 0.072411
Amount Units: ug/ml

Processing Integration Results



RT: 8.25
Area: 310276845
Amount: 0.073697
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

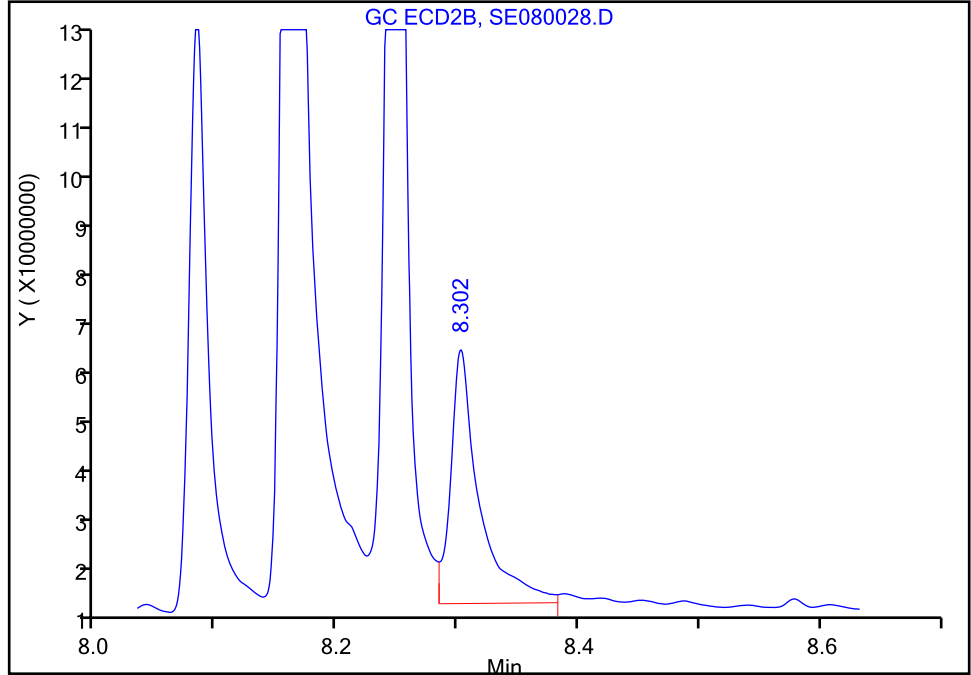
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

16 2,4-DB, CAS: 94-82-6

Signal: 2

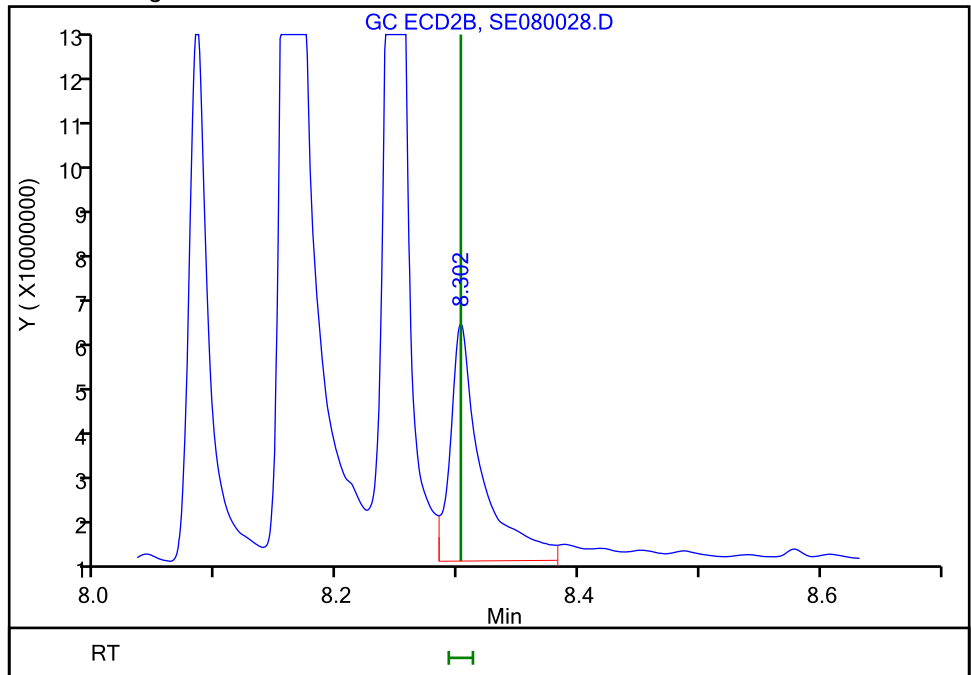
RT: 8.30
Area: 81650887
Amount: 0.082786
Amount Units: ug/ml

Processing Integration Results



RT: 8.30
Area: 91637209
Amount: 0.092911
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

TestAmerica Savannah

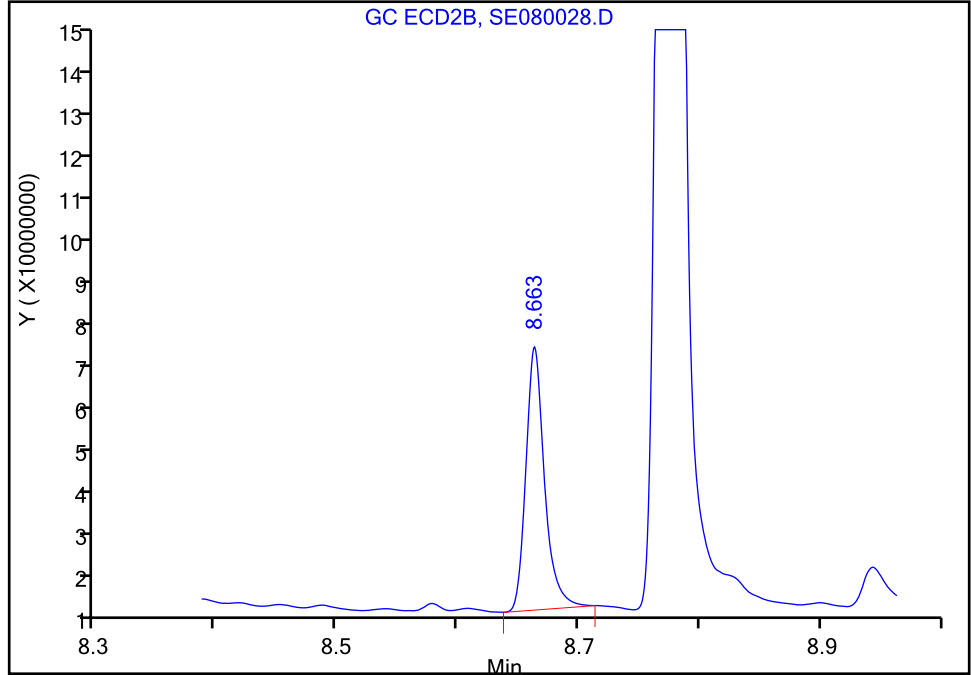
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

18 Bentazon, CAS: 25057-89-0

Signal: 2

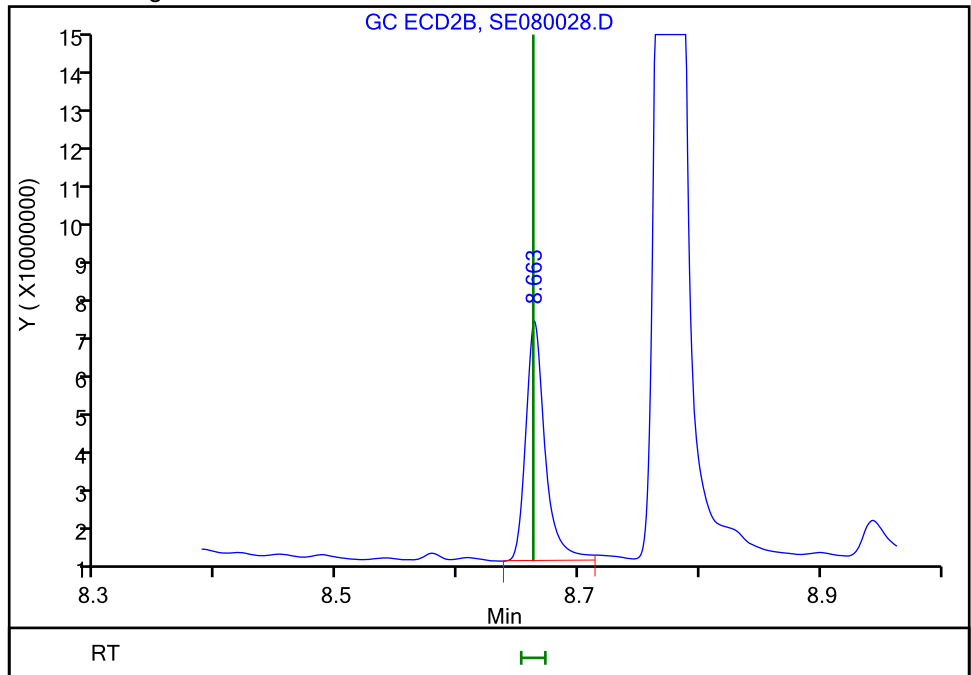
RT: 8.66
Area: 64993171
Amount: 0.080840
Amount Units: ug/ml

Processing Integration Results



RT: 8.66
Area: 67492156
Amount: 0.083949
Amount Units: ug/ml

Manual Integration Results



TestAmerica Savannah

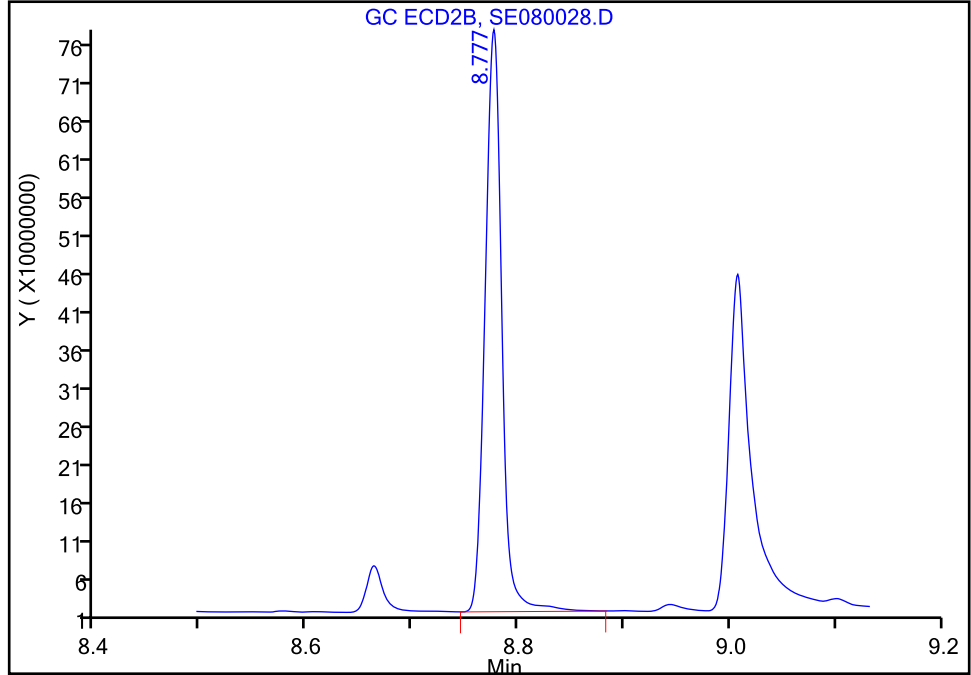
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

20 DCPA, CAS: 1861-32-1

Signal: 2

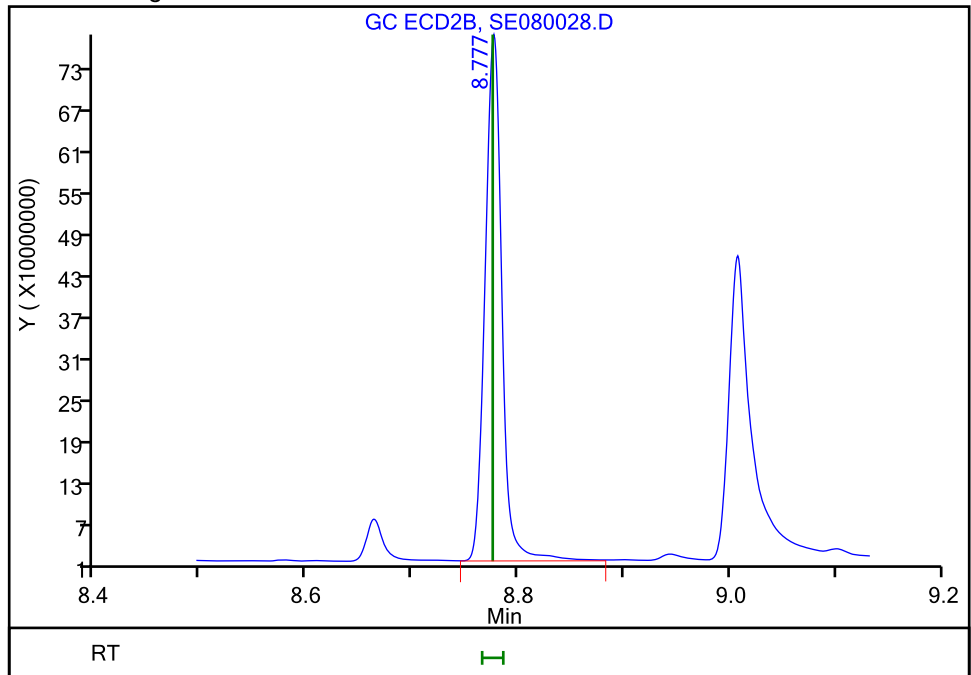
RT: 8.78
Area: 837751076
Amount: 0.085301
Amount Units: ug/ml

Processing Integration Results



RT: 8.78
Area: 842841434
Amount: 0.085819
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

TestAmerica Savannah

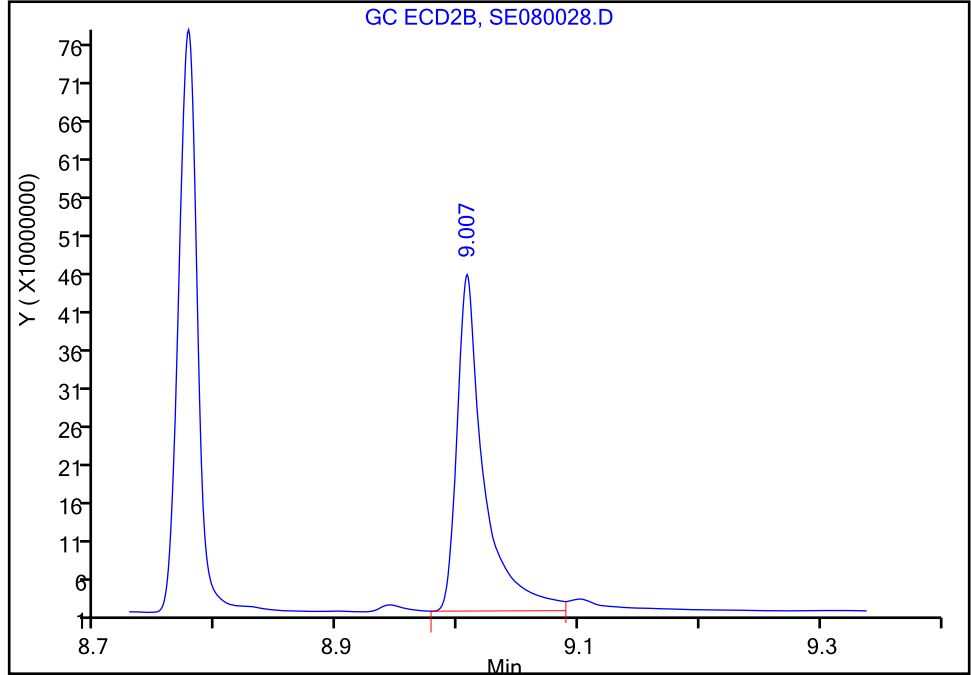
Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080028.D
Injection Date: 08-May-2018 21:40:11 Instrument ID: CSGS
Lims ID: ccv h4
Client ID:
Operator ID: GEM ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector: GC ECD2B

19 Picloram, CAS: 1918-02-1

Signal: 2

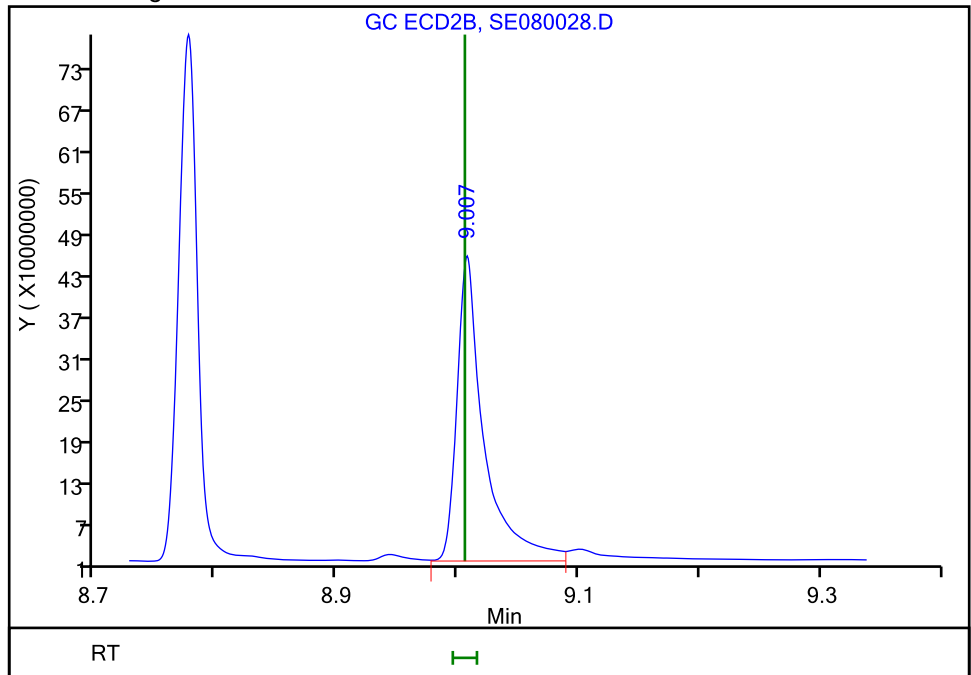
RT: 9.01
Area: 676921306
Amount: 0.069517
Amount Units: ug/ml

Processing Integration Results



RT: 9.01
Area: 686881952
Amount: 0.070402
Amount Units: ug/ml

Manual Integration Results



Reviewer: kellarj, 09-May-2018 09:21:27
Audit Action: Assigned New Baseline

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	524076394	427820811		0.143	0.175	-18.4	20.0
3,5-Dichlorobenzoic acid	Ave	321415612	296583189		0.161	0.175	-7.7	20.0
4-Nitrophenol	Ave	92458216	91577274		0.173	0.175	-1.0	20.0
Dicamba	Ave	1077009527	967765931		0.0786	0.0875	-10.1	20.0
MCPPP	Qua		463186		15.5	17.5	-11.5	20.0
MCPA	Ave	925968	928421		17.5	17.5	0.3	20.0
Dichlorprop	Ave	277497963	251504674		0.159	0.175	-9.4	20.0
2,4-D	Ave	302399622	288193971		0.167	0.175	-4.7	20.0
Pentachlorophenol	Ave	5383895550	4999942514		0.0406	0.0438	-7.1	20.0
Silvex (2,4,5-TP)	Ave	1878728542	1784749486		0.0416	0.0438	-5.0	20.0
Chloramben	Qua		1362967709		0.148	0.175	-15.2	20.0
2,4,5-T	Ave	2193840481	1981877189		0.0395	0.0438	-9.7	20.0
2,4-DB	Qua		140018897		0.151	0.175	-13.5	20.0
Dinoseb	Ave	1223895982	1102965480		0.158	0.175	-9.9	20.0
Bentazon	Ave	287551968	248107274		0.151	0.175	-13.7	20.0
Picloram	Qua		2203813377		0.152	0.175	-13.3	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	3293157561	3005082234		0.160	0.175	-8.7	20.0
Acifluorfen	Qua		2133379526		0.156	0.175	-10.8	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	211477985	187262200		0.155	0.175	-11.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-XLB ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.58	2.56	2.60
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.25	6.24	6.26
Dicamba	6.72	6.71	6.73
MCPP	6.87	6.86	6.88
MCPA	6.99	6.98	7.00
Dichlorprop	7.18	7.17	7.19
2,4-D	7.32	7.32	7.34
Pentachlorophenol	7.67	7.66	7.68
Silvex (2,4,5-TP)	7.77	7.76	7.78
Chloramben	7.85	7.85	7.87
2,4,5-T	7.93	7.92	7.94
2,4-DB	8.17	8.17	8.19
Dinoseb	8.22	8.21	8.23
Bentazon	8.30	8.29	8.31
Picloram	8.53	8.52	8.54
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.62	8.61	8.63
Acifluorfen	9.67	9.66	9.68
2,4-Dichlorophenylacetic acid (Surr)	6.68	6.67	6.69

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 00:55:01 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-038
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	74868642	0.1750	0.1429	
2	2.633	2.632	0.001	228091005	0.1750	0.1415	
						RPD = 0.94	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	15709201	NC	NC	
2	5.102	5.102	0.000	81447701	NC	NC	
						RPD = 6.40	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	197792324	NC	NC	
2	5.777	5.776	0.001	814623419	NC	NC	
						RPD = 4.12	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51902058	0.1750	0.1615	
2	6.116	6.116	0.000	269503235	0.1750	0.1500	
						RPD = 7.39	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	16026023	0.1750	0.1733	
2	6.504	6.505	-0.001	47684379	0.1750	0.1595	
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	32770885	0.1750	0.1550	
2	6.828	6.829	-0.001	207297956	0.1750	0.1473	
						RPD = 5.10	
7 Dicamba							
1	6.719	6.720	-0.001	84679519	0.0875	0.0786	
2	6.910	6.910	0.000	378314581	0.0875	0.0755	
						RPD = 4.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	8105752	17.5	15.5	
2	6.955	6.955	0.000	66707270	17.5	14.4	
						RPD = 7.18	
9 MCPA							
1	6.994	6.994	0.000	16247375	17.5	17.5	
2	7.154	7.155	-0.001	106598040	17.5	17.6	
						RPD = 0.16	
10 Dichlorprop							
1	7.180	7.180	0.000	44013318	0.1750	0.1586	
2	7.297	7.297	0.000	204624887	0.1750	0.1451	
						RPD = 8.87	
11 2,4-D							
1	7.324	7.326	-0.002	50433945	0.1750	0.1668	
2	7.516	7.517	-0.001	241432402	0.1750	0.1515	
						RPD = 9.60	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	218747485	0.0438	0.0406	
2	7.713	7.714	-0.001	739224164	0.0438	0.0393	
						RPD = 3.32	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	78082790	0.0438	0.0416	
2	7.846	7.846	0.000	285344847	0.0438	0.0386	
						RPD = 7.37	
14 Chloramben							
1	7.852	7.855	-0.003	238519349	0.1750	0.1484	
2	8.159	8.162	-0.003	877032133	0.1750	0.1559	
						RPD = 4.95	
15 2,4,5-T							
1	7.925	7.929	-0.004	86707127	0.0438	0.0395	
2	8.081	8.083	-0.002	257818803	0.0438	0.0388	
						RPD = 1.87	
16 2,4-DB							
1	8.172	8.175	-0.003	24503307	0.1750	0.1514	
2	8.299	8.302	-0.003	149059866	0.1750	0.1511	
						RPD = 0.18	
17 Dinoseb							
1	8.222	8.224	-0.002	193018959	0.1750	0.1577	
2	8.248	8.248	0.000	599229354	0.1750	0.1360	
						RPD = 14.76	
18 Bentazon							
1	8.299	8.300	-0.001	43418773	0.1750	0.1510	
2	8.662	8.662	0.000	121010538	0.1750	0.1505	
						RPD = 0.32	
19 Picloram							
1	8.526	8.529	-0.003	385667341	0.1750	0.1518	
2	9.005	9.005	0.000	1378057284	0.1750	0.1318	
						RPD = 14.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	525889391	0.1750	0.1597	
2	8.777	8.775	0.002	1570076998	0.1750	0.1599	
						RPD = 0.11	

21 Acifluorfen

1	9.665	9.666	-0.001	373341417	0.1750	0.1561	
2	9.791	9.792	-0.001	1116042155	0.1750	0.1517	
						RPD = 2.89	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D

Injection Date: 09-May-2018 00:55:01

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h5

Worklist Smp#: 38

Client ID:

Injection Vol: 1.0 ul

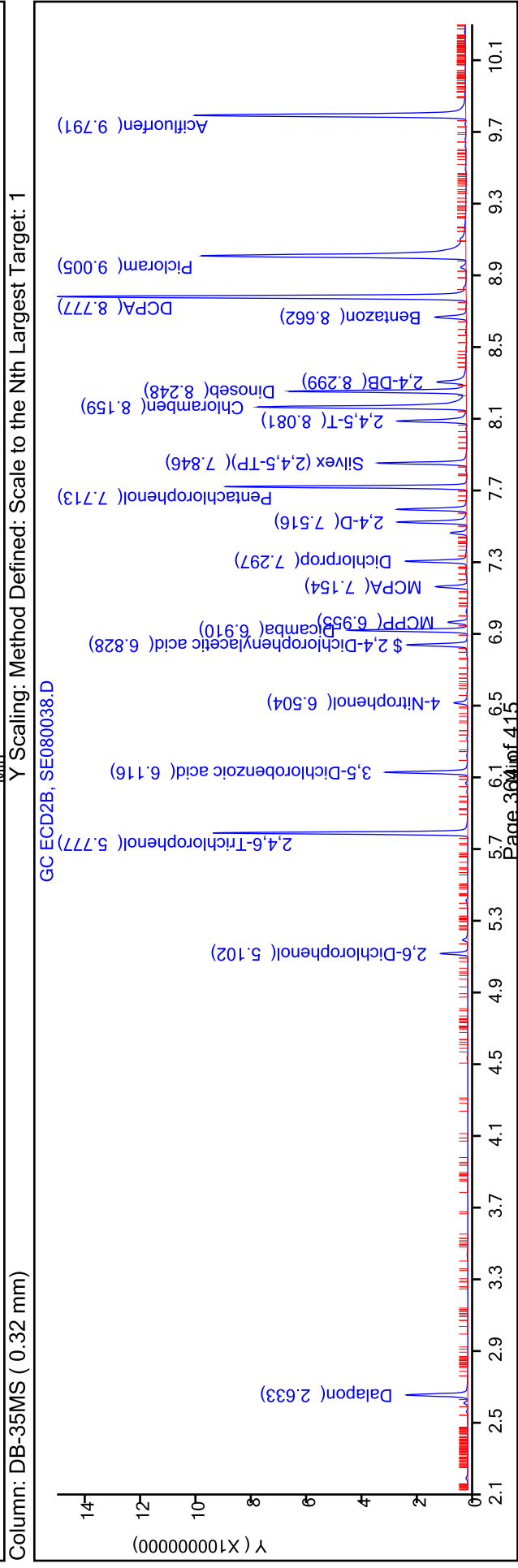
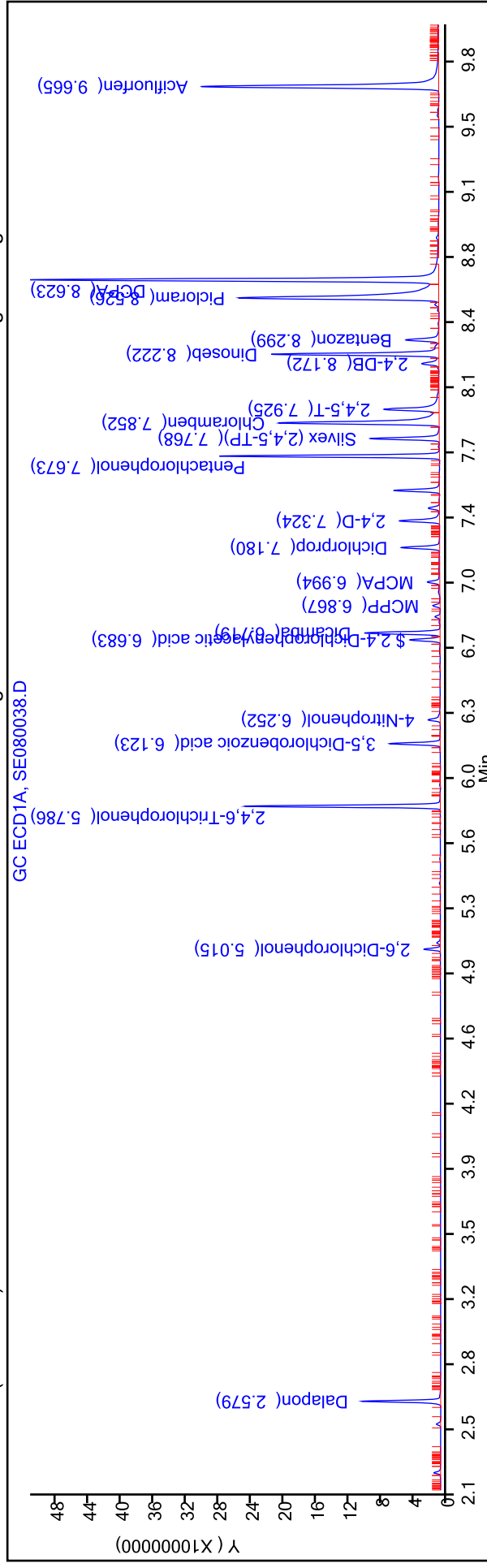
Dil. Factor: 1.0000

ALS Bottle#: 38

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon	Ave	1611774466	1303377171		0.142	0.175	-19.1	20.0
3,5-Dichlorobenzoic acid	Ave	1796964783	1540018486		0.150	0.175	-14.3	20.0
4-Nitrophenol	Ave	299039718	272482166		0.159	0.175	-8.9	20.0
Dicamba	Ave	5009061262	4323595211		0.0755	0.0875	-13.7	20.0
MCPP	Lin2		3811844		14.4	17.5	-17.6	20.0
MCPA	QuaF		6091317		17.6	17.5	0.4	20.0
Dichlorprop	Ave	1409813393	1169285069		0.145	0.175	-17.1	20.0
2,4-D	Ave	1593535987	1379613726		0.152	0.175	-13.4	20.0
Pentachlorophenol	Ave	18808678996	16896552320		0.0393	0.0438	-10.2	20.0
Silvex (2,4,5-TP)	Ave	7391322149	6522167931		0.0386	0.0438	-11.8	20.0
2,4,5-T	Ave	6646535168	5893001211		0.0388	0.0438	-11.3	20.0
Chloramben	Ave	5625509945	5011612189		0.156	0.175	-10.9	20.0
Dinoseb	Lin1		3424167737		0.136	0.175	-22.3*	20.0
2,4-DB	Ave	986290097	851770663		0.151	0.175	-13.6	20.0
Bentazon	Ave	803969083	691488789		0.151	0.175	-14.0	20.0
Tetraphthalic acid, tetrachloro-, dimethyl ester	Ave	9821124803	8971868560		0.160	0.175	-8.6	20.0
Picloram	Lin1		7874613051		0.132	0.175	-24.7*	20.0
Acifluorfen	Qua		6377383743		0.152	0.175	-13.3	20.0
2,4-Dichlorophenylacetic acid (Surr)	Ave	1407755771	1184559749		0.147	0.175	-15.9	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Lab Sample ID: CCV 680-523063/38 Calibration Date: 05/09/2018 00:55
 Instrument ID: CSGS Calib Start Date: 05/08/2018 11:58
 GC Column: DB-35MS ID: 0.32 (mm) Calib End Date: 05/08/2018 14:15
 Lab File ID: SE080038.D

Analyte	RT	RT WINDOW	
		FROM	TO
Dalapon	2.63	2.61	2.65
3,5-Dichlorobenzoic acid	6.12	6.11	6.13
4-Nitrophenol	6.50	6.50	6.52
Dicamba	6.91	6.90	6.92
MCPP	6.96	6.95	6.97
MCPA	7.15	7.15	7.17
Dichlorprop	7.30	7.29	7.31
2,4-D	7.52	7.51	7.53
Pentachlorophenol	7.71	7.70	7.72
Silvex (2,4,5-TP)	7.85	7.84	7.86
2,4,5-T	8.08	8.07	8.09
Chloramben	8.16	8.15	8.17
Dinoseb	8.25	8.24	8.26
2,4-DB	8.30	8.29	8.31
Bentazon	8.66	8.65	8.67
Tetraphthalic acid, tetrachloro-, dimethyl ester	8.78	8.77	8.79
Picloram	9.01	9.00	9.02
Acifluorfen	9.79	9.78	9.80
2,4-Dichlorophenylacetic acid (Surr)	6.83	6.82	6.84

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D
 Lims ID: ccv h5
 Client ID:
 Sample Type: CCV
 Inject. Date: 09-May-2018 00:55:01 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-038
 Operator ID: GEM Instrument ID: CSGS
 Sublist: chrom-Herbicides_CSGS*sub9
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Dalapon							
1	2.579	2.579	0.000	74868642	0.1750	0.1429	
2	2.633	2.632	0.001	228091005	0.1750	0.1415	
						RPD = 0.94	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	15709201	NC	NC	
2	5.102	5.102	0.000	81447701	NC	NC	
						RPD = 6.40	
3 2,4,6-Trichlorophenol							
1	5.786	5.786	0.000	197792324	NC	NC	
2	5.777	5.776	0.001	814623419	NC	NC	
						RPD = 4.12	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51902058	0.1750	0.1615	
2	6.116	6.116	0.000	269503235	0.1750	0.1500	
						RPD = 7.39	
5 4-Nitrophenol							
1	6.252	6.253	-0.001	16026023	0.1750	0.1733	
2	6.504	6.505	-0.001	47684379	0.1750	0.1595	
						RPD = 8.34	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.683	6.683	0.000	32770885	0.1750	0.1550	
2	6.828	6.829	-0.001	207297956	0.1750	0.1473	
						RPD = 5.10	
7 Dicamba							
1	6.719	6.720	-0.001	84679519	0.0875	0.0786	
2	6.910	6.910	0.000	378314581	0.0875	0.0755	
						RPD = 4.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							
1	6.867	6.867	0.000	8105752	17.5	15.5	
2	6.955	6.955	0.000	66707270	17.5	14.4	
						RPD = 7.18	
9 MCPA							
1	6.994	6.994	0.000	16247375	17.5	17.5	
2	7.154	7.155	-0.001	106598040	17.5	17.6	
						RPD = 0.16	
10 Dichlorprop							
1	7.180	7.180	0.000	44013318	0.1750	0.1586	
2	7.297	7.297	0.000	204624887	0.1750	0.1451	
						RPD = 8.87	
11 2,4-D							
1	7.324	7.326	-0.002	50433945	0.1750	0.1668	
2	7.516	7.517	-0.001	241432402	0.1750	0.1515	
						RPD = 9.60	
12 Pentachlorophenol							
1	7.673	7.674	-0.001	218747485	0.0438	0.0406	
2	7.713	7.714	-0.001	739224164	0.0438	0.0393	
						RPD = 3.32	
13 Silvex (2,4,5-TP)							
1	7.768	7.769	-0.001	78082790	0.0438	0.0416	
2	7.846	7.846	0.000	285344847	0.0438	0.0386	
						RPD = 7.37	
14 Chloramben							
1	7.852	7.855	-0.003	238519349	0.1750	0.1484	
2	8.159	8.162	-0.003	877032133	0.1750	0.1559	
						RPD = 4.95	
15 2,4,5-T							
1	7.925	7.929	-0.004	86707127	0.0438	0.0395	
2	8.081	8.083	-0.002	257818803	0.0438	0.0388	
						RPD = 1.87	
16 2,4-DB							
1	8.172	8.175	-0.003	24503307	0.1750	0.1514	
2	8.299	8.302	-0.003	149059866	0.1750	0.1511	
						RPD = 0.18	
17 Dinoseb							
1	8.222	8.224	-0.002	193018959	0.1750	0.1577	
2	8.248	8.248	0.000	599229354	0.1750	0.1360	
						RPD = 14.76	
18 Bentazon							
1	8.299	8.300	-0.001	43418773	0.1750	0.1510	
2	8.662	8.662	0.000	121010538	0.1750	0.1505	
						RPD = 0.32	
19 Picloram							
1	8.526	8.529	-0.003	385667341	0.1750	0.1518	
2	9.005	9.005	0.000	1378057284	0.1750	0.1318	
						RPD = 14.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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20 DCPA

1	8.623	8.623	0.000	525889391	0.1750	0.1597	
2	8.777	8.775	0.002	1570076998	0.1750	0.1599	
						RPD = 0.11	

21 Acifluorfen

1	9.665	9.666	-0.001	373341417	0.1750	0.1561	
2	9.791	9.792	-0.001	1116042155	0.1750	0.1517	
						RPD = 2.89	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SGHERB-5_00016

Amount Added: 1.00

Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080038.D

Injection Date: 09-May-2018 00:55:01

Instrument ID: CSGS

Operator ID: GEM

Lims ID: ccv h5

Worklist Smp#: 38

Client ID:

Injection Vol: 1.0 ul

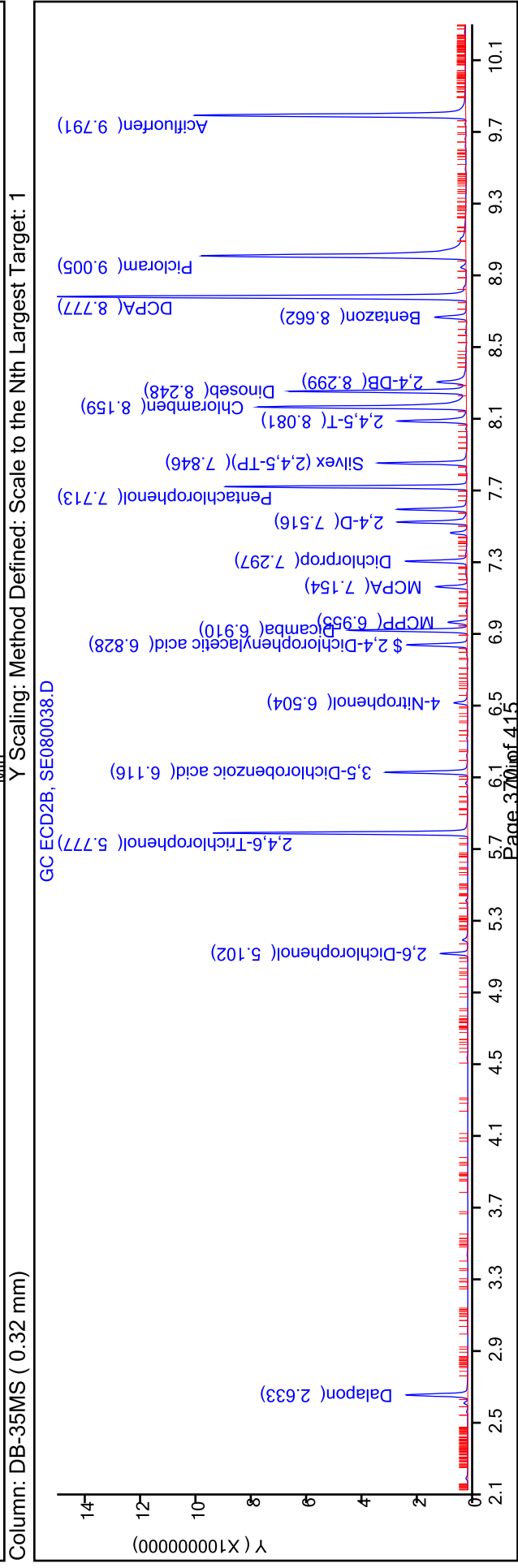
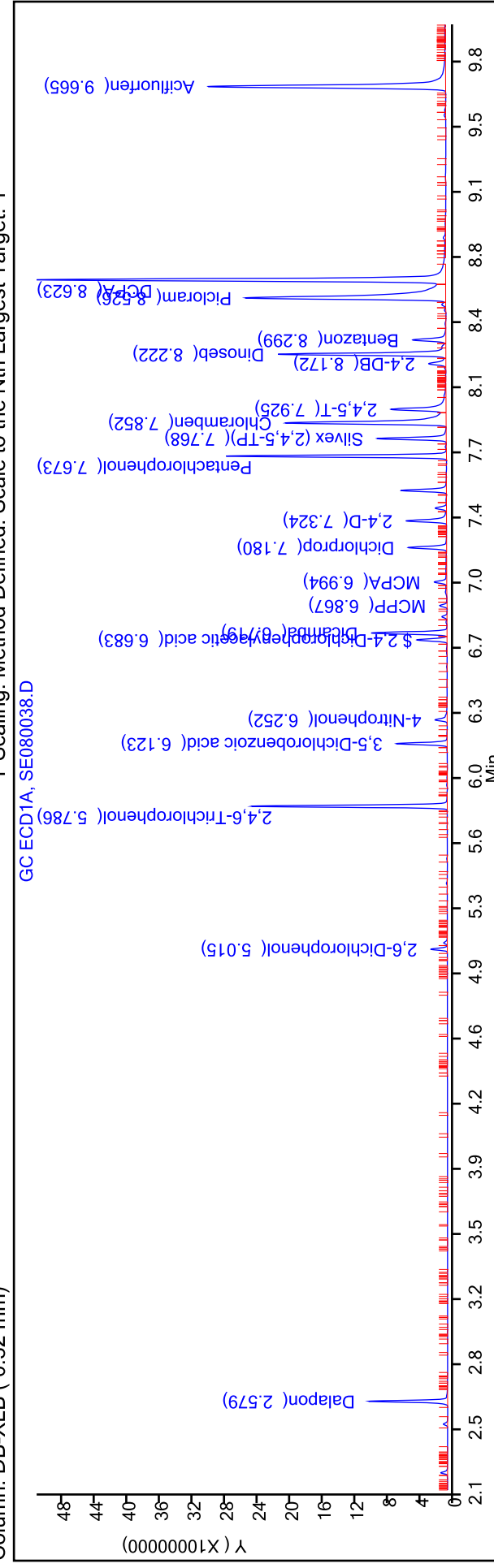
Dil. Factor: 1.0000

ALS Bottle#: 38

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-522541/10-A
 Matrix: Solid Lab File ID: SE080030.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.02(g) Date Analyzed: 05/08/2018 22:19
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	4.3	U M	8.3	4.3	2.3
94-75-7	2,4-D	8.3	U	8.3	8.3	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	52		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
 Lims ID: MB 680-522541/10-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2018 22:19:12 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-030
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:29:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.683	6.683	0.000	25404910	0.2000	0.1201	
2	6.828	6.829	-0.001	146536865	0.2000	0.1041	
							RPD = 14.31

12 Pentachlorophenol

1	7.671	7.674	-0.003	2673336		0.000497	
2	7.714	7.714	0.000	4902202		0.000261	
							RPD = 62.31

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D

Injection Date: 08-May-2018 22:19:12

Instrument ID: CSGS

Operator ID: GEM

Lims ID: MB 680-522541/10-A

Worklist Smp#: 30

Client ID:

Injection Vol: 1.0 ul

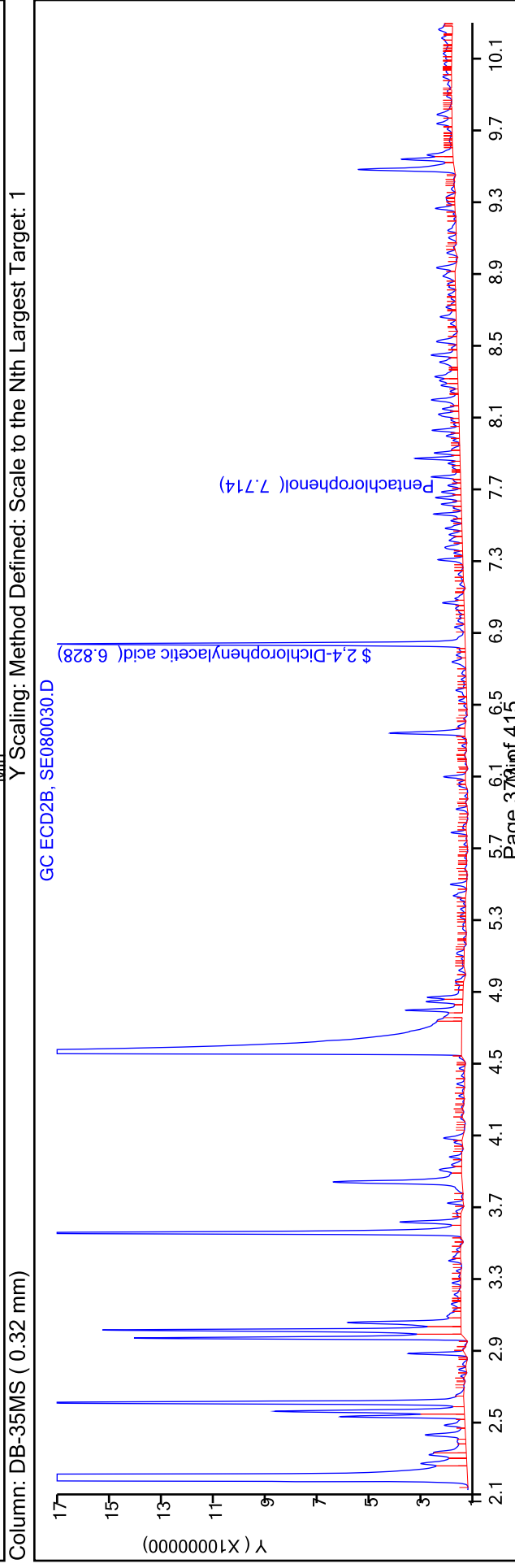
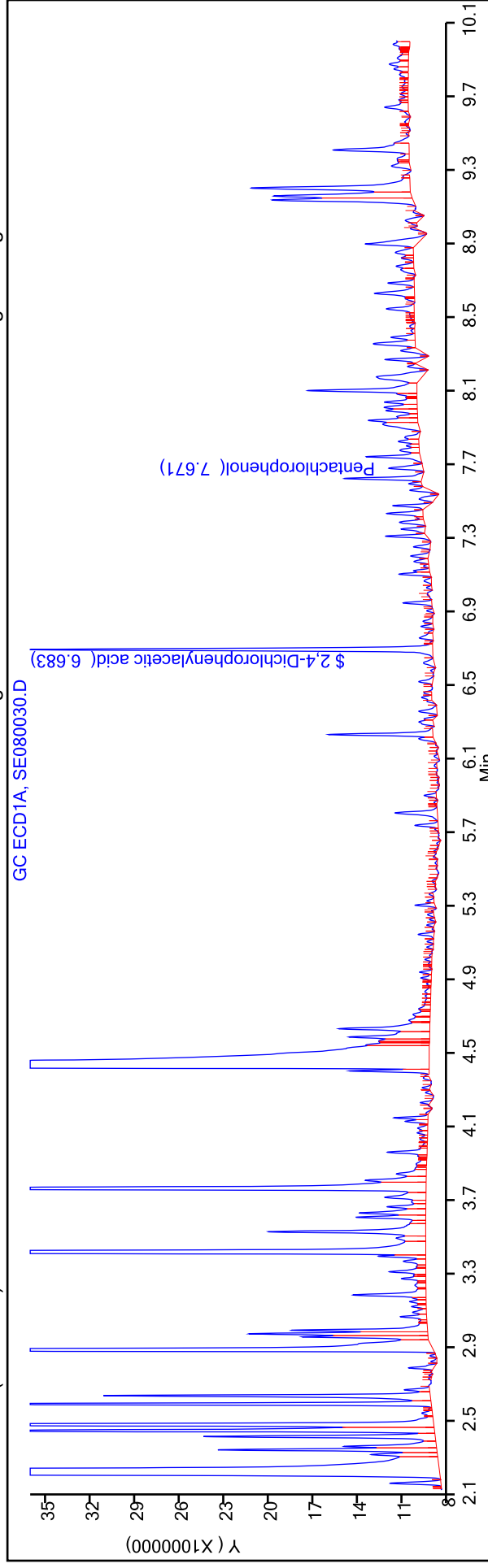
Dil. Factor: 1.0000

ALS Bottle#: 30

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
 Lims ID: MB 680-522541/10-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2018 22:19:12 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-030
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:29:27

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1201	60.07

Surrogate Recovery, Detector: GC ECD2B

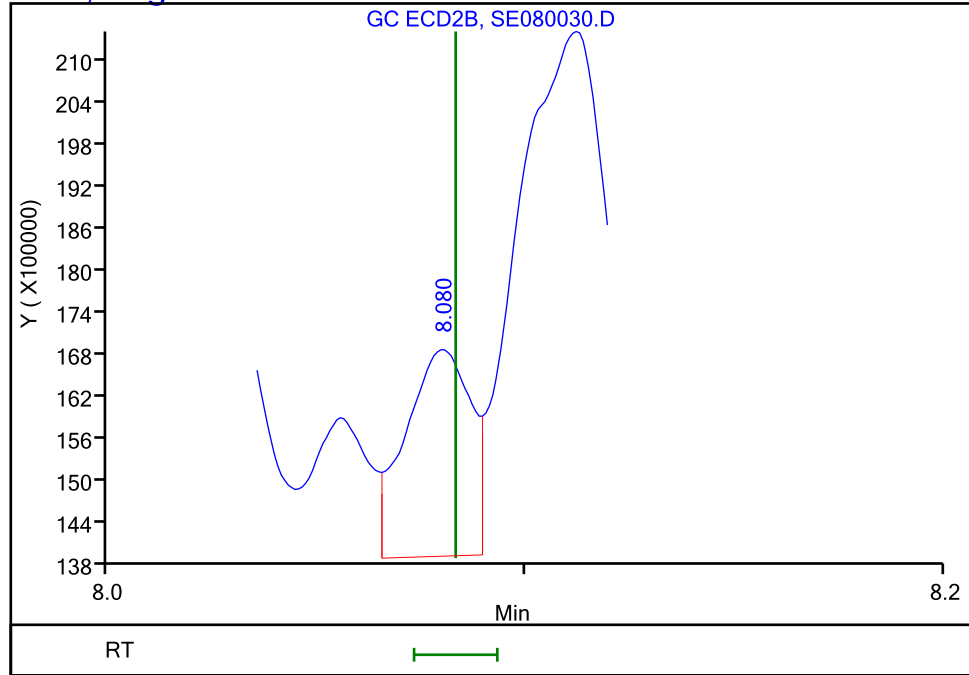
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1041	52.05

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080030.D
Injection Date: 08-May-2018 22:19:12 Instrument ID: CSGS
Lims ID: MB 680-522541/10-A
Client ID:
Operator ID: GEM ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

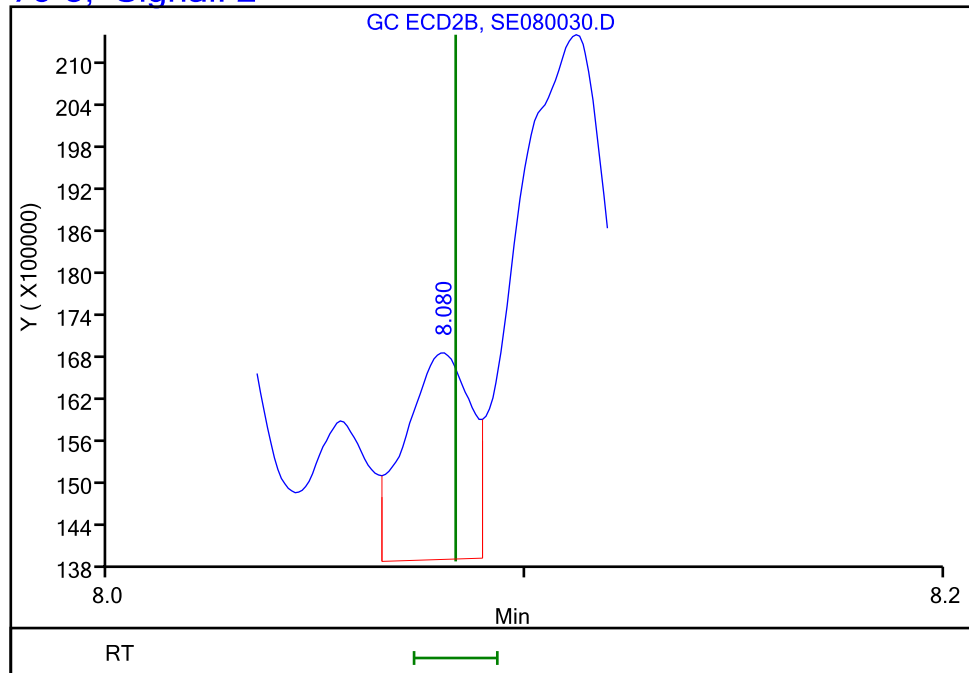
RT: 8.08
Response: 3234514
Amount: 0.000487



Column: DB-35MS (0.32 mm) Detector GC ECD2B

15 2,4,5-T, CAS: 93-76-5, Signal: 2

RT: 8.08
Response: 3234514
Amount: 0.000487



Reviewer: kellarj, 09-May-2018 09:29:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/29
 Matrix: Solid Lab File ID: SE080029.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2018 21:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	80		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

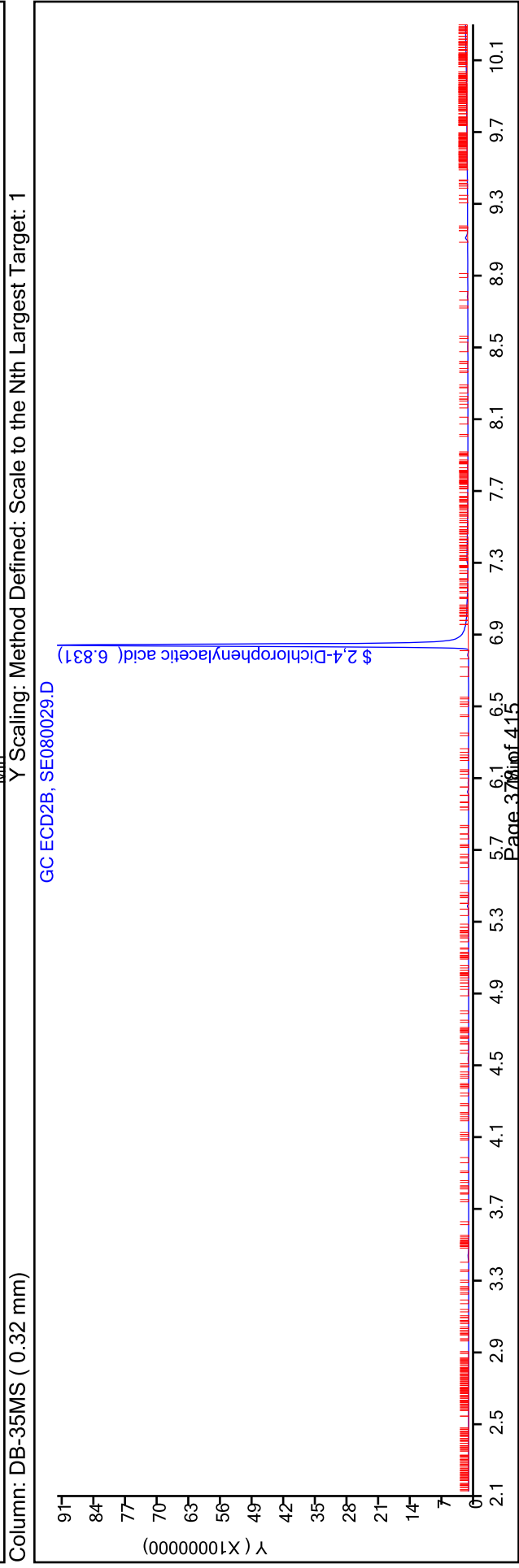
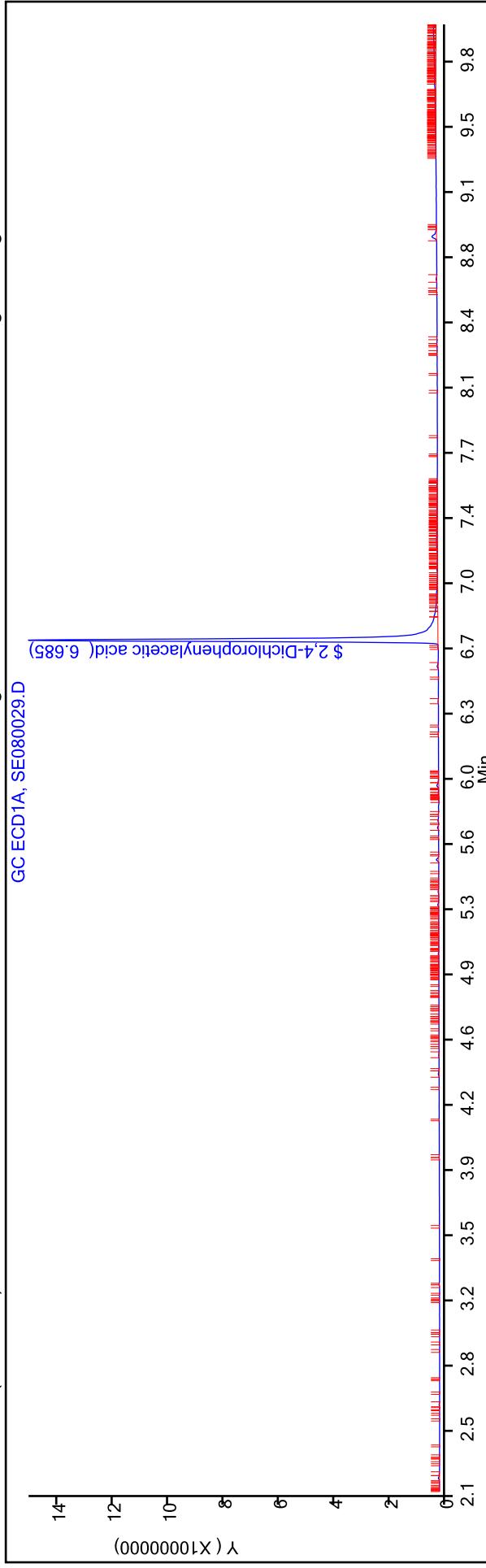
1	6.685	6.683	0.002	170593061	1.00	0.8067
2	6.831	6.829	0.002	995138894	1.00	0.7069

RPD = 13.18

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Injection Date: 08-May-2018 21:59:46
 Instrument ID: CSGS
 Operator ID: GEM
 Worklist Smp#: 29
 Client ID:
 Injection Vol: 1.0 ul
 Dil. Factor: 1.0000
 ALS Bottle#: 29
 Method: Herbicides_CSGS
 Limit Group: 8151A - DOD_V5
 Column: DB-XLB (0.32 mm)
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8067	80.35

Surrogate Recovery, Detector: GC ECD2B

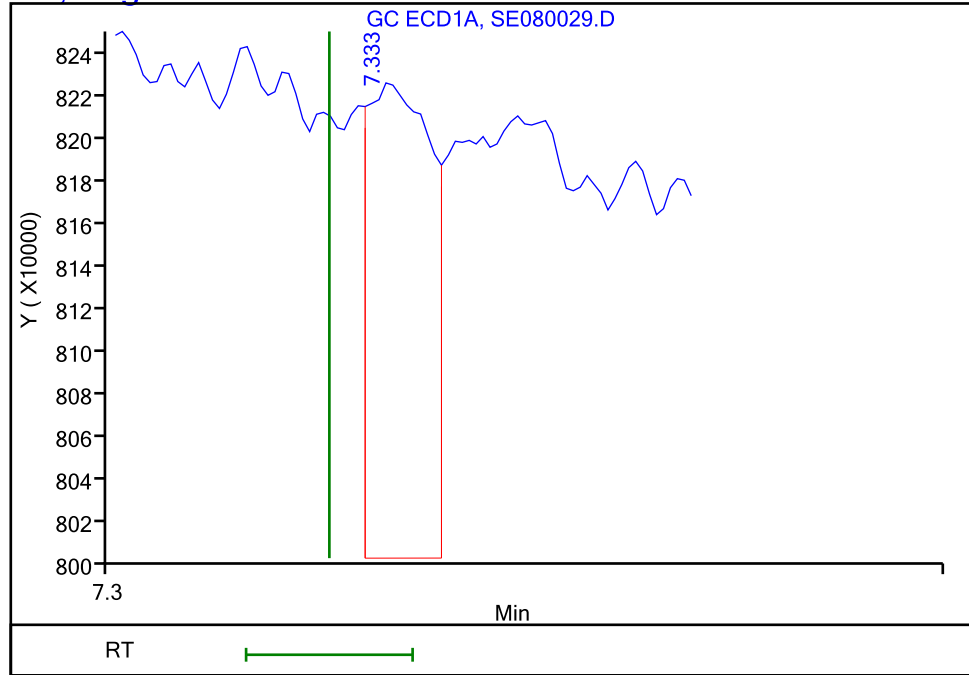
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7069	70.41

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
Injection Date: 08-May-2018 21:59:46 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

11 2,4-D, CAS: 94-75-7, Signal: 1

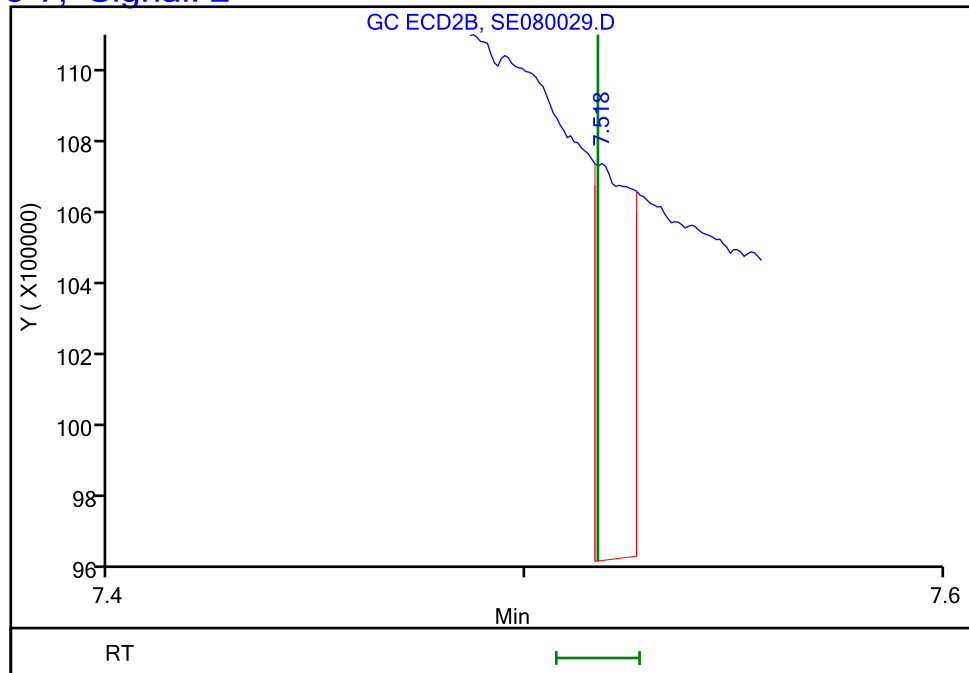
RT: 7.33
Response: 107513
Amount: 0.000356



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 574902
Amount: 0.000361



Reviewer: kellarj, 09-May-2018 09:21:42
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/29
 Matrix: Solid Lab File ID: SE080029.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2018 21:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	70		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.685	6.683	0.002	170593061	1.00	0.8067
2	6.831	6.829	0.002	995138894	1.00	0.7069

RPD = 13.18

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D

Injection Date: 08-May-2018 21:59:46

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 29

Client ID:

Injection Vol: 1.0 ul

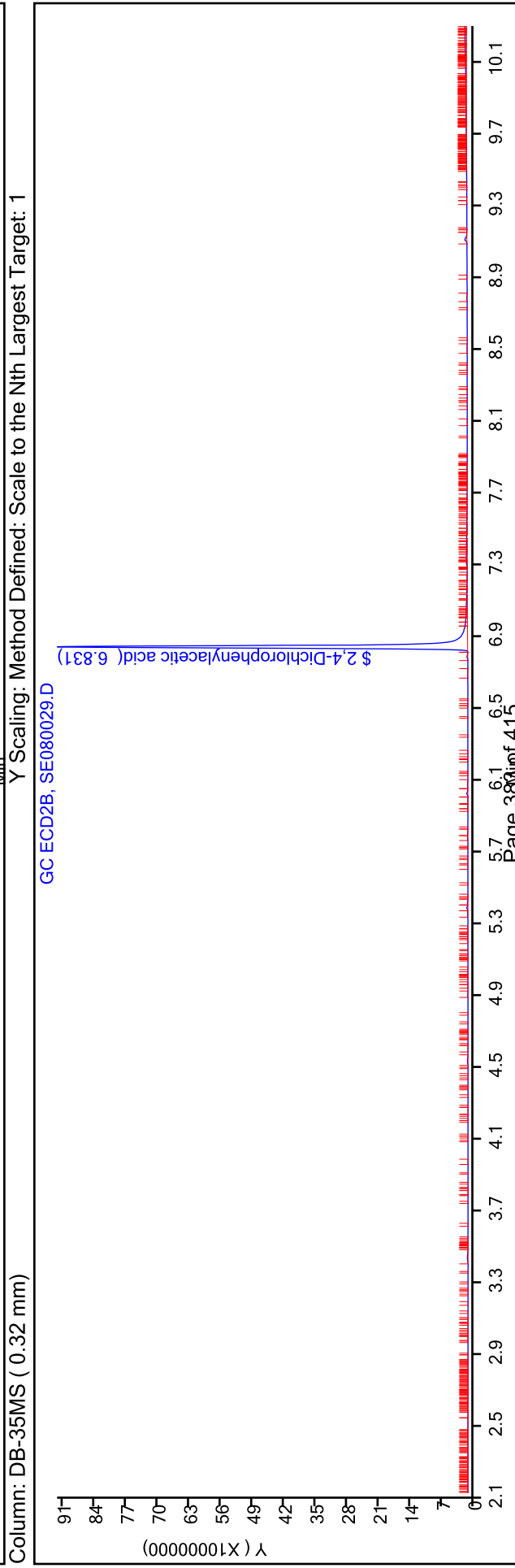
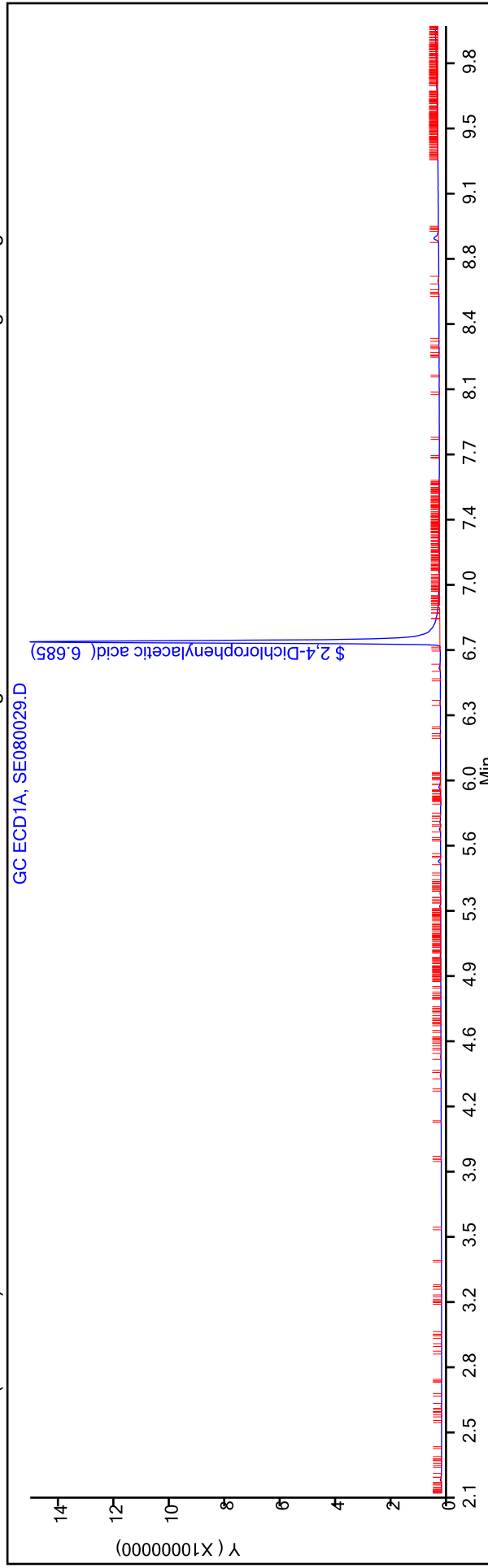
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2018 21:59:46 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-029
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:21:42

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.8067	80.35

Surrogate Recovery, Detector: GC ECD2B

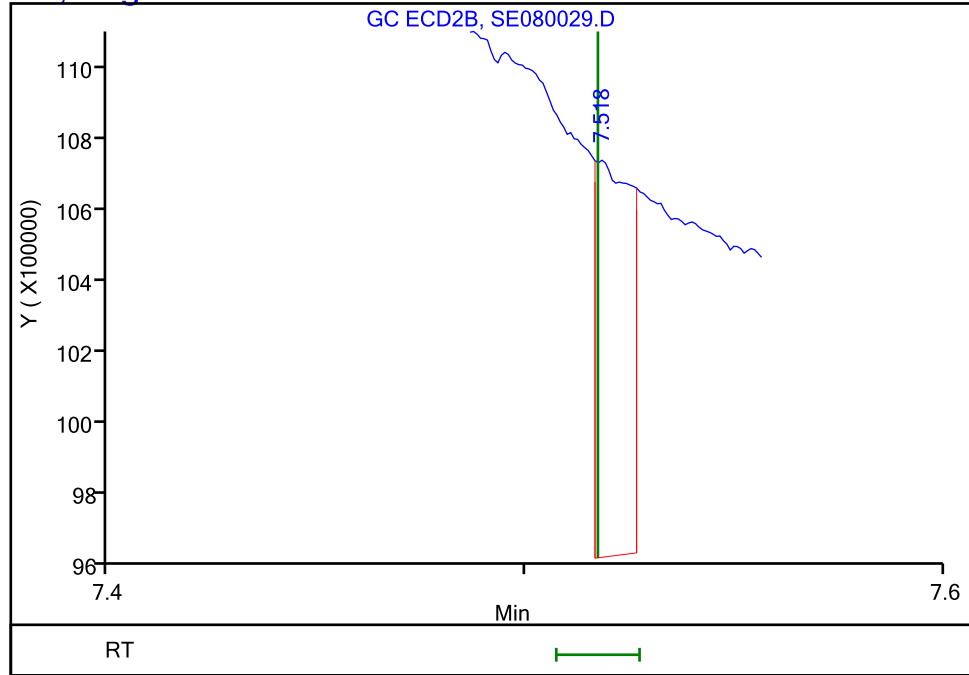
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7069	70.41

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080029.D
Injection Date: 08-May-2018 21:59:46 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

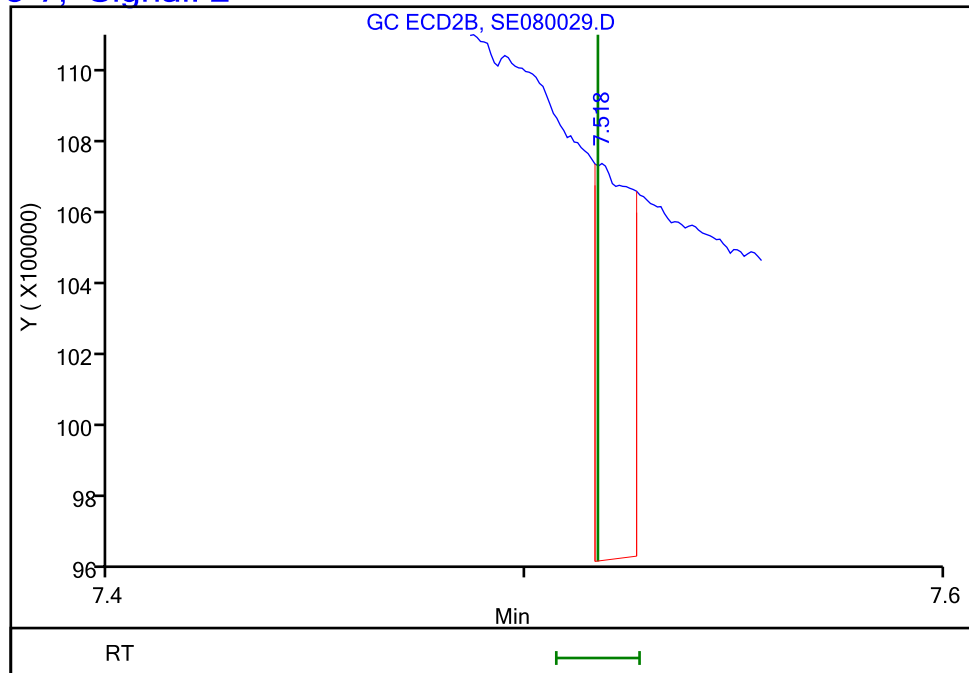
RT: 7.52
Response: 574902
Amount: 0.000361



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 574902
Amount: 0.000361



Reviewer: kellarj, 09-May-2018 09:21:42
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/39
 Matrix: Solid Lab File ID: SE080039.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/09/2018 01:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-XLB ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	75		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.684	6.683	0.001	159546417	1.00	0.7544
2	6.831	6.829	0.002	926668182	1.00	0.6583

RPD = 13.62

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D

Injection Date: 09-May-2018 01:14:39

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 39

Client ID:

Injection Vol: 1.0 ul

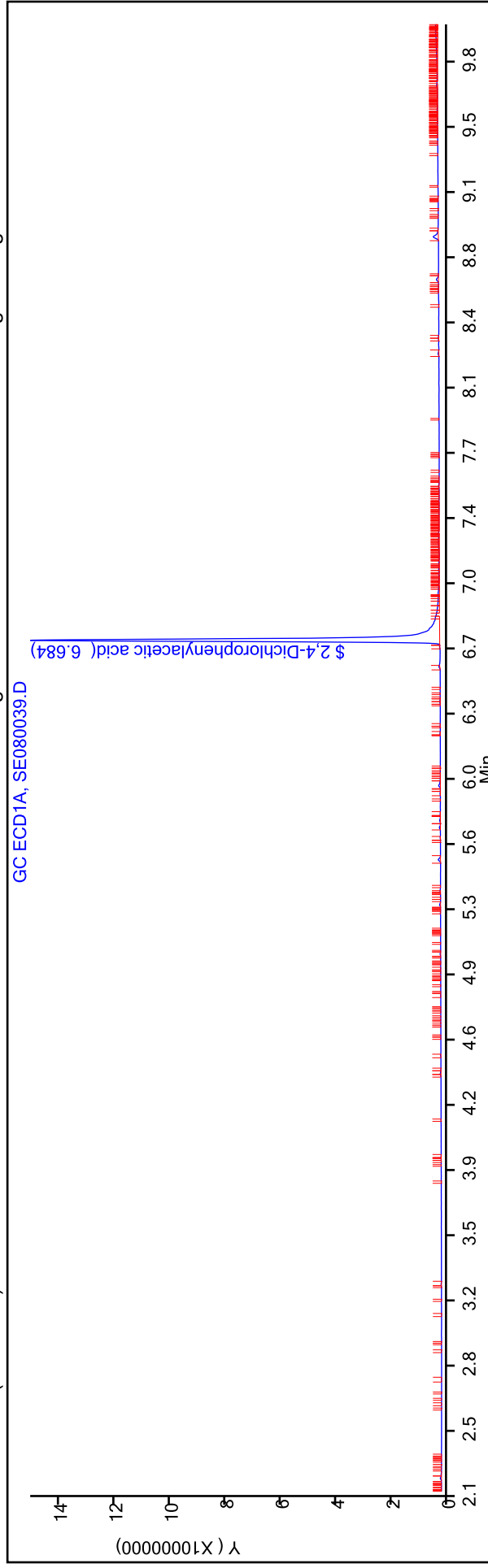
Dil. Factor: 1.0000

ALS Bottle#: 39

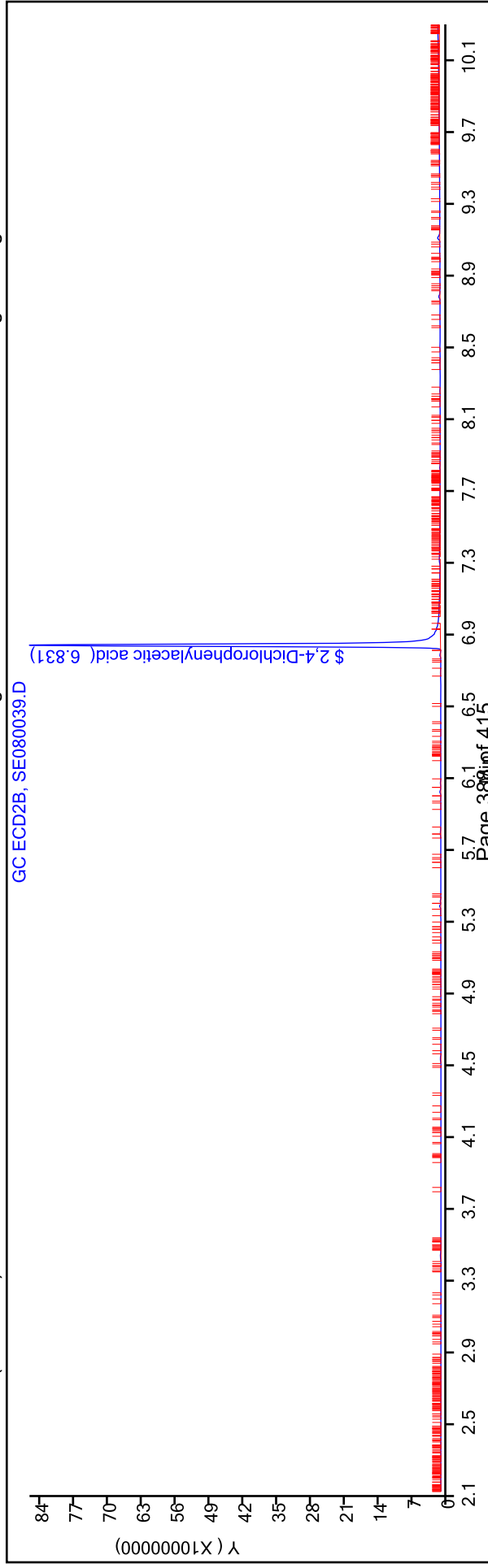
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7544	75.14

Surrogate Recovery, Detector: GC ECD2B

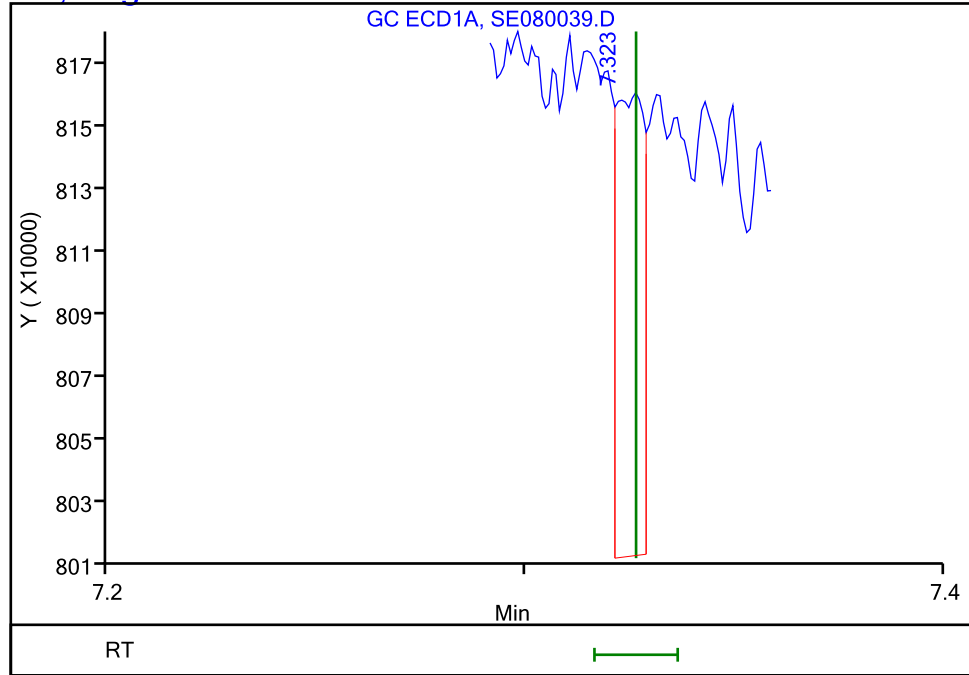
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.6583	65.56

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
Injection Date: 09-May-2018 01:14:39 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-XLB (0.32 mm) Detector GC ECD1A

11 2,4-D, CAS: 94-75-7, Signal: 1

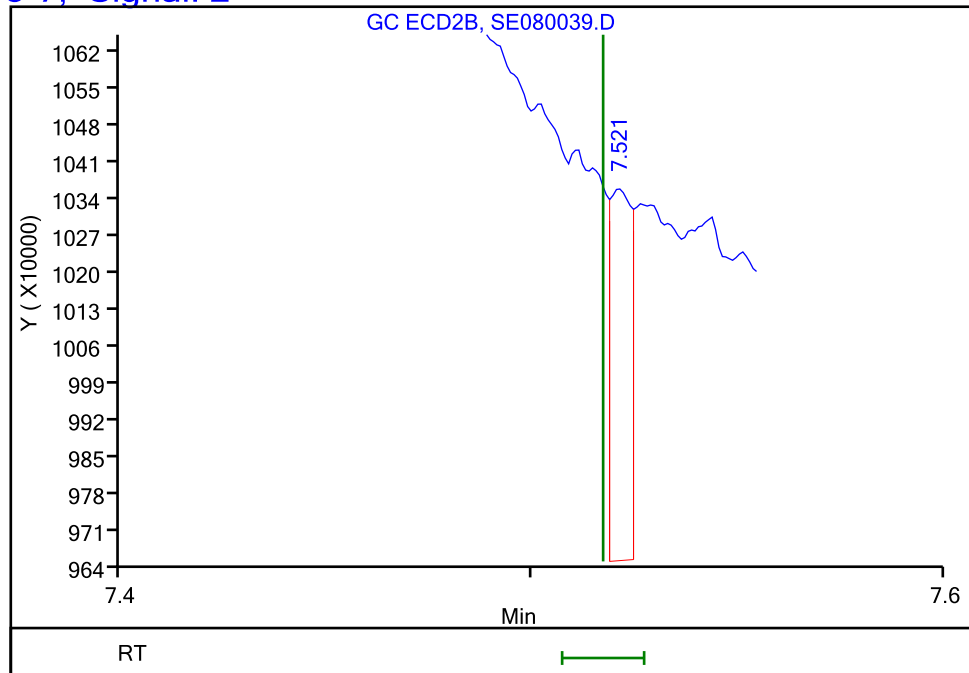
RT: 7.32
Response: 62011
Amount: 0.000205



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 240112
Amount: 0.000151



Reviewer: kellarj, 09-May-2018 09:22:33
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-523063/39
 Matrix: Solid Lab File ID: SE080039.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/09/2018 01:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	0.011	U	0.025	0.011	0.0062
94-75-7	2,4-D	0.012	U M	0.050	0.012	0.0037

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	66		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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\$ 6 2,4-Dichlorophenylacetic acid

1	6.684	6.683	0.001	159546417	1.00	0.7544
2	6.831	6.829	0.002	926668182	1.00	0.6583

RPD = 13.62

Reagents:

SG HIBLK_00063 Amount Added: 1.00 Units: mL

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D

Injection Date: 09-May-2018 01:14:39

Instrument ID: CSGS

Operator ID: GEM

Lims ID: piblk

Worklist Smp#: 39

Client ID:

Injection Vol: 1.0 ul

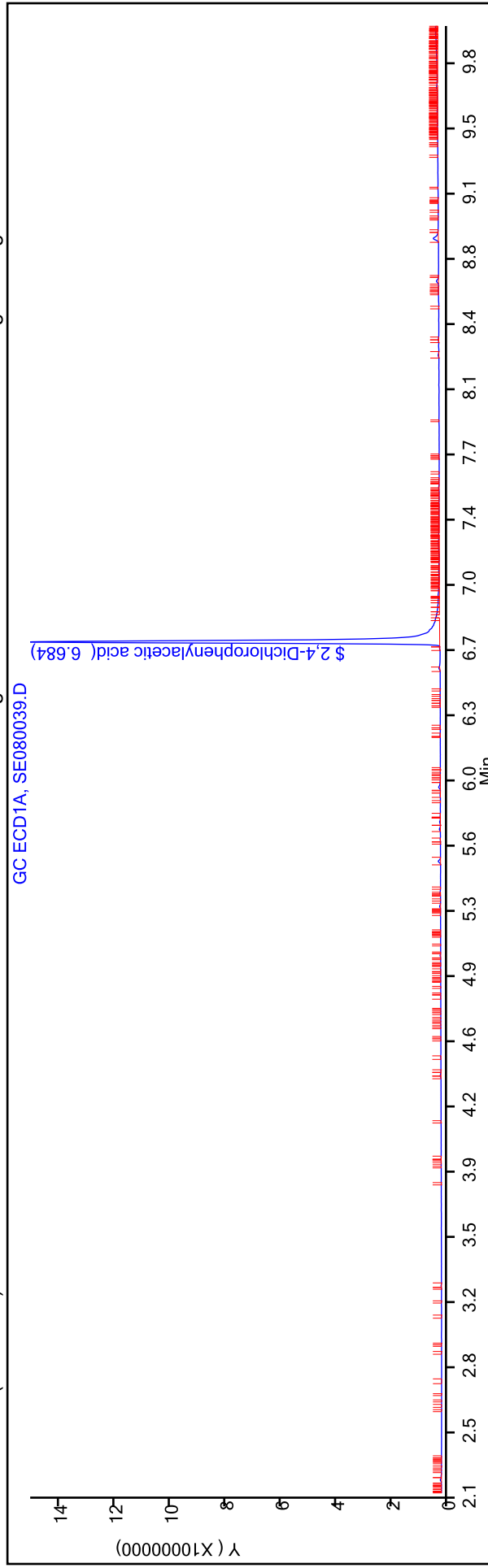
Dil. Factor: 1.0000

ALS Bottle#: 39

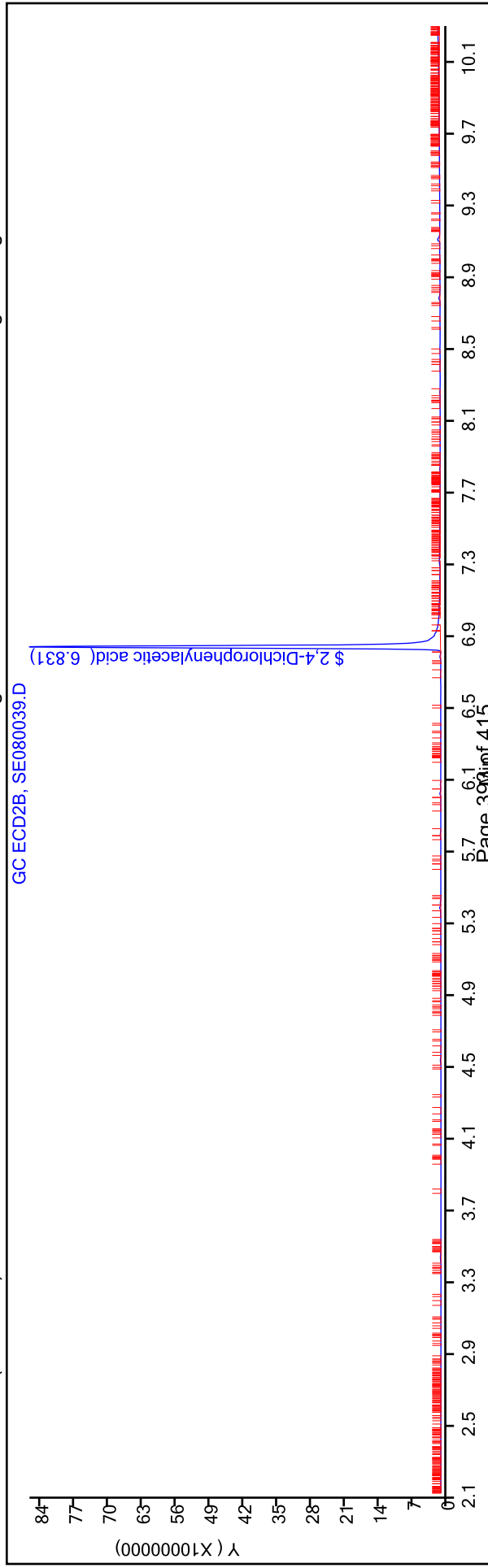
Method: Herbicides_CSGS

Limit Group: 8151A - DOD_V5

Column: DB-XLB (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: DB-35MS (0.32 mm)



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 09-May-2018 01:14:39 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-039
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:11 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:22:33

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.7544	75.14

Surrogate Recovery, Detector: GC ECD2B

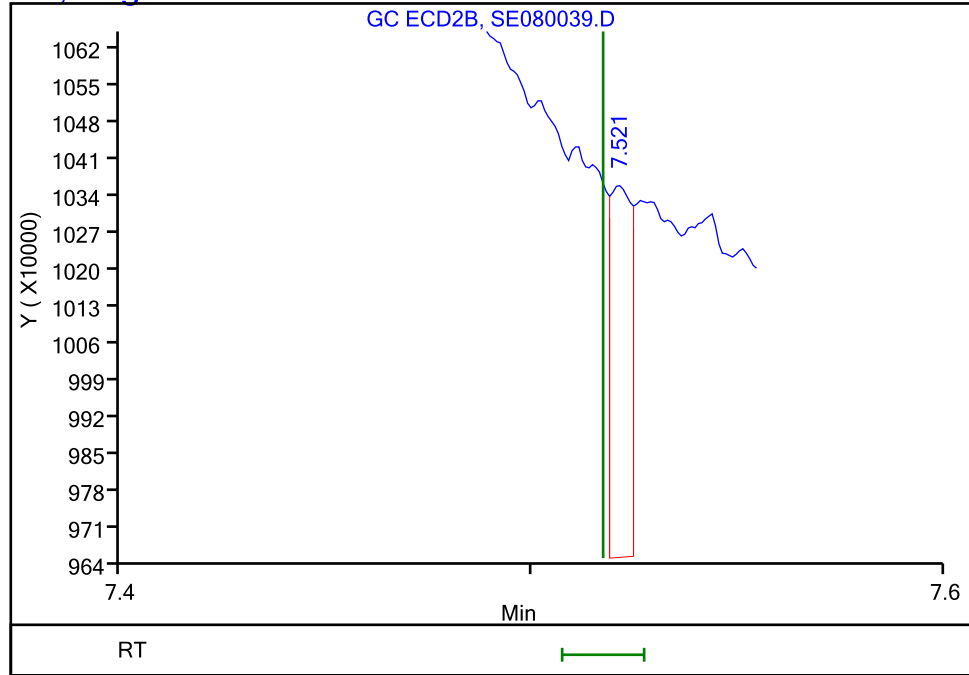
Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	1.00	0.6583	65.56

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080039.D
Injection Date: 09-May-2018 01:14:39 Instrument ID: CSGS
Lims ID: piblk
Client ID:
Operator ID: GEM ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Herbicides_CSGS Limit Group: 8151A - DOD_V5
Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

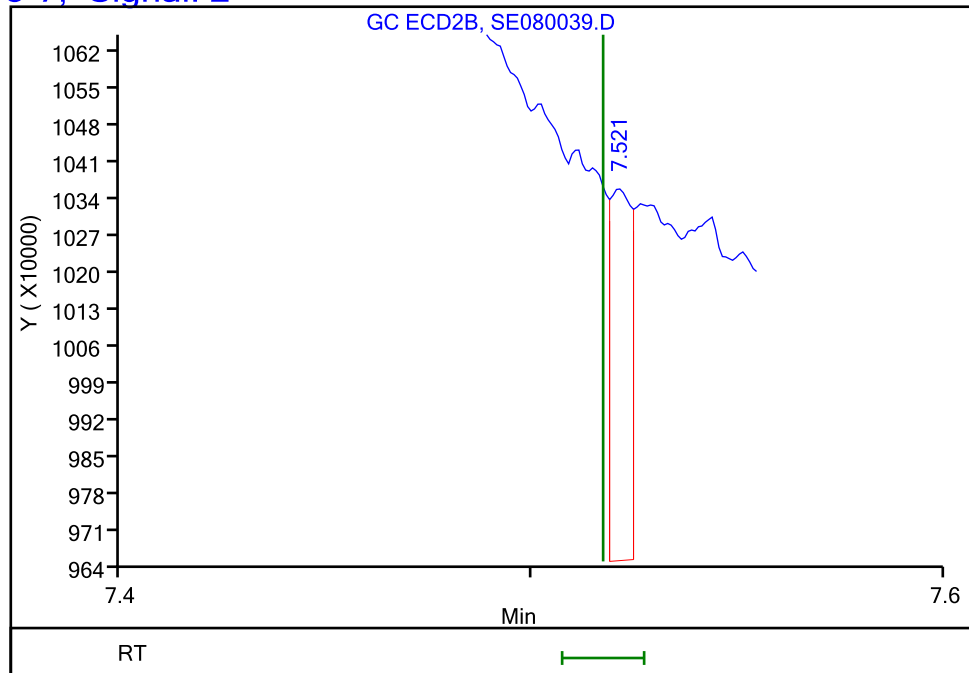
RT: 7.52
Response: 240112
Amount: 0.000151



Column: DB-35MS (0.32 mm) Detector GC ECD2B

11 2,4-D, CAS: 94-75-7, Signal: 2

RT: 7.52
Response: 240112
Amount: 0.000151



Reviewer: kellarj, 09-May-2018 09:22:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-522541/11-A
 Matrix: Solid Lab File ID: SE080031.D
 Analysis Method: 8151A DOD Date Collected: _____
 Extraction Method: 8151A Date Extracted: 05/03/2018 11:22
 Sample wt/vol: 30.59(g) Date Analyzed: 05/08/2018 22:38
 Con. Extract Vol.: 10 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: DB-35MS ID: 0.32 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 523063 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
93-76-5	2,4,5-T	8.90		8.1	4.2	2.3
94-75-7	2,4-D	44.5		8.1	8.1	4.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid (Surr)	54		27-122

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Lims ID: LCS 680-522541/11-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2018 22:38:36 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037

First Level Reviewer: kellarj Date: 09-May-2018 09:29:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Dalapon							
1	2.579	2.579	0.000	83977915	0.2000	0.1602	
2	2.632	2.632	0.000	193328681	0.2000	0.1199	
						RPD = 28.76	
2 2,6-Dichlorophenol							
1	5.015	5.015	0.000	16997350	NC	NC	
2	5.102	5.102	0.000	88978142	NC	NC	
						RPD = 5.43	
3 2,4,6-Trichlorophenol							
1	5.787	5.786	0.001	178016998	NC	NC	
2	5.777	5.776	0.001	722131967	NC	NC	
						RPD = 5.64	
4 3,5-Dichlorobenzoic acid							
1	6.123	6.124	-0.001	51178561	0.2000	0.1592	M
2	6.116	6.116	0.000	252259500	0.2000	0.1404	
						RPD = 12.58	
5 4-Nitrophenol							
1	6.251	6.253	-0.002	27190981	0.2000	0.2941	M
2	6.503	6.505	-0.002	80332197	0.2000	0.2686	
						RPD = 9.05	
\$ 6 2,4-Dichlorophenylacetic acid							
1	6.682	6.683	-0.001	26147601	0.2000	0.1236	M
2	6.828	6.829	-0.001	152742612	0.2000	0.1085	
						RPD = 13.04	
7 Dicamba							
1	6.720	6.720	0.000	84851579	0.1000	0.0788	M
2	6.911	6.910	0.001	370093579	0.1000	0.0739	
						RPD = 6.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
8 MCPP							M
1	6.867	6.867	0.000	4538433	20.0	9.59	M
2	6.956	6.955	0.001	37406683	20.0	7.70	
							RPD = 21.82
9 MCPA							M
1	6.994	6.994	0.000	10987097	20.0	11.9	M
2	7.155	7.155	0.000	83804849	20.0	14.3	
							RPD = 18.75
10 Dichlorprop							M
1	7.181	7.180	0.001	30283619	0.2000	0.1091	M
2	7.298	7.297	0.001	127406227	0.2000	0.0904	
							RPD = 18.81
11 2,4-D							M
1	7.323	7.326	-0.003	50602303	0.2000	0.1673	M
2	7.515	7.517	-0.002	217039232	0.2000	0.1362	
							RPD = 20.52
12 Pentachlorophenol							M
1	7.673	7.674	-0.001	197004023	0.0500	0.0366	M
2	7.714	7.714	0.000	675390441	0.0500	0.0359	
							RPD = 1.88
13 Silvex (2,4,5-TP)							M
1	7.767	7.769	-0.002	54876357	0.0500	0.0292	M
2	7.845	7.846	-0.001	194520506	0.0500	0.0263	
							RPD = 10.42
14 Chloramben							M
1	7.849	7.855	-0.006	162603579	0.2000	0.1058	M
2	8.158	8.162	-0.004	591965188	0.2000	0.1052	
							RPD = 0.57
15 2,4,5-T							M
1	7.923	7.929	-0.006	62905916	0.0500	0.0287	M
2	8.079	8.083	-0.004	180973536	0.0500	0.0272	
							RPD = 5.17
16 2,4-DB							M
1	8.168	8.175	-0.007	14739200	0.2000	0.0977	M
2	8.297	8.302	-0.005	36947342	0.2000	0.0375	
							RPD = 89.12
17 Dinoseb							M
1	8.222	8.224	-0.002	127464708	0.2000	0.1041	M
2	8.247	8.248	-0.001	409994956	0.2000	0.0952	
							RPD = 8.97
18 Bentazon							M
1	8.298	8.300	-0.002	43923380	0.2000	0.1527	M
2	8.661	8.662	-0.001	122227001	0.2000	0.1520	
							RPD = 0.47
19 Picloram							M
1	8.522	8.529	-0.007	391520728	0.2000	0.1538	M
2	9.003	9.005	-0.002	1348730663	0.2000	0.1292	
							RPD = 17.39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

20 DCPA							M
1	8.622	8.623	-0.001	535390256	0.2000	0.1626	M
2	8.776	8.775	0.001	1600305347	0.2000	0.1629	
						RPD = 0.23	

21 Acifluorfen							
1	9.663	9.666	-0.003	338049880	0.2000	0.1426	
2	9.791	9.792	-0.001	1028601509	0.2000	0.1415	
						RPD = 0.78	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

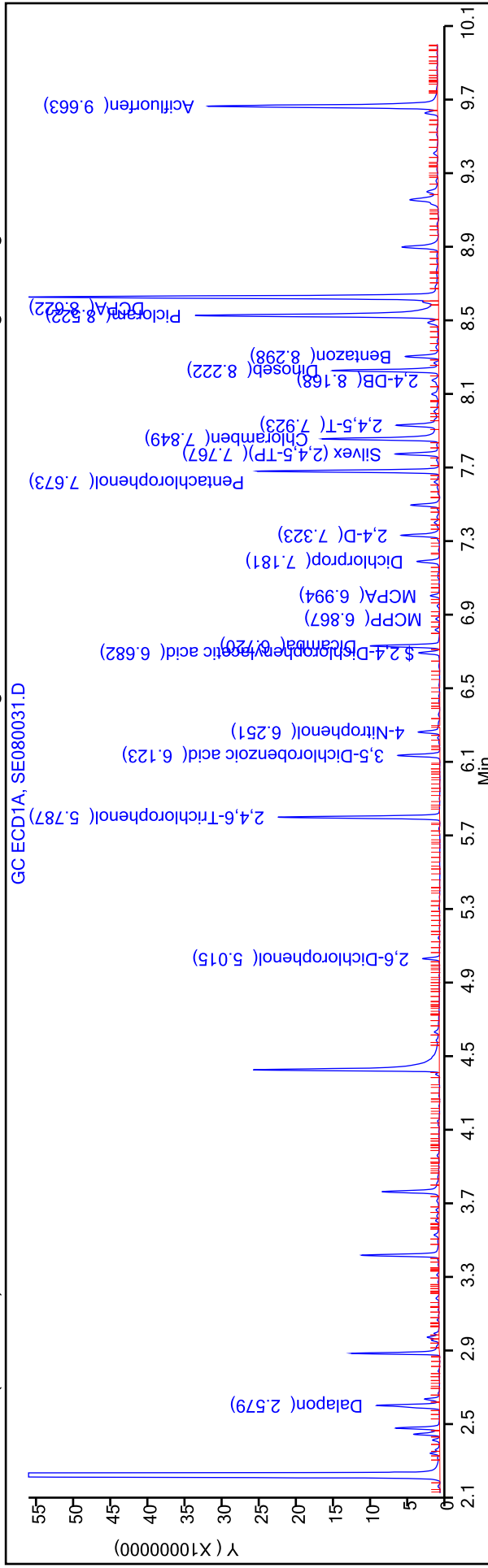
M - Manually Integrated

TestAmerica Savannah
 Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Injection Date: 08-May-2018 22:38:36
 Lims ID: LCS 680-522541\11-A
 Client ID:
 Injection Vol: 1.0 ul
 Method: Herbicides_CSGS
 Column: DB-XLB (0.32 mm)

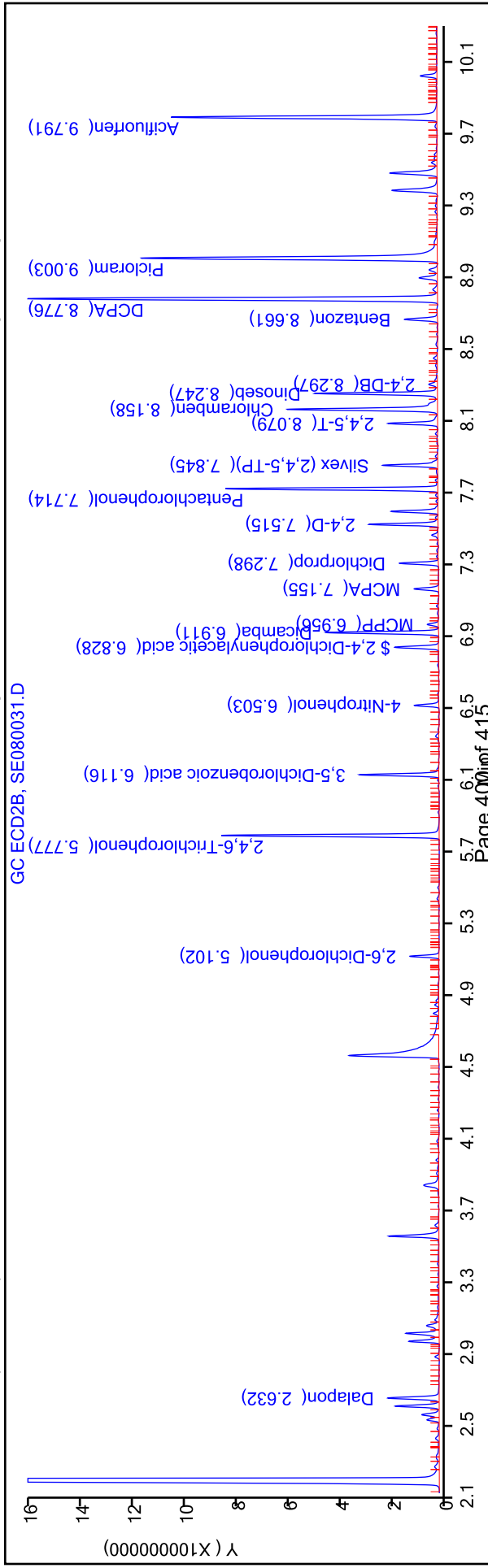
Operator ID: GEM
 Worklist Smp#: 31
 ALS Bottle#: 31

Dil. Factor: 1.0000
 Limit Group: 8151A - DOD_V5

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Savannah
Recovery Report

Data File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080031.D
 Lims ID: LCS 680-522541/11-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2018 22:38:36 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0047183-031
 Operator ID: GEM Instrument ID: CSGS
 Method: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\Herbicides_CSGS.m
 Limit Group: 8151A - DOD_V5
 Last Update: 09-May-2018 09:36:51 Calib Date: 08-May-2018 14:15:28
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Savannah\ChromData\CSGS\20180508-47183.b\SE080011.D
 Column 1 : DB-XLB (0.32 mm) Det: GC ECD1A
 Column 2 : DB-35MS (0.32 mm) Det: GC ECD2B
 Process Host: XAWRK037
 First Level Reviewer: kellarj Date: 09-May-2018 09:29:46

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1236	61.82

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 6 2,4-Dichlorophenylacetic acid	0.2000	0.1085	54.25

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/08/2018 11:58

Analysis Batch Number: 523063 End Date: 05/09/2018 08:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-523063/4		05/08/2018 11:58	1	SE080004.D	DB-XLB 0.32 (mm)
IC 680-523063/4		05/08/2018 11:58	1	SE080004.D	DB-35MS 0.32 (mm)
IC 680-523063/5		05/08/2018 12:17	1	SE080005.D	DB-XLB 0.32 (mm)
IC 680-523063/5		05/08/2018 12:17	1	SE080005.D	DB-35MS 0.32 (mm)
IC 680-523063/6		05/08/2018 12:37	1	SE080006.D	DB-XLB 0.32 (mm)
IC 680-523063/6		05/08/2018 12:37	1	SE080006.D	DB-35MS 0.32 (mm)
IC 680-523063/7		05/08/2018 12:56	1	SE080007.D	DB-XLB 0.32 (mm)
IC 680-523063/7		05/08/2018 12:56	1	SE080007.D	DB-35MS 0.32 (mm)
IC 680-523063/8		05/08/2018 13:16	1	SE080008.D	DB-XLB 0.32 (mm)
IC 680-523063/8		05/08/2018 13:16	1	SE080008.D	DB-35MS 0.32 (mm)
IC 680-523063/9		05/08/2018 13:36	1	SE080009.D	DB-XLB 0.32 (mm)
IC 680-523063/9		05/08/2018 13:36	1	SE080009.D	DB-35MS 0.32 (mm)
IC 680-523063/10		05/08/2018 13:55	1	SE080010.D	DB-XLB 0.32 (mm)
IC 680-523063/10		05/08/2018 13:55	1	SE080010.D	DB-35MS 0.32 (mm)
IC 680-523063/11		05/08/2018 14:15	1	SE080011.D	DB-XLB 0.32 (mm)
IC 680-523063/11		05/08/2018 14:15	1	SE080011.D	DB-35MS 0.32 (mm)
ICV 680-523063/12 CCV		05/08/2018 14:35	1	SE080012.D	DB-XLB 0.32 (mm)
ICV 680-523063/12 CCV		05/08/2018 14:35	1	SE080012.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/14		05/08/2018 15:14	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/14		05/08/2018 15:14	1		DB-35MS 0.32 (mm)
CCV 680-523063/28		05/08/2018 21:40	1	SE080028.D	DB-XLB 0.32 (mm)
CCV 680-523063/28		05/08/2018 21:40	1	SE080028.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/29		05/08/2018 21:59	1	SE080029.D	DB-XLB 0.32 (mm)
PIBLK 680-523063/29		05/08/2018 21:59	1	SE080029.D	DB-35MS 0.32 (mm)
MB 680-522541/10-A		05/08/2018 22:19	1	SE080030.D	DB-XLB 0.32 (mm)
MB 680-522541/10-A		05/08/2018 22:19	1	SE080030.D	DB-35MS 0.32 (mm)
LCS 680-522541/11-A		05/08/2018 22:38	1	SE080031.D	DB-XLB 0.32 (mm)
LCS 680-522541/11-A		05/08/2018 22:38	1	SE080031.D	DB-35MS 0.32 (mm)
680-151915-1		05/08/2018 22:58	1	SE080032.D	DB-XLB 0.32 (mm)
680-151915-1		05/08/2018 22:58	1	SE080032.D	DB-35MS 0.32 (mm)
680-151915-2		05/08/2018 23:17	1	SE080033.D	DB-XLB 0.32 (mm)
680-151915-2		05/08/2018 23:17	1	SE080033.D	DB-35MS 0.32 (mm)
680-151915-3		05/08/2018 23:36	1	SE080034.D	DB-XLB 0.32 (mm)
680-151915-3		05/08/2018 23:36	1	SE080034.D	DB-35MS 0.32 (mm)
ZZZZZ		05/08/2018 23:56	1		DB-XLB 0.32 (mm)
ZZZZZ		05/08/2018 23:56	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 00:16	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 00:16	1		DB-35MS 0.32 (mm)
ZZZZZ		05/09/2018 00:35	1		DB-XLB 0.32 (mm)
ZZZZZ		05/09/2018 00:35	1		DB-35MS 0.32 (mm)
CCV 680-523063/38		05/09/2018 00:55	1	SE080038.D	DB-XLB 0.32 (mm)
CCV 680-523063/38		05/09/2018 00:55	1	SE080038.D	DB-35MS 0.32 (mm)
PIBLK 680-523063/39		05/09/2018 01:14	1	SE080039.D	DB-XLB 0.32 (mm)
PIBLK 680-523063/39		05/09/2018 01:14	1	SE080039.D	DB-35MS 0.32 (mm)

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.: _____

Instrument ID: CSGS Start Date: 05/08/2018 11:58

Analysis Batch Number: 523063 End Date: 05/09/2018 08:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-523063/48		05/09/2018 04:10	1		DB-XLB 0.32 (mm)
CCV 680-523063/48		05/09/2018 04:10	1		DB-35MS 0.32 (mm)
PIBLK 680-523063/49		05/09/2018 04:30	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/49		05/09/2018 04:30	1		DB-35MS 0.32 (mm)
CCV 680-523063/61		05/09/2018 08:24	1		DB-XLB 0.32 (mm)
CCV 680-523063/61		05/09/2018 08:24	1		DB-35MS 0.32 (mm)
PIBLK 680-523063/62		05/09/2018 08:44	1		DB-XLB 0.32 (mm)
PIBLK 680-523063/62		05/09/2018 08:44	1		DB-35MS 0.32 (mm)

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Batch Number: 522541 Batch Start Date: 05/03/18 11:22 Batch Analyst: McKinnon, Heather D

Batch Method: 8151A Batch End Date: 05/08/18 14:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HERBwK LCS 00049	SG HerbwkSurr 00044
680-151915-A-1	GQ004	8151A, 8151A DOD	T	30.02 g	10 mL		1 mL
680-151915-A-2	GQ005	8151A, 8151A DOD	T	30.03 g	10 mL		1 mL
680-151915-A-3	GQ006	8151A, 8151A DOD	T	30.15 g	10 mL		1 mL
MB 680-522541/10		8151A, 8151A DOD		30.02 g	10 mL		1 mL
LCS 680-522541/11		8151A, 8151A DOD		30.59 g	10 mL	1 mL	1 mL

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.

HERBICIDES BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Batch Number: 522541 Batch Start Date: 05/03/18 11:22 Batch Analyst: McKinnon, Heather D

Batch Method: 8151A Batch End Date: 05/08/18 14:24

Batch Notes	
Balance ID	34
Batch Comment	BOX RC
Carbitol ID	5424057
Concentration End Time	1424
Concentration Start Time	0800
Diazald ID	5424071
Diethyl Ether ID	5389783
Sulfuric Acid Lot Number	5423977
Potassium Hydroxide ID	5370090
MeCL2 ID	5428080
Acidified Methanol ID	5442092
MTBE ID	5424031
N-evap ID	N-EVAP
Na2SO4 ID	5222493
NaOH Lot #	5423983
Ottawa Sand ID	5407071
pH Paper ID	5426313
Pipette ID	GE38/CC40G
Analyst ID - Reagent Drop	VT
Silica Gel ID	4252783
Silicic Acid ID	5183663
Uncorrected Temperature	EXKD2 77.0 EXKD3 77.6 EXKD4 Degrees C
Water Bath ID	EXKD2 EXKD3 EXKD4
Water Bath Temperature	EXKD2 77.0 EXKD3 77.3 EXKD4 Degrees C

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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151915-1

SDG No.: _____

Project: Andersen AFB, Guam - Herbicides

Client Sample ID

Lab Sample ID

GQ004

680-151915-1

GQ005

680-151915-2

GQ006

680-151915-3

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151915-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

LOQ Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah

Job Number: 680-151915-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Savannah Job No.: 680-151915-1
 SDG No.: _____
 Instrument ID: NOEQUIP Analysis Method: Moisture
 Start Date: 05/07/2018 16:07 End Date: 05/07/2018 16:07

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
680-151915-1	1	T	16:07	X	X																										
680-151915-2	1	T	16:07	X	X																										
680-151915-3	1	T	16:07	X	X																										
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												
ZZZZZZ			16:07																												

Prep Types: _____
 T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-151915-1

SDG No.:

Batch Number: 523856 Batch Start Date: 05/07/18 16:07 Batch Analyst: Chamberlain, Kim A

Batch Method: Moisture Batch End Date: 05/08/18 09:37

Lab Sample ID	Client Sample ID	Method	Chain	Basis	DishWeight	SampleMassWet	SampleMassDry
680-151915-A-1	GQ004	Moisture		T	1.261 g	6.397 g	6.003 g
680-151915-A-2	GQ005	Moisture		T	1.265 g	6.535 g	6.067 g
680-151915-A-3	GQ006	Moisture		T	1.29 g	6.22 g	5.822 g

Batch Notes	
Balance ID	NA- see documents
Oven ID	Na- See documents

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.

Moisture

MOISTURE CONTENT DETERMINATION

Analytical Batch: 18MCE001 Start Date/Time: 05/07/18 16:07 Temp IN (°C): 105
 Instrument ID: 10601202 End Date/Time: 05/08/18 9:37 Temp Out (°C): 105

Sample ID	Weight of Dish (g)	Wet Weight+ Dish (g)	Dry Weight+ Dish (g)	Percent Solids	Percent Moisture	NOTES
680-151865-1 D194-01	1.239	6.426	6.353	98.6%	1.4%	
D194-02 ↓ -2	1.016	5.069	5.029	99.0%	1.0%	
D194-03 ↓ -3	1.282	6.132	6.077	98.9%	1.1%	
680-151914-1 D202-01	1.021	6.433	6.205	95.8%	4.2%	
D202-02 ↓ -2	1.234	6.71	6.582	97.7%	2.3%	
D202-03 ↓ -3	1.248	6.31	6.129	96.4%	3.6%	
680-151915-1 D210-01	1.261	6.397	6.003	92.3%	7.7%	
D210-02 ↓ -2	1.265	6.535	6.067	91.1%	8.9%	
D210-03 ↓ -3	1.29	6.22	5.822	91.9%	8.1%	
E011-01	1.274	8.774	7.713	85.9%	14.1%	
E021-01	1.257	8.331	7.831	92.9%	7.1%	2.5% ✓
E021-01D	1.296	8.334	7.849	93.1%	6.9%	
E021-02	1.295	8.208	7.649	91.9%	8.1%	
E021-03	0.996	8.405	7.918	93.4%	6.6%	
E021-04	1.263	8.151	7.691	93.3%	6.7%	
E021-05	1.413	8.343	7.842	92.8%	7.2%	
E025-01	1.333	8.922	7.876	86.2%	13.8%	
E025-02	1.099	8.255	7.283	86.4%	13.6%	
E025-03	1.269	8.546	7.63	87.4%	12.6%	
E025-04	1.104	8.041	7.146	87.1%	12.9%	
E025-05	1.086	8.271	6.387	73.8%	26.2%	

COMMENT : Comments: Sample D194-02 was limited in amount

Initial Reading by: NCrist

Final Reading by: NCrist

Reviewed by: 

Thermometer ID: 660330

Shipping and Receiving Documents

CHAIN OF CUSTODY

		1835 W. 205th Street, Torrance, CA 90501 Tel #: 310-618-8889 FAX#: 310-618-0818 Email: info@emaxlabs.com		PO NUMBER: 18D202			EMAX CONTROL NO. 18D202					
		SAMPLE STORAGE			PROJECT CODE: AEC1801							
CLIENT : AECOM				MATRIX CODE		PRESERVATIVE		ANALYSIS REQUIRED			TAT	
PROJECT : ANDERSEN AFB, JQ13				DW=Drinking Water		IC = Ice		<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">8151A (2,4-D AND 2,4,5-T)</div> <div style="border: 1px solid black; padding: 10px; text-align: center; font-size: 2em; font-weight: bold;"> 5/1/18 </div> </div>			<input type="checkbox"/> Rush __24__hrs. <input type="checkbox"/> Rush __48__hrs. <input type="checkbox"/> Rush __72__hrs. <input type="checkbox"/> 7 days <input type="checkbox"/> 14 days <input type="checkbox"/> 21 days	
COORDINATOR				GW=Ground Water		HC = HCl						
TEL		FAX		EMAIL		WW=Waste Water					HN=HNO3	
SEND REPORT TO BRANT LANDERS				SD=Solid Waste SL=Sl		SH=NaO3						
COMPANY AECOM				SS=Soil/ Sediment		ST=Na2S2O3						
ADDRESS 1001 BISHOP STREET, SUITE 1600				WP=Wipes PP=Pure P		ZA=Zinc Acetate						
HONOLULU HI 96813				AR=Air		HS=H2SO4		STANDARD				
EMAX PM				O=								
SAMPLE ID			SAMPLING			CONTAINER			PRESERVATIVE CODE		COMMENTS	
LAB	CLIENT	LOCATION	DATE	TIME	NO.	SIZE	TYPE	MTRIX CODE	QC	IC		
1	GQ004		4/24/2018	11:40	1	4OZ	JAR	SS		X	EMAX ID 18D202-01 (ISM SAMPLE)	
2	GQ005		4/24/2018	11:45	1	4OZ	JAR	SS		X	EMAX ID 18D202-02 (ISM SAMPLE)	
3	GQ006		4/24/2018	11:50	1	4OZ	JAR	SS		X	EMAX ID 18D202-03 (ISM SAMPLE)	
Instructions :										Cooler #	Temp. (°C)	Sample #s
PLEASE FOLLOW PROJECT DATA REQUIREMENTS FROM AECOM.												Subcontract to:
Project Number: #60540676												TA Savannah 5102 LaRoche Avenue Savannah, GA 31404-6019 Main Phone: 912.354.7858
SAMPLER					COURIER/AIRBILL							
RELINQUISHED BY			Date	Time	RECEIVED BY							
			05/02/18	14:35								
			5/3/18	3:50	5/4/18 0900 5/3/18 3:50P-4							
<small>NOTICE: Turn-around-time (TAT) for samples shall not begin until all discrepancies have been resolved. For samples received and discrepancies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associated with sample disposal. Samples shall be disposed of as soon as practical (but not prior to fifteen (15) calendar days) after issuance of analytical report unless a different sample disposal schedule is pre-arranged with EMAX. Disposal fee for samples defined by CA Title 22 as non-hazardous shall be \$5.00 per sample. EMAX will return hazardous samples to the client at the client's expense unless directed in writing otherwise.</small>												

Page 414 of 415



680-151915 Chain of Custody

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 680-151915-1

Login Number: 151915
List Number: 1
Creator: Chamberlain, Kim A

List Source: TestAmerica Savannah

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.	N/A	
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	



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

AECOM
1001 Bishop Street Suite 1600
Honolulu, HI 96813
ATTN: Dr. Brant Landers

June 25, 2018

SUBJECT: Andersen AFB, CTO JQ13, Data Validation

Dear Dr. Landers

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on May 30, 2018. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #42338:

<u>SDG #</u>	<u>Fraction</u>
18D194, 18D202	2,4-D & 2,4,5-T
18D210, 680-151865-1	
680-151914-1, 680-151915-1	

The data validation was performed under Level C & D validation guidelines. The analyses were validated using the following documents and variances, as applicable to each method:

- Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base, Guam; 2018,
- Project Procedures Manual, U.S. Naval Facilities Engineering Command Environmental Restoration Program, NAVFAC Pacific; DON 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories; Version 5.1; 2017
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Project Manager/Senior Chemist

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 18D194

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ001**	18D194-01**	Soil	04/23/18
GQ002	18D194-02	Soil	04/23/18
GQ003**	18D194-03**	Soil	04/23/18
GQ002DUP	18D194-02DUP	Soil	04/23/18
GQ002TRP	18D194-02TRP	Soil	04/23/18
GQ003MS	18D194-03MS	Soil	04/23/18
GQ003MSD	18D194-03MSD	Soil	04/23/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Level C data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Level D data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

- H Holding times were exceeded.
- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05 .
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicate/Triplicate Sample Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Triplicate (TRP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Field Triplicates

Samples GQ001**, GQ002, and GQ003** were identified as field triplicates. No results were detected in any of the samples.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 18D194**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 18D194**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 18D194**

No Sample Data Qualified in this SDG

LDC #: 42338A5

VALIDATION COMPLETENESS WORKSHEET

Date: 4/23/18

SDG #: 18D194

Level C/D

Page: 1 of 1

Laboratory: EMAX Laboratories, Inc.

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D, 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	PSD < 20% . CV < 20%
III.	Continuing calibration	A	CCV < 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates /KR	A/A	
VIII.	Laboratory control samples	A	CCS/D
IX.	Field duplicates	ND	TR = 1 + 2 = 3
X.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ001**	18D194-01**	Soil	04/23/18
2	GQ002	18D194-02	Soil	04/23/18
3	GQ003**	18D194-03**	Soil	04/23/18
4	GQ002DUP	18D194-02DUP	Soil	04/23/18
5	GQ002TRP	18D194-02TRP	Soil	04/23/18
6	GQ003MS	18D194-03MS	Soil	04/23/18
7	GQ003MSD	18D194-03MSD	Soil	04/23/18
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VI. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Surrogate Spikes				
Were all surrogate percent recovery (%R) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII. Matrix Spikes				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
VII Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VIII Field duplicates				
Were field duplicate pairs identified in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TR
Were target compounds detected in the field duplicates?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IX Sample adjustments				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (94 std)	CF (10 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	ICAL	4/3/18	2,4-D (ZB-35H)	561	561	566.6	566.6	3.2	3.2
	(GC09)		2,4-D (RTX-CLPEST II)	539	539	553.3	553.3	7.5	7.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = 100 * (N - C)/N

Where: N = __ Initial Calibration Factor or __ Nominal Amount (ng)
 C = __ Calibration Factor from Continuing Calibration Standard or __ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	QE04002	5/4/18	2,4-D (ZB-35H)	94.0	99.67	99.67	6	6.0
			2,4-D (RTX-CLPEST II)	94.0	98.80	98.8	5	5
2	QE04038	5/5/18	2,4-D (ZB-35H)	94.0	90.94	90.94	3	3.2
			2,4-D (RTX-CLPEST II)	94.0	107.82	107.82	15	14.7
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Page: 1 of 1
 Reviewer: 9
 2nd reviewer: A

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100
 Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
<u>24-OCAT</u>	<u>ch1</u>	<u>1000.0</u>	<u>789.293</u>	<u>78.9</u>	<u>78.9</u>	<u>0</u>
<u>✓</u>	<u>✓2</u>	<u>✓</u>	<u>884.143</u>	<u>88.4</u>	<u>88.4</u>	<u>2</u>

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

MS = Matrix spike

MSD = Matrix spike duplicate

$\text{RPD} = (((\text{SSCMS} - \text{SSCMSD}) * 2) / (\text{SSCMS} + \text{SSCMSD})) * 100$

MS/MSD samples: 6/7

Compound	Spike Added		Sample Conc.	Spike Sample Concentration		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	(MS/MSD)			(MS/MSD)		Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)			—								
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	50.6	50.6	ND	38.1	37.4	75	75	74	74	2	2
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 100/0

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<u>100/0</u>		<u>100/0</u>		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	<u>50.0</u>	<u>50.0</u>	<u>52.9</u>	<u>46.9</u>	<u>106</u>	<u>106</u>	<u>94</u>	<u>94</u>	<u>12</u>	
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

N/A Were all reported results recalculated and verified for all level IV samples?
 N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound
In the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Example:
 Sample ID: ND Compound Name _____
#6MS, 2.4-D
 Concentration = $\frac{(41696)(5)(1)}{(553.3)(10.91)(0.989)}$
 = 38.1 $\mu\text{g}/\text{kg}$

#	Sample ID	Compound	Reported Concentrations (<u>μg/kg</u>)	Recalculated Results Concentrations	Qualifications
	<u>6</u>	<u>2.4-D</u>	<u>38.1</u>		

Comments: _____

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 18D202

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ004	18D202-01	Soil	04/24/18
GQ005**	18D202-02**	Soil	04/24/18
GQ006	18D202-03	Soil	04/24/18
GQ006MS	18D202-03MS	Soil	04/24/18
GQ006MSD	18D202-03MSD	Soil	04/24/18
GQ006DUP	18D202-03DUP	Soil	04/24/18
GQ006TRP	18D202-03TRP	Soil	04/24/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Level C data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Level D data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

- H Holding times were exceeded.
- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05 .
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicate/Triplicate Sample Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Triplicate (TRP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Field Triplicates

Samples GQ004, GQ005**, and GQ006 were identified as field triplicates. No results were detected in any of the samples.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 18D202**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 18D202**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 18D202**

No Sample Data Qualified in this SDG

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D & 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	ISO ≤ 20% . ICV ≤ 20%
III.	Continuing calibration	D	CCV ≤ 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	1/R A/A	
VIII.	Laboratory control samples	D	LCS/0
IX.	Field duplicates	ND	TR = 4+5+0
X.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinstate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ004	18D202-01	Soil	04/24/18
2	GQ005**	18D202-02**	Soil	04/24/18
3	GQ006	18D202-03	Soil	04/24/18
4	GQ006MS	18D202-03MS	Soil	04/24/18
5	GQ006MSD	18D202-03MSD	Soil	04/24/18
6	GQ006DUP	18D202-03DUP	Soil	04/24/18
7	GQ006TRP	18D202-03TRP	Soil	04/24/18
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical Holding Times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. Initial Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Continuing Calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Surrogate Recovery				
Were all surrogate percent recovery (%R) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Matrix Spike				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
VI. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
VII. Field duplicates				
Were field duplicate pairs identified in this SDG?		/		TR
Were target compounds detected in the field duplicates?			/	
VIII. Compound quantitation				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
IX. Target compound identification				
Were the retention times of reported detects within the RT windows?	/			
X. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
 Average CF = sum of the CF/number of standards
 %RSD = 100 * (S/X)

Where: A = Area of compound
 C = Concentration of compound
 S = Standard deviation of calibration factors
 X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (94 std)	CF (10 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	ICAL	4/3/18	2,4-D (ZB-35H)	561	561	566.6	566.6	3.2	3.2
	(GC09)		2,4-D (RTX-CLPEST II)	539	539	553.3	553.3	7.5	7.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = 100 * (N - C)/N

Where: N = ___ Initial Calibration Factor or ___ Nominal Amount (ng)
 C = ___ Calibration Factor from Continuing Calibration Standard or ___ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	QE04002	5/4/18	2,4-D (ZB-35H)	94.0	99.67	99.67	6	6.0
			2,4-D (RTX-CLPEST II)	94.0	98.80	98.8	5	5
2	QE04014	5/4/18	2,4-D (ZB-35H)	94.0	99.43	99.43	6	5.8
			2,4-D (RTX-CLPEST II)	94.0	102.75	102.75	9	9.3
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Page: 1 of 1
 Reviewer: [Signature]
 2nd reviewer: [Signature]

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 2

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
24-DCAA	ch1	1000.0	626.232	62.6	62.6	0
✓	✓ 2	1	691.424	69.1	69.1	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

MS = Matrix spike

MSD = Matrix spike duplicate

$\text{RPD} = ((\text{SSCMS} - \text{SSCMSD}) * 2) / (\text{SSCMS} + \text{SSCMSD}) * 100$

MS/MSD samples: 4/5

Compound	Spike Added (<u>MS/MSD</u>)		Sample Conc. (<u>MS/MSD</u>)	Spike Sample Concentration (<u>MS/MSD</u>)		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	<u>51.9</u>	<u>51.9</u>	<u>ND</u>	<u>29.7</u>	<u>27.0</u>	<u>57</u>	<u>57</u>	<u>52</u>	<u>52</u>	<u>10</u>	<u>10</u>
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1CS/0

Compound	Spike Added (174)		Spiked Sample Concentration (174)		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	50.0	50.0	52.9	48.9	106	106	94	94	12	12
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound
In the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Example:
 Sample ID: N^o Compound Name _____
#4 MS, 2A-D
 Concentration = $\frac{(31699.0)(5)(1)}{(1553.3)(10.04)(0.964)}$
 = 29.6196g

#	Sample ID	Compound	Reported Concentrations (<u>MS</u>)	Recalculated Results Concentrations ()	Qualifications
	<u>4</u>	<u>2A-D</u>	<u>29.7</u>		

Comments: _____

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: EMAX Laboratories, Inc.

Sample Delivery Group (SDG): 18D210

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ007	18D210-01	Soil	04/25/18
GQ008	18D210-02	Soil	04/25/18
GQ009**	18D210-03**	Soil	04/25/18
GQ009MS	18D210-03MS	Soil	04/25/18
GQ009MSD	18D210-03MSD	Soil	04/25/18
GQ009DUP	18D210-03DUP	Soil	04/25/18
GQ009TRP	18D210-03TRP	Soil	04/25/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Standard data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Full data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

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- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

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- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05.
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicate/Triplicate Sample Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Triplicate (TRP) sample analysis was performed on an associated project sample. Results were within QC limits.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

IX. Field Triplicates

Samples GQ007, GQ008, and GQ009** were identified as field triplicates. No results were detected in any of the samples.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 18D210**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 18D210**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 18D210**

No Sample Data Qualified in this SDG

LDC #: 42338C5

VALIDATION COMPLETENESS WORKSHEET

Date: 4/25/18

SDG #: 18D210

Level C/D

Page: 1 of 1

Laboratory: EMAX Laboratories, Inc.

Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D > 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	RSD ≤ 20% . 1CV ≤ 20%
III.	Continuing calibration	A	CCV ≤ 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates /LR	A/A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Field duplicates	ND	TR = 1 + 2 + 3
X.	Compound quantitation RL/LOQ/LODs	A	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ007	18D210-01	Soil	04/25/18
2	GQ008	18D210-02	Soil	04/25/18
3	GQ009**	18D210-03**	Soil	04/25/18
4	GQ009MS	18D210-03MS	Soil	04/25/18
5	GQ009MSD	18D210-03MSD	Soil	04/25/18
6	GQ009DUP	18D210-03DUP	Soil	04/25/18
7	GQ009TRP	18D210-03TRP	Soil	04/25/18
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical Holding Times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. Initial Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing Calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VI. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Surrogate Recovery				
Were all surrogate percent recovery (%R) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII. Matrix Spike				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
VI Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VII Field duplicates				
Were field duplicate pairs identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TR
Were target compounds detected in the field duplicates?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII Compound quantitation				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IX Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (94 std)	CF (10 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	ICAL	4/3/18	2,4-D (ZB-35H)	561	561	566.6	566.6	3.2	3.2
	(GC09)		2,4-D (RTX-CLPEST II)	539	539	553.3	553.3	7.5	7.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = 100 * (N - C)/N

Where: N = __ Initial Calibration Factor or __ Nominal Amount (ng)
 C = __ Calibration Factor from Continuing Calibration Standard or __ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	QE04002	5/4/18	2,4-D (ZB-35H)	94.0	99.67	99.67	6	6.0
			2,4-D (RTX-CLPEST II)	94.0	98.80	98.8	5	5
2	QE04014	5/4/18	2,4-D (ZB-35H)	94.0	99.43	99.43	6	5.8
			2,4-D (RTX-CLPEST II)	94.0	102.75	102.75	9	9.3
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

1 page: 1 of 1
 Reviewer: Q
 2nd reviewer: [Signature]

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 3

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
<u>2A-DCAA</u>	<u>ch 1</u>	<u>100.0</u>	<u>79.599</u>	<u>79.6</u>	<u>79.6</u>	
<u>↓</u>	<u>V 2</u>	<u>↓</u>	<u>78.840</u>	<u>78.8</u>	<u>78.8</u>	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

SC = Concentration

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 105/0

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<u>(105)</u>		<u>(105)</u>		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	<u>50.0</u>	<u>50.0</u>	<u>52.9</u>	<u>46.9</u>	<u>106</u>	<u>106</u>	<u>94</u>	<u>94</u>	<u>12</u>	<u>12</u>
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET I
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

MS = Matrix spike

MSD = Matrix spike duplicate

$$\text{RPD} = ((\text{SSCMS} - \text{SSCMSD}) * 2) / (\text{SSCMS} + \text{SSCMSD}) * 100$$

MS/MSD samples: 4/5

Compound	Spike Added (<u>N/A</u>)		Sample Conc. (<u>N/A</u>)	Spike Sample Concentration (<u>N/A</u>)		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	<u>54.4</u>	<u>54.4</u>	<u>ND</u>	<u>48.1</u>	<u>38.0</u>	<u>88</u>	<u>88</u>	<u>70</u>	<u>70</u>	<u>23</u>	<u>23</u>
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

Y N N/A
Y N N/A

Were all reported results recalculated and verified for all level IV samples?
 Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example:

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound in the initial calibration
- Vs= initial volume of the sample
- Ws= initial weight of the sample
- %S= Percent Solid

Sample ID. 3 Compound Name ND
~~#4(MS)~~: 2.4-0
 Concentration = $\frac{(50092) (5) (1)}{(566.59) (10.03) (0.919)}$
 = 48.0 μ g/g

#	Sample ID	Compound	Reported Concentrations (<u>16.81</u>)	Recalculated Results Concentrations (<u> </u>)	Qualifications
	<u>4(MS)</u>	<u>2.4-0</u>	<u>48.1</u>		

Comments: _____

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 680-151865-1

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ001**	680-151865-1**	Soil	04/23/18
GQ002	680-151865-2	Soil	04/23/18
GQ003**	680-151865-3**	Soil	04/23/18
GQ003MS	680-151865-3MS	Soil	04/23/18
GQ003MSD	680-151865-3MSD	Soil	04/23/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Standard data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Full data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

- H Holding times were exceeded.
- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05 .
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Affected Compound	Flag	A or P
GQ001**	DB-35MS	2,4-Dichlorophenyl acetic acid	23 (27-122)	All compounds	J (all detects) UJ (all non-detects)	P

Sample	Column	Surrogate	%R (Limits)	Affected Compound	Flag	A or P
GQ002	DB-35MS	2,4-Dichlorophenyl acetic acid	15 (27-122)	All compounds	UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicate

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	Flag	A or P
GQ003MS/MSD (GQ003**)	2,4,5-T 2,4-D	-236 (31-138) -668 (31-138)	-139 (31-138) -502 (31-138)	J (all detects) J (all detects)	A
GQ003MS/MSD (5X*) (GQ003** (5X*))	2,4,5-T 2,4-D	-130 (28-144) -514 (28-144)	-74.4 (28-144) -354 (28-144)	J (all detects) J (all detects)	A

*Sample GQ003, GQ003MS and GQ003MSD were analyzed at a 5X dilution because 2,4-D exceeded the calibration range in the undiluted analysis of GQ003.

Although the 2,4,5-T and 2,4-D results for parent sample GQ003 were greater than 2X the spike concentration and GQ003, GQ003MS and GQ003MSD were analyzed at 5X dilution for 2,4-D, using professional judgment, the associated results were qualified as estimated due to excessively high negative MS/MSD %Rs.

High negative MS/MSD %Rs indicate that the sample aliquots used to prepare GQ003, GQ003MS and GQ003MSD may not be from the same sample. Additionally, high negative %Rs at 5X dilution indicate that 2,4-D did not exceed the calibration range in GQ003MS and GQ003MSD which is not consistent with the reported results for 2,4-D in the parent sample GQ003.

Relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	RPD (Limits)	Flag	A or P
GQ003MS/MSD (GQ003**)	2,4,5-T 2,4-D	94 (≤30) 105 (≤30)	J (all detects) J (all detects)	A
GQ003MS/MSD (5X) (GQ003** (5X))	2,4,5-D	126 (≤30)	J (all detects)	A

Although the 2,4,5-T and 2,4-D results for parent sample GQ003 were greater than 2X the spike concentration and GQ003, GQ003MS and GQ003MSD were analyzed at 5X dilution for 2,4-D, using professional judgment, the associated results were qualified as estimated due to excessively high MS/MSD RPDs.

High MS/MSD RPDs may indicate a high degree of heterogeneity in the sample matrix, however, in this case, based on the excessively high negative MS/MSD %Rs, imprecision may be due to either improper sample handling or inconsistent sample preparation.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Triplicates

Samples GQ001**, GQ002, and GQ003** were identified as field triplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)			%RSD (Limits)	RPD (Limits)	Flag	A or P
	GQ001**	GQ002	GQ003** (5X)				
2,4-D	10	8.4U	380	-	190 (≤100)	J (all detects)	A

Compound	Concentration (ug/Kg)			%RSD (Limits)	RPD (Limits)	Flag	A or P
	GQ001**	GQ002	GQ003**				
2,4,5-T	4.4U	4.3U	49J	Not calculable	-	J (all detects)	A

The laboratory indicated that the presence of 2,4-D in the project samples is likely a result of glassware contamination. The laboratory received 10-15 samples that came in around the same time that required 10,000 to 100,000 fold dilutions for 2,4-D.

Chromatograms were reviewed by the validator to verify the reason for the imprecision. The chromatogram for sample GQ003 does not match the chromatograms for samples GQ001 and GQ002. Additionally, matrix interference was apparent for samples GQ001 and GQ002 but not for sample GQ003.

Although sample data are not qualified on the basis of field triplicate imprecision per NAVFAC SOP, using professional judgment, associated results were qualified as estimated due to possible 2,4-D contamination and the uncertainty that GQ003 may not be a field sample based on the field triplicate results and the negative MS/MSD %Rs.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation.

The laboratory detection limit (DL) and limit of detection (LOD) were less than or equal to the QAPP DL and LOD with the following exceptions:

Sample	Compound	Laboratory DL	QAPP DL	Laboratory LOD	QAPP LOD
GQ001** GQ003**	2,4-D	5.0 ug/Kg	2.5 ug/Kg	8.3 ug/Kg	5.0 ug/Kg

Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to surrogate %R, MS/MSD %R and RPD, and field triplicate imprecision, data were qualified as estimated in three samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 680-151865-1**

Sample	Compound	Flag	A or P	Reason (Code)
GQ001** GQ002	All compounds	J (all detects) UJ (all non-detects)	P	Surrogates (%R) (S)
GQ003**	2,4,5-T	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)(E)
GQ003** (5X)	2,4-D	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)(E)
GQ001** GQ003** (5X)	2,4-D	J (all detects)	A	Field triplicates (RPD) (V)
GQ003**	2,4,5-T	J (all detects)	A	Field triplicates (imprecision) (V)

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 680-151865-1**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 680-151865-1**

No Sample Data Qualified in this SDG

LDC #: 42338D5

VALIDATION COMPLETENESS WORKSHEET

SDG #: 680-151865-1

Level C/D

Laboratory: Test America, Inc

Date: 4/23/18

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D & 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	AA	RSDS ≤ 20% - 1CV ≤ 20%
III.	Continuing calibration	A	ECV ≤ 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	W	
VII.	Matrix spike/Matrix spike duplicates	W	
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	W	TR = 1+2+3
X.	Compound quantitation RL/LOQ/LODs	W	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ001**	680-151865-1**	Soil	04/23/18
2	GQ002	680-151865-2	Soil	04/23/18
3	GQ003**	680-151865-3**	Soil	04/23/18
4	GQ003MS	680-151865-3MS	Soil	04/23/18
5	GQ003MSD	680-151865-3MSD	Soil	04/23/18
6				
7				
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical Holding Times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
II. Initial Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Continuing Calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VII. Surrogate Recovery				
Were all surrogate percent recovery (%R) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VIII. Matrix Spike				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
VIII. Field duplicates				
Were field duplicate pairs identified in this SDG?	/	/		TR
Were target compounds detected in the field duplicates?	/		/	
IX. Compound quantitation				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
X. Target Retention Time Identification				
Were the retention times of reported detects within the RT windows?	/			
XI. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	/			

LDC# 4338D5

VALIDATION FINDINGS WORKSHEET
Field Triplicates

Page: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: Herbicides (EPA SW 846 Method 8151A)

Y N NA
Y N NA

Were field triplicate sets identified in this SDG?

Were target analytes detected in the field triplicate sets?

Analyte	Concentration (ug/Kg)			RSD (≤ 35)	RPD (≤ 100)
	1	2	3		
2,4-D (5x*)	10	8.4U	380 *		190
2,4,5-T (1x)	4.4U	4.3U	49J	NC	

V:\FIELD DUPLICATES\Field Triplicates\2018\42338D5_AECOM.wpd

* 62003 choo does not match 62001 & 62002 (text)
Lab indicated likely result of glassware contamination. 10-15 samples rec'd at same time that rec'd 10,000-100,000 dilution for 2,4-D

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
 Average CF = sum of the CF/number of standards
 %RSD = 100 * (S/X)

Where: A = Area of compound
 C = Concentration of compound
 S = Standard deviation of calibration factors
 X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (0.25 std)	CF (0.25 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	IACL	5/9/18	2,4-D (DB-35MS)	1445576004	1445576004	1459816204	1459816204	6.0	6.0
	(CSGS)		2,4-D (DB-XLB)	310716568	310716568	315615394	315615394	2.6	2.6
2	IACL	5/11/18	2,4-D (DB-35MS)	1317914556	1317914556	1258856811	1258856811	12.8	12.8
	(CSGS)		2,4-D (DB-XLB)	268581372	268581372	273146870	273146870	10.7	10.7
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = $100 * (N - C)/N$

Where: N = __ Initial Calibration Factor or __ Nominal Amount (ng)
C = __ Calibration Factor from Continuing Calibration Standard or __ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	SE090032	5/10/18	2,4-D (DB-35MS)	1459816204	1478123040	1478123040	1.3	1.3
			2,4-D (DB-XLB)	315615394	320574760	320574760	1.6	1.6
2	SE110030	5/11/18	2,4-D (DB-35MS)	1258856811	1079069800	1079069800	14.3	14.3
			2,4-D (DB-XLB)	273146870	259613330	259613330	5.0	5.0
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Page: 101
 Reviewer: [Signature]
 2nd reviewer: [Signature]

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
<u>2.4-D</u>	<u>DB-35MS</u>	<u>0.2000</u>	<u>0.0468</u>	<u>23</u>	<u>23</u>	<u>0</u>

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

VALIDATION FINDINGS WORKSHEET I
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$ Where $\text{SSC} = \text{Spiked sample concentration}$ $\text{SC} = \text{Sample concentration}$
 $\text{RPD} = \frac{((\text{SSCMS} - \text{SSCMSD}) * 2)}{(\text{SSCMS} + \text{SSCMSD})} * 100$ $\text{SA} = \text{Spike added}$ $\text{MS} = \text{Matrix spike}$ $\text{MSD} = \text{Matrix spike duplicate}$

MS/MSD samples: 4/5

Compound	Spike Added (MS/MSD)		Sample Conc. (MS/MSD)	Spike Sample Concentration (MS/MSD)		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	167.3	47.3	380	31.5	139	-514	-518	-354	-358	126	126
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 680-52658

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	LCS	LCSD	LCS	LCSD	Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	64.8	NA	46.3	NA	72	72				
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

Example:
 Sample ID: 3 Compound Name 2.4-D

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound in the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Concentration = $\frac{(282169999)(10,000)(5)}{(1159816204)(30.05)(0.989)}$
 (1258856811)
 = 377.11 $\mu\text{g/kg}$

#	Sample ID	Compound	Reported Concentrations <i>($\mu\text{g/kg}$)</i>	Recalculated Results Concentrations <i>($\mu\text{g/kg}$)</i>	Qualifications
	1	2.4-D	10	10	
	3	2.4-D	380	377.11	
		2.4.5-T	49	48.9	

Comments: _____

Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 680-151914-1

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ007	680-151914-1	Soil	04/25/18
GQ008	680-151914-2	Soil	04/25/18
GQ009**	680-151914-3**	Soil	04/25/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Standard data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Full data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

- H Holding times were exceeded.
- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05 .
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicate

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Triplicates

Samples GQ007, GQ008, and GQ009** were identified as field triplicates. No results were detected in any of the samples.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation.

The laboratory detection limit (DL) and limit of detection (LOD) were less than or equal to the QAPP DL and LOD with the following exceptions:

Sample	Compound	Laboratory DL	QAPP DL	Laboratory LOD	QAPP LOD
All samples in SDG 680-151914-1	2,4-D	5.0 ug/Kg	2.5 ug/Kg	8.3 ug/Kg	5.0 ug/Kg

Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 680-151914-1**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 680-151914-1**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 680-151914-1**

No Sample Data Qualified in this SDG

LDC #: 42338E5

VALIDATION COMPLETENESS WORKSHEET

SDG #: 680-151914-1

Level C/D

Laboratory: Test America, Inc

Date: 6/8/18

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D x 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	RSO ≤ 20%, 1CV ≤ 20%
III.	Continuing calibration	A	CCV ≤ 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	CS
VIII.	Laboratory control samples	A	LCS
IX.	Field duplicates	ND	TR = 1 + 2 + 3
X.	Compound quantitation RL/LOQ/LODs	SA	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ007	680-151914-1	Soil	04/25/18
2	GQ008	680-151914-2	Soil	04/25/18
3	GQ009**	680-151914-3**	Soil	04/25/18
4				
5				
6				
7				
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
Technical Holding Times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Initial Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Continuing Calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Surrogate Recovery				
Were all surrogate percent recovery (%R) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Matrix Spike				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Validation Area	Yes	No	NA	Findings/Comments
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VIII. Field Duplicates				
Were field duplicate pairs identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TR
Were target compounds detected in the field duplicates?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IX. Compound Identification				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X. Target Compound Identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
 Average CF = sum of the CF/number of standards
 %RSD = 100 * (S/X)

Where: A = Area of compound
 C = Concentration of compound
 S = Standard deviation of calibration factors
 X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (0.25 std)	CF (0.25 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	IACL	5/8/18	2,4-D (DB-35MS)	1676989976	1676989976	1593535987	1593535987	12.0	12.0
	(CSGS)		2,4-D (DB-XLB)	325959236	325959236	302399622	302399622	14.4	14.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = 100 * (N - C)/N

Where: N = __ Initial Calibration Factor or __ Nominal Amount (ng)
C = __ Calibration Factor from Continuing Calibration Standard or __ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	SE080028	5/8/18	2,4-D (DB-35MS)	1593535987	1336273560	1336273560	16.1	16.1
			2,4-D (DB-XLB)	302399622	279399860	279399860	7.6	7.6
2								
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Page: 201
 Reviewer: 9
 2nd reviewer: X

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 3

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4-DCAA	DB-75MS	0.200	0.2046	102	102	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration

SC = Concentration

SA = Spike added

RPD = | SSCLCS - SSCLCSD | * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 680-52271

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<u>(NA)</u>		<u>(44.5)</u>		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	<u>65.4</u>	<u>NA</u>	<u>44.5</u>	<u>NA</u>	<u>68</u>	<u>68</u>				
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound in the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Example:
 Sample ID. #3 Compound Name ND
LC# 680-522541, 2, 4-D
 Concentration = $\frac{(217039232)(10)(1)(1000)}{(1593535987)(30.59)}$
 = 44.5 ug/kg

#	Sample ID	Compound	Reported Concentrations (<u>ug/kg</u>)	Recalculated Results Concentrations (<u> </u>)	Qualifications
	<u>LC#</u>	<u>2,4-D</u>	<u>44.5</u>		

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Andersen AFB, CTO JQ13

LDC Report Date: June 18, 2018

Parameters: 2,4-D & 2,4,5-T

Validation Level: Level C & D

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 680-151915-1

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
GQ004	680-151915-1	Soil	04/24/18
GQ005**	680-151915-2**	Soil	04/24/18
GQ006	680-151915-3	Soil	04/24/18

**Indicates sample underwent Level D validation

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Work Plan for Limited Investigation into Alleged Herbicide Orange Use at Three Sites, Andersen Air Force Base (AFB), Guam (March 2018), the Project Procedures Manual, U.S. Naval Facilities Engineering Command (NAVFAC) Environmental Restoration (ER) Program, NAVFAC Pacific (DON 2015), and the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.1 (2017). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

2,4-D and 2,4,5-T by Environmental Protection Agency (EPA) SW 846 Method 8151A

All sample results were subjected to Standard data validation, which comprises an evaluation of quality control (QC) summary results. Samples appended with a double asterisk on the cover page were subjected to Full data validation, which is comprised of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

- J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.
- U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).
- UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.
- R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.
- NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Qualification Code Reference

- H Holding times were exceeded.
- S Surrogate recovery was outside QC limits.
- C Calibration %RSD, r , r^2 or %D were noncompliant.
- R Calibration RRF was <0.05 .
- B Presumed contamination from preparation (method blank).
- L Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits.
- Q MS/MSD recovery was poor.
- E MS/MSD or Duplicate RPD was high.
- I Internal standard performance was unsatisfactory.
- M Instrument Performance Check (BFB or DFTPP) was noncompliant.
- T Presumed contamination from trip blank.
- F Presumed contamination from FB or ER.
- D The analysis with this flag should not be used because another more technically sound analysis is available.
- P Instrument performance for pesticides was poor.
- V Unusual problems found with the data not defined elsewhere. Description of the problem can be found in the validation report.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

III. Continuing Calibration

Continuing calibration was performed at the required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicate

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

IX. Field Triplicates

Samples GQ004, GQ005**, and GQ006 were identified as field triplicates. No results were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)			%RSD (Limits)	RPD (Limits)
	GQ004	GQ005**	GQ006		
2,4-D	9.0U	8.3J	9.0U	Not calculable	-

The laboratory indicated that the presence of 2,4-D in the project sample is likely a result of glassware contamination. The laboratory received 10-15 samples that came in around the same time that required 10,000 to 100,000 fold dilutions for 2,4-D.

X. Compound Quantitation

All compound quantitations met validation criteria for samples which underwent Level D validation.

The laboratory detection limit (DL) and limit of detection (LOD) were less than or equal to the QAPP DL and LOD with the following exceptions:

Sample	Compound	Laboratory DL	QAPP DL	Laboratory LOD	QAPP LOD
All samples in SDG 680-151915-1	2,4-D	5.0 ug/Kg	2.5 ug/Kg	8.3 ug/Kg	5.0 ug/Kg

Raw data were not reviewed for Level C validation.

XI. Target Compound Identification

All target compound identifications met validation criteria for samples which underwent Level D validation. Raw data were not reviewed for Level C validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Data Qualification Summary - SDG 680-151915-1**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Laboratory Blank Data Qualification Summary - SDG 680-151915-1**

No Sample Data Qualified in this SDG

**Andersen AFB, CTO JQ13
2,4-D & 2,4,5-T - Field Blank Data Qualification Summary - SDG 680-151915-1**

No Sample Data Qualified in this SDG

LDC #: 42338F5
 SDG #: 680-151915-1
 Laboratory: Test America, Inc

VALIDATION COMPLETENESS WORKSHEET
 Level C/D

Date: 4/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC Herbicides (EPA SW 846 Method 8151A) 2,4-D, 2,4,5-T

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	RSD ≤ 20% ICV ≤ 20%
III.	Continuing calibration	A	CCV ≤ 20%
IV.	Laboratory Blanks	A	
V.	Field blanks	N	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	CS
VIII.	Laboratory control samples	A	CS
IX.	Field duplicates	M	TR = 1 + 2 + 3
X.	Compound quantitation RL/LOQ/LODs	M	Not reviewed for Level C validation.
XI.	Target compound identification	A	Not reviewed for Level C validation.
XII.	Overall assessment of data	A	

Note: A = Acceptable ND = No compounds detected D = Duplicate SB=Source blank
 N = Not provided/applicable R = Rinsate TB = Trip blank OTHER:
 SW = See worksheet FB = Field blank EB = Equipment blank

** Indicates sample underwent Level D validation

	Client ID	Lab ID	Matrix	Date
1	GQ004	680-151915-1	Soil	04/24/18
2	GQ005**	680-151915-2**	Soil	04/24/18
3	GQ006	680-151915-3	Soil	04/24/18
4				
5				
6				
7				
8				
9				
10				
11				

Notes:

Method: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
II. Technical Holding Times				
Were all technical holding times met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was cooler temperature criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
III. Continuing Calibration				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries (%R) 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a laboratory blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
V. Field Blanks				
Were field blanks identified in this SDG?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were target compounds detected in the field blanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Percent Recovery				
Were all surrogate percent recovery (%R) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
VI. Matrix Spike				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

LDC #: 42338FS

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
VIII. Field duplicates				
Were field duplicate pairs identified in this SDG?		/		IR
Were target compounds detected in the field duplicates?			/	
IX. Compound quantitation				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	/			
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

LDC#: 42338F5

VALIDATION FINDINGS WORKSHEET
Field Triplicates

Page: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: Herbicides (EPA SW 846 Method 8151A)

Y N NA
Y N NA

Were field triplicates sets identified in this SDG?

Were target analytes detected in the field triplicate sets?

Analyte	Concentration (ug/Kg)			RSD (≤ 35)	RPD (≤ 100)
	1	2	3		
2,4-D	9.0U	8.3J	9.0U	NC	

V:\FIELD DUPLICATES\Field Triplicates\2018\42338F5_AECOM.wpd

VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

METHOD: GC _____ HPLC _____

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (0.25 std)	CF (0.25 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	IACL	5/8/18	2,4-D (DB-35MS)	1676989976	1676989976	1593535987	1593535987	12.0	12.0
	(CSGS)		2,4-D (DB-XLB)	325959236	325959236	302399622	302399622	14.4	14.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC

Percent difference (%D) = $100 * (N - C) / N$

Where: N = ___ Initial Calibration Factor or ___ Nominal Amount (ng)
C = ___ Calibration Factor from Continuing Calibration Standard or ___ Calculated Amount (ng)

#	Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported	Recalculated	Reported	Recalculated
					CF/Conc CCV	CF/Conc CCV	%D	%D
1	SE080028	5/8/18	2,4-D (DB-35MS)	1593535987	1336273560	1336273560	16.1	16.1
			2,4-D (DB-XLB)	302399622	279399860	279399860	7.6	7.6
2								
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Surrogate Results Verification

Page: 1 of 1
 Reviewer: [Signature]
 2nd reviewer: [Signature]

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
 SS = Surrogate Spiked

Sample ID: 2

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
<u>24-DCA</u>	<u>DB-75MS</u>	<u>0.200</u>	<u>0.1865</u>	<u>93</u>	<u>93</u>	<u>0</u>

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC-SC)/SA

Where: SSC = Spiked sample concentration
 SA = Spike added

SC = Concentration

RPD = |SSCLCS - SSCLCSD| * 2 / (SSCLCS + SSCLCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 680-522541

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<u>(NA)</u>		<u>(NA)</u>		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	<u>65</u>	<u>NA</u>	<u>44.5</u>	<u>NA</u>	<u>68</u>	<u>68</u>				
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

METHOD: GC HPLC

Y N N/A
Y N N/A

Were all reported results recalculated and verified for all level IV samples?
 Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration = $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

Example:

Sample ID: 2 Compound Name 24-D

- A= Area or height of the compound to be measured
- Fv= Final Volume of extract
- Df= Dilution Factor
- RF= Average response factor of the compound
In the initial calibration
- Vs= Initial volume of the sample
- Ws= Initial weight of the sample
- %S= Percent Solid

Concentration = $\frac{(36113981)(10000)(1)}{(1593535987)(30.03)(0.911)}$
 = 8.28 164g

#	Sample ID	Compound	Reported Concentrations (<u>164g</u>)	Recalculated Results Concentrations ()	Qualifications
	<u>2</u>	<u>24-D</u>	<u>8.3</u>		

Comments: _____

**Andersen AFB, CTO JQ13 - 18D194, 18D202, 18D210
LDC# 42338**

AECOM

EPA_NO	LAB_SAMPLE	DF	ANALYTE	COLL_DATE	ANAL_DATE	QCLev	RESULT	UNITS	LAB_Q	LOQ	LOD	REV	Q_C
METHOD: 8151A													
GQ001	680-151865-1	1	2,4,5-T	1/2018 1:20:00 PM	2/2018 4:28:00 AM	D		UG_KG	U	8.4	4.4	UJ	s
GQ001	680-151865-1	1	2,4-D	1/2018 1:20:00 PM	2/2018 4:28:00 AM	D	10	UG_KG	M	8.4	8.4	J	s,v
GQ002	680-151865-2	1	2,4,5-T	1/2018 1:25:00 PM	2/2018 4:47:00 AM	C		UG_KG	UM	8.4	4.3	UJ	s
GQ002	680-151865-2	1	2,4-D	1/2018 1:25:00 PM	2/2018 4:47:00 AM	C		UG_KG	UM	8.4	8.4	UJ	s
GQ003	680-151865-3	1	2,4,5-T	1/2018 1:30:00 PM	2/2018 5:07:00 AM	D	49	UG_KG	J1	8.4	4.3	J	e,q,v
GQ003	680-151865-3	5	2,4-D	1/2018 1:30:00 PM	2/2018 9:55:00 PM	D	380	UG_KG	D J1	42	42	J	e,q,v
GQ007	680-151914-1	1	2,4,5-T	2018 11:00:00 AM	2018 11:56:00 PM	C		UG_KG	U	8.7	4.5		
GQ007	680-151914-1	1	2,4-D	2018 11:00:00 AM	2018 11:56:00 PM	C		UG_KG	UM	8.7	8.7		
GQ008	680-151914-2	1	2,4,5-T	2018 11:05:00 AM	2018 12:16:00 AM	C		UG_KG	U	8.5	4.4		
GQ008	680-151914-2	1	2,4-D	2018 11:05:00 AM	2018 12:16:00 AM	C		UG_KG	U	8.5	8.5		
GQ009	680-151914-3	1	2,4,5-T	2018 11:10:00 AM	2018 12:35:00 AM	D		UG_KG	U	8.6	4.5		
GQ009	680-151914-3	1	2,4-D	2018 11:10:00 AM	2018 12:35:00 AM	D		UG_KG	UM	8.6	8.6		
GQ004	680-151915-1	1	2,4,5-T	2018 11:40:00 AM	2018 10:58:00 PM	C		UG_KG	UM	9.0	4.7		
GQ004	680-151915-1	1	2,4-D	2018 11:40:00 AM	2018 10:58:00 PM	C		UG_KG	U	9.0	9.0		
GQ005	680-151915-2	1	2,4,5-T	2018 11:45:00 AM	2018 11:17:00 PM	D		UG_KG	U	9.1	4.7		
GQ005	680-151915-2	1	2,4-D	2018 11:45:00 AM	2018 11:17:00 PM	D	8.3	UG_KG	J	9.1	9.1		
GQ006	680-151915-3	1	2,4,5-T	2018 11:50:00 AM	2018 11:36:00 PM	C		UG_KG	U	9.0	4.7		
GQ006	680-151915-3	1	2,4-D	2018 11:50:00 AM	2018 11:36:00 PM	C		UG_KG	UM	9.0	9.0		
GQ001	D194-01	1	2,4,5-T	1/2018 1:20:00 PM	2/2018 6:07:00 AM	D	5.1	UG_KG	U	10	5.1		
GQ001	D194-01	1	2,4-D	1/2018 1:20:00 PM	2/2018 6:07:00 AM	D	5.1	UG_KG	U	10	5.1		
GQ002	D194-02	1	2,4,5-T	1/2018 1:25:00 PM	2/2018 6:41:00 AM	C	5.0	UG_KG	U	10	5.0		
GQ002	D194-02	1	2,4-D	1/2018 1:25:00 PM	2/2018 6:41:00 AM	C	5.0	UG_KG	U	10	5.0		
GQ002DUP	D194-02D	1	2,4,5-T	1/2018 1:25:00 PM	2/2018 7:15:00 AM	C	5.1	UG_KG	U	10	5.1		
GQ002DUP	D194-02D	1	2,4-D	1/2018 1:25:00 PM	2/2018 7:15:00 AM	C	5.1	UG_KG	U	10	5.1		
GQ002TRIP	D194-02R	1	2,4,5-T	1/2018 1:25:00 PM	2/2018 7:49:00 AM	C	5.1	UG_KG	U	10	5.1		

EPA_NO	LAB_SAMPLE	DF	ANALYTE	COLL_DATE	ANAL_DATE	QCLev	RESULT	UNITS	LAB_Q	LOQ	LOD	REV	Q_C
METHOD: 8151A													
GQ002TRIP	D194-02R	1	2,4-D	3/2018 1:25:00 PM	/2018 7:49:00 AM	C	5.1	UG_KG	U	10	5.1		
GQ003	D194-03	1	2,4,5-T	3/2018 1:30:00 PM	/2018 8:24:00 AM	D	5.1	UG_KG	U	10	5.1		
GQ003	D194-03	1	2,4-D	3/2018 1:30:00 PM	/2018 8:24:00 AM	D	5.1	UG_KG	U	10	5.1		
GQ004	D202-01	1	2,4,5-T	2018 11:40:00 AM	/2018 2:05:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ004	D202-01	1	2,4-D	2018 11:40:00 AM	/2018 2:05:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ005	D202-02	1	2,4,5-T	2018 11:45:00 AM	/2018 4:25:00 PM	D	5.1	UG_KG	U	10	5.1		
GQ005	D202-02	1	2,4-D	2018 11:45:00 AM	/2018 4:25:00 PM	D	5.1	UG_KG	U	10	5.1		
GQ006	D202-03	1	2,4,5-T	2018 11:50:00 AM	/2018 5:00:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ006	D202-03	1	2,4-D	2018 11:50:00 AM	/2018 5:00:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ006DUP	D202-03D	1	2,4,5-T	2018 11:50:00 AM	/2018 5:34:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ006DUP	D202-03D	1	2,4-D	2018 11:50:00 AM	/2018 5:34:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ006TRIP	D202-03R	1	2,4,5-T	2018 11:50:00 AM	/2018 6:08:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ006TRIP	D202-03R	1	2,4-D	2018 11:50:00 AM	/2018 6:08:00 PM	C	5.2	UG_KG	U	10	5.2		
GQ007	D210-01	1	2,4,5-T	2018 11:00:00 AM	/2018 7:51:00 PM	C	5.4	UG_KG	U	11	5.4		
GQ007	D210-01	1	2,4-D	2018 11:00:00 AM	/2018 7:51:00 PM	C	5.4	UG_KG	U	11	5.4		
GQ008	D210-02	1	2,4,5-T	2018 11:05:00 AM	/2018 8:25:00 PM	C	5.5	UG_KG	U	11	5.5		
GQ008	D210-02	1	2,4-D	2018 11:05:00 AM	/2018 8:25:00 PM	C	5.5	UG_KG	U	11	5.5		
GQ009	D210-03	1	2,4,5-T	2018 11:10:00 AM	/2018 9:00:00 PM	D	5.4	UG_KG	U	11	5.4		
GQ009	D210-03	1	2,4-D	2018 11:10:00 AM	/2018 9:00:00 PM	D	5.4	UG_KG	U	11	5.4		
GQ009DUP	D210-03D	1	2,4,5-T	2018 11:10:00 AM	/2018 9:34:00 PM	C	5.4	UG_KG	U	11	5.4		
GQ009DUP	D210-03D	1	2,4-D	2018 11:10:00 AM	/2018 9:34:00 PM	C	5.4	UG_KG	U	11	5.4		
GQ009TRIP	D210-03R	1	2,4,5-T	2018 11:10:00 AM	2018 11:16:00 PM	C	5.4	UG_KG	U	11	5.4		
GQ009TRIP	D210-03R	1	2,4-D	2018 11:10:00 AM	2018 11:16:00 PM	C	5.4	UG_KG	U	11	5.4		